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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Acme Shear Company, The, Bridgeport, Conn. Scissors and shears. Serial Nos. 333,992–5; Mar. 7. Class 23.
Air-O-Mat Burner Company, Detroit, Mich. Coal and coke burners. Serial No. 333,846; Mar. 7. Class 34.
American Beverage Co. Inc., New Orleans, La. Maltless carbonated fruit beverages. Serial No. 334,245; Mar. 7. Class 45.
American Chemical Paint Company, Lower Gwynedd Township, Montgomery County, Pa. Chemical rustproof preventive preparation. Serial No. 325,450; Mar. 7. Class 6.
Apter, Michael S., doing business as M. S. Apter Mfg. Co., Chicago, Ill. Typewriter ribbons. Serial No. 330,591; Mar. 7. Class 11.
B. & B. Products Co., The, New York, N. Y. Insecticide. Serial No. 328,055; Mar. 7. Class 6.
Bates Sant-I-Mist Manufacturing Company, Houston, Tex. Floor and furniture polish. Serial No. 332,566; Mar. 7. Class 16.
Beechams Pills, Inc., Niagara Falls, N. Y. Candy-like laxative or cathartic. Serial No. 333,818; Mar. 7. Class 6.
Bisbee, Edna Fay, doing business as Holly Lure Laboratories, Los Angeles, Calif. After shaving lotions, lemon cream, pore paste, etc. Serial No. 332,365; Mar. 7. Class 6.
Blake & Schwabe, Inc., New York, N. Y. Hosiery and underwear. Serial No. 334,345; Mar. 7. Class 39.
Blount, Clyde A., Watsonville, Calif. Frozen confection. Serial No. 330,155; Mar. 7. Class 46.
Blum, Hyman, doing business as H. Blum, New York, N. Y. Eggs. Serial No. 327,549; Mar. 7. Class 46.
Bond, Nina W., doing business as N. Bond Co., New York, N. Y. Headache band. Serial No. 333,880; Mar. 7. Class 44.
Boyd-Maybell Co., Reno, Nev. General tonic. Serial No. 332,981; Mar. 7. Class 6.
Breitholtz, Sigrid, New York, N. Y. Pie dough. Serial No. 333,254; Mar. 7. Class 46.
Breslauer, A., Inc., New York, N. Y. Foundation cream, tissue cream, face powder, etc. Serial No. 325,938; Mar. 7. Class 6.
British Vacuum Cleaner & Engineering Co. Ltd., The, London, England. Suction cleaning machines for carpets, floors, etc. Serial No. 330,008; Mar. 7. Class 23.
Bruno, L. R., Co., assignor to A. J. Canfield Co., Chicago, Ill. Nonalcoholic carbonated beverages. Serial No. 331,849; Mar. 7. Class 45.
Bryant, A. J., doing business as Calite Manufacturing Co., Los Angeles, Calif. Soap. Serial No. 332,681; Mar. 7. Class 4.
Burnham & Morrill Company, doing business as Oxford Packing Co., Portland, Me. Canned vegetables. Serial No. 333,576; Mar. 7. Class 46.
Busch, J., Inc., New York, N. Y. Knives. Serial No. 333,656; Mar. 7. Class 23.
Cadick Milling Company, Grand View, Ind. Wheat flour. Serial No. 327,270; Mar. 7. Class 46.
California Prune & Apricot Growers Association, San Jose, Calif. Dried fruits. Serial No. 333,919; Mar. 7. Class 46.
Calite Manufacturing Co. (See Bryant, A. J.)
Candy Products Corporation, Owosso, Mich. Candies. Serial No. 332,986; Mar. 7. Class 46.
Canfield, A. J., Co. (See Bruno, L. R., Co., assignor.)
Chryson's, Ltd., Los Angeles and Hollywood, Calif. Face powders, foundation creams, and cream rouge. Serial No. 332,757; Mar. 7. Class 6.
Churchill Mfg. Co., Sioux City, Iowa. Cleaning and sterilizing compounds. Serial No. 333,727; Mar. 7. Class 4.
Clifford, Joseph A., New York, N. Y. Periodical publication. Serial No. 334,511; Mar. 7. Class 38.
Colgate-Palmolive-Peet Company, Chicago, Ill. Powdered soap. Serial No. 333,758; Mar. 7. Class 4.
Columbus Coated Fabrics Corporation, Columbus, Ohio. Shade cloth. Serial No. 333,470; Mar. 7. Class 50.
Comprex Oscillator Corporation, New York, N. Y. Publication. Serial No. 334,486; Mar. 7. Class 38.
Corbett, J. Ralph, Inc., New York, N. Y. Weekly publication. Serial No. 333,822; Mar. 7. Class 38.
Crane Co., Chicago, Ill. Automatic water systems and pumps. Serial No. 333,507; Mar. 7. Class 23.
Crompton Company, West Warwick, R. I. Pile fabrics. Serial No. 331,494; Mar. 7. Class 42.
Crosby, Percy L., McLean, Va. Drawings and comic strips or cartoons. Serial No. 323,165; Mar. 7. Class 38.
Daniels, Claude H., Newton Center, Mass. Puzzles. Serial No. 334,050; Mar. 7. Class 22.
De Laval Separator Company, The, New York, N. Y. Rubber liners for teat cups for milking machines. Serial No. 333,824; Mar. 7. Class 23.
Dell Publishing Co. Inc., New York, N. Y. Magazine section. Serial No. 334,429; Mar. 7. Class 38.
Dell Publishing Co. Inc. New York, N. Y. Magazine section. Serial No. 334,431; Mar. 7. Class 38.
De Micheli, Carlo, di E. Società Anonima, Milan, Italy. Braces or suspenders, garters and elastic arm bands. Serial No. 328,087; Mar. 7. Class 39.
Der Stahlhelm, Bund der Frontsoldaten, New York, N. Y. Badges, breast pins, charms, etc. Serial No. 313,698; Mar. 7. Class 28.
Di Bella, Salvatore J., doing business as Di Bella Laboratories, New York, N. Y. Preparation for the treatment of skin eruptions. Serial No. 333,117; Mar. 7. Class 6.
Di Santo, Joseph, doing business as Di Santo & Co., Duluth, Minn. Malt cereal beverages. Serial No. 333,759; Mar. 7. Class 48.
Distillers Corporation Limited, Montreal, Quebec, Canada. Potable spirits, whiskey, and liquors. Serial No. 333,967; Mar. 7. Class 49.
Eagle Nut Products, Inc., Brooklyn, N. Y. Chocolates, candies, salted nuts, etc. Serial No. 333,385; Mar. 7. Class 46.
Eagle Ottawa Leather Company, Chicago, Ill., and Grand Haven, Mich. Leather. Serial Nos. 334,249–50; Mar. 7. Class 1.
Enke, J. E. Ohlsens, Copenhagen, Denmark. Seeds. Serial No. 327,763; Mar. 7. Class 1.
Eraleys Efttf. kemisk Laboratorium ved cand. pharm. Louis Foersom, Copenhagen, Denmark. Chemical-pharmaceutical preparations. Serial No. 332,341; Mar. 7. Class 6.
Estatement System. (See Rosenberg, August.)
Evans, J. T., Inc., Wilkes-Barre, Pa. Fans, blowers, oil burners, etc. Serial No. 333,062; Mar. 7. Class 34.
Evans Milling Company, Indianapolis, Ind. Cereal products. Serial No. 326,366; Mar. 7. Class 46.
Excelsior Granite Company, Inc., Montpelier, Vt. Stone memorials. Serial No. 318,000; Mar. 7. Class 50.
Fear, Ernest D., Kansas City, Mo. Frozen confections. Serial No. 332,648; Mar. 7. Class 46.
Fedden Brothers Company, Inc., New York, N. Y. Hosiery. Serial No. 333,762; Mar. 7. Class 39.
Feedwaters, Incorporated, New York, N. Y. Preparations for the prevention of rust, incrustations, in boiler, etc., preparations for clarifying sugar, etc. Serial No. 333,802; Mar. 7. Class 6.
Finch, Jos. S., & Company, New York, N. Y. Whisky and other potable spirits. Serial No. 333,566; Mar. 7. Class 49.
Fleer, Frank H., Corporation, Philadelphia, Pa. Chewing gum. Serial No. 333,851; Mar. 7. Class 46.
Foursome Laboratories, Inc., Syracuse and Dewitt, N. Y. Laxative preparation. Serial No. 331,821; Mar. 7. Class 6.
Frederics, E., Inc., New York, N. Y. Pads used in the permanent waving of human hair. Serial No. 334,354; Mar. 7. Class 44.
Gale, F. C., & Co. Inc., Boston, Mass. Prepared cleaning and polishing cloths. Serial No. 333,354; Mar. 7. Class 4.
Gillon, John, & Co., Ltd., Glasgow, Scotland. Whisky. Serial No. 334,394; Mar. 7. Class 49.
Glenmoor Mills, Inc., New York, N. Y. Tailor's stiffening canvas. Serial No. 333,629; Mar. 7. Class 42.
Gordon, Max, doing business as Gordon's All Pork Products Co., Detroit, Mich. Pork sausage. Serial No. 320,304; Mar. 7. Class 46.
Gulf Stream Laboratories, St. Paul, Minn. Anti-freeze solution. Serial No. 334,396; Mar. 7. Class 6.
Hall, Hartwell & Co. Inc., Troy, N. Y. Shirts and underwear. Serial No. 333,475; Mar. 7. Class 39.
Hall, Hartwell & Co. Inc., Troy, N. Y. Collars and shirts. Serial No. 333,477; Mar. 7. Class 39.
Hall, Hartwell & Co. Inc., Troy, N. Y. Shirts and underwear. Serial Nos. 333,676–7; Mar. 7. Class 39.
Hall, Hartwell & Co. Inc., Troy, N. Y. Shirts. Serial No. 333,682; Mar. 7. Class 39.
Halliwell-Shelton Electric Corporation, New York, N. Y. Shampoo, oil preparation, hair revitaliser. Serial No. 326,855; Mar. 7. Class 6.
Henney Motor Company, Freeport, Ill. Motor-driven ambulances, funeral coaches and trucks, etc. Serial No. 328,533; Mar. 7. Class 19.
Hercules Cycle and Motor Company Limited, The, Birmingham, England. Cycles. Serial No. 332,119; Mar. 7. Class 19.
Herisse, Emile, doing business as W. G. R. Products Co., New York, N. Y. Medicinal preparation for use as a tonic, stimulant, etc. Serial No. 333,591; Mar. 7. Class 6.
Herlihy, Theodore E., Los Angeles, Calif. Amusement device. Serial No. 334,436; Mar. 7. Class 22.
Holly Lure Laboratories. (See Bisbee, Edna Fay.)
Holstein Rubber Products Co., Inc., The, Hartford, Conn. Rubber flooring, rubber tile, etc. Serial No. 334,103; Mar. 7. Class 12.
Holstein Rubber Products Co., Inc., The, Hartford, Conn. Rubber sheeting. Serial No. 334,104; Mar. 7. Class 50.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Horton Manufacturing Company, The, Bristol, Conn. Fishing lines, fishing reels, golf clubs, etc. Serial No. 334,531; Mar. 7. Class 22.

Hulskamp & Zoon & Molijn, Rotterdam, Netherlands. Gin. Serial No. 330,955; Mar. 7. Class 49.

Huston, Tom, Corporation, Columbus, Ga. Candy. Serial No. 323,091; Mar. 7. Class 46.

Illinois Malleable Iron Company, Chicago, Ill. Pipe couplings, flanges, hook-plates, etc. Serial No. 333,766; Mar. 7. Class 13.

Imperial Malt Company, Chicago, Ill. Malt beverage. Serial No. 333,072; Mar. 7. Class 48.

Jacobson, J., & Sons, New York, N. Y. Shirts, pajamas, underwear, etc. Serial No. 333,803; Mar. 7. Class 39.

Johnston, Robert A., Co., Milwaukee, Wis. Cookies and crackers. Serial No. 332,619; Mar. 7. Class 46.

Kester Solder Company, Chicago, Ill. Solder. Serial No. 334,106; Mar. 7. Class 14.

Kester Solder Company, Chicago, Ill. Solder. Serial No. 334,311; Mar. 7. Class 14.

Kohler Co., Kohler, Wis. Heating boilers and radiators. Serial No. 334,256; Mar. 7. Class 34.

Kress, S. H., & Co., New York, N. Y. Playing cards. Serial No. 334,419; Mar. 7. Class 22.

Krueger, Gottfried, Brewing Co., Newark, N. J. Malt beverage. Serial No. 333,983; Mar. 7. Class 48.

Lee, Raymond, St. Paul, Minn. Permanent wave solution and permanent wave oil. Serial No. 322,178; Mar. 7. Class 6.

Long John Distilleries, Limited, London, England. Whisky. Serial No. 333,940; Mar. 7. Class 49.

M and M Plywood Corporation, Longview, Wash., and Portland, Oreg. Plywood. Serial No. 324,847; Mar. 7. Class 12.

MacDonald, Greenlees, Limited, Leith, Scotland. Scotch whisky. Serial No. 333,712; Mar. 7. Class 49.

Malinite Products, Inc., Los Angeles, Calif. Glazed tile and molded ceramic bodies. Serial No. 328,692; Mar. 7. Class 12.

Mammy's, Pittsburgh, Pa. Chicken sandwiches. Serial No. 333,439; Mar. 7. Class 46.

Marsh, C. A., & Co. Inc., Attleboro, Mass. Jewelry. Serial No. 334,224; Mar. 7. Class 28.

Maxine Products Company, Inc., Detroit, Mich. Perfume. Serial No. 330,958; Mar. 7. Class 6.

McCosker, David, Inc., New York, N. Y. Dry goods. Serial No. 333,708; Mar. 7. Class 42.

McCosker, David, Inc., New York, N. Y. Dresses, skirts, hosiery, etc. Serial No. 333,709; Mar. 7. Class 39.

Mellenthin, Michael A., doing business as Mellenthin Laboratories, assignor to Gurli Mellenthin, Los Angeles, Calif. Medical compounds. Serial No. 331,692; Mar. 7. Class 6.

Menasha Products Company, The, Menasha, Wis. Cartons. Serial Nos. 333,975–6; Mar. 7. Class 2.

Mineral Water Corporation, Los Angeles, Calif. Mineral water and maltless beverages. Serial No. 332,697; Mar. 7. Class 45.

Mintkist Oil Co. (See Stevenson, Robert D.)

Mitchell Diamond Drill Company, Ltd., San Francisco, Calif. Power rock drills and parts therefor. Serial No. 333,334; Mar. 7. Class 23.

Mound City Products Company, St. Louis, Mo. Malt beverage. Serial No. 333,889; Mar. 7. Class 48.

National Aluminate Corporation, Chicago, Ill. Chemicals. Serial No. 333,941; Mar. 7. Class 6.

National Biscuit Company, New York, N. Y. Biscuits. Serial No. 334,153; Mar. 7. Class 46.

National Cheese Producers' Federation (Co-operative), Plymouth, Wis. Butter. Serial No. 332,171; Mar. 7. Class 46.

National Oil Products Company, Harrison, N. J. Astringents, astringent cerates, bleach creams, etc. Serial No. 331,338; Mar. 7. Class 6.

Nelson-Columbia, Husb. Carpet Mills, Inc., Philadelphia, Pa. Textile rugs and carpets. Serial Nos. 333,978–9; Mar. 7. Class 42.

Nordmark-Werke G. m. b. H., Hamburg, Germany. Malt syrup. Serial No. 332,159; Mar. 7. Class 46.

North Coast Importing Co., Seattle, Wash. Rice (grain or seed). Serial No. 334,260; Mar. 7. Class 46.

Nut House, L. A., Los Angeles, Calif. Nut products, dried fruits. Serial No. 331,435; Mar. 7. Class 46.

Od Peacock Sultan Company, St. Louis, Mo. Pharmaceutical preparations. Serial No. 333,716; Mar. 7. Class 6.

Ohio Laboratories, Incorporated, Columbus, Ohio. Cleaning compounds for general use. Serial No. 331,833; Mar. 7. Class 4.

Ohrt, Harold F., M. D., Detroit, Mich. Preparation for the treatment of venereal diseases. Serial No. 332,660; Mar. 7. Class 6.

Oxford Packing Co. (See Burnham & Morrill Company.)

Paraguay Products Co., The, Cincinnati, Ohio. Nonalcoholic maltless beverages and syrups therefor. Serial No. 332,464; Mar. 7. Class 45.

Penn Tobacco Company, Wilkes-Barre, Pa. Chewing cigars. Serial No. 334,262; Mar. 7. Class 17.

Per-Calx, Incorporated, Burley, Idaho. Medicine. Serial No. 326,389; Mar. 7. Class 6.

Peterson, Blanche, Emery, Utah. Preparation for the treatment of diseases of the stomach, etc. Serial No. 326,910; Mar. 7. Class 6.

Pevely Dairy Company, St. Louis, Mo. Milk, cream, butter milk, etc. Serial No. 287,770; Mar. 7. Class 46.

Potter, Clifford B., Manchester, N. H. Bathing suits. Serial No. 333,946; Mar. 7. Class 39.

Potter & Moore, Ltd., New York, N. Y. Cosmetics. Serial No. 331,906; Mar. 7. Class 6.

Pownall, George L., Cincinnati, Ohio. Ice making cans and molds. Serial No. 333,947; Mar. 7. Class 2.

Refrigerating Equipment, Inc., Cincinnati, Ohio. Ice cream. Serial No. 329,608; Mar. 7. Class 46.

Reid, Murdoch & Co., Chicago, Ill. Coffee and tea. Serial No. 322,652; Mar. 7. Class 46.

Repair Parts and Replacement Company, The, Chicago, Ill. Electrical vacuum cleaners. Serial No. 333,451; Mar. 7. Class 21.

Rex Tool Company, Inc., Miami, Fla. Attachable and detachable spout for milk cans. Serial No. 333,864; Mar. 7. Class 23.

Richardson Company, The, Lockland, Ohio. Storage battery cases. Serial No. 334,161; Mar. 7. Class 21.

Rockne Motors Corporation, Detroit, Mich. Automobiles and structural parts thereof. Serial No. 334,319; Mar. 7. Class 19.

Rodger, Slater, & Company Limited, Glasgow, Scotland. Whisky. Serial No. 334,412; Mar. 7. Class 49.

Rosenberg, August, doing business as Estatement System, New York, N. Y. Loose leaf binders, sheets, records, etc. Serial No. 333,980; Mar. 7. Class 37.

Rudolph Wurlitzer Manufacturing Company, The, North Tonawanda, N. Y. Laundry washing machines, clothes wringers, and mangles. Serial No. 332,269; Mar. 7. Class 24.

Ry-Lock Company, Ltd., San Leandro, Calif. Hose couplings. Serial No. 333,609; Mar. 7. Class 13.

Saks & Company, New York, N. Y. Trunks, handbags, suitcases, etc. Serial No. 333,680; Mar. 7. Class 3.

Schmid, Julius, New York, N. Y. Prophylactic rubber and membranous articles for the prevention of contagious diseases. Serial No. 334,122; Mar. 7. Class 44.

School Thrift, Inc., New York, N. Y. Savings bank pass books. Serial No. 333,534; Mar. 7. Class 37.

Schulze, Paul, Biscuit Company, Chicago, Ill. Cookies, crackers, and biscuits. Serial No. 332,469; Mar. 7. Class 46.

Scientific Foods Products, Limited, Toronto, Ontario, Canada. Tonic Food Drink. Serial No. 333,774; Mar. 7. Class 46.

Scovill Manufacturing Company, Waterbury, Conn. Razor blade sharpener stones, razor hones, strops, etc. Serial No. 332,964; Mar. 7. Class 4.

Seng Company, The, Chicago, Ill. Resilient seats and mattresses and parts thereof. Serial No. 325,118; Mar. 7. Class 32.

Seydel Chemical Company, Nitro, W. Va., and Jersey City, N. J. Medicinal compound. Serial No. 326,315; Mar. 7. Class 6.

Smith, H. E., Company, The, Newark, N. J. Stencils. Serial No. 333,083; Mar. 7. Class 37.

Smith-Kasson Company, The, Cincinnati, Ohio. Vest and panties. Serial No. 333,171; Mar. 7. Class 39.

Sommer, Gertrude, doing business as Sterling Cleaners, Chicago, Ill. Clothing and fabric dry cleaner and spot remover. Serial No. 333,537; Mar. 7. Class 4.

Spearman, Helen, North Hollywood, Calif. Handmade pottery. Serial No. 331,183; Mar. 7. Class 30.

Standard Fruit & Steamship Company, New Orleans, La. Bananas. Serial No. 329,275; Mar. 7. Class 46.

Stanley Works, The, New Britain, Conn. Levels. Serial No. 306,870; Mar. 7. Class 26.

Sterling Cleaners. (See Sommer, Gertrude.)

Stevenson, Robert D., doing business as Mintkist Oil Co., Coshocton, Ohio. Mineral oil. Serial No. 331,208; Mar. 7. Class 6.

Sun-A-Sured, Inc., Minneapolis, Minn. Medicinal preparation. Serial No. 331,759; Mar. 7. Class 6.

Switzerland Cheese Association Inc., New York, N. Y. Cheese. Serial No. 330,053; Mar. 7. Class 46.

Taylor Chemical Corporation, Penn Yan, N. Y. Carbon bisulphide. Serial No. 333,746; Mar. 7. Class 6.

Technical Supply Company, Scranton, Pa. Tracing cloth, blank books, crayons, etc. Serial No. 333,812; Mar. 7. Class 37.

Tru-Bristle Brush Co., Inc., Seattle, Wash. Tooth-brushes. Serial No. 334,271; Mar. 7. Class 29.

United Distillers Limited, Vancouver, British Columbia, Canada. Whisky. Serial No. 332,742; Mar. 7. Class 49.

United Drug Company, Boston, Mass. Olive oil. Serial No. 328,928; Mar. 7. Class 46.

United States Bung Mfg. Co., The, Cincinnati, Ohio. Bungs, faucet plugs, spiles, etc. Serial No. 332,015; Mar. 7. Class 50.

United States Gypsum Company, Chicago, Ill. Lime and plaster. Serial No. 293,944; Mar. 7. Class 12.

Virginia Shoe Company, Inc., Fredericksburg, Va. Shoes. Serial No. 333,841; Mar. 7. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

W. R. G. Product Co. (See Herisse, Emile.)

Walker, Hiram, & Sons Limited, Walkerville, Ontario, Canada. Whisky. Serial No. 334,502; Mar. 7. Class 49.

Wassmuth, Kurth & Co., A.-G., Cologne-Dellbruck, Germany. Diffuser type air and gas distributing and ventilating units. Serial No. 332,502; Mar. 7. Class 34.

Welch Grape Juice Company, The, Westfield, N. Y. Powdered pectin. Serial No. 329,340; Mar. 7. Class 46.

Wellman, S. K., Company, The, Cleveland, Ohio. Brake linings and transmission linings. Serial No. 322,662; Mar. 7. Class 35.

Werner, Fritz, Aktiengesellschaft, Berlin, Germany. Comparators. Serial No. 329,677; Mar. 7. Class 26.

Western Clock Company, Peru, Ill. Clocks and watches. Serial No. 334,238; Mar. 7. Class 27.

White, James F., & Co., Inc., New York, N. Y. Woven cloths made from jute. Serial No. 328,286; Mar. 7. Class 42.

Williams, J. H., & Co., Buffalo, N. Y. Wrenches, wrench sockets, and tool handles. Serial No. 331,072; Mar. 7. Class 23.

Wilson-Jones Company, Chicago, Ill. Envelopes, folders, and pockets. Serial Nos. 333,722–3; Mar. 7. Class 37.

Wolverine-Empire Refining Co., New York, N. Y. Lubricating oils and greases. Serial No. 334,337; Mar. 7. Class 15.

LIST OF REGISTRANTS OF TRADE-MARKS

A. P. W. Paper Company, Inc. (See Albany Perforated Wrapping Paper Company.)

Abbott Laboratories, Chicago, Ill. Calomel, thyroid, calcium, etc. 301,662; Mar. 7; Serial No. 326,929; published Dec. 20, 1932. Class 6.

Actomint Company, The. (See Appleton, Vivian L.)

Aeronautical Industries Research. (See Sabor, Russell.)

Aktiebolaget Imoindustri, Stockholm, Sweden. Liquid meters. 301,673; Mar. 7; Serial No. 331,238; published Dec. 20, 1932. Class 26.

Albany Perforated Wrapping Paper Company, by change of name to A. P. W. Paper Company, Inc., Albany, N. Y. Toilet paper. 92,497; renewed July 15, 1933.

Alco Seal Co. (See Livergood, Albert C.)

Alling & Cory Company, The, Rochester, N. Y. Paper. 91,148; renewed Apr. 22, 1933.

American Can Company, New York, N. Y. Advertising cases and cabinets. 301,556; Mar. 7; Serial No. 307,083; published Dec. 20, 1932. Class 32.

American Disinfecting Company, Sedalia, Mo. Detergents. 301,520; Mar. 7; Serial No. 331,634; published Dec. 20, 1932. Class 4.

American Humane Association, The, Albany, N. Y. Magazine. 92,161; renewed June 24, 1933.

American Safety Razor Corporation. (See Kampfe Bros., assignor.)

American Safety Razor Corporation, Brooklyn, N. Y. Safety razors and safety razor blades. 301,676; Mar. 7; Serial No. 330,152; published Dec. 20, 1932. Class 23.

American Sales Book Company, Limited, Toronto, Ontario, Canada; Niagara Falls, Elmira, and Glendale, N. Y., to American Sales Book Company, Limited, Toronto, Canada. Manifold-books. 90,401; renewed Feb. 25, 1933.

American Sugar Refining Company, The, Jersey City, N. J., to The American Sugar Refining Company, New York, N. Y. Sugar. 89,974; renewed Jan. 28, 1933.

American Sugar Refining Co., The, Jersey City, N. J., to The American Sugar Refining Company, New York, N. Y. Sugar. 90,497; renewed Mar. 4, 1933.

Ammonol Chemical Company, The, New York, N. Y. Disinfectant, antiseptic, and deodorant. 301,517; Mar. 7; Serial No. 331,717; published Dec. 20, 1932. Class 6.

Amorskin Corporation, Wilmington, Del., and New York, N. Y. Rouge, perfumery, and toilet waters. 301,545; Mar. 7; Serial No. 324,027; published Mar. 29, 1932. Class 6.

Amorskin Corporation, New York, N. Y., and Wilmington, Del. Face cream and powder. 301,557; Mar. 7; Serial No. 301,085; published Mar. 15, 1932. Class 6.

Antoine de Paris, Inc., New York, N. Y. Cleansing cream, massage cream, skin tonic, etc. 301,503; Mar. 7; Serial No. 329,617; published Dec. 6, 1932. Class 6.

Antolini, D., & Co., assignor to Dante Antolini, New York, N. Y. Claret wine and champagne. 91,633; renewed May 20, 1933.

Appleton, Vivian L., doing business as The Actomint Company, St. Louis, Mo. Medicinal preparation. 301,477; Mar. 7; Serial No. 330,882; published Dec. 20, 1932. Class 6.

Arden, Elizabeth, Inc., New York, N. Y. Perfumes and perfumery. 301,606; Mar. 7; Serial No. 331,239; published Dec. 20, 1932. Class 6.

Arnold Bros., Incorporated, Chicago, Ill. Sausage. 301,654; Mar. 7; Serial No. 330,883; published Dec. 20, 1932. Class 46.

Atlantic Refining Company, The, Philadelphia, Pa. Lubricating oils. 301,574; Mar. 7; Serial No. 330,843; published Dec. 27, 1932. Class 15.

Atlas Supply Company, Newark, N. J. Vacuum tubes for use in radio apparatus. 301,497; Mar. 7; Serial No. 331,241; published Dec. 27, 1932. Class 21.

B-Z-B Knitting Co., Rockford, Ill. Hosiery. 301,515; Mar. 7; Serial No. 332,106; published Dec. 27, 1932. Class 39.

Baker, Frank, doing business as Baker Manufacturer, San Francisco, Calif. Soap. 301,526; Mar. 7; Serial No. 331,277; published Dec. 27, 1932. Class 4.

Barawik Company. (See Braun, Walter C.)

Barcalo Manufacturing Company, Buffalo, N. Y. Pillows, cushions, and bed mattresses. 301,668; Mar. 7; Serial No. 331,538; published Dec. 20, 1932. Class 32.

Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Pitch for roofing, waterproofing, etc. 89,980; renewed Jan. 28, 1933.

Beacon Manufacturing Company, New Bedford, Mass. Blankets. 301,573; Mar. 7; Serial No. 331,944; published Dec. 20, 1932. Class 42.

Beaudoin, Joseph A., San Francisco, Calif. Table board game. 301,645; Mar. 7; Serial No. 331,914; published Dec. 27, 1932. Class 22.

Beck, Koller & Company, Inc., Detroit, Mich. Synthetic resin. 301,493; Mar. 7; Serial No. 329,928; published Dec. 20, 1932. Class 6.

Bell, David M., doing business as Pineglow Products, New York, N. Y. Soap and shaving cream. 301,516; Mar. 7; Serial No. 331,847; published Dec. 27, 1932. Class 4.

Bell, Dr., Medicine Co., Inc. (See Sutherland, E. E., Medicine Co., The, assignor.)

Bennett, E. W., & Company, to George E. Bennett, doing business as E. W. Bennett & Company, San Francisco, Calif. Compound for polishing and cleaning. 92,392; renewed July 8, 1933.

Berkley, Frederick M., New York, N. Y. Bowling alleys played with mechanically operated targets. 301,693; Mar. 7. Class 22.

Berliner, Edwin E., & Co., New York, N. Y. Linen dress goods in the piece. 301,548; Mar. 7; Serial No. 321,483; published Dec. 20, 1932. Class 42.

Bevilite Company Ltd., The, Los Angeles, Calif. Chemical compound. 301,475; Mar. 7; Serial No. 331,098; published Dec. 20, 1932. Class 6.

Bianchini, Férier, Lyon, France. Piece goods. 301,552; Mar. 7; Serial No. 320,119; published Dec. 27, 1932. Class 42.

Bianchini, Férier, Lyon, France. Piece goods. 301,553; Mar. 7; Serial No. 317,450; published Dec. 27, 1932. Class 42.

Blair, J. C., Company, Huntingdon, Pa., assignor to Western Tablet & Stationery Corporation, Dayton, Ohio. Paper envelops and blank books. 92,520; renewed July 15, 1933.

Blair, J. C., Company, Huntingdon, Pa., assignor to Western Tablet & Stationery Corporation, Dayton, Ohio. Paper, envelops and blank books. 92,522–3; renewed July 15, 1933.

Blair, J. C., Company, Huntingdon, Pa., assignor to Western Tablet & Stationery Corporation, Dayton, Ohio. Paper and stationery. 92,626; renewed July 22, 1933.

Blair Laboratories. (See Morton Manufacturing Corporation.)

Bloomingdale Bros. Inc., New York, N. Y. Dresses. 301,565; Mar. 7; Serial No. 331,489; published Dec. 20, 1932. Class 39.

Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 301,461–2; Mar. 7; Serial Nos. 331,971–2; published Dec. 27, 1932. Class 42.

Brady & Schmidgall, Vienna, Austria. Purgament and preparation for treating obesity. 301,536; Mar. 7; Serial No. 330,196; published Dec. 20, 1932. Class 6.

Braun, Walter C., doing business as Barawik Company, Chicago, Ill. Radio receiving sets. 301,579; Mar. 7; Serial No. 329,766; published Dec. 27, 1932. Class 21.

Breitstein Manufacturing Co., Los Angeles, Calif. Ladies' coats and suits. 301,571; Mar. 7; Serial No. 331,815; published Dec. 27, 1932. Class 39.

Brewster, E. Franklin, assignor to Brewster, Gordon & Co., Inc., Rochester, N. Y. Canned vegetables, canned pork and beans and canned salmon. 91,845; renewed June 3, 1933.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. 301,675; Mar. 7; Serial No. 330,445; published Dec. 20, 1932. Class 23.

Bronnley, H., & Co., Limited, London, England. Perfumed soap. 91,815; renewed Apr. 29, 1933.

Brown Company, Portland, Me., and Berlin, N. H. Twines. 301,624; Mar. 7; Serial No. 332,174; published Dec. 27, 1932. Class 7.
Bullock's, Inc., Los Angeles, Calif. Pillows. 301,560; Mar. 7; Serial No. 330,118; published Dec. 20, 1932. Class 32.
Burk Brothers, Philadelphia, Pa. Calf, kid, and goat skins. 92,630; renewed July 22, 1933.
Burton, W., & Co., Inc., Brooklyn, N. Y. Chocolate flavored syrup. 301,694; Mar. 7. Class 46.
Buzze's Pharmaceutical Company. (See Herbert, Norval S.)
C. W. Mfg. Co. (See Williams, Charles B.)
California Fruit Exchange, Sacramento, Calif. Foods. 92,532; renewed July 15, 1933.
Camp Fire Girls, The, assignor to Camp Fire Girls, Inc., New York, N. Y. Articles of clothing. 90,791; renewed Mar. 25, 1933.
Capital Chemical Drug Company, Inc., Montgomery, Ala. Insecticides. 301,491; Mar. 7; Serial No. 330,290; published Dec. 20, 1932. Class 6.
Capsuloids (1909) Limited, doing business as The Cicfa Co., London, England. Preparation for the treatment of indigestion. 301,502; Mar. 7; Serial No. 329,736; published Dec. 6, 1932. Class 6.
Carpenter, M., Baking Company, Milwaukee, Wis., assignor to The W. E. Long Co., Chicago, Ill. Bread. 301,680; Mar. 7. Class 46.
Cavendish Chemical Corporation, New York, N. Y. Antiseptic preparations. 301,481; Mar. 7; Serial No. 330,418; published Dec. 20, 1932. Class 6.
Chad Valley Co. Ltd., The, Birmingham, England. Dolls, puzzles, games, etc. 301,558; Mar. 7; Serial No. 283,550; published Dec. 27, 1932. Class 22.
Champion Blower & Forge Co., Lancaster, Pa. Blowers and forges. 39,829; renewed Feb. 17, 1933.
Chiarello, Joseph, doing business as Lido Chemical Co., Los Angeles, Calif. Medicated ointment. 301,634; Mar. 7; Serial No. 330,919; published Dec. 6, 1932. Class 6.
Cicfa Co., The. (See Capsuloids (1909) Limited.)
Claude Neon, Electrical Products Corporation, Ltd., Los Angeles, Calif. Gaseous discharge tubular lamps. 301,512; Mar. 7; Serial No. 331,749; published Dec. 27, 1932. Class 21.
Cockshutt Plow Company Limited, Brantford, Ontario, Canada. Implements and parts of such implements. 301,677; Mar. 7; Serial No. 329,221; published Dec. 20, 1932. Class 23.
Cohn Hall Marx Co., New York, N. Y. Silk piece goods. 301,489; Mar. 7; Serial No. 330,338; published Dec. 27, 1932. Class 42.
Cohn Hall Marx Co., New York, N. Y. Silk piece goods. 301,567; Mar. 7; Serial No. 331,575; published Dec. 20, 1932. Class 42.
Colorado Fuel and Iron Company, The, Denver, Colo. Staples, lath nails, brads, etc. 301,600; Mar. 7; Serial No. 328,550; published Dec. 27, 1932. Class 13.
Columbia Petroleum Products Company. (See Radbill, Samuel.)
Columbian Rope Company, Auburn, N. Y. Tire chains. 301,590; Mar. 7; Serial No. 331,635; published Dec. 27, 1932. Class 13.
Conradty, C., Fabrik Elektrischer u. Galvinischer Kohlen, Nuremburg, Germany. Electrical supplies. 90,293; renewed Feb. 18, 1933.
Conran, James F., St. Louis, Mo. Lubricating oil. 301,508; Mar. 7; Serial No. 331,041; published Dec. 27, 1932. Class 15.
Consolidated Cotton Duck Company, Baltimore, Md., to Tucapau Mills, Boston, Mass., successor. Fabrics. 86,514; renewed May 14, 1932.
Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Barbed wire and wire fence. 301,589; Mar. 7; Serial No. 331,724; published Dec. 27, 1932. Class 13.
Cooper, Charles, & Company, Newark, N. J., and New York, N. Y. Liquid ammonia cleaning compound. 301,539; Mar. 7; Serial No. 329,704; published Dec. 20, 1932. Class 4.
Coty, Inc., Wilmington, Del., and New York, N. Y. Perfumes and face powder. 301,605; Mar. 7; Serial No. 331,247; published Dec. 20, 1932. Class 6.
Cowles Detergent Company, The, Cleveland, Ohio. Soluble chemical compounds. 301,535; Mar. 7; Serial No. 330,651; published Dec. 27, 1932. Class 4.
Crawford, McGregor and Canby Company, The, Dayton, Ohio. Golf clubs. 301,613; Mar. 7; Serial No. 330,506; published Dec. 27, 1932. Class 22.
Cronin, William B., doing business as Cronin's Drug Store, Hartford City, Ind. Medicine. 301,474; Mar. 7; Serial No. 331,102; published Dec. 20, 1932. Class 6.
D-N Facial Bandage Co. (See Welsh, Katherine.)
Dana, Charles A., and John B. Pierce, receivers. (See Fisk Rubber Company.)
Davis & Lawrence Co., New York, N. Y. Pills. 301,636; Mar. 7; Serial No. 330,922; published Dec. 6, 1932. Class 6.
Dearborn Company, The, Chicago, Ill. Tables. 301,692; Mar. 7. Class 32.
Dewar, John, & Sons Limited, Perth, Scotland, and London, England. Scotch whisky. 301,614; Mar. 7; Serial No. 330,541; published Dec. 27, 1932. Class 49.
Distillers Agency Limited, The, Edinburg, Scotland. Whisky. 301,612; Mar. 7; Serial No. 330,455; published Dec. 27, 1932. Class 49.
Dow Pharmacal Co. (See Downs, R. F.)
Downs, R. F., doing business as Dow Pharmacal Co., Dallas, Tex. Antacid and indigestion preperation. 301,505; Mar. 7; Serial No. 329,273; published Dec. 20, 1932. Class 6.
Drew Canning Company, Ltd., San Jose, Calif. Canned fruits and vegetables. 301,684; Mar. 7. Class 46.
Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif. Permanent waving solution. 301,540; Mar. 7; Serial No. 329,398; published Dec. 20, 1932. Class 6.
Electric Auto-Lite Company, The, Toledo, Ohio. Clocks, watches, chronometers, etc. 301,602; Mar. 7; Serial No. 326,582; published Dec. 7, 1932. Class 27.
Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof, and refrigerating systems. 301,681–2; Mar. 7. Class 31.
Ely & Walker Dry Goods Company, St. Louis, Mo. Dresses, aprons, pajamas. 301,566; Mar. 7; Serial No. 331,496; published Dec. 20, 1932. Class 39.
Exhibit Supply Company, The. (See Meyer, John F.)
Fargo Mercantile Company, Fargo, N. Dak., assignor to Griggs, Cooper & Co., St. Paul, Minn. Canned fruits, vegetables, salmon, etc. 91,470; renewed May 6, 1933.
Faxon, John H., jr., New York, N. Y. Ink solvent. 301,661; Mar. 7; Serial No. 329,226; published Dec. 6, 1932. Class 6.
Federal Malleable Company, West Allis, Wis. Finished castings. 301,597; Mar. 7; Serial No. 330,785; published Dec. 27, 1932. Class 19.
Firestone Tire & Rubber Company, The, Akron, Ohio. Anti-freeze solution. 301,608; Mar. 7; Serial No. 331,179; published Dec. 20, 1932. Class 6.
Fisher Flouring Mills Company, Seattle, to Fisher Flouring Mills Co., Harbor Island, Seattle, Wash. Wheat flour. 92,330–1; renewed July 1, 1933.
Fisk Rubber Company, Chicopee Falls and Springfield, Mass., to Charles A. Dana and John B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., successor. Pneumatic tires. 38,700; renewed July 29, 1932.
Ford, J. B., Company, The, Wyandotte, Mich. Cleaning compound. 301,519; Mar. 7; Serial No. 331,637; published Dec. 27, 1932. Class 4.
Forestek, Samuel, doing business as The Forestek Plating & Manufacturing Company, Cleveland, Ohio. Electric grills and toasters. 301,575; Mar. 7; Serial No. 330,401; published Dec. 27, 1932. Class 21.
Forging and Casting Corporation, The, Ferndale, Mich. Alloy steel castings, forgings, and welded composite. 301,594–6; Mar. 7; Serial Nos. 330,892–4; published Dec. 27, 1932. Class 14.
Franklin, H. H., Manufacturing Company, Syracuse, N. Y. Automobiles and structural parts thereof. 301,581; Mar. 7; Serial No. 332,228; published Dec. 27, 1932. Class 19.
Freydberg Brothers, Incorporated, New York, N. Y. Ribbon for tying packages and other uses. 301,640; Mar. 7; Serial No. 332,186; published Dec. 27, 1932. Class 7.
Frosted Fruit Corporation, Chicago, Ill. Frozen confections. 301,658; Mar. 7; Serial No. 326,677; published Dec. 20, 1932. Class 46.
Frozen Sponges, Inc., Brooklyn, N. Y. Ice cream. 301,653; Mar. 7; Serial No. 331,332; published Dec. 20, 1932. Class 46.
Fruh Frut Products Co. (See Miller, Willard D.)
Garber-Eagle Oil Corp., Brooklyn, N. Y. Bleaching and washing solution. 301,582; Mar. 7; Serial No. 330,949; published Dec. 20, 1932. Class 6.
Gibson, Wm. D., Company, The, Chicago, Ill. Coil springs. 301,585–6; Mar. 7; Serial Nos. 331,987–8; published Dec. 27, 1932. Class 18.
Gilbert, A. C., Company, The, New Haven, Conn. Electric fans, beverage mixers, switches, etc. 301,576; Mar. 7; Serial No. 330,367; published Dec. 27, 1932. Class 21.
Globe Automatic Sprinkler Company, Philadelphia, Pa. Water motors and fire extinguishers. 301,670; Mar. 7; Serial No. 330,441; published Dec. 20, 1932. Class 23.
Goodall Worsted Co., Sanford, Me. Fabric made from combinations of mohair, cotton, wool, etc. 301,480; Mar. 7; Serial No. 331,737; published Dec. 27, 1932. Class 42.
Grady-Travers Company, The. (See Kelley, Henry C., Company, assignor.)
Griggs, Cooper & Co. (See Fargo Mercantile Company, assignor.)
Guio, Henry S., Los Angeles, Calif. Razor strops. 301,610; Mar. 7; Serial No. 328,168; published Feb. 20, 1932. Class 4.
Hagerty, Paul J., doing business as Shaco Manufacturing Co., Peoria, Ill. Charred sticks for coloring, purifying, and flavoring liquids. 301,689; Mar. 7. Class 50.
Hagler, Sam, doing business as Leeds Ltd., New York, N. Y. Cosmetics and toilet preparations. 301,504; Mar. 7; Serial No. 329,877; published Dec. 6, 1932. Class 6.
Hallitwell-Shelton Electric Corporation, New York, N. Y. Electrical hair dryers and permanent wave machines. 301,651; Mar. 7; Serial No. 331,499; published Dec. 27, 1932. Class 44.
Harris-Lipsitz Co., Dallas, Tex., and New York, N. Y., assignor to Higginbotham-Bailey-Logan Company, Dallas, Tex. Children's rompers. 90,885; renewed Apr. 1, 1933.

Hart Drug Corporation, Miami, Fla. Medicinal powder preparation. 301,531; Mar. 7; Serial No. 331,107; published Dec. 20, 1932. Class 6.
Health Developing Apparatus Co., Inc., New York, N. Y. Bowling machines and tableboard games. 301,647; Mar. 7; Serial No. 331,681; published Dec. 27, 1932. Class 22.
Heekin Spice Company, The, assignor to The Heekin Company, Cincinnati, Ohio. Baking-powder. 91,483; renewed May 6, 1933.
Heekin Spice Company, The, assignor to The Heekin Company, Cincinnati, Ohio. Coffee, tea, flavoring extract, and spices. 91,662; renewed May 20, 1933.
Heller, Samuel, doing business as Karmal Laboratories, Brooklyn, N. Y. Palatable effervescent preparations. 301,478; Mar. 7; Serial No. 330,849; published Dec. 20, 1932. Class 6.
Hemp Jute & Textilite Mfg. Co., A. G., Vienna, Austria. Burlap. 301,665–6; Mar. 7; Serial Nos. 326,184–5; published Dec. 27, 1932. Class 42.
Herbert, Norval S., doing business as Busse's Pharmaceutical Company, Washington, D. C. Preparation recommended for athlete's foot and other fungi infections. 301,534; Mar. 7; Serial No. 330,734; published Dec. 20, 1932. Class 6.
Herradora, Marco A., doing business as Unite Pharmaceutique Francaise, New York, N. Y. Medicine. 301,529; Mar. 7; Serial No. 331,180; published Dec. 20, 1932. Class 6.
Higginbotham-Bailey-Logan Company. (See Harris-Lipsitz Co., assignor.)
Hingle, C. Martin, Chicago, Ill. Top cylinder lubrication oil. 301,578; Mar. 7; Serial No. 330,172; published Dec. 27, 1932. Class 15.
Horn, A. C., Company, Long Island City, N. Y. Liquid dye-soap. 301,528; Mar. 7; Serial No. 331,182; published Dec. 6, 1932. Class 6.
Huisking, Chas. L., & Co., Inc., New York, N. Y. Milk sugar U. S. P., coal tar disinfectant, extract witch hazel, etc. 301,660; Mar. 7; Serial No. 329,288; published Dec. 20, 1932. Class 6.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Thread and yarns. 301,568; Mar. 7; Serial No. 331,584; published Dec. 13, 1932. Class 43.
Imbs, J. F., Milling Company, St. Louis and Belleville, Ill., to J. F. Imbs Milling Company, Inc., St. Louis, Mo. Wheat flour. 92,338; renewed July 1, 1933.
Imperial Metal Manufacturing Corporation, Long Island City, N. Y. Pepper and salt cellars. 301,621; Mar. 7; Serial No. 331,990; published Dec. 27, 1932. Class 2.
Indian Motocycle Company, Springfield, Mass. Motor vehicles, particularly motorcycles and bicycles. 301,588; Mar. 7; Serial No. 331,742; published Dec. 27, 1932. Class 19.
Ivey, John R., Littleton, N. C. Preparation for relief of boils. 301,609; Mar. 7; Serial No. 331,153; published Dec. 20, 1932. Class 6.
Jackson, Willard E., Indianapolis, Ind. Attachments to weighing scales and similar devices. 301,674; Mar. 7; Serial No. 331,066; published Dec. 20, 1932. Class 26.
Johnson Biscuit Company, Sioux City, Iowa. Cakes, biscuits, crackers, and candy. 90,025; renewed Jan. 28, 1933.
Johnson & Johnson, New Brunswick, N. J. Medical and surgical appliances. 92,678; renewed July 22, 1933.
Kampfe Bros., New York, N. Y., assignor, by mesne assignments, to American Safety Razor Corporation, Brooklyn, N. Y. Cases for razors and razor parts. 40,777; renewed July 14, 1933.
Kaplan, Joseph A., Inc., New York, N. Y. Bath shower curtains. 301,587; Mar. 7; Serial No. 331,744; published Dec. 27, 1932. Class 13.
Karsal Laboratories. (See Heller, Samuel.)
Kaufmann Bros. & Bondy, Inc., West New York, N. J. Pipes. 301,592; Mar. 7; Serial No. 331,257; published Dec. 27, 1932. Class 3.
Kelley, Henry C., Company, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Cords, twine, ropes, and lines. 92,560–1; renewed July 18, 1933.
Kohler Co., Kohler, Wis. Bath tub hangers. 301,562; Mar. 7; Serial No. 332,154; published Dec. 27, 1932. Class 13.
Kresge Department Store Corp., Newark, N. J. Soap, liquid dry cleaner, shaving soap, shoe polish, etc. 301,533; Mar. 7; Serial No. 330,791; published Dec. 27, 1932. Class 4.
Kress, S. H., & Co., New York, N. Y. Dry cell batteries. 301,495; Mar. 7; Serial No. 331,567; published Dec. 27, 1932. Class 21.
Kriel, Walter E., Baltimore, Md. Adhesive sizing, gums, and pastes. 92,284; renewed June 24, 1933.
L & M Manufacturing Co., Cleveland, Ohio. Scrapers, rollers, groovers, etc. 301,678; Mar. 7; Serial No. 327,823; published Dec. 20, 1932. Class 23.
Laird & Company, Incorporated, Eatontown, N. J. Cider. 301,623; Mar. 7; Serial No. 332,155; published Dec. 27, 1932. Class 45.
Laurens, Ed., Limited. (See Société Anonyme le Khedive, assignor.)
Lazarus, F. & R., & Co., The, to The F. and R. Lazarus and Company, Columbus, Ohio, successor. Hosiery. 90,645; renewed Mar. 11, 1933.
Leeds, Ltd. (See Hagler, Sam.)
Lermann, Carl A., East Orange, N. J. Medicinal preparation. 301,499; Mar. 7; Serial No. 330,406; published Dec. 6, 1932. Class 6.
Les Parfums de Molyneux (Societe a Responsabilite Limitee), Paris, France. Perfumes, toilet water, face powder, etc. 301,506; Mar. 7; Serial No. 329,146; published Dec. 20, 1932. Class 6.
Levine, Theodore, doing business as The Myalora Company, Brooklyn, N. Y. Preparation used in the treatment of rheumatism and gouty conditions. 301,604; Mar. 7; Serial No. 331,261; published Dec. 20, 1932. Class 6.
Lido Chemical Co. (See Chiarello, Joseph.)
Livergood, Albert C., doing business as Alco Seal Co., Philadelphia, Pa. Cleaner for automobiles, furniture, woodwork, etc. 301,537; Mar. 7; Serial No. 330,174; published Dec. 27, 1932. Class 4.
Lloyd, E. E., Paper Company, Chicago, Ill. Papers. 301,690; Mar. 7. Class 37.
Lobl Manufacturing Company, The, Middleboro, Mass. Menthol pencils and inhalers. 301,655; Mar. 7; Serial No. 330,823; published Dec. 27, 1932. Class 44.
Long, W. E., Co., The. (See Carpenter, M., Baking Company, assignor.)
Longworth, Dewey, Oakland, Calif. Golf clubs. 301,679; Mar. 7; Serial No. 332,305; published Dec. 27, 1932. Class 22.
Louisiana State Rice Milling Company, Inc., Abbeville, La. Rice. 301,650; Mar. 7; Serial No. 331,505; published Dec. 20, 1932. Class 46.
Malone Knitting Company, Springfield, Mass. Infants' underwear. 301,685; Mar. 7. Class 39.
Manhattan Kreole Products, Inc., Brooklyn, N. Y. Polishes, dressings and cleaning preparations. 301,524; Mar. 7; Serial No. 331,379; published Dec. 27, 1932. Class 4.
Marvin-Neitzel Corporation, Troy, N. Y. Hospital supplies. 301,649; Mar. 7; Serial No. 331,508; published Dec. 27, 1932. Class 44.
Mata-Hara, Incorporated, Washington, D. C. Cosmetics. 301,492; Mar. 7; Serial No. 329,971; published Dec. 20, 1932. Class 6.
Maxine Products Company, Inc., Detroit, Mich. Perfume. 301,628–32; Mar. 7; Serial Nos. 330,959–63; published Dec. 6, 1932. Class 6.
McCartney, Charles J., New York, N. Y. Dry cleaning fluid. 301,542; Mar. 7; Serial No. 328,843; published Dec. 27, 1932. Class 4.
McNeil, Robert, Philadelphia, Pa. Cardiac stimulant and diuretic. 301,664; Mar. 7; Serial No. 326,386; published Dec. 20, 1932. Class 6.
Meadow Brook Farms. (See Miller, John A.)
Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin-controlled amusement machines. 301,691; Mar. 7. Class 22.
Milani's Inc., Seattle, Wash. Spaghetti with chicken giblet sauce, minced chicken, chicken tamale pot pie, etc. 301,688; Mar. 7. Class 46.
Miller, John A., doing business as Meadow Brook Farms, Palmer Township and Nazareth, Pa. Ground dehydrated manure. 301,584; Mar. 7; Serial No. 331,991; published Dec. 27, 1932. Class 10.
Miller, Willard D., doing business as Frah Frut Products Co., El Paso, Tex. Maltless beverages and fruit juices, beverage syrups, flavors, and extracts. 301,620; Mar. 7; Serial No. 331,959; published Dec. 27, 1932. Class 46.
Minot, Hooper & Co., New York, N. Y. Pillow cases. 301,483; Mar. 7; Serial No. 330,859; published Dec. 27, 1932. Class 42.
Minot, Hooper & Co., New York, N. Y. Sheets and pillow cases. 301,484; Mar. 7; Serial No. 330,860; published Dec. 27, 1932. Class 42.
Minot, Hooper & Co., New York, N. Y. Sheets. 301,485; Mar. 7; Serial No. 330,858; published Dec. 27, 1932. Class 42.
Montaqua Mineral Well Co., Joliet, Mont. Mineral water. 301,625; Mar. 7; Serial No. 332,379; published Dec. 27, 1932. Class 45.
Moores Lime Company, The, Springfield, Ohio. Lime. 91,979; renewed June 10, 1933.
Morley Brothers, Saginaw, Mich. Scales. 90,125; renewed Feb. 4, 1933.
Morley Brothers, Saginaw, Mich. Grindstones, razor-strops, and razor-hones. 90,460; renewed Feb. 25, 1933.
Morley Brothers, Saginaw, Mich. Pencils. 90,461; renewed Feb. 28, 1933.
Morley Brothers, Saginaw, Mich. Pneumatic bicycle and automobile tires and rubber hose for conducting water. 91,226; renewed Apr. 22, 1933.
Morton Manufacturing Corporation, doing business as Blair Laboratories, Lynchburg, Va. Hair beautifying cream. 301,546; Mar. 7; Serial No. 323,956; published Dec. 20, 1932. Class 6.
Mosse, Incorporated, New York, N. Y. Textile bath towels. 301,549; Mar. 7; Serial No. 321,143; published Dec. 20, 1932. Class 42.
Motley, Elizabeth, doing business as Motley's Beauty Parlor, Washington, D. C. Preparation for the hair. 301,635; Mar. 7; Serial No. 330,929; published Dec. 6, 1932. Class 6.
Mu-Col Company, The, Providence, R. I., to The Mu-Col Company, Buffalo, N. Y. Antiseptic compounds. 40,479; renewed June 2, 1933.
Myalora Company, The. (See Levine, Theodore.)

Naamloose Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company), The Hague, Netherlands. Pharmaceutical products. 301,500; Mar. 7; Serial No. 330,206; published Dec. 20, 1932. Class 6.
Naar, Benjamin, doing business as Rev. Naar & Sons, New Brunswick, N. J. Preparation for treating epilepsy and mild cases of insanity. 301,525; Mar. 7; Serial No. 331,314; published Dec. 20, 1932. Class 6.
Nathan Manufacturing Company, New York, N. Y. Steam-boiler injectors and boiler-feeders. 90,908; renewed Apr. 1, 1933.
Neisler Mills Inc., Kings Mountain, N. C. Decorative woven fabrics. 301,514; Mar. 7; Serial No. 332,098; published Dec. 27, 1932. Class 42.
Nestle and Anglo-Swiss Condensed Milk Company, Cham and Vevey, Switzerland, assignor to Nestle's Milk Products, Inc., New York, N. Y. Sterilized and condensed milk. 91,790; renewed May 27, 1933.
New Life Medicine Co., Hollywood, Calif. Medicinal tablets. 301,507; Mar. 7; Serial No. 327,887; published Dec. 20, 1932. Class 6.
Odorn Company, Inc., New York, N. Y. Moth repellant. 301,518; Mar. 7; Serial No. 331,693; published Dec. 20, 1932. Class 6.
Oliver's Sporting Goods House, Philadelphia, Pa. Baseballs, basket-balls, push-balls, etc. 90,236; renewed Feb. 11, 1933.
Olminol. (See Parker, Frederick H.)
Ormond Hosiery Shops, Inc., New York, N. Y. Hosiery and stockings. 301,570; Mar. 7; Serial No. 331,694; published Dec. 27, 1932. Class 39.
Pacific Hair Goods Company, Ltd. (See Duart Manufacturing Co. Ltd.)
Palmer, Forest R., doing business as Palmer Electric Mfg. Co., Toledo, Ohio. Inductance devices. 301,498; Mar. 7; Serial No. 331,192; published Dec. 27, 1932. Class 21.
Palmers Limited, Montreal, Quebec, Canada. Toilet preparations. 301,510; Mar. 7; Serial No. 326,312; published Dec. 6, 1932. Class 6.
Panborn Corporation, Hagerstown, Md. Sand-blast abrasive. 301,538; Mar. 7; Serial No. 339,901; published Dec. 27, 1932. Class 4.
Parker, Frederick H., doing business as Olminol, North Arlington, N. J. Hand cleanser. 301,523; Mar. 7; Serial No. 331,342; published Dec. 20, 1932. Class 4.
Pattberg, Philip W., New York, N. Y. Portable marble shooting prize game apparatus. 301,646; Mar. 7; Serial No. 331,870; published Dec. 27, 1932. Class 22.
Pennant Sport Togs Company, New York, N. Y. Blouses, rompers, and gym apparel. 301,563; Mar. 7; Serial No. 331,023; published Dec. 27, 1932. Class 39.
Pictorial Review Company, New York, N. Y. Paper dress patterns. 301,544; Mar. 7; Serial No. 324,396; published Dec. 20, 1932. Class 26.
Pike, Mathilda, New York, N. Y. Facial preparation. 301,501; Mar. 7; Serial No. 330,000; published Dec. 6, 1932. Class 6.
Pineglow Products. (See Bell, David M.)
Porus-Lastic Corp., Holbrook, Mass. First aid or surgical bandages. 301,652; Mar. 7; Serial No. 331,478; published Dec. 27, 1932. Class 44.
RCA Victor Company, Inc., Camden, N. J. Talking machines and parts thereof, records, etc. 301,496; Mar. 7; Serial No. 331,474; published Dec. 27, 1932. Class 36.
R. D. R. Manufacturing Co. (See Richardson, Edward.)
Radbill, Samuel, doing business as Columbia Petroleum Products Company, Philadelphia, Pa. Lubricating oils. 301,509; Mar. 7; Serial No. 331,008; published Dec. 27, 1932. Class 15.
Ralston Purina Company, St. Louis, Mo. Chicken feed. 90,837; renewed Mar. 25, 1933.
Ray Day Piston Corporation of Detroit, Detroit, Mich. Pistons for internal combustion engines. 301,671–2; Mar. 7; Serial Nos. 331,343–4; published Dec. 20, 1932. Class 23.
Raynorshyne Products, Inc., San Antonio, Tex. Automobile top dressing, leather dressing, shoe polish, etc. 301,541; Mar. 7; Serial No. 329,153; published Dec. 20, 1932. Class 4.
Reaves, Robert G., Knoxville, Tenn. Medicinal preparation. 301,488; Mar. 7; Serial No. 330,411; published Dec. 20, 1932. Class 6.
Richardson, Edward, doing business as R. D. R. Manufacturing Co., Maywood, Ill. Cleaning preparation. 301,543; Mar. 7; Serial No. 329,202; published Dec. 20, 1932. Class 4.
Richel Company, Inc., Upper Darby, Pa. Cosmetics. 301,479; Mar. 7; Serial No. 330,835; published Dec. 20, 1932. Class 6.
Ridge Tool Company, The, Elyria, Ohio. Thread cutting oil. 301,511; Mar. 7; Serial No. 332,310; published Dec. 27, 1932. Class 15.
Riegel Textile Corporation, New York, N. Y. Cotton piece goods. 301,562; Mar. 7; Serial No. 330,967; published Dec. 13, 1932. Class 42.
Riker, Samuel M., to The Riker Company, Newark, N. J., successor. Metal ornaments, monograms, and initials for harness. 90,379; renewed Feb. 18, 1933.
Rosa, Thomas, New York, N. Y. Preparation of a tonic for anemia. 301,490; Mar. 7; Serial No. 330,382; published Dec. 20, 1932. Class 6.
Rosenberg, Desider, doing business as Seboline Chemical Company, Kansas City, Mo. Preparation for skin diseases. 301,547; Mar. 7; Serial No. 322,601; published Dec. 20, 1932. Class 6.
Roth, Chester H., Co., Inc., New York, N. Y. Hosiery. 301,569; Mar. 7; Serial No. 331,594; published Dec. 20, 1932. Class 39.
Sabor, Russell, doing business as Aeronautical Industries Research, Minneapolis, Minn. Soaps, scouring powders, detergents, etc. 301,611; Mar. 7; Serial No. 326,161; published Dec. 20, 1932. Class 4.
Saks & Company, New York, N. Y. Perfumes. 301,607; Mar. 7; Serial No. 331,229; published Dec. 20, 1932. Class 6.
Sandeman, Geo. H., Sons & Co. Limited, London, England. Port and sherry wine. 90,925; renewed Apr. 1, 1933.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Sherry wine. 91,708; renewed May 20, 1933.
San-Nap-Pak Mfg. Co. Inc., New York, N. Y. Sanitary napkins. 301,686–7; Mar. 7. Class 44.
Sears, Roebuck and Co., Chicago, Ill. Watches. 301,598; Mar. 7; Serial No. 329,563; published Dec. 27, 1932. Class 27.
Seboline Chemical Company. (See Rosenberg, Desider.)
Seliger, Benno, Chicago, Ill. Packing. 301,615–16; Mar. 7; Serial Nos. 331,443–4; published Dec. 20, 1932. Class 35.
Servel, Inc., New York, N. Y. Refrigerators and refrigerating apparatus. 301,618–19; Mar. 7; Serial Nos. 331,936–7; published Dec. 27, 1932. Class 31.
Servel, Inc., New York, N. Y. Refrigerators and refrigerating apparatus. 301,641–2; Mar. 7; Serial Nos. 331,934–5; published Dec. 27, 1932. Class 31.
Servel, Inc., New York, N. Y. Refrigerators and refrigerating apparatus. 301,643–4; Mar. 7; Serial Nos. 331,931–2; published Dec. 27, 1932. Class 31.
Shaco Manufacturing Co. (See Hagerty, Paul J.)
Shapiro, Mandel, New York, N. Y. Preparation to prevent runs in hosiery and lingerie. 301,627; Mar. 7; Serial No. 331,011; published Dec. 6, 1932. Class 6.
Shell Oil Company, San Francisco, Calif. Gasoline and lubricating oils. 301,513; Mar. 7; Serial No. 331,995; published Dec. 27, 1932. Class 15.
Shep-Roid Corporation, St. Paul, Minn. Containers. 301,622; Mar. 7; Serial No. 332,048; published Dec. 27, 1932. Class 2.
Shorewood Mills, Milwaukee, Wis. Athletic union suits, shirts, and shorts. 301,564; Mar. 7; Serial No. 331,293; published Dec. 27, 1932. Class 39.
Shoudy, Chester P., Spokane, Wash. Dentifrices and mouth washes. 301,554; Mar. 7; Serial No. 312,202; published May 5, 1931. Class 6.
Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Electrical machines, electrotechnical instruments and appliances, etc. 301,551; Mar. 7; Serial No. 320,876; published Dec. 27, 1932. Class 21.
Silica Products Corporation, New York, N. Y. Soap. 301,521; Mar. 7; Serial No. 331,626; published Dec. 27, 1932. Class 4.
Silica Products Corporation, New York, N. Y. Fertilizer. 301,591; Mar. 7; Serial No. 331,628; published Dec. 27, 1932. Class 10.
Singer, Morris, assignor, by mesne assignments, to Soft-Lite Lens Co., Inc., New York, N. Y. Measuring scientific appliances. 91,909; renewed June 3, 1933.
Small's Sales Service, Inc., Warren, R. I. Non-illuminated reflecting devices. 301,599; Mar. 7; Serial No. 329,156; published Dec. 27, 1932. Class 50.
Smith, Kline & French Laboratories, Philadelphia, Pa. Medicinal preparation. 301,527; Mar. 7; Serial No. 331,268; published Dec. 20, 1932. Class 6.
Société Anonyme le Khedive, Brussels, Belgium, and Paris, France, assignor, by mesne assignments, to Ed. Laurens, Limited, London, England, and Alexandria, Egypt. Cigarettes. 39,933; renewed Mar. 17, 1933.
Societe des Marques Robin, Societe a Responsabilite Limitee, Paris, France. Internal medicines. 301,637; Mar. 7; Serial No. 330,870; published Dec. 6, 1932. Class 6.
Society of Chemical Industry in Basle, Basel, Switzerland. Tooth paste. 301,638; Mar. 7; Serial No. 330,937; published Dec. 6, 1932. Class 6.
Soft-Lite Lens Co., Inc. (See Singer, Morris, assignor.)
Southwest Laboratories, Inc., St. Louis, Mo. Hygienic powder and a special liquid germicide. 301,626; Mar. 7; Serial No. 331,067; published Dec. 6, 1932. Class 6.
Sponge-Aire Seat Company, Inc., Buffalo, N. Y. Seat cushions. 301,593; Mar. 7; Serial No. 331,128; published Dec. 27, 1932. Class 19.
Sprague Specialties Company, North Adams, Mass. Synchronized sound and picture projector with phonograph and radio set features in combination. 301,550; Mar. 7; Serial No. 321,039; published Dec. 20, 1932. Class 26.
Spring City Knitting Co., Spring City, Pa. Underwear. 301,559; Mar. 7; Serial No. 328,510; published Dec. 27, 1932. Class 39.
Standard Pressed Steel Co., Jenkintown, Pa. Screws, stripper bolts, and pipe plugs. 301,583; Mar. 7; Serial No. 332,013; published Dec. 27, 1932. Class 13.
Stearns & Foster Company, The, Lockland, Cincinnati, Ohio. Cotton batting. 301,688; Mar. 7. Class 1.

Streker, Joseph A., doing business as Twoclaims Mfg. Co., Providence, R. I. Medicinal preparations. 301,476; Mar. 7; Serial No. 330,938; published Dec. 20, 1932. Class 6.
Sutherland, E. E., Medicine Co., The, Paducah, Ky., assignor to Dr. Bell Medicine Co., Inc., New York, N. Y. Remedy for diseases of the liver and stomach. 92,597; renewed July 15, 1933.
Sweet, Donald H., Chicago, Ill. Game. 301,617; Mar. 7; Serial No. 331,709; published Dec. 20, 1932. Class 22.
Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga., assignor to Swift and Company, Chicago, Ill. Manufactured fertilizers. 40,330; renewed May 12, 1933.
Technical Equipment Corporation, New York, N. Y. Lubricants. 301,580; Mar. 7; Serial No. 326,401; published Dec. 27, 1932. Class 15.
Templeton, Kenly & Co., Ltd., Chicago, Ill. Lifting jacks. 40,082; renewed Mar. 31, 1933.
Terminal Barber Shops, Inc., New York, N. Y. Cold creams and facial creams. 301,667; Mar. 7; Serial No. 325,488; published Dec. 6, 1932. Class 6.
Tobias, B., Inc., New York, N. Y. Dresses. 301,561; Mar. 7; Serial No. 330,765; published Dec. 20, 1932. Class 39.
Tucapau Mills. (See Consolidated Cotton Duck Company.)
Turner Brothers, Limited, assignor to Turner Brothers Asbestos Company, Limited, Spotland, Rochdale, England. Packings. 40,433; renewed May 26, 1933.
Twoclaims Mfg. Co. (See Streker, Joseph A.)
Uni-Elo Grille Corporation, Detroit, Mich. Grilles. 301,603; Mar. 7; Serial No. 325,310; published May 10, 1932. Class 34.
Union Fork & Hoe Company, The, Columbus, Ohio. Cutters, harvesters, chisels, etc. 301,555; Mar. 7; Serial No. 311,496; published Dec. 20, 1932. Class 23.
Union Metal Manufacturing Company, The, Canton, Ohio. Metal pipes, tubes, and poles. 301,601; Mar. 7; Serial No. 327,074; published Dec. 27, 1932. Class 13.
Unite Pharmaceutique Francaise. (See Herradora, Marco A.)
United Scientific Laboratories, Inc., New York, N. Y. Radio receiving sets. 301,494; Mar. 7; Serial No. 331,712; published Dec. 27, 1932. Class 21.
Urbana Laboratories, The, Urbana, Ill. Chemical reagents. 301,663; Mar. 7; Serial No. 326,444; published Dec. 20, 1932. Class 6.
Vicbridge Lamp Company, The, Chicago, Ill. Electric lighting units and wiring fixtures therefor. 301,577; Mar. 7; Serial No. 330,215; published Dec. 27, 1932. Class 21.
Victor Manufacturing Company, Greenville, assignor, by mesne assignments, to Wallace Mfg. Co., Inc., Jonesville, S. C. Unbleached cotton goods in the piece. 91,433; renewed Apr. 29, 1933.
Vimola Sales Company, New York, N. Y. Maltless beverages and syrups and extracts therefor. 301,659; Mar. 7; Serial No. 326,404; published June 4, 1932. Class 45.
Vincennes Packing Corporation, Vincennes, Ind. Canned or bottled tomato juice, tomato catsup, pork and beans, etc. 301,657; Mar. 7; Serial No. 327,175; published Dec. 20, 1932. Class 46.
Vitro Manufacturing Company, The, Pittsburgh, Pa. Paints and painters' materials. 92,487; renewed July 8, 1933.
Voigt, William L., New York, N. Y., assignor to Herrick-Voigt Chemical Corporation, Bayonne, N. J. Oils for use in bleaching, cleaning and dyeing. 90,266; renewed Feb. 11, 1933.
Walker, Corp & Co., Inc., Syracuse, N. Y. Vaginal antiseptic. 301,486; Mar. 7; Serial No. 330,641; published Dec. 20, 1932. Class 6.
Wallace Mfg. Co., Inc. (See Victor Manufacturing Company, assignor.)
Wapler, Nicholas, Company, New York, N. Y. Fish parasiticidal preparation and water plants nutritive salt. 301,689; Mar. 7; Serial No. 330,581; published Dec. 6, 1932. Class 6.
Welskittel, A., & Son Company, Baltimore, Md. Closet combination. 92,379; renewed July 1, 1933.
Welsh, Katherine, doing business as D-N Facial Bandage Co., Brooklyn, N. Y. Face lifting bandage. 301,648; Mar. 7; Serial No. 331,601; published Dec. 27, 1932. Class 44.
West Disinfecting Co., New York, N. Y., to West Disinfecting Company, Long Island City, N. Y. Disinfectants. 40,795; renewed July 21, 1933.
West Point Manufacturing Company, Langdale, Ala. Towelling. 301,572; Mar. 7; Serial No. 331,840; published Dec. 20, 1932. Class 42.
Western Clock Manufacturing Co., The, (now by change of name Western Clock Co.), assignor to Western Clock Company, Peru, Ill. Clocks and watches. 90,071; renewed Jan. 28, 1933.
Western Tablet & Stationery Corporation. (See Blair, J. C., Company, assignor.)
Williams, Charles B., doing business as C. W. Mfg. Co., Cleveland, Ohio. Cleaning compounds for white shoes. 301,522; Mar. 7; Serial No. 331,898; published Dec. 20, 1932. Class 4.
Williams, J. B., Company, The, Glastonbury, Conn. Shaving cream. 301,530; Mar. 7; Serial No. 331,131; published Dec. 27, 1932. Class 4.
Winthrop Chemical Company, Inc., New York, N. Y. Water soluble organic iodine compound. 301,638; Mar. 7; Serial No. 330,804; published Dec. 6, 1932. Class 6.
Wolk, August, Eisenwarenfabrik Ges. m. beschr. Haftung, Betzdorf (Sieg), Germany. Garden and agricultural tools. 301,669; Mar. 7; Serial No. 331,524; published Dec. 20, 1932. Class 23.
Wolosky, Nathan, New York, N. Y. Frosen confection. 301,656; Mar. 7; Serial No. 330,188; published Dec. 20, 1932. Class 46.

LIST OF REGISTRANTS OF LABELS

Adlerika Company, The, St. Paul, Minn. Dr. Emil's Adla Tablets. For Tablets Useful in Acidity, Sour Stomach, Indigestion, Heart Burn, Etc. 41,805; Mar. 7.
Algase, Chas. G., Philadelphia, Pa. Sunny Smile Mouth Wash. For Mouth Wash. 41,806; Mar. 7.
Alsen, Fred A., doing usiness as Servisette, Chicago, Ill. For Shoe Shine Service Sets. 41,807; Mar. 7.
Fleer, Frank H., Corporation, Philadelphia, Pa. Fleers Bon Bon Gum. For Gum. 41,808; Mar. 7.
Freihofer, Chas., Baking Co. Inc., Troy, N. Y. Freihofer's 24 Hour Coffee. For Coffee. 41,809; Mar. 7.
Gansz Laboratories, Cincinnati, Ohio. Tar Zema. For Ointment. 41,810; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. Helthy Fut. For Boxes. 41,811; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. Special. For Boxes. 41,812; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. The La Salle Shoe. For Boxes. 41,813; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. Comfort. For Boxes. 41,814; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. The Checker Shoe. For Boxes. 41,815; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. Rolwyn. For Boxes. 41,816; Mar. 7.
Hoague-Sprague Corporation, Lynn, Mass. Tri-Flex. For Boxes. 41,817; Mar. 7.
Jaburg Brothers, Inc., New York, N. Y. Epicure Exquisite. For Tea. 41,818; Mar. 7.
Kahn, Harold A., New Iberia, La. Kofmix. For Cough Medicine. 41,819; Mar. 7.
Malted Cereals Company, The, Burlington, Vt. Maltex Cereal. For Prepared Wheat and Malt With Salt. 41,820; Mar. 7.
Peerless Paint & Varnish Corp., Brooklyn, N. Y. Five Boro. For One Coat White Enamel. 41,821; Mar. 7.
Penn City-National Oil Co., doing business as Penn Field Oil Corp. of Penn., Philadelphia, Pa. Penn Field Motor Oil. For Motor Oil. 41,822; Mar. 7.
Penn City-National Oil Co., doing business as Russian American Import Co., Philadelphia, Pa. Baku Genuine Russian Mineral Oil. For Russian Mineral Oil. 41,823; Mar. 7.
Royal Estates Tea Co., Jersey City, and Hoboken, N. J. Royal Estate Tea (Blue Label). For Tea. 41,824; Mar. 7.
Russian American Import Co. (See Penn City-National Oil Co.)
Scheyer-Loveless Service, New York, N. Y. Gold Kup Coffee. For Coffee. 41,825; Mar. 7.
Schreiber Products Corporation, Buffalo, N. Y. Schreiber's Manru Barley Malt Syrup. For Barley Malt Syrup. 41,826; Mar. 7.
Servisette. (See Alsen, Fred A.)
Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Odorless Dry Cleaner. For Dry Cleaning Composition. 41,827; Mar. 7.
Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. "X" Penetrating Lubricant. For Lubricants. 41,828; Mar. 7.
Trent Laboratories, Cleveland, Ohio. Double Purpose Dentrifice. For Dentrifice. 41,829; Mar. 7.
Union Oil Company of California, Los Angeles, Calif. Union Metal-Tone. For Liquid for Cleaning and Polishing Copper, Bronze, Brass, Zinc, Pewter, Nickel, Etc. 41,830; Mar. 7.
"X" Laboratories. (See Tolfree, Edward R.)

LIST OF REGISTRANTS OF PRINTS

Arden, Elisabeth, of New York, Ltd., doing business as Elisabeth Arden, New York, N. Y. Sometime Soon . . . Face these Facts. For Cleansing Cream, Skin Tonic, Skin Cream, Anti-Brown Spot Ointment, Orange Skin Feed, Etc. 14,066; Mar. 7.
Evening News Company, The, Baltimore, Md. Uncle Jack's Club Scrap Book. For Scrap Books. 14,067; Mar. 7.
Squibb, E. R., & Sons, New York, N. Y. Skippy. For Milk of Magnesia, Milk of Magnesia Wafers, and Sodium Bicarbonate. 14,068; Mar. 7.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Cotton batting. Stearns & Foster Company. 301,688; Mar. 7.
Pitch for roofing, waterproofing, etc. Barrett Manufacturing Company. 89,980; renewed Jan. 28, 1933.
Skins, Calf, kid and goat. Burk Brothers. 92,630; renewed July 22, 1933.

CLASS 2

Cases for razors and razor parts. Kampfe Bros. 40,777; renewed July 14, 1933.
Cellars, Pepper and salt. Imperial Metal Manufacturing Corporation. 301,621; Mar. 7; Serial No. 331,900; published Dec. 27, 1932.
Containers. Shep-Roid Corporation. 301,622; Mar. 7; Serial No. 332,048; published Dec. 27, 1932.

CLASS 3

Metal ornaments, monograms, and initials for harness. S. M. Riker. 90,379; renewed Feb. 18, 1933.

CLASS 4

Abrasive, Sand-blast. Pangborn Corporation. 301,538; Mar. 7; Serial No. 329,901; published Dec. 27, 1932.
Ammonia cleaning compound, Liquid. Charles Cooper & Company. 301,589; Mar. 7; Serial No. 329,704; published Dec. 20, 1932.
Chemical compounds, Soluble. Cowles Detergent Company. 301,535; Mar. 7; Serial No. 330,651; published Dec. 27, 1932.
Cleaner for automobiles, furniture, woodwork, etc. A. C. Liverpool. 301,537; Mar. 7; Serial No. 330,174; published Dec. 27, 1932.
Cleaner, shaving soap, shoe polish, etc., Liquid dry. Kresge Department Store Corp. 301,533; Mar. 7; Serial No. 330,791; published Dec. 27, 1932.
Cleaning compound. J. B. Ford Company. 301,519; Mar. 7; Serial No. 331,637; published Dec. 27, 1932.
Cleaning compounds for white shoes. C. B. Williams. 301,522; Mar. 7; Serial No. 331,393; published Dec. 20, 1932.
Cleaning fluid, Dry. C. J. McCartney. 301,542; Mar. 7; Serial No. 328,843; published Dec. 27, 1932.
Cleaning preparation. E. Richardson. 301,543; Mar. 7; Serial No. 329,202; published Dec. 20, 1932.
Cleanser, Hand. F. H. Parker. 301,523; Mar. 7; Serial No. 331,342; published Dec. 20, 1932.
Compound for polishing and cleaning. E. W. Bennett & Company. 92,392; renewed July 8, 1933.
Detergents. American Disinfecting Company. 301,520; Mar. 7; Serial No. 331,634; published Dec. 20, 1932.
Dressing, leather dressing, shoe polish, Automobile top. Raynorshyne Products, Inc. 301,541; Mar. 7; Serial No. 329,153; published Dec. 20, 1932.
Grindstones, razor-strops, and razor hones. Morley Brothers. 90,460; renewed Feb. 25, 1933.
Polishes, dressings and cleaning preparations. Manhattan Kreole Products, Inc. 301,524; Mar. 7; Serial No. 331,379; published Dec. 27, 1932.
Shaving cream. J. B. Williams Company. 301,530; Mar. 7; Serial No. 331,131; published Dec. 27, 1932.
Soap. F. Baker. 301,526; Mar. 7; Serial No. 331,277; published Dec. 27, 1932.
Soap. Silica Products Corporation. 301,521; Mar. 7; Serial No. 331,626; published Dec. 27, 1932.
Soap and shaving cream. D. M. Bell. 301,516; Mar. 7; Serial No. 331,847; published Dec. 27, 1932.
Soap, Perfumed. H. Bronnley & Co. 91,315; renewed Apr. 29, 1933.
Soaps, scouring powders, detergents, etc. R. Sabor. 301,611; Mar. 7; Serial No. 326,161; published Dec. 20, 1932.
Strops, Razor. H. S. Guio. 301,610; Mar. 7; Serial No. 328,168; published Dec. 20, 1932.

CLASS 5

Sising, gums, and pastes, Adhesive. W. E. Kriel. 92,234; renewed June 24, 1933.

CLASS 6

Antacid and indigestion preparation. R. F. Downs. 301,505; Mar. 7; Serial No. 329,273; published Dec. 20, 1932.
Anti-freeze solution. Firestone Tire & Rubber Company. 301,608; Mar. 7; Serial No. 331,179; published Dec. 20, 1932.
Antiseptic compounds. Mu-Col Company. 40,479; renewed June 2, 1933.
Antiseptic preparations. Cavendish Chemical Corporation. 301,487; Mar. 7; Serial No. 330,418; published Dec. 20, 1932.
Antiseptic, Vaginal. Walker, Corp & Co. 301,486; Mar. 7; Serial No. 330,641; published Dec. 20, 1932.
Bleaching and washing solution. Garber-Eagle Oil Corp. 301,532; Mar. 7; Serial No. 330,949; published Dec. 20, 1932.
Calomel, thyroid, calcium, etc. Abbott Laboratories. 301,662; Mar. 7; Serial No. 326,929; published Dec. 20, 1932.
Chemical compound. Bevilite Company Ltd. 301,475; Mar. 7; Serial No. 331,098; published Dec. 20, 1932.
Chemical reagents. Urbana Laboratories. 301,663; Mar. 7; Serial No. 326,444; published Dec. 20, 1932.
Cosmetics. Mata-Hara, Incorporated. 301,492; Mar. 7; Serial No. 329,971; published Dec. 20, 1932.
Cosmetics. Richel Company. 301,479; Mar. 7; Serial No. 330,835; published Dec. 20, 1932.
Cosmetics and toilet preparations. S. Hagler. 301,504; Mar. 7; Serial No. 329,377; published Dec. 6, 1932.
Cream and powder, Face. Amorskin Corporation. 301,557; Mar. 7; Serial No. 301,085; published Mar. 15, 1932.
Cream, Hair beautifying. Morton Manufacturing Corporation. 301,546; Mar. 7; Serial No. 328,956; published Dec. 20, 1932.
Cream, massage cream, skin tonic, etc., Cleansing. Antoine de Paris, Inc. 301,503; Mar. 7; Serial No. 329,617; published Dec. 6, 1932.
Creams and facial creams, Cold. Terminal Barber Shops, Inc. 301,667; Mar. 7; Serial No. 325,488; published Dec. 6, 1932.
Dentifrices and mouth washes. C. P. Shoudy. 301,554; Mar. 7; Serial No. 312,202; published May 5, 1931.
Disinfectant, antiseptic, and deodorant. Ammonol Chemical Company. 301,517; Mar. 7; Serial No. 331,717; published Dec. 20, 1932.
Disinfectants. West Disinfecting Co. 40,795; renewed July 21, 1933.
Dye-soap, Liquid. A. C. Horn Company. 301,528; Mar. 7; Serial No. 331,182; published Dec. 6, 1932.
Effervescent preparations, Palatable. S. Heller. 301,478; Mar. 7; Serial No. 330,849; published Dec. 20, 1932.
Facial preparation. M. Pike. 301,501; Mar. 7; Serial No. 330,000; published Dec. 6, 1932.
Fish parasiticidal preparation and water plants nutritive salt. Nicholas Wapler Company. 301,639; Mar. 7; Serial No. 330,581; published Dec. 6, 1932.
Insecticides. Capital Chemical Drug Company. 301,491; Mar. 7; Serial No. 330,290; published Dec. 20, 1932.
Iodine compound. Winthrop Chemical Company. 301,636; Mar. 7; Serial No. 330,804; published Dec. 6, 1932.
Medicinal powder preparation. Hart Drug Corporation. 301,531; Mar. 7; Serial No. 331,107; published Dec. 20, 1932.
Medicinal preparation. V. L. Appleton. 301,477; Mar. 7; Serial No. 330,882; published Dec. 20, 1932.
Medicinal preparation. C. A. Lermann. 301,499; Mar. 7; Serial No. 330,406; published Dec. 6, 1932.
Medicinal preparation. R. G. Reaves. 301,488; Mar. 7; Serial No. 330,411; published Dec. 20, 1932.
Medicinal preparation. Smith, Kline & French Laboratories. 301,527; Mar. 7; Serial No. 331,268; published Dec. 20, 1932.
Medicinal preparations. J. A. Streker. 301,476; Mar. 7; Serial No. 330,938; published Dec. 20, 1932.
Medicinal tablets. New Life Medicine Co. 301,507; Mar. 7; Serial No. 327,887; published Dec. 20, 1932.
Medicine. W. B. Cronin. 301,474; Mar. 7; Serial No. 331,102; published Dec. 20, 1932.
Medicine. M. A. Herradora. 301,529; Mar. 7; Serial No. 331,180; published Dec. 20, 1932.
Medicines, Internal. Societe des Marques Robin, Societe a Responsabilite Limitee. 301,637; Mar. 7; Serial No. 330,870; published Dec. 6, 1932.
Milk sugar U. S. P., coal tar disinfectant, extract witch hazel, etc. Chas. L. Huisking & Co. 301,660; Mar. 7; Serial No. 329,288; published Dec. 20, 1932.
Moth repellant. Odora Company. 301,518; Mar. 7; Serial No. 331,693; published Dec. 20, 1932.
Oils for use in bleaching, cleaning, and dyeing. W. L. Volgt. 90,266; renewed Feb. 11, 1933.
Ointment. J. Chiarello. 301,634; Mar. 7; Serial No. 330,919; published Dec. 6, 1932.
Perfume. Maxine Products Company. 301,628–32; Mar. 7; Serial Nos. 330,959–63; published Dec. 6, 1932.
Perfumes. Saks & Company. 301,607; Mar. 7; Serial No. 331,229; published Dec. 20, 1932.
Perfumes and face powder. Coty, Inc. 301,605; Mar. 7; Serial No. 331,247; published Dec. 20, 1932.
Perfumes and perfumery. Elizabeth Arden, Inc. 301,606; Mar. 7; Serial No 331,239; published Dec. 20, 1932.
Perfumes, toilet water, face powder, etc. Les Parfums de Molyneux (Societe a Responsabilite Limitee). 301,506; Mar. 7; Serial No. 329,146; published Dec. 20, 1932.
Pharmaceutical products. Naamlooze Vennootschap Chemisch-Pharmaceutische Fabriek "Menoline" (Menoline Drug Company). 301,500; Mar. 7; Serial No. 330,206; published Dec. 20, 1932.
Pills. Davis & Lawrence Co. 301,636; Mar. 7; Serial No. 330,922; published Dec. 6, 1932.
Powder and a special liquid germicide, Hygienic. Southwest Laboratories, Inc. 301,626; Mar. 7; Serial No. 331,067; published Dec. 6, 1932.

Preparation for relief of boils. J. R. Ivey. 301,609; Mar. 7; Serial No. 331,153; published Dec. 20, 1932.
Preparation for skin diseases. D. Rosenberg. 301,547; Mar. 7; Serial No. 322,601; published Dec. 20, 1932.
Preparation for the hair. E. Motley. 301,635; Mar. 7; Serial No. 330,929; published Dec. 6, 1932.
Preparation for the treatment of indigestion. Capsuloids (1909) Limited. 301,502; Mar. 7; Serial No. 329,736; published Dec. 6, 1932.
Preparation for treating epilepsy, and mild cases of insanity. B. Naar. 301,525; Mar. 7; Serial No. 331,314; published Dec. 20, 1932.
Preparation of a tonic for anemia. T. Rosa. 301,490; Mar. 7; Serial No. 330,382; published Dec. 20, 1932.
Preparation recommended for athlete's foot and other fungi infections. N. S. Herbert. 301,534; Mar. 7; Serial No. 330,734; published Dec. 20, 1932.
Preparation to prevent runs in hosiery and lingerie. M. Shapiro. 301,627; Mar. 7; Serial No. 331,011; published Dec. 6, 1932.
Preparation used in the treatment of rheumatism and gouty conditions. T. Levine. 301,604; Mar. 7; Serial No. 331,261; published Dec. 20, 1932.
Purgament and preparation for treating obesity. Brady & Schmidgall. 301,536; Mar. 7; Serial No. 330,195; published Dec. 20, 1932.
Remedy for diseases of the liver and stomach. E. E. Sutherland Medicine Co. 92,597; renewed July 15, 1933.
Resin, Synthetic. Beck, Koller & Company. 301,493; Mar. 7; Serial No. 329,928; published Dec. 20, 1932.
Rouge, perfumery, and toilet waters. Amorskin Corporation. 301,545; Mar. 7; Serial No. 324,027; published Mar. 29, 1932.
Solvent, Ink. J. H. Taxon, Jr. 301,661; Mar. 7; Serial No. 329,226; published Dec. 6, 1932.
Stimulant and diuretic, Cardiac. R. McNeil. 301,664; Mar. 7; Serial No. 326,386; published Dec. 20, 1932.
Toilet preparations. Palmer Limited. 301,510; Mar. 7; Serial No. 326,312; published Dec. 6, 1932.
Tooth paste. Society of Chemical Industry in Basle. 301,638; Mar. 7; Serial No. 330,937; published Dec. 6, 1932.
Waving solution, Permanent. Duart Manufacturing Co. Ltd. 301,540; Mar. 7; Serial No. 329,398; published Dec. 20, 1932.

CLASS 7

Cords, twines, ropes, and lines. Henry C. Kelley Company. 92,560–1; renewed July 15, 1933.
Ribbon for tying packages and other uses. Freydberg Brothers, Incorporated. 301,640; Mar. 7; Serial No. 332,186; published Dec. 27, 1932.
Twines. Brown Company. 301,624; Mar. 7; Serial No. 332,174; published Dec. 27, 1932.

CLASS 8

Pipes. Kaufmann Bros. & Bondy, Inc. 301,592; Mar. 7; Serial No. 331,257; published Dec. 27, 1932.

CLASS 10

Fertiliser. Silica Products Corporation. 301,591; Mar. 7; Serial No. 331,628; published Dec. 27, 1932.
Fertilisers, Manufactured. Swift Fertiliser Works. 40,330; renewed May 12, 1933.
Manure, Ground dehydrated. J. A. Miller. 301,584; Mar. 7; Serial No. 331,991; published Dec. 27, 1932.

CLASS 12

Lime. Moores Lime Company. 91,979; renewed June 10, 1933.

CLASS 13

Bath shower curtains. Joseph A. Kaplan, Inc. 301,587; Mar. 7; Serial No. 331,744; published Dec. 27, 1932.
Chains, Tire. Columbian Rope Company. 301,590; Mar. 7; Serial No. 331,635; published Dec. 27, 1932.
Closet combination. A. Weiskittel & Son Company. 92,379; renewed July 1, 1933.
Hangers, Bath tub. Kohler Co. 301,582; Mar. 7; Serial No. 332,154; published Dec. 27, 1932.
Pipes, tubes, and poles, Metal. Union Metal Manufacturing Company. 301,601; Mar. 7; Serial No. 327,074; published Dec. 27, 1932.
Screws, stripper bolts, and pipe plugs. Standard Pressed Steel Co. 301,583; Mar. 7; Serial No. 332,013; published Dec. 27, 1932.
Springs, Coil. Wm. D. Gibson Company. 301,585–6; Mar. 7; Serial Nos. 331,987–8; published Dec. 27, 1932.
Staples, lath nails, brads, etc. Colorado Fuel and Iron Company. 301,600; Mar. 7; Serial No. 328,550; published Dec. 27, 1932.
Wire and wire fence, Barbed. Continental Steel Corporation. 301,589; Mar. 7; Serial No. 331,724; published Dec. 27, 1932.

CLASS 14

Castings, forgings, and welded composite. Forging and Casting Corporation. 301,594–6; Mar. 7; Serial Nos. 330,892–4; published Dec. 27, 1932.

CLASS 15

Gasoline and lubricating oils. Shell Oil Company. 301,513; Mar. 7; Serial No. 331,995; published Dec. 27, 1932.
Lubricants. Technical Equipment Corporation. 301,580; Mar. 7; Serial No. 326,401; published Dec. 27, 1932.
Oil, Lubricating. J. F. Conran. 301,508; Mar. 7; Serial No. 331,041; published Dec. 27, 1932.
Oil, Thread cutting. Ridge Tool Company. 301,511; Mar. 7; Serial No. 332,310; published Dec. 27, 1932.
Oil, Top cylinder lubrication. C. M. Hingle. 301,573; Mar. 7; Serial No. 330,172; published Dec. 27, 1932.
Oils, Lubricating. Atlantic Refining Company. 301,574; Mar. 7; Serial No. 330,843; published Dec. 27, 1932.
Oils, Lubricating. S. Radbill. 301,509; Mar. 7; Serial No. 331,008; published Dec. 27, 1932.

CLASS 16

Paint and painters' materials. Vitro Manufacturing Company. 92,487; renewed July 8, 1932.

CLASS 17

Cigarettes. Société Aponyme le Khedive. 89,933; renewed Mar. 17, 1933.

CLASS 19

Automobiles and structural parts thereof. H. H. Franklin Manufacturing Company. 301,581; Mar. 7; Serial No. 332,228; published Dec. 27, 1932.
Castings, Finished. Federal Malleable Company. 301,597; Mar. 7; Serial No. 330,785; published Dec. 27, 1932.
Seat cushions. Sponge-Aire Seat Company. 301,593; Mar. 7; Serial No. 331,128; published Dec. 27, 1932.
Vehicles, Motor, particularly motorcycles and bicycles. Indian Motocycle Company. 301,588; Mar. 7; Serial No. 331,742; published Dec. 27, 1932.

CLASS 21

Batteries, Dry cell. S. H. Kress & Co. 301,495; Mar. 7; Serial No. 331,587; published Dec. 27, 1932.
Electric fans, beverage mixers, switches, etc. A. C. Gilbert Company. 301,576; Mar. 7; Serial No. 330,367; published Dec. 27, 1932.
Electric grills and toasters. S. Forestek. 301,575; Mar. 7; Serial No. 330,401; published Dec. 27, 1932.
Electric lighting units and wiring fixtures therefor. Vicbridge Lamp Company. 301,577; Mar. 7; Serial No. 330,215; published Dec. 27, 1932.
Electrical machines, electrotechnical instruments and appliances, etc. Siemens-Schuckertwerke Aktiengesellschaft. 301,551; Mar. 7; Serial No. 320,876; published Dec. 27, 1932.
Electrical supplies. C. Conradty, Fabrik Elektrischer u. Galvinischer Kohlen. 90,298; renewed Feb. 18, 1933.
Inductance devices. F. E. Palmer. 301,498; Mar. 7; Serial No. 331,192; published Dec. 27, 1932.
Lamps, Gaseous discharge tubular. Claude Neon Electrical Products Corporation. 301,512; Mar. 7; Serial No. 331,749; published Dec. 27, 1932.
Radio receiving sets. W. C. Braun. 301,579; Mar. 7; Serial No. 329,766; published Dec. 27, 1932.
Radio receiving sets. United Scientific Laboratories, Inc. 301,494; Mar. 7; Serial No. 331,712; published Dec. 27, 1932.
Tubes for use in radio apparatus, Vacuum. Atlas Supply Company. 301,497; Mar. 7; Serial No. 331,241; published Dec. 27, 1932.

CLASS 22

Base-balls, basket-balls, push-balls, etc. Oliver's Sporting Goods House. 90,236; renewed Feb. 11, 1933.
Bowling alleys. F. M. Berkley. 301,693; Mar. 7.
Coin-controlled amusement machines. J. F. Meyer. 301,691; Mar. 7.
Dolls, puzzles, games, etc. Chad Valley Co. Ltd. 301,558; Mar. 7; Serial No. 283,550; published Dec. 27, 1932.
Game. J. A. Beaudoin. 301,645; Mar. 7; Serial No. 331,914; published Dec. 27, 1932.
Game. D. H. Sweet. 301,617; Mar. 7; Serial No. 331,709; published Dec. 20, 1932.
Game apparatus. P. W. Pattberg. 301,646; Mar. 7; Serial No. 331,870; published Dec. 27, 1932.
Golf clubs. Crawford, McGregor and Canby Company. 301,613; Mar. 7; Serial No. 330,506; published Dec. 27, 1932.
Golf clubs. D. Longworth. 301,679; Mar. 7; Serial No. 332,305; published Dec. 27, 1932.
Rowing machines and table board games. Health Developing Apparatus Co. 301,647; Mar. 7; Serial No. 331,681; published Dec. 27, 1932.

CLASS 23

Cutters, harvesters, chisels, etc. Union Fork & Hoe Company. 301,555; Mar. 7; Serial No. 311,496; published Dec. 20, 1932.
Engines, Aircraft. Bristol Aeroplane Company Limited. 301,675; Mar. 7; Serial No. 330,445; published Dec. 20, 1932.
Implements and parts of such. Cockshutt Plow Company Limited. 301,577; Mar. 7; Serial No. 329,221; published Dec. 20, 1932.

Jacks, Lifting. Templeton, Kenly & Co. 40,032; renewed Mar. 31, 1933.
Motors and fire extinguishers, Water. Globe Automatic Sprinkler Company. 301,670; Mar. 7; Serial No. 330,441; published Dec. 20, 1932.
Pistons. Ray Day Piston Corporation of Detroit. 301,671–2; Mar. 7; Serial Nos. 331,343–4; published Dec. 20, 1932.
Razors and safety razor blades, Safety. American Safety Razor Corporation. 301,676; Mar. 7; Serial No. 330,152; published Dec. 20, 1932.
Scrapers, rollers, groovers, etc. L & M Manufacturing Co. 301,678; Mar. 7; Serial No. 327,823; published Dec. 20, 1932.
Steam-boiler injectors and boiler-feeders. Nathan Manufacturing Company. 90,908; renewed Apr. 1, 1933.
Tools, Garden and agricultural. August Wolf, Eisenwarenfabrik Ges. m. beschr. Haftung. 301,669; Mar. 7; Serial No. 331,524; published Dec. 20, 1932.

CLASS 26

Attachments to weighing scales and similar devices. W. E. Jackson. 301,674; Mar. 7; Serial No. 331,086; published Dec. 20, 1932.
Measuring and scientific appliances. M. Singer. 91,909; renewed June 3, 1933.
Meters, Liquid. Aktiebolaget Imoindustri. 301,673; Mar. 7; Serial No. 331,238; published Dec. 20, 1932.
Patterns, Paper dress. Pictorial Review Company. 301,544; Mar. 7; Serial No. 324,396; published Dec. 20, 1932.
Scales. Morley Brothers. 90,125; renewed Feb. 4, 1933.
Sound and picture projector with phonograph and radio set features. Sprague Specialties Company. 301,550; Mar. 7; Serial No. 321,039; published Dec. 20, 1932.

CLASS 27

Clocks and watches. Western Clock Manufacturing Co. 90,071; renewed Jan. 28, 1933.
Clocks, watches, chronometers, etc. Electric Auto-Lite Company. 301,602; Mar. 7; Serial No. 326,582; published Dec. 27, 1932.
Watches. Sears, Roebuck and Co. 301,598; Mar. 7; Serial No. 329,563; published Dec. 27, 1932.

CLASS 31

Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 301,681–2; Mar. 7.
Refrigerators and refrigerating apparatus. Servel, Inc. 301,618–19; Mar. 7; Serial Nos. 331,936–7; published Dec. 27, 1932.
Refrigerators and refrigerating apparatus. Servel, Inc. 301,641–2; Mar. 7; Serial Nos. 331,934–5; published Dec. 27, 1932.
Refrigerators, and refrigerating apparatus. Servel, Inc. 301,643–4; Mar. 7; Serial Nos. 331,931–2; published Dec. 27, 1932.

CLASS 32

Cases and cabinets, Advertising. American Can Company. 301,556; Mar. 7; Serial No. 307,083; published Dec. 20, 1932.
Pillows. Bullock's, Inc. 301,560; Mar. 7; Serial No. 330,118; published Dec. 20, 1932.
Pillows, cushions, and bed mattresses. Barcalo Manufacturing Company. 301,668; Mar. 7; Serial No. 331,538; published Dec. 20, 1932.
Tables. Dearborn Company. 301,692; Mar. 7.

CLASS 34

Blowers and forges. Champion Blower & Forge Co. 89,829; renewed Feb. 17, 1933.
Grilles. Uni-Flo Grille Corporation. 301,603; Mar. 7; Serial No. 325,310; published May 10, 1932.

CLASS 35

Packing. B. Seliger. 301,615–16; Mar. 7; Serial Nos. 331,443–4; published Dec. 20, 1932.
Packings. Turner Brothers, Limited. 40,433; renewed May 26, 1933.
Tires and rubber hose for conducting water, Pneumatic bicycle and automobile. Morley Brothers. 91,226; renewed Apr. 22, 1933.
Tires for bicycles, etc. Fisk Rubber Company. 38,700; renewed July 29, 1932.

CLASS 36

Talking machines and parts thereof, records, etc. RCA Victor Company. 301,496; Mar. 7; Serial No. 331,474; published Dec. 27, 1932.

CLASS 37

Manifold-books. American Sales Book Company. 90,401; renewed Feb. 25, 1933.
Paper. Alling & Cory Company. 91,148; renewed Apr. 22, 1933.
Paper and stationery. J. C. Blair Company. 92,626; renewed July 22, 1933.
Paper, envelopes and blank books. J. C. Blair Company. 92,520; renewed July 15, 1933.
Paper, envelops and blank books. J. C. Blair Company. 92,522–3; renewed July 15, 1933.
Paper, Toilet. Albany Perforated Wrapping Paper Company. 92,497; renewed July 15, 1933.
Papers. E. E. Lloyd Paper Company. 301,690; Mar. 7.
Pencils. Morley Brothers. 90,461; renewed Feb. 25, 1933.

CLASS 38

Magazine. American Humane Association. 92,161; renewed June 24, 1933.

CLASS 39

Blouses, rompers, and gym apparel. Pennant Sport Togs Company. 301,563; Mar. 7; Serial No. 331,023; published Dec. 27, 1932.
Clothing, Articles of. Camp Fire Girls. 90,791; renewed Mar. 25, 1933.
Coats and suits, Ladies'. Breitstein Manufacturing Co. 301,571; Mar. 7; Serial No. 331,815; published Dec. 27, 1932.
Dresses. Bloomingdale Bros. Inc. 301,565; Mar. 7; Serial No. 331,489; published Dec. 20, 1932.
Dresses. B. Tobias, Inc. 301,561; Mar. 7; Serial No. 330,765; published Dec. 20, 1932.
Dresses, aprons, pajamas. Ely & Walker Dry Goods Company. 301,566; Mar. 7; Serial No. 331,496; published Dec. 20, 1932.
Hosiery. E-Z-B Knitting Co. 301,515; Mar. 7; Serial No. 332,108; published Dec. 27, 1932.
Hosiery. F. & R. Lazarus & Co. 90,645; renewed Mar. 11, 1933.
Hosiery. Chester H. Roth Co. 301,569; Mar. 7; Serial No. 331,594; published Dec. 20, 1932.
Hosiery and Stockings. Ormond Hosiery Shops, Inc. 301,570; Mar. 7; Serial No. 331,694; published Dec. 27, 1932.
Rompers, Children's. Harris-Lipsitz Co. 90,885; renewed Apr. 1, 1933.
Suits, shirts, and shorts, Athletic union. Shorewood Mills. 301,564; Mar. 7; Serial No. 331,293; published Dec. 27, 1932.
Underwear. Spring City Knitting Co. 301,559; Mar. 7; Serial No. 328,510; published Dec. 27, 1932.
Underwear, Infants'. Malone Knitting Company. 301,685; Mar. 7.

CLASS 42

Blankets. Beacon Manufacturing Company. 301,573; Mar. 7; Serial No. 331,944; published Dec. 20, 1932.
Burlap. Hemp Jute & Textile Mfg. Co., A. G. 301,665–6; Mar. 7; Serial Nos. 326,184–5; published Dec. 27, 1932.
Cotton goods in the piece, Unbleached. Wallace Mfg. Co. 91,433; renewed Apr. 29, 1933.
Cotton piece goods. Riegel Textile Corporation. 301,562; Mar. 7; Serial No. 330,967; published Dec. 13, 1932.
Fabric. Goodall Worsted Co. 301,480; Mar. 7; Serial No. 331,737; published Dec. 27, 1932.
Fabrics. Consolidated Cotton Duck Company. 86,514; renewed May 14, 1932.
Fabrics, Decorative woven. Neisler Mills Inc. 301,514; Mar. 7; Serial No. 332,098; published Dec. 27, 1932.
Linen dress goods. Edwin E. Berliner & Co. 301,548; Mar. 7; Serial No. 321,483; published Dec. 20, 1932.
Piece goods. Bianchini, Férier. 301,552; Mar. 7; Serial No. 320,119; published Dec. 27, 1932.
Piece goods. Bianchini, Férier. 301,553; Mar. 7; Serial No. 317,450; published Dec. 27, 1932.
Pile fabrics. Sidney Blumenthal & Co. Inc. 301,481–2; Mar. 7; Serial Nos. 331,571–2; published Dec. 27, 1932.
Pillow cases. Minot, Hooper & Co. 301,483; Mar. 7; Serial No. 330,859; published Dec. 27, 1932.
Sheets. Minot, Hooper & Co. 301,485; Mar. 7; Serial No. 330,858; published Dec. 27, 1932.
Sheets and pillow cases. Minot, Hooper & Co. 301,484; Mar. 7; Serial No. 330,860; published Dec. 27, 1932.
Silk piece goods. Cohn Hall Marx Co. 301,489; Mar. 7; Serial No. 330,338; published Dec. 27, 1932.
Silk piece goods. Cohn Hall Marx Co. 301,567; Mar. 7; Serial No. 331,575; published Dec. 20, 1932.
Towelling. West Point Manufacturing Company. 301,572; Mar. 7; Serial No. 331,840; published Dec. 20, 1932.
Towels. Mosse, Incorporated. 301,549; Mar. 7; Serial No. 321,143; published Dec. 20, 1932.

CLASS 43

Threads and yarns. I. G. Farbenindustrie Aktiengesellschaft. 301,568; Mar. 7; Serial No. 331,584; published Dec. 18, 1932.

CLASS 44

Bandage, Face lifting. K. Welsh. 301,648; Mar. 7; Serial No. 331,601; published Dec. 27, 1932.
Bandages. Porus-Lastic Corp. 301,652; Mar. 7; Serial No. 331,478; published Dec. 27, 1932.
Hair dryers and permanent wave machines. Electrical. Halliwell-Shelton Electric Corporation. 301,651; Mar. 7; Serial No. 331,499; published Dec. 27, 1932.
Hospital supplies. Marvin-Neitzel Corporation. 301,649; Mar. 7; Serial No. 331,509; published Dec. 27, 1932.
Medical and surgical appliances. Johnson & Johnson. 92,678; renewed July 22, 1933.
Menthol pencils and inhalers. Lobl Manufacturing Company. 301,655; Mar. 7; Serial No. 330,823; published Dec. 27, 1932.

Sanitary napkins. San-Nap-Pak Mfg. Co. Inc. 301,686–7; Mar. 7.

CLASS 45

Beverages and fruit juices, beverage syrups, flavors, and extracts, Maltless. W. D. Miller. 301,620; Mar. 7; Serial No. 331,959; published Dec. 27, 1932.
Beverages, and syrups and extracts therefor, Maltless. Vimpla Sales Company. 301,659; Mar. 7; Serial No. 326,404; published June 14, 1932.
Cider. Laird & Company. 301,623; Mar. 7; Serial No. 332,155; published Dec. 27, 1932.
Water, Mineral. Montaqua Mineral Well Co. 301,625; Mar. 7; Serial No. 332,379; published Dec. 27, 1932.

CLASS 46

Baking-powder. Heekin Spice Company. 91,483; renewed May 6, 1933.
Bread. M. Carpenter Baking Company. 301,680; Mar. 7.
Cakes, biscuits, crackers, and candy. Johnson Biscuit Company. 90,025; renewed Jan. 28, 1933.
Canned fruits and vegetables. Drew Canning Company. 301,684; Mar. 7.
Canned fruits, vegetables, salmon, etc. Fargo Mercantile Company. 91,470; renewed May 6, 1933.
Canned or bottled tomato juice, tomato catsup, pork and beans, etc. Vincennes Packing Corporation. 301,657; Mar. 7; Serial No. 327,175; published Dec. 20, 1932.
Canned vegetables, pork and beans, and salmon. E. F. Brewster. 91,845; renewed June 3, 1933.
Coffee, tea, flavoring extracts, and spices. Heekin Spice Company. 91,662; renewed May 20, 1933.
Confection, Frozen. N. Woloski. 301,656; Mar. 7; Serial No. 330,188; published Dec. 20, 1932.
Confections, Frozen. Frosted Fruit Corporation. 301,658; Mar. 7; Serial No. 326,677; published Dec. 20, 1932.
Feed, Chicken. Ralston Purina Company. 90,837; renewed Mar. 25, 1933.
Flour, Wheat. Fisher Flouring Mills Company. 92,330–1; renewed July 1, 1933.
Flour, Wheat. J. F. Imbs Milling Company. 92,338; renewed July 1, 1933.
Foods. California Fruit Exchange. 92,532; renewed July 15, 1933.
Ice cream. Frozen Sponges, Inc. 301,653; Mar. 7; Serial No. 331,332; published Dec. 20, 1932.
Milk, Sterilized and condensed. Nestle and Anglo-Swiss Condensed Milk Company. 91,790; renewed May 27, 1933.
Rice. Louisiana State Rice Milling Company. 301,650; Mar. 7; Serial No. 331,505; published Dec. 20, 1932.
Sausage. Arnold Bros., Incorporated. 301,654; Mar. 7; Serial No. 330,883; published Dec. 20, 1932.
Spaghetti with chicken giblet sauce, minced chicken, chicken tamale pot pie, etc. Milani's Inc. 301,683; Mar. 7.
Sticks for coloring, purifying, and flavoring liquids, Charred. P. J. Hagerty. 301,689; Mar. 7.
Sugar. American Sugar Refining Company. 89,974; renewed Jan. 28, 1933.
Sugar. American Sugar Refining Co. 90,497; renewed Mar. 4, 1933.
Syrup, Chocolate flavored. W. Burton & Co. 301,694; Mar. 7.

CLASS 47

Port and sherry wine. Geo. H. Sandeman, Sons & Co. Limited. 90,925; renewed Apr. 1, 1933.
Wine, and champagne, Claret. D. Antolini & Co. 91,633; renewed May 20, 1933.
Wine, Sherry. Geo. G. Sandeman, Sons & Co. Limited. 91,703; renewed May 20, 1933.

CLASS 49

Whisky. Distillers Agency Limited. 301,612; Mar. 7; Serial No. 330,455; published Dec. 27, 1932.
Whisky, Scotch. John Dewar & Sons Limited. 301,614; Mar. 7; Serial No. 330,541; published Dec. 27, 1932.

CLASS 50

Reflecting devices, Non-illuminated. Small's Sales Service, Inc. 301,599; Mar. 7; Serial No. 329,156; published Dec. 27, 1932.

LIST OF LABELS

Baku Genuine Russian Mineral Oil. For Russian Mineral Oil. Penn City-National Oil Co. 41,823; Mar. 7.
Comfort. For Boxes. Hoague-Sprague Corporation. 41,814; Mar. 7.
Dr. Emile's Adla Tablets. For Tablets Useful in Acidity, Sour Stomach, Indigestion, Heart Burn, Etc. Adlerika Company. 41,805; Mar. 7.
Double Purpose Dentifrice. For Dentifrice. Trent Laboratories. 41,829; Mar. 7.
Epicure Exquisite. For Tea. Jaburg Brothers, Inc. 41,818; Mar. 7.
Fire Boro. For One Coat White Enamel. Peerless Paint & Varnish Corp. 41,821; Mar. 7.
Fleers Bon Bon Gum. For Gum. Frank H. Fleer Corporation. 41,808; Mar. 7.
Freihofer's 24 Hour Coffee. For Coffee. Chas. Freihofer Baking Co. Inc. 41,809; Mar. 7.
Gold Kup Coffee. For Coffee. Scheyer-Loveless Service. 41,825; Mar. 7.
Helthy Fut. For Boxes. Hoague-Sprague Corporation. 41,811; Mar. 7.
Kofmix. For Cough Medicine. H. A. Kahn. 41,819; Mar. 7.
Maltex Cereal. For Prepared Wheat and Malt with Salt. Malted Cereals Company. 41,820; Mar. 7.
Penn Field Motor Oil. For Motor Oil. Penn City-National Oil Co. 41,822; Mar. 7.
Rolwyn. For Boxes. Hoague-Sprague Corporation. 41,816; Mar. 7.
Royal Estate Tea (Blue Label). For Tea. Royal Estates Tea Co. 41,824; Mar. 7.
Schreiber's Manru Barley Malt Syrup. For Barley Malt Syrup. Schreiber Products Corporation. 41,826; Mar. 7.
Servisette. For Shoe Shine Service Sets. F. A. Alsen. 41,807; Mar. 7.
Special. For Boxes. Hoague-Sprague Corporation. 41,812; Mar. 7.
Sunny Smith Mouth Wash. For Mouth Wash. C. G. Algase. 41,806; Mar. 7.
Tar Zema. For Ointment. Ganss Laboratories. 41,810; Mar. 7.
The Checker Shoe. For Boxes. Hoague-Sprague Corporation. 41,815; Mar. 7.
The La Salle Shoe. For Boxes. Hoague-Sprague Corporation. 41,813; Mar. 7.
Tri-Plex. For Boxes. Hoague-Sprague Corporation. 41,817; Mar. 7.
Union Metal-Tone. For Liquid for Cleaning and Polishing Copper, Bronze, Brass, Zinc, Pewter, Nickel, Etc. Union Oil Company of California. 41,830; Mar. 7.
"X" Odorless Dry Cleaner. For Dry Cleaning Composition. E. R. Tolfree. 41,827; Mar. 7.
"X" Penetrating Lubricant. For Lubricants. 41,828; Mar. 7.

LIST OF PRINTS

Skippy. For Milk of Magnesia, Milk of Magnesia Wafers, and Sodium Bicarbonate. E. R. Squibb & Sons. 14,068; Mar. 7.
Sometime Soon . . . Face these Facts. For Cleansing Cream, Skin Tonic, Skin Cream, Anti-Brown Spot Ointment, Orange Skin Food, Etc. Elizabeth Arden of New York, Ltd. 14,066; Mar. 7.
Uncle Jack's Club Scrap Book. For Scrap Books. Evening News Company. 14,067; Mar. 7.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 7TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. J. & K. Company, Incorporated, The. (See Janer, Andre, assignor.)
Abbott, Carroll B., et al. (See Hammerly, Fred V., assignor.)
Ackerman, Albert H., assignor to The Studebaker Corporation, South Bend, Ind. Vehicle seat. 1,899,927; Mar. 7.
Ackerman, Michael H., Mansfield, assignor of one-half to L. C. Sickel, Caledonia, Ohio. Seal. 1,900,849; Mar. 7.
Adams, Arthur H., Yonkers, N. Y., assignor to F. Leo Crilly, London, England. Reenforcing cinematograph films. 1,900,681; Mar. 7.
Adams, Edwin C., Pittsburgh, Pa. Gas burner. 1,900,217; Mar. 7.
Adams, Lester V., Schenectady, N. Y., assignor to General Electric Company. Cementing composition. 1,900,537; Mar. 7.
Addressograph Company. (See Eley, Alonzo, assignor.)
Addressograph Company. (See Gollwitzer, Walter T., assignor.)
Addressograph Company. (See Jackson, James P., assignor.)
Addressograph Company. (See Mobler, Valentine J., assignor.)
Addressograph Company. (See Richter, Elmer F., assignor.)
Adhake Company, The. (See Sevison, Harry D., assignor.)
Aikman, Burton S., assignor of one-half to R. P. Tell, Milwaukee, Wis. Steering device. 1,900,218; Mar. 7.
Air Reduction Company. (See Metzger, Floyd J., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, Frederick, jr., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, F., jr., and Dow, assignors.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Ajax Spring Stabiliser Company. (See Ferguson, Warren T., assignor.)
Aktiebolaget Ljungstrom Angturbin. (See Lysholm, Alf J. R., assignor.)
Aktiebolaget Ljungstroms Angturbin. (See Lysholm, A., Horney, and Wahlsten, assignors.)
Aktiebolaget Malcus Holmquist. (See Brofelth, Gustav E., assignor.)
Aktiebolaget Nomy. (See Wallgren, August G. F., assignor.)
Alcott, James E., Madison, Ill., assignor of one-half to Steadman O. Taylor, Richmond Heights, Mo. Reclaiming car bolsters. 1,900,682; Mar. 7.
Aldon Company, The. (See Roe, Emil W. K., assignor.)
Allee, Herbert D., Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind. Transmission. 1,899,928; Mar. 7.
Allen, Frederick W. (See Malluk, A. M., and Allen.)
Allen, Howard G., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Hand stitching tool. 1,900,683; Mar. 7.
Allen, W. D., Manufacturing Company. (See Meng, Harry E., assignor.)
Altgelt, Herman E., South Bend, Ind., assignor to Oliver Farm Equipment Company. Dump rake. 1,900,270; Mar. 7.
Altgelt, Herman E. and R. J., South Bend, Ind., assignors to Oliver Farm Equipment Company. Harvester. 1,900,269; Mar. 7.
Altgelt, Rudolph J. (See Altgelt, Herman E. and R. J.)
Aluminum Colors Incorporated. (See Tosterud, Martin, assignor.)
American Car and Foundry Company. (See Willoughby, Victor, assignor.)
American Concrete Pipe Company. (See Whiting, William A., assignor.)
American Cyanamid Company. (See Hansen, Waldemar C., assignor.)
American Cyanamid Company. (See Kilbourne, Kenneth A., assignor.)
American Hat Co. Inc., The. (See Shrader, William T., assignor.)
American Pulley Company, The. (See Bowen, Russell H., assignor.)
American Seating Company. (See Hanson, Walter M., assignor.)
American Seating Company. (See Nuberg, Matthys, assignor.)
American Steel Foundries. (See Darby, Robert F., assignor.)
American Telephone and Telegraph Company. (See Crisson, George, assignor.)
American Telephone and Telegraph Company. (See Hamilton, H. S., and Crisson, assignors.)
American Tissue Mills. (See Perkins, Benjamin F., assignor.)
Anders, Ray, Indianapolis, Ind. Apparatus for forming removable ice cream wrappers. 1,900,083; Mar. 7.
Anderson, Martin J., assignor to Mathews Conveyer Company, Ellwood City, Pa. Brake mechanism for conveyers. 1,900,149; Mar. 7.
Anderson, Martin J., assignor to Mathews Conveyer Company, Ellwood City, Pa. Conveying system. 1,900,150; Mar. 7.
Andres, William J., and C. E. Ward, assignors to Bendix Aviation Corporation, South Bend, Ind. Lever. 1,900,151; Mar. 7.
Andrews, Cyrus N., Yucaipa, Calif. Sound amplifying device. 1,899,929; Mar. 7.
Arasim, John A. (See Kelly, J. E., and Arasim.)
Arge, Hans C., assignor to Doughnut Machine Corporation, New York, N. Y. Alimentary product forming device. 1,900,854; Mar. 7.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Atomiser. 1,900,087; Mar. 7.
Aronson, Louis V., assignor to Art Metal Works, Inc., Newark, N. J. Lighter construction. 1,900,684; Mar. 7.
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Arveson, Maurice H., Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Grease insoluble in gasoline. 1,900,759; Mar. 7.
Asahina, Yasuhiko. (See Tamura, K., Kihara, Asahina, and Ishidate.)
Aseltine, Fred E., Dayton, Ohio, assignor to Delco Products Corporation, Anderson, Ind. Charge forming device. 1,900,685; Mar. 7.
Ashbrook, Byron B., Johnstown, Ohio. Automatic door opener. 1,900,785; Mar. 7.
Askania-Werke Aktiengesellschaft. (See Möller, Waldemar, assignor.)
Associated Electric Laboratories, Inc. (See Hershey, Harry E., assignor.)
Atlantic Refining Company, The. (See Kurtz, Stewart S., jr., assignor.)
Auerbach, Zemach, New York, N. Y. Filing or recording device. 1,900,479; Mar. 7.
Augenstein, Karl C., Cranston, assignor to Edwin F. M. Speidel, Edgewood, R. I. Ornamental chain. 1,900,377; Mar. 7.
Automobilewerke H. Bussing, Aktiengesellschaft. (See Staniewicz, Willy, assignor.)
Averill, William H., assignor of one-half to Joseph Pollak, Boston, Mass. Clasp for collars, etc. 1,900,686; Mar. 7.
Avery, Alfred H., Malden, assignor to North American Chemical Company, Cambridge, Mass. Shoe-filling machine. 1,900,322; Mar. 7.
Avery, Alfred H., Malden, assignor to North American Chemical Company, Cambridge, Mass. Shoe-filling machine. 1,900,323; Mar. 7.
Aylsworth, George A., assignor to Cold Control Corporation, Kansas City, Mo. Ventilating means for refrigerators. 1,900,855; Mar. 7.
Aylsworth, George A., assignor to Cold Control Corporation, Kansas City, Mo. Refrigerator construction. 1,900,856; Mar. 7.
Baash, Lawrence F., Los Angeles, and W. H. Maxwell, Beverly Hills, Calif. Tongs. 1,900,878; Mar. 7.
Baehr, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Purification of gases. 1,900,751; Mar. 7.
Bailey, Ervin G., Cleveland Heights, Ohio, assignor, by mesne assignments, to Fuller Lehigh Company. Furnace. 1,900,006; Mar. 7.
Bailey, Ervin G., Easton, assignor to Fuller Lehigh Company, Fullerton, Pa. Furnace block. 1,900,007; Mar. 7.
Bailey Meter Company. (See Benjamin, Merrill G., assignor.)
Bailey, Vernon, Washington, D. C. Animal trap. 1,900,219; Mar. 7.
Bailey, William H., Pueblo, assignor to The Colorado Fuel and Iron Company, Denver, Colo. Dam construction. 1,900,393; Mar. 7.
Baird Machine Company, The. (See Lewis, Arthur J., assignor.)
Bakelite Building Products Co. Inc. (See Harshberger, Norman P., assignor.)
Bakelite Corporation. (See Daniels, Rupert S., assignor.)

Baker Perkins Company, Inc. (See Schmier, Eugene, assignor.)
Bakstad, Johan R., Chicago, Ill., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Crusher. 1,899,930; Mar. 7.
Ball, Joseph A., Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Color cinematographic apparatus. 1,900,034; Mar. 7.
Ballentin, Walter, genannt Mielke. (See Uhlich, E., and Ballentin.)
Ballou, Harry R., Canton, Ohio, assignor to The Hoover Company. Suction cleaner. 1,900,271; Mar. 7.
Barber, George H., New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J. Combined flash-light cap and hanger ring. Des. 89,421; Mar. 7.
Barker, Ralph H., Derry, N. H. Shoe-sole skiving machine. 1,900,786; Mar. 7.
Barmer Maschinenfabrik A.-G. (See Bochmann, O., and Lenk, assignors.)
Barney, Edwin E., New Rochelle, assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. 1,900,088; Mar. 7.
Baron, Charles S., Tiffin, Ohio. Covered container and sealing closure therefor. 1,899,921; Mar. 7.
Barstow, Edwin O., assignor to The Dow Chemical Company, Midland, Mich. Production of light metals, such as magnesium. 1,900,220; Mar. 7.
Bartholomew, Robert J., Germantown, assignor to Fletcher Works, Incorporated, Philadelphia, Pa. Traverse motion. 1,900,480; Mar. 7.
Bash, Thomas B., Kansas City, Mo. Switch. 1,900,687. Mar. 7.
Batchelor, Harold, Jersey City, N. J. Vanity case. 1,900,089; Mar. 7.
Baugnée, Justin, Differdange, Luxemburg. Coupling or clutch for coaxial shafts. 1,900,787; Mar. 7.
Baum, Frank G., San Francisco, Calif. Airplane wing. 1,900,688; Mar. 7.
Baum, Frank G., San Francisco, Calif. Airplane. 1,900,689; Mar. 7.
Baumgarten Company of Washington, The. (See Baumgarten, E., Gosnell, and Deisch, assignors.)
Baumgarten, Emanuel, C. W. Gosnell, and N. J. Deisch, assignors to The Baumgarten Company of Washington, Washington, D. C. Stamping press. 1,900,008; Mar. 7.
Bauwens, Seraphine F., Chicago, Ill. Decorative bow for hat bands or the like. 1,900,481; Mar. 7.
Baxter, George L. and F. W. Strachauer, Sacramento, and R. S. Twogood, Berkeley, Calif. Locomotive fire-box. 1,900,324; Mar. 7.
Bayes, Elijah W., Parsons, Kans. Railway track crossing construction. 1,900,788; Mar. 7.
Bayman, Fred, and R. C. Brennesholtz, Seattle, Wash. Automobile table. 1,900,325; Mar. 7.
Beacham, Edwin B., assignor to Chipman Knitting Mills, Easton, Pa. Hosiery. Re18,757; Mar. 7.
Beardsley, Alling P. (See Berry, G. A., Linville, and Beardsley.)
Beardsley, Elmer O., assignor to The Beardsley Piper Company, Chicago, Ill. Thermostatically controlled mixing device. 1,900,221; Mar. 7.
Beardsley & Piper Company, The. (See Beardsley, Elmer O., assignor.)
Beaver, John G. (See Bricken, John.)
Bebel, Abraham, New York, N. Y. Safety removable fastener. 1,900,152; Mar. 7.
Beck, Henry M., Wilkes-Barre, Pa. Fly holder. 1,900,035; Mar. 7.
Becker, Bernard C., York, Pa., assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,889; Mar. 7.
Becker, Joseph, Pittsburgh, Pa., assignor, by mesne assignments, to The Koppers Company of Delaware. Coking retort oven. 1,900,752; Mar. 7.
Becker, Joseph, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware. Charging coking retort ovens. 1,900,753; Mar. 7.
Beckett, Charles A., Hull, England. Machine for graining lithographic plates. 1,900,090; Mar. 7.
Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Phase shifting circuits. 1,900,538; Mar. 7.
Behrens, Hans C. A., assignor of one-half to the Firm Rud. Otto Meyer and one-half to the Firm Kupferhütte Ertel, Bieber & Co., Hamburg, Germany. Apparatus for separating salts or other materials from liquids. 1,900,789; Mar. 7.
Bell Punch Company. (See Black, Horace D., assignor.)
Bellanca, Giuseppe M., New Castle, Del. Air brake for airplanes. 1,900,631; Mar. 7.
Bendix Aviation Corporation. (See Andres, W. J., and Ward, assignors.)
Bendix Aviation Corporation. (See Mock, Frank C., assignor.)
Bendix Brake Company. (See Bendix, Vincent, assignor.)
Bendix Brake Company. (See Frank, Frederick C., assignor.)
Bendix Brake Company. (See McDonald, Eugene G., assignor.)
Bendix Brake Company. (See Norton, Raymond J., assignor.)
Bendix Brake Company. (See Whitworth, Stanley, assignor.)
Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Conduit. 1,900,091; Mar. 7.
Benjamin, Bert R., Oak Park, and W. S. Graham, Canton, Ill., assignors to International Harvester Company. Tractor planter. 1,899,931; Mar. 7.
Benjamin, Bert R., Oak Park, and S. W. Cady, Canton, Ill., assignors to International Harvester Company. Tractor cultivator. 1,899,932; Mar. 7.
Benjamin, Merrill G., Lakewood, Ohio, assignor, by mesne assignments, to Bailey Meter Company. Furnace control. 1,900,036; Mar. 7.
Benjamin, Philip, New York, N. Y. Article of jewelry. 1,900,425; Mar. 7.
Bennett, Irving T., Brooklyn, assignor to T. E. Murray, deceased, J. B. Murray, T. E. Murray, jr., and J. F. Murray, executors. Electric heater. 1,899,933; Mar. 7.
Bennett, Thomas B. (See Clarke, Alex A., assignor.)
Benzing, Hugo, Dresden, Germany. Power driven typewriter. 1,900,690; Mar. 7.
Berek, Max, assignor to Ernst Leitz Optische Werke, G. m. b. H., Wetzlar, Germany. Ultralight intensive objective. 1,899,934; Mar. 7.
Beresford, Joseph W., Clifton, N. J. Fountain toothbrush. 1,900,826; Mar. 7.
Berger, Emil J., Hatfield, assignor to Dexdale Hosiery Mills, Lansdale, Pa. Hosiery. Des. 89,383; Mar. 7.
Bergische Stahl-Industrie. (See Halbach, Paul, assignor.)
Bergman, Donald J., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbon oils. 1,900,153; Mar. 7.
Berry, George A., Bound Brook, C. P. Linville, Elizabeth, and A. P. Beardsley, Plainfield, assignors to Calco Chemical Company, Bound Brook, N. J. Apparatus for use in the catalytic oxidation of gases. 1,900,857; Mar. 7.
Best, Harry S., assignor to John H. Best & Sons, Galva, Ill. Display rack. 1,899,935; Mar. 7.
Best, John H., & Sons. (See Best, Harry S., assignor.)
Beyer, Haim. (See Blake, O., and Beyer.)
Bigelow-Sanford Carpet Co. (See Darlenzo, Anthony, assignor.)
Bigelow Sanford Carpet Co. (See Murphy, Francis, assignor.)
Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Structural unit. 1,900,327; Mar. 7.
Bjorkstedt, William. (See Lowe, R. E., Brown, and Bjorkstedt.)
Black, Horace D., Uxbridge, assignor to Bell Punch Company, Ltd., London, England. Inking device. 1,900,092; Mar. 7.
Black, Lee J., Beaumont, Tex. Blow-out preventing attachment for casing heads. 1,899,922; Mar. 7.
Blake, Octave, and H. Beyer, New York, assignors to Cornell Electric Manufacturing Co., Inc., Long Island City, N. Y. Fixed condenser and making the same. 1,900,093; Mar. 7.
Blanchard, Frederick C., Dorchester, Mass. Lubricating system. 1,900,754; Mar. 7.
Blanchard, George L., Calexico, Calif. Method and apparatus for defibrating cotton seed hulls. 1,900,154; Mar. 7.
Bliffert, Walter J., Milwaukee, Wis. Intake manifold. 1,900,272; Mar. 7.
Bliss, H. R., Company. (See Allen, Howard G., assignor.)
Blumenthal, B., & Co. Inc. (See Bentkow, Abraham, assignor.)
Boardman, Alfred E., Seattle, Wash. Fire extinguishing sprinkler valve. 1,900,032; Mar. 7.
Bochmann, Otto, and W. Lenk, Remscheid-Lennep, assignors to Barmer Maschinenfabrik A.-G., Wuppertal-Oberbarmen, Germany. Device for equalizing the thread tensions for twisting devices. 1,900,037; Mar. 7.
Boggs, Robert, Daly City, Calif. Automatic door tightener. 1,900,328; Mar. 7.
Böhme, the Firm, Dr. Martin. (See Lang, Arno, assignor.)
Bohn, Ralph M., Evanston, Ill. Wheat flour diluent. 1,900,094; Mar. 7.
Bond Electric Corporation. (See Barber, George H., assignor.)
Borden, Moro M., Collingswood, N. J., assignor to Simplex Valve & Meter Company, Philadelphia, Pa. Flow controller. 1,900,273; Mar. 7.
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric train signaling system. 1,900,405; Mar. 7.
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric train signaling system. 1,900,412; Mar. 7.
Boughtin, Earl M., et al. (See Christensen, John L., assignor.)
Bowen, Russell H., assignor to The American Pulley Company, Philadelphia, Pa. Grooved pulley. 1,900,222; Mar. 7.
Bower, Ward E., Washington, D. C. Oscillation generator. 1,900,038; Mar. 7.
Boyce, Irving J. (See Peters, Frank J., assignor.)
Boyd, Fisher L., Haverford, assignor, by mesne assignments, to National Foam System, Inc., Philadelphia, Pa. Apparatus for producing fire extinguishing foam. 1,900,482; Mar. 7.
Boyden, Roland W., et al., receivers. (See Maynard, Charles E., assignor.)

Brackett, Edward M., and D. Daneke, assignors to The Brackett Stripping Machine Company, Topeka, Kans. Paper cutting and trimming machine and clamping and shock-absorbing mechanism therefor. 1,899,923; Mar. 7.
Brackett Machine Stripping Company, The. (See Brackett, E. M., and Daneke, assignors.)
Brady, Charles T., Detroit, Mich. Reading lamp. 1,900,539; Mar. 7.
Brady, Walter L., Brockton, assignor to The Stetson Shoe Company, Inc., Weymouth, Mass. Shoe. Des. 89,384; Mar. 7.
Brady, Walter L., Brockton, assignor to The Stetson Shoe Company, Inc., Weymouth, Mass. Shoe. Des. 89,385; Mar. 7.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg Kliesrath Corporation, Long Island City, N. Y. Brake mechanism. 1,900,155; Mar. 7.
Bragg Kliesrath Corporation. (See Bragg C. S., and Kliesrath, assignors.)
Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)
Brandt, Edgar W., Paris, France. Grenade. 1,900,790; Mar. 7.
Brandt, Edward J., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Money handling machine. 1,900,039; Mar. 7.
Brennesholtz, Richard C. (See Bayman, F., and Brennesholtz.)
Brice, Henry E., New York, N. Y. Automatic brake adjuster. 1,900,791; Mar. 7.
Bricken, John (now by judicial change of name to J. G. Beaver), East Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Typewriting and calculating machine. 1,899,936; Mar. 7.
Brien, Joseph R., assignor of one-half to Camille Lapierre, Montreal, Quebec, Canada. Skate. 1,900,040; Mar. 7.
Briggs, Orville B., and G. M. Richard, assignors to Safety Belt Lacer Company, Toledo, Ohio. Method and apparatus for making belt lacing hooks. 1,900,156; Mar. 7.
Bright Star Battery Company. (See Koretzky, H., Horowitz, and Desimone, assignors.)
Bristol, Cyrus J., assignor to Globe Machinery & Supply Company, Des Moines, Iowa. Hydraulic lift for vehicles. 1,900,483; Mar. 7.
Brockie, Harold I., Chatham, N. J. Collapsible play pen and sun bath. 1,900,274; Mar. 7.
Broda, Jan, Torun, Poland. Arched roof. 1,899,924; Mar. 7.
Broderick, John H., Clinton, Mass. Ice-remover for windshields. 1,900,540; Mar. 7.
Brodhun, Carl P., Wilkes-Barre, Pa., assignor to The Okonite Company, Passaic, N. J. Cable. 1,900,041; Mar. 7.
Brodhun, Carl P., Wilkes-Barre, Pa., assignor to The Okonite Company, Passaic, N. J. Noninductive cable. 1,900,792; Mar. 7.
Brofelth, Gustav E., assignor to Aktiebolaget Malcus Holmquist, Halmstad, Sweden. Wadding for whale guns. 1,899,925; Mar. 7.
Broughton, Horatio D., Woodcliff, N. J. Cabinet. 1,900,793; Mar. 7.
Brown, Creston L., Dalles, Oreg. Splash guard for motor vehicles. 1,899,937; Mar. 7.
Brown, Lee R., East Orange, assignor to Monroe Calculating Machine Company, Orange, N. J. Calculating machine. 1,900,042; Mar. 7.
Brown, Norman B. (See Lowe, R. E., Brown, and Bjorkstedt.)
Brownstein, Louis, Brooklyn, assignor to Monopulse Teletype Corporation, New York, N. Y. One-wire electrical selecting apparatus. 1,900,095; Mar. 7.
Bruce, Thomas J., Wichita, Kans. Piston ring milling machine. 1,900,755; Mar. 7.
Bruckner, Robert E., Easton, Pa., assignor to Doherty Research Company, New York, N. Y. Three-cylinder tandem engine. 1,900,858; Mar. 7.
Brun, Albert, Paris, France. Safety device for locks. 1,900,794; Mar. 7.
Brunsviga Maschinenwerke Grimme, Natalis & Co., Aktiengesellschaft. (See Haase, Richard, assignor.)
Buchanan, Stephen N., New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J. Ground wire coupler. 1,900,329; Mar. 7.
Büchner, Carl, assignor of one-half to Papyrus A. G., Mannheim-Waldorf, Germany. Apparatus for sorting transparent or translucent papers, film foils, and the like. 1,900,633; Mar. 7.
Budnik, John. (See Skrlec, P., and Budnik.)
Buelow, George. (See Buelow, Henry W. and G.)
Buelow, Henry W., Royal Oak, and G. Buelow, Detroit, Mich. Structural element. 1,900,541; Mar. 7.
Buenger, Clarence O., assignor to Hills-McCanna Company, Chicago, Ill. Tank car outlet valve. 1,899,938; Mar. 7.
Buhrle, Paul, Bronx, assignor to United Metal Goods Mfg. Co. Inc., Brooklyn, N. Y. Combined clock case and lamp. Des. 89,422; Mar. 7.
Burdick Corporation, The. (See Torrisi, Samuel S., assignor.)
Burke, Stephen P., Morgantown, W. Va., assignor to Surface Combustion Corporation, Toledo, Ohio. Furnace. 1,899,926; Mar. 7.
Burke, Stephen P., Elizabeth, N. J., assignor to Surface Combustion Corporation, Toledo, Ohio. Firing reheating furnaces. 1,900,223; Mar. 7.
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,900,157; Mar. 7.
Büsdorf, Johann, and F. Löfund, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Substituted amino-diphenylamine. 1,900,426; Mar. 7.
Bush, Philip M. (See Hart, T. S., and Bush.)
Bushbeck, Werner, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Arrangement for radio circuits. 1,899,939; Mar. 7.
Bushong, Harry F., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Transmission. 1,900,096; Mar. 7.
Busse, Edwin G., and H. W. Ekholm, assignors to Chicago Railway Equipment Company, Chicago, Ill. Safety guard for brake rods. 1,900,224; Mar. 7.
Butler, John D., Washington, D. C. Razor blade sharpener. 1,900,158; Mar. 7.
Butterworth, William J., Tutbury, assignor to Qualcast Limited, Derby, England. Washing machine. 1,900,795; Mar. 7.
Butts, George W., Wynnewood, Pa., assignor to Pennsylvania Railroad Company. Assembling and transporting stacked articles. 1,900,756; Mar. 7.
Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft. (See Mengele, Hans, assignor.)
Byron-Jackson Co. (See Smith, Nelson K., assignor.)
Cady, Sherman W. (See Benjamin, B. R., and Cady.)
Cady, Sherman W., Canton, Ill., assignor to International Harvester Company. Tractor cultivator. 1,899,940; Mar. 7.
Cain, William E. (See Gotthardt, H. R., and Cain.)
Calco Chemical Company. (See Berry, G. A., Linville, and Beardsley, assignors.)
California Packing Corporation. (See Youman, Burt C., assignor.)
Camel Company. (See Nystrom, Karl F., assignor.)
Cameron Machine Company. (See Johnstone, Robert M., assignor.)
Campbell, Allan, Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,900,159; Mar. 7.
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air brake. 1,900,043; Mar. 7.
Capper, Arthur, trustee. (See Poirot, Eugene M., assignor.)
Card, John L., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Hat lubricating machine. 1,900,634; Mar. 7.
Card, William C., jr., Winthrop, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y. Sole cementing machine. 1,899,941; Mar. 7.
Carlson, Ernest J., Reading, Pa. Adjustable milk bottle holder for cribs and the like. 1,900,691; Mar. 7.
Carlson, George, Bridgeport, Conn., assignor to General Electric Company. Wiring device. 1,900,542; Mar. 7.
Carpenter, E. W., Manufacturing Company, The. (See Carpenter, Edward W., assignor.)
Carpenter, Edward W., Fairfield, assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Making shears. 1,900,413; Mar. 7.
Carson Pirie Scott & Company. (See Gottstein, Lewis, assignor.)
Carter, Daniel G. and G. G., Highland Park, Mich. Device for cleaning waste and drain pipes. 1,900,275; Mar. 7.
Carter, Guy G. (See Carter, Daniel G. and G. G.)
Carter, Pauline F., Brookline, Mass. Clothes drier. 1,900,796; Mar. 7.
Casper, Louis H., et al. (See Manvell, Edwin H., assignor.)
Caswell, Geo. W., Co. (See Quinn, Joseph F., assignor.)
Cawood, Richard L., East Liverpool, Ohio. Apparatus for producing various kinds of pottery. 1,900,797; Mar. 7.
Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Rivat, assignors.)
Celanese Corporation of America. (See Ellis, G. H., Olpin, and Storey, assignors.)
Centeno V., Melchor, New York, N. Y. Television apparatus. Re18,761; Mar. 7.
Cerf, Barry, trustee. (See Hedeen, A., and Holifer.)
Certain-teed Products Corporation. (See Doyon, Eugene T., assignor.)
Certain-teed Products Corporation. (See Otis, Edward C., assignor.)
Chadeloid Chemical Company. (See Root, Frank B., assignor.)
Chambers, Berin, Quinlan Company. (See Cooper, Earl E., assignor.)
Chapin, Herbert L., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lip turning machine. 1,900,044; Mar. 7.
Chappell, Reginald J., Brooklyn, N. Y. Game appliance. 1,900,798; Mar. 7.
Charlotte Chemical Laboratories, Inc. (See Raffoer, Emil, assignor.)

Chartrand, John B., Cleveland, Ohio, assignor to Line Material Company, South Milwaukee, Wis. Lighting fixture. 1,900,330; Mar. 7.
Chemical Construction Corporation. (See Hechenbleikner, Ingenuin, assignor.)
Chemische Fabrik Kalk G. m. b. H. (See Oehme, Hermann, assignor.)
Chesley, Walter R., Somerville, assignor to Persons-Majestic Manufacturing Company, Worcester, Mass. Splash guard holder for vehicle fenders. 1,900,225; Mar. 7.
Chicago Bridge and Iron Company. (See Williams, Djalma D., assignor.)
Chicago Railway Equipment Company. (See Busse, E. G., and Ekholm, assignors.)
Chicago Railway Equipment Company. (See Ekholm, Herbert W., assignor.)
Chilton, Roland, Ridgewood, assignor to Eclipse Aviation Corporation, East Orange, N. J. Engine starting mechanism. 1,900,799; Mar. 7.
Chipman Knitting Mills. (See Beacham, Edwin B., assignor.)
Christenson, John L., assignor of one-half to Earl M. Boughtin and C. Wagenius, Edmonton, Alberta, Canada. Automatic door, window, or gate operating device. 1,900,009; Mar. 7.
Church, Harold D., assignor to The White Motor Company, Cleveland, Ohio. Heavy duty automobile construction. 1,900,484; Mar. 7.
Church, Lewis H., Westfield, assignor to The Thomas & Betts Co., Elizabeth, N. J. Grounding fitting. 1,900,485; Mar. 7.
Cincinnati Ball Crank Company, The. (See Harris, Cleo, assignor.)
Cipko, Joseph, New York, N. Y. Wire shaping machine. 1,900,160; Mar. 7.
Claflin Products Incorporated. (See Claflin, William B., jr., assignor.)
Claflin, William B., jr., assignor to Claflin Products Incorporated, New Canaan, Conn. Trouser hanger. 1,899,942; Mar. 7.
Clapp, Albert L., Danvers, Mass. Manufacture of fibrous articles. 1,900,427; Mar. 7.
Clarin, Werner E., Chicago, Ill. Folding chair. 1,900,486; Mar. 7.
Clark, Harry A., Detroit, Mich. Necktie construction. 1,900,800; Mar. 7.
Clark, Peter. (See Weidhaas, G. A., Clark and Harding, assignors.)
Clark, William T., Boston, Mass. Rain and sun shield for vehicles. 1,900,097; Mar. 7.
Clarke, Alex A., Chicago, Ill., assignor to T. B. Bennett, Muskegon, Mich., and himself jointly. Wood surfacing machine. 1,900,331; Mar. 7.
Clay Equipment Corporation. (See Clay, J. B., and Wilson, assignors.)
Clay, Joseph B., Cedar Heights, and L. R. Wilson, Waterloo, assignors to Clay Equipment Corporation, Cedar Falls, Iowa. Window device. 1,899,943; Mar. 7.
Claybourn Process Corporation. (See Dennis, William C., assignor.)
Clayton and Lambert Manufacturing Company. (See Lambert, Charles F., assignor.)
Clements Mfg. Co. (See Clements, William J., assignor.)
Clements, William J., assignor to Clements Mfg. Co., Chicago, Ill. Vacuum cleaner. 1,900,692; Mar. 7.
Close, Lowell B. (See Huber, W. I., and Close.)
Cobb, Thomas S., Fort Lauderdale, Fla. Mattress. 1,900,801; Mar. 7.
Cochran, Ralt S., assignor to Surface Combustion Corporation, Toledo, Ohio. Conveyer for furnaces. 1,900,428; Mar. 7.
Cochrane, Charles H., New York, N. Y. Combined ink drying and neutralizing device. 1,900,543; Mar. 7.
Coddington, Harry W., Roanoke, Va. Control valve for low water alarms. 1,900,379; Mar. 7.
Cohan, Morris J., Brooklyn, N. Y. Spot welding. 1,900,161; Mar. 7.
Cohen, Benjamin, Brooklyn, N. Y. Foundation for animal head and body. 1,900,487; Mar. 7.
Cohen, Solomon, Leavenworth, Kans. Spring mattress. 1,900,802; Mar. 7.
Cold Control Corporation. (See Aylsworth, George A., assignor.)
Cole, Clarence, et al. (See Oster, C. B., and Rainey, assignors.)
Cole, Dale S. (See Leece, B. M., and Cole.)
Coleman, Gerald H., assignor to The Dow Chemical Company, Midland, Mich. Preparation of ethylidene chloride. 1,900,276; Mar. 7.
Colombo, Carlo A., assignor to Soc. Ital. Transfers Albini, S. I. T. A., Milan, Italy. Printing transfers. 1,900,635; Mar. 7.
Colorado Fuel and Iron Company, The (See Bailey, William H., assignor.)
Compo Shoe Machinery Corporation. (See Card, William C., jr., assignor.)
Conant, David J., Memphis, Tenn. Well reamer. 1,900,226; Mar. 7.
Connolly, Gerald C., and E. B. Miller, assignor to The Silica Gel Corporation, Baltimbre, Md. Making gels. 1,900,859; Mar. 7.
Cook, C. Lee, Manufacturing Company. (See Durham, Fred D., assignor.)
Cook, Charles C., Baltimore, Md. End ballast tamper. 1,899,944; Mar. 7.
Cook Electric Company. (See Wilkins, Albert M., assignor.)
Coolidge, Cole, assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Metal salts of half acid esters of fatty hydroxylated oil and making them. 1,900,693; Mar. 7.
Cooper, Earl E., assignor to Chambers, Bering, Quinlan Company, Decatur, Ill. Protecting cap. 1,900,098; Mar. 7.
Cooperstein, Abraham, et al. (See Cooperstein, Irving and A., and Levitt.)
Cooperstein, Irving and A., Brooklyn, and A. Levitt, New York, N. Y. Candelabrum. Des. 89,423; Mar. 7.
Coradi, Oswald, Zurich, and W. Leemann, Ruschlikon, near Zurich, Switzerland. Tracing device for instruments such as integraphs and the like. 1,900,332; Mar. 7.
Corlett, Edwin H., assignor to Fairchild Aerial Surveys, Inc., New York, N. Y. Measuring and computing instrument. 1,900,757; Mar. 7.
Cornell Electric Manufacturing Co. (See Blake, O., and Beyer, assignors.)
Cornillac, André. (See Coupeau, M., and Delaville, assignors.)
Cottrell, Roy H., Ogden, Utah. Centrifugal thickener. 1,900,394; Mar. 7.
Coupeau, Marc., Paris, and M. Delaville St.-Maurice, assignors of one-third to A. Cornillac, Paris, France. Apparatus for the removal of alcohol from wine, cider, beer, and other alcoholic products. 1,900,094; Mar. 7.
Courtaulds Limited. (See Hegan, H. J., and Hazeley, assignors.)
Crabbe, Lindsay T., assignor to Phoenix Metal Cap Co., Inc., Chicago, Ill. Jar and closure therefor. 1,900,803; Mar. 7.
Craig, Frank E., assignor of one-fourth to J. W. Lovell, Astorio, Oreg. Lifeboat hook. 1,900,227; Mar. 7.
Craig, William D., Meadville, Pa., assignor to Hookless Fastener Company. Playing ball. 1,900,544; Mar. 7.
Crane, Theodore D., Council Bluffs, Iowa. Parachute mounting for aeroplanes. 1,900,891; Mar. 7.
Creveling, John L., White Plains, assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Electric regulation. 1,900,277; Mar. 7.
Creveling, John L., Tucson, Ariz., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y. Electric system. 1,900,278; Mar. 7.
Crilly, F. Leo. (See Adams, Arthur H., assignor.)
Crisson, George. (See Hamilton, H. S., and Crisson.)
Crisson, George, East Orange, N. J., assignor to American Telephone and Telegraph Company. Two-way negative resistance repeater. 1,900,045; Mar. 7.
Cronwell, Magnus. (See Ellberg, J., and Cronwell.)
Crowe, James H., Lakewood, assignor to The Midland Steel Products Company, Cleveland, Ohio. Brake drum or member. 1,900,804; Mar. 7.
Crown Cork & Seal Company. (See Kramer, Eric B., assignor.)
Cudney, Harry J. (See Wiley, W. K., and Cudney.)
Cudney, Harry J., Buffalo, assignor to Flexlume Corporation, Tonawanda, N. Y. Illuminated sign. 1,900,768; Mar. 7.
Cunning, Harry F., Roanoke, Va. Lubricating device. 1,900,429; Mar. 7.
Cunningham, James, Son & Company. (See Fergusson, David, assignor.)
Curtin-Howe Co poration. (See Curtin, Leo P., assignor.)
Curtin, Leo P., Cranbury, N. J., assignor to Curtin-Howe Corporation, New York, N. Y. Zino-meta-arsenite. 1,900,162; Mar. 7.
Curtis, Arthur R., assignor to Superior Carbon Products, Incorporated, Cleveland, Ohio. Method of and machine for binding cables. 1,900,695; Mar. 7.
Curtis, William H., assignor to National Pumps Corporation, Dayton, Ohio. Pump cabinet. Des. 89,386; Mar. 7.
Curtis, William H., assignor to National Pumps Corporation, Dayton, Ohio. Pressure controlling device for a liquid dispensing apparatus. 1,900,333; Mar. 7.
Cuthbert, William R. (See Sheaffer, C. R., and Cuthbert.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Cutting, Clark T. (See Taylor, W. J., and Cutting.)
Dahlquist, Reuben A., Chicago, Ill. Game board. Des. 89,387; Mar. 7.
Dain Manufacturing Company of Iowa. (See Miller, Paul P., assignor.)
Dana, Charles A., et al., receivers. (See Maynard, Charles E., assignor.)
Dana, Drexler, Santa Barbara, and F. A. Morgan, Beverley Hills, Calif. Method and apparatus for drilling oil wells. 1,900,163; Mar. 7.
Daneke, Dietrich. (See Bracket, E. M., and Daneke.)
Dangerlite Corporation of America. (See Scott, Ernest E., assignor.)
Daniels, Rupert S., Newark, N. J., assignor to Bakelite Corpo ation, New York, N. Y. Water repellent abrasive. 1,900,430; Mar. 7.
Darby, Robert F., assignor to American Steel Foundries, Chicago, Ill. Grate. 1,999,945; Mar. 7.
Darienzo, Anthony, Amsterdam, N. Y., assignor to Bigelow-Sanford Co., Inc., Thompsonville, Conn. Filling stop motion for looms. 1,900,545; Mar. 7.

Dasenbrook, Charles H., assignor to Thayer Action Company, Rockford, Ill. Piano action. 1,900,488; Mar. 7.
Davidson, William D., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Kelly bushing. 1,899,946; Mar. 7.
Davis, Charles H., Hawkins, Wis. Attachment for ladders. 1,900,636; Mar. 7.
Davis, Clarke F., Short Hills, N. J. Metal edged gypsum lumber. 1,900,805; Mar. 7.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. 1,900,334; Mar. 7.
Dawson, James C., Webster Groves, Mo. Loose leaf binder. 1,900,431; Mar. 7.
Day, George J., Buffalo, N. Y. Oven thermometers. 1,900,696; Mar. 7.
Day, J. H., Company, The. (See Schiff, Sigmund, assignor.)
Dean Brothers Co. (See Dean, Stuart, assignor.)
Dean, Stuart, assignor to Dean Brothers Co., Indianapolis, Ind. Pump construction. 1,900,228; Mar. 7.
Dean, Wilbur J., Kansas City, Mo. Bead forming machine. 1,899,947; Mar. 7.
Decker, James W., New York, N. Y. Stock quotation projecting machine. 1,900,010; Mar. 7.
De Coriolis, Ernest G., Toledo, and P. Q. Williams, Ottawa Hills, assignors to Surface Combustion Corporation, Toledo, Ohio. Glass melting apparatus. 1,900,432; Mar. 7.
Deere & Company. (See Silver, Walter H., assignor.)
Delsch, Noel J. (See Baumgarten, E., Gosnell, and Delsch.)
Delaville, Maurice. (See Coupeau, M., and Delaville.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Del Vecchio, Ambrogio, Hawthorne, N. Y. Collapsible tent and frame. 1,900,335; Mar. 7.
De Monge, Gérard, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli Societa Anonima, Milan, Italy. Power transmission mechanism. 1,900,165; Mar. 7.
Dennis, William C., assignor to Claybourn Process Corporation, Milwaukee, Wis. Safety device for pressure systems. 1,900,229; Mar. 7.
Denzer, Ludwig, Hamburg, Germany. Type pad for typewriters. 1,900,046; Mar. 7.
De Orlow, Stephen, Lansing, Mich. Liquid level indicator. 1,900,433; Mar. 7.
Derby, Ira H., assignor to P. C. Reilly, Indianapolis, Ind. Distilling fluent materials and producing coke. 1,900,047; Mar. 7.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Cutter for extruding machines. 1,900,434; Mar. 7.
Desautels, Charles H., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire building method. 1,900,435; Mar. 7.
Desimone, Anthony J. (See Koretsky, H., Horowitz, and Desimone.)
Detroit Show Case Company. (See McDonald, Angus N., assignor.)
De Vilbiss Company, The. (See Roselund, Harold A., assignor.)
Devol, Lee, Wilkinsburg, assignor to The Union Switch & Signal Company, Pittsburgh, Pa. Electric control system. 1,900,406; Mar. 7.
Dexdale Hosiery Mills. (See Berger, Emil J., assignor.)
Dickens, James C., Goose Creek assignor of one-half to W. C. Thomas, Houston, Tex. Releasable packer. 1,900,230; Mar. 7.
Dictograph Products Co. (See Ring, Fred, assignor.)
Dill & Collins Co. (See Schwalbe, Hellmuth C., assignor.)
Dix, Lawton A., New York, N. Y. Drier head. 1,900,166; Mar. 7.
Doherty Research Company. (See Bruckner, Robert E., assignor.)
Doherty Research Company. (See Lowe, R. E., Brown, and Bjorkstedt assignors.)
Dohner, Donald R., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Refrigerator cabinet or similar article. Des. 89,388; Mar. 7.
Dohner, Donald R., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Cover of a refrigerator cabinet or similar article. Des. 89,389; Mar. 7.
Dole, Myron W., Belmont, and M. Silverman, Brookline, Mass. Feed water heater for locomotives. 1,900,697; Mar. 7.
Doughnut Machine Corporation. (See Arge, Hans C., assignor.)
Dourgnon, Jean T., Paris, France. System of indirect lighting of all spaces. 1,900,436; Mar. 7.
Dovell Dudley K., El Paso, Tex., assignor to Sullivan Machinery Company. Drill steel retainer. 1,900,860; Mar. 7.
Dow Chemical Company, The. (See Barstow, Edwin O., assignor.)
Dow Chemical Company, The. (See Coleman, Gerald H., assignor.)
Dow Chemical Company, The. (See Grether, Ernest F., assignor.)
Dow, Dewey M. (See Riebel, F., and Dow.)
Doyon, Eugene T., assignor, by mesne assignments, to Certain-teed Products Corporation. Roofing manufacture. 1,900,598; Mar. 7.
Drake Rollin L., Port Arthur, Tex., assignor to The Texas Company, New York, N. Y. Capping machine. 1,900,637; Mar. 7.
Draper Corporation. (See O'Brien, Daniel N., assignor.)
Drexler, Dana, Santa Barbara, and F. A. Morgan, Beverly Hills, Calif. Method and apparatus for drilling oil wells. 1,900,164; Mar. 7.
Dreyfus, Camille, New York, N. Y., and G. Rivat, Paterson, N. J., assignors to Celanese Corporation of America. Differentially coloring fabric and product thereof. 1,900,167; Mar. 7.
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Dyeing of textile material with vat dyes. 1,900,168; Mar. 7.
Drying Systems, Inc. (See Russell, B. B., and Uhlhorn, assignors.)
Duduletz, John, Tregarva, Saskatchewan, assignor of one-half to Stephen Duduletz, Tregarva, Canada. Breast wrench. 1,900,169; Mar. 7.
Duduletz, Stephen. (See Dudulest, John, assignor.)
Duplate Corporation. (See Zola, John C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Coolidge, Cole, assignor.)
Du Pont, E. I., de Nemours & Company. (See Graves, George D., assignor.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, I., and Rintelman, assignors.)
Du Pont, E. I., de Nemours & Company. (See Lewers, W. W., and Schwartz, assignors.)
Du Pont, E. I., de Nemours & Company. (See Rintelman, William L., assignor.)
Du Pont, E. I., de Nemours & Company. (See Ulich, L., and Goodrich, assignors.)
Du Pont Film Manufacturing Corporation. (See Moyse, Hollis W., assignor.)
Du Pont Film Manufacturing Corporation. (See Sease, Virgil B., assignor.)
Durham, Fred D., assignor to C. Lee Cook Manufacturing Company, Louisville, Ky. Rod wiping mechanism. 1,900,437; Mar. 7.
Durham, Harold L., Everett, Wash. Corrosion preventing attachment for boats. 1,900,011; Mar. 7.
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Hopkins, Roy S., assignor.)
Eastman Kodak Company. (See Jones, John G., assignor.)
Eastman Kodak Company. (See Seymour, Merrill W., assignor.)
Eastman Kodak Company. (See Staud, C. J., and Webber, assignors.)
Eastman Kodak Company. (See Taylor, E. R., and Smith, assignors.)
Eastman Kodak Company. (See Van Derhoef, Henry E., assignor.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eclipse Aviation Corporation. (See Chilton, Roland, assignor.)
Eclipse Aviation Corporation. (See Lansing, Raymond P., assignor.)
Ede, George A., Cobden, Ill. Measuring device. 1,900,231; Mar. 7.
Edghill, Frederick A., assignor to Rayner Decalcomania Company, Chicago, Ill. Decalcomania transfer. 1,900,048; Mar. 7.
Edminston, Hugh C. (See Goddard, John V., assignor.)
Egan, John J., San Francisco, Calif. Woodworking machinery. 1,900,336; Mar. 7.
Egli, Firm H. W. A. G. (See Suter, Heinrich, assignor.)
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for converting oils. 1,900,170; Mar. 7.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for converting oils. 1,900,171; Mar. 7.
Eisenberg, George, Brooklyn, N. Y. Musical instrument of the violin type. 1,900,489; Mar. 7.
Ekholm, Herbert W. (See Busse, E. G., and Ekholm.)
Ekholm, Herbert W., assignor to Chicago Railway Equipment Company, Chicago, Ill. Wheel stop. 1,900,232; Mar. 7.
Electrolux Servel Corporation. (See Knight, Donald B., assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Electrolux Servel Corporation. (See Taylor, Robert S., assignor.)
Eley, Alonzo, Hendon, England, assignor to Addressograph Company, Chicago, Ill. Addressing machine and other similar printing machines. 1,900,279; Mar. 7.
Elgin National Watch Company. (See Howard, Edward, assignor.)
Eliassen, Fred B. (See Thoresen, C. B., and Eliassen.)
Ellberg, John, New York, and M. Cronwall, assignors to A. Schrader's Son, Inc., Brooklyn, N. Y. Fluid pressure gauge. 1,900,414; Mar. 7.
Elliott Company. (See Rodgers, James P., assignor.)
Ellis, Carleton, Montclair, N. J. Composition containing a resinous complex. 1,900,638; Mar. 7.

Ellis, George H., H. C. Olpin, and R. C. Storey, Spondon, near Derby, England, assignors to Celanese Corporation of America. Treatment of textile and other materials. 1,900,172; Mar. 7.
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Insulating body. 1,900,698; Mar. 7.
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Waterproof insulating body. 1,900,699; Mar. 7.
Ellison, Harry C., Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation. U-bolt and making the same. 1,900,049; Mar. 7.
Elöd, Egon, Karlsruhe, Germany. Production of cellulose formates. 1,900,599; Mar. 7.
Emanueli, Luigi, Milan, Italy, assignor to Società Italiana Pirelli. High tension electric cable. 1,900,600; Mar. 7.
Emerson Electric Mfg. Co., The. (See Persons, Lawrence M., assignor.)
Emmons, Arthur N., assignor to The Porter-Cable Machine Company, Syracuse, N. Y. Tailstock for lathes and the like. 1,900,233; Mar. 7.
Emsco Derrick & Equipment Company. (See Davidson, William D., assignor.)
Emsco Derrick & Equipment Company. (See Goeser, Edwin W., assignor.)
Engstrom, Gustaf W. (See Walker, E. C., and Engstrom.)
Epstein, Albert A., New York, N. Y. Briquette and process of manufacture. 1,900,173; Mar. 7.
Equipment Specialties Company. (See O'Connor, Arthur F., assignor.)
Erickson, Everett, and G. J. Hoody, Omaha, Nebr. Collapsible luggage rack. 1,900,438; Mar. 7.
Ernst, Hans, assignor to Western Cartridge Company, East Alton, Ill. Process of and apparatus for making wads. 1,900,012; Mar. 7.
Ernst, Walter, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press platen travel equalizer. 1,900,050; Mar. 7.
Evans, Edwin R., Detroit, Mich. Brake construction. 1,900,546; Mar. 7.
Evenson, Arthur M., Spring Grove, Minn. Corn removing attachment. 1,900,806; Mar. 7.
Extrom, Victor E. (See Miller, P. J. N., and Extrom.)
F. & N. Lawn Mower Company, The. (See Kenyon, M. G., and Kluter, assignors.)
Fabrica Italiana Magneti Merelli, Societe Anonima. (See de Monge, Gérard, assignor.)
Fahrenwald, Frank A., Chicago, Ill., Chain link and integral head articulating pintle. 1,899,948; Mar. 7.
Fahrney, Emery H., Chicago, Ill. Lubricating means for high pressure pump pistons. 1,899,949; Mar. 7.
Fairbanks, Morse & Co. (See Goldberg, M. J., and Teufl, assignors.)
Fairbanks, Morse & Co. (See Harstick, William H., assignor.)
Fairchild Aerial Surveys, Inc. (See Corlett, Edwin H., assignor.)
Fairchild, Oscar H., assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,900,174; Mar. 7.
Falk Corporation, The. (See Ledeen, Hyman, assignor.)
Famous, Earl M., Upper Darby, Pa. Reversible necktie. 1,900,490; Mar. 7.
Farrelly, Patrick, San Francisco, Calif. Collar shaper. 1,900,547; Mar. 7.
Fedders Manufacturing Company. (See Moore, Samuel, assignor.)
Fedders Manufacturing Company. (See Slagel, Franklin G., assignor.)
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's M'f'g Co., Philadelphia, Pa. Christmas tree holder. 1,900,807; Mar. 7.
Fehlberg, Chester H., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind. Free Wheeling transmission. 1,899,950; Mar. 7.
Felder, Abraham, New York, N. Y. Loose leaf book. 1,900,601; Mar. 7.
Felten, Abram V. A. (See Mahlstedt, John F., and Felten.)
Ferguson, Harry, Belfast, Northern Ireland. Cultivator. 1,900,440; Mar. 7.
Ferguson, John E., Edgewood, R. I., assignor to Westinghouse Lamp Company. Securing contact pins in radio-tube bases. 1,900,099; Mar. 7.
Ferguson, Warren T., Brookline, assignor to Ajax Spring Stabilizer Company, Cambridge, Mass. Metal spring cover. 1,900,051; Mar. 7.
Fergusson, David, assignor to James Cunningham, Son & Company, Rochester, N. Y. Motor vehicle. 1,900,439; Mar. 7.
Fien, Alphonsus, assignor to S. H. Pomeroy Company, New York, N. Y. Metal window. 1,900,175; Mar. 7.
Fien, Alphonsus, assignor to S. H. Pomeroy Company, New York, N. Y. Metal window. 1,900,177; Mar. 7.
Finkelstein, Hans, Uerdingen (Niederrhein), assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Cellulose nitrate lacquer. 1,900,700; Mar. 7.
Firebar Corporation. (See Thompson, James S., assignor.)
Fire King Co., The. (See Snavely, Earl R., assignor.)
Fischer, Heinrich. (See Schmidt, O., Treppenhauer, Grosskinsky, and Fischer.)
Fisher, David, Paden City, W. Va. Saucer. Des. 89,390; Mar. 7.
Fisher, David, Paden City, W. Va. Cup. Des. 89,391; Mar. 7.
Fisher, Guy B., Blandlake, Tex. Plow. 1,900,701; Mar. 7.
Fisher, Guy B., Blandlake, Tex. Saw. 1,900,702; Mar. 7.
Fisk Rubber Company, The. (See Desautels, Charles H., assignor.)
Fisk Rubber Company, The. (See Labine, Roland A., assignor.)
Fisk Rubber Company. (See Maynard, Charles E., assignor.)
Fisk Rubber Company. (See Mead, George J., assignor.)
Fitzgerald Mfg. Company, The. (See Fitzgerald, Patrick J., assignor.)
Fitzgerald, Patrick J., assignor to The Fitzgerald Mfg. Company, Torrington, Conn. Casing for a rotary cutting implement. Des. 89,424; Mar. 7.
Fitzpatrick, John B., East Orange, N. J., assignor to Westinghouse Lamp Company. Welding metals. 1,900,100; Mar. 7.
Fletcher Works, Incorporated. (See Bartholomew, Robert J., assignor.)
Flewell, Walter H., Sioux City, Iowa. Dual door control. 1,900,176; Mar. 7.
Flexlume Corporation. (See Cudney, Harry J., assignor.)
Flexlume Corporation. (See Wiley, W. K., and Cudney, assignors.)
Floyd, William M. (See Latou, William L., assignor.)
Folmer Graflex Corporation, The. (See Petit, W. H., and Hineline, assignors.)
Fonseca, Edward L. (See Hunt, Edward M., and Fonseca.)
Food Machinery Corporation. (See McDill, R. D., assignor.)
Foster, John L., New York, N. Y. Garment safety pocket. 1,900,639; Mar. 7.
Foster Wheeler Corporation. (See Wallis, John S., assignor.)
Fox Case Corporation. (See Sponable, Earl I., assignor.)
Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Wheel. 1,900,101; Mar. 7.
Frank, Frederick C., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,900,178; Mar. 7.
Frank, Leonard, St. Paul, Minn. Vegetable slicing mechanism. 1,900,491; Mar. 7.
Franklin Valveless Engine Company. (See Kahr, Martin, assignor.)
Frederickson, Otto A., Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y. Armored cable. 1,900,492; Mar. 7.
Freeman, Benjamin W., Cincinnati, Ohio. Making shoes. 1,900,441; Mar. 7.
Free Wheeling Patents Corporation. (See Bushong, Harry F., assignor.)
Free Wheeling Patents Corporation. (See Fehlberg, Chester H., assignor.)
Freeman, Horace. (See Wagner, C. L., and Freeman.)
Freudenberg, Ernest W., Larchmont, N. Y. Embroidered textile fabric or a similar article. Des. 89,392; Mar. 7.
Friedrichs, Frederick M., Summerville, S. C. Radio secretary. 1,900,493; Mar. 7.
Frigidaire Corporation. (See Maccabee, David E., assignor.)
Frink, Carl H., Clayton, N. Y. Snowplow. 1,900,703; Mar. 7.
Fuchs, Leo, Cameron, Tex. Glare shield. 1,900,337; Mar. 7.
Fuller Company. (See Morrow, Joseph H., assignor.)
Fuller Lehigh Company. (See Bailey, Ervin G., assignor.)
Fuller Lehigh Company. (See Harter, Isaac, assignor.)
Fuller Lehigh Company. (See Jacobus, D. S., and Kerr, assignors.)
Fullerton, George A., Clarendon, Pa. Power take-off for motor vehicles. 1,900,415; Mar. 7.
Gade, Harcourt F. (See Ranney, L., and Gade.)
Galassi, Pasquale, New York, N. Y. Dividing strip for terazzo and like floors. 1,900,704; Mar. 7.
Galassi, Pasquale, New York, N. Y. Bimetallic flanged dividing strip. 1,900,705; Mar. 7.
Galloway, Otis W., Minneapolis, Minn. Box car construction. 1,900,548; Mar. 7.
Garrett, Francis A., assignor to Ransomes, Sims & Jeffries, Limited, Ipswich, England. Cardan shaft. 1,900,052; Mar. 7.
Gasstrom, Herman M., Mount Vernon, N. Y. Yielding joint for extension rules. 1,900,640; Mar. 7.
Gattoni, John, Union City, assignor to Seederer-Kohlbusch, Inc., Jersey City, N. J. Magnetic damper for precision balance. 1,900,641; Mar. 7.
Gay, Frazer W., Newark, N. J. Power transmission system. 1,900,494; Mar. 7.
Gay, Frazer W., Newark, N. J. Capacitor protector. 1,900,495; Mar. 7.
Gay, Frazer W., Newark, N. J. Network of midtapped transformers. 1,900,496; Mar. 7.
Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Protective system for fluid cooled tubes. 1,900,013; Mar. 7.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Coupler and yoke connection. 1,900,549; Mar. 7.

Geist, Joseph, Kraiburg-on-the-Inn, Germany. Grab. 1,900,179; Mar. 7.
General Aniline Works, Inc. (See Büsdorf, J., and Lösund, assignors.)
General Aniline Works, Inc. (See Kranzlein, G., and Ochwat, assignors.)
General Aniline Works, Inc. (See Laska, L., and Zitscher, assignors.)
General Aniline Works, Inc. (See Marx, K., and Lehmann, assignors.)
General Aniline Works, Inc. (See Rietz, E., and Hoffmann, assignors.)
General Aniline Works, Inc. (See Wahl, Ottmar, assignor.)
General Electric Company. (See Adams, Lester V., assignor.)
General Electric Company. (See Bedford, Burnice D., assignor.)
General Electric Company. (See Carlson, George, assignor.)
General Electric Company. (See Heisler, Charles L., assignor.)
General Electric Company. (See Hull, Albert W., assignor.)
General Electric Company. (See Junggren, Oscar, assignor.)
General Electric Company. (See McArthur, Elmer D., assignor.)
General Electric Company. (See Moore, Daniel M., assignor.)
General Electric Company. (See Pipkin, Marvin, assignor.)
General Electric Company. (See Reed, Walter C., assignor.)
General Electric Company. (See Seeley, Harold T., assignor.)
General Electric Company. (See Wade, Raymond B., assignor.)
General Electric Company. (See Watson, George O., assignor.)
General Electric Company. (See Weber, Louis J., assignor.)
General Electric Company. (See Whitney, C. F., assignor.)
General Plate Company. (See Payette, Joseph A., assignor.)
Gerhardt, Jacob J. (See Pearson, A. L., and Gerhardt.)
Gerlach, Frits, Berlin-Tempelhof, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Ventilating device for subterranean spaces. 1,900,642; Mar. 7.
Gervasi, Paul, Waterbury, Conn. Burner. 1,899,951; Mar. 7.
Gessler, Harry C., Brooklyn N. Y. Self closing sugar bowl mounting. 1,900,643; Mar. 7.
Gibson, Oliver E. (See Manske, F. A., Odenwaldt, and Gibson.)
Giesecke, Fred O., Evanston, Ill., assignor to International Patents Development Company, Wilmington, Del. Apparatus for making gelatinized starch products. 1,889,952; Mar. 7.
Gilbert & Barker Manufacturing Company. (See Logan, Joseph A., assignor.)
Gilbert, William S., Detroit, Mich., assignor to Morgan & Wright. Tire. Des. 89,393; Mar. 7.
Giles, H. R., et al. (See Pippin, John W., assignor.)
Giles, William R. (See Pasternack, R., and Giles.)
Gillen, George A., Bronx, N. Y. Combined switch casing and mounting bracket or similar article. Des. 89,394; Mar. 7.
Gillette Safety Razor Company. (See Muros, Joseph, assignor.)
Gilmer, George W., Tacony, Pa. Pad or packing with fastening means. 1,900,280; Mar. 7.
Gitt, Harry N., 2d, Hanover, Pa. Hand ball gloves. 1,900,395; Mar. 7.
Gitzendanner, Fred, New York, N. Y. Shock absorber. 1,900,497; Mar. 7.
Glatthar, George E., University Heights and F. Wening, South Euclid, Ohio. Lighting fixture. Des. 89,395; Mar. 7.
Glidden, Harvey L., Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Back. 1,900,053; Mar. 7.
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Globe Machinery and Supply Company. (See Bristol, Cyrus J., assignor.)
Goddard, John V., Trentham, England, assignor to H. C. Edmiston, New York, N. Y. Covered dish or similar article. Des. 89,396; Mar. 7.
Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Vehicle Driving apparatus and system. 1,900,706; Mar. 7.
Godsey, Frank W., jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Regulation of alternating current circuits. 1,900,707; Mar. 7.
Goeser, Edwin W., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Rotary draw works with adjustable jack shaft. 1,899,958; Mar. 7.
Going, George G., Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company. Typewriting machine. 1,900,102; Mar. 7.
Goldberg, Morris J., and F. C. Teufl, Beloit, Wis., assignors to Fairbanks, Morse & Co., Chicago, Ill. Reversing and control mechanism for internal combustion engines. 1,900,054; Mar. 7.
Golliwitzer, Walter T., Chicago, Ill, assignor to Addressograph Company, Wilmington, Del. Addressing machine. 1,900,281; Mar. 7.
Goodman Manufacturing Company. (See Vodos, Frederick W., assignor.)
Goodrich, Robert E. (See Ulich, L., and Goodrich.)
Gookin, Sylvester L., Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener supplying apparatus. 1,900,055; Mar. 7.
Gosnell, Charles W. (See Baumgarten, E., Gosnell, and Deisch.)
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky. Switching conveyor. 1,900,602; Mar. 7.
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky. Automatic conveying apparatus. 1,900,603; Mar. 7.
Gottlieb, Joseph, Jersey City, N. J. Combined clock case and lamp or similar article. Des. 89,397; Mar. 7.
Gottstein, Lewis, assignor of one-half to Carson Pirie Scott & Company, Chicago, Ill. Display stand. 1,899,954; Mar. 7.
Gould Storage Battery Corporation. (See Snyder, Almond H., assignor.)
Goulds Pumps, Incorporated. (See Pomeroy, William D., assignor.)
Graham, William S. (See Benjamin, B. R., and Graham.)
Grant, Albert E., New York, and S. W. Vanderbeek, Manhasset, N. Y. Thermostat switch. 1,899,955; Mar. 7.
Graubner, Herman G. (See Jones, H. W., and Graubner.)
Graves, George D., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Anti-freeze composition. 1,900,014; Mar. 7.
Gray, Max, Minneapolis, Minn. Hanger for fur. 1,900,550; Mar. 7.
Greenawalt, John E., New York, N. Y. Copling sintered material. 1,900,234; Mar. 7.
Greenley, Jay H., Buffalo, N. Y. Speed and time recorder. 1,899,956; Mar. 7.
Greider, Harold W., Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company. Magnesium carbonate and manufacturing process thereof. 1,900,235; Mar. 7.
Grether, Ernest F., assignor to The Dow Chemical Company, Midland, Mich. Acyl derivatives of 4,4'-diamino diphenyl oxide. 1,900,442; Mar. 7.
Griffith, Charles A., Knoxville, Tenn. Drop bottom car. 1,900,056; Mar. 7.
Grigsby-Grunow Company. (See Haimbaugh, Raymond C., assignor.)
Grigsby-Grunow Company. (See Lewis, Robert O., assignor.)
Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of train brakes. 1,900,403; Mar. 7.
Grondahl, Lars O., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Apparatus for the control of vehicle brakes. 1,900,404; Mar. 7.
Grondahl, Lars O., and A. J. Sorensen, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,900,407; Mar. 7.
Grondahl, Lars O., and A. J. Sorensen, Pittsburgh, assignors to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,900,411; Mar. 7.
Grosskinsky, Otto. (See Schmidt, O., Treppenhauer, Grosskinsky, and Fischer.)
Grulich, Anton, Glen Ridge, N. J. Textile fabric or the like. Des. 89,398; Mar. 7.
Gubelmann, Ivan, South Milwaukee, and W. L. Rintelman, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Preparing anthraquinone sulphonic acids. 1,899,957; Mar. 7.
Gubelmann, William S., Buffalo, N. Y. Calculating machine. 1,900,103; Mar. 7.
Gunnison, Raymond M., Scarsdale, N. Y. Book. 1,899,958; Mar. 7.
Gustafson, Andrew F., Clarinda, Iowa. Stock watering apparatus. 1,900,604; Mar. 7.
Guth, Edwin F., Webster Groves, Mo. Lighting unit for reflected illumination. 1,900,551; Mar. 7.
Guth, Edwin F., Webster Groves, Mo. Lighting fixture. 1,900,552; Mar. 7.
Haase, Richard, assignor to Brunsviga-Maschinenwerke Grimme, Natalis & Co., Aktiengesellschaft, Brunswick, Germany. Carrying mechanism for calculating machines and the like. 1,900,808; Mar. 7.
Hageman, Aaron M., Bloomfield, and A. F. Lindstrom, Nutley, N. J., assignors to Westinghouse Lamp Company. Method and apparatus for coating the interior wall of hollow bodies. 1,900,104; Mar. 7.
Haimbaugh, Raymond C., assignor to Grigsby-Grunow Company, Chicago, Ill. Refrigeration apparatus. 1,900,644; Mar. 7.
Halbach, Paul, Remscheid, assignor to the Firm Bergische Stahl-Industrie, Dusseldorf-Oberkassel, Germany. Mechanical brake for railway motor cars. 1,900,282; Mar. 7.

Hale, Reuben B., San Francisco, Calif. Lighting fixture. 1,900,380; Mar. 7.
Hall, Arthur, Oak Park, assignor to Yaxley Manufacturing Company, Chicago, Ill. Electric switch. 1,900,236; Mar. 7.
Hall, W. F., et al. (See Pippin, John W., assignor.)
Halle, Hiram J., New York, N. Y., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating hydrocarbons. 1,900,105; Mar. 7.
Hamant, Edward W. (See von Webern, G., and Hamant.)
Hamilton, Harold S., White Plains, N. Y., and G. Crisson, East Orange, N. J., assignors to American Telephone and Telegraph Company. Bridging connection for program circuits. 1,900,106; Mar. 7.
Hammerly, Fred V., assignor of one-half to C. B. Abbott and one-half to G. A. Hammerly, Berkeley, Calif. Sewage purification system. 1,900,809; Mar. 7.
Hammerly, Georgia A., et al. (See Hammerly, Fred V., assignor.)
Hammond, John H., jr., Gloucester, Mass. Selective radio reception. 1,900,283; Mar. 7.
Hampton, George E., Pittsburgh, Pa., assignor to The Syntron Company. Portable motor driven saw. 1,900,553; Mar. 7.
Handler, Harris L., Vallejo, Calif. Cushion pad for shoe counters. 1,900,107; Mar. 7.
Hannoversche Maschinenbau-Actien-Gesellschaft vormals Georg Egestorff Hanomag. (See Schargorodsky, Lazar, assignor.)
Hansen, Hans P., Syracuse, N. Y. Mortuary record container. 1,900,708; Mar. 7.
Hansen, Mahlin S., assignor to P. C. Reilly, Indianapolis, Ind. Froth-flotation process for slime-containing ore pulps. 1,900,850; Mar. 7.
Hansen, Waldemar C., Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y. System for producing gypsum. 1,900,381; Mar. 7.
Hauson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Drawer construction. 1,900,338; Mar. 7.
Happ, Willard C., assignor to The Studebaker Corporation, South Bend, Ind. Abrasive disk. 1,899,959; Mar. 7.
Harding, Howard V. (See Weidhaas, G. A., (Clark, and Harding, assignors.)
Hargroves, Willis W., Portsmouth, Va. Basket cover fastener. 1,900,810; Mar. 7.
Harnsberger, Audley E., assignor to The Pure Oil Company, Chicago, Ill. Treating an oil-gas. 1,900,057; Mar. 7.
Harrell, Billington C., San Antonio, Tex. Firefly. 1,900,339; Mar. 7.
Harris, Cleo, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio. Grease gun casing. Des. 89,399; Mar. 7.
Harris-Seybold-Potter Company. (See Pritchard, Carl G., assignor.)
Harshberger, Norman P., Chicago, Ill., assignor to Bakelite Building Products Co. Inc., New York, N. Y. Roofing material. 1,900,861; Mar. 7.
Harshman, Vern S., Detroit, Mich. Dental cement and making dental cement. 1,900,237; Mar. 7.
Harstick, William H., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Power plant. 1,900,058; Mar. 7.
Hart & Hutchinson Company, The. (See Hart, T. S., and Bush, assignors.)
Hart Glass Manufacturing Company. (See McDonald, Harry R., assignor.)
Hart, Theodore S., New Britain, and P. M. Bush, Bloomfield, assignors to The Hart & Hutchinson Company, New Britain, Conn. Combined radiator and humidifier. 1,900,554; Mar. 7.
Harter, Isaac, New York, N. Y., assignor to The Fuller Lehigh Company, Fullerton, Pa. Furnace wall. 1,900,443; Mar. 7.
Hartford-Empire Company. (See Mulholland, Vergil, assignor.)
Hartford-Empire Company. (See Mulholland, V., and Hunter, assignors.)
Hartmann, Paul E., Hillside Township, Union County, assignor to J. E. Mergott Company, Newark, N. J. Hand bag. 1,899,960; Mar. 7.
Hartsborn, Joseph, Fort Des Moines, Iowa. Animal trap. 1,900,645; Mar. 7.
Harvey, James W., Winthrop, Me. Motor boat installation. 1,900,180; Mar. 7.
Harvey, Leo M., Los Angeles, Calif. Flat band tying machine. 1,900,238; Mar. 7.
Hayes, Harvey C., Washington, D. C. Method and apparatus for sound ranging. 1,900,015; Mar. 7.
Hayne, C. C., et al. (See Hayne, Ernest S., assignor.)
Hayne, Ernest S., assignor of one-third to J. T. Large and one-third to C. C. Hayne, Birmingham, Ala. Draft regulator. 1,900,340; Mar. 7.
Hayter, Bernie S., Waco, Tex. Changeable exhibitor. 1,900,059; Mar. 7.
Hazel-Atlas Glass Company. (See Smith, Frasier, assignor.)
Haseley, Edward. (See Hegan, H. J., and Hazeley.)
Heat Treating Company. (See Laird, Wilbur G., assignor.)
Hechenbleikner, Ingenuin, assignor to Chemical Construction Corporation, Charlotte, N. C. Manufacturing SO_2 gas. 1,900,239; Mar. 7.

Hedeen, Arthur, J. G. Hollfer, and V. S. Landess, assignors to Barry Cerf, Portland, Oreg., trustee. Coaster wagon. 1,900,108; Mar. 7.
Hegan, Horace J., and E. Hazeley, Coventry, assignors to Courtaulds Limited, London, England. Production of artificial threads and the like from viscose and in apparatus therefor. 1,900,811; Mar. 7.
Heinke, Alfred J., Towaco, N. J., assignors to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 89,400; Mar. 7.
Heinrich, Walter A., St. Louis, Mo. Earth anchor. 1,900,498; Mar. 7.
Heisler, Charles L., Schenectady, N. Y., assignor to General Electric Company. Combined motion picture-sound reproducer. 1,900,555; Mar. 7.
Hellman, Carl B., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,401; Mar. 7.
Hemmingsen, Trokild V., Copenhagen, Denmark. Controlling pistons of internal combustion engines. 1,900,605; Mar. 7.
Hempy-Cooper Manufacturing Company. (See Mattern, Herman T., assignor.)
Henderson, James E., Lee, England. Gyroscopic navigational instrument. 1,900,709; Mar. 7.
Hendry, William F., Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J. High intensity gaseous discharge tube. 1,900,109; Mar. 7.
Henke, Clyde O., South Milwaukee, Wis., assignor, by mesne assignments, to Newport Industries, Inc. Hydrogenated rosin product. 1,899,961; Mar. 7.
Henkensiefken, Clara G., et al. (See Henkensiefken, John A., assignor.)
Henkensiefken, Frederick, et al. (See Henkensiefken, John A., assignor.)
Henkensiefken, Frieda, et al. (See Henkensiefken, John A., assignor.)
Henkensiefken, John A., assignor of one-fourth to C. G. Henkensiefken, one-fourth to F. Henkensiefken, and one-fourth to F. Henkensiefken, Philadelphia, Pa. House or building construction. 1,900,812; Mar. 7.
Henry, Skelton D., Houston, Tex. Protecting earthen dams, river levees, etc. 1,900,341; Mar. 7.
Hershey, Harry E., Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Selective signaling system. 1,900,499; Mar. 7.
Herthel, Eugene C., Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y. Cracking hydrocarbons. 1,900,110; Mar. 7.
Hertner Electric Company. (See Hertner, John H., assignor.)
Hertner, John H., Lakewood, assignor to The Hertner Electric Company, Cleveland, Ohio. Insulator. 1,900,710; Mar. 7.
Herzmark, Nicolas, Paris, France. Air compressor. 1,900,284; Mar. 7.
Hess, Julius H., Chicago, Ill. Infant incubator. 1,900,342; Mar. 7.
Heuer, Josef, Grune, Germany. Traffic signal apparatus. 1,900,060; Mar. 7.
Heuser, Herman, Evanston, Ill. Preserved egg and making same. 1,900,444; Mar. 7.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Non-halation motion picture film. 1,900,877; Mar. 7.
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Automatic silver recovery control. 1,900,893; Mar. 7.
Hicks, Chester W., Hampton, Va. Sound amplifier. 1,900,111; Mar. 7.
Higginbotham, Luther J., Dallas, Tex. Illuminated changeable display device and producing the same. 1,899,962; Mar. 7.
Hile, Leslie M., Benton Harbor, Mich. Basket handle machine. 1,900,181; Mar. 7.
Hile, Leslie M., Benton Harbor, Mich. Making a downwardly tapered container. 1,900,646; Mar. 7.
Hile, Leslie M., Benton Harbor, Mich. Machine for making and inserting basket handles. 1,900,712; Mar. 7.
Hill, Earl Vernon, Chicago, Ill., assignor to E. Vernon Hill Company. Psychrometer. 1,900,813; Mar. 7.
Hills-McCanna Company. (See Buenger, Clarence O., assignor.)
Hills-McCanna Company. (See Noyes, Albert H., assignor.)
Hinckelmann, Werner, Philadelphia, Pa. Adjustable arc. 1,900,500; Mar. 7.
Hineline, Edson S. (See Petit, W. H., and Hineline.)
Hines, Claude M., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,900,713; Mar. 7.
Hitchcock, Halbert K., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Roll for molten glass and cooling the same. 1,900,556; Mar. 7.
Hoern, Joseph H., Saginaw, Mich., assignor to Wilcox-Rich Corporation. Grinding machine. 1,900,112; Mar. 7.
Hoffman, Martin. (See Maul, P. J., and Hoffman.)
Hoffmann, Wilhelm. (See Rietz, E. and Hoffmann.)
Hogan, John G. (See Radley, Alton A., jr., assignor.)
Holcombe, George A., San Diego, Calif. Exhibiting apparatus. 1,900,557; Mar. 7.

Hollifer, John G. (See Hedeen, A., Hollifer, and Landess.)
Holley, Walter P., Montgomery, Ala. Storage bag. 1,900,814; Mar. 7.
Holzwarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Explosion turbine plant for ships. 1,899,963; Mar. 7.
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Nozzle channel construction for explosion turbines. 1,900,558; Mar. 7.
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif. Explosion turbine. 1,900,815; Mar. 7.
Hoody, George J. (See Erickson, E., and Hoody.)
Hookless Fastener Company. (See Craig, William D., assignor.)
Hoopes, Ernest A., Des Moines, Iowa. Electric switch. 1,900,647; Mar. 7.
Hoover Company, The. (See Ballou, Harry R., assignor.)
Hoover Company, The. (See Becker Bernard C., assignor.)
Hoover Company, The. (See Kitto, William H., assignor.)
Hoover Company, The. (See Sellers, William D., assignor.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hopkins, Roy S., assignor to Eastman Kodak Company, Rochester, N. Y. Document photographing apparatus. 1,900,878; Mar. 7.
Horner, Clyde H., Palmyra, N. J. Powder box. Des. 89,425; Mar. 7.
Horney, Fred. (See Lysholm, A., Horney, and Wahlsten.)
Horowitz, Max. (See Koretzky, H., Horowitz, and Desimone.)
Howard, Bloomfield H., Washington, D. C. Feeder for ingot molds. 1,900,816; Mar. 7.
Howard, Edward, Elgin, assignor, by mesne assignments, to Elgin National Watch Comany, Chicago, Ill. Watch. 1,900,343; Mar. 7.
Howard, James E., Jeffersonville, Ind. Sheet metal vessel construction. 1,900,711; Mar. 7.
Howard, William R., Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill. Treatment of hydrocarbons. 1,900,113; Mar. 7.
Huber, W. I., Inc. (See Huber, Ward I., assignor.)
Huber, W. I., Inc. (See Huber, W. I., and Close, assignors.)
Huber, Ward I., assignor to W. I. Huber, Inc., Cleveland, Ohio. Sphygmomanometer. 1,900 285; Mar. 7.
Huber, Ward I., and L. B. Close, assignors to W. I. Huber, Inc., Cleveland, Ohio. Sphygmomanometer. 1,900,286; Mar. 7.
Huff, Wilbert J. (See Lusby, Oscar W., assignor.)
Hughes, Edward P., assignor of sixty per cent to W. A. Wood, Detroit, Mich. Liquid level gauge. 1,900,851; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender and head lamp casing for vehicles. Des. 89,426; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp casing, parking lamp casing, and horn casing. Des. 89,427; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp casing, and combined parking lamp and horn casing. Des. 89,428; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp, parking lamp, and horn casing, Des. 89,429; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp casing, parking lamp casing, and horn casing. Des. 89,430; Mar. 7.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp casing, and parking lamp casing. Des. 89,431; Mar. 7.
Hughes, James R., assignor to The Studebaker Corporation, South Bend, Ind. Head lamp lens. 1,899,964; Mar. 7.
Hull, Albert W., Schenectady, N. Y., assignor to General Electric Company. Electron discharge device. 1,900,559; Mar. 7.
Humason, Granville A., and W. A. Raymond, Houston, Tex. Tubing head. 1,900,714; Mar. 7.
Hund, Frans, Cleveland, Ohio. Advertising device. 1,900,061; Mar. 7.
Hunt, Edward M., Montclair, and E. L. Fonseca, assignors to The Wilcolator Company, Newark, N. J. Air conditioning apparatus. 1,900,501; Mar. 7.
Hunter, Alfred R. (See Mulholland, V., and Hunter.)
Hydraulic Press Manufacturing Company, The. (See Ernst, Walter, assignor.)
Hyslop, Joseph F., Falkirk, Scotland. Checker brickwork construction for regenerators. 1,900,817; Mar. 7.
I. G. Farbenindustrie Aktiengesellschaft. (See Baehr, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Finkelstein, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pohl, Franz, assignor.)

I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., Treppenhauer, Grosskinsky, and Fischer, assignors.)
Industrial Development Corporation. (See Wilkins, Richard A., assignor.)
Ingersoll-Rand Company. (See Kirgan, John, assignor.)
Insulite Company, The. (See Ellis, George H., assignor.)
International Harvester Company. (See Benjamin, B. R., and Cady, assignors.)
International Harvester Company. (See Benjamin, B. R., and Graham, assignors.)
International Harvester Company. (See Cady, Sherman W., assignor.)
International Harvester Company. (See Walker, E. C., and Engstrom, assignors.)
International Nickel Company, Inc., The. (See Merica, P. D., Vanick, and Wickenden, assignors.)
International Patents Development Company. (See Giesecke, Fred O., assignor.)
Irgens, Finn T., Wauwatosa, assignor to Outboard Motors Corporation, Milwaukee, Wis. Ignition timer breaker mechanism, 1,899,965; Mar. 7.
Ishidate, Morizo. (See Tamura, K., Kihara, Asahina, and Ishidate.)
Isley, George H., and G. A. Merkt, assignors to Morgan Construction Company, Worcester, Mass. Furnace construction and operation. 1,900,396; Mar. 7.
Isley, George H., assignor to Morgan Construction Company, Worcester, Mass. Operation of regenerative furnaces. 1,900,397; Mar. 7.
Iversen, Lorenz, assignor to Mesta Machine Company, Pittsburgh, Pa. Roll mounting. 1,900,344; Mar. 7.
Izbicki, Adolph, Cambridge, Mass. Rotary pump. 1,900,416; Mar. 7.
Jackson, Daniel D., Brooklyn, N. Y., assignor to Remington Arms Company. Metallic Alloy. 1,900,182; Mar. 7.
Jackson, James P., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,900,845; Mar. 7.
Jacobsen Manufacturing Co. (See Krenzke, William F., assignor.)
Jacobson, David L., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Removal of hydrogen sulphide from gases. 1,900,398; Mar. 7.
Jacobus, David S., Montclair, and H. J. Kerr, Westfield, N. J., assignors, by mesne assignments, to Fuller Lehigh Company. Water cooled furnace wall. 1,900,445; Mar. 7.
Jaeger, Alphons O., Crafton, assignor, by mesne assignments, to The Selden Research and Engineering Corporation, Pittsburgh, Pa. Carrying out exothermic catalytic vapor phase reactions. 1,900,715; Mar. 7.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic apparatus. 1,900,382; Mar. 7.
Jaeger, Alphons O., Crafton, assignor to The Selden Company, Pittsburgh, Pa. Catalytic side chain oxidation of aromatic compounds. 1,900,648; Mar. 7.
Jaeger, Alphons O., Mount Lebanon, assignor to The Selden Company, Pittsburgh, Pa. Contact sulphuric acid process. 1,900,383; Mar. 7.
Jaeger, Alphons O., Mount Lebanon, assignor to The Selden Company, Pittsburgh, Pa. Purification of crude dicarboxylic acids. 1,900,649; Mar. 7.
Jäger, Franz, Suhl, Germany. Repeating firearm with bolt action and case magazine. 1,900,818; Mar. 7.
Janer, Andre, Flushing, assignor to The A. J. & K. Company, Incorporated, New York, N. Y. Anchoring means. 1,900,560; Mar. 7.
Jarvis, Frank W. (See Jarvis, Walter D., assignor.)
Jarvis, Walter D., assignor of one-half to F. W. Jarvis, Pittsburgh, Pa. Roof and floor structure. 1,900,346; Mar. 7.
Jeffrey Manufacturing Company, The. (See Bakstad, Johan R., assignor.)
Jenkins, Charles F., assignor to Jenkins Laboratories, Washington, D. C. Resistor cell circuit. Re18,756; Mar. 7.
Jenkins Laboratories. (See Jenkins, Charles F., assignor.)
Jennings, Willis A., Chicago, Ill. Soap dispenser. 1,900,819; Mar. 7.
Jensen, Paul E. G., Grantwood, N. J., assignor to Radio Corporation of America. Sound pick-up device. 1,899,966; Mar. 7.
Johnson, Erling, assignor to the Firm Odda Smelt Werk A/S. Odda, Norway. Producing alumina and phosphorus or phosphoric acid. 1,900,287; Mar. 7.
Johnstone, Robert McC., Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y. Slitting device. 1,900,183; Mar. 7.
Jones, Emory E., assignor to Winding Gulf Collieries, Bluefield, W. Va. Coal briquetting equipment. 1,900,347; Mar. 7.
Jones, Frank A., University City, Mo., assignor to Shell Petroleum Corporation. Vehicle trailer tank. 1,900,114; Mar. 7.
Jones, Harrie, et. al. (See Oster, C. B., and Rainey, assignors.)
Jones, Homer W., Williamsville, N. Y., and H. G. Graubner, Lakewood, Ohio, assignors to National Carbon Company, Inc. Flashlight. 1,900,348; Mar. 7.
Jones, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Light tight photographic film cartridge. 1,900,879; Mar. 7.

Jordhoy, Hans C., North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Folding cylinder. 1,900,288; Mar. 7.
Joy Bros., Inc. (See Joy, Joseph F., assignor.)
Joy, Joseph F., assignor to Joy Bros., Inc., Marion, Ohio. Device for breaking down coal. 1,900,446; Mar. 7.
Jnergens, Gustav H., St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y. Wire glass manufacture. 1,900,716; Mar. 7.
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Conduit connection. 1,900,561; Mar. 7.
Junkers, Hugo, Dessau, Germany. Aircraft. 1,900,502; Mar. 7.
Kahr, Martin, assignor to Franklin Valveless Engine Company, Franklin, Pa. Power plant for drilling apparatus. 1,900,384; Mar. 7.
Kahr, Martin, assignor to Franklin Valveless engine Company, Franklin, Pa. Fuel feeding means. 1,900,385; Mar. 7.
Kane, James M., Berkeley, Calif. Signaling system. 1,900,016; Mar. 7.
Kane, Thomas A., McMinnville, Oreg. Direction signal. 1,900,240; Mar. 7.
Kanolt, Clarence W., New York, N. Y. Depthograph camera stand. 1,900,562; Mar. 7.
Kanolt, Clarence W., New York, N. Y. Depthograph plate holder. 1,900,566; Mar. 7.
Kantor, James, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Filler valve for bottle fillers. 1,900,447; Mar. 7.
Keller, Henry C., Syracuse, N. Y., and M. Van Billiard, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y. Conveyer. 1,900,563; Mar. 7.
Kelly, Joseph E., and J. A. Arasim, Scranton, Pa. Lost motion mechanical linkage. 1,900,289; Mar. 7.
Kemp, Irving, assignor, by mesne assignments, to Kemp Lock, Inc., New York, N. Y. Lock. 1,900,503; Mar. 7.
Kemp Lock Inc. (See Kemp, Irving, assignor.)
Kendrick, Carrol C. (See Lewis, George K., assignor.)
Kennedy, Krafton S., Dayton, Ohio. Apparatus for disconnecting threaded members. 1,900,017; Mar. 7.
Kenyon, Melville G., and M. H. Kluter, assignors to The F. & N. Lawn Mower Company, Richmond, Ind. Shipping containers. 1,900,820; Mar. 7.
Kerr, Howard J. (See Jacobus, D. S., and Kerr.)
Keuffel & Esser Co. (See Kraft, Eugene W., assignor.)
Kiessling, Max, Waterbury, Conn. Slide fastener tape. 1,900,564; Mar. 7.
Kihara, Gyokujo. (See Tamura, K., Kihara, Asahina, and Ishidate.)
Kilbourne, Kenneth A., Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y. Cyanide applicator. 1,900,717; Mar. 7.
King, Harold A., Birmingham, Mich. Automobile accessory. 1,900,448; Mar. 7.
Kipper, Ewald, Brackwede, Germany. Medicine package. 1,900,606; Mar. 7.
Kircher, Ralph N., assignor to West Bend Aluminum Company, West Bend, Wis. Cooking utensil handle. 1,900,565; Mar. 7.
Kirgan, John, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Condensing apparatus. 1,900,504; Mar. 7.
Kitto, William H., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,887; Mar. 7.
Kitto, William H., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,888; Mar. 7.
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Kline, Joseph E., Alpena, Mich. Oil filter and cooler. 1,900,821; Mar. 7.
Klingbeil, Walter G., Portland, Oreg. Thermostatic mixing valve. 1,900,349; Mar. 7.
Kluter, Marlowe H. (See Kenyon, M. G., and Kluter.)
Knight, Donald B., Brooklyn, assignor to Electrolux Servel Corporation, New York, N. Y. Absorption refrigerating apparatus. 1,900,650; Mar. 7.
Koch, Victor. (See Schutzniedrig, Ewald, assignor.)
Koenig, Lloyd R., Webster Groves, and F. B. Wolf, Clayton, Mo. Mask. 1,900,651; Mar. 7.
Kohr, Robert F., assignor to The Studebaker Corporation, South Bend, Ind. Brake. 1,899,967; Mar. 7.
König, Albert, assignor to Firm Carl Zeiss, Jena, Germany. Reversing prism system affording parallel vision. 1,900,241; Mar. 7.
Konishi, Koji. (See Owada, Tokujiro, assignor.)
Koppers Company of Delaware, The. (See Becker, Joseph, assignor.)
Koppers Company of Delaware, The. (See Jacobson, David L., assignor.)
Koretzky, Harry, Jersey City, N. J., M. Horowitz, Brooklyn, N. Y., and A. J. Desimone, Lyndhurst, assignors to Bright Star Battery Company, Hoboken, N. J. Flash light. 1,900,505; Mar. 7.
Kraft, Eugene W., Chicago, Ill., assignor to Keuffel & Esser Co., Hoboken, N. J. Stadia transit. 1,900,567; Mar. 7.
Kramer, Eric B., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Process and apparatus for manufacture of screw caps. 1,900,880; Mar. 7.
Kramer, Eric B., assignor to Crown Cork & Seal Company, Baltimore, Md. Screw cap. 1,900,881; Mar. 7.
Krantz, Joseph A., assignor to The Reeves Manufacturing Company, Dover, Ohio. Stovepipe. 1,900,750; Mar. 7.
Kränzlein, Georg, and P. Ochwat, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthracene series. 1,900,350; Mar. 7.
Kremmling, Aribert, Hamersleben, near Oschersleben, Germany. Machine for feeding plastic material such as dough through dies or like apertures. 1,900,607; Mar. 7.
Krenzke, William F., assignor to Jacobsen Manufacturing Co., Racine, Wis. Power mower. 1,900,062; Mar. 7.
Krollpfeiffer, Friedrich, Marburg-on-the-Lahn, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Pharmaceutical preparation. 1,900,449; Mar. 7.
Krug, Harold F., Grosse Pointe Park, Mich. Pneumatic tube. 1,900,568; Mar. 7.
Kudo, Haroid, Dubuque, Iowa. Doughnut pan. 1,900,290; Mar. 7.
Kühner, Otto, Goppingen, Germany. Sheet metal drawing press. 1,900,291; Mar. 7.
Kumler, Ralph W., Wilmington, Del. Destructively distilling black liquor. 1,900,506; Mar. 7.
Kupferhütte Ertel, Bieber & Co., Firm, et al. (See Behrens, Hans C. A., assignor.)
Kuppersmith, Fred W., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill. Jig and fixture lock. 1,900,852; Mar. 7.
Kurowski, Alfred G. F., Brooklyn, assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,899,968; Mar. 7.
Kurtz, Stewart S., jr., Merion, assignor to The Atlantic Refining Company, Philadelphia, Pa. Refining hydrocarbon oil. 1,899,969; Mar. 7.
Kuzmick, Joseph N., assignor of one-half to The Manhattan Rubber Manufacturing Division of Raybestos-Manhattan, Inc., Passaic, N. J., and one-half to J. S. Stokes, Spring Valley Farms, Pa. Abrasive product and making the same. 1,900,386; Mar. 7.
Labinc, Roland A., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Applying covering material to tire patches. 1,900,450; Mar. 7.
Lacy, Rollo G. (See Simning, Roy B., assignor.)
Laird, Wilbur G., assignor to Heat Treating Company, New York, N. Y. Refining oils. 1,900,862; Mar. 7.
Lakehurst, Albert, Brooklyn, N. Y., assignor to Lakewood Comet Aero Advertising Company, Lakewood, N. J. Parachute projecting device for airplanes. 1,900,399; Mar. 7.
Lakewood Comet Aero Advertising Company. (See Lakehurst, Albert, assignor.)
La Lux Manufacturing Company. (See Underwood, Western, assignor.)
Lambert, Charles F., Grosse Pointe Farms, assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich. Spare wheel and tire cover assembly. 1,900,822; Mar. 7.
Lamson Company, The. (See Keller, H. C., and Van Billiard, assignors.)
Lamson Company, The. (See Taylor, W. J., and Cutting, assignors.)
Lancaster Iron Works. (See Walker, Charles E., assignor.)
Land, Charles H., Grosse Pointe, and W. H. Wilson, Detroit, Mich. Fifth wheel for connecting tractors to different types of trailers. 1,900,115; Mar. 7.
Landess, Victor S. (See Hedeen, A., Holifer, and Landess.)
Lang, Albion S., Roslindale, Mass. Combined carrying case and holder for musical instruments. 1,900,718; Mar. 7.
Lang, Arno, Treuenbritzen, assignor to the Firm Dr. Martin Böhme, Berlin, Germany. Differential pressure gauge for measuring flow of fluids in conduits. 1,900,823; Mar. 7.
Lansing, Raymond P., Montclair, assignor to Eclipse Aviation Corporation, East Orange, N. J. Engine starting mechanism. 1,900,063; Mar. 7.
La Pierre, Camille. (See Brien, Joseph R., assignor.)
Large, John T., et al. (See Hayne, Ernest S., assignor.)
Larsen, Martin I., Chicago, Ill. Water heater. 1,900,451; Mar. 7.
Laska, Leopold, and A. Zitscher, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. New azodyestuffs. 1,900,351; Mar. 7.
Latou, William L., assignor of two-fifths to W. M. Floyd, Toronto, Ontario, Canada. Locking mechanism for handcuffs. 1,900,242; Mar. 7.
Layer, Frank C., Algonquin, Ill. Brick hacking apparatus. 1,900,243; Mar. 7.
Ledeen, Hyman, Los Angeles, Calif., assignor to The Falk Corporation, Milwaukee, Wis. Driving means for oil well equipment. 1,900,452; Mar. 7.
Lederer, Herbert H., Cleveland, Ohio. Apparatus for handling merchandise. 1,900,569; Mar. 7.
Leece, Bennett M., Cleveland, and D. S. Cole, Cleveland Heights, assignors to The Leece-Neville Company, Cleveland, Ohio. Generator regulation. 1,900,719; Mar. 7.
Leece-Neville Company. (See Leece, B. M., and Cole.)
Leemann, Walter. (See Coradi, O., and Leemann.)
Lehmann, Erich. (See Marx, K., and Lehmann.)

Leib, August, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Direction finder apparatus. 1,900,222; Mar. 7.
Leiman Bros. Inc. (See Leiman, George W., assignor.)
Leiman Bros. Inc. (See Leiman, Gustave, assignor.)
Leiman, George W., assignor to Leiman Bros. Inc., Newark, N. J. Liquid feeding device. 1,900,571; Mar. 7.
Leiman, Gustave, New York, N. Y., assignor to Leiman Bros. Inc., Newark, N. J. Furnace. 1,900,570; Mar. 7.
Leitz, Ernst, Optische Werke G. m. b. H. (See Berek, Max, assignor.)
Lenk, Wilhelm. (See Bochmann, O., and Lenk.)
Leopold, George O. (See Fegley, T. J., and Leopold.)
Lester, Nathan, assignor to P. & B. Tool Company, Worcester, Mass. Die casting machine. 1,900,863; Mar. 7.
Lester, Roy A., El Paso, Tex. Trigger mechanism. 1,900,606; Mar. 7.
Levitt, Abe, et al. (See Cooperstein, I. and A., and Levitt.)
Lewers, William W., Flint, Mich., and G. L. Schwartz, assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Cellulose ether composition. 1,900,507; Mar. 7.
Lewis, Arthur J., Stratford, assignor to The Baird Machine Company, Bridgeport, Conn. Chucking machine. 1,900,387; Mar. 7.
Lewis, Florence N., New York, N. Y. Fitted traveling bag. 1,900,508; Mar. 7.
Lewis, George K., assignor to C. C. Kendrick, Chicago, Ill. Molding construction for composite panels. 1,900,824; Mar. 7.
Lewis, Robert O., assignor to Grigsby-Grunow Company, Chicago, Ill. Condenser and making the same. 1,900,352; Mar. 7.
Liberman, Alexander I., Paris, France. Photographic developing apparatus. 1,900,825; Mar. 7.
Liftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung. (See Strobl, Hans, assignor.)
Lilienfeld, Julius E., Brooklyn, N. Y. Device for controlling electric current. 1,900,018; Mar. 7.
Lindemann, Frederick W., St. Paul, assignor to The Unipress Company, Incorporated, Minneapolis, Minn. Buck structure for laundry presses. 1,900,720; Mar. 7.
Lindsay, John C., Brooklyn, N. Y. Clothes hanger. 1,900,826; Mar. 7.
Lindstrom, Albert F. (See Hageman, A. M., and Lindstrom.)
Line Material Company. (See Chartrand, John B., assignor.)
Linville, Clarence P. (See Berry, G. A., Linville, and Beardsley.)
Liptak, Michael, St. Paul, Minn. Mud drum seal. 1,900,019; Mar. 7.
Liquid Carbonic Corporation. (See Kantor, James, assignor.)
Lloyd, Harold B., Sioux City, Iowa. Nonsubstituting container. Re18,759; Mar. 7.
Löflund, Fritz. (See Büsdorf, J., and Löflund.)
Logan Co. (See Goddhardt, H. R., and Cain, assignors.)
Logan, Joseph A., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing apparatus. 1,900,652; Mar. 7.
Logwood, Charles V., Providence, R. I., assignor to Radio Corporation of America, New York, N. Y. Increasing the selectivity of tuned radio frequency systems. 1,900,293; Mar. 7.
Long, George A., assignor to the Long Security Lock Company, Hartford, Conn. Lock. 1,900,185; Mar. 7.
Long Security Lock Company. (See Long, George A., assignor.)
Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,900,184; Mar. 7.
Loomis, Nathaniel E., Westfield, and A. H. Tomlinson, Elizabeth, N. J., assignors to Standard Oil Development Company. Process and apparatus for cracking oil. 1,900,116; Mar. 7.
Loria, Francesco, Rome, Italy. Sundial. 1,900,117; Mar. 7.
Louder, Earl A., Greenville, Ill., assignor to Pet Milk Company, St. Louis, Mo. Sterilization of liquids. 1,900,509; Mar. 7.
Lovatt, George N., Holliston, Mass. Waxed paper and making the same. 1,900,294; Mar. 7.
Love, Josie. (See Love, William F., assignor.)
Love, William F., assignor to Josie Love, Trenton, Fla. Dibble. 1,900,827; Mar. 7.
Lovell, James W. (See Craig, Frank E., assignor.)
Low, John W., Mill Valley, Calif. Box making machine. 1,900,892; Mar. 7.
Lowe, Russell E., New York, N. B. Brown, St. Albans, and W. Bjorkstedt, Jamaica, assignors to Doherty Research Company, New York, N. Y. Refractory porous diaphragm. 1,900,864; Mar. 7.
Lowrey, George, et al. (See Pippin, John W., assignor.)
Lubin, Harry, South Orange, N. J. Box. 1,900,828; Mar. 7.
Ludowici-Celadon Company. (See Mooney, Thomas F., assignor.)
Luftschiffbau Zeppelin Gesellschaf mit beschränkter Haftung. (See Strobl, Hans., assignor.)
Luplow, Ronald C., Seligman, Ariz. Humidifier. 1,900,453; Mar. 7.
Lusby, Oscar W., Baltimore, Md. Catalysts for the production of oxygenated organic compounds. 1,900,829; Mar. 7.
Lusby, Oscar W., assignor to W. J. Huff, Baltimore, Md. Catalysts for the removal of organic sulphur compounds from gases. 1,900,882; Mar. 7.
Lusby, Oscar W., assignor to W. J. Huff, Baltimore, Md. Purifying gas. 1,900,883; Mar. 7.
Lusby, Oscar W., assignor to W. J. Huff, Baltimore, Md. Apparatus for the control of combustion. 1,900,884; Mar. 7.
Lyman, Charles E., Waterbury, Conn. Tubular rivet machine. 1,900,572; Mar. 7.
Lyons, Robert L., Waltham, Mass. Button sewing machine. 1,900,388; Mar. 7.
Lysholm, Alf J. R., assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Hydraulic variable speed power transmission. 1,900,118; Mar. 7.
Lysholm, Alf., Fred Horney, and Gösta Wahlsten, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Variable speed power transmission. 1,900,119; Mar. 7.
Lysholm, Alf., Fred Horney and Gösta Wahlsten, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden. Variable speed power transmission. 1,900,120; Mar. 7.
Maarsen, Isidor, New York, N. Y. Transfer table rear guide. 1,900,064; Mar. 7.
MacArthur Concrete Pile Corporation. (See Talmadge, Richard E., assignor.)
Maccabee, David E., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,900,510; Mar. 7.
Madden, Edward J., Bridgeport, Conn. Brake operating tube. 1,900,511; Mar. 7.
Madden, Edward J., Bridgeport, Conn. Brake cable tube. 1,900,512; Mar. 7.
Mahannah, Alva, Sedgwick, Kans. Grain door. 1,900,244; Mar. 7.
Mahlstedt, John F., New Rochelle, N. Y., and A. V. A. Felten, Pittsfield, Mass. Cedar board. 1,900,830; Mar. 7.
Mallinson, H. R., & Co. (See Heinke, Alfred J., assignor.)
Malluk, Assad M., New York, and F. W. Allen, Sea Cliff, Long Island, N. Y. Fuel control apparatus for automobiles. 1,900,245; Mar. 7.
Manhattan Electrical Supply Company. (See Hendry, William F., assignor.)
Manhattan Rubber Manufacturing Division of Raybestos-Manhattan, Inc., The, et al. (See Kusmick, Joseph N., assignor.)
Manske, Fred A., E. W. Odenwaldt, and O. E. Gibson, assignors to United States Gypsum Company, Chicago, Ill. Roof and floor construction. 1,900,721; Mar. 7.
Manske, Fred A., E. W. Odenwaldt, and O. E. Gibson, assignors to United States Gypsum Company, Chicago, Ill. Method of and machine for forming metal plates. 1,900,722; Mar. 7.
Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)
Manvell, Edwin H., et al. (See Manvell, Edwin H., assignor.)
Manvell, Edwin H., assignor to E. H. Manvell and L. Casper, Brooklyn, N. Y. Tape moistening and affixing device. 1,900,121; Mar. 7.
Marchetti, Christoph, Chicago, Ill. Toy. 1,900,353; Mar. 7.
Marchisella, Vincenzo, New York, N. Y. Shoe booth foot rest. 1,900,653; Mar. 7.
Marks, Isidore J., New York, N. Y., assignor to E. S. Mendelson & Co., Inc. Textile fabric or similar article. Des. 89,402; Mar. 7.
Marling, William L., Weimar, Calif. Lawn mower sharpener. 1,900,186; Mar. 7.
Marsch, Nicholas W. (See Scott, V. L., and Marsch.)
Marsh, Lucien A., Mill Valley, Calif. Score pad displaying and supporting device for card tables. 1,900,513; Mar. 7.
Marter, Ezra B., 3d., Burlington, N. J., assignor to A. Edmond Pausser, Philadelphia, Pa. Electrical control system for permanent hair-waving apparatus. 1,900,831; Mar. 7.
Martin, Earl L., Des Moines, Iowa. Supporting a separating hopper as applied to portable mills. 1,900,354; Mar. 7.
Martin, Ira T., San Francisco, Calif. Draft control and dust separator. 1,900,065; Mar. 7.
Martin, Marshall D., New Orleans, La. Fish lure. 1,900,832; Mar. 7.
Martin, Otto V., San Springs, Okla., assignor to The Texaco Salt Products Company, New York, N. Y. Recovery of salts and other products from oil field brines. 1,900,246; Mar. 7.
Martin, Otto V., assignor to Texaco Salt Products Company, Tulsa, Okla. Recovery of salts and other products from oil field brines. 1,900,247; Mar. 7.
Marx, Karl, Dessau in Anhalt, and E. Lehmann, Wolfen, near Bitterfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing furs, hairs, feathers, and similar articles. 1,900,454; Mar. 7.
Mason, Francis C., assignor to Sears, Roebuck & Company, Chicago, Ill. Apparatus for cleaning. 1,900,122; Mar. 7.
Masterench Corporation. (See Mead, Homer A., assignor.)
Mather Spring Company, The. (See Nilsson, Robert W., assignor.)

Mathesius, Walther, Chicago, Ill. Hot top for ingot molds. 1,900,066; Mar. 7.
Mathews Conveyer Company. (See Anderson, Martin J., assignor.)
Mathews, Milton, Sedalia, Mo. Device for extracting metal members. 1,900,654; Mar. 7.
Mathieu, Laurence M. (See Nuttall, Fred D., assignor.)
Matter, Gustave O., Portland, Oreg. Advertising device. 1,900,187; Mar. 7.
Mattern, Herman T., assignor to Hempy-Cooper Manufacturing Company, Kansas City, Mo. Chuck. 1,900,188; Mar. 7.
Mattison, Willsie M. (See Stromberg, Pehr W., assignor.)
Maul, Peter J., Detroit, Mich., and M. Hoffman, Chicago, Ill. Coated concrete. 1,900,833; Mar. 7.
Maurer, William, Queens Village, N. Y. Method and apparatus for making ice cream bars, sticks, or the like. 1,900,355; Mar. 7.
Maxwell, William H. (See Baash, L. F., and Maxwell.)
Mayer, Daniel J., Belleville, assignor to Metal Textile Corporation, West Orange, N. J. Machine for fabricating scouring devices, mop heads, and similar articles. 1,900,356; Mar. 7.
Maynard, Charles E., Northampton, assignor to R. W. Boyden and C. A. Dana as receivers of The Fisk Rubber Company, Chicopee Falls, Mass. Automatic mold closing apparatus. 1,900,455; Mar. 7.
McAdoo, William G. (See Noyes, Hazlehurst R., assignor.)
McArthur, Elmer D., Schenectady, N. Y., assignor to General Electric Company. Electric heating apparatus. 1,900,573; Mar. 7.
McBerty, Fred P., Warren, Ohio. Electric welding machine. 1,900,834; Mar. 7.
McCandless, Byron, U. S. Navy. Portable camera apparatus. 1,900,020; Mar. 7.
McClintock, O. B., Company. (See Popp, Sylvan R., assignor.)
McCollum, Burton, assignor to McCollum Geological Explorations, Inc., Houston, Tex. Seismic exploration of geologic formations. 1,899,970; Mar. 7.
McCollum Geological Explorations, Inc. (See McCollum, Burton, assignor.)
McCormick, George, Redwood City, and F. E. Russell, Alameda, Calif. Boiler drop-plug. 1,900,357; Mar. 7.
McDill, Rex D., Riverside, assignor to Food Machinery Corporation, San Jose, Calif. Treating fruit for the market. 1,900,295; Mar. 7.
McDonald, Angus N., assignor to Detroit Show Case Company, Detroit, Mich. Store front sash. 1,900,248; Mar. 7.
McDonald, Eugene G., assignor to Bendix Brake Company, South Bend, Ind. Brake operating connection. 1,900,123; Mar. 7.
McDonald, Harry R., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind. Glass jar. Des. 89,403; Mar. 7.
McDonough, Martin V., Brooklyn, N. Y. Toilet article. 1,900,609; Mar. 7.
McGhee, Robert J., Virginia, Minn. Scraper. 1,900,189; Mar. 7.
McLean, William A., assignor to C. Schnackel's Son, Inc., Rochester, N. Y. Automatic valve. 1,900,514; Mar. 7.
McNichol, Forrest C. (See Van Valkenburg, H. L., and McNichol.)
Mead, George J., Milwaukee, Wis., assignor to The Fish Rubber Company, Chicopee Falls, Mass. Tire vulcanizer. 1,900,456; Mar. 7.
Mead, Homer A., assignor to Masterench Corporation, Turlock, Calif. Adjustable jaw wrench. 1,900,358; Mar. 7.
Meader, Russell G., Detroit, Mich., assignor to Scovill Manufacturing Company, Waterbury, Conn. Fastening device for inherently resilient articles. 1,900,574; Mar. 7.
Meehan, John P., Los Angeles, Calif. Making colored signs. 1,899,971; Mar. 7.
Megros, Georges, Bronxville, N. Y. Textile fabric or the like. Des. 89,404; Mar. 7.
Meier, William G., Manaroneck, N. Y. Embroidered textile fabric or the like. Des. 89,432; Mar. 7.
Mendelson, E. S., & Co. (See Marks, Isidore J., assignor.)
Meng, Harry E., Oak Park, assignor to W. D. Allen Manufacturing Company, Chicago, Ill. Sprinkler head. 1,900,124; Mar. 7.
Mengele, Hans, Wiesbaden, assignor to Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Toning silver pictures. 1,899,972; Mar. 7.
Mentkow, Abraham, Brooklyn, assignor to B. Blumenthal & Co., Inc., New York, N. Y. Buckle. Des. 89,405; Mar. 7.
Menzies, William C., Scranton, Pa. Method of and apparatus for separating materials of different specific gravities. 1,900,190; Mar. 7.
Meredith, Jaquelin M., assignor of one-fourth to B. F. Yost, Norfolk, Va. Tire and rim construction. 1,900,835; Mar. 7.
Mergott, J. E., Company. (See Hartmann, Paul E., assignor.)
Merica, Paul D., Westfield, J. S. Vanick, Elizabeth, and T. H. Wickenden, Roselle, N. J., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y. Gray iron alloy. 1,900,125; Mar. 7.
Merkt, Gustav A. (See Isley, G. H., and Merkt.)
Merritt, Vernon, Montgomery, Ala. Method of and apparatus for preventing the bursting of liquid containers subjected to freezing temperature. 1,900,836; Mar. 7.
Mertes, Robert G., Catonsville, Md., assignor to The Pittsburgh Plate Glass Company, Pittsburgh, Pa. Making cup brushes. 1,900,575; Mar. 7.
Messerschmitt, Willy, Augsburg, Germany. Spar for airplanes. 1,900,067; Mar. 7.
Mesta Machine Company. (See Iverson, Lorens, assignor.)
Metal Textile Corporation. (See Mayer, Daniel J., assignor.)
Metropolitan Device Corporation. (See Oesterreicher, Sandor I., assignor.)
Metropolitan Engineering Company. (See Murray, T. E., jr., and Phelps, assignors.)
Metropolitan Engineering Company. (See Smith, Albert A., assignor.)
Metzger, Floyd J., assignor to Air Reduction Company, New York, N. Y. Separation of acetylene. 1,900,655; Mar. 7.
Meyer, George J., Cudahy, Wis. Oil feed mechanism. 1,899,973; Mar. 7.
Midland Steel Products Company. (See Crowe, James H., assignor.)
Midwest Manufacturing Company. (See Wittemeier, Hans assignor.)
Miller, Charles, Long Island City, N. Y. Shoe. 1,900,515; Mar. 7.
Miller, Dale O., Detroit, Mich. Traffic signal. 1,900,723; Mar. 7.
Miller, Ernest B. (See Connolly, G. C., and Miller.)
Miller, Harry L., Chester, Pa. Milk weighing apparatus. 1,900,359; Mar. 7.
Miller, Paul P., assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Rake tooth for hay loaders. 1,900,724; Mar. 7.
Miller, Peter J. N., and V. E. Extrom, Minneapolis, Minn. Electric toaster. 1,900,249; Mar. 7.
Miller, Walter R., Mansfield, Ohio. Building block. 1,900,457; Mar. 7.
Mills, Henry J., Kinderhook, N. Y. Spraying apparatus. 1,900,837; Mar. 7.
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Mingus, Fred B., Oshkosh, Wis. Lawn mowing machine. 1,900,838; Mar. 7.
Minto, Wallace M., Jersey City, N. J. Propeller. 1,900,839; Mar. 7.
Mississippi Glass Company. (See Juergens, Gustav H., assignor.)
Mitchell, Leonard O. (See Mitchell, Ossian K. and L. O.)
Mitchell, Ossian K. and L. O., Oak Park, Ill. Vertically and horizontally adjustable table. 1,900,250; Mar. 7.
Mock, Frank C., East Orange, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind. Charge forming device. 1,900,191; Mar. 7.
Moffett, Frank E., Maywood, Ill., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Release mechanism. 1,900,725; Mar. 7.
Mohawk Carpet Mills, Inc. (See Shuttleworth, Howard L., assignor.)
Mohler, Valentine J., River Forest, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device frame blank. 1,900,296; Mar. 7.
Mohler, Valentine J., River Forest, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,900,297; Mar. 7.
Möller, Waldemar, Berlin-Charlottenburg, assignor to Askania-Werke Aktiengesellschaft, Berlin-Friedenau, Germany. Steering apparatus for aircraft. 1,900,516; Mar. 7.
Monopulse Teletype Corporation. (See Brownstein, Louis, assignor.)
Monroe Calculating Machine Company. (See Bricken, John, assignor.)
Monroe Calculating Machine Company. (See Brown, Lee R., assignor.)
Mooney, Thomas F., New Lexington, Ohio, assignor to Ludowici-Celadon Company, Chicago, Ill. Machine for manufacturing ceramic objects. 1,899,974; Mar. 7.
Moore, Chadwick H., London, England. Loose leaf binder. 1,900,840; Mar. 7.
Moore, Charles A., Edina, Minn. Refrigerator. 1,900,576; Mar. 7.
Moore, Charles A., Edina, Minn. Refrigerator. 1,900,579; Mar. 7.
Moore, Charles A., Edina, Minn. Ventilated refrigerator. 1,900,580; Mar. 7.
Moore, Daniel M., East Orange, N. J., assignor to General Electric Company. Gaseous conduction lamp. 1,900,577; Mar. 7.
Moore, Daniel M., East Orange, N. J., assignor to General Electric Company. Gaseous discharge device. 1,900,578; Mar. 7.
Moore, Ida L., Long Beach, Calif. Table support for reading matter. 1,900,251; Mar. 7.
Moore, Samuel, assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Condenser unit for refrigerating apparatus. 1,900,865; Mar. 7.
Moorhouse, William R., assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Dyeing process. 1,899,975; Mar. 7.

Morgan Construction Company. (See Isley, George H., assignor.)
Morgan Construction Company. (See Isley, G. H., and Merkt, assignors.)
Morgan Construction Company. (See Morgan, Myles, assignor.)
Morgan, Frank A. (See Dana, D., and Morgan.)
Morgan, Myles, assignor to Morgan Construction Company, Worcester, Mass. Controlling the shearing of metal bars while in motion. 1,900,252; Mar. 7.
Morgan & Wright. (See Gilbert, William S., assignor.)
Morris, Fred C., San Francisco, Calif. Making bushings. 1,900,298; Mar. 7.
Morris, Thomas W., Chicago, Ill. Trimming apparatus. 1,900,000; Mar. 7.
Morrow, Joseph H., Hokendanqua, Pa., assignor to Fuller Company. Roll feeder. 1,900,458; Mar. 7.
Morse Chain Company. (See Morse, Frank L., assignor.)
Morse, Frank L., assignor to Morse Chain Company, Ithaca, N. Y. Duplex link belt. 1,900,192; Mar. 7.
Mount, Morris B., Lynchburg, Va. Preparation of caustic liquor. 1,900,253; Mar. 7.
Moyer, Amos F., assignor to Toro Manufacturing Company, Minneapolis, Minn. Lawn mower. 1,900,726; Mar. 7.
Moyse, Hollis W., New Brunswick, N. J., assignor to Du Pont Film Manufacturing Corporation, Wilmington, Del. Multipack negative system. 1,900,459; Mar. 7.
Mueller, John, Chicago, Ill. Hair curler. 1,900,360; Mar. 7.
Mueller, Richard P., New York, N. Y. Control mechanism for aircraft. 1,900,068; Mar. 7.
Mulford, Roland H. (See Wallace, Donald J., assignor.)
Mulholland, Vergil, West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Forehearth for molten glass. 1,900,362; Mar. 7.
Mulholland, Vergil, West Hartford, and A. B. Hunter, assignors to Hartford-Empire Company, Hartford, Conn. Forehearth for molten glass. 1,900,361; Mar. 7.
Müller, Friederich, Elisabeth, N. J., assignor to The Whitney Mfg. Co., Hartford, Conn. Automatic chain assembling means. 1,899,976; Mar. 7.
Mullins, William H., South Boston, Va. Adjustable display stand. 1,900,610; Mar. 7.
Multigraph Company. (See Osborn, Henry C., assignor.)
Munters, Carl G., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y. Heat pump. 1,900,656; Mar. 7.
Muros, Joseph, Belmont, assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,900,069; Mar. 7.
Murphy, Andrew W., Norwich, N. Y. Apparatus for saving radiator alcohol. 1,900,727; Mar. 7.
Murphy, Edward D., Louisville, Ky. Bicycle newspaper bag rack. 1,900,070; Mar. 7.
Murphy, Francis, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc. Carpet. Des. 89,406; Mar. 7.
Murray Corporation, The. (See Radecky, Edward H., assignor.)
Murray, John F., et al. (See Bennett, Irving T., assignor.)
Murray, Joseph B., et al. (See Bennett, Irving T.)
Murray, Thomas E. (See Bennett, Irving T., assignor.)
Murray, Thomas E., jr., et al. (See Bennett, Irving T., assignor.)
Murray, Thomas E., jr., Brooklyn, N. Y., and G. H. Phelps, Warehouse Point, Conn., assignors, by direct and mesne assignments, to Metropolitan Engineering Company. Heating system. 1,899,977; Mar. 7.
National Aniline & Chemical Company. (See Moorhouse, William R., assignor.)
National Aniline & Chemical Co. Inc. (See Payne, Ralph B., assignor.)
National Carbon Company, Inc. (See Jones, H. W., and Graubner, assignors.)
National Electric Products Corporation. (See Frederickson, Otto A., assignor.)
National Foam System, Inc. (See Boyd, Fisher L., assignor.)
National Malleable and Steel Castings Company. (See Moffett, Frank E., assignor.)
National Pneumatic Company. (See Paul, Abram F., assignor.)
National Pumps Corporation. (See Curtis, William H., assignor.)
Nearing, George G., Chadds Ford, Pa. Promoting plant growth. 1,900,193; Mar. 7.
New England Lime Co. (See Stump, Horace E., assignor.)
Newhouse, Walter F., Benton Harbor, Mich. Feed belt guide construction. 1,900,657; Mar. 7.
New Idea Spreader Company, The. (See Oppenheim, Theodore H., assignor.)
Newmark, Morris, New York, N. Y. Lubricating device. 1,900,021; Mar. 7.
Newport Industries, Inc. (See Henke, Clyde O., assignor.)
New York Air Brake Company, The (See Campbell, Charles A., assignor.)
Ney, Eugene J., New York, N. Y. Window ventilator. 1,900,611; Mar. 7.
Nicosia, Vincent N., Houston, Tex. Hair waving or curling rod. 1,900,126; Mar. 7.
Niedecken, Edward F., Milwaukee, Wis. Shower stall. 1,900,658; Mar. 7.
Niemi, Matti, Seattle, Wash. Hoisting block. 1,900,194; Mar. 7.
Nilsson, Robert W., assignor to The Mather Spring Company, Toledo, Ohio. Spring construction. 1,900,841; Mar. 7.
North American Chemical Company. (See Avery, Alfred H., assignor.)
North American Chemical Company. (See Thoma, Andrew, assignor.)
North Bro's M'f'g Co. (See Fegley, T. J., and Leopold, assignors.)
Northrup, Edwin F., near Princeton, assignor to Ajax Electrothermic Corporation, Trenton, N. J. Heater for rods and tubes. 1,900,842; Mar. 7.
Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, Trenton, N. J. Heater for rods and tubes. 1,900,843; Mar. 7.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Brake drum. 1,900,844; Mar. 7.
Noyes, Albert H., assignor to Hills-McCanna Company, Chicago, Ill. Tank outlet valve. 1,899,978; Mar. 7.
Noyes, Hazelhurst R., assignor to W. G. McAdoo, Los Angeles, Calif. Razor blade package. 1,899,979; Mar. 7.
Nuberg, Matthys, assignor to American Seating Company, Grand Rapids, Mich. Joint construction. 1,900,460; Mar. 7.
Nuttall, Fred D., assignor of one-fourth to Laurence M. Mathieu, Richmond, Va. High tension ignition system. 1,900,022; Mar. 7.
Nystrom, Karl F., Milwaukee, Wis., assignor to Camel Company, Chicago, Ill. Latch mechanism. 1,900,254; Mar. 7.
O'Brien, Daniel N., Ashton, R. I., assignor to Draper Corporation, Hopedale, Mass. Harness mechanism for a loom. 1,900,659; Mar. 7.
Ochwat, Paul. (See Kranstein, G., and Ochwat.)
O'Connor, Arthur F., assignor to Equipment Specialties Company, Chicago, Ill. Support construction. 1,899,980; Mar. 7.
Odda Smelteverk A/S, the Firm. (See Johnson, Erling, assignor.)
Odenwaldt, Eugene W. (See Manske, F. A., Odenwaldt, and Gibson.)
Oehme, Hermann, assignor to Chemische Fabrik Kalk G. m. b. H., Cologne-Kalk, Germany. Vulcanized rubber composition and vulcanizing rubber. 1,900,728; Mar. 7.
Oesterreicher, Sandor I., assignor to Metropolitan Device Corporation, Brooklyn, N. Y. Protective inclosure for reactors and similar apparatus. 1,899,981; Mar. 7.
Offutt, James S., assignor to United States Gypsum Company, Chicago, Ill. Acoustical plaster. 1,900,866; Mar. 7.
Ohta, Joe Yoneo, Terminal Island, Calif. Signal. 1,900,845; Mar. 7.
Okonite Company, The. (See Brodhun, Carl P., assignor.)
Olds, Marshall, Mountainside, N. J. Container and handling cargo by such containers. 1,900,867; Mar. 7.
Oliver, Campbell H., Hibbing, Minn. Brake testing instrumentality. 1,900,581; Mar. 7.
Oliver Farm Equipment Company. (See Altgelt, Herman E., assignor.)
Oliver Farm Equipment Company. (See Altgelt, Herman E. and R. J., assignors.)
Oliver Farm Equipment Company. (See Schoenrock, Otto A., assignor.)
Olpin, Henry C. (See Ellis, G. H., Olpin, and Storey.)
Olson, Axel E., Brainerd, Minn. Clamp clothespin. 1,899,982; Mar. 7.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Screw locking element. 1,900,195; Mar. 7.
O'Neill, William T., Pittsburgh, Pa. Game. 1,900,071; Mar. 7.
Opdyke, Vernice G. (See Paden, M. W., and Opdyke, assignors.)
Oppenheim, Charles, assignor to Sears, Roebuck and Co., Chicago, Ill. Watch-fob. Des. 89,407; Mar. 7.
Oppenheim, Theodore H., assignor to The New Idea Spreader Company, Coldwater, Ohio. Attachment for fertilizer distributors. 1,900,299; Mar. 7.
Orem, William H., Baltimore, Md. Milk bottle hood. 1,900,127; Mar. 7.
Ormsbee, Arnold L., Lodi, Calif. Flushing system for operating tables. 1,900,255; Mar. 7.
Osborn, Henry C., Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del. Printing form. 1,900,023; Mar. 7.
Oster, Cornelius B., and H. Rainey, assignors of one-fourth to H. Jones, Rushville, and one-fourth to C. Cole, Indianapolis, Ind. Milk bottle receiver. 1,900,729; Mar. 7.
Osuch, Francis J., Detroit, Mich. Index to be used with telephone directories and other books. 1,900,461; Mar. 7.
Osuch, Francis J., Detroit, Mich. Index for bound volumes. 1,900,462; Mar. 7.
Otis, Edward C., Chicago, Ill., assignor, by mesne assignments, to Certain-teed Products Corporation. Roofing. 1,900,597; Mar. 7.
Otis Manufacturing Co. (See Strausser, H. S., and Reynolds, assignors.)
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)

Owada, Tokujiro, Sukegawa-Cho, assignor of one-half to Koji Konishi, Tokio, Japan. Apparatus for testing watches. 1,900,612; Mar. 7.
Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for case hardening glass sheets. 1,900,582; Mar. 7.
Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for case hardening glass sheets. 1,900,583; Mar. 7.
Oxford Varnish Corporation. (See Von Webern, G., and Hamant, assignors.)
P. & R. Tool Company. (See Lester, Nathan, assignor.)
Pack, William E., Oakland, Calif. Roofer's gauge. 1,900,196; Mar. 7.
Pack, William E., Oakland, Calif. Pitch gauge. 1,900,197; Mar. 7.
Paden, Matthew W., and V. G. Opdyke, Rockford, Ill. Valve control apparatus for dry pipe sprinkler systems. 1,900,300; Mar. 7.
Page, Blin W. (See Tewksbury, Allen M., assignor.)
Page, Charles E., Los Angeles, Calif. Handle for coffee makers. Des. 89,408; Mar. 7.
Papyrus, A. G. (See Buchner, Carl, assignor.)
Parent, Emile J., Hartford, assignor to The Whitlock Coil Pipe Company, West Hartford, Conn. Heat exchange apparatus. 1,900,363; Mar. 7.
Parker, Chester James, Carson City, Nev. Clamp for holding dressing in fowls and the like. 1,900,613; Mar. 7.
Pasternack, Richard, Brooklyn, and W. R. Giles, Richmond Hill, assignors to Charles Pfizer & Company, Brooklyn, N. Y. Highly soluble calcium gluconate and making same. 1,900,517; Mar. 7.
Paul, Abram F., Llanerch, Pa., assignor to National Pneumatic Company, New York, N. Y. Stanchion switch. 1,900,198; Mar. 7.
Pausser, A. Edmond. (See Marter, Ezra B., 3d., assignor.)
Pawlitschko, Anton R., Little Ferry, N. J., assignor to Western Newspaper Union. Matrix board for stereotyping. 1,900,660; Mar. 7.
Payette, Joseph A., assignor to General Plate Company, Attleboro, Mass. Electrical contact and the manufacture thereof. 1,900,256; Mar. 7.
Payne, Ralph B., Elma, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Production of azo dye. 1,900,417; Mar. 7.
Pearson, Amel L., and J. J. Gerhardt, Madison, Wis. Self-adjusting valve lifter, or tappet. 1,900,518; Mar. 7.
Peel, Arthur, London, England. Indexing device. 1,900,073; Mar. 7.
Peltier, Frank D., Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y. Conduit connection for compressors. 1,900,661; Mar. 7.
Pendleton, Eldridge M., Vicksburg, Miss. Folding support. 1,900,760; Mar. 7.
Pennsylvania Railroad Company. (See Butts, George W., assignor.)
Penny, Ira W., Phoenix, Ariz. Vending machine. 1,900,074; Mar. 7.
Perkins, Benjamin F., assignor to American Tissue Mills, Holyoke, Mass. Making articles of paper. 1,900,257; Mar. 7.
Perry, Horace W., Oak Park, assignor to Reliable Electric Company, Chicago, Ill. Wire clamp. 1,899,983; Mar. 7.
Persons, Lawrence M., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Resilient support for electric motors. 1,900,128; Mar. 7.
Persons-Majestic Manufacturing Company. (See Chesley, Walter R., assignor.)
Pet Milk Company. (See Louder, Earl A., assignor.)
Peters, Frank J., assignor of one-half to I. J. Boyce, Portland, Oreg. Toy coast defense gun. 1,900,024; Mar. 7.
Peterson, Oscar R., Brooklyn, N. Y. Safety razor. 1,900,662; Mar. 7.
Petit, William H., and E. S. Hineline, assignors to The Folmer Graflex Corporation, Rochester, N. Y. Camera back. 1,900,730; Mar. 7.
Pfizer, Charles, & Company. (See Pasternack, R., and Giles, assignors.)
Phelps, George H. (See Murray, T. E., jr., and Phelps.)
Philip Carey Manufacturing Company, The. (See Greider, Harold W., assignor.)
Phoenix Metal Cap Co. (See Crabbe, Lindsay T., assignor.)
Piani, Fred, New York, N. Y. Alarmed cash register. 1,900,519; Mar. 7.
Pickett, Angelo C., Riverside, Calif. Insect trap. 1,900,199; Mar. 7.
Pickup, George E., assignor to The Wehrle Company, Newark, Ohio. Cabinet type oil burning heater. 1,900,520; Mar. 7.
Pierce-Arrow Motor Car Company, The. (See Hughes, James R., assignor.)
Pipkin, Marvin, Cleveland Heights, Ohio, assignor to General Electric Company. Bulb and coloring the same. 1,900,463; Mar. 7.
Pippin, John W., Corpus Christi, assignor of one-half to H. R. Giles, Nueces County, and one-half to W. F. Hall and George Lowrey, Harris County, Tex. Well plunger. 1,900,731; Mar. 7.
Pittsburgh Plate Glass Company. (See Hitchcock, Halbert K., assignor.)
Pittsburgh Plate Glass Company. (See Mertes, Robert G., assignor.)
Pittsburgh Plate Glass Company. (See Owen, William, assignor.)
Place, Willard P., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical rectifier. 1,900,732; Mar. 7.
Platt, Herbert. (See Dreyfus, C., and Platt.)
Plauson, Hermann, assignor, by mesne assignments, to Radiochemisches Forschungs-Institut, G. m. b. H., Darmstadt, Germany. Manufacture of caoutchouc lacquers or varnishes. 1,900,663; Mar. 7.
Pneuman, James I., Camillus, N. Y. Animal trap. 1,900,733; Mar. 7.
Pohn, Franz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of driers for varnishes, lacquers, oil paints, and the like. 1,900,734; Mar. 7.
Poirot, Eugene M., Poirot Farms, Mo., assignor to Arthur Capper, trustee, Kansas. Preparing artificial manures. 1,900,614; Mar. 7.
Poirot, Eugene M., Poirot Farms, Mo., assignor to Arthur Capper, trustee, Kansas. Machine for preparing artificial manures. 1,900,615; Mar. 7.
Pollak, Joseph. (See Averill, William H., assignor.)
Pomeroy, S. H., Company. (See Flen, Alphonsus, assignor.)
Pomeroy, William D., assignor to Goulds Pumps, Incorporated, Seneca Falls, N. Y. Lubricating system. 1,900,735; Mar. 7.
Popp, Sylvan R., assignor to O. B. McClintock Company, Minneapolis, Minn. Gun port for bullet-resisting structures. 1,900,364; Mar. 7.
Porter, Alexander W., Atlantic City, N. J. Building front. Des. 89,409; Mar. 7.
Porter-Cable Machine Company, The. (See Emmons, Arthur N., assignor.)
Porter, Sidney C., East Liverpool, Ohio. Preventing reverse movement. 1,900,025; Mar. 7.
Poth, George H., Cincinnati, Ohio. Electromagnetic reciprocating device. 1,900,464; Mar. 7.
Pouchain, Adolfo, Turin, Italy. Electric accumulator. 1,900,616; Mar. 7.
Powell, James D., Stoyestown, Pa. Shaving brush. 1,899,984; Mar. 7.
Poyer, Guy R., Wichita, Kans. Supercharger. 1,900,200; Mar. 7.
Price, James H., Grand Rapids, Mich. Piston head guard. 1,900,521; Mar. 7.
Pritchard, Carl G., Hiram, assignor to Harris-Seybold-Potter Company, Cleveland, Ohio. Printing press. 1,900,664; Mar. 7.
Proteau, Elizabeth, Vancouver, British Columbia, Canada. Egg poacher. 1,900,761; Mar. 7.
Prussing, Walter, assignor to Victor Metal Products Corporation, Brooklyn, N. Y. Die for extruding collapsible tubes. 1,900,665; Mar. 7.
Prussing, Walter, assignor to Victor Metal Products Corporation, Brooklyn, N. Y. Stripper for collapsible tube forming machines. 1,900,666; Mar. 7.
Pure Oil Company, The. (See Harnsberger, Audley E., assignor.)
Qualcast Limited. (See Butterworth, William J., assignor.)
Quinn, Joseph F., Burlingame, assignor to Geo. W. Caswell Co., San Francisco, Calif. Coffee roasting process. 1,900,072; Mar. 7.
Radecky, Edward H., Detroit, Mich., assignor to The Murray Corporation of America. Muffler for internal combustion engines. 1,900,026; Mar. 7.
Radecky, Edward H., Detroit, Mich., assignor to The Murray Corporation of America. Muffler for internal combustion engines. 1,900,027; Mar. 7.
Radioschemisches Forschungs-Institute, G. m. b. H. (See Plauson, Hermann, assignor.)
Radio Corporation of America. (See Jensen, Paul E. G., assignor.)
Radio Corporation of America. (See Logwood, Charles V., assignor.)
Radio Corporation of America. (See Whitaker, Alfred, assignor.)
Radio-Keith-Orpheum Corporation. (See Spotts, Ralph K., assignor.)
Radley, Alton A., jr., assignor of one-fourth to John G. Hogan, Whitefish, Mont. Valve and valve-seat refinishing tool. 1,900,075; Mar. 7.
Raffloer, Emil, Duisburg, Germany, assignor to Charlotte Chemical Laboratories, Charlotte, N. C. Desulphurizing gases. 1,900,667; Mar. 7.
Rainey, Harry. (See Oster, C. B., and Rainey.)
Rand, James H., jr., and J. A. Zellers, Buffalo, assignors to Remington Rand Inc., New York, N. Y. Top or cover plate for typewriting machines. Des. 89,410; Mar. 7.
Rand, James H., jr., and J. A. Zellers, Buffalo, assignors to Remington Rand Inc., New York, N. Y. Frame for typewriting machines. Des. 89,411; Mar. 7.
Ranney, Leo, New York, and H. F. Gade, Brooklyn, N. Y.; said Gade assignor to said Ranney. Toy. 1,900,419; Mar. 7.
Ransomes, Sims & Jeffries Limited. (See Garrett, Francis A., assignor.)

CARNEGIE LIBRARY OF ATLANTA

Raymond Concrete Pile Company. (See Schroeder, F. A., and Twist, assignors.)
Raymond, William A. (See Humason, G. A., and Raymond.)
Rayner Decalcomania Company. (See Edghill, Frederick A., assignor.)
Rea, James C., Oakland, Calif. Switch operator. 1,900,584; Mar. 7.
Read, Henry, Tulsa, Okla. Concrete floor joist form construction. 1,900,301; Mar. 7.
Redlich, Rudolph, jr., Chicago, Ill. Table or similar article. Des. 89,412; Mar. 7.
Reece Button Hole Machine Company, The. (See Reece, Franklin A., assignor.)
Reece, Franklin A., Brookline, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,900,076; Mar. 7.
Reed, James H., Marblehead, Mass. Package. 1,900,389; Mar. 7.
Reed, Walter C., Dalton, Mass., assignor to General Electric Company. Terminal for electrical conductors. 1,900,585; Mar. 7.
Reeves Manufacturing Company, The. (See Krantz, Joseph A., assignor.)
Reeves Manufacturing Company, The. (See Sladky, Alexander C., assignor.)
Reilly, Peter C. (See Derby, Ira H., assignor.)
Reilly, Peter C. (See Hansen, Mablin S., assignor.)
Reimann, Arthur A., Oakland, Calif. Internal combustion engine. 1,900,762; Mar 7.
Reliable Electric Company. (See Perry, Horace W., assignor.)
Remington Arms Company, Inc. (See Burns, James E., assignor.)
Remington Arms Company, Inc. (See Campbell, Allan assignor.)
Remington Arms Company, Inc. (See Jackson, Daniel D., assignor.)
Remington Arms Company, Inc. (See Loomis, Crawford C., assignor.)
Remington Arms Company, Inc. (See Seiler, Richard J., assignor.)
Remington Rand Inc. (See Rand, J. H., jr., and Zellers, assignors.)
Remington Typewriter Company. (See Barney, Edwin E., assignor.)
Remington Typewriter Company. (See Going, George G., assignor.)
Republic Steel Corporation. (See Ellisonk, Harry C., assignor.)
Respats, Inc. (See Respess, Roland B., assignor.)
Respess, Roland B., Wickford, assignor to Respats Inc., Cranston, R. I. Fibrous product and manufacture of same. 1,899,985; Mar. 7.
Reumelin, Richard, Milwaukee, Wis. Air drier. 1,899,988; Mar. 7.
Reynolds' Henry T. (See Strausser, H. S., and Reynolds.)
Ricardo, Harry R., London, England. Self-aligning spherical joint or bearing. 1,900,617; Mar. 7.
Richard, Grant M. (See Briggs, O. B., and Richard.)
Richardson, Maurice F., Berwyn, Pa. Valve. 1,900,736; Mar. 7.
Richter, Elmer F., Park Ridge, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,900,302; Mar. 7.
Richter, Elmer F., Park Ridge, Ill., assignor to Addressograph Company, Wilmington, Del. Printing device. 1,900,303; Mar. 7.
Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,900,465; Mar. 7.
Riebel Frederick, jr., and D. M. Dow, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio. Bag coupling. 1,900,366; Mar. 7.
Rietz, Erich, and W. Hoffman, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation product from aliphatic aldehydes and bases of the naphthalene series. 1,900,365; Mar. 7.
Riffe, Raymond F., Greensburg, Pa. Adjustable door catch. 1,900,077; Mar. 7.
Ring, Fred, assignor to Dictograph Products Co., Inc., New York, N. Y. Woman's undergarment. 1,900,129; Mar. 7.
Rintelman, William L. (See Gubelmann, I., and Rintelman.)
Rintelman, William L., Milwaukee, Wis., assignor, by mesne assignments to E. I. du Pont de Nemours & Company. 1, 5-dichloro-2, 6-diamino-anthraquinone-3, 7-disulphonic acid and producing same. 1,899,986; Mar. 7.
Rintelman, William L., Milwaukee, Wis., assignor, by mesne assignments, to E. I. du pont de Nemours & Company. Preparing 1, 5-dichloro-2, 6-diamino-anthraquinone. 1,899,987; Mar. 7.
Rippe, John B., Fresno, Calif. Cooling systems. 1,900,586; Mar. 7.
Ritchie, Frank E., Chippewa Falls, Wis. Animal feeder. 1,900,868; Mar. 7.
Rivat, George. (See Dreyfus, C., and Rivat.)
Riverbank Laboratories. (See Sabine, Paul E., assignor.)
Robichaux Sosthene, Saratoga, Tex. Sample taking device. 1,900,618; Mar. 7.
Rodgers, James P., assignor to Elliott Company, Pittsburgh, Pa. Tube cleaner. 1,900,130; Mar. 7.
Roe, Emil W. K., assignor to The Aldon Company, Chicago, Ill. Saw operating mechanism. 1,900,304; Mar. 7.
Roebling's, John A., Sons Company. (See Sunderland, Charles C., assignor.)
Rohne, Even J., assignor to Waters-Genter Company, Minneapolis, Minn. Toaster. 1,900,737; Mar. 7.
Root, Frank B., East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Rugous coating composition and making same. 1,900,131; Mar. 7.
Roselund, Harold A., assignor to The De Vilbiss Company, Toledo, Ohio. Liquid gun. 1,900,668; Mar. 7.
Rosenstein, Ludwig, San Francisco, Calif. Process of refining. 1,900,132; Mar. 7.
Ross, J. O., Engineering Corporation. (See Wagner, C. L., and Freeman, assignors.)
Rowe, Thomas A., Red Creek, N. Y. Silo. 1,900,763; Mar. 7.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Sealing and release device for carbon dioxide fire systems. 1,900,764; Mar. 7.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Heat responsive device. 1,900,765; Mar. 7.
Rud, Otto Meyer, Firm, et al. (See Behrens, Hans C. A., assignor.)
Russell, Buford B., Chicago, and W. J. Uhlhorn, Oak Park, assignors to Drying Systems, Inc., Chicago, Ill. Apparatus for and method of drying. 1,900,846; Mar. 7.
Russell, Frank E. (See McCormick, G., and Russell.)
Ruthsaccumulator A. B. (See Ruths, Johannes, assignor.)
Ruths, Johannes, Djursholm, Sweden, assignor to Ruthsaccumulator A. B., Berlin, Germany. Steam power plant. 1,900,766; Mar. 7.
Ryan, Augustus M., Madison, N. J. Wall brace and reenforcement. 1,900,767; Mar. 7.
Sabine, Paul E., assignor of one-half to Riverbank Laboratories, Geneva, Ill. Sound absorbent material and producing it. 1,900,522; Mar. 7.
Safety Belt Lacer Company. (See Briggs, O. B., and Richard, assignors.)
Safety Car Heating & Lighting Company, The. (See Godsey, Frank W., jr., assignor.)
Sager, Solomon M., Evanston, Ill. Eye cup. 1,900,201; Mar. 7.
Sauter, Friedrich, Weingarten, Germany. Letter box. 1,900,078; Mar. 7.
Schaeffers, Joseph, Philadelphia, Pa. Internal combustion engine. 1,900,133; Mar. 7.
Schargorodsky, Lazar, assignor to the Firm Hannoversche Maschinenbau-Actien-Gesellschaft vormals Georg Eystorff. Hanomag, Hannover, Linden, Germany. Starting internal combustion engines. 1,900,367; Mar. 7.
Scheibell, Gordon B., Newark, N. J. Film apparatus. 1,900,738; Mar. 7.
Schemmel, Robert C., Union City, Ind. Finishing welt. 1,900,768; Mar. 7.
Schemmel, Robert C., Union City, Ind. Molding. 1,900,769; Mar. 7.
Schiff, Sigmund, assignor to The J. H. Day Company, Cincinnati, Ohio. Locking device for bayonet slot construction. 1,900,258; Mar. 7.
Schlenker, Louis F., and M. Wuerthner, Jackson, Mich., assignors to said Schlenker and said Wuerthner, as joint tenants with right of survivorship. Combined heating and ventilating apparatus. 1,900,770; Mar. 7.
Schlotz, Elmer E., Denver, Colo. Railway car. 1,900,134; Mar. 7.
Schmidt, Otto, Ludwigshafen-on-the-Rhine, M. Treppenhauer, Mannheim, and O. Grosskinsky and Heinrich Fischer, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of olefines and diolefines. 1,900,739; Mar. 7.
Schmierer, Eugene, assignor to Baker Perkins Company, Inc., Saginaw, Mich. Packing gland. 1,900,523; Mar. 7.
Schnackel's, C., Son, Inc. (See McLean, William A., assignor.)
Schoenrock, Otto R., Chicago, Ill., assignor to Oliver Farm Equipment Company. Clutch coupling. 1,900,305; Mar. 7.
Schrader's, A., Son, Inc. (See Elbert, J., and Cronwall, assignors.)
Schroeder, Frederick A., Rochelle Park, and A. E. Twist, Rutherford, N. J., assignors to Raymond Concrete Pile Company, New York, N. Y. Pile shell. 1,900,524; Mar. 7.
Schroeder, Henry R., Omaha, Nebr. Internal combustion motor. 1,900,466; Mar. 7.
Schumacher, Karl. (See Zimmermann, Max E., assignor.)
Schutzniedrig, Ewald, assignor to Victor Koch, Detroit, Mich. Diesel engine. 1,900,587; Mar. 7.
Schwalbe, Hellmuth C., assignor to Dill & Collins Co., Philadelphia, Pa. Treating cellulose fiber pulp. 1,899,989; Mar. 7.
Schwartz, George L. (See Lewers, William W., and Schwartz.)
Schwartz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,413; Mar. 7.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,414; Mar. 7.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,415; Mar. 7.
Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,416; Mar. 7.
Scott, Bernard H., Glendale, Calif. Liquid counter-balanced pumping system. 1,900,588; Mar. 7.
Scott, Ernest E., assignor to The Dangerlite Corporation of America, Denver, Colo. Reflector. 1,900,202; Mar. 7.
Scott-Ross and Company. (See Yungling, Paul F., assignor.)
Scott, Victor L., Ottumwa, Iowa, and N. W. Marsch, Troy, S. Dak. Renewable threaded liner for coal drill boxings. 1,900,740; Mar. 7.
Scott, Walter J., Woonsocket, R. I. Stop motion for gill boxes. 1,900,400; Mar. 7.
Scovill Manufacturing Company. (See Meader, Russell G., assignor.)
Scruggs, Clarence H., Brooklyn, N. Y. Jewelry display device. 1,900,467; Mar. 7.
Sculley, William J., Palmyra, N. J. Apparatus for making a belt splice. 1,900,402; Mar. 7.
Scully, Rees T., Pittsburgh, Pa. Scoring device. 1,900,401; Mar. 7.
Sears, Roebuck & Company. (See Mason, Francis C., assignor.)
Sears, Roebuck and Co. (See Oppenheim, Charles, assignor.)
Sease, Virgil B., Parlin, N. J., assignor to Du Pont Film Manufacturing Corporation, Wilmington, Del. Multipack negative system. 1,900,468; Mar. 7.
Seederer, Jacob E., assignor to Seederer-Kohlbusch, Inc., Jersey City, N. J. Beam scale. 1,900,418; Mar. 7.
Seederer-Kohlbusch, Inc. (See Gattoni, John, assignor.)
Seederer-Kohlbusch, Inc. (See Seederer, Jacob E., assignor.)
Seeley, Harold T., Yeadon, Pa., assignor to General Electric Company. Control system. 1,900,589; Mar. 7.
Sehring, Frank, Brooklyn, N. Y. Hair curler or hair wave winder. 1,900,373; Mar. 7.
Seiler, Richard J., Ilion, N. Y., assignor to Remington Arms Company, Inc. Checkering machine. 1,900,203; Mar. 7.
Selden Company, The. (See Jaeger, Alphons O., assignor.)
Selden Company, The. (See Witzel, Heinrich W., assignor.)
Selden Research & Engineering Corporation, The. (See Jaeger, Alphons O., assignor.)
Sellers, William D., Oak Park, Ill., assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,890; Mar. 7.
Servel, Inc. (See Peltier, Frank D., assignor.)
Sevison, Harry D., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Curtain roller construction. 1,900,259; Mar. 7.
Seymour, Merrill W., assignor to Eastman Kodak Company, Rochester, N. Y. Color photographic material. 1,900,869; Mar. 7.
Seymour, Merrill W., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic color process. 1,900,870; Mar. 7.
Shaffer, William D., Brea, Calif. Multicap casing head. 1,900,260; Mar. 7.
Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)
Sharp, Jefferson M., Oil City, Pa. Coupler for toy railway cars. 1,900,204; Mar. 7.
Sharpsville Boiler Works, Co. (See Swank, Rehl W., assignor.)
Sheaffer, Craig R., and W. R. Cuthbert, assignors to W. A. Sheaffer Pen Co., Fort Madison, Iowa. Pencil. 1,900,669; Mar. 7.
Sheaffer, W. A., Pen Co. (See Sheaffer, C. R., and Cuthbert, assignors.)
Sheldon Machinery Corporation. (See Sheldon, Waldo, assignor.)
Sheldon, Roscoe V., Riverside, Calif. Price marker. 1,900,136; Mar. 7.
Sheldon, Waldo, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y. Well drilling apparatus. 1,900,135; Mar. 7.
Shell Petroleum Corporation. (See Jones, Frank A., assignor.)
Sherrill, Clarence O., Cincinnati, Ohio. Earthwork and making same. 1,900,205; Mar. 7.
Shiffer, Harry R., Brownstown, Pa. Lubricant retainer. 1,900,868; Mar. 7.
Shirley, Roswell R., Rockford, Ill. Dairy products refrigerator. 1,900,306; Mar. 7.
Shrader, William T., assignor to The American Hat Co. Inc., Norwalk, Conn. Hat box. 1,900,420; Mar. 7.
Shuttleworth, Howard L., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y. Manufacture of pile fabrics. 1,899,990; Mar. 7.
Sickel, Louis C. (See Ackerman, Michael H., assignor.)
Sidav, William E., Richmond, England. Collapsible seat, stool, or chair with receptacle for holding articles. 1,900,847; Mar. 7.
Siegel, Charles. (See Siegel, Myer, assignor.)
Siegel, Myer, assignor of one-half to Charles Siegel, New York, N. Y. Dishwasher. 1,900,771; Mar. 7.
Siemens-Schuckertwerke Aktiengesellschaft. (See Gerlach, Fritz, assignor.)
Siers, John A. H., Jersey City, N. J. Separable fastener. 1,900,390; Mar. 7.
Silberstein, Isidor, Berlin, Germany. Electric resistance. 1,900,206; Mar. 7.
Silica Gel Corporation. (See Connolly, G. C., and Miller, assignors.)
Silver, Walter H., assignor to Deere & Company, Moline, Ill. Tractor guide. 1,900,525; Mar. 7.
Silverman, Mortimer. (See Dole, M. W., and Silverman.)
Simning, Roy B., assignor of one-fourth to Rollo G. Lacy, Duluth, Minn. Vehicle. 1,900,590; Mar. 7.
Simplex Equipment Company. (See Creveling, John L., assignor.)
Simplex Valve & Meter Company. (See Borden, Moro M., assignor.)
Sinclair Refining Company. (See Herthel, Eugene C., assignor.)
Skrlec, Paul, and J. Budnik, Hamtramck, Mich. Bowling ball rack. 1,900,469; Mar. 7.
Sladky, Alexander C., Milwaukee, Wis., assignor, by mesne assignments, to The Reeves Manufacturing Company, Dover, Ohio. Lock joint for metal pipes. 1,900,749; Mar. 7.
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Control mechanism for evaporators. 1,900,526; Mar. 7.
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Ice pan. 1,900,741; Mar. 7.
Slagel, Franklin G., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Evaporator. 1,900,742; Mar. 7.
Slanger, Leopold, Brooklyn, N. Y. Sleeve construction. 1,900,391; Mar. 7.
Smart, James H., Shanghai, China. Automatic secret telegraph system. 1,900,772; Mar. 7.
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,885; Mar. 7.
Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,900,886; Mar. 7.
Smith, Albert A., Riverdale, N. J., assignor to Metropolitan Engineering Company, Brooklyn, N. Y. Electric welding apparatus. 1,899,991; Mar. 7.
Smith, Frasier, Zanesville, Ohio, assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Jar. Des. 89,420; Mar. 7.
Smith, H. B., Company, The. (See Smith, Stanley K., assignor.)
Smith, Henry B. (See Taylor, E. R., and Smith.)
Smith, Herbert C., Los Angeles, Calif. Building construction. 1,900,369; Mar. 7.
Smith, Herbert P., Emsworth, Pa. Automotive system. 1,900,470; Mar. 7.
Smith, Jesse A. B., Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,900,527; Mar. 7.
Smith, Nelson K., Los Angeles, assignor to Byron Jackson Co., West Berkeley, Calif. Tongs. 1,900,370; Mar. 7.
Smith, Nelson K., assignor to Byron-Jackson Co., Los Angeles, Calif. Tubing catcher. 1,900,371; Mar. 7.
Smith, Stanley K., assignor to The H. B. Smith Company, Westfield, Mass. Door construction. 1,900,079; Mar. 7.
Snavely, Earl R., Roselle, assignor to The Fire King Co., Inc., Union, N. J. Mercury switch. 1,900,080; Mar. 7.
Snelling, Walter O., Allentown, Pa. Foundry flask. 1,900,137; Mar. 7.
Snider, Herbert B., Ellensburg, Wash. Manicuring method and means. 1,900,028; Mar. 7.
Snyder, Almond H., Lancaster, assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Storage battery. 1,900,307; Mar. 7.
Snyder, Almond H., Lancaster, assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y. Storage battery cell. 1,900,308; Mar. 7.
Snyder, Henry C., Kis-Lyn, Pa. Cooking utensil. 1,900,619; Mar. 7.
Soc. Ital. Transfer Albini, S. I. T. A. (See Colombo, Carlo A., assignor.)
Società Italiana Pirelli. (See Emanueli, Luigi, assignor.)
Sohn, Erwin, Oak Park, Ill. Rack for electroplating. 1,899,992; Mar. 7.
Sommerville, William E., Coal City, Ill. Twisting and reeling mechanism for wire rope making machines. 1,900,309; Mar. 7.
Sommerville, William E., Coal City, Ill. Twister or strander. 1,900,310; Mar. 7.
Sorensen, Andrew J. (See Grondahl, L. O., and Sorensen.)
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,900,408; Mar. 7.
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,900,409; Mar. 7.
Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,900,410; Mar. 7.

Spear, Walter A., assignor to Victor Electric Products, Inc., Cincinnati, Ohio. Clock. 1,900,311; Mar. 7.
Specialty Insulation Manufacturing Company. (See Willey, Llewellyn M., assignor.)
Speidel, Edwin F. M. (See Augenstien, Karl C., assignor.)
Spencer, George M., Chicago, Ill. Fluid cleaner. 1,899,993; Mar. 7.
Sponable, Earl I., assignor to Fox Case Corporation, New York, N. Y. Apparatus for printing from a negative sound record to a positive. 1,900,853; Mar. 7.
Spotts, Ralph K., Los Angeles, Calif., assignor to Radio-Keith-Orpheum Corporation. Conversion of sound into electrical impulses. 1,899,994; Mar. 7.
Square D Company. (See Van Valkenburg, H. L., and McNicol, assignors.)
Stålhane, Otto, Stockholm, Sweden. Cement or materials containing cement. 1,900,670; Mar. 7.
Standard Oil Company. (See Arveson, Maurice H., assignor.)
Standard Oil Development Company. (See Loomis, N. E., and Tomlinson, assignors.)
Staniewicz, Willy, assignor to Automobilwerke H. Büssing, Aktiengesellschaft, Brunswick, Germany. Motor vehicle. 1,900,773; Mar. 7.
Star, Richard, Brooklyn, N. Y. Tank gauge. 1,900,774; Mar. 7.
Star, Richard, Brooklyn, N. Y. Tank gauge. 1,900,775; Mar. 7.
Statz, Robert, assignor to Walker Manufacturing Company, Racine, Wis. Jack. 1,900,528; Mar. 7.
Stauber, Georg, Berlin, Germany. Rotary mechanical apparatus. 1,900,620; Mar. 7.
Staud, Cyril J., and C. S. Webber, assignors to Eastman Kodak Company, Rochester, N. Y. Double alpha ketonic acid cellulose esters and making the same. 1,900,871; Mar. 7.
Stetson Shoe Company, The. (See Brady, Walter L., assignor.)
Stokes, John S., et al. (See Kuzmick, Joseph N., assignor.)
Storey, Ralph C. (See Ellis, G. H., Olpin, and Storey.)
Storm, Adolph, and T. Thorsen, assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn. Lathe dead center actuating device. 1,900,261; Mar. 7.
Storm, Adolph, and T. Thorsen, assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn. Clutch. 1,900,312; Mar. 7.
Storm Manufacturing Co. (See Storm, A., and Thorsen, assignors.)
Storm Manufacturing Company. (See Thorsen, Thor, assignor.)
Stratford, Herbert R., assignor to The Stratmore Company, Cleveland, Ohio. Surfacing. 1,900,313; Mar. 7.
Stratmore Company, The. (See Stratford, Herbert R., assignor.)
Strauchauer, Frederick W. (See Baxter, G. L., Strachauer, and Twogood.)
Strausser, Herbert S., Chicago, and H. T. Reynolds, Lombard, assignors to Otis Manufacturing Co., Chicago, Ill. Pocket lighter. 1,900,207; Mar. 7.
Strobl, Hans, Berlin-Tempelhof, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Bodensee, Germany. Airship. 1,900,743; Mar. 7.
Strobl, Hans, Berlin-Tempelhof, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Airship. 1,900 744; Mar. 7.
Strobridge, William, Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Operator's bench. 1,900,621; Mar. 7.
Strom, William S., Seattle, Wash. Sheet metal clamp. 1,900,314; Mar. 7.
Stromberg, Pehr W., Somerville, Mass., assignor of one-half to Willsie M. Mattison, Ogdensburg, N. Y. Air conditioning apparatus. 1,899,995; Mar. 7.
Studebaker Corporation, The. (See Ackerman, Albert H., assignor.)
Studebaker Corporation, The. (See Allee, Herbert D., assignor.)
Studebaker Corporation, The. (See Happ, Willard C., assignor.)
Studebaker Corporation, The. (See Hughes, James R., assignor.)
Studebaker Corporation, The. (See Kohr, Robert F., assignor.)
Studebaker Corporation, The. (See Sullivan, Perry W., assignor.)
Stump, Horace E., Lakeville, Conn., assignor to New England Lime Co., Pittsfield, Mass. Obtaining magnesium sulphate. 1,900, 392; Mar. 7.
Sukete Investment Company. (See Sutter, Erwin, L., assignor.)
Sullivan Machinery Company. (See Dovell, Dudley K., assignor.)
Sullivan, Perry W., assignor to The Studebaker Corporation, South Bend, Ind. Doorlock handle. 1,899,996; Mar. 7.
Sullivan, Perry W., assignor to The Studebaker Corporation, South Bend, Ind. Doorlock handle. 1,899,997; Mar. 7.
Sunderland, Charles C., New Brunswick, assignor to John A. Roebling's Sons Company, Trenton, N. J. Method and apparatus for spinning bridge cables. 1,899,998; Mar. 7.
Superior Carbon Products, Incorporated. (See Curtis, Arthur R., assignor.)
Surface Combustion Corporation. (See Burke, Stephen P., assignor.)
Surface Combustion Corporation. (See Cochran, Ralf S., assignor.)
Surface Combustion Corporation. (See De Croiolis, E. G., and Williams, assignors.)
Suter, Heinrich, assignor to Firm H. W. Egli A. G., Zurich, Switzerland. Calculating machine comprising axially displaceable setting wheels. 1,900,776; Mar. 7.
Sutter, Erwin L., assignor to The Sukete Investment Company, St. Paul, Minn. Progressive distributing lubricator. 1,900,745; Mar. 7.
Swank, Rehl W., assignor to Sharpsville Boiler Works Co., Sharpsville, Pa. Coupling. 1,900,208; Mar. 7.
Sweeney Lithograph Co. (See Watson, John, assignor.)
Swerer, Millard F., Jamestown, Calif. Adjustable door hinge. 1,900,081; Mar. 7.
Syntron Company, The. (See Hampton, George E., assignor.)
Tada, Renzo, Tokyo-Fu, Japan. Apparatus for forming concrete piles. 1,900,622; Mar. 7.
Talmadge, Richard E., Nutley, N. J., assignor to MacArthur Concrete Pile Corporation, New York, N. Y. Composite pile. 1,900,673; Mar. 7.
Tamura, Kenzo, Iriarai-Cho, G. Kihara, Suna-Machi, Y. Asahina, Tozuka-Cho, and M. Ishidate, Suginami-Cho, Japan. Manufacturing pure para-hydroxycamphor. 1,900,209; Mar. 7.
Tatham, Robert L., Chicago, Ill. Dishwasher. 1,900,529; Mar. 7.
Tatum, Will S., Hattiesburg, Miss. Drop frame body for trailers. 1,900,778; Mar. 7.
Taylor, Ernest R., and H. B. Smith, assignors to Eastman Kodak Company, Rochester, N. Y. Recovering cellulosic derivative scrap. 1,900,872; Mar. 7.
Taylor, Halsey W., Warren, Ohio. Drinking fountain. 1,900,591; Mar. 7.
Taylor, Robert S., Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y. Two-temperature evaporator. 1,900,674; Mar. 7.
Taylor, Steadman O. (See Alcott, James R., assignor.)
Taylor, Thomas G., Roswell, N. Mex. Well drilling apparatus. 1,900,029; Mar. 7.
Taylor, William J., and C. T. Cutting, assignors to The Lamson Company, Syracuse, N. Y. Pneumatic dispatch system. 1,900,592; Mar. 7.
Technicolor, Inc. (See Ball, Joseph A., assignor.)
Technicolor, Inc. (See Tuttle, Bertha S., assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Buschbeck, Werner, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Leib, August, assignor.)
Tell, R. P. (See Aikman, Burton S., assignor.)
Temple, John J., New York, assignor to Victor Metal Products Corporation, Brooklyn, N. Y. Machine for inserting corks into caps for collapsible tubes. 1,900,671; Mar. 7.
Teufl, Franz C. (See Goldberg, M. J., and Teufl.)
Tewksbury, Allen M., assignor of one-third to Blin W. Page, Skowhegan, Me. Method and apparatus for producing sound waves. 1,900,623; Mar. 7.
Texaco Salt Products Company. (See Martin, Otto V., assignor.)
Texas Company, The. (See Drake, Rollin L., assignor.)
Thayer Action Company. (See Dasenbrook, Charles H., assignor.)
Thoma, Andrew, Cambridge, assignor to North American Chemical Company, Boston, Mass. Filling shoes. 1,900,316; Mar. 7.
Thoma, Andrew, assignor to North American Chemical Company, Cambridge, Mass. Filling shoes. 1,900,317; Mar. 7.
Thomas & Betts Co., The. (See Buchanan, Stephen N., assignor.)
Thomas & Betts Co. (See Church, Lewis H., assignor.)
Thomas, W. C. (See Dickens, James C., assignor.)
Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate. 1,900,530; Mar. 7.
Thompson, Lawson, et al. (See Weir, William E., assignor.)
Thompson, Ralph, et al. (See Weir, William F., assignor.)
Thoresen, Carl B., Richmond Hill, and F. B. Eliassen, Brooklyn, N. Y. Automatic hood lock for vehicles. 1,900,777; Mar. 7.
Thorsen, Thor. (See Storm, A., and Thorsen.)
Thorsen, Thor, Plymouth Township, Hennepin County, assignor to Storm Manufacturing Company, Minneapolis, Minn. Babbitting device. 1,900,746; Mar. 7.
Thwing, Charles B., assignor to Thwing Instrument Company, Philadelphia, Pa. Pyrometer. 1,900,779; Mar. 7.
Thwing Instrument Company. (See Thwing, Charles B., assignor.)
Ties, Fred M., Brodhead, Wis. Rod and pipe grapple. 1,900,471; Mar. 7.

Told, Arnold H., Chicago, Ill. Wheel stop. 1,900,210; Mar. 7.
Toledo Metal Furniture Company, The. (See Uhl, Clement R., assignor.)
Tomlinson, Albert H. (See Loomis, N. E., and Tomlinson.)
Toro Manufacturing Company. (See Moyer, Amos F., assignor.)
Torrisi, Samuel S., Philadelphia, Pa., assignor to The Burdick Corporation, Milton, Wis. Therapeutic lamp. 1,900,138; Mar. 7.
Tosterud, Martin, Arnold, Pa., assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind. Coating on aluminum. 1,900,472; Mar. 7.
Tracy, Homer D., Ridgewood, N. J. Blade sharpener and the like. 1,900,374; Mar. 7.
Trans-Lux Daylight Picture Screen Corporation. (See Unkles, Edward H., assignor.)
Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Attachment plug cap and making the same. 1,900,139; Mar. 7.
Treppenhauer, Max. (See Schmidt, O., Treppenhauer, Grosskinsky, and Fisher.)
Trout, Walter C., Lufkin, Tex. Pumping power. 1,900,675; Mar. 7.
Tully, Hugh C., New York, N. Y. Airplane. 1,900,473; Mar. 7.
Tuttle, Bertha S., Boston, Mass., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y. Imbibition printing with pure primary colors and product. 1,900,140; Mar. 7.
Twist, Albert E. (See Schroeder, F. A., and Twist.)
Twogood, Ralph S. (See Baxter, G. L., Strachauer, and Twogood.)
Tyden, Emil. Hastings, Mich. Pressure venting device for dry pipe sprinkler systems. 1,900,262; Mar. 7.
Uhl, Clement R., assignor to The Toledo Metal Furniture Company, Toledo, Ohio. Caster. 1,900,672; Mar. 7.
Uhlhorn, Walter J. (See Russell, B. B., and Uhlhorn.)
Uhlich, Erich, and Walter Ballentin, genannt Mielke, Berlin-Hirschgarten, Germany. Sun and planet wheel gear. 1,899,999; Mar. 7.
Uhrig, Anna K. (See Uhrig, Katherine E. and A. K.)
Uhrig, Katherine E. and A. K., Dayton, Ohio. Arm sling. Des. 89,417; Mar. 7.
Ulich, Lynne, Racine, and R. J. Goodrich, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Purifying an anthraquinone body. 1,900,001; Mar. 7.
Ulrey, Clayton T., East Orange, N. J., assignor to Westinghouse Lamp Company. Electrical discharge device. Des. 89,418; Mar. 7.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Smith, Jesse A. B.)
Underwood, Western, Santa Monica, assignor to La Lux Manufacturing Company, Los Angeles, Calif. Core for molds. 1,900,372; Mar. 7.
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Devol, Lee, assignor.)
Union Switch & Signal Company, The. (See Grondahl, Lars O., assignor.)
Union Switch & Signal Company, The. (See Grondahl, L. O. and Sorensen, assignors.)
Union Switch & Signal Company, The. (See Hines, Claude M., assignor.)
Union Switch & Signal Company, The. (See Place, Willard P., assignor.)
Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)
Unipress Company, The. (See Lindemann, Frederick W., assignor.)
Unipress Company, The. (See Wilhelm, Fred C., assignor.)
United Metal Goods Mfg. Co. (See Buhrle, Paul, assignor.)
United Shoe Machinery Corporation. (See Chapin, Herbert L., assignor.)
United Shoe Machinery Corporation. (See Glidden, Harvey L., assignor.)
United Shoe Machinery Corporation. (See Gookin, Sylvester L., assignor.)
United States Gypsum Company. (See Manske, F. A., Odenwaldt, and Gibson, assignors.)
United States Gypsum Company. (See Offutt, James S., assignor.)
United States Hoffman Machinery Corporation. (See Card, John L., assignor.)
United States Hoffman Machinery Corporation. (See Strobridge, William, assignor.)
United States Wind Engine & Pump Company. (See Wenberg, Oscar A., assignor.)
Universal Oil Products Company. (See Bergman, Donald J., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Fairchild, Oscar H., assignor.)
Universal Oil Products Company. (See Halle, Hiram J., assignor.)
Universal Oil Products Company. (See Howard, William R., assignor.)
Universal Oil Products Company. (See Van Heeden, Arthur P., assignor.)
Unkles, Edward H., Weehawken, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Tape puller. 1,900,421; Mar. 7.
Vadset, Johan G., Stavanger, Norway. Rudder for seagoing vessels. 1,900,848; Mar. 7.
Vallquette, Joseph E., Webbwood, Ontario, Canada. Motor sled. 1,900,315; Mar. 7.
Van Billiard, Maynard. (See Keller, H. C., and Van Billiard, assignors.)
Vanderbeek, Samuel W. (See Grant, A. E., and Vanderbeek.)
Van Derhoef, Henry E., assignor to Eastman Kodak Company, Rochester, N. Y. Making cellulose nitrate film and similar products. 1,900,873; Mar. 7.
Van Heeden, Arthur P., assignor to Universal Oil Products Company, Chicago, Ill. Making producer gas. 1,900,141; Mar. 7.
Vanick, James S. (See Merica, P. D., Vanick, and Wickenden.)
Van Valkenburg, Hermon L., Wauwatosa, and F. C. McNicol, Milwaukee, Wis., assignors to Square D Company, Detroit, Mich. Resistor construction. 1,900,318; Mar. 7.
Varell, Anna D., New York, N. Y. Wrinkle eradicator. 1,900,002; Mar. 7.
Vermeulen, Aurèle, Los Angeles, Calif. Structural device. 1,900,319; Mar. 7.
Victor Electric Products, Inc. (See Spear, Walter A., assignor.)
Victor Metal Products Corporation. (See Prussing, Walter, assignor.)
Victor Metal Products Corporation. (See Temple, John J., assignor.)
Vitu, James E., assignor to Well Pump Company, Chicago, Ill. Multistage centrifugal pump. 1,900,531; Mar. 7.
Vodoz, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,900,780; Mar. 7.
Von Webern, Guido, and E. W. Hamant, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich. Surface decorating machine. 1,900,030; Mar. 7.
Voortmann, Walter, Dortmund, Germany. Safety device for blasting charges employed in mining and similar work. 1,900,624; Mar. 7.
Wade, Raymond B., Swampscott, Mass., assignor to General Electric Company. Shaft bearing. 1,900,593; Mar. 7.
Wagenius, C., et al. (See Christensen, John L., assignor.)
Wagner, Charles L., Boonton, N. J., and H. Freeman, Shawinigan Falls, Quebec, Canada, assignors to J. O. Ross Engineering Corporation, New York, N. Y. Recovering chemicals from waste liquors. 1,900,320; Mar. 7.
Wahl, Ottmar, Leverkusen, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyestuff derived from indoline bases and preparing same. Re18,758; Mar. 7.
Wahlsten, Gösta. (See Lysholm, A., Horney, and Wahlsten.)
Waksmöncki, Joseph, Mosinee, Wis. Animal stanchion. 1,900,676; Mar. 7.
Walker, Charles E., Catskill, N. Y., assignor to Lancaster Iron Works, Lancaster, Pa. Pallet feeding device. 1,900,625; Mar. 7.
Walker, Earl C., Chicago, and G. W. Engstrom, Riverside, Ill., assignors to International Harvester Company. Burner. 1,900,003; Mar. 7.
Walker Manufacturing Company. (See Stutz, Robert, assignor.)
Wallace, Charles F., Westfield, assignor to Wallace & Tiernan Products, Inc., Belleville, N. J. Apparatus for feeding solutions. 1,900,142; Mar. 7.
Wallace, Charles F., Westfield, assignor to Wallace & Tiernan Products, Inc., Belleville, N. J. Apparatus for feeding solutions. 1,900,143; Mar. 7.
Wallace, Donald J., assignor of one-half to R. H. Mulford, Long Beach, Calif. Entrance control. 1,900,422; Mar. 7.
Wallace, James D., Washington, D. C. High frequency measuring apparatus. 1,900,082; Mar. 7.
Wallace & Tiernan Products, Inc. (See Wallace, Charles F., assignor.)
Waller, John A., Beverley Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Saw setting device. 1,900,083; Mar. 7.
Waller, John A., Beverley Hills, assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif. Saw filing device. 1,900,084; Mar. 7.
Waller Manufacturing Corporation Ltd. (See Waller, John A., assignor.)
Wallgren, August G. F., assignor to Aktiebolaget Nomy, Stockholm, Sweden. Bearing. 1,900,874; Mar. 7.
Wallgren, August G. F., assignor to Aktiebolaget Nomy, Stockholm, Sweden. Bearing. 1,900,875; Mar. 7.
Wallis, John Samuel, assignor to Foster Wheeler Corporation, New York, N. Y. Oil fractionation. 1,900,085; Mar. 7.
Ward, Clarence E. (See Andres, W. J., and Ward.)
Wardley, Thomas, Greenford, England. Manufacture of glassware. 1,900,781; Mar. 7.
Waters-Genter Company. (See Rohne, Even J., assignor.)

Watson, George O., Rugby, England, assignor to General Electric Company. Electric ship propulsion. 1,900,594; Mar. 7.
Watson, John, Passaic, assignor to Sweeney Lithograph Co., Inc., Belleville, N. J. Easel. 1,900,375; Mar. 7.
Watson, Joseph R., assignor to V. L. Watson, San Francisco, Calif. Fire resistant and preservative composition. 1,900,211; Mar. 7.
Watson, Joseph R., assignor to V. L. Watson, San Francisco, Calif. Fire resistant and preservative composition and making same. 1,900,212; Mar. 7.
Watson, Virginia L. (See Watson, Joseph R., assignor.)
Way, Chester M., Burlington, Vt. Light plug. 1,900,782; Mar. 7.
Webber, Charles S. (See Staud, C. J., and Webber.)
Weber, Louis J., Schenectady, N. Y., assignor to General Electric Company. Circuit controlling and protective device. 1,900,595; Mar. 7.
Wehrle Company, The. (See Pickup, George E., assignor.)
Weidhaas, Gustav A., Bronxville, P. Clark, Great Neck, and H. V. Harding, New York, N. Y.; said Clark and said Harding assignors to said Weidhaas. Curtain and controlling means therefor. 1,900,677; Mar. 7.
Well Pump Company. (See Vitu, James E., assignor.)
Weir, Fred W., Pittsburgh, Pa. Apparatus for welding tubes. 1,900,376; Mar. 7.
Weir, William F., assignor to R. and L. Thompson, Holden, W. Va. Engine. 1,900,086; Mar. 7.
Weiss, John F., Philadelphia, Pa. Holder for paraffin fluid containers. 1,900,783; Mar. 7.
Welsh, Ezra C., Grimsby, Ontario, Canada. Traffic regulator. 1,900,532; Mar. 7.
Wenberg, Oscar A., assignor to United States Wind Engine & Pump Company, Batavia, Ill. Grain handling device. 1,900,213; Mar. 7.
Wening, Frederick. (See Glatthar, G. E., and Wening.)
Wesnigk, Erwin. (See Zagorski, J., and Wesnigk.)
West Bend Aluminum Company. (See Kircher, Ralph N., assignor.)
Wester, Stefan, Easton, Pa. One-piece coat. 1,900,678; Mar. 7.
Western Cartridge Company. (See Ernst, Hans, assignor.)
Western Newspaper Union. (See Pawlitschko, Anton R., assignor.)
Westinghouse Electric & Manufacturing Company. (See Dohner, Donald R., assignor.)
Westinghouse Lamp Company. (See Ferguson, John E., assignor.)
Westinghouse Lamp Company. (See Hageman, A. M., and Lindstrom, assignors.)
Westinghouse Lamp Company. (See Ulrey, Clayton T., assignor.)
Whitaker, Alfred, West Drayton, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound recording system. 1,900,679; Mar. 7.
White, Clarence L., Cuyahoga Falls, Ohio. Shoe sole. Des. 89,419; Mar. 7.
White, George E., San Diego, Calif. Binder ring. 1,900,321; Mar. 7.
White Motor Company, The. (See Church, Harold D., assignor.)
White, William M., Milwaukee, Wis. Hydraulic machine. 1,900,144; Mar. 7.
Whiting, William A., Huntington Park, Calif., assignor to American Concrete Pipe Company. Precaulked extensible joint for pipes. 1,900,145; Mar. 7.
Whitlock Coil Pipe Company, The. (See Parent, Emile J., assignor.)
Whitney, Chancy F., Scotia, N. Y., assignor to General Electric Company. Electric control system. 1,900,596; Mar. 7.
Whitney Mfg. Co., The. (See Müller, Friederick, assignor.)
Whitworth, Stanley, assignor to Bendix Brake Company, South Bend, Ind. Forming brake shoes and blanks therefor. 1,900,004; Mar. 7.
Wickenden, Thomas H. (See Merica, P. D., Vanick, and Wickenden.)
Wilcolator Company, The. (See Hunt, Edward Mc.K., and Fonesca, assignors.)
Wilcox, Leland J., Adel, Iowa. Automatic pressure release gauge. 1,900,533; Mar. 7.
Wilcox & Rich Corporation. (See Hoern, Joseph H., assignor.)
Wiley, Wallace K., and H. J. Cudney, Buffalo, assignors to Flexlume Corporation, Tonawanda, N. Y. Illuminated sign. 1,900,747; Mar. 7.
Wilhelm, Fred C., assignor to The Unipress Company, Inc., Minneapolis, Minn. Pressing pad ventilating apparatus. 1,900,748; Mar. 7.
Wilkins, Albert M., assignor to Cook Electric Company, Chicago, Ill. Draft controller. 1,900,214; Mar. 7.
Wilkins, Richard A., Beverly Farms, assignor to Industrial Development Corporation, Salem, Mass. Electrolytic apparatus. 1,900,534; Mar. 7.
Willey, Llewellyn M., assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y. Handle. 1,900,423; Mar. 7.
Willhelm, William, Co. (See Hellman, Carl R., assignor.)
Williams, Djalma D., Dallas, Tex., assignor to Chicago Bridge and Iron Company, Chicago, Ill. Wrecking device. 1,900,031; Mar. 7.
Williams, Gladys R. T., Cleveland, Ohio. Electric butter churn. 1,900,626; Mar. 7.
Williams Oil-O-Matic Heating Corporation. (See Kupersmith, Fred W., assignor.)
Williams, Percy Q. (See De Coriolis, E. G., and Williams.)
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Tank dome closure. 1,900,627; Mar. 7.
Willoughby, Victor, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y. Tank dome closure. 1,900,628; Mar. 7.
Wilson, Chester C., Alexandria, Ind. Voltage transforming apparatus for direct current. 1,900,215; Mar. 7.
Wilson, Lancelot R. (See Clay, J. B., and Wilson.)
Wilson, Lawrence B., Tucson, Ariz. Two part couch. 1,900,474; Mar. 7.
Wilson, William H. (See Land, Charles H., and Wilson.)
Winding Gulf Collieries. (See Jones, Emory E., assignor.)
Winkler, Bruno E., Detroit, Mich. Lock for screw fastening members. 1,900,146; Mar. 7.
Winquist, Victor H., Seattle, Wash. Sleeve valve two cycle engine. 1,900,475; Mar. 7.
Winthrop Chemical Company, Inc. (See Krollpfeiffer, Friedrich, assignor.)
Wired Radio, Inc. (See Gebhard, Louis A., assignor.)
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,900,147; Mar. 7.
Witt, Joshua C., Chicago, Ill. Coloring material. 1,900,216; Mar. 7.
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture film feeding device. 1,900,876; Mar. 7.
Wittemeier, Hans, Berlin-Grunewald, Germany, assignor to Midwest Manufacturing Company, Inc., Louisville, Ky. Filtering apparatus. 1,900,476; Mar. 7.
Wittemeier, Hans, Berlin-Grunewald, Germany, assignor to Midwest Manufacturing Company, Inc., Louisville, Ky. Optical gas tester. 1,900,477; Mar. 7.
Witzel, Heinrich W., Ingram, assignor to The Selden Company, Pittsburgh, Pa. Purification of crude maleic acids. 1,900,680; Mar. 7.
Wolf, Frederick B. (See Koenig, L. R., and Wolf.)
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Inking mechanism for printing presses. 1,900,263; Mar. 7.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Web splicing apparatus. 1,900,264; Mar. 7.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Machine for casting stereotype printing plates. 1,900,265; Mar. 7.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Fountain roll cleaner. 1,900,266; Mar. 7.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Method of and apparatus for feeding paper to printing presses. 1,900,535; Mar. 7.
Wood Newspaper Machinery Corporation. (See Jordboy, Hans C., assignor.)
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, Richard V., Louisville, Ky. Device for stabilizing cards, files, etc., in filing drawers or boxes. 1,900,148; Mar. 7.
Wood, Walter A. (See Hughes, Edward P., assignor.)
Woodbury, Eugene, Lincoln Park, N. J. Electrical testing. 1,900,424; Mar. 7.
Worthington, Warren, Pittsburgh, Pa. Bar mill. 1,900,032; Mar. 7.
Wuerfel, Robert P., Ann Arbor, Mich. Radio circuit. 1,900,629; Mar. 7.
Wuerthner, Martin. (See Schlenker, L. F., and Wuerthner.)
Yasuda, Seiichi, Osaka-Fu, Japan. Playboard. 1,900,005; Mar. 7.
Yaxley Manufacturing Company. (See Hall, Arthur, assignor.)
Yoder, Carl M., Lakewood, Ohio. Machine for and process of forming metal into shapes. Re18,760; Mar. 7.
Yost, B. F. (See Meredith, Jacquelin M., assignor.)
Youman, Burt C., assignor to California Packing Corporation, San Francisco, Calif. Fish auger. 1,900,267; Mar. 7.
Yungling, Paul F., assignor to Scott-Ross and Company, Los Angeles, Calif. Valve mechanism. 1,900,268; Mar. 7.
Zagorski, Johann, Frankfort-on-the-Main, and E. Wesnigk, Berlin, Germany. Rolling mill. 1,900,630; Mar. 7.
Zeiss, Firm, Carl. (See König, Albert, assignor.)
Zellers, John A. (See Rand, J. H., jr., and Zellers.)
Zimmermann, Max E., assignor of one-half to K. Schumacher, Los Angeles, Calif. Cover gripping device. 1,900,478; Mar. 7.
Zint, George, Wapakoneta, Ohio. Rotary steam engine. 1,900,784; Mar. 7.
Zitscher, Arthur. (See Laska, L., and Zitscher.)
Zola, John C., Tarentum, Pa., assignor to Duplate Corporation. Laminated glass. 1,900,536; Mar. 7.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 7TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive product and making the same. J. N. Kuzmick. 1,900,386; Mar. 7.
Abrasive, Water repellent. R. S. Daniels. 1,900,430; Mar. 7.
Acetylene, Separation of. F. J. Metzger. 1,900,655; Mar. 7.
Acid and producing same, 1,5-dichloro-2,6-diamino-anthraquinone-3,7-disulphonic. W. L. Rintelman. 1,899,986; Mar. 7.
Acid cellulose esters and making the same, Double alpha-ketonic. C. J. Staud and C. S. Webber. 1,900,871; Mar. 7.
Acid process, Contact sulphuric. A. O. Jaeger. 1,900,383; Mar. 7.
Acids, Preparing anthraquinone sulphonic. I. Gubelmann and W. L. Rintelman. 1,899,957; Mar. 7.
Acids, Purification of crude dicarboxylic. A. O. Jaeger. 1,900,649; Mar. 7.
Acids, Purification of crude maleic. H. W. Witzel. 1,900,680; Mar. 7.
Acyl derivatives of 4,4'-diamino diphenyl oxide. E. F. Grether. 1,900,442; Mar. 7.
Addressing machine. W. T. Gollwitzer. 1,900,281; Mar. 7.
Addressing machine and other similar printing machines. A. Eley. 1,900,279; Mar. 7.
Advertising device. F. Hund. 1,900,061; Mar. 7.
Advertising device. G. O. Matter. 1,900,187; Mar. 7.
Air brake. C. A. Campbell. 1,900,043; Mar. 7.
Air compressor. N. Herzmark. 1,900,284; Mar. 7.
Air conditioning apparatus. E. M. Hun and E. L. Fonseca. 1,900,501; Mar. 7.
Air conditioning apparatus. P. W. Stromberg. 1,899,995; Mar. 7.
Aircraft. H. Junkers. 1,900,502; Mar. 7.
Aircraft, Control mechanism for. R. P. Mueller. 1,900,068; Mar. 7.
Air drier. R. Reumelin. 1,899,988; Mar. 7.
Airplane. F. G. Baum. 1,900,689; Mar. 7.
Airplane. H. C. Tully. 1,900,473; Mar. 7.
Airplane wing. F. G. Baum. 1,900,688; Mar. 7.
Airplanes, Spar for. W. Messerschmitt. 1,900,067; Mar. 7.
Airship. H. Strobl. 1,900,743–4; Mar. 7.
Alcohol, Apparatus for saving radiator. A. W. Murphy. 1,900,727; Mar. 7.
Alcohol from wine, cider, beer, and other alcoholic products, Apparatus for the removal of. M. Conpeau and M. Delaville. 1,900,694; Mar. 7.
Alimentary product forming device. H. C. Arge. 1,900,854; Mar. 7.
Alloy, Gray iron. P. D. Merica, J. S. Vanick, and T. H. Wickenden. 1,900,125; Mar. 7.
Alloy, Metallic. D. D. Jackson. 1,900,182; Mar. 7.
Alumina and phosphorus or phosphoric acid, Producing. E. Johnson. 1,900,287; Mar. 7.
Amino-diphenylamine, Substituted. J. Büsdorf and F. Löfund. 1,900,426; Mar. 7.
Ammunition. J. E. Burns. 1,900,157; Mar. 7.
Ammunition. A. Campbell. 1,900,159; Mar. 7.
Anchor, Earth. W. A. Heinrich. 1,900,498; Mar. 7.
Anchoring means. A. Janer. 1,900,560; Mar. 7.
Animal feeder. F. R. Ritchie. 1,900,868; Mar. 7.
Animal trap. V. Bailey. 1,900,219; Mar. 7.
Animal trap. J. Hartshorn. 1,900,645; Mar. 7.
Animal trap. J. I. Pneuman. 1,900,733; Mar. 7.
Antifreeze composition. G. D. Graves. 1,900,014; Mar. 7.
Applicator, Cyanide. K. A. Kilbourne. 1,900,717; Mar. 7.
Arc, Adjustable. W. Hinckelmann. 1,900,500; Mar. 7.
Aromatic compounds, Catalytic side chain oxidation of. A. O. Jaeger. 1,900,648; Mar. 7.
Assembling and transporting stacked articles. G. W. Butts. 1,900,756; Mar. 7.
Atomizer. L. V. Aronson. 1,900,087; Mar. 7.
Auger, Fish. B. C. Youman. 1,900,267; Mar. 7.
Automatic valve. W. A. McLean. 1,900,514; Mar. 7.
Automobile accessory. H. A. King. 1,900,448; Mar. 7.
Automobile construction, Heavy duty. H. D. Church. 1,900,484; Mar. 7.
Automobile table. F. Bayman and R. C. Brennesholtz. 1,900,325; Mar. 7.
Automotive system. H. P. Smith. 1,900,470; Mar. 7.
Azodyestuffs, New. L. Laska and A. Zitscher. 1,900,351; Mar. 7.
Babbitting device. T. Thorsen. 1,900,746; Mar. 7.
Bag: *See*—
Fitted traveling bag. Storage bag.
Hand bag.
Bag coupling. F. Riebel, jr., and D. M. Dow. 1,900,366; Mar. 7.

Bag rack. Bicycle newspaper. E. D. Murphy. 1,900,070; Mar. 7.
Ballast tamper, End. C. C. Cook. 1,899,944; Mar. 7.
Band tying machine, Flat. L. M. Harvey. 1,900,238; Mar. 7.
Bar mill. W. Worthington. 1,900,082; Mar. 7.
Bars while in motion, Controlling the shearing of metal. M. Morgan. 1,900,252; Mar. 7.
Basket handle machine. L. M. Hile. 1,900,181; Mar. 7.
Battery: *See*—
Storage battery.
Battery cell, Storage. A. H. Snyder. 1,900,308; Mar. 7.
Bead forming machine. W. J. Dean. 1,899,947; Mar. 7.
Bearing: *See*—
Shaft bearing.
Bearing. A. G. F. Wallgren. 1,900,874–5; Mar. 7.
Belt, Duplex link. F. L. Morse. 1,900,192; Mar. 7.
Belt guide construction, Feed. W. F. Newhouse. 1,900,657; Mar. 7.
Belt splice, Apparatus for making a. W. J. Sculley. 1,900,402; Mar. 7.
Bench, Operator's. W. Strobridge. 1,900,621; Mar. 7.
Binder, Loose leaf. J. C. Dawson. 1,900,334; Mar. 7.
Binder, Loose leaf. J. C. Dawson. 1,900,431; Mar. 7.
Binder, Loose leaf. C. H. Moore. 1,900,840; Mar. 7.
Binder ring. G. E. White. 1,900,321; Mar. 7.
Block: *See*—
Building block. Hoisting block.
Furnace block.
Blow-out preventing attachment for casing heads. L. J. Black. 1,899,922; Mar. 7.
Board: *See*—
Cedar board.
Boat installation. Motor. J. W. Harvey. 1,900,180; Mar. 7.
Boats, Corrosion preventing attachment for. H. L. Durham. 1,900,011; Mar. 7.
Book. R. M. Gunnison. 1,899,958; Mar. 7.
Book, Loose leaf. A. Felder. 1,900,601; Mar. 7.
Bottle hood, Milk. W. H. Orem. 1,900,127; Mar. 7.
Bottle receiver, Milk. C. B. Oster and H. Rainey. 1,900,729; Mar. 7.
Bow for hat bands or the like, Decorative. S. F. Bauwens. 1,900,481; Mar. 7.
Bowling ball rack. P. Skrlec and J. Budnik. 1,900,469; Mar. 7.
Box: *See*—
Fire box. Letter box.
Hat box.
Box. H. Lubin. 1,900,828; Mar. 7.
Box making machine. J. W. Low. 1,900,892; Mar. 7.
Brake: *See*—
Air brake.
Brake. F. C. Frank. 1,900,178; Mar. 7.
Brake. R. F. Kohr. 1,899,967; Mar. 7.
Brake adjuster, Automatic. H. E. Brice. 1,900,791; Mar. 7.
Brake cable tube. E. J. Madden. 1,900,512; Mar. 7.
Brake construction. E. R. Evans. 1,900,546; Mar. 7.
Brake drum. R. J. Norton. 1,900,844; Mar. 7.
Brake drum or member. J. H. Crowe. 1,900,804; Mar. 7.
Brake for airplanes, Air. G. M. Bellanca. 1,900,631; Mar. 7.
Brake for railway motor cars, Mechanical. P. Halbach. 1,900,282; Mar. 7.
Brake mechanism. C. S. Bragg and V. W. Kilesrath. 1,900,155; Mar. 7.
Brake mechanism for conveyers. M. J. Anderson. 1,900,149; Mar. 7.
Brake operating tube. E. J. Madden. 1,900,511; Mar. 7.
Brake shoes and blanks therefor, Forming. S. Whitworth. 1,900,004; Mar. 7.
Brake testing instrumentality. C. H. Oliver. 1,900,581; Mar. 7.
Brakes, Apparatus for the control of train. L. O. Grondahl. 1,900,403; Mar. 7.
Brakes, Apparatus for the control of vehicle. L. O. Grondahl. 1,900,404; Mar. 7.
Breast wrench. J. Dudulets. 1,900,169; Mar. 7.
Brick backing apparatus. F. C. Layer. 1,900,243; Mar. 7.
Brickwork construction for regenerators, Checker. J. F. Hyslop. 1,900,817; Mar. 7.
Briquette and process of manufacture. A. A. Epstein. 1,900,173; Mar. 7.
Brush, shaving. J. D. Powell. 1,899,984; Mar. 7.
Brushes, Making cup. R. G. Mertes. 1,900,575; Mar. 7.
Buck structure for laundry presses. F. W. Lindemann. 1,900,720; Mar. 7.

Buckle. A. Mentkow. Des. 89,405; Mar. 7.
Buckle, Belt. D. M. Wirth. 1,900,147; Mar. 7.
Building block. W. R. Miller. 1,900,457; Mar. 7.
Building construction. H. C. Smith. 1,900,869; Mar. 7.
Building front. A. W. Porter. Des. 89,409; Mar. 7.
Bulb and coloring the same. M. Pipkin. 1,900,468; Mar. 7.
Burner: *See*—
Gas burner.
Burner. P. Gervasi. 1,899,951; Mar. 7.
Burner. E. C. Walker and G. W. Engstrom. 1,900,003; Mar. 7.
Bushing, Kelly. W. D. Davidson. 1,899,946; Mar. 7.
Bushings, Making. F. C. Morris. 1,900,298; Mar. 7.
Buttonhole sewing machine. F. A. Reece. 1,900,076; Mar. 7.
Cabinet. H. D. Broughton. 1,900,793; Mar. 7.
Cabinet, Pump. W. H. Curtis. Des. 89,386; Mar. 7.
Cable. C. P. Brodhun. 1,900,041; Mar. 7.
Cable, Armored. O. A. Frederickson. 1,900,492; Mar. 7.
Cable, High tension electric. L. Emanuel. 1,900,600; Mar. 7.
Cable, Noninductive. C. P. Brodhun. 1,900,792; Mar. 7.
Cables, Method and apparatus for spinning bridge. C. C. Sunderland. 1,899,998; Mar. 7.
Cables, Method of and machine for binding. A. B. Curtis. 1,900,695; Mar. 7.
Calcium gluconate and making same, Highly soluble. R. Pasternack and W. R. Giles. 1,900,517; Mar. 7.
Calculating machine. L. R. Brown. 1,900,042; Mar. 7.
Calculating machine. W. S. Gubelmann. 1,900,103; Mar. 7.
Calculating machine comprising axially displaceable setting wheels. H. Suter. 1,900,776; Mar. 7.
Calculating machines and the like, Carrying mechanism for. R. Haase. 1,900,808; Mar. 7.
Camera apparatus, Portable. B. McCandless. 1,900,020; Mar. 7.
Camera back. W. H. Petit and E. S. Hineline. 1,900,730; Mar. 7.
Camera stand, Depthograph. C. W. Kanolt. 1,900,562; Mar. 7.
Camphor, Manufacturing pure para-hydroxy. K. Tamura, G. Kihara, Y. Asahina, and M. Ishidate. 1,900,209; Mar. 7.
Candelabrum. I. Cooperstein and A. Levitt. Des. 89,423; Mar. 7.
Cap, protecting. E. E. Cooper. 1,900,098; Mar. 7.
Capacitor protector. F. W. Gay. 1,900,495; Mar. 7.
Capping machine. R. L. Drake. 1,900,637; Mar. 7.
Car bolsters, Reclaiming. J. B. Alcott. 1,900,682; Mar. 7.
Car construction, Box. O. W. Galloway. 1,900,548; Mar. 7.
Car, Drop bottom. C. A. Griffith. 1,900,056; Mar. 7.
Car outlet valve, Tank. C. O. Buenger. 1,899,938; Mar. 7.
Car, Railway. E. E. Schlotz. 1,900,134; Mar. 7.
Cardan shaft. F. A. Garrett. 1,900 052; Mar. 7.
Cards, files, etc., in filing drawers or boxes, Device for stabilizing. R. V. Wood. 1,900,148; Mar. 7.
Carpet. F. Murphy. Des. 89,406; Mar. 7.
Case: *See*—
Vanity case.
Case and holder for musical instruments, Combined carrying. A. S. Lang. 1,900,718; Mar. 7.
Casing for rotary cutting implement. P. J. Fitzgerald. Des. 89,424; Mar. 7.
Casing head, Multicap. W. D. Shaffer. 1,900,260; Mar. 7.
Cash register, Alarmed. F. Piani. 1,900,519; Mar. 7.
Caster. C. R. Uhl. 1,900,672; Mar. 7.
Catalysts for the production of oxygenated organic compounds. O. W. Lusby. 1,900,829; Mar. 7.
Catalysts for the removal of organic sulphur compounds from gases. O. W. Lusby. 1,900,882; Mar. 7.
Catalytic apparatus. A. O. Jaeger. 1,900,382; Mar. 7.
Catch, Adjustable door. R. F. Rime. 1,900,077; Mar. 7.
Cedar board. J. F. Mahlstedt and A. V. A. Felten. 1,900,830; Mar. 7.
Cellulose ether composition. W. W. Lewers and G. L. Schwartz. 1,900,507; Mar. 7.
Cellulose fiber pulp, Treating. H. C. Schwalbe. 1,899,989; Mar. 7.
Cellulose formates, Production of. E. Elöd. 1,900,599; Mar. 7.
Cellulose nitrate film and similar products, Making. H. E. Van Derhoef. 1,900,873; Mar. 7.
Cellulosic derivative scrap, Recovering. E. R. Taylor and H. B. Smith. 1,900,872; Mar. 7.
Cement and making dental cement, Dental. V. S. Harshman. 1,900,237; Mar. 7.
Cement or materials containing cement. O. Stälhane. 1,900,670; Mar. 7.
Cementing composition. L. V. Adams. 1,900,587; Mar. 7.
Centrifugal pump, Multistage. J. E. Vitu. 1,900,581; Mar. 7.
Chain: *See*—
Ornamental chain.
Chain assembling means, Automatic. F. Müller. 1,899,976; Mar. 7.
Chain link and integral head articulating pintle. F. A. Fahrenwald. 1,899,948; Mar. 7.
Chair: *See*—
Folding chair.
Changeable exhibitor. B. S. Hayter. 1,900,059; Mar. 7.
Charge forming device. F. E. Aseltine. 1,900,685; Mar. 7.
Charge forming device. F. C. Mock. 1,900,191; Mar. 7.
Checkering machine. R. J. Seiler. 1,900,203; Mar. 7.
Chemicals from waste liquors, Recovering. C. L. Wagner and H. Freeman. 1,900,820; Mar. 7.
Chloride, Preparation of ethylidene. G. H. Coleman. 1,900,276; Mar. 7.
Christmas tree holder. T. J. Fegley and G. O. Leopold. 1,900,807; Mar. 7.
Chuck. H. T. Mattern. 1,900,188; Mar. 7.
Chucking machine. A. J. Lewis. 1,900,387; Mar. 7.
Churn, Electric butter. G. R. T. Williams. 1,900,626; Mar. 7.
Circuit controlling and protective device. L. J. Weber. 1,900,595; Mar. 7.
Circuit, Resistor cell. C. F. Jenkins. Re18,756; Mar. 7.
Circuits, Phase shifting. B. D. Bedford. 1,900,538; Mar. 7.
Circuits, Regulation of alternating current. F. W. Godsey, jr. 1,900,707; Mar. 7.
Clamp: *See*—
Sheet metal clamp. Wire clamp.
Clamp for holding dressing in fowls and the like. C. J. Parker. 1,900,613; Mar. 7.
Clasp for collars, etc. W. H. Averill. 1,900,686; Mar. 7.
Cleaner: *See*—
Fluid cleaner. Tube cleaner.
Roll cleaner. Vacuum cleaner.
Suction cleaner.
Cleaning, Apparatus for. F. C. Mason. 1,900,122; Mar. 7.
Clock. W. A. Spear. 1,900,311; Mar. 7.
Clock case and lamp, Combined. P. Buhrle. Des. 89,422; Mar. 7.
Clock case and lamp or similar article, combined. J. Gottlieb. Des. 89,397; Mar. 7.
Closure, Tank dome. V. Willoughby. 1,900,627–8; Mar. 7.
Clothes drier. P. F. Carter. 1,900,796; Mar. 7.
Clothes hanger. J. C. Lindsay. 1,900,826; Mar. 7.
Clothespin, Clamp. A. E. Olson. 1,899,982; Mar. 7.
Clutch. A. Storm and T. Thorsen. 1,900,812; Mar. 7.
Clutch coupling. O. R. Schoenrock. 1,900,305; Mar. 7.
Coal briquetting equipment. E. E. Jones. 1,900,347; Mar. 7.
Coal, Device for breaking down. J. F. Joy. 1,900,446; Mar. 7.
Coat, One-piece. S. Wester. 1,900,678; Mar. 7.
Coating composition and making same, Rugous. F. B. Root. 1,900,181; Mar. 7.
Coatings on aluminum. M. Tosterud. 1,900,472; Mar. 7.
Coffee roasting process. J. F. Quinn. 1,900,072; Mar. 7.
Collar shaper. P. Farrelly. 1,900,547; Mar. 7.
Color cinematographic apparatus. J. A. Ball. 1,900,034; Mar. 7.
Coloring material. J. C. Witt. 1,900,216; Mar. 7.
Combustion, Apparatus for the control of. O. W. Lusby. 1,900,884; Mar. 7.
Composition containing a resinous complex. C. Ellis. 1,900,638; Mar. 7.
Concrete, Coated. P. J. Maul and M. Hoffman. 1,900,833; Mar. 7.
Condensation products from aliphatic aldehydes and bases of the naphthalene series. E. Rietz and W. Hoffmann. 1,900,365; Mar. 7.
Condenser and making the same. R. O. Lewis. 1,900,352; Mar. 7.
Condenser and making the same, Fixed. O. Blake and H. Beyer. 1,900,093; Mar. 7.
Condenser unit for refrigerating apparatus. S. Moore. 1,900,865; Mar. 7.
Condensing apparatus. J. Kirgan. 1,900,504; Mar. 7.
Conduit. V. Bendix. 1,900,091; Mar. 7.
Conduit connection. O. Junggren. 1,900,561; Mar. 7.
Conduit connection for compressors. F. D. Peltier. 1,900,661; Mar. 7.
Connection, Brake operating. E. G. McDonald. 1,900,123; Mar. 7.
Connection, Coupler and yoke. W. A. Geiger. 1,900,549; Mar. 7.
Connection for program circuits, Bridging. H. S. Hamilton and G. Crisson. 1,900,106; Mar. 7.
Contact pins in radiotube bases, Securing. J. E. Ferguson. 1,900,099; Mar. 7.
Container: *See*—
Mortuary record container. Shipping container.
Nonsubstituting container.
Container and handling cargo by such containers. M. Olds. 1,900,867; Mar. 7.
Container and sealing closure therefor, Covered. C. S. Baron. 1,899,921; Mar. 7.
Container, Making a downwardly tapered. L. M. Hile. 1,900,646; Mar. 7.
Containers subjected to freezing temperature, Method of and apparatus for preventing the bursting of liquid. V. Merritt. 1,900,836; Mar. 7.
Control mechanism for evaporators. F. G. Slagel. 1,900,526; Mar. 7.
Control system. H. T. Seeley. 1,900,589; Mar. 7.
Controlling device for controlling pistons of internal combustion engines. T. V. Hemmingsen. 1,900,605; Mar. 7.
Conveyer. H. C. Keller and M. Van Billiard. 1,900,563; Mar. 7.
Conveyer for furnaces. R. S. Cochran. 1,900,428; Mar. 7.

Conveyer, Switching. H. R. Gotthardt and W. E. Cain. 1,900,602; Mar. 7.
Conveying apparatus, Automatic. H. R. Gotthardt and W. E. Cain. 1,900,603; Mar. 7.
Conveying system. M. J. Anderson. 1,900,150; Mar. 7.
Cooling sintered material. J. E. Greenawalt. 1,900,234; Mar. 7.
Cooling system. J. R. Rippe. 1,900,586; Mar. 7.
Core for molds. W. Underwood. 1,900,372; Mar. 7.
Corn removing attachment. A. M. Evenson. 1,900,806; Mar. 7.
Cottonseed hulls, Method and apparatus for defibrating. G. L. Blanchard. 1,900,154; Mar. 7.
Couch, Two part. L. B. Wilson. 1,900,474; Mar. 7.
Coupler for toy railway cars. J. M. Sharp. 1,900,204; Mar. 7.
Coupler, Ground wire. S. N. Buchanan. 1,900,329; Mar. 7.
Coupling: *See*—
Bag coupling. Clutch coupling.
Coupling. R. W. Swank. 1,900,208; Mar. 7.
Coupling or clutch for coaxial shafts. J. Baugnée. 1,900,787; Mar. 7.
Cover: *See*—
Metal spring cover.
Cover assembly, Spare wheel and tire. C. F. Lambert. 1,900,822; Mar. 7.
Cover fastener, Basket. W. W. Hargroves. 1,900,810; Mar. 7.
Cover gripping device. M. E. Zimmermann. 1,900,478; Mar. 7.
Cover of a refrigerator cabinet or similar article. D. R. Dohner. Des. 89,389; Mar. 7.
Covering material to tire patches, Applying. R. A. Labine. 1,900,450; Mar. 7.
Crusher. J. R. Bakstad. 1,899,930; Mar. 7.
Cultivator. H. Ferguson. 1,900,440; Mar. 7.
Cultivator, Tractor. B. R. Benjamin and S. W. Cady. 1,899,932; Mar. 7.
Cultivator, Tractor. S. W. Cady. 1,899,940; Mar. 7.
Cup: *See*—
Eye cup.
Cup. D. Fisher. Des. 89,391; Mar. 7.
Current, Device for controlling electric. J. E. Lilienfeld. 1,900,018; Mar. 7.
Curtain and controlling means therefor. G. A. Weidhaas, P. Clark, and H. V. Harding. 1,900,677; Mar. 7.
Cutter for extruding machines. C. H. Desautels. 1,900,434 Mar. 7.
Cylinder, Folding. H. C. Jordboy. 1,900,288; Mar. 7.
Dam construction. W. H. Bailey. 1,900,393; Mar. 7.
Dams, river levees, etc., Protecting earthen. S. D. Henry. 1,900,341; Mar. 7.
Damper for precision balance, Magnetic. J. Gattoni. 1,900,641; Mar. 7.
Decalcomania transfer. F. A. Edghill. 1,900,048; Mar. 7.
Diaphragm, Refractory porous. R. E. Lowe, N. B. Brown, and W. Bjorkstedt. 1,900,864; Mar. 7.
Dibble. W. F. Love. 1,900,827; Mar. 7.
Die casting machine. N. Lester. 1,900,863; Mar. 7.
Die for extruding collapsible tubes. W. Prussing. 1,900,665; Mar. 7.
Diesel engine. E. Schutsniedrig. 1,900,587; Mar. 7.
Direction finder apparatus. A. Leib. 1,900,292; Mar. 7.
Direction signal. T. A. Kane. 1,900,240; Mar. 7.
Discharge tube, High intensity gaseous. W. F. Hendry. 1,900,109; Mar. 7.
Dish or similar article, Covered. J. V. Goddard. Des. 89,396; Mar. 7.
Dishwasher. M. Siegel. 1,900,771; Mar. 7.
Dishwasher. R. L. Tatham. 1,900,529; Mar. 7.
Disk, Abrasive. W. C. Happ. 1,899,959; Mar. 7.
Dispenser: *See*—
Soap dispenser.
Display device and producing the same, Illuminated changeable. L. J. Higginbotham. 1,899,962; Mar. 7.
Display rack. H. S. Best. 1,899,935; Mar. 7.
Display stand. L. Gottstein. 1,899,954; Mar. 7.
Display stand, Adjustable. W. H. Mullins. 1,900,610; Mar. 7.
Distributing lubricator, Progressive. E. L. Sutter. 1,900,745; Mar. 7.
Distributors, Attachment for fertilizer. T. H. Oppenheim. 1,900,299; Mar. 7.
Document photographing apparatus. R. S. Hopkins. 1,900,878; Mar. 7.
Door construction. S. K. Smith. 1,900,079; Mar. 7.
Door control, Dual. W. H. Flewell. 1,900,176; Mar. 7.
Door, Grain. A. Mahannah. 1,900,244; Mar. 7.
Door hinge, Adjustable. M. F. Swerer. 1,900,031; Mar. 7.
Doorlock handle. P. W. Sullivan. 1,899,996–7; Mar. 7.
Door tightener, Automatic. R. Boggs. 1,900,328; Mar. 7.
Door, window, or gate operating device, Automatic. J. L. Christenson. 1,900,009; Mar. 7.
Draft control and dust separator. I. T. Martin. 1,900 065; Mar. 7.
Draft controller. A. M. Wilkins. 1,900,214; Mar. 7.
Draft regulator. E. S. Hayne. 1,900,340; Mar. 7.
Draw works with adjustable jack shaft, Rotary. E. W. Goeser. 1,899,953; Mar. 7.
Drawer construction. W. M. Hanson. 1,900,338; Mar. 7.
Drawing press, Sheet metal. O. Kübner. 1,900,291; Mar. 7.
Drier: *See*—
Air drier. Clothes drier.
Drier head. L. A. Dix. 1,900,166; Mar. 7.
Driers for varnishes, lacquers, oil paints, and the like, Production of. F. Pohl. 1,900,734; Mar. 7.
Drinking fountain. H. W. Taylor. 1,900,591; Mar. 7.
Driving apparatus and system, Vehicle. F. W. Godsey, jr. 1,900,706; Mar. 7.
Driving means for oil well equipment. H. Iedeen. 1,900,452; Mar. 7.
Drying, Apparatus for and method of. B. B. Russell and W. J. Uhlhorn. 1,900,846; Mar. 7.
Dye, Production of azo. E. B. Payne. 1,900,417; Mar. 7.
Dyeing of textile material with vat dyes. C. Dreyfus and H. Platt. 1,900,168; Mar. 7.
Dyeing process. W. R. Moorhouse. 1,899,975; Mar. 7.
Dyestuff derived from indoline bases and preparing same. O. Wahl. Re18,758; Mar. 7.
Dyestuffs of the anthracene series, Vat. G. Kränslein and P. Ochwat. 1,900,350; Mar. 7.
Earthwork and making same. C. O. Sherrill. 1,900,205; Mar. 7.
Easel. J. Watson. 1,900,375; Mar. 7.
Egg and making same, Preserved. H. Heuser. 1,900,444; Mar. 7.
Electric accumulator. A. Pouchain. 1,900,616; Mar. 7.
Electric control system. L. Devol. 1,900,406; Mar. 7.
Electric control system. L. O. Grondahl and A. J. Sorensen. 1,900,407; Mar. 7.
Electric control system. L. O. Grondahl and A. J. Sorensen. 1,900,411; Mar. 7.
Electric control system. A. J. Sorensen. 1,900,408–10; Mar. 7.
Electric control system. C. F. Whitney. 1,900,596; Mar. 7.
Electric heater. I. T. Bennett. 1,899,933; Mar. 7.
Electric heating apparatus. E. D. McArthur. 1,900,573; Mar. 7.
Electric regulation. J. L. Creveling. 1,900,277; Mar. 7.
Electric resistance. I. Silberstein. 1,900,206; Mar. 7.
Electric ship propulsion. G. O. Watson. 1,900,594; Mar. 7.
Electric switch. A. Hall. 1,900,236; Mar. 7.
Electric switch E. A. Hoopes. 1,900,647; Mar. 7.
Electric system. J. L. Creveling. 1,900,278; Mar. 7.
Electric welding apparatus. A. A. Smith. 1,899,991; Mar. 7.
Electric welding machine. F. P. McBerty. 1,900,834; Mar. 7.
Electrical contact and the manufacture thereof. J. A. Payette. 1,900,256; Mar. 7.
Electrical discharge device. C. T. Ulrey. Des. 89,418; Mar. 7.
Electrical rectifier. W. P. Place. 1,900,782; Mar. 7.
Electrical selecting apparatus, One-wire. L. Brownstein. 1,900,095; Mar. 7.
Electrical testing. E. Woodbury. 1,900,424; Mar. 7.
Electrolytic apparatus. R. A. Wilkins. 1,900,534; Mar. 7.
Electromagnetic reciprocating device. G. H. Poth. 1,900,464; Mar. 7.
Electron discharge device. A. W. Hull. 1,900,559; Mar. 7.
Engine: *See*—
Diesel engine. Steam engine.
Internal combustion engine. Three-cylinder tandem engine.
Sleeve valve two cycle engine.
Engine. W. F. Weir. 1,900,086; Mar. 7.
Engine starting mechanism. R. Chilton. 1,900,799; Mar. 7.
Engines, Reversing and control mechanism for internal combustion. M. J. Goldberg and F. C. Teufl. 1,900,054; Mar. 7.
Engines, Starting internal combustion. L. Schargorodsky. 1,900,367; Mar. 7.
Entrance control. D. J. Wallace. 1,900,422; Mar. 7.
Evaporator. F. G. Siegel. 1,900,742; Mar. 7.
Evaporator, Two-temperature. R. S. Taylor. 1,900,674; Mar. 7.
Exhibiting apparatus. G. A. Holcombe. 1,900,557; Mar. 7.
Eye cup. S. M. Sager. 1,900,201; Mar. 7.
Fabric: *See*—
Pile fabric.
Fabric and product thereof, Differentially coloring. C. Dreyfus and G. Rivat. 1,900,167; Mar. 7.
Fastener. *See*—
Cover fastener. Separable fastener.
Safety removable fastener.
Fastener supplying apparatus. S. L. Gookin. 1,900,055; Mar. 7.
Fastening device for inherently resilient articles. R. G. Meader. 1,900,574; Mar. 7.
Feeder: *See*—
Animal feeder.
Feeder for ingot molds. B. H. Howard. 1,900,816; Mar. 7.
Fender and headlamp casing for vehicles, Combined. J. R. Hughes. Des. 89,426; Mar. 7.
Fender, head lamp casing, and combined parking lamp and horn casing, Combined. J. R. Hughes. Des. 89,428; Mar. 7.
Fender, head lamp casing, and parking lamp casing, Combined. J. R. Hughes. Des. 89,431; Mar. 7.
Fender, head lamp casing, parking lamp, and horn casing, Combined. J. R. Hughes. Des. 89,429; Mar. 7.

Fender, head lamp casing, parking lamp casing, and horn casing, Combined. J. R. Hughes. Des. 89,427; Mar. 7.
Fender, head lamp casing, parking lamp casing, and horn casing, Combined. J. R. Hughes. Des. 90,430; Mar. 7.
Fibrous articles, Manufacture of. A. L. Clapp. 1,900,427; Mar. 7.
Filing or recording device. Z. Auerbach. 1,900,479; Mar. 7.
Film apparatus. G. B. Scheibell. 1,900,788; Mar. 7.
Film cartridge, Light tight photographic. J. G. Jones. 1,900,879; Mar. 7.
Film feeding device, Motion picture. O. Wittel. 1,900,876; Mar. 7.
Film, Nonhalation motion picture. K. C. D. Hickman. 1,900,877; Mar. 7.
Films, Reenforcing cinematograph. A. H. Adams. 1,900,681; Mar. 7.
Filter and cooler, Oil. J. E. Kline. 1,900,821; Mar. 7.
Filtering apparatus. H. Wittemeier. 1,900,476; Mar. 7.
Finishing welt. R. C. Schemmel. 1,900,768; Mar. 7.
Firearm. C. C. Loomis. 1,900,184; Mar. 7.
Firearm with bolt action and case magazine, Repeating. F. Jäger. 1,900,818; Mar. 7.
Fire box, Locomotive. G. L. Baxter, F. W. Strachauer, and R. S. Twogood. 1,900,824; Mar. 7.
Fire extinguishing foam, Apparatus for producing. F. L. Boyd. 1,900,482; Mar. 7.
Firefly. B. C. Harrell. 1,900,339; Mar. 7.
Fire resistant and preservative composition. J. R. Watson. 1,900,211; Mar. 7.
Fire resistant and preservative composition and making same. J. R. Watson. 1,900,212; Mar. 7.
Fish lure. M. D. Martin. 1,900,832; Mar. 7.
Fitted traveling bag. F. N. Lewis. 1,900,508; Mar. 7.
Fitting, Grounding. L. H. Church. 1,900,485; Mar. 7.
Flash light. H. W. Jones and H. G. Graubner. 1,900,348; Mar. 7.
Flash light. H. Koretzky, M. Horowitz, and A. J. Desimone. 1,900,505; Mar. 7.
Flash-light cap and hanger, Combined. G. H. Barber. Des. 89,421; Mar. 7.
Flask, Foundry. W. O. Snelling. 1,900,137; Mar. 7.
Flour diluent, Wheat. R. M. Bohn. 1,900,094; Mar. 7.
Flow controller. M. M. Borden. 1,900,273; Mar. 7.
Fluid cleaner. G. M. Spencer. 1,899,993; Mar. 7.
Fluid pressure gauge. J. Ellberg and M. Cronwall. 1,900,414; Mar. 7.
Flushing system for operating tables. A. L. Ormsbee. 1,900,255; Mar. 7.
Fly holder. H. M. Beck. 1,900,035; Mar. 7.
Folding chair. W. E. Clarin. 1,900,486; Mar. 7.
Folding support. E. M. Pendleton. 1,900,760; Mar. 7.
Foot rests, Shoe booth. V. Marchisella. 1,900,653; Mar. 7.
Forehearth for molten glass. V. Mulholland and A. R. Hunter. 1,900,361–2; Mar. 7.
Form construction, Concrete floor joist. H. Read. 1,900,301; Mar. 7.
Form, Printing. H. C. Osborn. 1,900,023; Mar. 7.
Foundation for animal head and body. B. Cohen. 1,900,487; Mar. 7.
Fountain: *See*—
Drinking fountain.
Frame blank, Printing device. V. J. Mohler. 1,900,296; Mar. 7.
Frame body for trailers, Drop. W. S. Tatum. 1,900,778; Mar. 7.
Frame for typewriting machines. J. H. Rand, jr., and J. A. Zellers. Des. 89,411; Mar. 7.
Fruit for the market, Treating. R. D. McDill. 1,900,295; Mar. 7.
Fuel control apparatus for automobiles. A. M. Malluk and F. W. Allen. 1,900,245; Mar. 7.
Fuel feeding means. M. Kahr. 1,900,885; Mar. 7.
Furnace. E. G. Bailey. 1,900,006; Mar. 7.
Furnace. S. P. Burke. 1,899,926; Mar. 7.
Furnace. G. Leiman. 1,900,570; Mar. 7.
Furnace block. E. G. Bailey. 1,900,007; Mar. 7.
Furnace construction and operation. G. H. Isley and G. A. Merkt. 1,900,396; Mar. 7.
Furnace control. M. G. Benjamin. 1,900,036; Mar. 7.
Furnace, Firing reheating. S. P. Burke. 1,900,223; Mar. 7.
Furnace wall. I. Harter. 1,900,443; Mar. 7.
Furnace wall, Water cooled. D. S. Jacobus and H. J. Kerr. 1,900,445; Mar. 7.
Furnaces, Operation of regenerative. G. H. Isley. 1,900,397; Mar. 7.
Furs, hairs, feathers, and similar articles, Dyeing. K. Marx and E. Lehmann. 1,900,454; Mar. 7.
Game. W. T. O'Neill. 1,900,071; Mar. 7.
Game appliance. R. J. Chappell. 1,900,798; Mar. 7.
Game board. E. A. Dahlquist. Des. 89,387; Mar. 7.
Gas burner. E. C. Adams. 1,900,217; Mar. 7.
Gas, Making Producer. A. P. Van Heeden. 1,900,141; Mar. 7.
Gas, Manufacturing SO_3. I. Hechenbleikner. 1,900,239; Mar. 7.
Gas, Purifying. O. W. Lusby. 1,900,883; Mar. 7.
Gas tester, Optical. H. Wittemeier. 1,900,477; Mar. 7.
Gaseous-discharge device. E. H. Moore. 1,900,578; Mar. 7.
Gaseous discharge tube, High intensity. W. F. Hendry. 1,900,109; Mar. 7.
Gases, Apparatus for use in the catalytic oxidation of. G. A. Berry, C. P. Linville and A. P. Beardsley. 1,900,857; Mar. 7.
Gases, Desulphurizing. E. Raffloer. 1,900,667; Mar. 7.
Gases, Purification of. H. Baehr. 1,900,751; Mar. 7.
Gauge: *See*—
Fluid pressure gauge. Pressure release gauge.
Liquid level gauge. Roofer's gauge.
Pitch gauge. Tank gauge.
Gauge for measuring flow of fluids in conduits, Differential pressure. A. Lang. 1,900,823; Mar. 7.
Gear: *See*—
Wheel gear.
Gels, Making. G. C. Connolly and E. B. Miller. 1,900,859; Mar. 7.
Generator: *See*—
Oscillation generator.
Generator regulation. B. M. Leece and D. S. Cole. 1,900,719; Mar. 7.
Glass jar. H. R. McDonald. Des. 89,403; Mar. 7.
Glass, Laminated. J. C. Zola. 1,900,536; Mar. 7.
Glass manufacture, Wire. G. H. Juergens. 1,900,716; Mar. 7.
Glass melting apparatus. E. G. de Coriolis and P. Q. Williams. 1,900,432; Mar. 7.
Glass sheets, Apparatus for case hardening. W. Owen. 1,900,582–3; Mar. 7.
Glassware, Manufacture of. T. Wardley. 1,900,781; Mar. 7.
Glove, Hand ball. H. N. Gitt. 1,900,395; Mar. 7.
Grab. J. Geist. 1,900,179; Mar. 7.
Grain handling device. O. A. Wenberg. 1,900,218; Mar. 7.
Grapple, Rod and pipe. F. M. Tiea. 1,900,471; Mar. 7.
Grate. R. F. Darby. 1,899,945; Mar. 7.
Grate. J. S. Thompson. 1,900,530; Mar. 7.
Grease insoluble in gasoline. M. H. Arveson. 1,900,759; Mar. 7.
Grenade. E. W. Brandt. 1,900,790; Mar. 7.
Grinding machine. J. H. Hoern. 1,900,112; Mar. 7.
Guard for brake rods, Safety. E. G. Busse and H. W. Ekholm. 1,900,224; Mar. 7.
Guard for motor vehicles, Splash. C. L. Brown. 1,899,937; Mar. 7.
Gun casing, Grease. C. Harris. Des. 89,399; Mar. 7.
Gun, Liquid. H. A. Roselund. 1,900,668; Mar. 7.
Gun port for bullet-resisting structures. S. R. Popp. 1,900,364; Mar. 7.
Gypsum, System for producing. W. C. Hansen. 1,900,381; Mar. 7.
Gyroscopic navigational instrument. J. B. Henderson. 1,900,709; Mar. 7.
Hair curler. J. Mueller. 1,900,360; Mar. 7.
Hair curler or hair wave winder. F. Sehring. 1,900,373; Mar. 7.
Hair-waving apparatus, Electrical control system for permanent. E. B. Marter, 3d. 1,900,831; Mar. 7.
Hair waving or curling rod. V. N. Nicosia. 1,900,126; Mar. 7.
Hand bag. P. R. Hartmann. 1,899,960; Mar. 7.
Hand stitching tool. H. G. Allen. 1,900,683; Mar. 7.
Handle: *See*—
Doorlock handle. Utensil handle.
Handle. L. M. Willey. 1,900,423; Mar. 7.
Handle for coffee makers. C. E. Page. Des. 89,408; Mar. 7.
Hanger: *See*—
Clothes hanger. Trouser hanger.
Hanger for fur. M. Gray. 1,900,550; Mar. 7.
Harvester. H. E. and R. J. Altgelt. 1,900,269; Mar. 7.
Hat box. W. T. Shrader. 1,900,420; Mar. 7.
Hat lubring machine. J. L. Card. 1,900,634; Mar. 7.
Headlamp lens. J. R. Hughes. 1,899,984; Mar. 7.
Heat exchange apparatus. E. J. Parent. 1,900,363; Mar. 7.
Heat pump. C. G. Munters. 1,900,656; Mar. 7.
Heat responsive device. A. C. Rowley. 1,900,765; Mar. 7.
Heater: *See*—
Electric heater. Water heater.
Oil burning heater.
Heater for locomotives, Feed water. M. W. Dole and M. Silverman. 1,900,697; Mar. 7.
Heater for rods and tubes. E. F. Northrup. 1,900,842; Mar. 7.
Heater for rods and tubes. E. F. Northrup. 1,900,843; Mar. 7.
Heating and ventilating apparatus, Combined. L. F. Schlenker and M. Wuerthner. 1,900,770; Mar. 7.
Heating system. T. E. Murray, jr., and G. H. Phelps. 1,899,977; Mar. 7.
High frequency measuring apparatus. J. D. Wallace. 1,900,082; Mar. 7.
Hinge: *See*—
Door hinge.
Holsting block. M. Niemi. 1,900,194; Mar. 7.
Holder: *See*—
Christmas tree holder. Plate holder.
Fly holder.
Holder for cribs and the like, Adjustable milk bottle. E. J. Carlson. 1,900,691; Mar. 7.
Holder for paraffin fluid containers. J. F. Weiss. 1,900,783; Mar. 7.
Holder for vehicle fenders, Splash guard. W. R. Chesley. 1,900,225; Mar. 7.

Hooks, Method and apparatus for making belt lacing. O. B. Briggs and G. M. Richard. 1,900,156; Mar. 7.
Hosiery. E. B. Beacham. Re18,757; Mar. 7.
Hosiery. E. J. Berger. Des. 89,383; Mar. 7.
House or building construction. J. A. Henkensiefken. 1,900,812; Mar. 7.
Humidifier. R. C. Luplow. 1,900,453; Mar. 7.
Hydraulic machine. W. M. White. 1,900,144; Mar. 7.
Hydrocarbons, Cracking. E. C. Herthel. 1,900,110; Mar. 7.
Hydrocarbons, Process and apparatus for treating. H. J. Halle. 1,900,105; Mar. 7.
Hydrocarbons. Treatment of. W. R. Howard. 1,900,113; Mar. 7.
Hydrogen sulphide from gases, Removal of. D. L. Jacobson. 1,900,398; Mar. 7.
Ice cream bars, sticks, or the like, Method and apparatus for making. W. Maurer. 1,900,355; Mar. 7.
Ice cream wrappers, Apparatus for forming removable. R. Anders. 1,900,033; Mar. 7.
Ice-remover for windshields. J. H. Broderick. 1,900,540; Mar. 7.
Ignition system, High tension. F. D. Nuttall. 1,900,022; Mar. 7.
Ignition timer breaker mechanism. F. T. Irgens. 1,899,965; Mar. 7.
Illuminated sign. H. J. Cudney. 1,900,758; Mar. 7.
Illuminating sign. W. K. Wiley and H. J. Cudney. 1,900,747; Mar. 7.
Inclosure for reactors and similar apparatus, Protective. S. I. Oesterreicher. 1,899,981; Mar. 7.
Incubator, Infant. J. H. Hess. 1,900,342; Mar. 7.
Index for bound volumes. F. J. Osuch. 1,900,462; Mar. 7.
Index to be used with telephone directories and other books. F. J. Osuch. 1,900,461; Mar. 7.
Indexing device. A. Peel. 1,900,073; Mar. 7.
Indicator: *See*—
Liquid level indicator.
Ink drying and neutralizing device, Combined. C. H. Cochrane. 1,900,543; Mar. 7.
Inking device. H. D. Black. 1,900,092; Mar. 7.
Inking mechanism for printing presses. H. A. W. Wood. 1,900,263; Mar. 7.
Insect trap. A. C. Pickett. 1,900,199; Mar. 7.
Insulating body. G. H. Ellis. 1,900,698; Mar. 7.
Insulating body, Waterproof. G. H. Ellis. 1,900,699; Mar. 7.
Insulator. J. H. Hertner. 1,900,710; Mar. 7.
Internal combustion engine. A. A. Reimann. 1,900,762; Mar. 7.
Internal combustion engine. J. Schaeffers. 1,900,153; Mar. 7.
Internal combustion motor. H. R. Schroeder. 1,900,466; Mar. 7.
Jack. R. Statz. 1,900,528; Mar. 7.
Jar. F. Smith. Des. 89,420; Mar. 7.
Jar and closure therefor. L. T. Crabbe. 1,900,803; Mar. 7.
Jaw wrench, Adjustable. H. A. Mead. 1,900,358; Mar. 7.
Jewelry, Article of. P. Benjamin. 1,900,425; Mar. 7.
Jewelry display device. C. H. Scruggs. 1,900,467; Mar. 7.
Jig and fixture lock. F. W. Kuppersmith. 1,900,852; Mar. 7.
Joint construction. M. Nuberg. 1,900,460; Mar. 7.
Joint for extension rules, Yielding. H. M. Gasstrom. 1,900,640; Mar. 7.
Joint for metal pipes, Lock. A. C. Sladky. 1,900,749; Mar. 7.
Joint for pipes, Precaulked extensible. W. A. Whiting. 1,900,145; Mar. 7.
Joint or bearing, Self-aligning spherical. H. R. Ricardo. 1,900,617; Mar. 7.
Lacquer, Cellulose nitrate. H. Finkelstein. 1,900,700; Mar. 7.
Lacquers or varnishes, Manufacture of caoutchouc. H. Plauson. 1,900,663; Mar. 7.
Ladders, Attachment for. C. H. Davis. 1,900,636; Mar. 7.
Lamp, Gaseous conduction. D. McF. Moore. 1,900,577; Mar. 7.
Lamp, Reading. C. T. Brady. 1,900,539; Mar. 7.
Lamp, The apeutic. S. S. Torrisi. 1,900,138; Mar. 7.
Latch mechanism. K. F. Nystrom. 1,900,254; Mar. 7.
Lathe dead center actuating device. A. Storm and T. Thorsen. 1,900,261; Mar. 7.
Letter box. F. Sauter. 1,900,078; Mar. 7.
Lever. W. J. Andres and C. E. Ward. 1,900,151; Mar. 7.
Lifeboat hook. F. E. Craig. 1,900,227; Mar. 7.
Lift for vehicles, Hydraulic. C. J. Bristol. 1,900,483; Mar. 7.
Lifter: *See*—
Valve lifter.
Light: *See*—
Flash light.
Light plug. C. M. Way. 1,900,782; Mar. 7.
Lighter construction. L. V. Aronson. 1,900,684; Mar. 7.
Lighter, Pocket. H. S. Strausser and H. T. Reynolds. 1,900,207; Mar. 7.
Lighting fixture. J. B. Chartrand. 1,900,330; Mar. 7.
Lighting fixture. G. E. Glatthar. Des. 89,395; Mar. 7.
Lighting fixture. E. F. Guth. 1,900,552; Mar. 7.
Lighting fixture. R. B. Hale. 1,900,380; Mar. 7.
Lighting of all spaces, System of indirect. J. T. Dourgnon. 1,900,436; Mar. 7.
Lighting unit for reflected illumination. E. F. Guth. 1,900,551; Mar. 7.
Liner for coal drill boxings, Renewable threaded. V. L. Scott and N. W. Marsch. 1,900,740; Mar. 7.
Linkage, Lost motion mechanical. J. E. Kelly and J. A. Arasim. 1,900,289; Mar. 7.
Lip turning machine. H. L. Chapin. 1,900,044; Mar. 7.
Liquid dispensing apparatus. J. A. Logan. 1,900,652; Mar. 7.
Liquid feeding device. G. W. Leiman. 1,900,571; Mar. 7.
Liquid level gauge E. P. Hughes. 1,900,851; Mar. 7.
Liquid level indicator. S. De Orlow. 1,900,433; Mar. 7.
Liquids, Sterilization of. E. A. Louder. 1,900,509; Mar. 7.
Liquor, Destructively distilling black. R. W. Kumler. 1,900,506; Mar. 7.
Liquor, Preparation of caustic. M. B. Mount. 1,900,253; Mar. 7.
Lock: *See*—
Jig and fixture lock.
Lock. I. Kemp. 1,900,503; Mar. 7.
Lock. G. A. Long. 1,900,185; Mar. 7.
Lock for screw fastening members. B. E. Winkler. 1,900,146; Mar. 7.
Lock for vehicles, Automatic hood. C. B. Thoresen and F. B. Eliassen. 1,900,777; Mar. 7.
Locking device for bayonet slot construction. S. Schiff. 1,900,258; Mar. 7.
Locking mechanism for handcuffs. W. L. Latou. 1,900,242; Mar. 7.
Loom, Harness mechanism for a. D. N. O'Brien. 1,900,659; Mar. 7.
Looms, Filling stop motion for. A. Darienzo. 1,900,545; Mar. 7.
Lubricant retainer. H. R. Shiffer. 1,900,368; Mar. 7.
Lubricating system. F. C. Blanchard. 1,900,754; Mar. 7.
Lubricating device. H. F. Cunning. 1,900,429; Mar. 7.
Lubricating device. M. Newmark. 1,900,021; Mar. 7.
Lubricating means for high pressure pump pistons. E. H. Fahrney. 1,899,949; Mar. 7.
Lubricating system. W. D. Pomeroy. 1,900,735; Mar. 7.
Lubricator: *See*—
Distributing lubricator.
Luggage rack, Collapsible. E. Erickson and G. J. Hoody. 1,900,438; Mar. 7.
Lumber, Metal edged gypsum. C. F. Davis. 1,900,805; Mar. 7.
Machine for and process of forming metal into shapes. C. M. Yoder. Re18,760; Mar. 7.
Machine for casting stereotype printing plates. H. A. W. Wood. 1,900,265; Mar. 7.
Machine for fabricating scouring devices, mop heads, and similar articles. D. J. Mayer. 1,900,356; Mar. 7.
Machine for feeding plastic material such as dough through dies or like apertures. A. Kremmling. 1,900,607; Mar. 7.
Machine for graining lithographic plates. C. A. Beckett. 1,900,090; Mar. 7.
Machine for inserting corks into caps for collapsible tubes. J. J. Temple. 1,900,671; Mar. 7.
Machine for making and inserting basket handles. L. M. Hile. 1,900,712; Mar. 7.
Machine for manufacturing ceramic objects. T. F. Mooney. 1,899,974; Mar. 7.
Machine for preparing artificial manures. E. M. Poirot. 1,900,615; Mar. 7.
Magnesium carbonate and manufacturing process thereof. H. W. Greider. 1,900,235; Mar. 7.
Magnesium sulphate, Obtaining. H. E. Stump. 1,900,392; Mar. 7.
Manicuring method and means. H. B. Snider. 1,900,028; Mar. 7.
Manifold, Intake. W. J. Bliffert. 1,900,272; Mar. 7.
Manures, Preparing artificial. E. M. Poirot. 1,900,614; Mar. 7.
Marker, Price. R. V. Sheldon. 1,900,136; Mar. 7.
Mask. L. R. Koenig and F. B. Wolf. 1,900,651; Mar. 7.
Material, Color photographic. M. W. Seymour. 1,900,869; Mar. 7.
Materials and producing coke, Distilling fluent. I. H. Derby. 1,900,047; Mar. 7.
Materials of different specific gravities, Method of and apparatus for separating. W. C. Menzies. 1,900,190; Mar. 7.
Matrix board for stereotyping. A. R. Pawlitschko. 1,900,660; Mar. 7.
Mattress. T. S. Cobb. 1,900,801; Mar. 7.
Mattress, Spring. S. Cohen. 1,900,802; Mar. 7.
Measuring and computing instrument. E. H. Corlett. 1,900,757; Mar. 7.
Measuring device. G. A. Ede. 1,900,231; Mar. 7.
Mechanical apparatus, Rotary. G. Stauber. 1,900,620; Mar. 7.
Medicine package. E. Kipper. 1,900,606; Mar. 7.
Merchandise, Apparatus for handling. H. H. Lederer. 1,900,569; Mar. 7.
Mercury switch. E. R. Snavely. 1,900,080; Mar. 7.
Metal members, device for extracting. M. Mathews. 1,900,654; Mar. 7.
Metal plates, Method of and machine for forming. F. A. Manske, E. W. Odenwaldt, and O. E. Gibson. 1,900,722; Mar. 7.
Metal salts of half acid esters of fatty hydroxylated oil and making them. C. Coolidge. 1,900,693; Mar. 7.
Metal spring cover. W. T. Ferguson. 1,900,051; Mar. 7.

Metals, such as magnesium, Production of light. E. O. Barstow. 1,900,220; Mar. 7.
Metals, Welding. J. B. Fitzpatrilk. 1,900,100; Mar. 7.
Milk weighing apparatus. H. L. Miller. 1,900,859; Mar. 7.
Mill: *See*—
Bar mill. Rolling mill.
Mining machine. F. W. Vodoz. 1,900,780; Mar. 7.
Mixing device, Thermostatically controlled. E. O. Beardsley. 1,900,221; Mar. 7.
Mixing valve, Thermostatic. W. G. Klingbeil. 1,900,349; Mar. 7.
Mold closing apparatus, Automatic. C. E. Maynard. 1,900,455; Mar. 7.
Molding. R. C. Schemmel. 1,900,769; Mar. 7.
Molding construction for composite panels. G. K. Lewis. 1,900,824; Mar. 7.
Money handling machine. E. J. Brandt. 1,900,039; Mar. 7.
Mortuary record container. H. P. Hansen. 1,900,708; Mar. 7.
Motion, Traverse. R. J. Bartholomew. 1,900,480; Mar. 7.
Motor: *See*—
Internal combustion motor.
Mounting, Roll. L. Iversen. 1,900,344; Mar. 7.
Mounting, Self-closing sugar bowl. H. C. Gessler. 1,900,643; Mar. 7.
Mower, Lawn. A. F. Moyer. 1,900,726; Mar. 7.
Mower, Power. W. F. Krenske. 1,900,062; Mar. 7.
Mowing machine, Lawn. F. B. Mingus. 1,900,838; Mar. 7.
Muffler for internal combustion engines. E. H. Radecky. 1,900,026–7; Mar. 7.
Musical instrument of the violin type. G. Eisenberg. 1,900,489; Mar. 7.
Necktie construction. H. A. Clark. 1,900,800; Mar. 7.
Necktie, Reversible. E. M. Famous. 1,900,490; Mar. 7.
Negative system, Multipack. H. W. Moyse. 1,900,459; Mar. 7.
Negative system, Multipack. V. B. Sease. 1,900,468; Mar. 7.
Nonsubstituting container. H. B. Lloyd. Re18,759; Mar. 7.
Nozzle channel construction for explosion turbines. H. Holzwarth. 1,900,558; Mar. 7.
Oil burning heater, Cabinet type. G. E. Pickup. 1,900,520; Mar. 7.
Oil conversion, Hydrocarbon. O. H. Fairchild. 1,900,174; Mar. 7.
Oil feed mechanism. G. J. Meyer. 1,899,973; Mar. 7.
Oil fractionation. J. S. Wallis. 1,900,085; Mar. 7.
Oil gas, Treating an. A. E. Harnsberger. 1,900,057; Mar. 7.
Oil, Process and apparatus for cracking. N. E. Loomis and A. H. Tomlinson. 1,900,116; Mar. 7.
Oil, Refining hydrocarbon. S. S. Kurtz, jr. 1,899,969; Mar. 7.
Oil wells, Method and apparatus for drilling. D. Dana and F. A. Morgan. 1,900,163–4; Mar. 7.
Oils, Process and apparatus for converting. G. Egloff. 1,900,170; Mar. 7.
Oils, Process and apparatus for converting. G. Egloff. 1,900,171; Mar. 7.
Oils, Refining. W. G. Laird. 1,900,862; Mar. 7.
Oils, Treatment of hydrocarbon. D. J. Bergman. 1,900,153; Mar. 7.
Olefines and diolefines, Production of. O. Schmidt, M. Treppenhauer, O. Gorsskinsky, and H. Fischer. 1,900,739; Mar. 7.
1,5-dichloro-2,6-diamino anthraquinone, Preparing. W. L. Rintelman. 1,899,987; Mar. 7.
Opener, Automatic door. B. B. Ashbrook. 1,900,785; Mar. 7.
Ornamental chain. K. C. Augenstein. 1,900,377; Mar. 7.
Oscillation generator. W. E. Bower. 1,900,038; Mar. 7.
Oven, Coking retort. J. Becker. 1,900,752; Mar. 7.
Ovens, Charging coking retort. J. Becker. 1,900,753; Mar. 7.
Package. J. H. Reed. 1,900,389; Mar. 7.
Packer, Releasable. J. C. Dickens. 1,900,230; Mar. 7.
Packing gland. B. Schmierer. 1,900,523; Mar. 7.
Pad for shoe counters, Cushion. H. L. Handler. 1,900,107; Mar. 7.
Pad for typewriters, Type. L. Denzer. 1,900,046; Mar. 7.
Pad or packing with fastening means. G. W. Gilmer. 1,900,280; Mar. 7.
Pallet feeding device. C. E. Walker. 1,900,625; Mar. 7.
Pan, Doughnut. H. Kudo. 1,900,290; Mar. 7.
Pan, Ice. F. G. Siegel. 1,900,741; Mar. 7.
Paper and making the same, Waxed. G. N. Lovatt. 1,900,294; Mar. 7.
Paper cutting and trimming machine and clamping and shock-absorbing mechanism therefor. E. M. Brackett and D. Daneke. 1,899,923; Mar. 7.
Paper, Making articles of. B. F. Perkins. 1,900,257; Mar. 7.
Paper to printing presses, Method of and apparatus for feeding. H. A. W. Wood. 1,900,535; Mar. 7.
Papers, film foils, and the like, Apparatus for sorting transparent or translucent. C. Büchner. 1,900,633; Mar. 7.
Parachute mounting for aeroplanes. T. D. Crane. 1,900,891; Mar. 7.
Parachute projecting device for airplanes. A. Lakehurst. 1,900,399; Mar. 7.
Pencil. C. R. Sheaffer and W. R. Cuthbert. 1,900,669; Mar. 7.
Pharmaceutical preparation. F. Krollpfeiffer. 1,900,449; Mar. 7.
Photographic color process. M. W. Seymour. 1,900,870; Mar. 7.
Photographic developing apparatus. A. I. Liberman. 1,900,825; Mar. 7.
Piano action. C. H. Dasenbrook. 1,900,488; Mar. 7.
Picture-sound reproducer, Combined motion. C. L. Heisler. 1,900,555; Mar. 7.
Pictures, Toning silver. H. Mengele. 1,899,972; Mar. 7.
Pile, Composite. R. E. Talmadge. 1,900,673; Mar. 7.
Pile fabrics, Manufacture of. H. L. Shuttleworth. 1,899,990; Mar. 7.
Pile shell. F. A. Schroeder and A. E. Twist. 1,900,524; Mar. 7.
Piles, Apparatus for forming concrete. R. Tada. 1,900,622; Mar. 7.
Pipes, Device for cleaning waste and drain. D. G. and G. G. Carter. 1,900,275; Mar. 7.
Piston head guard. J. H. Price. 1,900,521; Mar. 7.
Piston ring milling machine. T. J. Bruce. 1,900,755; Mar. 7.
Pitch gauge. W. E. Pack. 1,900,197; Mar. 7.
Plant growth, Promoting. G. G. Nearing. 1,900,193; Mar. 7.
Planter, Tractor. B. R. Benjamin and W. S. Graham. 1,899,931; Mar. 7.
Plaster, Acoustical. J. S. Offutt. 1,900,866; Mar. 7.
Plate holder, Depthograph. C. W. Kanolt. 1,900,566; Mar. 7.
Platen travel equalizer, Hydraulic press. W. Ernst. 1,900,050; Mar. 7.
Playboard. S. Yasuda. 1,900,005; Mar. 7.
Play pen and sun bath, Collapsible. H. I. Brockie. 1,900,274; Mar. 7.
Playing ball. W. D. Craig. 1,900,544; Mar. 7.
Plow. G. B. Fisher. 1,900,701; Mar. 7.
Plug: *See*—
Drop plug. Light plug.
Plug, Boiler drop. G. McCormick. 1,900,357; Mar. 7.
Plug cap and making the same, Attachment. W. C. Tregoning. 1,900,139; Mar. 7.
Pneumatic dispatch system. W. J. Taylor and C. T. Cutting. 1,900,592; Mar. 7.
Pneumatic tube. H. F. Krug. 1,900,568; Mar. 7.
Poacher, Egg. E. Proteau. 1,900,761; Mar. 7.
Pocket, Garment safety. J. L. Foster. 1,900,639; Mar. 7.
Pottery, Apparatus for producing various kinds of. R. L. Cawood. 1,900,797; Mar. 7.
Powder box. C. H. Horner. Des. 89,425; Mar. 7.
Power plant. W. H. Harstick. 1,900,058; Mar. 7.
Power plant for drilling apparatus. M. Kahr. 1,900,884; Mar. 7.
Power, Pumping. W. C. Trout. 1,900,675; Mar. 7.
Power take-off for motor vehicles. G. A. Fulerton. 1,900,415; Mar. 7.
Power Transmission, Hydraulic variable speed. A. J. R. Lysholm. 1,900,118; Mar. 7.
Power transmission mechanism. G. DeMonge. 1,900,165; Mar. 7.
Power transmission system. W. F. Gay. 1,900,494; Mar. 7.
Power Transmission, variable speed. A. Lysholm, F. Horney, and G. Wahlsten. 1,900,119–20; Mar. 7.
Press: *See*—
Drawing press. Stamping press.
Printing press.
Pressing and ventilating apparatus. F. C. Wilhelm. 1,900,748; Mar. 7.
Pressure controlling device for a liquid dispensing apparatus. W. H. Curtis. 1,900,383; Mar. 7.
Pressure release gauge, Automatic. L. J. Wilcox. 1,900,533; Mar. 7.
Pressure venting device for dry pipe sprinkler systems. E. Tyden. 1,900,262; Mar. 7.
Printing device. J. P. Jackson. 1,900,345; Mar. 7.
Printing device. V. J. Mohler. 1,900,297; Mar. 7.
Printing device. E. F. Richter. 1,900,302; Mar. 7.
Printing from negative sound record to a positive, Apparatus for. E. I. Sponable. 1,900,853; Mar. 7.
Printing press. C. G. Pritchard. 1,900,664; Mar. 7.
Printing with pure primary colors and product, Imbibition. B. S. Tuttle. 1,900,140; Mar. 7.
Prism system affording parallel vision, Reversing. A. Konig. 1,900,241; Mar. 7.
Product and manufacture of same, Fibrous. R. B. Respess. 1,899,985; Mar. 7.
Propeller. W. M. Minto. 1,900,889; Mar. 7.
Protective system for fluid cooled tubes. L. A. Gebhard. 1,900,013; Mar. 7.
Protector. *See*—
Capacitor protector.
Psychrometer. E. V. Hill. 1,900,813; Mar. 7.
Puller: *See*—
Tape puller.
Pulley, Grooved. R. H. Bowen. 1,900,222; Mar. 7.
Pulps, Froth flotation process for slime-containing ore. M. S. Hansen. 1,900,850; Mar. 7.
Pump: *See*—
Centrifugal pump. Rotary pump.
Heat pump.
Pump construction. S. Dean. 1,900,228; Mar. 7.

Pumping system, Liquid counter-balanced. B. H. Scott. 1,900,588; Mar. 7.
Purifying an anthraquinone body. L. Ulich and R. E. Goodrich. 1,900,001; Mar. 7.
Pyrometer. C. B. Thwing. 1,900,779; Mar. 7.
Rack: *See*—
Bag rack. Display rack.
Bowling ball rack. Luggage rack.
Rack. H. L. Glidden. 1,900,053; Mar. 7.
Rack for electroplating. E. Sohn. 1,899,992; Mar. 7.
Radiator and humidifier. Combined. T. S. Hart and P. M. Bush. 1,900,554; Mar. 7.
Radio circuit. R. P. Wuerfel. 1,900,629; Mar. 7.
Radio circuits, Arrangement for. W. Bushbeck. 1,899,939; Mar. 7.
Radio frequency systems, Increasing the selectivity of tuned. C. V. Logwood. 1,900,293; Mar. 7.
Radio reception, Selective. J. H. Hammond, jr. 1,900,283; Mar. 7.
Rake, dump. H. E. Altgelt. 1,900,270; Mar. 7.
Rake tooth for hay loaders. P. P. Miller. 1,900,724; Mar. 7.
Razor blade package. H. R. Noyes. 1,899,979; Mar. 7.
Razor, Safety. J. Muros. 1,900,069; Mar. 7.
Razor, Safety. O. R. Peterson. 1,900,662; Mar. 7.
Recorder: *See*—
Speed and time recorder.
Refining. L. Rosenstein. 1,900,132; Mar. 7.
Reflector. E. E. Scott. 1,900,202; Mar. 7.
Refrigerating apparatus. D. E. Maccabee. 1,900,510; Mar. 7.
Refrigeration apparatus. R. C. Halmbaugh. 1,900,644; Mar. 7.
Refrigeration apparatus, Absorption. D. B. Knight. 1,900,650; Mar. 7.
Refrigerator. C. A. Moore. 1,900,576; Mar. 7.
Refrigerator. C. A. Moore. 1,900,579; Mar. 7.
Refrigerator cabinet or similar article. D. R. Dohner. Des. 89,388; Mar. 7.
Refrigerator construction. G. A. Aylsworth. 1,900,856; Mar. 7.
Refrigerator, Dairy products. R. R. Shirley. 1,900,306; Mar. 7.
Refrigerator, Ventilated. C. A. Moore. 1,900,580; Mar. 7.
Regulator: *See*—
Draft regulator. Traffic regulator.
Release mechanism. F. E. Moffett. 1,900,725; Mar. 7.
Resistance repeater, Two-way negative. G. Crisson. 1,900,045; Mar. 7.
Resistor construction. H. L. Van Valkenburg and F. C. McNicol. 1,900,318; Mar. 7.
Reverse movement, Preventing. S. C. Porter. 1,900,025; Mar. 7.
Ring: *See*—
Binder ring.
Rivet machine, Tubular. C. E. Lyman. 1,900,572; Mar. 7.
Rod: *See*—
Hair waving or curling rod.
Rod wiping mechanism. F. D. Durham. 1,900,437; Mar. 7.
Roll cleaner, Fountain. H. A. W. Wood. 1,900,266; Mar. 7.
Roll feeder. J. H. Morrow. 1,900,458; Mar. 7.
Roll for molten glass and cooling the same. H. K. Hitchcock. 1,900,556; Mar. 7.
Roller construction, Curtain. H. D. Sevison. 1,900,259; Mar. 7.
Rolling mill. J. Zagorski. 1,900,630; Mar. 7.
Roof and floor structure. W. D. Jarvis. 1,900,346; Mar. 7.
Roof and floor construction. F. A. Manske, E. W. Odenwaldt, and O. E. Gibson. 1,900,721; Mar. 7.
Roof, Arched. J. Broda. 1,899,924; Mar. 7.
Roofer's gauge. W. E. Pack. 1,900,196; Mar. 7.
Roofing. E. C. Otis. 1,900,597; Mar. 7.
Roofing manufacture. E. T. Doyon. 1,900,598; Mar. 7.
Roofing material. N. P. Harshberger. 1,900,861; Mar. 7.
Rosin product, Hydrogenated. C. O. Henke. 1,899,961; Mar. 7.
Rotary pump. A. Izbicki. 1,900,416; Mar. 7.
Rubber composition and vulcanizing rubber, Vulcanized. H. Oehme. 1,900,728; Mar. 7.
Rubber for sea-going vessel. J. G. Vadset. 1,900,848; Mar. 7.
Safety device for blasting charges employed in mining and similar work. W. Voortmann. 1,900,624; Mar. 7.
Safety device for locks. A. Brun. 1,900,794; Mar. 7.
Safety device for pressure systems. W. C. Dennis. 1,900,229; Mar. 7.
Safety removable fastener. A. Bebel. 1,900,152; Mar. 7.
Salts and other products from oil field brines, Recovery of. O. V. Martin. 1,900,246; Mar. 7.
Salts and other products from oil field brines, Recovery of. O. V. Martin. 1,900,247; Mar. 7.
Salts or other materials from liquids, Apparatus for separating. H. C. A. Behrens. 1,900,789; Mar. 7.
Sample taking device. S. Robichaux 1,900,618; Mar. 7.
Sash, Store front. A. N. McDonald. 1,900,248; Mar. 7.
Saucer. D. Fisher Des. 89,390; Mar. 7
Saw. G. B. Fisher. 1,900,702; Mar. 7.
Saw filing device. J. A. Waller. 1,900,084; Mar. 7.
Saw operating mechanism. E. W. K. Roe. 1,900,304; Mar. 7.
Saw, Portable motor driven. G. E Hampton. 1,900,553; Mar. 7.
Saw setting device. J. A. Waller. 1,900,083; Mar. 7.
Scale, Beam. J. E. Seederer. 1,900,418; Mar. 7.
Score pad displaying and supporting device for card tables. L. A. Marsh. 1,900,513; Mar. 7.
Scoring device. R. T. Scully. 1,900,401; Mar. 7.
Scraper. R. J. McGhee. 1,900,189; Mar. 7.
Screw cap. E. B. Kramer. 1,900,881; Mar. 7.
Screw caps, Process and apparatus for manufacture of. E. B. Kramer. 1,900,880; Mar. 7.
Screw locking element. C. G. Olson. 1,900,195; Mar. 7.
Seal. M. H. Ackerman. 1,900,849; Mar. 7.
Seal, Mud drum. M. Liptak. 1,900,019; Mar. 7.
Sealing and release device for carbon dioxide fire systems. A. C. Rowley. 1,900,764; Mar. 7.
Seat: *See*—
Vehicle seat.
Seat, stool, or chair with receptacle for holding articles, Collapsible. W. E. Siday. 1,900,847; Mar. 7.
Secretary, Radio. F. M. Friedrichs. 1,900,493; Mar. 7.
Seismic exploration of geologic formations. B. McCollum. 1,899,970; Mar. 7.
Separable fastener. J. A. H. Siers. 1,900,390; Mar. 7.
Sewage purification system. F. V. Hammerly. 1,900,809; Mar. 7.
Sewing machine, Button. R. L. Lyons. 1,900,388; Mar. 7.
Shade, Lamp. E. Schwarz. Des. 89,413–16; Mar. 7.
Shaft bearing. R. B. Wade. 1,900,593; Mar. 7.
Sharpener and the like, Blade. H. D. Tracy. 1,900,374; Mar. 7.
Sharpener, Lawn mower. W. L. Marling. 1,900,186; Mar. 7.
Sharpener, Razor blade. J. D. Butler. 1,900,158; Mar. 7.
Shears, Making. E. W. Carpenter. 1,900,413; Mar. 7.
Sheet metal clamp. W. S. Strom. 1,900,314; Mar. 7.
Shield for vehicles, Rain and sun. W. T. Clark. 1,900,097; Mar. 7.
Shield, Glare. L. Fuchs. 1,900,337; Mar. 7.
Shipping container. M. G. Kenyon and M. H. Kluter. 1,900,820; Mar. 7.
Shock absorber. F. Gitzendanner. 1,900,497; Mar. 7.
Shoe. W. L. Brady. Des. 89,384–5; Mar. 7.
Shoe. C. Miller. 1,900,515; Mar. 7.
Shoes, Filling. A. Thoma. 1,900,316–17; Mar. 7.
Shoe-filling machine. A. H. Avery. 1,900,322–3; Mar. 7.
Shoes, Making. B. W. Freeman. 1,900,441; Mar. 7.
Shoe-sole skiving machine. R. H. Barker. 1,900,780; Mar. 7.
Shower stall. E. F. Niedecken. 1,900,658; Mar. 7.
Sign: *See*—
Illuminated sign.
Signal: *See*—
Direction signal. Traffic signal.
Signal. J. Y. Ohta. 1,900,845; Mar. 7.
Signal apparatus, Traffic. J. Heuer. 1,900,060; Mar. 7.
Signaling system. J. M. Kane. 1,900,016; Mar. 7.
Signaling system, Selective. H. E. Hershey. 1,900,499; Mar. 7.
Signs, Making colored. J. P. Meehan. 1,899,971; Mar. 7.
Silo. T. A. Rowe. 1,900,763; Mar. 7.
Silver recovery control, Automatic. K. C. D. Hickman. 1,900,893; Mar. 7.
Skate. J. R. Brien. 1,900,040; Mar. 7.
Sled, Motor. J. E. Valiquette. 1,900,315; Mar. 7.
Sleeve construction. L. Slanger. 1,900,391; Mar. 7.
Sleeve valve two cycle engine. V. H. Winquist. 1,900,475; Mar. 7.
Sling, Arm. K. E. and A. K. Uhrig. Des. 89,417; Mar. 7.
Slitting device. R. McC. Johnstone. 1,900,183; Mar. 7.
Snowplow. C. H. Frink. 1,900,703; Mar. 7.
Soap dispenser. W. A. Jennings. 1,900,819; Mar. 7.
Sole cementing machine. W. C. Card, jr. 1,899,941; Mar. 7.
Sole, Shoe. C. L. White. Des. 89,419; Mar. 7.
Solutions, Apparatus for feeding. C. F. Wallace. 1,900,142–3; Mar. 7.
Sound absorbent material and producing it. P. E. Sabine. 1,900,522; Mar. 7.
Sound amplifier. C. W. Hicks. 1,900,111; Mar. 7.
Sound amplifying device. C. N. Andrews. 1,899 929; Mar. 7.
Sound into electrical impulses, Conversion of. R. K. Spotts. 1,899,994; Mar. 7.
Sound pick-up device. P. E. G. Jensen. 1,899,966; Mar. 7.
Sound ranging, Method and apparatus for. H. C. Hayes. 1,900,015; Mar. 7.
Sound recording system. A. Whitaker. 1,900,679; Mar. 7.
Sound waves, Method and apparatus for producing. A. M. Tewksbury. 1,900,623; Mar. 7.
Sphygmomanometer. W. I. Huber. 1,900,285; Mar. 7.
Sphygmomanometer. W. I. Huber and L. B. Close. 1,900,286; Mar. 7.
Spot welding. M. J. Cohan. 1,900,161; Mar. 7.
Speed and time recorder. J. H. Greenley. 1 899,956; Mar. 7.
Spraying apparatus. H. J. Mills. 1,900,837; Mar. 7.
Spring construction. R. W. Nilsson. 1,900,841; Mar. 7.
Sprinkler head. H. E. Meng. 1,900,124; Mar. 7.

Sprinkler valve, Fire extinguishing. A. E. Boardman. 1,900,632; Mar. 7.
Stadia transit. E. W. Kraft. 1,900,567; Mar. 7.
Stamping press. E. Baumgarten, C. W. Gosnell, and N. J. Delsch. 1,900,008; Mar. 7.
Stanchion, Animal. J. Waksmoncki. 1,900,676; Mar. 7.
Stanchion switch. A. F. Paul. 1,900,198; Mar. 7.
Stand: *See*—
Camera stand. Display stand.
Starch products Apparatus for making gelatinized. F. O. Giesecke. 1,899,952; Mar. 7.
Starting mechanism, Engine. R. P. Lansing. 1,900,063; Mar. 7.
Steam engine, Rotary. G. Zint. 1,900,784; Mar. 7.
Steam power plant. J. Ruths. 1,900,766; Mar. 7.
Steel retainer, Drill. D. K. Dovell. 1,900,860; Mar. 7.
Steering apparatus for aircraft. W. Möller. 1,900,516; Mar. 7.
Steering device. B. S. Aikman. 1,900,218; Mar. 7.
Stock quotation projecting machine. J. W. Decker. 1,900,010; Mar. 7.
Stock watering apparatus. A. F. Gustafson. 1,900,604; Mar. 7.
Stop motion for gill boxes. W. J. Scott. 1,900,400; Mar. 7.
Stop, Wheel. H. W. Ekholm. 1,900,232; Mar. 7.
Stop, Wheel. A. H. Told. 1,900,210; Mar. 7.
Storage bag. W. P. Holley. 1,900,814; Mar. 7.
Storage battery. A. H. Snyder. 1,900,307; Mar. 7.
Stovepipe. J. A. Krantz. 1,900,750; Mar. 7.
Strip, Bimetallic flanged dividing. P. Galassi. 1,900,705; Mar. 7.
Strip for terrazzo and like floors, Dividing. P. Galassi. 1,900,704; Mar. 7.
Stripper for collapsible tube forming machines. W. Prussing. 1,900,666; Mar. 7.
Structural devices. A. Vermeulen. 1,900,319; Mar. 7.
Structural element. H. W. and G. Buelow. 1,900,541; Mar. 7.
Structural unit. D. H. Bitney. 1,900,327; Mar. 7.
Suction cleaner. H. R. Ballou. 1,900,271; Mar. 7.
Suction cleaner. B. C. Becker. 1,900,889; Mar. 7.
Suction cleaner. W. H. Kitto. 1,900,887; Mar. 7.
Suction cleaner. W. H. Kitto. 1,900,888; Mar. 7.
Suction cleaner. W. D. Sellers. 1,900,890; Mar. 7.
Suction cleaner. D. G. Smellie. 1,900,885; Mar. 7.
Suction cleaner. D. G. Smellie. 1,900,886; Mar. 7.
Sundial. F. Loria. 1,900,117; Mar. 7.
Supercharger. G. R. Poyer. 1,900,200; Mar. 7.
Support: *See*—
Folding support.
Support construction. A. F. O'Connor. 1,899,980; Mar. 7.
Support for electric motors, Resilient. L. M. Persons. 1,900,128; Mar. 7.
Support for reading matter, Table. I. L. Moore. 1,900,251; Mar. 7.
Supporting a separating hopper as applied to portable mills. E. L. Martin. 1,900,354; Mar. 7.
Surface decorating machine. G. von Webern and E. W. Hamant. 1,900,030; Mar. 7.
Surfacing. H. R. Stratford. 1,900,313; Mar. 7.
Switch: *See*—
Electric switch. Stanchion switch.
Mercury switch. Thermostat switch.
Switch. T. B. Bash. 1,900,687; Mar. 7.
Switch casing and mounting bracket or similar article, Combined. G. A. Gillen. Des. 89,394; Mar. 7.
Switch operator. J. C. Rea. 1,900,584; Mar. 7.
Table: *See*—
Automobile table. Vertically and horizontally adjustable table.
Table or similar article. R. Redlich, jr. Des. 89,412; Mar. 7.
Table rear guide, Transfer. I. Maarsen. 1,900,064; Mar. 7.
Tailstock for lathes and the like. A. N. Emmons. 1,900,233; Mar. 7.
Tank: *See*—
Trailer tank.
Tank gauge. R. Star. 1,900,774–5; Mar. 7.
Tank outlet valve. A. H. Noyes. 1,899,978; Mar. 7.
Tape moistening and affixing device. E. H. Manvell. 1,900,121; Mar. 7.
Tape puller. E. H. Unkles. 1,900,421; Mar. 7.
Tape, Slide fastener. M. Kiessling. 1,900,564; Mar. 7.
Telegraph system, Automatic secret. J. H. Smart. 1,900,772; Mar. 7.
Television apparatus. M. Centeno V. Re18,761; Mar. 7.
Tent and frame, Collapsible. A. Del Vacchio. 1,900,335; Mar. 7.
Terminal for electrical conductors. W. C. Reed. 1,900,585; Mar. 7.
Textile and other materials, Treatment of. G. H. Ellis, H. C. Olpin, and R. C. Storey 1,900,172; Mar. 7.
Textile fabric or a similar article, Embroidered. E. W. Freudenberg. Des. 89,392; Mar. 7.
Textile fabric or similar article. C. R. Hellman. Des. 89,401; Mar. 7.
Textile fabric or similar article. I. J. Marks. Des. 89,402; Mar. 7.
Textile fabric or similar article of manufacture. A. J. Heinke. Des. 89,400; Mar. 7.
Textile fabric or the like. A. Grulich. Des. 89,398; Mar. 7.
Textile fabric or the like. G. Megroz. Des. 89,404; Mar. 7.
Textile fabric or the like, Embroidered. W. G. Meier. Des. 89,432; Mar. 7.
Thermometer, Oven. G. J. Day. 1,900,696; Mar. 7.
Thermostat switch. A. E. Grant and S. W. Vanderbeek. 1,899,955; Mar. 7.
Thickener, Centrifugal. R. H. Cottrell. 1,900,394; Mar. 7.
Thread tensions for twisting devices, Device for equalizing the. O. Bochmann and W. Lenk. 1,900,037; Mar. 7.
Threads and the like from viscose and in apparatus therefor, Production of artificial. H. J. Hegan and E. Hazeley. 1,900,811; Mar. 7.
Threaded members, Apparatus for disconnecting. G. S. Kennedy. 1,900,017; Mar. 7.
Three-cylinder tandem engine. R. E. Bruckner. 1,900,858; Mar. 7.
Tire. W. S. Gilbert. Des. 89,393; Mar. 7.
Tire and rim construction. J. M. Meredith. 1,900,835; Mar. 7.
Tire building method. C. H. Desautels. 1,900,435; Mar. 7.
Tire vulcanizer. G. J. Mead. 1,900,456; Mar. 7.
Toaster. E. J. Rohne. 1,900,737; Mar. 7.
Toaster, Electric. P. J. N. Miller and V. E. Extrom. 1,900,249; Mar. 7.
Toilet article. M. V. McDonough. 1,900,609; Mar. 7.
Tongs. L. F. Baash and W. H. Maxwell. 1,900,378; Mar. 7.
Tongs. N. K. Smith. 1,900,370; Mar. 7.
Tool: *See*—
Hand stitching tool.
Toothbrush, Fountain. J. W. Beresford. 1,900,326; Mar. 7.
Top for ingot molds, Hot. W. Mathesius. 1,900,066; Mar. 7.
Top or cover plate for typewriting machines. J. H. Rand, jr., and J. A. Zellers. Des. 89,410; Mar. 7.
Toy. C. Marchetti. 1,900,353; Mar. 7.
Toy. L. Ranney and H. F. Gade. 1,900,419; Mar. 7.
Toy coast defense gun. F. J. Peters. 1,900,024; Mar. 7.
Tracing device for instruments such as integraphs and the like. O. Coradi and W. Leeman. 1,900,332; Mar. 7.
Track crossing construction, Railway. E. W. Bayes. 1,900,788; Mar. 7.
Tractor guide. W. H. Silver. 1,900,525; Mar. 7.
Traffic controlling apparatus, Railway. C. M. Hines. 1,900,713; Mar. 7.
Traffic regulator. E. C. Welsh. 1,900,532; Mar. 7.
Traffic signal. D. O. Miller. 1,900,723; Mar. 7.
Trailer tank, Vehicle. F. A. Jones. 1,900,114; Mar. 7.
Train signaling system, Electric. P. N. Bossart. 1,900,405; Mar. 7.
Train signaling system, Electric. P. N. Bossart. 1,900,412; Mar. 7.
Transfers, Printing. C. A. Colombo. 1,900,635; Mar. 7.
Transformers, Network of midtapped. F. W. Gay. 1,900,496; Mar. 7.
Transmission. H. D. Allee. 1,899,928; Mar. 7.
Transmission. H. F. Bushong. 1,900,096; Mar. 7.
Transmission, Free wheeling. C. H. Fehlberg. 1,899,950; Mar. 7.
Trap: *See*—
Animal trap. Insect trap.
Trigger mechanism. R. A. Lester. 1,900,608; Mar. 7.
Trimming apparatus. T. W. Morris. 1,900,000; Mar. 7.
Trouser hanger. W. B. Claflin, jr. 1,899,942; Mar. 7.
Tube: *See*—
Brake cable tube. Gaseous discharge tube.
Brake operating tube. Pneumatic tube.
Tube cleaner. J. P. Rodgers. 1,900,130; Mar. 7.
Tubes, Apparatus for welding. F. W. Weir. 1,900,376; Mar. 7.
Tubing catcher. N. K. Smith. 1,900,371; Mar. 7.
Tubing head. G. A. Humason and W. A. Raymond. 1,900,714; Mar. 7.
Turbine, Explosion. H. Holzwarth. 1,900,815; Mar. 7.
Turbine plant for ships, Explosion. H. Holzwarth. 1,899,963; Mar. 7.
Twister or strander. W. E. Sommerville. 1,900,310; Mar. 7.
Twisting and reeling mechanism for wire rope making machines. W. E. Sommerville. 1,900,309; Mar. 7.
Typewriter, Power driven. H. Benzing. 1 900,690; Mar. 7.
Typewriting and calculating machine. J. Bricken. 1,899,936; Mar. 7.
Typewriting machine. E. E. Barney. 1,900,088; Mar. 7.
Typewriting machine. G. G. Going. 1,900,102; Mar. 7.
Typewriting machine. A. G. F. Kurowski. 1,899,968; Mar. 7.
Typewriting machine. J. A. B. Smith. 1,900,527; Mar. 7.
U-bolts and making the same. H. C. Ellison. 1,900,049; Mar. 7.
Ultralight intensive objective. M. Berek. 1,899,984; Mar. 7.
Undergarment, Woman's. F. Ring. 1,900,129; Mar. 7.
Utensil, Cooking. H. C. Synder. 1,900,619; Mar. 7.
Utensil handle, Cooking. R. N. Kircher. 1,900,565; Mar. 7.
Vacuum cleaner. W. J. Clements. 1,900,692; Mar. 7.
Vacuum cleaner. F. Riebel, jr. 1,900,465; Mar. 7.

Valve: *See*—
Automatic valve. Sprinkler valve.
Car outlet valve. Tank outlet valve.
Mixing valve.

Valve. M. F. Richardson. 1,900,736; Mar. 7.
Valve and valve-seat refinishing tool. A. A. Radley, jr. 1,900,075; Mar. 7.
Valve control apparatus for dry pipe sprinkler systems. M. W. Paden and V. G. Opdyke. 1,900,300; Mar. 7.
Valve for bottle fillers, Filler. J. Kantor. 1,900,447; Mar. 7.
Valve for low water alarms, Control. H. W. Coddington. 1,900,379; Mar. 7.
Valve lifter, or tappet, Self-adjusting. A. L. Pearson and J. J. Gerhardt. 1,900,518; Mar. 7.
Valve mechanism. P. F. Youngling. 1,900,268; Mar. 7.
Vanity case. H. Batchelor. 1,900,089; Mar. 7.
Vapor phase reactions, Carrying out exothermic. A. O. Jaeger. 1,900,715; Mar. 7.
Vegetable slicing mechanism. L. Frank. 1,900,491; Mar. 7.
Vehicle. R. B. Simning. 1,900,590; Mar. 7.
Vehicle, Motor. D. Fergusson. 1,900,439; Mar. 7.
Vehicle, Motor. W. Staniewicz. 1,900,773; Mar. 7.
Vehicle seat. A. H. Ackerman. 1,899,927; Mar. 7.
Vending machine. I. W. Penny. 1,900,074; Mar. 7.
Ventilating device for subterranean spaces. F. Gerlach. 1,900,642; Mar. 7.
Ventilating means for refrigerators. G. A. Aylsworth. 1,900,855; Mar. 7.
Vertically and horizontally adjustable table. O. K. and L. O. Mitchell. 1,900,250; Mar. 7.
Vessel construction, Sheet metal. J. E. Howard. 1,900,711; Mar. 7.
Voltage transforming apparatus for direct current. C. C. Wilson. 1,900,215; Mar. 7.
Ventilator: *See*—
Window ventilator.
Wadding for whale guns. G. E. Brofelth. 1,899,925; Mar. 7.
Wads, Process of and apparatus for making. H. Ernst. 1,900,012; Mar. 7.
Wagon, Coaster. A. Hedeen, J. G. Holifer, and V. S. Landess. 1,900,108; Mar. 7.
Wall brace and reenforcement. A. M. Ryan. 1,900,767; Mar. 7.
Wall of hollow bodies, Method and apparatus for coating the interior. A. M. Hageman and A. F. Lindstrom. 1,900,104; Mar. 7.
Washing machine. W. J. Butterworth. 1,900,795; Mar. 7.
Watch. E. Howard. 1,900,343; Mar. 7.
Watch-fob. C. Oppenheim. Des. 89,407; Mar. 7.
Watches, Apparatus for testing. T. Owada. 1,900,612; Mar. 7.
Water heater. M. I. Larsen. 1,900,451; Mar. 7.
Web splicing apparatus. H. A. W. Wood. 1,900,264; Mar. 7.
Well drilling apparatus. W. Sheldon. 1,900,135; Mar. 7.
Well drilling apparatus. T. G. Taylor. 1,900,029; Mar. 7.
Well plunger. J. W. Pippin. 1,900,731; Mar. 7.
Well reamer. D. J. Conant. 1,900,226; Mar. 7.
Wheel. F. C. Frank. 1,900,101; Mar. 7.
Wheel for connecting tractors to different types of trailers, Fifth. C. H. Land and W. H. Wilson. 1,900,115; Mar. 7.
Wheel gear, Sun and planet. E. Uhlich and W. Ballentine, gennant Mielke. 1,899,999; Mar. 7.
Window device. J. B. Clay and L. R. Wilson. 1,899,943; Mar. 7.
Window, Metal. A. Fien. 1,900,175; Mar. 7.
Window, Metal. A. Fien. 1,900,177; Mar. 7.
Window ventilator. E. J. Ney. 1,900,611; Mar. 7.
Wire clamp. H. W. Perry. 1,899,983; Mar. 7.
Wire shaping machine. J. Cipko. 1,900,160; Mar. 7.
Wiring device. G. Carlson. 1,900,542; Mar. 7.
Wood surfacing machine. A. A. Clarke. 1,900,331; Mar. 7.
Woodworking machinery. J. J. Egan. 1,900,336; Mar. 7.
Wrecking device. D. D. Williams. 1,900,031; Mar. 7.
Wrench: *See*—
Breast wrench. Jaw wrench.
Wrinkle eradicator. A. D. Varell. 1,900,002; Mar. 7.
Zinc-meta-arsenite. L. P. Curtin. 1,900,162; Mar. 7.

CLASSIFICATION OF PATENTS

ISSUED MARCH 7, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

1—	50: 1,900,683	23—	185: 1,900,253	51—	72: 1,900,158	73—	44: 1,900,285	95—	37: 1,900,566	119—	78: 1,900,604
2—	19: 1,900,395		225: 1,900,398		106: 1,900,112		1,900,286		49: 1,900,730		148: 1,900,676
	65: 1,900,487		233: 1,900,882		176: 1,900,331		54: 1,900,774		75: 1,900,853	120—	18: 1,900,669
	93: 1,900,391		273: 1,900,247		195: 1,899,959		1,900,775		88: 1,899,972	121—	32: 1,900,860
	1,900,678		288: 1,900,382		1,900,374		1,900,851		94: 1,900,825		41: 1,900,165
	146: 1,900,490		1,900,857		278: 1,900,313		82: 1,900,433	97—	47: 1,899,932		77: 1,900,784
	150: 1,900,800	24—	73: 1,900,560		1,900,439		111: 1,900,414		1,899,940		164: 1,900,268
	179: 1,900,481		81: 1,900,686		280: 1,900,386		119: 1,900,696		1,900,440	122—	6: 1,900,007
	250: 1,900,129		126: 1,899,983	52—	4: 1,900,157		167: 1,900,823		49: 1,900,525		1,900,443
	254: 1,900,639		137: 1,899,982	53—	1: 1,900,761		1,900,151		52: 1,900,701		1,900,445
	278: 1,899,990		163: 1,900,147		5: 1,900,249	74—	5: 1,900,151		1,900,928		159: 1,900,451
4—	191: 1,900,591		205: 1,900,152		1,900,737		7: 1,899,928	98—	1: 1,900,642		235: 1,900,006
5—	100: 1,900,478		1,900,390		6 1,900,290		1,900,415		51: 1,900,856		434: 1,900,697
	351: 1,900,802		1,900,564	55—	67: 1,900,827		14: 1,900,795		88: 1,899,943		504.3: 1,900,357
	359: 1,900,801		214: 1,900,574	56—	7: 1,900,726		21: 1,899,953		99: 1,900,611	123—	25: 1,900,453
7—	1: 1,900,314		253: 1,900,613		20: 1,900,269		34: 1,899,999	99—	1: 1,900,295		33: 1,900,762
8—	5: 1,899,975	25—	1: 1,900,625		23: 1,900,838		56: 1,900,675		10: 1,900,094		51: 1,900,086
	1,900,167		42: 1,899,974		119: 1,900,806		58: 1,899,950		11: 1,900,072		52: 1,900,272
	1,900,168		92: 1,900,797		249: 1,900,062		59: 1,900,119		1,900,444		53: 1,900,466
	1,900,172		118: 1,900,372		392: 1,900,270		64: 1,900,192	101—	47: 1,900,261		1,900,587
	1,900,454		131.5: 1,900,301		400: 1,900,724		108: 1,900,521		65: 1,900,279		57: 1,900,133
10—	12: 1,900,572	27—	23: 1,900,255	58—	26: 1,900,311	75—	1: 1,900,125		149: 1,900,140		59: 1,900,475
12—	30: 1,900,044	29—	38: 1,900,387		88: 1,900,343	76—	31: 1,900,084		154: 1,900,030		1,900,858
	31.5: 1,900,786		73: 1,900,304	59—	5: 1,899,948		61: 1,900,083		225: 1,900,535		75: 1,900,200
	142: 1,900,441		76: 1,900,075		7: 1,899,976		82.1: 1,900,186		320: 1,900,008		90: 1,900,518
	1,900,317		85: 1,900,654		80: 1,900,377		104: 1,900,413		351: 1,900,092		140: 1,900,385
14—	23: 1,899,998		88.2: 1,900,017	60—	16: 1,900,054	77—	62: 1,900,188		1,900,263		148: 1,900,022
15—	9: 1,900,692		89: 1,900,031		41: 1,900,558		1,900,852		364: 1,900,266		171: 1,900,586
	10: 1,900,122		152: 1,900,004		1,900,815	80—	24: 1,900,630		369: 1,900,296		174: 1,900,727
	13: 1,900,886		1,900,049		54: 1,900,118		38: 1,900,032		1,900,297		182: 1,900,367
	1,900,887		164: 1,900,662		1,900,120		1,900,344		1,900,303		188: 1,900,605
	1,900,889	30—	12: 1,900,069		94: 1,900,766	81—	9.1: 1,900,238		1,900,345		196: 1,899,949
	14: 1,900,885		1,900,662		97: 1,899,963		53: 1,900,378		374: 1,900,023		198: 1,900,245
	1,900,888	33—	62: 1,900,117	61—	30: 1,900,393		57: 1,900,169		396: 1,900,302	124—	12: 1,900,024
	1,900,890		69: 1,900,567		37: 1,900,341		66: 1,900,370		415.1: 1,900,664	126—	90: 1,900,520
	29: 1,900,771		97: 1,900,197		39: 1,900,205		110: 1,900,358	102—	6: 1,900,624		180: 1,899,945
	104.14: 1,900,130		98: 1,900,196		48: 1,900,319	82—	31: 1,900,233		17: 1,900,159		1,900,530
	137: 1,899,984		120: 1,900,640		53: 1,900,673		1,900,261		26: 1,900,182		309: 1,900,749
	1,900,326		125: 1,900,231		57: 1,900,622	83—	44: 1,900,458		29: 1,900,700		1,900,750
	255: 1,900,540		150: 1,900,757		78: 1,900,524		53: 1,899,930		42: 1,899,925	128—	1: 1,900,342
	257: 1,900,271		177: 1,900,500	62—	89: 1,900,576	84—	239: 1,900,488	103—	112: 1,900,531		163: 1,900,002
16—	18: 1,900,672		204: 1,900,709		1,900,579		294: 1,900,489		132: 1,900,416		240: 1,900,201
	116: 1,900,423	34—	4: 1,900,166		1,900,580	87—	9: 1,900,759		179: 1,900,588		16: 1,900,073
	1,900,565		12: 1,900,846		1,900,855		12: 1,900,132		203: 1,900,228	129—	1,900,148
	131: 1,900,081	36—	25: 1,900,515		95: 1,900,674		17: 1,899,952		219: 1,900,371		1,900,479
17—	3: 1,900,267		58.5: 1,900,107		108.5: 1,900,741		1,900,537		225: 1,900,731		23: 1,900,601
18—	1: 1,900,322	37—	44: 1,900,703		115: 1,900,510		23: 1,900,609		255: 1,900,656		1,900,840
	1,900,323	40—	19: 1,900,708		116: 1,900,644	88—	1: 1,900,202	104—	13: 1,899,944		24: 1,900,334
	2: 1,899,947		68: 1,900,187		119.5: 1,900,650		1,900,241		257: 1,900,232		1,900,431
	4: 1,900,455		125: 1,900,375		126: 1,900,526		1,900,332		258: 1,900,210	132—	33: 1,900,126
	8: 1,900,811		130: 1,900,061		1,900,742		1,900,557	105—	171: 1,900,134		1,900,360
	12: 1,900,434		133: 1,900,747		169.1: 1,899,980		14: 1,900,477		253: 1,900,096		1,900,373
	16: 1,900,012	41—	24: 1,899,971	63—	20: 1,900,425		1,900,633	106—	3: 1,900,316		73: 1,900,028
	20: 1,900,456		33: 1,900,048	64—	12: 1,900,091		16.2: 1,900,555		6: 1,900,237		83: 1,900,089
	53: 1,900,298		1,900,635		1,900,511		16.4: 1,900,034		9: 1,900,864	133—	12: 1,900,089
	1,900,728	42—	17: 1,900,818		1,900,512		18.4: 1,900,876		24: 1,899,985	134—	17: 1,900,663
	57: 1,900,873		41: 1,900,184		17: 1,900,222		19.5: 1,900,681		1,900,216		26: 1,900,638
19—	44: 1,900,154		42: 1,900,608		29: 1,900,052		24: 1,900,020		27: 1,900,670		45: 1,900,211
	165: 1,900,400	43—	32: 1,900,035		96: 1,900,208		1,900,651		34: 1,900,866		1,900,212
20—	1: 1,900,812		44: 1,900,339	65—	60: 1,900,643		1,900,878	107—	14: 1,900,854		57: 1,900,734
	1.4: 1,900,763		46: 1,900,832		61: 1,900,783		57: 1,899,934		19: 1,900,355		79: 1,900,507
	4: 1,900,369		87: 1,900,219	66—	178: R. 18,757	89—	36: 1,900,364		29: 1,900,607		1,900,700
	16: 1,900,422		88: 1,900,733	67—	7.1: 1,900,207	90—	21: 1,900,755	108—	7: 1,900,861	135—	4: 1,900,335
	26: 1,900,548		94: 1,900,645		1,900,684	91—	14.5: 1,900,121		23: 1,899,934		5: 1,900,274
	39: 1,900,244		107: 1,900,199	68—	9 1,900,621		45: 1,900,104	110—	97: 1,900,019	136—	31: 1,900,616
	56.4: 1,900,248	44—	12: 1,900,347		1,900,720		51: 1,899,941		147: 1,900,065		80: 1,900,308
	91: 1,900,824		15: 1,900,173		1,900,748		67.9: 1,900,294		173: 1,900,079		81: 1,900,307
	1,900,830	45—	7: 1,900,338	69—	20: 1,900,402		68: 1,900,131	111—	63: 1,899,931	137—	21: 1,899,936
	92: 1,900,460		28: 1,900,819	70—	14: 1,900,777		1,900,597	112—	71: 1,900,076		1,899,978
22—	2: 1,900,265		46: 1,900,250		24: 1,900,242		1,900,598		112: 1,900,388		34.3: 1,900,836
	68: 1,900,863		51: 1,900,325		46: 1,900,794		1,900,660	113—	29: 1,900,637		53: 1,900,533
	96: 1,900,137		1,900,760		72: 1,900,185	92—	15: 1,899,989		80: 1,900,671		69: 1,900,661
	123: 1,900,746		57: 1,900,251		91: 1,899,996		21: 1,900,162	114—	26: 1,900,711		78: 1,900,273
	147: 1,900,066	46—	40: 1,900,419		1,899,997		1,900,606		65: 1,900,011		160: 1,900,026
	1,900,816		49: 1,900,353		122: 1,900,146		1,900,699		168: 1,900,848		1,900,027
23—	3: 1,900,667	47—	26: 1,900,193	71—	1: 1,900,616		54: 1,900,427	115—	41: 1,900,180	138—	10: 1,900,050
	1,900,751	48—	203: 1,900,141		6: 1,900,614	93—	36: 1,900,033	116—	45: 1,900,845	139—	82: 1,900,659
	1,900,883	49—	32: 1,900,716	72—	17: 1,900,522		51: 1,900,892		48: 1,900,240		370: 1,900,545
	43: 1,900,246		45: 1,900,582		36: 1,900,833	94—	17: 1,900,704		63: 1,900,060	140—	71: 1,900,156
	48: 1,900,320		1,900,583		40: 1,900,805		1,900,705		1,900,532		1,900,646
	67: 1,900,235		54: 1,900,432		41: 1,900,457	95—	2: 1,900,459		119: 1,900,451		93: 1,900,181
	128: 1,900,392		55: 1,900,361		46: 1,900,767		1,900,468		1,900,462		1,900,695
	142: 1,900,267		1,900,362		66: 1,900,346		1,900,869		135: 1,900,136		1,900,712
	175: 1,900,383		81: 1,900,536		109: 1,900,327		1,900,870	117—	16: 1,900,309		1,900,529
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95: 1,900,333
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223— 15: 1,900,547
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226— 83: 1,900,127
111: 1,900,447
229— 22: 1,900,420
230— 79: 1,900,620
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232— 41: 1,900,729
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234— 30: 1,899,956
235— 22: 1,900,519
27: 1,900,103
60: 1,899,936
63: 1,900,042
137: 1,900,776
1,900,808
236— 12: 1,900,221
1,900,349
14: 1,900,036
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16: 1,900,214
237— 46: 1,900,770
67: 1,899,977
240— 6: 1,900,467
9: 1,900,436
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25: 1,900,330
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78: 1,900,380
92: 1,900,539
103: 1,900,551
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58: 1,900,264
243— 16: 1,900,592
244— 3: 1,900,743
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15: 1,900,689
21: 1,900,399
1,900,891
29: 1,900,068
1,900,473
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30: 1,900,502
31: 1,900,067
246— 63: 1,900,403
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1,900,411
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15: 1,900,542
248— 2: 1,900,354
16: 1,900,128
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38: 1,900,807

248— 41: 1,900,562
65: 1,900,691
250— 6: 1,900,499
11: 1,900,292
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20: 1,900,283
1,900,293
27: 1,900,013
1,900,629
27.5: 1,900,559
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271— 2.4: 1,900,010
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273— 47: 1,900,469
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136: 1,900,513
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1,900,875
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131: 1,900,503
239: 1,900,617
312— 152: 1,900,793
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U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

A. P. W. Paper Company, Inc., Albany, N. Y. Toilet tissue. Serial No. 334,703; Mar. 14. Class 37.

Ab-So-Cur Company, The. (See Mautwitz, Sophie.)

Ace Drug Co. (See Perkins, Timothy D.)

Aizer, Alexandre, doing business as The Stonetone Company, New York, N. Y. Plastic coating compositions. Serial No. 332,477; Mar. 14. Class 12.

Alexander Marketing Company, San Benito, Tex. Fresh vegetables. Serial No. 323,930; Mar. 14. Class 46.

American Safety Razor Corporation, Brooklyn, N. Y. Safety razors and blades. Serial No. 334,297; Mar. 14. Class 23.

American Vault Company, Brooklyn, N. Y. Burial vaults. Serial No. 334,704; Mar. 14. Class 2.

Amster, Max, New York, N. Y. Cigarettes. Serial No. 332,395; Mar. 14. Class 17.

Anderson, Wilbur C., doing business as Lexa Laboratories Co., Dayton, Ohio. Headache tablet. Serial No. 334,629; Mar. 14. Class 6.

Animal Foods Company, doing business as Bar-None Sales Company, San Jose, Calif. Canned foods for dogs, cats, etc. Serial No. 334,426; Mar. 14. Class 46.

Antongnoli, Joseph, & Co., Chicago, Ill. Malt syrup and macaroni. Serial No. 334,380; Mar. 14. Class 46.

Arkwright Merchandising Corporation, New York, N. Y. Coats, suits, pants, etc. Serial No. 333,494; Mar. 14. Class 39.

Ashton, Fred B., St. Louis, Mo. Soap. Serial No. 330,143; Mar. 14. Class 4.

Australian Essential Oils Limited, Sydney, Australia. Antiseptic solution. Serial No. 326,246; Mar. 14. Class 6.

Bachrach-Feld Company, Inc., The, doing business as Old Wurzburg Malt Co., Cincinnati, Ohio. Malt syrup. Serial No. 333,053; Mar. 14. Class 46.

Baltimore Steel Co., The, Baltimore City, Md. Green grocer's spraying racks. Serial No. 333,140; Mar. 14. Class 13.

Bar Apparatus, Inc., New York, N. Y. Fountains for dispensing soft drinks. Serial No. 333,180; Mar. 14. Class 23.

Bar-None Sales Company. (See Animal Foods Company.)

Bay State Fishing Company, Boston, Mass. Haddock, cod, cusk, etc. Serial No. 333,912; Mar. 14. Class 46.

Becton, Dickinson & Co., Rutherford, N. J. Clinical thermometers. Serial No. 331,915; Mar. 14. Class 44.

Beech-Nut Packing Company, Canajoharie, N. Y. Chewing gum. Serial No. 334,083; Mar. 14. Class 46.

Berry, Simon C., Portland, Oreg. Ice cream and frozen confections, candy and cake. Serial No. 329,252; Mar. 14. Class 46.

Blaisdell Pencil Company, Philadelphia, Pa. Lead pencils. Serial No. 330,417; Mar. 14. Class 37.

Blue Ribbon Products Co., Inc., San Francisco, Calif. Coffee cooker and heater. Serial No. 333,182; Mar. 14. Class 13.

Boell, Charles A., doing business as Inter-State Ribbon & Carbon Company, Cleveland, Ohio. Typewriter ribbons and carbon papers. Serial No. 334,221; Mar. 14. Class 11.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Soap preparations. Serial No. 333,788; Mar. 14. Class 4.

Bon Ami Company, New York, N. Y. Scouring soap, and cleaning and polishing powder. Serial No. 334,246; Mar. 14. Class 4.

Bowers, Edward C., and Charles L. Feldman, receivers for Wickwire Spencer Steel Company, New York, N. Y. Door springs. Serial No. 333,701; Mar. 14. Class 13.

Breyer Ice Cream Company, Philadelphia, Pa. Frozen confection. Serial No. 331,175; Mar. 14. Class 46.

Bud Radio, Inc., Cleveland, Ohio. Radio apparatus, supplies, and equipment, etc. Serial No. 332,003; Mar. 14. Class 21.

Carey Medical Corporation, The, Elmira, N. Y. Foot lotion. Serial No. 333,669; Mar. 14. Class 6.

Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 316,294; Mar. 14. Class 42.

Chicago Musical Instrument Company, Chicago, Ill. Guitars and banjos. Serial No. 334,188; Mar. 14. Class 36.

Citrus Juice & Flavor Co., Ltd., Los Angeles, Calif. Malt-less beverages and extracts and syrups. Serial No. 334,140; Mar. 14. Class 45.

Columbia Plush & Puff Co., Inc., Brooklyn, N. Y. Nail cream, bleach, and paste, cuticle ice, and cream, etc. Serial No. 332,085; Mar. 14. Class 6.

Consolidated Lithographing Corporation, Brooklyn, N. Y. Jigsaw puzzles. Serial No. 334,705; Mar. 14. Class 22.

Continental Mills, Inc., Philadelphia, Pa. Overcoats, topcoats, cloaks, etc. Serial No. 334,141; Mar. 14. Class 39.

Cook & Dunn Paint Corporation, Newark, N. J. Paints, varnishes, lacquers, etc. Serial No. 333,672; Mar. 14. Class 16.

Cook & Dunn Paint Corporation, Newark, N. J. Paints, varnishes, lacquers, etc. Serial No. 334,304; Mar. 14. Class 16.

Coors Porcelain Company, The, Golden, Colo. Porcelain teapots, drip coffee makers, casseroles, etc. Serial No. 333,505; Mar. 14. Class 30.

Coplay Cement Manufacturing Company, Coplay, Pa. Cement. Serial No. 333,850; Mar. 14. Class 12.

Corn Products Refining Company, New York, N. Y. Salad and cooking oil. Serial No. 333,026; Mar. 14. Class 46.

Crandall, Pierce & Co., Chicago, Ill. Publication. Serial No. 334,554; Mar. 14. Class 38.

Curlee Clothing Company, St. Louis, Mo. Suits. Serial No. 334,349; Mar. 14. Class 39.

Curtis, David, doing business as De-Ce Products Co. of New York, New York, N. Y. Surface anesthetic. Serial No. 333,256; Mar. 14. Class 6.

Cushman, Jack, doing business as Wow! Soap Products Company, Hastings-on-Hudson, N. Y. Soap. Serial No. 332,826; Mar. 14. Class 4.

Dayton Rubber Manufacturing Company, The, Dayton, Ohio. Vehicle tires and inner tubes. Serial No. 330,398; Mar. 14. Class 35.

Debonaire Laboratories. (See Edlis Barbers' Supply Co., The.)

De-Ce Products Co. of New York. (See Curtis, David.)

Dickerson, Walker T., Company, The, Columbus, Ohio. Shoes. Serial No. 332,061; Mar. 14. Class 39.

Dobeckmun Company, The, Cleveland, Ohio. Laminated sheeting. Serial No. 333,550; Mar. 14. Class 50.

Dold, Fred, and Sons Packing Company, Wichita, Kans. Cheese, butter and eggs. Serial No. 327,583; Mar. 14. Class 46.

Dumari Textile Co., Inc., New York, N. Y. Fabrics. Serial No. 334,089; Mar. 14. Class 42.

E. Z. Chemical Company. (See Gibbs, Malcolm G.)

Edison, Thomas A., Incorporated, West Orange, N. J. Machines for shaving sound record tablets and parts thereof. Serial No. 333,315; Mar. 14. Class 23.

Edlis Barbers' Supply Co., The, doing business as Debonaire Laboratories, Pittsburgh, Pa. Skin cream and cleanser. Serial No. 331,950; Mar. 14. Class 6.

Eggar, Forrester & Verner, Ltd., London, England. Dates. Serial No. 333,930; Mar. 14. Class 46.

Ephinol Laboratores. (See Oelschlegel, Herbert R.)

Epiphany Chemical Company. (See Passalacque, Nicola.)

Excelsior Leather Washer Manufacturing Co., Rockford, Ill. Cup leathers, valve and plunger leathers, leather washers, etc. Serial No. 333,703; Mar. 14. Class 35.

Filecraft, Inc., Cleveland, Ohio. Files. Serial No. 326,419; Mar. 14. Class 23.

Finch, Jos. S., & Company, New York, N. Y. Whiskey and other potable spirits. Serial No. 334,678; Mar. 14. Class 49.

Firestone Tire & Rubber Company, The, Akron, Ohio. Tire covers. Serial No. 329,285; Mar. 14. Class 35.

Fleischmann, Frances, doing business as Frances Fleischmann Soap Products, West Haven, Conn. Facial soap. Serial No. 334,052; Mar. 14. Class 4.

Food Products Co., of America, Chicago, Ill. Canned dog food. Serial No. 330,474; Mar. 14. Class 46.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 334,176–7; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 334,181–3; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 334,188–90; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 334,192; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 334,194–5; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial Nos. 334,197–200; Mar. 14. Class 42.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 334,202; Mar. 14. Class 42.

Fortune Tobacco Company, The, New York, N. Y. Cigarettes. Serial Nos. 334,352–3; Mar. 14. Class 17.

Fox, M. Ewing, Co., Inc., New York, N. Y. Water paint in dry form. Serial No. 334,676; Mar. 14. Class 16.

Frank Drug Corporation, New York, N. Y. Pharmaceutical preparation. Serial No. 333,931; Mar. 14. Class 6.

General Mills, Inc., Minneapolis, Minn. Wheat flour. Serial No. 330,217; Mar. 14. Class 46.

General Mills, Inc., Minneapolis, Minn. Flour. Serial No. 332,372; Mar. 14. Class 46.

General Mills, Inc., Minneapolis, Minn. Flour. Serial No. 333,187; Mar. 14. Class 46.

Gibbs, Malcolm G., doing business as E. Z. Chemical Company, Washington, D. C. Medicated corn discs. Serial No. 331,986; Mar. 14. Class 6.

Giese, Otto E., New York, N. Y. Filtering materials. Serial No. 334,008; Mar. 14. Class 31.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Gillette Safety Razor Company, Boston, Mass. Safety razors and blades. Serial No. 333,032; Mar. 14. Class 23.
Goldin, Lew, Pharmacal Co., Washington, D. C. Preparation for athlete's foot, ring worm, etc. Serial No. 332,451; Mar. 14. Class 6.
Goldin, Lew, Pharmacal Co., Washington, D. C. Preparation recommended for athlete's foot, ring worm, itching, etc. Serial No. 333,830; Mar. 14. Class 6.
Good Humor Corporation of America, Cleveland, Ohio. Ice cream and frozen confections. Serial No. 328,396; Mar. 14. Class 46.
Goodle, George W., doing business as Sam-Tex Laboratories, Los Angeles, Calif. Vaginal antiseptic. Serial No. 329,944; Mar. 14. Class 6.
Goodwear Rubber Co. Inc., New York, N. Y., assignor to L. E. Shunk Latex Products, Inc., Akron, Ohio. Prophylactic rubber articles. Serial No. 331,372; Mar. 14. Class 44.
Green Horse Beverage Co., Detroit, Mich. Maltless beverages. Serial No. 334,308; Mar. 14. Class 45.
Griffith, Brandford W., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. Serial No. 333,675; Mar. 14. Class 6.
Heumann, L., & Company, Inc., New York, N. Y. Candy, dry milk, malt syrup, etc. Serial No. 322,793; Mar. 14. Class 46.
Hi-Gene Co. (See Hoffman, Aaron C.)
Hoffman, Aaron C., doing business as Hi-Gene Co., Newark, N. J. Medical preparations. Serial No. 333,632; Mar. 14. Class 6.
Hood Rubber Company, Inc., Watertown, Mass. Wall covering. Serial No. 333,568; Mar. 14. Class 50.
Hoyt, Otis, Long Beach, Calif. Fresh citrus fruits and fresh dates. Serial No. 332,772; Mar. 14. Class 46.
I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Ladies' underwear and hosiery. Serial No. 331,583; Mar. 14. Class 39.
Independent Druggists' Alliance Distributing Co., Chicago, Ill. Epsom salt, borax, henna powder. Serial No. 330,260; Mar. 14. Class 6.
Inter-State Ribbon & Carbon Company. (See Boell, Charles A.)
Jewish Opinion Publishing Corp., New York, N. Y. Announcements and publications. Serial No. 323,620; Mar. 14. Class 38.
Karmelkorn Corporation, Rockford, Ill. Machines for popping and treating corn. Serial No. 326,426; Mar. 14. Class 23.
Keen Manufacturing Corporation, New York, N. Y. Shampoo. Serial No. 325,911; Mar. 14. Class 6.
Knight, Boyce W., doing business as B. W. Knight Mfg. Co., Chicago, Ill. Golf club weights. Serial No. 333,392; Mar. 14. Class 22.
Kops Brothers, Inc., New York, N. Y. Corset girdles. Serial No. 333,939; Mar. 14. Class 39.
Kresge Department Store Corporation, Newark, N. J. Jewelry, table ware, etc. Serial No. 333,073; Mar. 14. Class 28.
Kress, S. H., & Co., New York, N. Y. Dolls. Serial No. 334,642; Mar. 14. Class 22.
Kwickorn Sales Company. (See Waterhouse, Ernest C.)
Lathers, Matt F., Orlando, Fla. Hand paddle and ball game. Serial No. 334,286; Mar. 14. Class 22.
Lerch, Floyd S., Hellertown, Pa. Maltless beverages and sirups and extracts for making the same. Serial No. 334,568; Mar. 14. Class 45.
Lesquendieu, Incorporated, New York, N. Y. Preparations for shampooing and brightening the hair, brilliantine. Serial No. 333,887; Mar. 14. Class 6.
Lexn Laboratories Co. (See Anderson, Wilbur C.)
Littler Bakeries, Inc., Chicago, Ill. Cakes. Serial No. 324,618; Mar. 14. Class 46.
Lorraine Manufacturing Company, Pawtucket, R. I. Skirts, waists, suits, etc. Serial No. 333,597; Mar. 14. Class 39.
Luco Novelty Company, The. (See Lucomlin, Morris.)
Lucomlin, Morris, doing business as The Luco Novelty Company, New York, N. Y. Ornamental mountings. Serial No. 333,680; Mar. 14. Class 40.
Luxite Silk Products Co., Milwaukee, Wis. Underwear and foundation garments for women. Serial No. 333,005; Mar. 14. Class 39.
Mandel & Cohen, New York, N. Y. Coats, suits, skirts, etc. Serial No. 333,521; Mar. 14. Class 39.
Manhattan Kreole Products, Inc., Brooklyn, N. Y. Polishes, dressings, and cleaning preparations. Serial No. 334,257; Mar. 14. Class 4.
Marietta Paint & Color Company, The, Marietta, Ohio. Varnishes. Serial No. 334,645; Mar. 14. Class 16.
Marietta Paint & Color Co., The, Marietta, Ohio. Water and wear resisting finish. Serial No. 334,646; Mar. 14. Class 16.
Mautwitz, Sophie, doing business as The Ah-So-Cur Company, Berwyn, Ill. Salve used in the treatment of piles. Serial No. 334,016; Mar. 14. Class 6.
McCrudden, Samuel, & Co., Limited, Belfast, Ireland. Handkerchiefs. Serial No. 331,623; Mar. 14. Class 42.
Menihan Company, The, Rochester, N. Y. Shoes. Serial No. 333,111; Mar. 14. Class 39.
Meyer, E., & Cie., Société Anonyme, Paris, France. Wool fabrics. Serial No. 332,345; Mar. 14. Class 42.
Monowatt Electric Corporation, The, Bridgeport, Conn. Electrical wiring devices. Serial No. 331,059; Mar. 14. Class 21.
Mundo Products, Inc., New York, N. Y. Paint enamels and varnish stains. Serial No. 334,067; Mar. 14. Class 16.
Neilan Co., Ltd., Los Angeles, Calif. Steam pressure control devices and regulators. Serial No. 323,350; Mar. 14. Class 26.
New Era Specialties Corporation, New York, N. Y. Phonograph turntable drives. Serial No. 333,810; Mar. 14. Class 36.
Northwestern Supply Company, Inc., New York, N. Y. Edible nuts. Serial No. 309,601; Mar. 14. Class 46.
Noveltex, Inc., New York, N. Y. Cotton cloth to be made into aprons. Serial No. 330,826; Mar. 14. Class 42.
Oelschlegel, Herbert R., doing business as Ephinol Laboratories, Douglas, Ariz., and Los Angeles, Calif. Nose drops and spray. Serial No. 331,061; Mar. 14. Class 6.
Old Wurzburg Malt Co. (See Bachrach-Feld Company, Inc.)
Omnia Pro Vita Laboratories Co., Brooklyn, N. Y. Cream cheese. Serial No. 322,595; Mar. 14. Class 46.
Pabst Pharmaceutical Co., Inc., doing business as Pabst Chemical Co., Chicago, Ill. Shaving cream. Serial No. 333,359; Mar. 14. Class 4.
Parke, Davis & Company, Detroit, Mich. Cough syrup. Serial No. 333,603; Mar. 14. Class 6.
Parkway Distributing Co., Inc., Philadelphia, Pa. Cakes, pretzels, pickles, etc. Serial No. 320,793; Mar. 14. Class 46.
Pasmantier, John L., New York, N. Y. Coffee pots. Serial No. 334,340; Mar. 14. Class 30.
Passalacque, Nicola, doing business as Epiphany Chemical Company, Pittsburgh, Pa. Germicidal detergent for the treatment of gonorrhea. Serial No. 333,837; Mar. 14. Class 6.
Perkins, Timothy D., doing business as Ace Drug Co., San Diego, Calif. Mineral oil, quinine, boric acid, etc. Serial No. 260,585; Mar. 14. Class 6.
Philadelphia Malt Extract Co., Philadelphia, Pa. Malt syrup. Serial No. 311,693; Mar. 14. Class 46.
Pollak, Henry, Inc., New York, N. Y. Straw braids. Serial No. 333,945; Mar. 14. Class 40.
Popsicle Corporation of the United States, The, New York, N. Y. Wrappers and bags. Serial No. 332,891; Mar. 14. Class 2.
Popsicle Corporation of the United States, The, New York, N. Y. Wrappers and bags. Serial No. 332,896; Mar. 14. Class 2.
Publicker Commercial Alcohol Company, Philadelphia, Pa. Anti-freeze compounds. Serial No. 334,290; Mar. 14. Class 6.
Pure-A Foods, Inc., Penn Yan, N. Y. Powdered soup. Serial No. 329,061; Mar. 14. Class 46.
Puritan Uniform Co., Inc., New York, N. Y. Nurses' uniforms, maids' uniforms, and uniform dresses. Serial No. 334,295; Mar. 14. Class 39.
Pyle, Charles M., doing business as Pyle Manufacturing Co., New York, N. Y. Cleaning and polishing compounds. Serial No. 334,071; Mar. 14. Class 4.
Pyramid Rubber Company, The, Ravenna, Ohio. Nursing nipples. Serial No. 333,717; Mar. 14. Class 44.
Reid, Murdoch & Co., Chicago, Ill. Candy. Serial No. 326,302; Mar. 14. Class 46.
Riddell, John T., Inc., Chicago, Ill. Shoes. Serial No. 318,955; Mar. 14. Class 39.
Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Sprinkler actuated thermostat for fire detection apparatus. Serial No. 331,411; Mar. 14. Class 26.
Rulaid, Inc., Cleveland, Ohio. Laxatives. Serial No. 333,608; Mar. 14. Class 6.
S. M. A. Corporation, Cleveland, Ohio. Milk. Serial No. 328,964; Mar. 14. Class 46.
Sam-Tex Laboratories. (See Goodle, George W.)
Sanitol Sanitary Corporation, New York, and Glendale, N. Y. Toilet seats. Serial No. 334,653; Mar. 14. Class 13.
Satir, George, Westmoreland, Calif. Fresh lettuce, tomatoes, peas, etc. Serial No. 311,980; Mar. 14. Class 46.
Schacht Rubber Manufacturing Co., Huntington, Ind. Fruit jar rings and rubbers. Serial No. 334,268; Mar. 14. Class 35.
Scott Paper Company, Chester, Pa. Facial tissues. Serial No. 334,717; Mar. 14. Class 37.
Sears, Roebuck and Co., Chicago, Ill. Automobile tents. Serial No. 333,897; Mar. 14. Class 50.
Sears, Roebuck and Co., Chicago, Ill. Milk can strainers. Serial No. 334,579; Mar. 14. Class 13.
Sears, Roebuck and Co., Chicago, Ill. Padlocks and wall safes. Serial No. 334,691; Mar. 14. Class 25.
Shelby Home Products Co., The, Shelby, Ohio. Washing compound. Serial No. 333,562; Mar. 14. Class 4.
Shunk, L. E., Latex Products, Inc. (See Goodwear Rubber Co. Inc., assignor.)

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Sierra Talc Company, Los Angeles, Calif. Minerals, specifically talc. Serial No. 334,472; Mar. 14. Class 1.
Silten, Dr. Ernest, Berlin, Germany. Apparatus adapted for the treatment of diseases of the respiratory organs. Serial No. 333,653; Mar. 14. Class 44.
Skinner Chuck Company, New Britain, Conn. Piston rings. Serial No. 323,722; Mar. 14. Class 35.
Société Anonyme des Usines Chausson, Asnieres, France. Thermostats. Serial No. 327,608; Mar. 14. Class 26.
Sparks-Withington Company, The, Jackson, Mich. Electrical refrigerating, water-cooling and air-conditioning apparatus. Serial No. 329,158; Mar. 14. Class 81.
Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. Serial No. 330,528; Mar. 14. Class 46.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Naphthenic acids and their derivatives. Serial No. 333,945; Mar. 14. Class 6.
Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Paint driers. Serial No. 333,953; Mar. 14. Class 16.
Steinberger Bros. Inc., New York, N. Y. Yarns. Serial No. 332,130; Mar. 14. Class 43.
Stockbridge, John P., Inc., New York, N. Y. Golf balls. Serial No. 333,617; Mar. 14. Class 22.
Stonetone Company, The. (See Aizer, Alexandre.)
Strauss, Levi, and Company, San Francisco, Calif. Shirts, pants sweaters, etc. 316,909; Mar. 14. Class 39.
Swift and Company, Chicago, Ill. Ham. Serial No. 334,373; Mar. 14. Class 46.
Technical Supply Company, Scranton, Pa. Drawing inks. Serial No. 333,813; Mar. 14. Class 11.
Tetley, Joseph, & Co., Inc., New York, N. Y. Tea, coffee, cocoa, etc. Serial Nos. 333,539–41; Mar. 14. Class 46.
Tomlin, Edyth C., Washington, D. C. Soap powder capsules. Serial No. 334,588; Mar. 14. Class 4.
Towlsaver, Inc., Los Angeles, Calif. Paper towel dispensing means. Serial No. 333,618; Mar. 14. Class 23.
Truckseal Delivery Company, Brooklyn, N. Y. Truck bodies. Serial No. 326,531; Mar. 14. Class 19.
Tugend Blade Co., Cincinnati, Ohio. Razor blades. Serial No. 332,357; Mar. 14. Class 23.
Union Oil Company, Parsons, Kans., and North Kansas City, Mo. Storage (wet cell) batteries. Serial No. 332,971; Mar. 14. Class 21.
Union Pin Company, The, Winsted, Conn. Pins. Serial No. 323,259; Mar. 14. Class 40.
United States Equipment Corporation, New Brighton, Pa. Fruit juice extractor. Serial No. 332,639; Mar. 14. Class 23.
Van Tine Laboratories, Inc. (See Weiner, William, assignor.)
Wak Incorporated, Charlotte, N. C. Pick counters for textile machines and revolution recording devices. Serial No. 333,721; Mar. 14. Class 26.
Warren, Thomas S., Los Angeles, Calif. Therapeutic devices. Serial No. 332,133; Mar. 14. Class 44.
Warwick Chemical Company, West Warwick, R. I. Products for use as an assistant for mercerizing and similar treatment on vegetables and artificial fibres. Serial No. 333,845; Mar. 14. Class 6.
Waterhouse, Ernest C., doing business as Kwickorn Sales Company, Los Angeles, Calif. Food preparation. Serial No. 332,935; Mar. 14. Class 46.
Webster Eisenlohr, Inc., New York, N. Y. Cigars. Serial No. 333,902; Mar. 14. Class 17.
Weiner, William, assignor to Van Tine Laboratories, Inc., New York, N. Y. Prepared liquid wax. Serial No. 325,378; Mar. 14. Class 16.
Weis, John A., New York, N. Y. Tooth brushes. Serial No. 334,237; Mar. 14. Class 29.
West Disinfecting Company, Long Island City, N. Y. Cleaning preparations, dry cleaner, floor cleaner, enamel cleaner, etc. Serial No. 311,634; Mar. 14. Class 4.
West Disinfecting Company, Long Island City, N. Y. Air-purifying preparations, antiseptics, animal dips, etc. Serial No. 311,636; Mar. 14. Class 6.
White, Robert C., Company, Philadelphia, Pa. Concentrated base for insect destroying sprays. Serial No. 333,647; Mar. 14. Class 6.
Wickwire Spencer Steel Company. (See Bowers, E. C., and Feldman.)
Wilkinson, E. DeF., Company, Providence, R. I. Printing blankets or/and impression surfaces. Serial No. 333,906; Mar. 14. Class 50.
Wittmeyer, John, New York, N. Y. Shoes, slippers, and rubbers. Serial No. 333,345; Mar. 14. Class 39.
Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes, etc. Serial No. 333,135; Mar. 14. Class 39.
Wow! Soap Products Company. (See Cushman, Jack.)
Wullschleger & Co., New York, N. Y. Silk goods. Serial No 334,456; Mar. 14. Class 42.

LIST OF REGISTRANTS OF TRADE-MARKS

Air-Way Electric Appliance Corporation, Toledo, Ohio. Liquid preparation for application to the under surface of rugs. 301,821; Mar. 14; Serial No. 331,863; published Jan. 3, 1933. Class 5.
American Rubber Products Co. (See Colie, Claude C.)
Arleesé, Inc., Miami, Fla. Corsets, corselettes, girdles, etc. 301,761; Mar. 14; Serial No. 331,186; published Dec. 27, 1932. Class 39.
B-Vite Company, Philadelphia, Pa. Vitamin-containing syrup. 301,825; Mar. 14; Serial No. 328,883; published Jan. 3, 1933. Class 46.
Bacorn Company, The, Elmira and Elmira Heights, N. Y. Remedy for diseases. 92,779; renewed July 29, 1933.
Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Cocktail made of conch juice. 301,776–7; Mar. 14; Serial Nos. 331,536–7; published Jan. 3, 1933. Class 46.
Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Conch chowder and/or broth. 301,778; Mar. 14; Serial No. 331,533; published Jan. 3, 1933. Class 46.
Baker Furniture Factories, Inc., Allegan, Mich. Beds, benches, bookcases, etc. 301,713; Mar. 14; Serial No. 329,395; published Oct. 4, 1932. Class 32.
Bauer's, August, Sons, Inc., New York, N. Y. Prepared mustard. 301,781; Mar. 14; Serial No. 330,806; published Dec. 27, 1932. Class 46.
Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic mountings. 301,850; Mar. 14. Class 26.
Bayer és társa, Dr., Budapest, Austria-Hungary, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Salves. 90,954; renewed Apr. 8, 1933.
Beck, Koller & Company, Inc., Detroit, Mich. Paints, varnishes, lacquers, etc. 301,765; Mar. 14; Serial No. 329,924; published Dec. 27, 1932. Class 16.
Beck, Koller & Company, Inc., Detroit, Mich. Soluble ester gums and plastic resins. 301,770; Mar. 14; Serial No. 329,930; published Dec. 27, 1932. Class 16.
Beck, Koller & Company, Inc., Detroit, Mich. Soluble plastic resins. 301,771; Mar. 14; Serial No. 329,927; published Dec. 27, 1932. Class 16.
Becker, Henry, & Son, Inc., Roseland, N. J. Milk, cream, butter, etc. 301,828; Mar. 14; Serial No. 319,850; published June 7, 1932. Class 46.
Bolta Rubber Co., Inc., Lawrence, Mass. Composition sheet material made of rubber, acetate-cellulose, etc. 301,800; Mar. 14; Serial No. 331,036; published Jan. 3, 1933. Class 50.
Borden's Milk Products Company, Inc., New York, N. Y. Malted milk. 301,829; Mar. 14; Serial No. 318,619; published Dec. 27, 1932. Class 46.
Borgfeldt, Geo., & Co., New York, N. Y. Glassware. 301,854; Mar. 14. Class 33.
Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. 301,712; Mar. 14; Serial No. 330,777; published Dec. 27, 1932. Class 23.
Brockton Last Manufacturing Co., Brockton, Mass. Shoe lasts and trees, and followers. 301,799; Mar. 14; Serial No. 331,176; published Jan. 3, 1933. Class 50.
Brooklyn Hotel Supply Co., Brooklyn, N. Y. Butter, eggs, beef, veal, mutton, lamb, etc. 301,832; Mar. 14; Serial No. 317,594; published Dec. 27, 1932. Class 46.
Brooks, J. W., & Co. Incorporated, Portland, Me., to J. W. Brooks & Co. Inc., Brighton, Mass. Lotion for treating the skin. 92,041; renewed June 17, 1933.
Brown Company, Portland, Me., and Berlin, N. H. Cellulose pulps and felts made therefrom. 301,817; Mar. 14; Serial No. 331,667; published Jan. 3, 1933. Class 1.
Browne, Herbert J., doing business as Permagloss Manufacturing Company, Atlanta, Ga. Cleaning and polishing preparation. 301,798; Mar. 14; Serial No. 331,424; published Dec. 27, 1932. Class 16.
Burroughs Wellcome & Co. (U. S. A.) Inc. (See Wellcome, Henry S., assignor.)
California and Hawaiian Sugar Refining Corporation, Limited, San Francisco, Calif. Sugar. 301,782; Mar. 14; Serial No. 330,739; published Jan. 3, 1933. Class 46.
Callaghan, George H., New York, N. Y. Cleaners and polishers for motor cars, furniture, etc. 301,795; Mar. 14; Serial No. 331,850; published Dec. 27, 1932. Class 16.
Central United National Bank of Cleveland, Cleveland, Ohio. Publications. 301,763; Mar. 14; Serial No. 330,593; published Dec. 27, 1932. Class 38.
Central United National Bank of Cleveland, Cleveland, Ohio. Publications. 301,809; Mar. 14; Serial No. 330,594; published Dec. 27, 1932. Class 38.
Chemical Foundation, Incorporated, The. (See Bayer és társa, Dr., assignor.)
Chemical Foundation, Incorporated, The. (See Chemische Fabrik auf Actien, (vorm. E. Schering) assignor.)

Chemical Foundation, Incorporated, The. (See Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heideweg, assignor.)
Chemical Foundation, Incorporated, The. (See Farbwerke vorm. Meister Lucius & Brüning, assignor.)
Chemical Foundation, Incorporated, The. (See Kalle & Co., Aktiengesellschaft, assignor.)
Chemical Foundation, Incorporated, The. (See Pappenheim, Victor, & Co., assignor.)
Chemcal Foundaton, Incorporated, The. (See Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung, assignor.)
Chemical Foundation, Incorporated, The. (See Zeiss, Firm Carl.)
Chemische Fabrik auf Actien, (vorm. E. Schering,) Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Photographic goods. 40,137; renewed Apr. 21, 1933.
Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heilmann, Gustrow and Heideweg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for nervous diseases. 90,967; renewed Apr. 8, 1933.
Christie & Hoover, Houston, Tex. Malt extracts and syrups. 301,774; Mar. 14; Serial No. 332,176; published Dec. 27, 1932. Class 46.
Cities Service Oil Company, The, Cleveland, Ohio. Gas analyzing apparatus. 301,856; Mar. 14. Class 26.
City Mills Company, Columbus, Ga. Wheat flour. 301,720; Mar. 14; Serial No. 322,356; published Dec. 27, 1932. Class 46.
Coal Carburetor Company, The. (See Price, Thornton W.)
Cochran, Burns & Farnsworth Co., assignor to Howard B. Ritchie, Boston, Mass. Canned lobster, sardines, clams, etc. 92,188; renewed June 24, 1933.
Colle, Claude C., doing business as American Rubber Products Co., Bloomington, Ill. Liquid and dry powder. 301,767; Mar. 14; Serial No. 329,079; published Dec. 27, 1932. Class 6.
Collins Company, The, Collinsville, Conn. Tools. 90,097; renewed Feb. 4, 1933.
Columbia River Packers Association, Astoria, assignor, by mesne assignments, to Portland Trust and Savings Bank, Portland, Oreg. Canned salmon. 92,402; renewed July 8, 1933.
Compagnie Internationale des Pieux Armés Frankignoul, S. A., Liege, Belgium. Machines for manufacturing concrete and hydraulic apparatus, etc. 301,723; Mar. 14; Serial No. 320,230; published Dec. 27, 1932. Class 23.
Cropley, S. J., Aurora, Ill. Scientific testing instruments. 301,711; Mar. 14; Serial No. 331,177; published Dec. 27, 1932. Class 26.
Danahy Packing Company, The, Buffalo, N. Y. Fresh and cured pork. 92,539; renewed July 15, 1933.
Deerfoot Farms Company, Southboro, Mass. Sausages, sausage meat, bacon and lard. 301,811; Mar. 14; Serial No. 331,890; published Dec. 27, 1932. Class 46.
Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Lathes and drill presses. 301,704; Mar. 14; Serial No. 331,949; published Dec. 27, 1932. Class 23.
Dennison Manufacturing Company, Framingham, Mass. Crepe paper. 301,843; Mar. 14; Serial No. 332,033; published Dec. 27, 1932. Class 37.
Detroit-Michigan Stove Company. (See Michigan Stove Company, assignor.)
Dorogi, Dr., és Társa Gummigyar R. T., Budapest, Hungary. Rubber toys. 301,734; Mar. 14; Serial No. 332,448; published Jan. 3, 1933. Class 22.
Eastman Kodak Company, Rochester, N. Y. Photographic film. 301,700; Mar. 14; Serial No. 332,036; published Dec. 27, 1932. Class 26.
Eastman Kodak Company, Rochester, N. Y. Photographic cameras. 301,701; Mar. 14; Serial No. 332,037; published Dec. 27, 1932. Class 26.
Eastman Kodak Company, Rochester, N. Y. Photographic cameras. 301,702; Mar. 14; Serial No. 332,035; published Dec. 27, 1932. Class 26.
Eastman Kodak Company, Rochester, N. Y. Photographic film. 301,703; Mar. 14; Serial No. 332,034; published Dec. 27, 1932. Class 26.
Economic Blade Co. (See Stein, Max.)
Edison Brothers Stores, Inc., St. Louis, Mo. Shoes. 301,760; Mar. 14; Serial No. 331,729; published Dec. 27, 1932. Class 39.
Educational Molds Company. (See Ide, Chandler.)
Ehlenbeck & Platte, Wuppertal-Vohwinkel, Germany. Beds, mattresses, pillows, etc. 301,758; Mar. 14; Serial No. 329,770; published Dec. 27, 1932. Class 32.
80th (Blue Ridge) Division Veterans' Association, The, Pittsburgh, Pa. Periodical. 301,724; Mar. 14; Serial No. 320,023; published Dec. 27, 1932. Class 38.
Enterprise Manufacturing Company, The, Akron, Ohio. Fishing reels. 301,751; Mar. 14; Serial No. 332,408; published Jan. 3, 1933. Class 22.
Erinoid Limited, London, England. Synthetic material. 301,818; Mar. 14; Serial No. 331,301; published Jan. 3, 1933. Class 1.
Eskimo Pie Corporation, New York and Brooklyn, N. Y. Frozen confections. 301,746; Mar. 14; Serial No. 327,136; published Jan. 3, 1933. Class 46.
Faber, A. W., Inc., Newark, N. J. Rulers, squares, triangles, etc. 301,698–9; Mar. 14; Serial Nos. 332,142–3; published Dec. 27, 1932. Class 26.
Farbwerke vorm. Meister Lucius & Brüning, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Bacterial preparation. 90,976; renewed Apr. 8, 1933.
Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Dyestuffs. 91,183; renewed Apr. 22, 1933.
Files, Adino F., doing business as Maumee Color Company, Maumee, Ohio. Coloring materials for foods. 301,848; Mar. 14. Class 6.
Fitchburg Paper Company, Fitchburg, Mass. Papers. 301,841; Mar. 14; Serial No. 332,115; published Dec. 27, 1932. Class 37.
Fletcher, Hal B., San Francisco, Calif. Rust preventive and metal protective paints. 301,840; Mar. 14; Serial No. 332,185; published Dec. 27, 1932. Class 16.
Florence Manufacturing Co., Northampton, Mass., New York, N. Y., and Chicago, Ill., assignor to Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Brushes for toilet purposes. 40,105; renewed Apr. 14, 1933.
Florida Ice and Coal Company, Jacksonville, Fla. Coal. 301,794; Mar. 14; Serial No. 331,923; published Dec. 27, 1932. Class 1.
Foote, G. Clifford, one of the executors of the estate of Henry C. Rowe, deceased, doing business as H. C. Rowe & Company, New Haven, Conn. Oysters. 301,819; Mar. 14; Serial No. 330,422; published Jan. 3, 1933. Class 46.
Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels and napkins, and crepe paper. 301,844; Mar. 14; Serial No. 331,677; published Dec. 27, 1932. Class 37.
Fort Lupton Canning Company, The, Fort Lupton, Colo. Canned tomatoes, peas, and beans. 301,816; Mar. 14; Serial No. 331,951; published Jan. 3, 1933. Class 46.
Frampton Company, Inc., The. (See Verran, H. E., Company, Incorporated, assignor.)
Fred, Walter, Hosiery Mills, Inc., Nashville, Tenn. Hosiery. 301,853; Mar. 14. Class 39.
Frigar, Ellis D., Philadelphia, Pa. Cooked banana chips. 301,813; Mar. 14; Serial No. 331,822; published Dec. 27, 1932. Class 46.
Garcia & Vega, New York, N. Y. Cigars. 92,886; renewed Aug. 5, 1933.
Gay-Day Corporation, Chicago, Ill. Enamel-like product or substance for finishing walls, etc. 301,793; Mar. 14; Serial No. 331,953; published Dec. 27, 1932. Class 16.
Gibson, Guy T., Inc., New York, N. Y. Perfumes and sachets. 301,790; Mar. 14; Serial No. 331,578; published Dec. 27, 1932. Class 6.
Gilman Brothers, Inc., Boston, Mass. Drug preparations. 301,718; Mar. 14; Serial No. 323,452; published Dec. 27, 1932. Class 6.
Glendronach Distillery Company, Limited, The, Glendronach, Scotland. Whiskey. 301,735; Mar. 14; Serial No. 332,450; published Jan. 3, 1933. Class 49.
Goldblatt Bros., Inc., Chicago, Ill. Razor blades. 301,705; Mar. 14; Serial No. 331,927; published Dec. 27, 1932. Class 23.
Greenebaum, J., Tanning Company, Chicago, Ill., Boston, Mass., and Milwaukee, Wis. Leathers. 301,802; Mar. 14; Serial No. 330,178; published Jan. 3, 1933. Class 1.
Ground Gripper Shoe Company, Inc., Harrisburg, Pa. Shoes. 301,759; Mar. 14; Serial No. 327,752; published Dec. 27, 1932. Class 39.
Hahn Department Stores, Inc., Wilmington, Del. Men's and boys' clothing and accessories. 301,762; Mar. 14; Serial No. 325,144; published May 3, 1932. Class 39.
Hall, Horace W., Newton, Mass. Tennis rackets. 301,753; Mar. 14; Serial No. 331,581; published Jan. 3, 1933. Class 22.
Harvard Brewing Company, Lowell, Mass., assignor to The New England Brewing Company, Boston, Mass. Beer, lager-beer, ale, etc. 92,336; renewed July 1, 1933.
Hillerich & Bradsby Co., Louisville, Ky. Baseball bats. 301,737–45; Mar. 14; Serial Nos. 332,481–9; published Jan. 3, 1933. Class 32.
Hollywood-Marvel Products Company, Hollywood, Calif. Perfumes. 301,846; Mar. 14; Serial No. 331,404; published Dec. 27, 1932. Class 6.
Howard-Scott Publishing Co., New York, N. Y. Magazine. 301,801; Mar. 14; Serial No. 330,703; published Dec. 27, 1932. Class 38.
Ice Cream Cake Company, Philadelphia, Pa. Edible food product. 301,815; Mar. 14; Serial No. 330,998; published Dec. 20, 1932. Class 46.
Ide, Chandler, doing business as Educational Molds Company, Los Angeles, Calif. Toy molds. 301,725; Mar. 14; Serial No. 332,532; published Jan. 3, 1933. Class 22.
Illinois Canning Company, The, Hoopeston, Ill. Canned corn. 301,812; Mar. 14; Serial No. 331,825; published Dec. 27, 1932. Class 46.
Individual Drinking Cup Co., Inc., Easton, Pa. Cups and containers. 301,728; Mar. 14; Serial No. 331,619; published Jan. 3, 1933. Class 2.
Iowa Chemical Company, Cedar Rapids, Iowa. Feeds for livestock and poultry. 301,827; Mar. 14; Serial No. 327,780; published Jan. 3, 1933. Class 46.

Jacob, Chas. W., & Allison, New York, N. Y. Vegetable product to be used as basis for paste. 91,578; renewed May 13, 1933.
Jenkins, Jesse M., doing business as Jenkins Associated Industries, New York, N. Y. Pipes. 301,792; Mar. 14; Serial No. 332,043; published Jan. 3, 1933. Class 8.
Johnson, Charles W., assignor to Wm. Kitchen, Houston, Tex. Insecticide. 90,216; renewed Feb. 11, 1933.
Johnston, R. F., Paint Company, The, Cincinnati, Ohio. Varnishes, paints, stains, etc. 301,808; Mar. 14; Serial No. 330,629; published Dec. 27, 1932. Class 16.
Jones, Mary K., Salisbury, N. C. Candy. 301,814; Mar. 14; Serial No. 331,087; published Dec. 27, 1932. Class 46.
Jordan Marsh Company, Boston, Mass. Cloaks, coats, capes, etc. 301,736; Mar. 14; Serial No. 331,467; published Dec. 27, 1932. Class 39.
Kalle & Co., Aktiengesellschaft, Biebrich-on-the-Rhine, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Preparation for treating diseases. 91,218; renewed Apr. 22, 1933.
Kasper, Alfred, doing business as Quieta-Werke Alfred Kasper, Leipzig, Germany. Coffee. 301,826; Mar. 14; Serial No. 331,663; published Dec. 27, 1932. Class 46.
Kennerly, Fles B., doing business as Sweetheart Ice Cream Company, Houston Heights, Houston, Tex. Novelty confection. 301,747; Mar. 14; Serial No. 325,582; published Dec. 27, 1932. Class 46.
Kern, Julius, doing business as Kern Food Products Co., Los Angeles, Calif. Fruit preserves, jellies and honey. 301,849; Mar. 14. Class 46.
Kitchen, Wm. (See Johnson, Charles W., assignor.)
Kohler Co., Kohler, Wis. Paste. 301,822; Mar. 14; Serial No. 331,034; published Jan. 3, 1933. Class 5.
Kops Brothers, Inc., New York, N. Y. Abdominal supporting belts. 301,787; Mar. 14; Serial No. 332,493; published Jan. 3, 1933. Class 44.
Lawrence, A. C., Leather Company, Peabody, Mass. Leather. 301,791; Mar. 14; Serial No. 332,192; published Dec. 27, 1932. Class 1.
Leeman, Stephen, Products Corporation, New York, N. Y. Pottery bowls, jars, vases. 301,768; Mar. 14; Serial No. 329,020; published Dec. 27, 1932. Class 30.
Leggett, Francis H., & Co., Inc., New York, N. Y. Sandwich spreads. 301,717; Mar. 14; Serial No. 313,604; published Dec. 15, 1931. Class 46.
Levin, Nathan, doing business as Star Bottling Works, Philadelphia, Pa. Ginger ale. 301,852; Mar. 14. Class 45.
Libby, McNeill & Libby, Chicago, Ill. Corned beef. 301,779; Mar. 14; Serial No. 331,378; published Dec. 27, 1932. Class 46.
Life Savers, Inc., Port Chester, N. Y. Candy. 301,784; Mar. 14; Serial No. 330,165; published Dec. 27, 1932. Class 46.
Lincoln Fruit Growers Association, Lincoln, Calif. Fresh peaches, apricots, and plums. 301,833; Mar. 14; Serial No. 315,913; published Dec. 27, 1932. Class 46.
Lindsay Farm Bureau Fruit Assn., Lindsay, Calif. Fresh citrus fruits. 301,721; Mar. 14; Serial No. 321,113; published Dec. 27, 1932. Class 46.
Loewith, Julius, Inc., New York, N. Y. Food flavoring extracts. 301,783; Mar. 14; Serial No. 330,427; published Jan. 3, 1933. Class 46.
Marros, Arthur, New York, N. Y. Bird seeds. 301,831; Mar. 14; Serial No. 318,457; published Dec. 27, 1932. Class 46.
Martin Brothers Electric Company, The, Cleveland, Ohio. Driers for the hair, etc. 301,805–6; Mar. 14; Serial Nos. 331,052–3; published Jan. 3, 1933. Class 44.
Maumee Color Company. (See Files, Adino F.)
Mayer, William G., New York, N. Y. Candies and confectionery. 301,820; Mar. 14; Serial No. 331,389; published Jan. 3, 1933. Class 46.
Mayers, Mollie. (See Zwiebelson, Abraham.)
McCrory Stores Corporation, New York, N. Y. Razor blades. 301,706; Mar. 14; Serial No. 331,868; published Dec. 27, 1932. Class 23.
McLeod, Donald, doing business as D. McLeod & Company, Glasgow, Scotland. Gut cast lines and traces, silk lines, artificial bait, etc. 301,750; Mar. 14; Serial No. 329,450; published Jan. 3, 1933. Class 22.
Memphis Press-Scimitar Company, Memphis, Tenn. Section or column appearing in newspaper or periodical. 301,803; Mar. 14; Serial No. 331,263; published Dec. 27, 1932. Class 38.
Michigan Lithographing Co., Grand Rapids, Mich. Catalogs, broadsides, posters, etc. 301,804; Mar. 14; Serial No. 331,115; published Dec. 27, 1932. Class 38.
Michigan Stove Company, assignor to Detroit-Michigan Stove Company, Detroit, Mich. Heating stoves and ranges. 92,902; renewed Aug. 5, 1933.
Missouri State Chickeries, Jefferson City, Mo. Dressed chickens. 301,837; Mar. 14; Serial No. 312,614; published Jan. 3, 1933. Class 46.
Mitchell Brothers, Limited, Glasgow, Scotland. Whisky. 90,561; renewed Mar. 4, 1933.
Moore, Olive A., Oakland, Calif. Sauces. 301,823; Mar. 14; Serial No. 328,922; published Dec. 27, 1932. Class 46.
Movie Stamps, Inc., New York, N. Y. Trading stamps. 301,786; Mar. 14; Serial No. 325,991; published Dec. 27, 1932. Class 38.
Muralo Company, The, assignor to The Muralo Company, Inc., New Brighton, N. Y. Paint. 40,710; renewed June 30, 1933.
Myers, Geo. T., & Co., Seattle, Wash., and Chatham, Alaska, assignor to New England Fish Company, Seattle, Wash. Canned salmon. 90,363–4; renewed Feb. 18, 1933.
Myers, Geo. T., & Co., Seattle, Wash., and Chatham, Alaska, assignor to New England Fish Company, Seattle, Wash. Canned salmon. 90,465; renewed Feb. 25, 1933.
New England Brewing Company, The. (See Harvard Brewing Company, assignor.)
New England Fish Company. (See Myers, Geo. T., & Co., assignor.)
Ohio Butterine Company, The, Cincinnati, Ohio. Oleomargarine. 92,821; renewed July 29, 1933.
Olen, John E., Minneapolis, Minn. Expansion rings. 301,708; Mar. 14; Serial No. 331,750; published Dec. 27, 1932. Class 23.
Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Dumb waiters and guide rail lubricators. 301,709; Mar. 14; Serial No. 331,699; published Dec. 27, 1932. Class 23.
Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Dumb waiters and guide rail lubricators. 301,710; Mar. 14; Serial No. 331,696; published Dec. 27, 1932. Class 23.
Outserts, Incorporated, New York, N. Y. Labels. 301,764; Mar. 14; Serial No. 330,180; published Dec. 27, 1932. Class 37.
Pappenheim, Victor, & Co., Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Dental filling compositions, impression compositions and artificial teeth. 91,240; renewed Apr. 22, 1933.
Pease, C. F., Company, The, Chicago, Ill. Machines for making blue prints and attachments for such machines. 301,722; Mar. 14; Serial No. 320,736; published Dec. 27, 1932. Class 26.
Pennsylvania Forge Company, Philadelphia, assignor to Pennsylvania Forge Corporation, Tacony, Philadelphia, Pa. Steel forgings. 90,912; renewed Apr. 1, 1933.
Perfection Rubber Company, The, Akron, Ohio. Prophylactic rubber articles. 301,789; Mar. 14; Serial No. 331,752; published Jan. 3, 1933. Class 44.
Permagloss Manufacturing Company. (See Browne, Herbert J.)
Perth Shoe Company Limited, Perth, Ontario, Canada. Boots, shoes, slippers, and sandals. 301,752; Mar. 14; Serial No. 331,608; published Dec. 27, 1932. Class 39.
Pharmazeutische Industrie A. G., Vienna, Austria. Medicated blood-stopping gauze, wadding, and bandage gauze. 301,788; Mar. 14; Serial No. 332,046; published Jan. 3, 1933. Class 44.
Pierce, F. O., Company, Brooklyn, N. Y. Paints, waterproof varnish, and painters' wall size. 301,845; Mar. 14; Serial No. 331,658; published Dec. 27, 1932. Class 16.
Pitcairn Aviation, Inc., Philadelphia, Pa. Publication. 301,715; Mar. 14; Serial No. 255,130; published Nov. 8, 1927. Class 38.
Porth and Haas Company, New York, N. Y. Preparation for the relief of insect bites. 301,769; Mar. 14; Serial No. 329,096; published Jan. 3, 1933. Class 6.
Portland Trust and Savings Bank. (See Columbia River Packers Association, assignor.)
Postum Company, Inc., New York, N. Y. Cereal foods. 301,785; Mar. 14; Serial No. 329,385; published Jan. 3, 1933. Class 46.
Poth's, F. A., Sons, Inc., Philadelphia, Pa. Malt beverage. 301,730–2; Mar. 14; Serial Nos. 332,416–18; published Jan. 3, 1933. Class 48.
Poth's, F. A., Sons, Inc., Philadelphia, Pa. Malt beverage. 301,748; Mar. 14; Serial No. 332,415; published Jan. 3, 1933. Class 48.
Pratt & Lambert-Inc., Buffalo, N. Y. Varnishes, paint enamels, lacquers, etc. 301,847; Mar. 14; Serial No. 331,320; published Dec. 27, 1932. Class 16.
Price, Thornton W., doing business as The Coal Carburetor Company, New Brunswick, N. J. Draft control for furnaces. 301,839; Mar. 14; Serial No. 305,826; published Dec. 27, 1932. Class 34.
Pro-Phy-Lac-Tic Brush Company. (See Florence Manufacturing Co., assignor.)
Quieta-Werke Alfred Kasper. (See Kasper, Alfred.)
Ralston Purina Company, St. Louis, Mo. Baked rye flour product. 301,836; Mar. 14; Serial No. 313,509; published Dec. 27, 1932. Class 46.
Remington Arms Company, Inc., Bridgeport, Conn., and Ilion and New York, N. Y. Firearms and parts thereof, shot shells, blank cartridges, etc. 301,757; Mar. 14; Serial No. 331,228; published Jan. 3, 1933. Class 9.
Republic Stamping & Enameling Company, The, Canton, Ohio. Table and cooking hollow ware of enameled base metal. 301,851; Mar. 14. Class 13.
Ritchie, Howard B. (See Cochran, Burns & Farnsworth Co., assignor.)
Riverside & Dan River Cotton Mills, Inc., Danville, Va. Cotton broadcloth shirting in the piece. 301,855; Mar. 14. Class 42.
Rosenkrantz, Eva., Los Angeles, Calif. Hair grower. 301,807; Mar. 14; Serial No. 330,712; published Dec. 27, 1032. Class 6.

Roth Creations, Incorporated, New York, N. Y. Corsets, girdles, underwear, etc. 301,749; Mar. 14; Serial No. 331,413; published Dec. 27, 1932. Class 39.
Rowe, Henry C. (See Foote, G. Clifford.)
Saks & Company, New York, N. Y. Unfilled base metal compacts. 301,729; Mar. 14; Serial No. 328,875; published Sept. 6, 1932. Class 2.
Savage Arms Corporation. (See Stevens, J., Arms & Tool Co., assignor.)
Schutter Johnson Candy Company Inc., Chicago, Ill. Candy. 301,835; Mar. 14; Serial No. 315,284; published Dec. 27, 1932. Class 46.
Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Whiskey and potable spirits. 301,726; Mar. 14; Serial No. 330,494; published Jan. 3, 1933. Class 49.
Sheffield Dentifrice Co., New London, Conn., and New York, N. Y., to Sheffield Dentifrice Company, New London, Conn. Cordial. 92,728; renewed July 22, 1933.
Siemens-Planiawerke A. G. fur Kohlefabrikate, Berlin-Lichtenberg, Germany. Asbestos, clay, silica, etc. 301,716; Mar. 14; Serial No. 286,341; published Dec. 27, 1932. Class 1.
Silica Products Corporation, New York, N. Y. Varnishes and paints. 301,797; Mar. 14; Serial No. 331,630; published Dec. 27, 1932. Class 16.
Sloane-Blabon Corporation, Trenton, N. J., and Nicetown, Philadelphia, Pa. Linoleum paste and cement. 301,842; Mar. 14; Serial No. 332,056; published Dec. 27, 1932. Class 5.
Smith, Woodhouse & Co. Ltd., London, England, and Oporto, Portugal. Port wine. 301,733; Mar. 14; Serial No. 332,427; published Jan. 3, 1933. Class 47.
Southern Coffee Mills, Ltd., New Orleans, La. Coffee. 301,775; Mar. 14; Serial No. 331,876; published Jan. 3, 1933. Class 46.
Southern Dairies, Inc., Washington, D. C. Frozen confections. 301,719; Mar. 14; Serial No. 322,838; published July 19, 1932. Class 46.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Paints and painters' materials. 92,838; renewed July 29, 1933.
Standard Oil Company, Whiting, Ind., and Chicago, Ill. Cylinder oil, engine oil, and gas-engine oil. 92,839; renewed July 29, 1933.
Star Bottling Works. (See Levin, Nathan.)
Stein, Max, doing business as Economic Blade Co., New York, N. Y. Razor blades. 301,697; Mar. 14; Serial No. 332,164; published Dec. 27, 1932. Class 23.
Stevens, J., Arms & Tool Co., Chicopee Falls, Mass., assignor to Savage Arms Corporation, New York and Utica, N. Y. Firearms. 91,391; renewed Apr. 29, 1933.
Sturtevant, B. F., Company, Boston, Mass. Air conditioning apparatus. 301,707; Mar. 14; Serial No. 331,807; published Dec. 27, 1932. Class 34.
Sweetheart Ice Cream Company. (See Kennerly, Pies B.)
Syndicate Publishing Co. Inc., New York, N. Y. Magazine or printed periodical. 301,773; Mar. 14; Serial No. 326,400; published Dec. 27, 1932. Class 38.
Talens & Son, Inc., Irvington, N. J. Retouching and picture varnish, and painting medium. 301,796; Mar. 14; Serial No. 331,761; published Dec. 27, 1932. Class 16.
Taylor, Taylor & Hobson, Limited, Leicester, England. Cinematographic projection lenses. 301,695–6; Mar. 14; Serial Nos. 332,165–6; published Dec. 27, 1932. Class 26.
Tetlow, Henry, Company, Philadelphia, Pa. Face powder, skin lotions, astringents. 301,830; Mar. 14; Serial No. 318,469; published Dec. 27, 1932. Class 6.
Thomas, William G., doing business as W. G. Thomas, Pharmacist, Varina, N. C. Medicinal preparation. 301,727; Mar. 14; Serial No. 331,029; published Dec. 6, 1932. Class 6.
Todd, E. M., Co., Richmond, Va. Packing house products. 301,810; Mar. 14; Serial No. 331,479; published Dec. 27, 1932. Class 46.
Tudela, Emilio, New York, N. Y. Canned sardines. 301,772; Mar. 14; Serial No. 326,994; published Jan. 3, 1933. Class 46.
United Drug Company, as assignee of Vex-All Company, Inc., New York, N. Y., to United Drug Company, Boston, Mass., successor. Insecticide. 92,746; renewed July 22, 1933.
Universal Button Fastening & Button Company, Detroit, Mich. Buttons. 301,756; Mar. 14; Serial No. 331,236; published Dec. 27, 1932. Class 40.
Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, New York, N. Y., and Wilmington, Del. Combinations of quinin and phenetidin. 40,116; renewed Apr. 14, 1933.
Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung, Frankfort-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Salts of diorthoöxydibensalaceton. 40,117; renewed Apr. 14, 1933.
Verran, H. E., Company, Incorporated, assignor to The Frampton Company, Inc., New York, N. Y. Thread and yarn. 91,300; renewed Apr. 22, 1933.
Vex-All Company, Inc. (See United Drug Company, assignor.)
Vitrolite Company, The, Parkersburg, W. Va. Tiles. 91,050; renewed Apr. 8, 1933.
Waffled Steak Machines, Inc., Buffalo, N. Y. Steaks. 301,780; Mar. 14; Serial No. 331,016; published Dec. 27, 1932. Class 46.
Walker, Joe E., Grand Rapids, Mich. Dressed poultry. 301,824; Mar. 14; Serial No. 328,569; published Dec. 27, 1932. Class 46.
Warren Packing Company, Portland, Oreg. Canned salmon. 91,144; renewed Apr. 15, 1933.
Wason Bros. Co., Inc., Seattle, Wash. Coffee, tea, table syrup, etc. 301,838; Mar. 14; Serial No. 309,182; published Jan. 3, 1933. Class 46.
Wellcome, Henry S., London, England, assignor, by mesne assignments, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y. Malt extract. 92,492; renewed July 8, 1933.
Western Corset Company Inc., Los Angeles, Calif. Brassières, girdles, garter belts, etc. 301,755; Mar. 14; Serial No. 331,521; published Dec. 27, 1932. Class 39.
Whitall Tatum Company, Millville, N. J. Glass bottles, jars, pots, etc. 301,766; Mar. 14; Serial No. 329,877; published Dec. 27, 1932. Class 33.
Wilcox, Crittenden and Company, Incorporated, Middletown, Conn. Combination oil and electric marine lamps. 301,714; Mar. 14; Serial No. 326,406; published Dec. 27, 1932. Class 34.
Witt and Hamm, Boston, Mass. Atomizers. 301,834; Mar. 14; Serial No. 313,987; published Jan. 3, 1933. Class 44.
Zeiss, Firm, Carl, Jena, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Photographic cameras. 40,139; renewed Apr. 21, 1933.
Zeiss, Firm, Carl, Jena, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Lens instruments. 40,140; renewed Apr. 21, 1933.
Zeiss, Firm, Carl, Jena, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Optical systems consisting of one or several lenses. 40,141; renewed Apr. 21, 1933.
Zwiebelson, Abraham, doing business as Mollie Mayers, New York, N. Y. Brassières. 301,754; Mar. 14; Serial No. 331,525; published Dec. 27, 1932. Class 39.

LIST OF REGISTRANTS OF LABELS

Ace Products Company, Inc., New York, N. Y. E-Z The E-Z Grater and Entirely Different Kitchen Necessity. For Graters. 41,831; Mar. 14.
Beech-Nut Packing Company, Canajoharie, N. Y. Beech-Nut Assorted Drops. For Assorted Drops. 41,832; Mar. 14.
Bird & Son, Inc., East Walpole, Mass. Arch Grasp Arch Support Shoes. For Shoes. 41,833; Mar. 14.
Bozzo, Joe, et al. (See Eagle Washing Water Company, assignor.)
Comet Envelope & Printing Co., New York, N. Y. Liquid Latex. For Prophylactic Rubbers. 41,834; Mar. 14.
Dickinson, E. E., Co., The, Essex, Conn. Dickinson's Witch Hazel. For Witch Hazel. 41,835–6; Mar. 14.
Eagle Washing Water Company, assignor to Pasquale Giordano and Joe Bozzo, doing business as Eagle Washing Water Co., Chicago, Ill. Eagle Bleaching Water. For Bleaching Water. 41,837; Mar. 14.
Fillmore Citrus Association, Fillmore, Calif. Cycle. For Oranges. 41,838; Mar. 14.
Fillmore Citrus Association, Fillmore, Calif. Glider. For Oranges. 41,839; Mar. 14.
General Products, New York, N. Y. Fire-Pruf Ash Trays. For Ash Trays. 41,840; Mar. 14.
Giordano, Pasquale, et al. (See Eagle Washing Water Company, assignor.)
Good Seed Company, Inc., Fredonia, N. Y. Good Seed. For Lawn Grass Seed. 41,841; Mar. 14.
Goudey Gum Co., The, Boston, Mass. Jungle Gum. For Gum. 41,842; Mar. 14.
Groever-Lotspeich Mfg. Co. Inc., Knoxville, Tenn. Red Ribbon Blend Vanilla and Vanillin. For Blend of Vanilla and Vanillin Used for Flavoring Deserts, Ice Cream, Cakes, Etc. 41,843; Mar. 14.
Harris, P. E., & Co., Seattle, Wash. Queen 'O Quality. For Canned Salmon. 41,844; Mar. 14.

Miller, George C., & Co. Inc., Boston, Mass. Guarantee Package. For Chocolates. 41,845; Mar. 14.
Miller, George C., & Co. Inc., Boston, Mass. Miller Made Guarantee Package Chocolates. For Chocolates. 41,846; Mar. 14.
Russell Box Company, Medford, Mass. Animal Crackers. For Animal Crackers. 41,847; Mar. 14.
Schumacher, F. E., Co., The, Hartville, Ohio. Reddy-Loc. For Window Screens. 41,848; Mar. 14.
Sockloff, Abraham, New York, N. Y. Paint Eltona Products. For Paint Products. 41,849; Mar. 14.

LIST OF REGISTRANTS OF PRINTS

Page Milling Co., The, Luray, Va. Favorite Feeds. For Turkey Feeds. 14,069; Mar. 14.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Asbestos, clay, silica, etc. Siemens-Planiawerke A. G. fur Kohlefabrikate. 301,716; Mar. 14; Serial No. 286,341; published Dec. 27, 1932.
Cellulose pulps and felts made therefrom. Brown Company. 301,817; Mar. 14; Serial No. 331,667; published Jan. 3, 1933.
Coal. Florida Ice and Coal Company. 301,794; Mar. 14; Serial No. 331,923; published Dec. 27, 1932.
Leather. A. C. Lawrence Leather Company. 301,791; Mar. 14; Serial No. 332,192; published Dec. 27, 1932.
Leathers. J. Greenebaum Tanning Company. 301,802; Mar. 14; Serial No. 330,178; published Jan. 3, 1933.
Synthetic material. Erinoid Limited. 301,818; Mar. 14; Serial No. 331,301; published Jan. 3, 1933.
Vegetable product to be used as basis for paste. Chas. W. Jacob & Allison. 91,578; renewed May 13, 1933.

CLASS 2

Compacts, Unfilled base metal. Saks & Company. 301,729; Mar. 14; Serial No. 328,875; published Sept. 6, 1932.
Cups and containers. Individual Drinking Cup Co. 301,728; Mar. 14; Serial No. 331,619; published Jan. 3, 1933.

CLASS 5

Liquid preparation for application to the under surface of rugs. Air-Way Electric Appliance Corporation. 301,821; Mar. 14; Serial No. 331,363; published Jan. 3, 1933.
Paste. Kohler Co. 301,822; Mar. 14; Serial No. 331,034; published Jan. 3, 1933.
Paste and cement, Linoleum. Sloane-Blabon Corporation. 301,842; Mar. 14; Serial No. 332,056; published Dec. 27, 1932.

CLASS 6

Bacterial preparation. Farbwerke vorm. Meister Lucius & Brüning. 90,976; renewed Apr. 8, 1933.
Coloring materials for foods. A. F. Files. 301,848; Mar. 14.
Drug preparations. Gilman Brothers, Inc. 301,718; Mar. 14; Serial No. 323,452; published Dec. 27, 1932.
Dyestuffs. Farbwerke vorm. Meister Lucius & Brüning. 91,183; renewed Apr. 22, 1933.
Extract, Malt. H. S. Wellcome. 92,492; renewed July 8, 1933.
Hair grower. E. Rosenkrants. 301,807; Mar. 14; Serial No. 330,712; published Dec. 27, 1932.
Insecticide. C. W. Johnson. 90,216; renewed Feb. 11, 1933.
Insecticide. United Drug Company. 92,746; renewed July 22, 1933.
Lotion for treating the skin. J. W. Brooks & Co. Incorporated. 92,041; renewed June 17, 1933.
Medicinal preparation. W. G. Thomas. 301,727; Mar. 14; Serial No. 331,029; published Dec. 6, 1932.
Perfumes. Hollywood-Marvel Products Company. 301,846; Mar. 14; Serial No. 331,404; published Dec. 27, 1932.
Perfumes and sachets. Guy T. Gibson, Inc. 301,790; Mar. 14; Serial No. 331,578; published Dec. 27, 1932.
Powder, Liquid and dry. C. C. Colle. 301,767; Mar. 14; Serial No. 329,079; published Dec. 27, 1932.
Powder, skin lotions, and astringents, Face and talcum. Henry Tetlow Company. 301,830; Mar. 14; Serial No. 318,469; published Dec. 27, 1932.
Preparation for the relief of insect bites. Porth and Haas Company. 301,769; Mar. 14; Serial No. 329,096; published Jan. 3, 1933.
Preparation for treating diseases. Kalle & Co., Aktiengesellschaft. 91,218; renewed Apr. 22, 1933.
Quinin and phenetidin, Combinations of. Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung. 40,116; renewed Apr. 14, 1933.
Remedy for diseases. Bacorn Company. 92,779; renewed July 29, 1933.
Remedy for nervous diseases. Chemische Fabrik Güstrow, Dr. Hillringer & Dr. Heilmann. 90,967; renewed Apr. 8, 1933.
Salts of diorthoöxydibensalaceton. Vereinigte Chininfabriken Zimmer & Co. Ges. mit beschränkter Haftung. 40,117; renewed Apr. 14, 1933.
Salves. Dr. Bayer és társa. 90,954; renewed Apr. 8, 1933.

CLASS 8

Pipes. J. M. Jenkins. 301,792; Mar. 14; Serial No. 332,043; published Jan. 3, 1933.

CLASS 9

Firearms. J. Stevens Arms & Tool Co. 91,391; renewed Apr. 29, 1933.
Firearms and parts thereof, shot shells, blank cartridges, etc. Remington Arms Company. 301,757; Mar. 14; Serial No. 331,228; published Jan. 3, 1933.

CLASS 12

Tiles. Vitrolite Company. 91,050; renewed Apr. 8, 1933.

CLASS 13

Ware of enameled base metal, Table and cooking hollow. Republic Stamping & Enameling Company. 301,851; Mar. 14.

CLASS 14

Steel forgings. Pennsylvania Forge Company. 90,912; renewed Apr. 1, 1933.

CLASS 15

Oil, Cylinder, engine and gas-engine. Standard Oil Company. 92,839; renewed July 29, 1933.

CLASS 16

Cleaners and polishers for motor cars, furniture, etc. G. H. Callaghan. 301,795; Mar. 14; Serial No. 331,850; published Dec. 27, 1932.
Cleaning and polishing preparation. H. J. Browne. 301,798; Mar. 14; Serial No. 331,424; published Dec 27, 1932.
Enamel-like product or substance for finishing walls, etc. Gay-Day Corporation. 301,793; Mar. 14; Serial No. 331,953; published Dec. 27, 1932.
Ester gums and plastic resins, Soluble. Beck, Koller & Company. 301,770; Mar. 14; Serial No. 329,930; published Dec. 27, 1932.
Paint. Muralo Company. 40,710; renewed June 30, 1933.
Paints and painters' materials. Standard Oil Company. 92,838; renewed July 29, 1933.
Paints, Rust preventive and metal protective. H. B. Fletcher. 301,840; Mar. 14; Serial No. 332,185; published Dec. 27, 1932.
Paints, varnishes, lacquers, etc. Beck, Koller & Company. 301,765; Mar. 14; Serial No. 329,924; published Dec. 27, 1932.
Paints, waterproof varnish, and painters' wall size. F. O. Pierce Company. 301,845; Mar. 14; Serial No. 331,658; published Dec. 27, 1932.
Resins, Soluble plastic. Beck, Koller & Company. 301,771; Mar. 14; Serial No. 329,927; published Dec. 27, 1932.
Varnish, and painting medium, Retouching and picture. Talens & Son, Inc. 301,796; Mar. 14; Serial No. 331,761; published Dec. 27, 1932.
Varnishes and paints. Silica Products Corporation. 301,797; Mar. 14; Serial No. 331,630; published Dec. 27, 1932.
Varnishes, paint enamels, lacquers, etc. Pratt & Lambert-Inc. 301,847; Mar. 14; Serial No. 331,320; published Dec. 27, 1932.
Varnishes, paints, stains, etc. R. F. Johnston Paint Company. 301,808; Mar. 14; Serial No. 330,629; published Dec. 27, 1932.

CLASS 17

Cigars. Garcia & Vega. 92,886; renewed Aug. 5, 1933.

CLASS 22

Baseball bats. Hillerich & Bradsby Co. 301,737–45; Mar. 14; Serial Nos. 332,481–9; published Jan. 3, 1933.

Fishing reels. Enterprise Manufacturing Company. 301,751; Mar. 14; Serial No. 332,408; published Jan. 3, 1933.
Gut cast lines and traces, Silk lines, artificial bait, etc. D. McLeod. 301,750; Mar. 14; Serial No. 329,450; published Jan. 3, 1933.
Tennis rackets. H. W. Hall. 301,753; Mar. 14; Serial No. 331,581; published Jan. 3, 1933.
Toy molds. C. Ide. 301,725; Mar. 14; Serial No. 332,532; published Jan. 3, 1933.
Toys, Rubber. Dr. Dorogi és Társa Gummigyar R. T. 301,734; Mar. 14; Serial No. 332,448; published Jan. 3, 1933.

CLASS 23

Dumb waiters and guide rail lubricators. Otis Elevator Company. 301,709; Mar. 14; Serial No. 331,699; published Dec. 27, 1932.
Dumb waiters and guide rail lubricators. Otis Elevator Company. 301,710; Mar. 14; Serial No. 331,696; published Dec. 27, 1932.
Engines, Aircraft. Bristol Aeroplane Company Limited. 301,712; Mar. 14; Serial No. 330,777; published Dec. 27, 1932.
Lathes and drill presses. Delta Manufacturing Company. 301,704; Mar. 14; Serial No. 331,949; published Dec. 27, 1932.
Machines for manufacturing concrete, hydraulic apparatus, etc. Compagnie Internationale des Pieux Armés Frankignoul, S. A. 301,723; Mar. 14; Serial No. 320,230; published Dec. 27, 1932.
Razor blades. Goldblatt Bros., Inc. 301,705; Mar. 14; Serial No. 331,927; published Dec. 27, 1932.
Razor blades. McCrory Stores Corporation. 301,706; Mar. 14; Serial No. 331,868; published Dec. 27, 1932.
Razor blades. M. Stein. 301,697; Mar. 14; Serial No. 332,164; published Dec. 27, 1932.
Rings, Expansion. J. E. Olen. 301,708; Mar. 14; Serial No. 331,750; published Dec. 27, 1932.
Tools. Collins Company. 90,097; renewed Feb. 4, 1933.

CLASS 26

Cameras. Eastman Kodak Company. 301,701; Mar. 14; Serial No. 332,037; published Dec. 27, 1932.
Cameras. Eastman Kodak Company. 301,702; Mar. 14; Serial No. 332,035; published Dec. 27, 1932.
Cameras, Photographic. Firm Carl Zeiss. 40,139; renewed Apr. 21, 1933.
Film. Eastman Kodak Company. 301,700; Mar. 14; Serial No. 332,036; published Dec. 27, 1932.
Film. Eastman Kodak Company. 301,703; Mar. 14; Serial No. 332,034; published Dec. 27, 1932.
Gas analyzing apparatus. Cities Service Oil Company. 301,856; Mar. 14.
Lens instruments. Firm Carl Zeiss. 40,140; renewed Apr. 21, 1933.
Lenses, Projection. Taylor, Taylor & Hobson, Limited. 301,695–6; Mar. 14; Serial Nos. 332,165–6; published Dec. 27, 1932.
Machine for making blue prints and attachments for such machines. C. F. Pease Company. 301,722; Mar. 14; Serial No. 320,736; published Dec. 27, 1932.
Mountings, Ophthalmic. Bausch & Lomb Optical Company. 301,850; Mar. 14.
Optical systems. Firm Carl Zeiss. 40,141; renewed Apr. 21, 1933.
Photographic goods. Chemische Fabrik auf Actien (vorm. E. Scherin.) 40,137; renewed Apr. 21, 1933.
Rulers, squares, triangles, etc. A. W. Faber, Inc. 301,698–9; Mar. 14; Serial Nos. 332,142–3; published Dec. 27, 1932.
Scientific testing instruments. S. J. Cropley. 301,711; Mar. 14; Serial No. 331,177; published Dec. 27, 1932.

CLASS 29

Brushes. Florence Manufacturing Co. 40,105; renewed Apr. 14, 1933.

CLASS 30

Bowls, jars, vases, Pottery. Stephen Leeman Products Corporation. 301,768; Mar. 14; Serial No. 329,020; published Dec. 27, 1932.

CLASS 32

Beds, benches, bookcases, etc. Baker Furniture Factories, Inc. 301,713; Mar. 14; Serial No. 329,395; published Oct. 4, 1932.
Beds, mattresses, pillows, etc. Ehlenbeck & Platte. 301,758; Mar. 14; Serial No. 329,770; published Dec. 27, 1932.

CLASS 33

Bottles, jars, pots, etc., Glass. Whitall Tatum Company. 301,766; Mar. 14; Serial No. 329,877; published Dec. 27, 1932.
Glassware. Geo. Borgfeldt & Co. 301,864; Mar. 14.

CLASS 34

Air conditioning apparatus. B. F. Sturtevant Company. 301,707; Mar. 14; Serial No. 331,807; published Dec. 27, 1932.
Draft control for furnaces. T. W. Price. 301,839; Mar. 14; Serial No. 305,826; published Dec. 27, 1932.
Lamps, Marine. Wilcox, Crittenden and Company. 301,714; Mar. 14; Serial No. 326,406; published Dec. 27, 1932.
Stoves and ranges, Heating. Michigan Stove Company. 92,902; renewed Aug. 5, 1933.

CLASS 37

Labels. Outserts, Incorporated. 301,764; Mar. 14; Serial No. 330,180; published Dec. 27, 1932.
Paper, Crepe. Dennison Manufacturing Company. 301,843; Mar. 14; Serial No. 332,033; published Dec. 27, 1932.
Paper, paper towels and napkins, and crepe paper, Toilet. Fort Howard Paper Company. 301,844; Mar. 14; Serial No. 331,677; published Dec. 27, 1932.
Papers. Fitchburg Paper Company. 301,841; Mar. 14; Serial No. 332,115; published Dec. 27, 1932.

CLASS 38

Catalogs, broadsides, posters, etc. Michigan Lithographing Co. 301,804; Mar. 14; Serial No. 331,115; published Dec. 27, 1932.
Magazine. Howard-Scott Publishing Co. 301,801; Mar. 14; Serial No. 330,703; published Dec. 27, 1932.
Magazine or periodical. Syndicate Publishing Co. Inc. 301,773; Mar. 14; Serial No. 326,400; published Dec. 27, 1932.
Periodical. 80th (Blue Ridge) Division Veterans' Association. 301,724; Mar. 14; Serial No. 320,023; published Dec. 27, 1932.
Publication. Pitcairn Aviation, Inc. 301,715; Mar. 14; Serial No. 255,130; published Nov. 8, 1927.
Publications. Central United National Bank of Cleveland. 301,763; Mar. 14; Serial No. 330,593; published Dec. 27, 1932.
Publications. Central United National Bank of Cleveland. 301,809; Mar. 14; Serial No. 330,594; published Dec. 27, 1932.
Section or column appearing in newspaper or periodical. Memphis Press-Scimitar Company. 301,803; Mar. 14; Serial No. 331,263; published Dec. 27, 1932.
Stamps, Trading. Movie Stamps, Inc. 301,786; Mar. 14; Serial No. 325,991; published Dec. 27, 1932.

CLASS 39

Boots, shoes, slippers, and sandals. Perth Shoe Company Limited. 301,752; Mar. 14; Serial No. 331,608; published Dec. 27, 1932.
Brassières. A. Zwiebelson. 301,754; Mar. 14; Serial No. 331,525; published Dec. 27, 1932.
Brassières, girdles, garter belts, etc. Western Corset Company Inc. 301,755; Mar. 14; Serial No. 331,521; published Dec. 27, 1932.
Cloaks, coats, capes, etc. Jordan Marsh Company. 301,736; Mar. 14; Serial No. 331,467; published Dec. 27, 1932.
Clothing and accessories, Men's and boys'. Hahn Department Stores, Inc. 301,762; Mar. 14; Serial No. 325,144; published May 3, 1932.
Corsets, corselettes, girdles, etc. Arleese, Inc. 301,761; Mar 14; Serial No. 331,136; published Dec. 27, 1932.
Corsets, girdles, underwear, etc. Roth Creations, Incorporated. 301,749; Mar. 14; Serial No. 331,413; published Dec. 27, 1932.
Hosiery. Walter Fred Hosiery Mills, Inc. 301,853; Mar. 14.
Shoes. Edison Brothers Stores, Inc. 301,760; Mar. 14; Serial No. 331,729; published Dec. 27, 1932.
Shoes. Ground Gripper Shoe Company. 301,759; Mar. 14; Serial No. 327,752; published Dec. 27, 1932.

CLASS 40

Buttons. Universal Button Fastening & Button Company. 301,756; Mar. 14; Serial No. 331,236; published Dec. 27, 1932.

CLASS 42

Shirting in the piece, Cotton broadcloth. Riverside and Dan River Cotton Mills, Inc. 301,855; Mar. 14.

CLASS 43

Thread and yarn. H. E. Verran Company. 91,300; renewed Apr. 22, 1933.

CLASS 44

Abdominal supporting belts. Kops Brothers, Inc. 301,787; Mar. 14; Serial No. 332,493; published Jan. 3, 1933.
Atomizers. Witt and Hamm. 301,834; Mar. 14; Serial No. 313,987; published Jan. 3, 1933.
Dental filling and impression compositions, and artificial teeth. Victor Pappenheim & Co. 91,240; renewed Apr. 22, 1933.
Driers for the hair, etc. Martin Brothers Electric Company. 301,805–6; Mar. 14; Serial Nos. 331,052–3; published Jan. 3, 1933.
Gauze, wadding, and bandage gauze. Pharmaceutische Industrie A. G. 301,788; Mar. 14; Serial No. 332,046; published Jan. 3, 1933.
Prophylactic rubber articles. Perfection Rubber Company. 301,789; Mar. 14; Serial No. 331,752; published Jan. 3, 1933.

CLAS845

Ginger ale. N. Levin. 301,852; Mar. 14.

CLASS 46

Banana chips, Cooked. E. D. Frigar. 301,813; Mar. 14; Serial No. 331,822; published Dec. 27, 1932.
Beef, Corned. Libby, McNeill & Libby. 301,779; Mar. 14; Serial No. 331,378; published Dec. 27, 1932.
Beef, veal, mutton, lamb, etc. Brooklyn Hotel Supply Co. 301,832; Mar. 14; Serial No. 317,594; published Dec. 27, 1932.
Candies and confectionery. W. G. Mayer. 301,820; Mar. 14; Serial No. 331,889; published Jan. 3, 1933.
Candy. M. K. Jones. 301,814; Mar. 14; Serial No. 331,087; published Dec. 27, 1932.
Candy. Life Savers, Inc. 301,784; Mar. 14; Serial No. 330,165; published Dec. 27, 1932.
Candy. Schutter Johnson Candy Company Inc. 301,835; Mar. 14; Serial No. 315,284; published Dec. 27, 1932.
Canned corn. Illinois Canning Company. 301,812; Mar. 14; Serial No. 331,825; published Dec. 27, 1932.
Canned lobster, sardines, clams, etc. Cochran, Burns & Farnsworth Co. 92,188; renewed June 24, 1933.
Canned salmon. Columbia River Packers Association. 92,402; renewed July 8, 1933.
Canned salmon. Geo. T. Myers & Co. 90,363–4; renewed Feb. 18, 1933.
Canned salmon. Geo. T. Myers & Co. 90,465; renewed Feb. 25, 1933.
Canned salmon. Warren Packing Company. 91,144; renewed Apr. 15, 1933.
Canned sardines. E. Tudela. 301,772; Mar. 14; Serial No. 326,994; published Jan. 3, 1933.
Canned tomatoes, peas and beams. Fort Lupton Canning Company. 301,816; Mar. 14; Serial No. 331,951; published Jan. 3, 1933.
Cereal foods. Postum Company. 301,785; Mar. 14; Serial No. 329,385; published Jan. 3, 1933.
Chickens, Dressed. Missouri State Chickeries. 301,837; Mar. 14; Serial No. 312,614; published Jan. 3, 1933.
Cocktail made of conch juice. Bahama Isles Foods Corporation. 301,776–7; Mar. 14; Serial Nos. 331,536–7; published Jan. 3, 1933.
Coffee. A. Kasper. 301,826; Mar. 14; Serial No. 331,663; published Dec. 27, 1932.
Coffee. Southern Coffee Mills, Inc. 301,775; Mar. 14; Serial No. 331,876; published Jan. 3, 1933.
Coffee, tea, table syrup, etc. Wason Bros. Co. 301,838; Mar. 14; Serial No. 309,182; published Jan. 3, 1933.
Conch chowder and/or broth. Bahama Isles Foods Corporation. 301,778; Mar. 14; Serial No. 331,533; published Jan. 3, 1933.
Confection, Novelty. P. B. Kennerly. 301,747; Mar. 14; Serial No. 325,582; published Dec. 27, 1932.
Confections, Frozen. Eskimo Pie Corporation. 301,746; Mar. 14; Serial No. 327,136; published Jan. 3, 1933.
Confections, Frozen. Southern Dairies, Inc. 301,719; Mar. 14; Serial No. 322,838; published July 19, 1932.
Extracts and syrups, Malt. Christie & Hoover. 301,774; Mar. 14; Serial No. 332,176; published Dec. 27, 1932.
Extracts, Food flavoring. Julius Loewith, Inc. 301,783; Mar. 14; Serial No. 330,427; published Jan. 3, 1933.
Feeds for livestock and poultry. Iowa Chemical Company. 301,827; Mar. 14; Serial No. 327,780; published Jan. 3, 1933.
Flour product, Baked rye. Ralston Purina Company. 301,836; Mar. 14; Serial No. 313,509; published Dec. 27, 1932.
Flour, Wheat. City Mills Company. 301,720; Mar. 14; Serial No. 322,356; published Dec. 27, 1932.
Food product, Edible. Ice Cream Cake Company. 301,815; Mar. 14; Serial No. 330,998; published Dec. 20, 1932.
Fruits, Fresh citrus. Lindsay Farm Bureau Fruit Assn. 301,721; Mar. 14; Serial No. 321,113; published Dec. 27, 1932.
Milk, cream, butter, etc. Henry Becker & Son, Inc. 301,828; Mar. 14; Serial No. 319,850; published June 7, 1932.
Milk, Malted. Borden's Milk Products Company. 301,829; Mar. 14; Serial No. 318,619; published Dec. 27, 1932.
Mustard, Prepared. August Bauer's Sons, Inc. 301,781; Mar. 14; Serial No. 330,806; published Dec. 27, 1932.
Oleomargarine. Ohio Butterine Company. 92,821; renewed July 29, 1933.
Oysters. G. C. Foote. 301,819; Mar. 14; Serial No. 330,422; published Jan. 3, 1933.
Packing house products. E. M. Todd Co. 301,810; Mar. 14; Serial No. 331,479; published Dec. 27, 1932.
Peaches, apricots, and plums, Fresh. Lincoln Fruit Growers Association. 301,833; Mar. 14; Serial No. 315,918; published Dec. 27, 1932.
Pork. Danahy Packing Company. 92,539; renewed July 15, 1933.
Poultry, Dressed. J. E. Walker. 301,824; Mar. 14; Serial No. 328,569; published Dec. 27, 1932.
Preserves, jellies, and honey, Fruit. J. Kern. 301,849; Mar. 14.
Sandwich spreads. Francis H. Leggett & Co. 301,717; Mar. 14; Serial No. 313,604; published Dec. 15, 1931.
Sauces. O. A. Moore. 301,823; Mar. 14; Serial No. 328,922; published Dec. 27, 1932.
Sausages, sausage meat, bacon, and lard. Deerfoot Farms Company. 301,811; Mar. 14; Serial No. 331,890; published Dec. 27, 1932.
Seeds, Bird. A. Marros. 301,831; Mar. 14; Serial No. 318,457; published Dec. 27, 1932.
Steaks. Waffled Steak Machines, Inc. 301,780; Mar. 14; Serial No. 331,016; published Dec 27, 1932.
Sugar. California and Hawaiian Sugar Refining Corporation. 301,782; Mar. 14; Serial No. 330,739; published Jan. 3, 1933.
Syrup, Vitamin-containing. B-Vite Company. 301,825; Mar. 14; Serial No. 328,883; published Jan. 3, 1933.

CLASS 47

Wine, Port. Smith, Woodhouse & Co. Ltd. 301,733; Mar. 14; Serial No. 332,427; published Jan. 3, 1933.

CLASS 48

Beer, lager-beer, ale, etc. Harvard Brewing Company. 92,336; renewed July 1, 1933.
Malt beverage. F. A. Poth's Sons, Inc. 301,730–2; Mar. 14; Serial Nos. 332,416–18; published Jan. 3, 1933.
Malt beverage. F. A. Poth's Sons, Inc. 301,748; Mar. 14; Serial No. 332,415; published Jan. 3, 1933.

CLASS 49

Cordial. Sheffield Dentifrice Co. 92,728; renewed July 22, 1933.
Whiskey. Glendronach Distillery Company. 301,735; Mar. 14; Serial No. 332,450; published Jan. 3, 1933.
Whiskey and potable spirits. Joseph E. Seagram & Sons Limited. 301,726; Mar. 14; Serial No. 330,494; published Jan. 3, 1933.
Whisky. Mitchell Brothers, Limited. 90,561; renewed Mar. 4, 1933.

CLASS 50

Lasts and trees, and followers, Shoe. Brockton Last Manufacturing Co. 301,799; Mar. 14; Serial No. 331,176; published Jan. 3, 1933.
Material made of rubber, acetate-cellulose, etc. Bolta Rubber Co. 301,800; Mar. 14; Serial No. 331,036; published Jan. 3, 1933.

LIST OF LABELS

Animal Crackers. For Animal Crackers. Russell Box Company. 41,847; Mar. 14.
Arch Grasp Arch Support Shoes. For Shoes. Bird & Son, Inc. 41,833; Mar. 14.
Beech-Nut Assorted Drops. For Assorted Drops. Beech-Nut Packing Company. 41,832; Mar. 14.
Cycle. For Oranges. Fillmore Citrus Association. 41,838; Mar. 14.
Dickinson's Witch Hazel. For Witch Hazel. E. E. Dickinson Co. 41,835–6; Mar. 14.
E-Z The E-Z Grater an Entirely Different Kitchen Necessity. For Graters. Ace Products Company. 41,831; Mar. 14.
Eagle Bleaching Water. For Bleaching Water. Eagle Washing Water Company. 41,837; Mar. 14.
Fire-Pruf Ash Trays. For Ash Trays. General Products. 41,840; Mar. 14.
Glider. For Oranges. Fillmore Citrus Association. 41,839; Mar. 14.
Good Seed. For Lawn Grass Seed. Good Seed Company. 41,841; Mar. 14.
Guarantee Package. For Chocolates. George C. Miller & Co. Inc. 41,845; Mar. 14.
Jungle Gum. For Gum. Goudey Gum Co. 41,842; Mar. 14.
Liquid Latex. For Prophylactic Rubbers. Comet Envelope & Printing Co. 41,834; Mar. 14.
Miller Made Guarantee Package Chocolates. For Chocolates. George C. Miller & Co. Inc. 41,846; Mar. 14.
Paint Eltona Products. For Paint Products. A. Sockloff. 41,849; Mar. 14.
Queen 'O Quality. For Canned Salmon. P. E. Harris & Co. 41,844; Mar. 14.
Red Ribbon Blend Vanilla and Vanillin. Blend of Vanilla and Vanillin Used for Flavoring Desserts, Ice Cream, Cakes, Etc. Greever-Lotspeich Mfg. Co. Inc. 41,843; Mar. 14.
Reddy-Loc. For Window Screens. F. E. Schemacher Co. 41,848; Mar. 14.

LIST OF PRINTS

Favorite Feeds. For Turkey Feeds. Page Milling Co. 14,069; Mar. 14.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 14TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbotts Dairies, Inc. (See Kennedy, Ridgway R., assignor.)
Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 89,459; Mar. 14.
Abel, Frank J., Massapequa, assignor to H. Hyman, Brooklyn, N. Y. Clock case. Des. 89,460; Mar. 14.
Abercrombie, James S., Houston, Tex. Whipstock. 1,901,854; Mar. 14.
Acme Machine Tool Company, The. (See Meier, C., and Wettig, assignors.)
Acme Shear Company, The. (See Conway, John J., assignor.)
Acro Aktiengesellschaft. (See Baur, Ottmar, assignor.)
Adams, Peter P., Turkey River, Iowa. Motor vehicle differential gear drive and guide in four wheels, combined with triple differential and brake in one unit. 1,901,276; Mar. 14.
Adkins, Frank A. (See Malm, John F., assignor.)
Aermotor Company. (See Scholes, Daniel E., assignor.)
Air Reduction Company, Incorporated. (See Anderson, James L., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, F., jr., and Dow, assignors.)
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Johnson, Bror A. E., assignor.)
Aktiebolaget Separator. (See Lindgren, Hans O., assignor.)
Aktiebolaget Svenska Fläktfabriken. (See Olsson, J. G. and Stenfors, assignors.)
Alco Products Incorporated. (See Harcourt, Guy N., assignor.)
Aldeen, Gedor W., assignor to American Cabinet Hardware Corp., Rockford, Ill. Hinge. 1,901,072; Mar. 14.
Alexander, Egbert, Los Angeles, Calif. Dispensing device. 1,901,487; Mar. 14.
Alexander, Sidney H. (See Peroni, J. H., and Alexander, assignors.)
Alimena, Samuel, and W. Naumann, Scranton, Pa. Sliding hair and wave clip. 1,900,970; Mar. 14.
Allen-Bradley Company. (See Wilms, Gustav O., assignor.)
Allen, William D., Evansville, Ind. Angle detector. 1,901,793; Mar. 14.
Allen, William O., Glendale, Ky. Display device. 1,901,717; Mar. 14.
Alley, John D., Pittsburgh, Pa., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Lining for casting mold cavities. 1,901,427; Mar. 14.
Allinson, John J. (See Davis, L. L., Henriksen, and Allinson.)
Allis-Chalmers Manufacturing Company. (See Becker, G. D., and Newhouse, assignors.)
Allis-Chalmers Manufacturing Company. (See McClintock, William E., assignor.)
Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
Allis-Chalmers Manufacturing Company. (See Nye, Henry V., assignor.)
Allis-Chalmers Manufacturing Company. (See Pfau, Arnold, assignor.)
Allis-Chalmers Manufacturing Company. (See Ring, Joseph J., assignor.)
Allis-Chalmers Manufacturing Company. (See Winograd, Harold, assignor.)
Alsaker, Alfred, W. O. Hampton, and C. A. Koerner, assignors to The Delta-Star Electric Company, Chicago, Ill. Horisontal break disconnecting switch. 1,901,688; Mar. 14.
Alsaker, Alfred, W. O. Hampton, and C. A. Koerner, assignors to The Delta Star Electric Company, Chicago, Ill. Switch. 1,901,689; Mar. 14.
Altenkirch, Edmund, Neuenhagen, near Berlin, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Absorption refrigerating machine. 1,901,794; Mar. 14.
Altvater, Arthur W., St. Louis County, Mo. Cutting and ornamenting die. 1,901,575; Mar. 14.
Aluminum Company of America. (See Cook, M. F., and Breisch, assignors.)
Ambler Asbestos Shingle & Sheathing Company. (See Kinney, Harmon C., assignor.)
American Blower Corp. (See Morse, C. T., and Hogan, assignors.)
American Brake Shoe and Foundry Company, The. (See Alley, John D., assignor.)
American Brake Shoe and Foundry Company, The. (See Poe, Fred M., assignor.)
American Cabinet Hardware Corp. (See Aldeen, Gedor W., assignor.)
American Engineering Company. (See Bowden, William I., assignor.)
American Flange & Manufacturing Company. (See Shera, John W., assignor.)
American Glanzstoff Corporation. (See Carter, Ralph H., assignor.)
American Lurgi Corporation. (See Maier, Werner, assignor.)
American Rolling Mill Company, The. (See Hudson, Edwin B., assignor.)
American Rolling Mill Company, The. (See McCutcheon, Kenneth C., assignor.)
American Ship Building Company, The. (See Bradley, Charles H., assignor.)
American Telephone and Telegraph Company. (See Carpe, A., and Leibe, assignors.)
American Telephone and Telegraph Company. (See McCann, Thomas A., assignor.)
American Welding & Manufacturing Co., The. (See Meyer, Frank H., assignor.)
Ammerman, Clinton P. (See Pasternack, B., and Ammerman.)
Amspacher, Lemmet L., Glasco, Kans. Egg case carrier. 1,901,277; Mar. 14.
Anders, Erich. (See Eule, M., and Anders.)
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Cutting metal by means of gases. 1,901,428; Mar. 14.
Anderson, Oscar M. (See Jnenust, F. W., and Anderson.)
Andres, William J., South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Drum-grinding machine. 1,901,690; Mar. 14.
Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Gas burner. 1,901,716; Mar. 14.
Applegate, Lindsay M., Seattle, Wash. Electric circuit protective system. 1,901,488; Mar. 14.
Arcade Manufacturing Company. (See Firestone, Vance S., assignor.)
Archea, Walter D., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Machine tool. 1,901,489; Mar. 14.
Archea, Walter D., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,901,490; Mar. 14.
Ardco Manufacturing Company. (See Feeley, M. R., and Stern, assignors.)
Armstrong Cork Company. (See Humphreys, Charles F., assignor.)
Ashbaugh, John H., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Regulator system. 1,901,621; Mar. 14.
Ashford, Ernest, Charlton, London, England. Apparatus for cutting glass tubing. 1,900,971; Mar. 14.
Associated Electric Laboratories, Inc. (See Levy, Oscar C., assignor.)
Associated Electric Laboratories, Inc. (See Wicks, John, assignor.)
Associated Telephone and Telegraph Company. (See Gillings, C., and Belas, assignors.)
Atwell, Harold V., Whiting, Ind., assignor to Standard Oil Company, Chicago, Ill. Prevention of evaporation losses. 1,901,576; Mar. 14.
Aufsesser, Gates B., assignor to Mohawk Brush Company, Albany, N. Y. Brush. Des. 89,433; Mar. 14.
Aufsesser, Gates B., assignor to Mohawk Brush Company, Albany, N. Y. Brush. Des. 89,461; Mar. 14.
Aull, Jerome J., assignor to The Lunkenheimer Company, Cincinnati, Ohio. Wick oiler. 1,901,691; Mar. 14.
Automatic Bread Baking Company Limited, et al. (See Muller, Wilhelm, assignor.)
Austin, Gilbert, J. C. and W. A. Macfarlane, Glasgow, Scotland. Constant current variable voltage electric generating systems. 1,901,218; Mar. 14.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Combination organ stop action. 1,901,622; Mar. 14.
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Combination organ stop mechanism. 1,901,623; Mar. 14.
Austin Organ Company, The. (See Austin, John T., assignor.)
Autogiro Company of America. (See Stanley, Paul H., assignor.)
Automatic Food Machinery Corporation. (See Hall, Charles G., assignor.)
Automatic Lighting Company. (See Vincent, Sidney C., assignor.)
Bacharach Industrial Instrument Company. (See Reinhardt, G. A., and Burich, assignors.)
Bacharach Industrial Instrument Company. (See Vayda, Louis L., assignor.)

Baddiley, James, Manchester, and J. Hill, Glastonbury, assignors to Imperial Chemical Industries Limited, Westminster, England. Secondary disazo dyestuffs. 1,901,278; Mar. 14.

Badenhausen Corporation. (See Kuhner, Max H., assignor.)

Bagley, Edward S., Hartford, Conn. Garage door control device. 1,900,901; Mar. 14.

Baguley, Eric. (See Hughes, R. L., and Baguley.)

Bailey, Agard H., Altadena, Calif. Fireplace screen. 1,901,073; Mar. 14.

Bainbridge, Kenneth T., New York, N. Y., assignor to General Electric Company. Photo-electric tube. 1,901,577; Mar. 14.

Bainbridge, Kenneth T., Swarthmore, Pa., assignor to General Electric Company. Preparing photo-electric tubes. 1,901,578; Mar. 14.

Baker, George, assignor to Oversewing Machine Company, Los Angeles, Calif. Book sectioner. 1,901,137; Mar. 14.

Baldwin, James L., Chicago, Ill. Package carrier. 1,901,279; Mar. 14.

Ballenberg, Adolf G. (See Powell, H. K., and Ballenberg.)

Barber, Benjamin R., Jacksonville, Fla. Making latches for rail switches and blanks for the same. 1,901,718; Mar. 14.

Barber, Sherman, Maywood, Ill. Chuck for nut tapping machines. 1,901,579; Mar. 14.

Barclay, Gustaf I., assignor to Detroit Steel Products Company, Detroit, Mich. Radiator support. 1,901,074; Mar. 14.

Barge Electric Shoe Cement Press, Inc. (See Barge, George H., assignor.)

Barge, George H., Brooklyn, N. Y., assignor to Barge Electric Shoe Cement Press, Inc. Shoe bottom attaching apparatus. 1,901,546; Mar. 14.

Barger, Paul, Greenfield, Mass. Wick. 1,901,834; Mar. 14.

Barks, Frank S., St. Louis, Mo. Coupling. 1,900,902; Mar. 14.

Barlow, William N., Yonkers, N. Y. Sound correction in an electric circuit. 1,901,429; Mar. 14.

Barnes, George L., and H. D. Chapman, Los Angeles, Calif., said Chapman assignor to said Barnes. Ground connecter. 1,900,894; Mar. 14.

Barnes, Gladeon M., Hastings, Mich. Muzzle brake and gas collector. 1,901,138; Mar. 14.

Barnholdt, Harold L., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Rotor construction. 1,901,280; Mar. 14.

Baroni, Sante, Philadelphia, Pa. Measuring device. 1,901,719; Mar. 14.

Barrett Company, The. (See Harshberger, Norman P., assignor.)

Bartholet, John C., Tacoma, Wash. Expansion joint anchor. 1,900,895; Mar. 14.

Bartlett & Snow Company, The. (See Snow, Karl F., assignor.)

Barton, Melvin C., Yuba City, Calif. Brush. 1,901,139; Mar. 14.

Bärwinkel, Moritz, Ohrdruf, Germany. Upholstering spring. 1,901,720; Mar. 14.

Bateholts, Clinton, assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y. Plate surface. 1,901,837; Mar. 14.

Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Method of and machine for sole fitting. 1,901,140; Mar. 14.

Battelle, Grant, Long Beach, Calif. Subterranean automatic oil well control. 1,901,141; Mar. 14.

Baum, Isaac A., Chicago, Ill. Reenforced metal jamb. 1,901,624; Mar. 14.

Baur, Adolphe F. J., assignor to Baur-Steinkamp & Company, Inc., Indianapolis, Ind. Carnation. Pl. Pt. 56; Mar. 14.

Baur, Ottmar, Stuttgart, Germany, assignor to Acro Aktiengesellschaft, Kuesnacht-on-Rigi, Switzerland. Piston for internal combustion engines. 1,901,838; Mar. 14.

Baur-Steinkamp & Company. (See Baur, Adolphe F. J., assignor.)

Bausch & Lomb Optical Company. (See McCabe, Joseph J., assignor.)

Baxter, Harold G., Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,901,692; Mar. 14.

Beal, Fay, assignor to Kingston Products Corporation, Kokomo, Ind. Automobile doorlocking system. 1,901,548; Mar. 14.

Beal, Fay, assignor to Kingston Products Corporation, Kokomo, Ind. Electric doorlock. 1,901,721; Mar. 14.

Bechman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Changeable rotary press. 1,901,075; Mar. 14.

Bechman, Henry F., by City National Bank & Trust Company, administrator, assignor to Duplex Printing Press Company, Battle Creek, Mich. Changeable rotary press. 1,901,076; Mar. 14.

Becker, Ernst, Berlin-Charlottenburg, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Air-cooled cylinder. 1,901,693; Mar. 14.

Becker, George D., West Allis, and R. C. Newhouse, Wauwatosa, assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Packing structure. 1,901,722; Mar. 14.

Becker, Walter, Feudenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Purifying benzanthrone. 1,900,972; Mar. 14.

Bedford, Burnice D., Schenectady, N. Y., assignor to General Electric Company. Phase shifting circuits. 1,901,694; Mar. 14.

Beecher, Eugene L., East Cleveland, assignor to The Gabriel Company, Cleveland, Ohio. Shock absorber. 1,901,839; Mar. 14.

Beeson, Theodore S., Hamilton, assignor, by mesne assignments, to Libbey-Owens-Ford-Glass Company, Toledo, Ohio. Glass machinery. 1,901,491; Mar. 14.

Belas, Francis T. (See Gillings, C., and Belas.)

Belcher, Joseph L., Long Beach, Calif. Breathing apparatus. 1,901,219; Mar. 14.

Bell, Mike, Kansas City, Kans. Curtain and shade fixture. 1,901,796; Mar. 14.

Bell Telephone Laboratories, Incorporated. (See Burchett, George W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Garvin, John S., assignor.)

Bell Telephone Laboratories, Incorporated. (See Hoge, Joseph F. D., assignor.)

Bell Telephone Laboratories, Incorporated. (See Marrison, Warren A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Murphy, Paul B., assignor.)

Bellanca, Giuseppe M., New Castle, Del. Airplane landing gear. 1,901,795; Mar. 14.

Beller, Hans. (See Luther, M., and Beller.)

Belyavin, Paul, London, England. Internal combustion engine. 1,901,723; Mar. 14.

Bendix Aviation Corporation. (See Andres, William J., assignor.)

Bendix Brake Company. (See Bendix, Vincent, assignor.)

Bendix Brake Company. (See La Brie, Ludger E., assignor.)

Bendix Brake Company. (See Mahoney, John P., assignor.)

Bendix Brake Company. (See Poehlman, Herbert W., assignor.)

Bendix-Cowdrey Brake Tester, Inc. (See Graham, Leon L., assignor.)

Bendix, Vincent, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,901,695; Mar. 14.

Bennett, Norman G., London, England. Measuring appliance. 1,901,724; Mar. 14.

Bennett, W. H., Dr., et al. (See McCorquodale, Wilmer E., assignor.)

Bennington, Earl T., Cleveland Heights, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio. Carrier for ovens, furnaces or the like. 1,900,903; Mar. 14.

Bergé, Julien, assignor to Raffinerie Tirlemontoise, Société Anonyme, Tirlemont, Belgium. Preliminary treatment of raw sugar and the like. 1,901,142; Mar. 14.

Berger, Edward H., Manville, N. J., assignor to Johns-Manville Corporation, New York, N. Y. Flexible wear-resisting sealing fabric and making the same. 1,900,904; Mar. 14.

Bergman, Hyman W., Kansas City, Mo. Vaporizer or similar article. Des. 89,462; Mar. 14.

Berry, Charles F., Boston, Mass. Combined rubber and leggin. 1,901,492; Mar. 14.

Bertsch, Heinrich, assignor to H. Th. Böhme A. G., Chemnitz, Germany. Phosphoric acid esters. 1,900,973; Mar. 14.

Bethea, Peter H., Washington, D. C. Sign. 1,900,896; Mar. 14.

Bethlehem Steel Company. (See Reed, Claude D., assignor.)

Bieber, Clarence G., Huntington, W. Va., assignor to The International Nickel Company, Inc., New York, N. Y. Treatment of magnetic alloys and products, resulting therefrom. 1,901,018; Mar. 14.

Bierce, Fred N., Cincinnati, Ohio. Guy shield. 1,901,550; Mar. 14.

Big Rock Ranch Company. (See Seise, William H., assignor.)

Bigelow-Sanford Carpet Co., Inc. (See Cooper, W. B., and Phoenix, assignors.)

Bilde, Tord E. D. (See Engberg, A. O., and Bilde.)

Birdseye, Clarence, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del. Fish scaling device. 1,901,625; Mar. 14.

Birkenmaier, Theodore, assignor to W. N. Matthews Corporation, St. Louis, Mo. Guy guard. 1,901,220; Mar. 14.

Birtman Electric Company. (See Rankin, William A., assignor.)

Björkman, George E., Djursholm, Sweden. Hair winding mechanism. 1,901,480; Mar. 14.

Black, Russell, assignor to Commercial Patents Development Company, Huntington, W. Va. Ejector. 1,901,797; Mar. 14.

Blayney, Wilson L., assignor to Marshall Field & Company, Chicago, Ill. Scarf. 1,901,725; Mar. 14.

Bleser, Joseph F. (See Schafer, J. C. F., and Bleser.)

Bliss, E. W. Company. (See Dieter, William, assignor.)

Blunt, James G., Schenectady, N. Y. Brake mechanism. 1,901,919; Mar. 14.

Bodine, Alfred V., Fairfield, Conn., assignor to Raybestos-Manhattan, Incorporated, Passaic, N. J. Brake block and means of attaching. 1,901,698; Mar. 14.

Boecking, Ewald. (See Frappier, L. S., and Boecking.)

Boenning, William M., Manitowoc, Wis., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Table leg support. 1,901,697; Mar. 14.

Böhme, H. Th., A. G. (See Bertsch, Heinrich, assignor.)

Bond, Lewis A., Los Angeles, assignor to Shell Oil Company, San Francisco, Calif. Method of and apparatus for determining true rock temperature in rotary drilled wells. 1,901,481; Mar. 14.

Bonnet, Clement, Menominee, Ill. Scaffold. 1,901,726; Mar. 14.

Bontempi, Giuseppe. (See Guidetti, F., and Bontempi.)

Boomer, Frank, Berkeley, Calif. Nut hulling machine. 1,901,798; Mar. 14.

Booth, Charles F., Anniston, Ala., assignor to Swann Research, Incorporated. Preparation of pure phosphates. 1,901,020; Mar. 14.

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,901,077; Mar. 14.

Borglin, Joseph N., Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining rosin. 1,901,626; Mar. 14.

Borland, Charles W., Maywood, Ill. Valve spring retainer tool. 1,901,727; Mar. 14.

Borsigwerk Aktiengesellschaft. (See Gorschlueter, F., and Pohl, assignors.)

Bosch, Robert, Aktiengesellschaft. (See Klaiber, Erich, assignor.)

Bott, George R., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn. Antifriction bearing. 1,901,580; Mar. 14.

Bourdon, Pierre M., Paris, assignor to Michelin et Cie., Clermont-Ferrand, France. Vehicle wheel. 1,901,078; Mar. 14.

Bowden, William L., assignor to American Engineering Company, Philadelphia, Pa. Boat hoist. 1,900,905; Mar. 14.

Bower, James A., assignor to The National Tile Company, Anderson, Ind. Tile feeder. 1,901,281; Mar. 14.

Bowie, Augustus J., San Francisco, Calif. Switch contact. 1,901,493; Mar. 14.

Bowman, Oliver S., Colorado Springs, Colo. Grate. 1,901,698; Mar. 14.

Boynton, Arthur J., assignor, by mesne assignments, to Open Hearth Combustion Company, Chicago, Ill Open hearth furnace. 1,901,079; Mar. 14.

Bozarth, William H., Vineland, N. J., assignor to Osborn Products, Inc., E. B. Grosscup, receiver. Dehydrating vegetables and the like. 1,900,974; Mar. 14.

Brackett, Tracy F., Highland Park, Mich. Portable abrading and polishing machine. 1,901,627; Mar. 14.

Bradley, Charles H., University Heights, assignor to The American Ship Building Company, Cleveland, Ohio. Self-unloading ship. 1,901,549; Mar. 14.

Bradley, Robert W., Aldwych, London, England, assignor to Western Electric Company, New York, N. Y. Pressure leak indicator. 1,901,482; Mar. 14.

Bradley, Theodore P., Westfield, N. J., assignor to Chadeloid Chemical Company, New York, N. Y. Finish remover. 1,901,728; Mar. 14.

Bradner, Donald E., Oxford, assignor to The Champion Coated Paper Company, Hamilton, Ohio. Wiper mechanism for coating machines and process. 1,901,080; Mar. 14.

Brady, James H., Louisville, Ky. Whirl whistle. 1,901,547; Mar. 14.

Brainard, Maurice W., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Undervoltage device. 1,901,628; Mar. 14.

Brandt Automatic Cashier Company. (See Brandt, Edward J., assignor.)

Brandt, Edward J., assignor to Brandt Automatic Cashier Company, Watertown, Wis. Money handling machine. 1,901,081; Mar. 14.

Breisch, George T. (See Cook, M. F., and Breisch.)

Brewer, John F., Ossining, assignor of one-half to Arthur Greenfield, New York, N. Y. Lifter. 1,901,729; Mar. 14.

Bridgeport Metal Goods Manufacturing Company, The. (See Fullmer, Giles C., assignor.)

Briggs, Norman E. (See Halsted, H. J., and Briggs.)

British Dyestuffs Corporation, Limited. (See Davidson, A., and Shepherdson, assignors.)

Broekhuysen, Willem C., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. Electrical system of distribution. 1,901,628; Mar. 14.

Bromley, John, & Sons, Incorporated. (See Grundy, J. A., and Payne, assignors.)

Brooke, Harold L. (See Jandus, H. S., and Brooke.)

Brooks, Buford M., Dover, N. J. Beller. 1,901,730; Mar. 14.

Brooks, James H., and J. Goldstone, assignors of one-fourth to F. W. Taplin and one-fourth to D. Richards, Portland, Oreg. Preservative composition. 1,901,799; Mar. 14.

Brown Company. (See Richter, G. A., Van Arsdel, and Hill, assignors.)

Brown, Le Roy O., assignor to Justrite Manufacturing Company, Chicago, Ill. Portable electric illuminating apparatus. 1,900,906; Mar. 14.

Brown, William R. (See Crobin, Elbert A., jr., assignor.)

Brunner, Albert, assignor to Wagner Electric Corporation, St. Louis, Mo. Hose fitting. 1,901,143; Mar. 14.

Brunner, John, Chicago, Ill. Rail joint. 1,900,975; Mar. 14.

Brunswig, Marguerite, Los Angeles, Calif. Dial for timepieces. Des. 89,434; Mar. 14.

Bryans, William A. (See Williams, Harry S., assignor.)

Buckeye Aluminum Company, The. (See Porter, Kirk E., assignor.)

Budd Wheel Company. (See Kelley, G. L., and Budd, assignors.)

Buerger, Leo, New York, N. Y. Cystoscope and the like. 1,901,731; Mar. 14.

Buffalo Brake Beam Company. (See Crone, Seth A., assignor.)

Buff, Edward G. (See Kelley, G. L., and Budd.)

Bullwinkel, John T., Brooklyn, assignor to The Phosphate Mining Co., New York, N. Y. Mining and treatment of phosphate-rock. 1,901,221; Mar. 14.

Bullwinkel, John T., Brooklyn, assignor to The Phosphate Mining Co., New York, N. Y. Treatment of phosphate rock. 1,901,222; Mar. 14.

Burchett, George W., Peekskill, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Artificial larynx. 1,901,483; Mar. 14.

Burger, Frederick W., Niles, assignor to Clark Equipment Company, Buchanan, Mich. Dual wheel. 1,901,629; Mar. 14.

Burket, Elias G., Altoona, Pa. Billboard construction. 1,901,282; Mar. 14.

Burnham, George A., Saugus, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Circuit interrupter. 1,901,363; Mar. 14.

Burpee Can Sealer Company. (See Burpee, Frank W., assignor.)

Burpee, Frank W., Wilmette, assignor to Burpee Can Sealer Company, Chicago, Ill. Cover clamp for pressure cooking vessels. 1,901,699; Mar. 14.

Burtnett, Everett R., San Marino, Calif. Transmission mechanism. 1,901,283; Mar. 14.

Bush, Lester C., Columbus, Ohio. Automobile robe or blanket. 1,901,228; Mar. 14.

Bushey, Francis S., Brooklyn, N. Y. Welded construction. 1,901,800; Mar. 14.

Bushnell, James E., North Plainfield, and J. C. Lukachovic, assignors to Ransome Concrete Machinery Company, Plainfield, N. J. Concrete mixing and distributing apparatus. Re15,764; Mar. 14.

Buse, Bernhard G., Golden, Ill. Locking catch. 1,901,021; Mar. 14.

Bussinger, Selma B., San Leandro, Calif. Piston ring compressor. 1,901,224; Mar. 14.

Butler, Francis D., special administrator. (See Holt, G. J., Hocking, Matson, and Knickerbocker.)

Butler, John H., Berkshire township, Delaware county, Ohio. Lawn sprinkler. 1,901,225; Mar. 14.

Butterfield, Charles, Norwood, assignor to Harold W. Nichols, Cincinnati, Ohio. Liner. 1,900,897; Mar. 14.

Butterfield, Vernon J., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn. Heating apparatus for automotive vehicles. 1,901,082; Mar. 14.

Buxton, Herman A., Cleveland Heights, Ohio, assignor to The Chase Bag Company, New York, N. Y. Bag filling apparatus. 1,900,907; Mar. 14.

Byrkit, Rollin J., jr., Marshallton, assignor to Hercules Powder Company, Wilmington, Del. Hydrogenating Abietic Acid Ester. 1,901,630; Mar. 14.

Cade, Arthur R., and H. O. Halverson, Minneapolis, Minn. Germicidal and detergent substances. 1,901,494; Mar. 14.

Caloroil Burner Corporation. (See Klasman, Gordon, assignor.)

Calvert, Burnell M., Terre Haute, Ind. Automobile door. Des. 89,435; Mar. 14.

Camel Company. (See Lute, Carl, assignor.)

Campbell, John G. and L. A., Kansas City, Mo. Garment hanger. 1,900,908; Mar. 14.

Campbell, Lawrence A. (See Campbell, J. G. and L. A.)

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carting Tool & Machine Company. (See Snelerson, S. L., and Gale, assignors.)

Carlisle, Richard W., Oaklyn, N. J., and R. W. Nye, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Diaphragms. 1,901,631; Mar. 14.

Carlson, Edwin G., Riverside, assignor to Speidel Chain Co., Providence, R. I. Chain connecting link. 1,901,845; Mar. 14.

Carlson, Eric S., assignor to Turnstedt Manufacturing Company, Detroit, Mich. Outside door handle or similar article for an automotive vehicle. Des. 89,436; Mar. 14.

Carlson, Frank P., Astoria, N. Y. Printing press. 1,901,284; Mar. 14.

Carnahan, Glen C., assignor to James B. Clow & Sons, Chicago, Ill. Radiator. 1,900,909; Mar. 14.

Carpe, Allen, New York, N. Y., and F. A. Leibe, Dunellen, N. J., assignors to American Telephone and Telegraph Company. Concentric conductor system. 1,900,976; Mar. 14.

Carpenter, David, Cherryville, N. C. Auxiliary tread for tractors. 1,900,910; Mar. 14.

Carpenter, Edward W., Fairfield, assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Shrub protector. 1,901,700; Mar. 14.

Carpenter, E. W., Manufacturing Company, The. (See Carpenter, Edward W., assignor.)
Carroll, Stewart J. (See Smith, H. B., and Carroll.)
Carter, Ralph H., Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y. Flanged spool and holder therefor. 1,901,226; Mar. 14.
Cattaneo, Charles, South Norwalk, Conn. Proportional divider. 1,901,801; Mar. 14.
Cavanagh, James, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel. 1,901,144; Mar. 14.
Chadeloid Chemical Company. (See Bradley, Theodore F., assignor.)
Chain Belt Company. (See Shafer, Samuel, jr., assignor.)
Chain Belt Company. (See Steindorf, Robert T., assignor.)
Chamberlain, Alfred J., Milwaukee, Wis. Closure for containers. 1,901,581; Mar. 14.
Chamberlain, Clark W., East Lansing, Mich. Interferometer. 1,901,632; Mar. 14.
Champion Coated Paper Company. (See Bradner, Donald B., assignor.)
Chance Brothers and Co. Limited. (See Forster, Alfred L., assignor.)
Chandonia, Elmer H., assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio. Multiple bake pan. 1,901,022; Mar. 14.
Chapman, Frank D., Berlin, Wis. Heat treating edible substances. 1,901,083; Mar. 14.
Chapman, Frank D., Berlin, Wis. Treating material. 1,901,084; Mar. 14.
Chapman, Howard D. (See Barnes, G. L., and Chapman.)
Chase Bag Company, The. (See Buxton, Herman A., assignor.)
Chase Companies Incorporated, The. (See Pope, Elton A., assignor.)
Chemical Engineering Corporation. (See Jones, Louis C., assignor.)
Chemical Works, formerly Sandos. (See von Allmen, Samuel, assignor.)
Chemipulp Process, Incorporated. (See Dunbar, Thomas L., assignor.)
Chicago-Cleveland Car Roofing Company. (See Swanson, Earl E., assignor.)
Chicago Pneumatic Tool Company. (See Coates, Charles B., assignor.)
Christensen, Peter C., East Orange, N. J. Composition and the production thereof. 1,901,145; Mar. 14.
Christian, David A., assignor to Siemens Brothers & Company Limited, London, England. Telephone system. 1,900,911; Mar. 14.
Christian, David A., assignor to Siemens Brothers & Company Limited, London, England. Electromagnetic switch. 1,900,912; Mar. 14.
Christian, Frank T., assignor to Eclipse Machine Company, Elmira, N. Y. Automatic starting mechanism for internal combustion engines. 1,901,285; Mar. 14.
Christie, Neil, Larder Lake, Ontario, Canada. Rotary engine. 1,900,898; Mar. 14.
Christman, John M., assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle transmission mechanism. 1,901,712; Mar. 14.
Cincinnati Ball Crank Co., The. (See Munday, Richard B., assignor.)
Cincinnati Milling Machine Company, The. (See Archea, Walter D., assignor.)
Cincinnati Milling Machine Company, The. (See De Haas, M., and Sassen, assignors.)
Cincinnati Milling Machine Company. (See Einstein, S., and Nenninger, assignors.)
Cippitelli, Cesare, assignor to the Firm Voigt & Haeffner A. G., Frankfort-on-the-Main, Germany. Contact device. 1,900,977; Mar. 14.
Cipullo, Anthony H., assignor to Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,901,551; Mar. 14.
Clapp, F. H., Rubber Company. (See Sleeper, Myron O., assignor.)
Clapp, George A., et al. (See Sleeper, Myron O., assignor.)
Clark, Edward A., Saline, Mich. Folding game table. 1,901,732; Mar. 14.
Clark Equipment Company. (See Burger, Frederick W., assignor.)
Clark, Eugene F., Damariscotta, Me., assignor to Marshall Field Mills Corporation, Philadelphia, Pa. Tuft yarn frame for looms for weaving tufted pile fabric. 1,901,435; Mar. 14.
Clark, George F. (See Stanley, H. H. V., and Clark.)
Clark, Jeddiah B., assignor to Indiana Glass Company, Dunkirk, Ind. Jar. Des. 89,437; Mar. 14.
Clark Manufacturing Company, The. (See Strong, Leslie P., assignor.)
Clarke Chapman & Company. (See Woodeson, William A., assignor.)
Clemmons, Herbert D., Sturgis, Mich., assignor to Scovill Manufacturing Company, Waterbury, Conn. Ball-cock. 1,901,633; Mar. 14.
Clerc, Reinhard. (See Schoeller, W., Jordan, and Clerc.)
Cleveland Crane & Engineering Company, The. (See Bennington, Earl T., assignor.)
Cleveland Graphite Bronze Company, The. (See Kerrulish, Edward P., assignor.)
Cleveland Welding Company. (See Krans, H. W., Holden, and Uber, assignors.)
Climax Engineering Company. (See Waters, H. H., and Gagg, assignors.)
Clingestein, Heinrich. (See Wiedemann, K., and Clingestein.)
Clouse, William L., assignor to The National Machinery Company, Tiffin, Ohio. Delivery mechanism for nut tappers. 1,901,146; Mar. 14.
Clow, James B., & Sons. (See Carnahan, Glen C., assignor.)
Cluff, William R., New York, N. Y. Game board. Des. 89,438; Mar. 14.
Coates, Charles B., Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Duplex equalizing apparatus. 1,901,436; Mar. 14.
Coe, George B., Montclair, N. J., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del. Rod coupling. 1,901,286; Mar. 14.
Coffey, W. H. (See Kuhn, Herman L., assignor.)
Cohn, David D., Camden, N. J., assignor to General Electric Company. Transformer fault detector. 1,901,701; Mar. 14.
Coleman, Clyde, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Vulcanization of rubber. 1,901,582; Mar. 14.
Coleman, John P., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical coupling device. 1,900,913; Mar. 14.
Colonial Trust Company, executors. (See Kirk, Henry C.)
Colorado Fuel and Iron Company, The. (See Thompson, George S., assignor.)
Colson Company, The. (See Roe, De Forest, assignor.)
Combustion Utilities Corporation. (See Schumann, Theodor E. W., assignor.)
Commercial Patents Development Company. (See Black, Russell, assignor.)
Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)
Condit Electrical Manufacturing Corporation. (See Burnham, George A., assignor.)
Conn, Joseph C., Boonton, N. J. Indicator device. 1,901,346; Mar. 14.
Continental Oil Company. (See Davis, L. L., Henriksen, and Allinson, assignors.)
Continental Oil Company. (See Henriksen, Alfred, assignor.)
Continental Oil Company. (See Lincoln, Bert H., assignor.)
Continental Oil Company. (See Moran, Daniel J., assignor.)
Conway, John J., assignor to The Acme Shear Company, Bridgeport, Conn. Shipping and display cabinet for shears. 1,901,583; Mar. 14.
Cook, Mark F., and G. T. Breisch, Niagara Falls, N. Y., assignors to Aluminum Company of America, Pittsburgh, Pa. Work handling mechanism. 1,901,702; Mar. 14.
Cooper, Grover C., Collingswood, N. J., assignor to Union Special Machine Company, Chicago, Ill. Uncurler guide for sewing machines. 1,901,733; Mar. 14.
Cooper, Wellesley B., and E. T. Phoenix, Amsterdam, N. Y., assignors to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Reversible tuft pile carpet or rug. 1,901,840; Mar. 14.
Coots, Frank J., jr., and G. Seid, Hollywood, Calif. Sound track printing attachment for motion picture printers. 1,901,147; Mar. 14.
Corell, Martin, et al. (See Kraenzlein, G., Vollman, and Corell.)
Corkran, Ceylon C., San Francisco, Calif. Fluid injecting device. 1,901,085; Mar. 14.
Cornet, Manuel G., Madrid, Spain. System for preventing the derailment of screw-driven vehicles. 1,900,914; Mar. 14.
Corriveau, Aloysius W., West Springfield, Mass. Adjustable spring and axle wedge. 1,901,287; Mar. 14.
Cossaiter, Frank M., Goldbar, Wash. Vehicle bumper. 1,901,227; Mar. 14.
Costello, William F., assignor to The New Britain Machine Company, New Britain, Conn. Wrench set. 1,900,915; Mar. 14.
Cotroumpas, Stephanos, Brooklyn, assignor, by mesne assignments, to C. H. Sullivan, Northport, N. Y. Aircraft. 1,901,734; Mar. 14.
Cotton Harvester Corporation of America. (See Wirth, Louis E., assignor.)
Court, Frank T. (See White, C. H., and Court.)
Courtner, W. H., et al. (See Tedford, Julian P., assignor.)
Cox, Frederick J., Tufnell Park, London, England. Gas burner. 1,901,086; Mar. 14.
Crane Co. (See Olson, Charles A., assignor.)
Creamer Package Mfg. Company, The. (See Wallis, George E., assignor.)
Creveling, John L., near Tucson, Ariz., assignor to The Lubrication Corporation, South Bend, Ind. Lubricating means. 1,901,148; Mar. 14.
Crobin, Elbert A., jr., Gradyville, assignor of one-half to W. R. Brown, Philadelphia, Pa. Single deck bus with superimposed seats. 1,901,023; Mar. 14.
Croker Fire Prevention Corp. (See Lund, Rudolph O., assignor.)
Cromar Company, The. (See Dittmar, Elmer C., assignor.)

Crone, Seth A., East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y. Brake beam adjuster and release device. 1,901,437; Mar. 14.
Crossley, Alfred, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y. Piezo electric crystal system. 1,901,735; Mar. 14.
Crowley, Henry L., East Orange, assignor to Henry L. Crowley & Company, Inc., West Orange, N. J. Insulating spacer. 1,901,703; Mar. 14.
Crowley, Henry L., & Company. (See Crowley, Henry L., assignor.)
Crown Cork & Seal Company, Inc. (See Warth, Albin H., assignor.)
Crumpacker James W., Hutchinson, Kans. Drive shaft and pinion assembly puller. 1,901,736; Mar. 14.
Cummings, Edmund O., High Point, N. C. Making basic metal sulphates and recovery of metal from waste metallic compounds. 1,901,364; Mar. 14.
Currivan, John F., Forest Hills, N. Y., assignor to Good-Ad, Inc. Dial operator. 1,900,916; Mar. 14.
Cutler-Hammer, Inc. (See Kuhn, Clarence W., assignor.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Dahlstrom Metallic Door Company. (See Jacobson, Ludwig G., assignor.)
Dailey, Manvel C. (See Randel, W. S., and Dailey.)
Dailey, Manvel C., Maywood, assignor to United States Gypsum Company, Chicago, Ill. Composition for molding investment inlays. 1,901,052; Mar. 14.
Dailey, Manvel C., Maywood, assignor to United States Gypsum Company, Chicago, Ill. Dental investment composition. 1,901,053; Mar. 14.
Dailey, Manvel C., assignor to United States Gypsum Company, Chicago, Ill. Dental model stone composition. 1,901,054; Mar. 14.
Daley, James C., assignor to Jefferson Electric Company, Chicago, Ill. Making core laminæ. 1,901,584; Mar. 14.
Dalheimer, Walther, Eindhoven, Netherlands, assignor to Radio Corporation of America. Apparatus for mechanically mounting electrodes of thermionic tubes. 1,901,087; Mar. 14.
Dillenbach, Walter, Zurich, Switzerland. Leading-in device for metallic vacuum-discharge containers. 1,901,802; Mar. 14.
Dancer, Ben, Houston, Tex. Burial vault. 1,901,149; Mar. 14.
Daniels, Claude H., Newton Center, Mass. Jewelled shoe and making same. 1,901,494; Mar. 14.
Dargis, Christopher C., Atlantic City, N. J. Combination box for electro-pneumatic pipe organs. 1,901,552; Mar. 14.
Davidson, Alfred, and A. Shepherdson, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Manufacture of vat dyestuffs and of intermediate products relating thereto. 1,901,288; Mar. 14.
Davidson, Walter C., North Canton, Ohio, assignor to The Hoover Company. Filtering material. 1,901,488; Mar. 14.
Davies, Gilbert H., Ebbw Vale, Wales. Rotary coupling for steam and other pressure fluid supply circuits. 1,900,899; Mar. 14.
Davis, Lawrence, Walpole, Mass. Label. 1,901,495; Mar. 14.
Davis, Lloyd L., A. Henriksen, and J. J. Allinson, assignors to Continental Oil Company, Ponca City, Okla. Removal of impurities from crude petroleum. 1,901,228; Mar. 14.
Davis, William T., Huntington Park, Calif. Decarbonising oil refining apparatus. 1,901,803; Mar. 14.
Davis, William T., Southgate, and C. B. Rhein, San Francisco, Calif., assignors to The Linde Air Products Company. Removing carbon from tubes. 1,901,804; Mar. 14.
Dawkins, Don G., Huntington Park, Calif. Removable chill ring. 1,901,634; Mar. 14.
Deakin, Gerald, New York, N. Y., and L. J. J. Schreiber, Antwerp, Belgium, assignor to International Standard Electric Corporation, New York, N. Y. Selector switch suitable for use in telephone systems. 1,900,917; Mar. 14.
Dean, John N. (See Smith, W. S., Garnett, and Dean.)
Deere & Company. (See McKahin, Herbert B., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
Deere & Company. (See White, C. H., and Court, assignors.)
De Haas, Max, and B. Sassen, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,901,295; Mar. 14.
De La Mare, Thomas, Salt Lake City, Utah. Constructing and maintaining crude oil conductors. 1,900,978; Mar. 14.
De La Quintana, Raul O., Buenos Aires, Argentina. Automatic braking device for phonographs and the like. 1,901,553; Mar. 14.
Delles, William J., Schenectady, N. Y., assignor to General Electric Company. Manufacturing blade ring structures. 1,901,704; Mar. 14.
Delta Star Electric Company, The. (See Alsaker, A., Hampton, and Kerner, assignors.)
Delta Star Electric Company, The. (See Rah, Joseph, assignor.)
De Ment, Olive M., Decatur, Ill. Lingerie strap holder. 1,900,979; Mar. 14.
Detroit Steel Products Company. (See Barclay, Gustaf L., assignor.)
Deubener, Walter H. (See Fischer, Howard L., assignor.)
Devine, J. P., Manufacturing Company. (See Sleeper, Oliver S., assignor.)
De Vout, Anson W., and R. W. Regensburger, assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill. Egg tray. 1,901,705; Mar. 14.
De Wilde, Frederick P., Sheboygan, Wis. Safety control for motor vehicles. 1,901,554; Mar. 14.
Dick, Burns, Ferguson, assignor to Wagner Electric Corporation, St. Louis, Mo. Making hose connections. 1,901,088; Mar. 14.
Diesel, William F., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y. Multiple key lock. 1,901,229; Mar. 14.
Dieter, William, Newark, N. J., assignor to E. W. Bliss Company. Can testing machine. 1,900,918; Mar. 14.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Combined ventilating and fire shutter for motion picture projection machines. 1,900,919; Mar. 14.
Dina, Augusto, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y. Gate for motion picture machines. 1,900,920; Mar. 14.
Disporsious Process, Inc. (See Mitchell, John K., assignor.)
Dittmar, Elmer C., assignor to The Cromar Company, Williamsport, Pa. Method of and apparatus for bundling flooring. 1,900,980; Mar. 14.
Dömmler, Karl, Leverkusen-on-the-Rhine, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Rendering carbon disulphide soluble in water. 1,900,981; Mar 14.
Doherty-Brehm Company. (See Doherty, George D., assignor.)
Doherty, George D., Evanston, Ill., assignor to Doherty-Brehm Company, Minneapolis, Minn. Humidifying apparatus. Re18,762; Mar. 14.
Doherty Research Company. (See Gordon, Philip C., assignor.)
Dorogi, Dr., & Co. Rubber Goods Factory Limited. (See Dorogi, István and L., assignors.)
Dorogi, István and L., assignors of one-half to Dr. Dorogi & Co. Rubber Goods Factory Limited, Budapest, Hungary. Inflatable figure toy. 1,901,150; Mar. 14.
Dorogi, Lajos. (See Dorogi, István and L.)
Dow Chemical Company, The. (See Stroeacker, C. J., Kennedy, and Pelton, assignors.)
Dow, Dewey M. (See Riebel, F., jr., and Dow.)
Dowd, Bernard J., West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y. Hinge. 1,901,289; Mar. 14.
Drake, Harcourt C., Hempstead, assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y. Purifying molten metal. 1,901,585; Mar. 14.
Draper Corporation. (See Stimpson, Wallace L., assignor.)
Drew, James F., assignor to Macwhyte Company, Kenosha, Wis. Sling and making the same. 1,901,439; Mar. 14.
Dreyer, Paul, Stavanger, Norway. Typewriter and like machine. 1,900,982; Mar. 14.
Druckenmiller, Joseph H., Edge Hill, Pa. Bathroom fixture. 1,901,151; Mar. 14.
Duey, Harold P., Los Angeles, Calif. Toothbrush. 1,901,280; Mar. 14.
Dunbar, Thomas L., assignor to Chemipulp Process, Incorporated, Watertown, N. Y. Production of pulp. 1,901,706; Mar. 14.
Dunker, John G., Chicago, Ill., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Calculating machine. 1,901,152; Mar. 14.
Dunker, John G., Chicago, Ill., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Bookkeeping machine. 1,901,153; Mar. 14.
Dunlap, Charles K., assignor to Conoco Products Company, Hartsville, S. C. Spool. 1,901,737; Mar. 14.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Slack cable take-up device. 1,901,635; Mar. 14.
Dunn, John J. (See Hoffman, Otto C., assignor.)
Dunn, Louise M., and W. H. Mills, Cleveland, Ohio. Toy. 1,901,707; Mar. 14.
Duplex Printing Press Company. (See Bechman, Henry F., assignor.)
Du Pont, E. I. de Nemours & Company. (See Heake, C. O., and Etsel, assignors.)
Du Pont, Mark S., Darby, assignor to Kellett Autogiro Corporation, Philadelphia, Pa. Aerial banner. 1,901,855; Mar. 14.
Du Pont Rayon Company. (See Ladrette, Jean, assignor.)
Durdin, Augustus C., jr., Chicago, Ill. Vacuum condensation pump. 1,901,154; Mar. 14.
Dustmann, Friedrich W. (See Heine, A., and Dustmann.)
Dunck, Josias D., Sequim, Wash. Hog feeder. 1,901,089; Mar. 14.
Early, Rupert N., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Dynamo-electric machine. 1,901,586; Mar. 14.
Early, Rupert N., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn. Electric motor starting system. 1,901,636; Mar. 14.
Eastman Kodak Company. (See Smith, Henry B., assignor.)

Eastman Kodak Company. (See Smith, H. B., and Carroll, assignors.)
Eastham, Melville, assignor to General Radio Company, Cambridge, Mass. Electric instrument. 1,901,343; Mar. 14.
Eaton Manufacturing Company. (See Cipullo, Anthony H., assignor.)
Eaton Manufacturing Company. (See Veale, George W., assignor.)
Eau de Cologne & Jarfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd. Mühleus. (See Kahn, Leopold, assignor.)
Eaves, Elmer, Batesville, Miss. Barber mug. 1,901,738; Mar. 14.
Eberlein, John B., and G. R. Steere, Detroit, Mich., assignors, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y. Gas manufacture. 1,900,958; Mar. 14.
Eckstein, Reuben, New York, N. Y. Electric current tapping device. 1,901,587; Mar. 14.
Eckstein, Reuben, New York, N. Y. Battery. 1,901,588; Mar. 14.
Eclipse Machine Company. (See Christian, Frank T., assignor.)
Eclipse Machine Company. (See Sekella, Youston, assignor.)
Economic Machinery Company. (See Holm, Carl, assignor.)
Edge, Jacob, Downingtown, Pa., assignor, by mesne assignments, to United States Gypsum Company, Wilmington, Del. Making plastic material. 1,901,024; Mar. 14.
Edland, Ingval, Monitor, Oreg. Feed mixer. Re18,768; Mar. 14.
Eger, Ernst, assignor to Morgan & Wright, Detroit, Mich. Interchangeable tire valves. 1,901,637; Mar. 14.
Egry Register Company, The. (See Pfeiffer, Frank E., assignor.)
Einstein, Sol, and L. F. Nenninger, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,901,290; Mar. 14.
Elder, Donald, Berkeley, Calif. Sprinkler flow timing apparatus. 1,901,496; Mar. 14.
Electric Machinery Manufacturing Company. (See Early, Rupert N., assignor.)
Electrolux Servel Corporation. (See Lenning, Alvar.)
Ellingson, William M., Fargo, N. Dak., assignor to Westinghouse Electric & Manufacturing Company. Invar relay. 1,901,708; Mar. 14.
Elliott, George R. (See Warner, H. K., and Elliott.)
Emerson Electric Mfg. Co. (See Rodgers, James A., assignor.)
Emsco Derrick & Equipment Company. (See Stevenson, Edward E., assignor.)
Endsley, William H., Henderson, Tex. Apparatus for guiding and steadying drill stem and drill pipe. 1,900,921; Mar. 14.
Engberg, Axel O., and T. E. D. Bilde, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland. Floor polisher. 1,901,497; Mar. 14.
Engel, Karl, New York, N. Y. Attachment for shears. 1,901,739; Mar. 14.
Ensign Carburetor Co. (See Ensign, Orville H., assignor.)
Ensign, Orville H., Pasadena, Calif., assignor, by mesne assignments, to Ensign Carburetor Co., Ltd., Huntington Park, Calif. Carburetor. Re18,767; Mar. 14.
Erickson, Ellis O. (See Vedder, E. H., and Erickson.)
Ernest, Albert, Chicago, Ill. Furniture. 1,901,638; Mar. 14.
Ernest, Walter, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Hydraulic press. 1,901,291; Mar. 14.
Erren, Rudolf, Berlin, Germany. Driving internal combustion engines. 1,901,709; Mar. 14.
Eschholz, Otto H., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Vacuum circuit breaker. 1,901,639; Mar. 14.
Esseltine, Alfred B., assignor to Goodman Manufacturing Company, Chicago, Ill. Snatch block. 1,901,498; Mar. 14.
Ettinger, Joe J., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Hospital bed. 1,901,841; Mar. 14.
Etzel, Gastao. (See Henke, C. O., and Etzel.)
Eule, Martin, Berlin-Spandau, and E. Anders, Berlin-Charlottenburg, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Multiple heat exchange coil. 1,901,090; Mar. 14.
Eurich, Richard H. (See Reinhardt, G. A., and Eurich.)
Evans, Harold A., assignor to Parco Specialty Co., Lynn, Mass. Ornamental ribbon and making the same. 1,900,900; Mar. 14.
Evans, Leigh R., assignor to Morrison Machine Products, Inc., Elmira, N. Y. Gripping face for chucks and making the same. 1,900,922; Mar. 14.
Evans, Wilmot R., trustee. (See Wolfe, Walter G., assignor.)
Everitt, George E., Decatur, Ga. Display stand and shipping case. 1,900,983; Mar. 14.
Fahrenwold, Frank A., Chicago, Ill. Electric furnace. 1,901,499; Mar. 14.
Fallert, Fritz, Bern, Switzerland. Printing press. 1,900,928; Mar. 14.
Farber, S. W., Inc. (See Farber, Simon W., assignor.)
Farber, Simon W., assignor to S. W. Farber, Inc., Brooklyn, N. Y. Receptacle for liquids. 1,901,155; Mar. 14.
Faries Manufacturing Company. (See Flynn, James J., assignor.)
Farr, Leon N., et al. (See Tedford, Julian P., assignor.)
Farrell Company, The. (See Young, Wilson T., assignor.)
Fawcett, John R., assignor to William Hall & Company Limited, Studley, England. Fishing reel. 1,901,091; Mar. 14.
Feeley, Matthew R., Scranton, Pa., and C. Stern, Jersey City, assignors to Ardco Manufacturing Company, Hoboken, N. J. Bellows checked cylinder cock. 1,901,740; Mar. 14.
Feeley, Matthew R., Scranton, Pa., and C. Stern, Jersey City, N. J. Bellows operated safety cylinder cock. 1,901,805; Mar. 14.
Fellows Gear Shaper Company, The. (See Miller, Edward W., assignor.)
Ferguson Brothers Manufacturing Company. (See Boenning, William M., assignor.)
Ferranti Inc. (See Norris, Eric D. T., assignor.)
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Broaching machine. 1,901,500; Mar. 14.
Ferris, Walter, assignor to The Oilgear Company, Milwaukee, Wis. Pump. 1,901,501; Mar. 14.
Fessenden, Reginald A., Chestnut Hill, Mass. Light modulators and constructing the same. 1,901,502; Mar. 14.
Fessenden, Reginald A., Chestnut Hill, Mass. Rotary brush. 1,901,503; Mar. 14.
Fetsch, Joseph T., jr., Washington, D. C. High frequency voltmeter. 1,901,741; Mar. 14.
Fichtel & Sachs A. G. et al. (See Goldschmidt, Max, assignor.)
Field, James H., Newark, N. J. Filing device. 1,901,365; Mar. 14.
Field, Marshall, & Company. (See Blayney, Wilson L., assignor.)
Firestone, Vance S., assignor to Arcade Manufacturing Company, Freeport, Ill. Mechanically-operated bucket. 1,901,555; Mar. 14.
Firth, Rowland V. D., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Oiling device for bearings. 1,900,924; Mar. 14.
Firtion, Harold L., Warehouse Point, assignor to The Montgomery Company, Windsor Locks, Conn. Mop. 1,901,842; Mar. 14.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional material. Re18,765; Mar. 14.
Fischer, Howard L., assignor to W. H. Deubener, St. Paul, Minn. Bag and making the same. 1,901,858; Mar. 14.
Fisher, Albert H., East Cleveland, Ohio, assignor to Kex Company, Incorporated, St. Louis, Mo. Tire casing repair apparatus. 1,901,231; Mar. 14.
Fisk, Henry D., assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo. Corn harvesting machine. 1,901,092; Mar. 14.
Fitzgerald Manufacturing Company, The. (See Reichold, Ludwig, assignor.)
Fitzhugh, Champe G., Washington, D. C. Container. 1,901,742; Mar. 14.
Flaherty, Mark, Haddon Heights, N. J., assignor to General Electric Company. Stop means for rotary shafts. 1,901,710; Mar. 14.
Flanigan, John J., Oak Park, assignor to Vivid, Incorporated, Chicago, Ill. Duplicating machine. 1,901,440; Mar. 14.
Fleischhauer, Richard, and C. Schultis, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Black azodyestuffs and making same. 1,901,890; Mar. 14.
Flüga Aktien-Gesellschaft. (See Heylandt, Christian W. P., assignor.)
Flynn, James J., Camden, N. J., assignor to Faries Manufacturing Company, Decatur, Ill. Screwless holder. 1,901,366; Mar. 14.
Food Machinery Corporation. (See Fulton, Thomas J., assignor.)
Forberg, Christian, St. Thomas, Ontario, Canada. Combination washer. 1,901,891; Mar. 14.
Forman, Paris R., Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y. Closure operating and locking device. 1,901,711; Mar. 14.
Forster, Alfred L., Glasgow, Scotland, assignor to Chance Brothers and Co., Limited, West Smethwick, England. Manufacture of wired glass. 1,901,743; Mar. 14.
Fränkel, Stefan, Berlin, Germany. Making photographic silver salt emulsions. 1,901,441; Mar. 14.
Franklin, Charles S., Buckhurst Hill, England, assignor to Radio Corporation of America. Aerial. 1,901,025; Mar. 14.
Franklin Railway Supply Company. (See Vincent, Harry S., assignor.)
Frappier, Louis S., and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Compound film gate. 1,900,925; Mar. 14.
Fraser, Hugh J. (See Owens, R. J., and Fraser.)
Frederick, John S., Emaus, Pa. Concrete form. 1,901,392; Mar. 14.
Freedlander, Abraham L., Dayton, Ohio. Manufacturing belts. 1,901,442; Mar. 14.
French Oil Mill Machinery Co. (See Stacy, Thomas F., assignor.)

Friesel, Adolph J., Chicago, Ill. Combination plug and fuse. 1,900,926; Mar. 14.
Frosted Foods Company, Inc. (See Birdseye, Clarence, assignor.)
Fuller, Bert F., Burlingame, Calif., assignor to Westinghouse Electric & Manufacturing Company. Theater switch panel. 1,901,640; Mar. 14.
Fuller, Frederick L., West Orange, N. J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,901,093; Mar. 14.
Fuller Lehigh Company. (See Jacobus, David S., assignor.)
Fuller, Rufus W., Deerfield, assignor to Production Machine Company, Greenfield, Mass. Centerless grinding or polishing machine. 1,900,984; Mar. 14.
Fullmer, Giles C., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn. Pick-up candle light. 1,901,589; Mar. 14.
Fulton, Paul D., assignor to The Huffman Manufacturing Company, Dayton, Ohio. Liquid dispensing can. 1,901,504; Mar. 14.
Fulton Sylphone Company, The. (See Giesler, Jean V., assignor.)
Fulton, Thomas J., Fresno, assignor to Food Machinery Corporation, San Jose, Calif. Atomizer. 1,901,806; Mar. 14.
Furness Corporation. (See Furness, William H., assignor.)
Furness, William H., National Park, N. J., assignor, by mesne assignments, to Furness Corporation, Philadelphia, Pa. Silk manufacture. 1,901,590; Mar. 14.
Gabosen, John, Chicago, Ill., assignor to The Kendall Company, Boston, Mass. Adhesive tape. 1,901,094; Mar. 14.
Gabriel Company, The. (See Beecher, Eugene L., assignor.)
Gagg, Rudolph F. (See Waters, H. H., and Gagg.)
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Metal aligning device. 1,901,829; Mar. 14.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Blade clip. 1,901,830; Mar. 14.
Gale, Eiffel B. (See Snelerson, S. L., and Gale.)
Galusha, Albert L., Caldwell, N. J. Gas producer. 1,901,807; Mar. 14.
Garda, Enrico. (See Trinchero, Ferrucci, assignor.)
Garnett, Henry J. (See Smith, W. S., Garnett, and Dean.)
Garvin, John S., Bogota, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling device. 1,901,443; Mar. 14.
Gas Krakker Corporation. (See Rawers, William B., assignor.)
Geigy, J. R., S. A., Firm. (See Schafer, Josef, assignor.)
General Aniline Works, Inc. (See Becker, Walter, assignor.)
General Aniline Works, Inc. (See Fleischhauer, R., and Schultis, assignors.)
General Aniline Works, Inc. (See Gleitenberg, Eugen, assignor.)
General Aniline Works, Inc. (See Hentrich, W., Ossenbeck, and Tietze, assignors.)
General Aniline Works, Inc. (See Kraenzlein, G., Vollmann, and Corell, assignors.)
General Aniline Works, Inc. (See Kunz, M. A., and Koeberle, assignors.)
General Aniline Works, Inc. (See Munz, Ferdinand, assignor.)
General Aniline Works, Inc. (See Neelmeier, W., Rimele, and Glietenberg, assignors.)
General Aniline Works, Inc. (See Wiedemann, K., and Clingenstein, assignors.)
General Electric Company. (See Bainbridge, Kenneth T., assignor.)
General Electric Company. (See Bedford, Burnice D., assignor.)
General Electric Company. (See Coffin, David D., assignor.)
General Electric Company. (See Delles, William J., assignor.)
General Electric Company. (See Flaherty, Mark, assignor.)
General Electric Company. (See Heine, A., and Dustmann, assignors.)
General Electric Company. (See Hull, John I., assignor.)
General Electric Company. (See Kempton, Leslie A., assignor.)
General Electric Company. (See Kerr, Thomas, assignor.)
General Electric Company. (See McArthur, Elmer D., assignor.)
General Electric Company. (See Setter, Joseph A., assignor.)
General Electric Company. (See Turner, Harry W., assignor.)
General Electric Company. (See Uebermuth, Werner, assignor.)
General Electric Company. (See Whiting, Max A., assignor.)
General Electric Company. (See Woods, William J., assignor.)
General Machinery Company. (See Sutton, G. C., and Witschge, assignors.)
General Radio Company. (See Eastham, Melville, assignor.)
General Radio Company. (See Herton, Joseph W., assignor.)
General Radio Company. (See Lamson, Horatio W., assignor.)
General Railway Signal Company. (See Howe, Winthrop K., assignor.)
General Railway Signal Company. (See Leake, Richard C., assignor.)
General Spring Bumper Corporation. (See Jandus, H. S., and Brooke, assignors.)
General Tire & Rubber Company, The. (See Maranville, Alger G., assignor.)
General Zeolite Co. (See Kean, Robert H., assignor.)
Gettings, Edwin G., Los Angeles, Calif. Clothes cleaning machine. 1,900,927; Mar. 14.
Gibson, Alexander J. (See Huttger, Edward P., assignor.)
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Pressure responsive vessel. 1,900,985; Mar. 14.
Gietz, Peter, Johannisberg-on-the-Rhine, assignor to Maschinenfabrik Johannisberg G. m. b. H., Geisenheim-on-the-Rhine, Germany. Device for the clamping of flexible printing blocks or sterens on the form-cylinder of copper-plate or intaglio printing machine. 1,900,986; Mar. 14.
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillings, Charles, and F. T. Belas, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill. Telephone system. 1,901,156; Mar. 14.
Giordano, Michael G., Cranston, R. I. Joint connection. 1,901,026; Mar. 14.
Gleaner Harvester Corporation. (See Fisk, Henry D., assignor.)
Gleaner Harvester Corporation. (See Hale, Stephen H., assignor.)
Glietenberg, Eugen. (See Neelmeier, W., Rimele, and Glietenberg.)
Glietenberg, Eugen, Leverkusen-I. G.-Werk, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Polyazodyestuffs. 1,901,893; Mar. 14.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Glover, Edward G., Pineville, N. [illegible] Nut lock. 1,901,744; Mar. 14.
Glowacki, John B., Chicago, Ill. Drop card protector. 1,901,232; Mar. 14.
Glowacki, John B., Chicago, Ill. Drop cord and canopy supporting bridge. 1,901,233; Mar. 14.
Glowacki, John B., Chicago, Ill. Fixture and canopy support. 1,901,234; Mar. 14.
Glowacki, John B., Chicago, Ill. Fixture bridge. 1,901,235; Mar. 14.
Godshalk, Clarence A., Ardmore, Pa. Safety razor. 1,190,591; Mar. 14.
Goff, Jennie H., Lisbon Falls, Me. Wall paper. 1,900,987; Mar. 14.
Goldblatt, Louis E., Brooklyn, N. Y. Stretcher. 1,901,641; Mar. 14.
Goldschmidt, Max, Frankfort-on-the-Main, assignor to the Firm Fichtel & Sachs A. G., Schweinfort-on-the-Main, and Mecano Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany. Adjustable disk clutch. 1,901,856; Mar. 14.
Goldstone, Jacob. (See Brooks, J. H., and Goldstone.)
Goldthwait, Charles F., Mount Lebanon Township, Allegheny County, Pa., assignor, by mesne assignments, to Textile Machinery Corporation. Modified cotton. 1,901,095; Mar. 14.
Golladay, Lawrence R. (See Wagner, C. F., and Golladay.)
Gongaware, William F., Santa Monica, Calif. Firecracker tube rolling machine. 1,900,928; Mar. 14.
Good-Ad, Inc. (See Currivan, John F., assignor.)
Goodman Manufacturing Company. (See Esseltine, Alfred B., assignor.)
Gordon, Philip C., assignor to Doherty Research Company, New York, N. Y. Coupling device. 1,901,843; Mar. 14.
Gordon, Samuel, Boston, Mass. Display stand. Des. 89,463; Mar. 14.
Gorin, Frederick P., Seattle, assignor to Gorin Shocklesspeed Tabulator Company, King County, Wash. Tabulator rebound trap. 1,901,896; Mar. 14.
Gorin, Frederick P., assignor to Gorin Shocklesspeed Tabulator Company, Seattle, Wash. Typewriting machine. 1,901,157; Mar. 14.
Gorin Shocklesspeed Tabulator Company. (See Gorin, Frederick P., assignor.)
Gorschlüter, Fritz, and E. Pohl, assignors to Borsigwerk Aktiengesellschaft, Borsigwerk, Germany. Steel vessel and producing same. 1,900,988; Mar. 14.
Gottschalk, Lionel J., New Orleans, La. Refrigerator. 1,901,556; Mar. 14.
Graham, Leon L., Chicago, Ill., assignor to Bendix-Cowdrey Brake Tester, Inc., South Bend, Ind. Brake throw measuring device. 1,901,292; Mar. 14.
Grattan, David, Los Angeles, Calif. Force feed lubricating apparatus. 1,901,027; Mar. 14.

Gravely, Benjamin F., Dunbar, W. Va. Mowing device. 1,901,293; Mar. 14.
Gray Processes Corporation, The. (See Gray, Thomas T., assignor.)
Gray, Thomas T., Elisabeth, assignor to The Gray Processes Corporation, Newark, N. J. Refining hydrocarbons. 1,901,158; Mar. 14.
Green, Charles W., Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,901,097; Mar. 14.
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Water heater for coffee making. 1,901,028; Mar. 14.
Greene, Fred E., Escalon, assignor to A. B. Humphrey Company, Mayhews, Calif. Apparatus for precooling refrigerator cars. 1,901,505; Mar. 14.
Greenfield, Arthur. (See Brewer, John F., assignor.)
Greiner, Edward E. (See Johnson, Ben P., assignor.)
Gritt, Frank A., and F. Stewart, assignors to Gritt, Incorporated, Indianapolis, Ind. Animated imitation hearth fire. 1,901,294; Mar. 14.
Gritt, Incorporated. (See Gritt, F. A., and Stewart, assignors.)
Grosscup, Edward E., receiver. (See Bozarth, William H., assignor.)
Gruber, Max. (See Wurster, C., and Gruber.)
Grundy, James A., and W. M. Payne, assignors to John Bromley & Sons, Incorporated, Philadelphia, Pa. Tube frame. 1,901,444; Mar. 14.
Guenther, Fritz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustire Aktiengesellschaft, Frankfort-on-the-Main, Germany. Mixtures of sulphonated alkylated nondyeing aromatic carbocyclic compounds and their salts. 1,901,507; Mar. 14.
Guest, William W., Los Angeles, Calif. Shear pin for crushing machines. 1,901,159; Mar. 14.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,429; Mar. 14.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,440; Mar. 14.
Guidetti, Ferruccio, Elmhurst, and G. Bontempi, assignors to The Watairway Manufacturing Corporation, New York, N. Y. Sanitary water closet attachment. 1,901,160; Mar. 14.
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,901,236; Mar. 14.
Guinness, Edward E., Rednal, near Birmingham, assignor of one-eighth to Hubert Humphreys, Birmingham, England. Variable speed device. 1,901,098; Mar. 14.
Günther, Fritz, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Wetting agent. 1,901,506; Mar. 14.
Gustafsson, Em. I G. T., Stockholm, Sweden. Producing metals and metal alloys low in carbon. 1,901,367; Mar. 14.
Gutberlet, Charles J., Philadelphia, Pa. Telephone ticket distribution system. 1,901,508; Mar. 14.
Gyro Process Company. (See Harnsberger, A. E., and Smith, assignors.)
H. L. G. Company. (See Humphrey, Herbert S., assignor.)
Haag, Leonhard, Frankfort-on-the-Main, Germany. Electric switch. 1,900,929; Mar. 14.
Haggstrom, Arthur C., Rockford, Ill., assignor to E. H. Scott. Radiocabinet. Des. 89,441; Mar. 14.
Haglund, Hakon H., Flushing, assignor to The Western Union Telegraph Company, New York, N. Y. Multiplex telegraph system. 1,901,296; Mar. 14.
Hale, Stephen H., Kansas City, assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo. Cutter mechanism for corn harvesters. 1,901,099; Mar. 14.
Hall, Charles G., assignor to Automatic Food Machinery Corporation, Boise, Idaho. Combination tray heating and refrigerating cabinet. 1,901,509; Mar. 14.
Hall, Elbert J. (See Winslow, C. A., and Hall.)
Haller, Harvey H., assignor to The Wehr Motor Company, Los Angeles, Calif. Valve construction. 1,901,237; Mar. 14.
Halsted, Hobart J., and N. R. Briggs, Buffalo, N. Y. Coin controlled dispensing apparatus. 1,900,989; Mar. 14.
Halvorson, Halvor O. (See Cade, A. R., and Halvorson, assignors.)
Hamann, Henry J., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Edging apparatus. 1,901,510; Mar. 14.
Hammer, Samuel, Brooklyn, N. Y. Waste receptacle. 1,901,808; Mar. 14.
Hampton, Weldon O. (See Alsaker, A., Hampton, and Koerner.)
Handy, Le Roy L., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Coupler for glass supporting tables. 1,901,511; Mar. 14.
Hansell, Clarence W., Port Jefferson, N. Y., assignor to Radio Corporation of America. Signaling. 1,901,642; Mar. 14.
Hansen, Christian J., Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Treating thiocyanates. 1,901,844; Mar. 14.
Harcourt, Guy N., Larchmont, assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y. Recovering drip oil from certain residuums. 1,901,238; Mar. 14.
Harnsberger, Audley E., and C. L. Smith, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Heating oil. 1,901,592; Mar. 14.
Harnsberger, Audley E., and C. L. Smith, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich. Converting heavy hydrocarbons into lighter hydrocarbons. 1,901,593; Mar. 14.
Harrington, George G., assignor to Reed Roller Bit Company, Houston, Tex. Drill bit. 1,901,643; Mar. 14.
Harris, Ford W., assignor to Patco, Inc., Los Angeles, Calif. Reclosing circuit interrupter. 1,901,512; Mar. 14.
Harris, Ford W., assignor to Patco, Inc., Los Angeles, Calif. Rotary jar. 1,901,513; Mar. 14.
Harshberger, Norman P., Scarsdale, assignor to The Barrett Company, New York, N. Y. Shingle. 1,901,161; Mar. 14.
Harsin, Clarence W., Pasadena, Calif. Duplex picture hanger. 1,901,644; Mar. 14.
Haskell, Harry, et al. (See Phelps, Benjamin B., assignor.)
Hassell, Bert R. J., Rockford, Ill. Ice cream confection bar. 1,901,894; Mar. 14.
Hauk, Joseph, assignor to Hauk Manufacturing Company, Milwaukee, Wis. Can covering apparatus. 1,901,594; Mar. 14.
Hauk, Joseph, Shorewood, assignor to P. C. Read, Milwaukee, Wis. Can washing machine. 1,901,595; Mar. 14.
Hauk, Joseph, Shorewood, assignor to P. C. Read, Milwaukee, Wis. Bottle handling machine. 1,901,596; Mar. 14.
Hauk, Joseph, Shorewood, assignor to P. C. Read, Milwaukee, Wis. Clutch control mechanism. 1,901,597; Mar. 14.
Hauk Manufacturing Company. (See Hauk, Joseph, assignor.)
Hauser, Oscar, Ozone Park, assignor to Kollmorgen Optical Corporation, Brooklyn, N. Y. Portable magnifier. 1,900,930; Mar. 14.
Havill, Owen A., assignor to H. O. Schundler, New York, N. Y. Airship. 1,901,809; Mar. 14.
Hawkins, Francis, et al. (See Muller, Wilhelm, assignor.)
Hazard-Flamand, Maurice, Douai, France. Liquefying and rectifying air. 1,901,389; Mar. 14.
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Health-O-Meter Company, The. (See Weber, Mathias J., assignor.)
Heide, William A., Detroit, Mich. Air controlling means for carburetors. 1,901,810; Mar. 14.
Heilhecker, Eugene C. (See Smith, M. C., jr., and Heilhecker.)
Hein, George N., San Francisco, Calif. Enclosed body for automobiles. 1,901,239; Mar. 14.
Heine, Adolf, Berlin-Lichtenberg, and F. W. Dustmann, Berlin, Germany, assignors to General Electric Company. Film printing machine. 1,901,645; Mar. 14.
Heinits, Woldemar, assignor to Schubert & Salzer Maschinenfabrik Aktiengesellschaft, Chemnitz, Germany. Row counter for flat knitting machines. 1,901,745; Mar. 14.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y. Textile fabric or the like. Des. 89,442; Mar. 14.
Heise, William H., assignor to Big Rock Ranch Company, Los Angeles, Calif. Self-leveling platform of a tilted body. 1,901,029; Mar. 14.
Hellman, Carl R., assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,464; Mar. 14.
Helmond, William F., West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,901,162; Mar. 14.
Hendrick, Otto E. (See Streeter, R. S., and Hendrick.)
Henke, Clyde O., South Milwaukee, Wis., and G. Etsel, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Preparing camphene. 1,901,746; Mar. 14.
Henriksen, Alfred. (See Davis, L. L. Henriksen, and Allinson.)
Henriksen, Alfred, assignor to Continental Oil Company, Ponca City, Okla. Dewaxing oils. 1,901,240; Mar. 14.
Hentrich, Winfrid, Erlangen, A. Oessenbeck, Cologne-Mulheim, and E. Tietze, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Diarylsulphone-azodyestuffs. 1,901,515; Mar. 14.
Hercules Powder Company. (See Borglin, Joseph N., assignor.)
Hercules Powder Company. (See Byrkit, Rollin J., jr., assignor.)
Hercules Powder Company. (See Langmeier, Arthur, assignor.)
Hercules Powder Company. (See Piccard, Jean, assignor.)
Herman, William, and W. H. Sommer, Peoria, Ill. Producing wire rods. 1,901,514; Mar. 14.
Herzog, John L., assignor to John L. Herzog Co., Saginaw, Mich. Machine for making panel core stock from mill clippings and the like. 1,901,596; Mar. 14.
Herzog, John L., Co. (See Herzog, John L., assignor.)

Heylandt, Christian W. P., Lankwitz, Germany, assignor to Filiga-Aktien-Gesellschaft, St. Moritz, Switzerland. Apparatus for transferring and storing liquefied gases. 1,901,445; Mar. 14.
Heylandt, Christian W. P., Lankwitz, Germany, assignor to Filiga-Aktien-Gesellschaft, St. Moritz, Switzerland. Conserving liquefied gases. 1,901,446; Mar. 14.
Heylandt, Christian W. P., Berlin-Britz, Germany, assignor to Filiga Aktiengesellschaft, St. Moritz, Switzerland. Apparatus for preparing pressure gases. 1,901,447; Mar. 14.
Hicks, Harry W., Brookline, Mass. Toothbrush. 1,901,646; Mar. 17.
Higby, Willard C. (See Higby, Willis O., and W. C.)
Higby, Willis O., West Leyden, and W. C. Higby, Ithaca, N. Y. Hydraulic clutch. 1,901,241; Mar. 14.
High, Carl F., Madison, Wis. Internal combustion engine. 1,901,448; Mar. 14.
Hildebrand, David A., assignor of one-half to John A. Rolph, Oakland, Calif. Built-in tables. 1,901,347; Mar. 14.
Hill, James. (See Baddiley, J., and Hill.)
Hill, Roger B. (See Richter, G. A., Van Arsdel, and Hill.)
Himmel Brothers Company, The. (See Himmel, Fred and I., assignors.)
Himmel, Fred and I., assignors to The Himmel Brothers Company, New Haven, Conn. Store front construction. 1,901,369; Mar. 14.
Himmel, Isidore. (See Himmel, Fred, and I.)
Hinrichs, Carl G., St. Louis, Mo. Treating emulsions. 1,901,163; Mar. 14.
Hipwell, Harry H. (See Hipwell, Harry T. and H. H.)
Hipwell, Harry T. and H. H., Pittsburgh, Pa. Flashlamp. 1,900,931; Mar. 14.
Hirvonen, Eric J., Worcester, Mass. Valve casing. Des. 89,443; Mar. 14.
Hochstatter, Charles, Ozone Park, N. Y. Measuring and dispensing device for containers. 1,901,811; Mar. 14.
Hocking, Richard O. (See Holt, G. J., Hocking, Matson, and Knickerbocker.)
Hoffman, Otto C., assignor of one-half to J. J. Dunn, Buffalo, N. Y. Registering bank. 1,901,030; Mar. 14.
Hoffrits, Charles W., Los Angeles, Calif. Illuminated pump dial. 1,901,100; Mar. 14.
Hogan, Edward L. (See Morse, C. T., and Hogan.)
Hoge, Joseph F. D., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Multicontact switch. 1,901,449; Mar. 14.
Hogg, William J., assignor to The National Acme Company, Cleveland, Ohio. Circular chaser grinding gauge. 1,901,242; Mar. 14.
Holden, Charles S. (See Kraus, H. W., Holden, and Uber.)
Hollestelle, Jan H., assignor to The Kennedye Corporation, St. Louis, Mo. Rotary well drilling bit control. 1,900,932; Mar. 14.
Holm, Carl, assignor to Economic Machinery Company, Worcester, Mass. Label picking mechanism. 1,901,101; Mar. 14.
Holt, Grover J., Crosby, E. O. Hocking, Nashwauk, A. E. Matson, Hibbing, and A. K. Knickerbocker, deceased, by F. D. Butler, special administrator, assignors to The Reclamation Company, St. Paul, Minn. Ore conditioning process. 1,901,102; Mar. 14.
Holt, William A., Mebane, N. C. Helical connecter. 1,901,747; Mar. 14.
Homer, John W., Greencastle, assignor to T. B. Wood's Sons Company, Chambersburg, Pa. Belt tightener. 1,901,557; Mar. 14.
Hookless Fastener Company. (See Norton, Samuel H., assignor.)
Hookless Fastener Company. (See Poux, Roland J., assignor.)
Hoover Company, The. (See Davidson, Walter C., assignor.)
Hopkins, Robert K., St. George, assignor to The M. W. Kellogg Company, New York, N. Y. Method and machine for rolling fins on tubes. 1,901,516; Mar. 14.
Horton, Joseph W., assignor to General Radio Company, Cambridge, Mass. Power-level indicator. 1,901,244; Mar. 14.
Horwitt, Paul H., Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill. Dispenser. 1,901,243; Mar. 14.
Howald, Werner T., E. H. Klingelfuss, and F. P. Kenny, Brooklyn, N. Y. Cleaning machine. 1,901,647; Mar. 14.
Howard, Frank E., assignor to James L. Howard & Company, Hartford, Conn. Door hanger. 1,901,648; Mar. 14.
Howard, James L., & Company. (See Howard, Frank E., assignor.)
Howe, Winthrop K., assignor to General Railway Signal Company, Rochester, N. Y. Interlocking system for railroads. 1,901,748; Mar. 14.
Huber, Orlando E., Milwaukee, Wis. Valve. 1,901,649; Mar. 14.
Hudson, Edwin B., Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio. Automatic gauge for sheet metal shears. 1,900,985; Mar. 14.
Hudson, Thomas J., assignor to The Warner & Swasey Company, Cleveland, Ohio. Chuck. 1,900,984; Mar. 14.
Huey, Helen T., Stonehurst, Pa. Dishwashing tool and spray. 1,901,812; Mar. 14.
Huffman Manufacturing Company, The. (See Fulton, Paul D., assignor.)
Huffman Manufacturing Company, The. (See Vahle, Edgar W., assignee.)
Hughes, Richard L., and E. Baguley, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Loading structure for a signaling conductor. 1,900,935; Mar. 14.
Hull, Foster J., Hagerstown, Md., assignor to Pangborn Corporation. Sand blast machine for applying pressure to abrasive. 1,901,450; Mar. 14.
Hull, John I., Swampscott, Mass., assignor to General Electric Company. Speed control. 7,901,650; Mar. 14.
Humason, Granville A., Houston, Tex. Pumping apparatus. 1,901,031; Mar. 14.
Humphrey, A. B., Company. (See Greene, Fred E., assignor.)
Humphrey, Herbert S., assignor to H. L. G. Company, Kalamazoo, Mich. Valve casing. Des. 89,465; Mar. 14.
Humphreys, Charles F., assignor to Armstrong Cork Company, Lancaster, Pa. Surface covering such as linoleum. 1,901,550; Mar. 14.
Humphreys, Hubert. (See Guinness, Edward E., assignor.)
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Cascade amplifier. 1,901,558; Mar. 14.
Hurt, Frank B., La Grande, Oreg. Aggregate spreader and truck body. 1,901,297; Mar. 14.
Husted, H. A., Company, The. (See Husted, Harry A., assignor.)
Husted, Harry A., Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich. Steering wheel. 1,901,599; Mar. 14.
Huttger, Edward P., assignor of one-half to A. J. Gibson, Philadelphia, Pa. Window fastener. 1,900,936; Mar. 14.
Hydraulic Press Manufacturing Company. (See Brast, Walter, assignor.)
Hyman, Henry. (See Abel, Frank J., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Guenther, Fritz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Günther, Fritz, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Kramer, Oskar, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Luther, M., and Beller, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Meisenburg, Kurt, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmidt, O., Schnell, and Meyer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Stuhlmann, Hans C., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Wurster, C., and Gruber, assignors.)
Imperial Chemical Industries Limited. (See Baddiley, J., and Hill, assignors.)
Indiana Glass Company. (See Clark, Jeddiah B., assignor.)
Industrial Patents Corporation. (See De Vout, A. W., and Regensburger, assignors.)
Industries of America, Inc. (See Robinson, Harry G., assignor.)
Ingersoll-Rand Company. (See Firth, Rowland V. D., assignor.)
International Nickel Company. (See Bieber, Clarence G., assignor.)
International Nickel Company, The. (See Owens, R. J., and Fraser, assignor.)
International Projector Corporation. (See Dia, Augusta, assignor.)
International Projector Corporation. (See Frappier, L. S., and Boecking.)
International Standard Electric Corporation. (See Deakin, G., and Schreiber, assignors.)
International Standard Electric Corporation. (See Hughes, R. L., and Baguley, assignors.)
International Standard Electric Corporation. See Sandeman, Edward K., assignor.)
International Standard Electric Corporation. (See Vesey, John R., assignor.)
International Standard Electric Corporation. (See Wright, Esmond P. G., assignor.)
Intertype Corporation. (See Turner, Ransom H., assignor.)
Inventia Patent-Verwertungs-Gesellschaft. (See Engberg, A. O., and Bilde, assignees.)
Jackson, Harry G., Jenkintown, Pa. Gauge. 1,901,451; Mar. 14.
Jackson, John G., assignor to Square D Company, Detroit, Mich. Fuse panel board. 1,901,164; Mar. 14.
Jackson, John G., assignor to Square D Company, Detroit, Mich. Reenforced block structure for electric fixtures. 1,901,165; Mar. 14.
Jacobson, Ludwig G., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Swing door inclosure interlock. 1,901,517; Mar. 14.
Jacobson, Parker A., Winona, Minn. Sausage linking machine. 1,901,452; Mar. 14.

Jacobus, David S., Jersey City, N. J., assignor, by mesne assignments, to Fuller Lehigh Company. Sectional furnace wall. 1,901,560; Mar. 14.
James, George S., Battle Creek, Mich., assignor, by mesne assignments, to James Neon Double Electrode Corporation, Chicago, Ill., Gas-tube, electrode, etc. 1,901,600; Mar. 14.
James Neon Double Electrode Corporation. (See James, George S., assignor.)
Jandus, Herbert S., and H. L. Brooke, assignors to General Spring Bumper Corporation, Detroit, Mich. Bumper with cushioned ends. 1,901,601; Mar. 14.
Jefferson Electric Company. (See Daley, James C., assignor.)
Jewell Electrical Instrument Company. (See Simpson, Ray, assignor.)
Jewell, Howard W., Los Angeles, Calif. Apparatus for automatically flushing sewers. 1,901,244; Mar. 14.
Johns-Manville Corporation. (See Berger, Edward H., assignor.)
Johnsen-Stephens & Shinkle Shoe Company. (See Mattler, Peter, assignor.)
Johnson, Albert, New York, N. Y. Valve controlling means for fluid distributing devices. 1,901,749; Mar. 14.
Johnson, Alvin L., Worcester, Mass. Direction signal. 1,901,395; Mar. 14.
Johnson, Ben P., assignor to E. E. Greiner, Springfield, Ohio. Seeding machine. 1,901,298; Mar. 14.
Johnson, Ben P., assignor to E. E. Greiner, Springfield, Ohio. Mulching wheel for seeding machines. 1,901,299; Mar. 14.
Johnson, Ben P., assignor to E. E. Greiner, Springfield, Ohio. Double run force feed grain distributor. 1,901,300; Mar. 14.
Johnson, Ben P., assignor to E. E. Greiner, Springfield, Ohio. Combined grain and fertilizer distributor. 1,901,301; Mar. 14.
Johnson, Bror A. E., Alsten, assignor to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden. Machine for manufacturing boxes. 1,901,750; Mar. 14.
Johnson, Leonard W., Batavia, Ill. Cleaning device. 1,901,518; Mar. 14.
Johnson-Matthey & Company Limited. (See Powell, A. H., and Scott, assignors.)
Johnson, Sven A., Brooklyn, N. Y. Rotary plunger pump. 1,901,602; Mar. 14.
Johnson, Tomlinson F., Atlanta, Ga. Connecter. 1,901,990; Mar. 14.
Johnston, George W., and S. Muchnik, St. Joseph, Mo.; said Johnston assignor to said Muchnik. Sled brake. 1,901,302; Mar. 14.
Johnston, Mordica O., Glendale, assignor of one-third to G. M. Jones, and one-third to F. C. Van Deinse, Los Angeles, Calif. Oil well testing device. 1,901,813; Mar. 14.
Jones, Frank N., Chicago, Ill. Interchangeable holding member for projection machines. 1,901,245; Mar. 14.
Jones, Gilson M., et al. (See Johnston, Mordica O., assignor.)
Jones, Lester L., Oradell, N. J. Transformer. 1,901,368; Mar. 14.
Jones, Louis C., Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y. Purifying the nitrogen-hydrogen mixture in the synthesis of ammonia. Re18,766; Mar. 14.
Jones, Thomas H., Woodthorpe, England. Knitting machine sinker. 1,901,751; Mar. 14.
Jordan, Hans. (See Scheeller, W., Jordan, and Clerc.)
Jordon, Newbury L., Princeton, N. J. Handle support. 1,901,166; Mar. 14.
Jorgensen, Jacob C., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for inserting fastenings. 1,901,167; Mar. 14.
Judd, Irving H., Detroit, assignor to Whitehead & Kales Company, River Rouge, Mich. Transporting vehicles and the like. 1,901,103; Mar. 14.
Juengst, Fred W., and O. M. Anderson, assignors to Landers Frary & Clark, New Britain, Conn. Electric toaster. 1,901,603; Mar. 14.
Junkers, Hugo, Dessau, Germany. Fuel injection devices for internal combustion engines. 1,901,814; Mar. 14.
Justrite Manufacturing Company. (See Brown, Le Roy O., assignor.)
Kahlerth, Charles W., Newark, N. J. Hoisting engine. 1,900,937; Mar. 14.
Kahn, Leopold, Mannheim, assignor to P. P. Muelhens, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdepost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Non-refillable container for powder. 1,901,651; Mar. 14.
Kalben, Max, San Diego, Calif. Sectional rod coupling. 1,901,168; Mar. 14.
Kallam, Floyd L., South Gate, Calif. Fluid flow control device. 1,901,032; Mar. 14.
Kallam, Floyd L., South Gate, Calif. Condenser control apparatus. 1,901,104; Mar. 14.
Kambara, Shinichiro, Yokohama, Japan. Automatic regulating and controlling gate. 1,901,396; Mar. 14.
Kapuczin, Dave, Los Angeles, Calif. Fluid dispenser or meter. 1,901,848; Mar. 14.
Karle, John D., Roselle Park, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machine presser-foot. 1,901,752; Mar. 14.
Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Recording and reproducing phonofilms. 1,901,033; Mar. 14.
Karolus, August, Leipzig, Germany, assignor to Radio Corporation of America. Recording and reproducing phonofilms. 1,901,034; Mar. 14.
Karrick, Lewis C., Salt Lake City, Utah. Distillation of solid carbonaceous material. 1,901,169; Mar. 14.
Karrick, Lewis C., Salt Lake City, Utah. Gasification of carbonaceous material. 1,901,170; Mar. 14.
Kauffman, Thomas J., Grosse Pointe Village, assignor to Square D Company, Detroit, Mich. Steering wheel attachment. 1,901,171; Mar. 14.
Kaufmann, Phillip H., Cleveland Heights, Ohio. Book, pad, and tablet, and line ruler therefor. 1,901,246; Mar. 14.
Kean, Robert H., assignor to General Zeolite Co., Chicago, Ill. Liquid purification. 1,901,652; Mar. 14.
Keil, Francis, & Son, Inc. (See Keil, Henry F., assignor.)
Keil, Henry F., Scarsdale, N. Y., assignor to Francis Keil & Son, Inc. Attachment for doors. 1,901,803; Mar. 14.
Keith, David F., Cleveland Heights, assignor to Perfection Stove Company, Cleveland, Ohio. Thermal shield for the freezing space of refrigeration apparatus. 1,901,845; Mar. 14.
Keith, Henry M., Harrisburg, Ill. Vacuum cleaner. 1,901,519; Mar. 14.
Keith, Henry M., Harrisburg, Ill. Oil and liquor dispensing device. 1,901,815; Mar. 14.
Kellett Autogiro Corporation. (See Du Pont, Mark S., assignor.)
Kelley, George L., and E. G. Budd, assignors to Budd Wheel Company, Philadelphia, Pa. Making cold rolled disks. 1,901,035; Mar. 14.
Kellogg, M. W., Company, The. (See Hopkins, Robert K., assignor.)
Kelly, Laurence C., Beverly Hills, Calif. Whipstock. 1,901,453; Mar. 14.
Kelly, Laurence C., Beverly Hills, Calif. Cementing whipstocks in well bores. 1,901,454; Mar. 14.
Kelly, William J., et al. (See Phelps, Benjamin B., assignor.)
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Kelsey-Hayes Wheel Corporation. (See Sinclair, Charles W., assignor.)
Kempton, Leslie A., Bridgeport, Conn., assignor to General Electric Company. Electric switch. 1,901,653; Mar. 14.
Kendall Company, The. (See Gabosch, John, assignor.)
Kennedy, Chester C. (See Strosacker, C. J., Kennedy, and Pelton.)
Kennedy, Ridgway R., assignor to Abbotts Dairies, Inc., Philadelphia, Pa. Apparatus for washing fruits. 1,901,455; Mar. 14.
Kennedye Corporation, The. (See Hollestelle, Jan H., assignor.)
Kenny, Frederick P. (See Howald, W. T., Klingelfuss, and Kenny.)
Kerr, Samuel L., Philadelphia, Pa., assignor to I. P. Morris & De La Vergne, Incorporated. Governor. 1,901,831; Mar. 14.
Kerr, Thomas, Schenectady, N. Y., assignor to General Electric Company. Cutting tool and making it. 1,901,654; Mar. 14.
Kerruish, Edward P., assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio. Making lined bearings. 1,900,938; Mar. 14.
Kex Company. (See Fisher, Albert H., assignor.)
Keys, John H., Dayton, Ohio. Lawn sprinkler. 1,901,655; Mar. 14.
Kiesling, Le Roy H., Brooklyn, N. Y. Elevator track mounting. 1,901,520; Mar. 14.
Kilborn-Sauer Company, The. (See Sauer, Henry J., assignor.)
King, Lyman M., jr. (Stine, Walter H., assignor.)
King, Patrick F., assignor to The Stanley Works, New Britain, Conn. Sliding door arrangement. 1,901,304; Mar. 14.
Kingsbury, Harry T., Keene, N. H. Combined fender and tail-light socket for toy automobiles. Des. 89,444; Mar. 14.
Kingston Products Corporation. (See Beal, Fay, assignor.)
Kingston Products Corporation. (See Ulrich, Carl J., assignor.)
Kinkead, William S., Chicago, Ill. Carton. 1,901,036; Mar. 14.
Kinney, Harmon C., Ambler, Pa., assignor, by mesne assignments, to Ambler Asbestos Shingle & Sheathing Company. Apparatus for shaping molding. 1,900,939; Mar. 14.
Kinsman, Gordon, Jersey City, N. J., assignor to Caloroil Burner Corporation. Oil burner. 1,901,456; Mar. 14.
Kinzbach, Frank, Houston, Tex. Pipe cleaning machine. 1,901,247; Mar. 14.
Kirk, Henry C., Baltimore, Md.; Colonial Trust Company executors of said H. C. Kirk, deceased. Oil treatment process and apparatus therefor. 1,901,172; Mar. 14.
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Patent Licensing Corporation, Boston, Mass. Roofing and making same. 1,900,940; Mar. 14.
Klaiber, Erich, assignor to Robert Bosch Aktiengesellschaft Stuttgart, Germany. Ignition device for aircraft engines. 1,901,846; Mar. 14.

Klingelfuss, Eugene H. (See Howald, W. T., Klingelfuss, and Kenny.)
Knickerbocker, Arthur K. (See Holt, G. J., Hocking, Matson, and Knickerbocker.)
Knowles, Albert, San Francisco, Calif. Concrete mixer blade. 1,901,305; Mar. 14.
Knowlton, George H., Westbrook, Me. Vulcanizing or drying apparatus. 1,901,306; Mar. 14.
Koberling, Joseph, San Francisco, Calif. Fireplace damper construction. 1,901,753; Mar. 14.
Koeberle, Karl. (See Kuns, M. A., and Koeberle.)
Koerner, Charles A. (See Alsaker, A., Hampton, and Koerner.)
Kolb, Louis J. (See Worrall, Arthur G., assignor.)
Kolbede, Karl H., San Andreas, Calif. Electrical valve control for packing machines. 1,901,521; Mar. 14.
Kollmorgen Optical Corporation. (See Hauser, Oscar, assignor.)
Koppers Company, The. (See Hansen, Christian J., assignor.)
Kovats, John, Fairfield, assignor to The Leg-O-Matic Company, Bridgeport, Conn. Folding table. 1,901,105; Mar. 14.
Kovats, John, assignor to The Leg-O-Matic Company, Bridgeport, Conn. Folding table. 1,901,106; Mar. 14.
Kovats, John, assignor to The Leg-O-Matic Company, Bridgeport, Conn. Folding table. 1,901,107; Mar. 14.
Kraenslein, Georg, H., Vollmann and M. Correll, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Halogenated vat dyestuffs of the 3.4.8.9-and 4.5.8.9-dibenzpyrenequinone series and preparing them. 1,901,307; Mar. 14
Kramer, Oskar, Oppau, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Stable suspensions. 1,901,656; Mar. 14.
Krans, Harry W., C. S. Holden, and H. R. Uber, Lakewood, assignors to The Cleveland Welding Company, Cleveland, Ohio. Apparatus for making wire wheels. 1,901,457; Mar. 14.
Kuhlman, Edward H., Dayton, Ohio. Welding electrodes. 1,900,941; Mar. 14.
Kuhn, Clarence W., North Milwaukee, assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis. Driving mechanism for valves and other devices. 1,901,397; Mar. 14.
Kuhn, Herman L., Union, assignor of fifty per cent to W. H. Coffey, Ludlow, Miss. Dirigible-airplane. 1,901,173; Mar. 14.
Kuhner, Max H., assignor to Badenhausen Corporation, Cornwells Heights, Pa. Dust separating and collecting device. 1,901,370; Mar. 14.
Kuns, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the isodibenzanthrone series and making them. 1,901,308; Mar. 14.
Kusterle, Frank, Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Hospital table. 1,901,174; Mar. 14.
LaBrie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,901,657; Mar. 14.
Lack, Arnold, Beloit, Wis., assignor to H. H. Shockey, Chicago, Ill. Crank shaft. 1,901,175; Mar. 14.
Ladrette, Jean, Peage de Roussillon, France, assignor to Du Pont Rayon Company, New York, N. Y. Treating spinnerets. 1,901,658; Mar. 14.
Lamson, Horatio W., Arlington, assignor to General Radio Company, Cambridge, Mass. Sound ranging system. 1,901,342; Mar. 14.
Landaw, Osk, assignor to Mutschler Bros. Co., Nappanee, Ind. Table. 1,901,108; Mar. 14.
Landers Frary & Clark. (See Juengst, F. W., and Anderson, assignors.)
Landsiedel, Harry, Norwood, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y. Calculating machine. 1,901,372; Mar. 14.
Lange, Edward H., Baltimore, Md. Automobile clutch control system. 1,901,371; Mar. 14.
Langmeier, Arthur, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del. Dehydrating nitrocellulose and the product thereof. 1,901,561; Mar. 14.
Lapp Insulator Company. (See Lapp, John S., assignor.)
Lapp, John S., Leroy, N. Y., assignor to Lapp Insulator Company, Inc. 270° clamp. 1,901,849; Mar. 14.
Larack, Frank A., New York, N. Y. Instep protector. 1,901,659; Mar. 14.
Larrowe-Suzuki Company. (See Masuda, Reisuke, assignor.)
Larsen, Edith A., Chicago, Ill. Device for eliminating facial wrinkles. 1,901,248; Mar. 14.
Lawson, Gottfrid C., assignor to The United Metal Products Company, Canton, Ohio. Welding. 1,901,176; Mar. 14.
Leake, Richard C., assignor to General Railway Signal Company, Rochester, N. Y. Train control system. 1,901,754; Mar. 14.
Lee-O-Matic Company, The. (See Kovats, John, assignor.)
Leibe, Frank A. (See Carpe, A., and Leibe.)
Lely, Dirk, Eindhoven, Netherlands, assignor to Radio Corporation of America. Electric discharge device. 1,901,037; Mar. 14.
Lemmon, Rees H. (see Yerkes, J. A., and Lemmon.)
Le Moon, Axel R., Chicago, Ill. Four-wheel vehicle drive construction. 1,901,309; Mar. 14.
Leaning, Alvar, Jackson Heights, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,901,458; Mar. 14.
Lents, Lawrence E., Harrisburg, Pa., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,901,398; Mar. 14.
Le Sueur, Claude D., Richmond, England. Means for use in navigating and like operations. 1,901,755; Mar. 14.
Levy, Maurice L., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Radio-signaling system. 1,901,350; Mar. 14.
Levy, Oscar C., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Multi-office telephone system. 1,901,177; Mar. 14.
Lewis, Arthur J., Stratford, Conn., assignor to A. Schrader's Son, Inc., New York, N. Y. Machine for making and assembling a valve pin and valve gasket support. 1,901,459; Mar. 14.
Lewis, Robert B., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa. Drop testing machine. 1,901,460; Mar. 14.
Lewis, William J., Clarksdale, Miss. Stalk-cutting machine. 1,901,310; Mar. 14.
Libbey-Owens-Ford Glass Company. (See Beesor, Theodore, assignor.)
Libbey-Owens-Ford Glass Company. (See Louviaux, Raoul J., assignor.)
Libbey-Owens-Ford Glass Company. (See Hamann, Henry J., assignor.)
Libbey-Owens-Ford Glass Company. (See Handy, Le Roy L., assignor.)
Libby, McNeill & Libby. (See Robbins, Frank, assignor.)
Liebel, John G. H., Cincinnati, Ohio, assignor, by mesne assignments, to The Union Switch & Signal Company. Alternating current rectifying element. 1,901,756; Mar. 14.
Lieberknecht, Karl R., assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany. Making full fashioned stockings. 1,901,757; Mar. 14.
Lieberknecht, Karl, G. m. b. H. (See Lieberknecht, Karl R., assignor.)
Linaker, Frederick W., Brooklyn, N. Y. Boiler cleaner. 1,901,804; Mar. 14.
Lincoln, Bert H., assignor to Continental Oil Company, Ponca City, Okla. Method and apparatus for converting hydrogen sulphide into sulphur. 1,901,249; Mar. 14.
Lincoln Electric Company, The. (See Osborne, Samuel C., assignor.)
Linde Air Products Company, The. (See Davis, W. T., and Rhein, assignors.)
Lindgren, Hans O., Appelviken, assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal separator machine. 1,901,461; Mar. 14.
Linsell, Harry K., LaGrange, assignor to United States Gypsum Company, Chicago, Ill. Mastic flooring, composition, and preparing. 1,901,053; Mar. 14.
Lionne, Ernest, Swampscott, Mass. Urea-formaldehyde condensation product and process. 1,901,373; Mar. 14.
Liptak, Michael, St. Paul, Minn. Mud-drum seal. 1,901,462; Mar. 14.
Lloyd, Fred, Wilkes-Barre, Pa. Antiskid device. 1,901,311; Mar. 14.
Lockwood Manufacturing Company, The. (See Chandonia, Elmer H., assignor.)
Loewe, Siegmund, Berlin, Germany, assignor to Westinghouse Electric & Manufacturing Company. Multiple booster or multiple vibration generator. 1,901,605; Mar. 14.
Lonza Elektrizitatswerke und Chemische Fabriken Aktiengesellschaft. (See Luscher, Emil, assignor.)
Louviaux, Raoul J., assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for handling glass sheets. 1,901,463; Mar. 14.
Lubrication Corporation, The. (See Creveling, John L., assignor.)
Lucas, Georges D. (See Salone, J. C. G., and Lucas.)
Lucas, William J., Oklahoma City, Okla. Piston construction. 1,901,312; Mar. 14.
Lukachovic, Joseph C. (See Bushnell, J. E., and Lukachovic.)
Lund, Rudolph O., assignor to Croker Fire Prevention Corp., New York, N. Y. Hose reel. 1,901,660; Mar. 14.
Lunkenheimer Company, The. (See Aull, Jerome J., assignor.)
Lüscher, Emil, assignor to the Firm Lonza Elektrizitätswerke und Chemische Fabriken Aktiengesellschaft, Basel, Switzerland. Absorption of oxides of nitrogen. 1,901,816; Mar. 14.
Lute, Carl, Hammond, Ind., assignor to Camel Company, Chicago, Ill. Door elevating arrangement. 1,901,758; Mar. 14.
Luther, Martin, Mannheim, and H. Beller, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of masses resembling linoxyn. 1,901,374; Mar. 14.
Lyman, Charles E., jr., assignor to The Lyman Gun Sight Corporation, Middlefield, Conn. Sight. 1,901,859; Mar. 14.
Lyman Gun Sight Corporation, The. (See Lyman, Charles E., jr., assignor.)

Lyon, George A., assignor to Lyon Incorporated, Asbury Park, N. J. Combination spare tire cover side member and spare wheel hub closure for a tire cover or similar article. Des. 89,466; Mar. 14.
Lyon Incorporated. (See Lyon, George A., assignor.)
Macallen Company, The. (See McCarthy, Louis, assignor.)
Macallen Company, The. (See Tracy, Elwyn B., assignor.)
MacCourt, Winthrop D., T. F. Walsh, and F. H. Rasmussen, assignors to Magill-Weinsheimer Company, Chicago, Ill. Reflective display device. 1,901,661; Mar. 14.
Macfarlane, James C. (See Austin, G., Macfarlane, J. C. and W. A.)
Macfarlane, William A. (See Austin, G., Macfarlane, J. C. and W. A.)
Macwhyte Company. (See Drew, James F., assignor.)
Magill-Weinsheimer Company. (See MacCourt, W. D., Walsh, and Rasmussen, assignors.)
Magnavox Company, The. (See Pridham, Edwin S., assignor.)
Magnesium Development Corporation. (See Moschel, Wilhelm, assignor.)
Magnetic Signal Co. (See Newton, Burkett D., assignor.)
Mahoney, John P., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,901,662; Mar. 14.
Maier, Werner, Baden-Baden, Germany, assignor to American Lurgi Corporation, New York, N. Y. Production of starch. 1,901,109; Mar. 14.
Main, Norman S., Linlithgow, Scotland. Golf club. 1,901,562; Mar. 14.
Mallinson, H. R., & Co. (See Heinke, Alfred J., assignor.)
Malm, John F., assignor of one-half to F. A. Adkins, Chicago, Ill. Liquid dispensing meter. 1,901,178; Mar. 14.
Mammes, Raymond J., Los Angeles, assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif. Reversible mat. 1,901,110; Mar. 14.
Mann, Leo, assignor to H. D. Peck, Providence, R. I. Heat-producing compound. 1,901,313; Mar. 14.
Maranville, Alger G., assignor to The General Tire & Rubber Company, Akron, Ohio. Airplane landing wheel. 1,901,759; Mar. 14.
March Construction Co. (See Wirt, Harry M., assignor.)
Marrison, Warren A., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Harmonic analyser. 1,901,400; Mar. 14.
Marsh, Charles W., Muskegon, Mich. Oil seal. 1,901,606; Mar. 14.
Marshall, David S., San Diego, Calif. Electric heater. 1,901,038; Mar. 14.
Marshall Field Mills Corporation. (See Clark, Eugene F., assignor.)
Martin, Elmer G., East Lampeter Township, Pa. Educational chart. Des. 89,467; Mar. 14.
Martin, George F., jr., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Copper oxide rectifier. 1,901,563; Mar. 14.
Marx, Frank A., assignor, by mesne assignments, to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio. Dummy display box. 1,901,351; Mar. 14.
Maschinenfabrik Johannisberg G. m. b. H. (See Gietz, Peter, assignor.)
Masuda, Reisuke, Toledo, Ohio, assignor to Larrowe-Suzuki Company, Detroit, Mich. Antifreezing solution. 1,901,111; Mar. 14.
Matheson, Axel C., Minneapolis, Minn. Piston. 1,900,991; Mar. 14.
Mathias, Maximilian, Berlin, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Automatic telephone system. 1,901,179; Mar. 14.
Matson, Amel E. (See Holt, G. J., Hocking, Matson, and Knickerbocker.)
Matthes, Samuel S., assignor to The Ohio Brass Company, Mansfield, Ohio. Conductor support. 1,901,401; Mar. 14.
Matthews, George A., Detroit, Mich., assignor to Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa. Outdoor switch contact. 1,901,607; Mar. 14.
Matthews, W. N., Corporation. (See Birkenmaier, Theodore, assignor.)
Mattler, Peter, assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo. Method and apparatus for weaving. 1,901,250; Mar. 14.
Maurer, Rufus H., Brookline, assignor to Spencer Thermostat Company, Cambridge, Mass. Ignition system for gas burners. 1,901,251; Mar. 14.
Maxmoor Corporation. (See Moore, Arlington, assignor.)
McArdle, Michael W., Chicago, Ill. Griddle. 1,901,314; Mar. 14.
McArthur, Elmer D., Scheuectady, N. Y., assignor to General Electric Company. Signal transmitting means. 1,901,112; Mar. 14.
McBride, Octave O., McKinney, Tex. Electric head lamp. 1,901,180; Mar. 14.
McCabe, Ira E., Chicago, Ill. Motor operated mechanism. 1,901,402; Mar. 14.
McCabe, Joseph J., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Toric lens generating machine. 1,901,181; Mar. 14.
McCandless, Byron, U. S. Navy. Portable display screen. 1,901,182; Mar. 14.
McCann, Thomas A., East Orange, N. J., assignor to American Telephone and Telegraph Company. Impulse transmission system. 1,900,993; Mar. 14.
McCarthy, Louis, assignor to The Macallen Company, Boston, Mass. Machine for making composite sheets. 1,901,352; Mar. 14.
McCarty, Harvey V., Canton, Ohio. Carburetor. 1,901,564; Mar. 14.
McCarty, Roy A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fabricated frame. 1,901,315; Mar. 14.
McClintock, William H., Bellevue, Pa., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Clamping device. 1,901,760; Mar. 14.
McCorquodale, Wilmer E., assignor to Mrs. Gladys McCorquodale Ready, Orange, and Dr. W. H. Bennett, Humble, Tex. Hot water heater attachment. 1,901,761; Mar. 14.
McCrosky Tool Corporation. (See Skeel, L., and Miller, assignors.)
McCutcheon, Kenneth C., Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio. Open hearth furnace construction. 1,900,942; Mar. 14.
McKahin, Herbert B., assignor to Deere & Company, Moline, Ill. Transport truck for disk harrows. 1,901,183; Mar. 14.
McKey Company, The. (See Wells, Merritt R., assignor.)
Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)
Mead, Richard R., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Slug casting machine. 1,901,118; Mar. 14.
Mecano Gesellschaft mit beschrankter Haftung, et al. (See Goldschmidt, Max, assignor.)
Meerwein, Hans, Marburg-on-the-Lahn, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Preparing trybromoethylalcohol. 1,901,316; Mar. 14.
Meginniss, Francis R., Albany, N. Y. Switch. 1,901,252; Mar. 14.
Meginniss, Francis R., Albany, N. Y. Clamp and support for flash-lights. 1,901,253; Mar. 14.
Meier, Charles, and T. A. Wettig, assignors to The Acme Machine Tool Company, Cincinnati, Ohio. Machine tool construction. 1,901,522; Mar. 14.
Meiselbach, August D., Chicago, Ill. Ventilator. 1,901,114; Mar. 14.
Meisenburg, Kurt, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Mixed rubber-like masses and preparing the same. 1,901,354; Mar. 14.
Menasha Products Company, The. (See Horwitt, Paul H., assignor.)
Mercier, Daniel, Annonay, France. Hide and leather dressing machine. 1,901,317; Mar. 14.
Mergenthaler Linotype Company. (See Mead, Richard R., assignor.)
Messer, Adolf, Frankfort-on-the-Main, Germany. Cutting mechanism. 1,901,254; Mar. 14.
Metro-Goldwyn-Mayer Corporation. (See Mammes, Raymond J., assignor.)
Meyer, Egon. (See Schmidt, O., Schnell, and Meyer.)
Meyer, Frank H., Warren, assignor to The American Welding & Manufacturing Co., Trumbull, Ohio. Bending apparatus. 1,901,762; Mar. 14.
Michaels, Frank L., Fort Thomas, Ky. Grave marker. Des. 89,445; Mar. 14.
Michaels, Frank L., Fort Thomas, Ky. Grave marker. Des. 89,446; Mar. 14.
Michelin et Cie. (See Bourdon, Pierre M., assignor.)
Middlemiss, Austin O., Portland, Oreg. Cream skimmer. 1,900,993; Mar. 14.
Miller, Edward M. (See Nirdlinger, Patrick A. and C. D., and Miller.)
Miller, Edward W., assignor to The Fellows Gear Shaper Company, Springfield, Vt. Truing means for formed gear grinding wheels. 1,900,943; Mar. 14.
Miller, Frank P. (See Skeel, L., and Miller.)
Millet, Eugène J. N., Paris, France. Automatically loading machine for distributing sand, gravel, and the like. 1,901,523; Mar. 14.
Mills, Winifred H. (See Dunn, L. M., and Mills.)
Milmoe, Michael J., assignor to F. B. Redington Co., Chicago, Ill. Starter mechanism for feeding blanks or the like. 1,901,832; Mar. 14.
Milnor, Joseph W., Maplewood, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Balancing cables equipped with a long sea-earth. 1,901,318; Mar. 14.
Minkler, William A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,901,668; Mar. 14.
Mitchell, John K., Philadelphia, Pa., assignor to Dispersions Process, Inc., Dover, Ill. Recovery of fibrous material and rubber from waste rubber stock. 1,900,944; Mar. 14.
Mitchie, Jean G., assignor to Stephenson Laboratories Trust, Boston, Mass. Arch support. 1,901,353; Mar. 14.
Mohawk Brush Company. (See Aufsesser, Gates B., assignor.)
Moloney, William, Hamilton Beach, N. Y. Foot rest device. 1,901,184; Mar. 14.

Montgomery Company, The. (See Firtion, Harold L., assignor.)
Montgomery, H. B. (See Tatro, Lysle G., assignor.)
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Intake manifold. 1,901,763; Mar. 14.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Supplying and mixing charges for internal combustion engines. 1,901,847; Mar. 14.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Charge forming apparatus for internal combustion engines. 1,901,848; Mar. 14.
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Fueling internal combustion engines. 1,901,849; Mar. 14.
Moore, Clarence W., Roslyn, Pa., assignor to Ritter Dental Manufacturing Company, Rochester, N. Y. Fountain cuspidor. 1,901,319; Mar. 14.
Moran, Daniel J., assignor to Continental Oil Company, Ponca City, Okla. Gate valve. 1,901,255; Mar. 14.
Morgan & Wright. (See Eger, Ernst, assignor.)
Morgan, John R., Birmingham, and W. Schnell, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich. Automobile radiator ornament or similar article. Des. 89,447; Mar. 14.
Morits, John A., Crawfordsville, Ind. Insulating zinc spelter baths and for effecting their practice. 1,901,464; Mar. 14.
Morris, I. P. & De La Vergne, Incorporated. (See Kerr, Samuel L., assignor.)
Morris Paper Mills. (See Powell, H. K., and Ballenberg, assignors.)
Morrison Machine Products, Inc. (See Evans, Leigh R., assignor.)
Morse, Clark T., and E. L. Hogan, assignors to American Blower Corp., Detroit, Mich. Cooling coil, storage tank, and cooling the water in the tank. 1,901,664; Mar. 14.
Mortenson, Gustav M., Warren, Pa. Electric switch. 1,901,320; Mar. 14.
Mosca, John, Brooklyn, N. Y. Hat brim trimming tool. 1,901,764; Mar. 14.
Moschel, Wilhelm, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation. Chlorinating apparatus. 1,901,524; Mar. 14.
Moschel, Wilhelm, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation. Apparatus for performing reactions between molten substances and gases. 1,901,525; Mar. 14.
Muchnik, Samuel. (See Johnston, G. W., and Muchnik.)
Muelhens, Paul P. (See Kahn, Leopold, assignor.)
Muhlfeld, John E., Scarsdale, N. Y. Steam boiler structure. 1,901,465; Mar. 14.
Müller, Johannes, assignor to "Sachtleben" Aktiengesellschaft für Bergbau und Chemische Industrie, Mombergon-the-Lower-Rhine, Germany. Purifying of natural heavy spar. 1,900,994; Mar. 14.
Muller, Wilhelm, Enfield, near Sydney, New South Wales, assignor of one-third to Automatic Bread Baking Company Limited and one-third to Francis Hawkins, Sydney, Australia. Preparation of bread and the like for wrapping. 1,901,115; Mar. 14.
Munday, Richard B., Dayton, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio. Non-decanting liquid measure. 1,901,256; Mar. 14.
Münz, Ferdinand, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works Inc., New York, N. Y. Rendering harmless the precipitates formed by hard water. 1,901,321; Mar. 14.
Murphy, Paul B., Nyack, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,901,403; Mar. 14.
Murray Corporation of America, The. (See Northrup, Amos E., assignor.)
Mutscheller, Arthur, New York, N. Y., assignor to Wappler Electric Company, Inc. Synchronously operated timing device. 1,901,526; Mar. 14.
Mutschler Bros. Co. (See Landaw, Oak, assignor.)
Myers, Edmund T. D. jr., Richmond, Va. Road marker. 1,900,945; Mar. 14.
National Acme Company, The. (See Hogg, William J., assignor.)
National Acme Company, The. (See Trobeck, Olof E., assignor.)
National Aniline & Chemical Co. (See Tumim, Herbert R., assignor.)
National Aniline & Chemical Company. (See Wood, Robert O., assignor.)
National Bank and Trust Company (administrator). (See Bachman, Henry F., assignor.)
National Bank of Hungary. (See Von Heinrich, Friedrich, assignor.)
National Cash Register Company. (See Dunker, John G., assignor.)
National Cash Register Company, The. (See Fuller, Frederick L., assignor.)
National Cash Register Company, The. (See Green, Charles W., assignor.)
National Cash Register Company. (See Shipley, Bernis M., assignor.)
National Machinery Company, The. (See Clouse, William L., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
National Tile Company, The. (See Bower, James A., assignor.)
Naugatuck Chemical Company, The. (See Coleman, Clyde, assignor.)
Naumann, William. (See Alimena, S., and Naumann.)
Nas-Dar Company. (See Rempen, William R., assignor.)
Needham, John T., North Plainfield, N. J., assignor, by mesne assignments, to Pneumatic Tube Supply Co. of Delaware. Pneumatic dispatch tube apparatus. 1,900,946; Mar. 14.
Neelmeier, Wilhelm, E. Eimele, and B. Glietenberg, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Monoacylated 2,5-diaminohydroquinoneethers. 1,901,322; Mar. 14.
Neidl, Georg, Berlin, Germany. Compressor. 1,901,817; Mar. 14.
Nelson, Paul R., Fort Totten, N. Y., assignor to the Secretary of War, in behalf of the United States. Submarine mine control. 1,901,185; Mar. 14.
Nenninger, Lester F. (See Einstein, S., and Nenninger.)
Newall, William F., Wimsford, England. Coin exchanging mechanism. 1,901,323; Mar. 14.
Newberry, Sidney H., Philadelphia, Pa. Drum head tightener. 1,901,765; Mar. 14.
New Britain Machine Company, The. (See Costello, William F., assignor.)
New England Pressed Steel Company. (See Somersall, William W., assignor.)
Newhouse, Ray C. (See Becker, G. D., and Newhouse.)
Newhouse, Ray C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Packing. 1,901,766; Mar. 14.
Newton, Burkett D., Los Angeles, Calif., assignor to Magnetic Signal Co. Out-of-order signal. 1,901,404; Mar. 14.
Newton, Frank E., Hartford, Conn. Machine for shaving and slotting screws. 1,901,405; Mar. 14.
Nichols, Harold W. (See Butterfield, Charles, assignor.)
Nichols, Marion F., assignor of one-half to Campbell Wallace, Knoxville, Tenn. Treating liquids. 1,900,995; Mar. 14.
Nicolson, Alexander McL., assignor to Communication Patents, Inc., New York, N. Y. Color television. 1,901,116; Mar. 14.
Nirdlinger, Clarence D. (See Nirdlinger, Patrick A. and C. D., and Miller.)
Nirdlinger, Patrick A. and C. D., and E. M. Miller, Chicago, Ill., assignors, by mesne assignments, to Operay Laboratories, Inc., Madison, Wis. Universal joint and supporting structure for illuminating devices. 1,901,527; Mar. 14.
Noltin, Fred, Berwyn, assignor to The Oscar C. Rixson Co., Chicago, Ill. Self aligning interfitting spindle and socket element. 1,901,855; Mar. 14.
Norma-Hoffmann Bearings Corporation. (See Bott, George R., assignor.)
Norris, Eric D. T., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Lightning or surge absorber. 1,901,767; Mar. 14.
Norris, Eric D. T., Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Regulation of the voltage of an alternating current circuit. 1,901,768; Mar. 14.
Northrup, Amos E., Pleasant Ridge, assignor to The Murray Corporation of America, Detroit, Mich. Automobile body. Des. 89,448; Mar. 14.
Norton, Samuel H., Meadville, Pa., assignor to Hookless Fastener Company. Lock slider. 1,901,257; Mar. 14.
Norworth, Jack, New York, N. Y. Apparatus for testing photopaper. 1,901,180; Mar. 14.
Nottage, Stanley G., Murrysville, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,901,608; Mar. 14.
Novotny, Emil E., Philadelphia, assignor to J. S. Stokes, Huntingdon Valley, Pa. Abrasive body and making the same. 1,901,824; Mar. 14.
Novotny, Emil E., Philadelphia, assignor to J. S. Stokes, Huntingdon Valley, Pa. Abrasive body and making the same. 1,901,825; Mar. 14.
Nye, Henry V., West Allis, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Circuit breaker control system. 1,901,406; Mar. 14.
Nye, Roland W. (See Carlisle, E. W., and Nye.)
Oakes Products Corporation. (See Smith, Frederick A assignor.)
Ohio Brass Company, The. (See Matthes, Samuel S., assignor.)
Oil Country Specialties Mfg. Co. (See Stanley, Fred D., assignor.)
Oilgear Company, The. (See Ferris, Walter, assignor.)
Okerberg, Luther C., Elk City, Okla. Printing pipes roller. 1,901,818; Mar. 14.
Olsen, Henry, Minneapolis, Minn. Bottle receiving and coin dispensing device. 1,901,528; Mar. 14.
Olsen, Henry, Minneapolis, Minn. Coin handling machine. 1,901,529; Mar. 14.
Olson, Charles A., Geneva, assignor to Crane Co., Chicago, Ill. Sectional boiler. 1,900,947; Mar. 14.
Olsson, Johan G., Lidingon, and F. I. E. Stenfors, Alsten, assignors to Aktiebolaget Svenska Flaktfabriken, Stockholm, Sweden. Drying device. 1,901,826; Mar. 14.

Open Hearth Combustion Company. (See Boynton, Arthur J., assignor.)
Operay Laboratories, Inc. (See Nirdlinger, Patrick A., and C. D., and Miller.)
Osborg, Hans, Frankfort-on-the-Main, Germany. Electrolytic process for producing alloys of lithium. 1,901,407; Mar. 14.
Osborn Products Inc. (See Bosarth, William H., assignor.)
Osborn, Robert T., Warren, Ohio. Air operated horn. 1,901,187; Mar. 14.
Osborne, Samuel C., Cleveland Heights, assignor to The Lincoln Electric Company, Cleveland, Ohio. Welding apparatus. 1,901,466; Mar. 14.
Oschwald, Alfred, Zurich, Switzerland. Projector comprising automatic picture changing means. 1,901,819; Mar. 14.
Ossenbeck, Anton. (See Hentrich, W., Ossenbeck, and Tietse.)
Otto, Carl, Essen-Bredeney, Germany. Vacuum cleaning apparatus. 1,901,467; Mar. 14.
Oversewing Machine Company. (See Baker, George, assignor.)
Owens, Robert J., and H. J. Frarer, Huntington, W. Va., assignors to The International Nickel Company, Inc., New York, N. Y. Bright annealing steels and alloys. 1,901,039; Mar. 14.
Packard Motor Car Company. (See Christman, John M., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Palmaer, Knut W., Stockholm, Sweden. Removing one or more of the metals of the iron group from solutions containing salts of one or more of the said metals. 1,900,996; Mar. 14.
Pangborn Corporation. (See Hull, Foster J., assignor.)
Parco Specialty Co. (See Evans, Harold A., assignor.)
Parker, Arthur H. (See Sebell, Harry, assignor.)
Parker, Arthur L., Cleveland, Ohio. Solder fittings and method of soldering. 1,901,820; Mar. 14.
Parker, Clara B., executrix. (See Twomley, Herbert E., assignor.)
Parker, George D. (See Twomley, Herbert E., assignor.)
Parker Pen Company. (See Parker, Russell C., assignor.)
Parker, Russell C., assignor to Parker Pen Company, Janesville, Wis. Fountain pen. Des. 89,449; Mar. 14.
Parker, Samuel P., Franklinton, N. C. Loom. 1,901,769; Mar. 14.
Parkhurst, Karl C., Wichita, Kans. Traffic sign. 1,901,333; Mar. 14.
Pasternack, Richard, and C. P. Ammerman, assignors to Charles Pfizer & Company, Brooklyn, N. Y. Amides of d-gluconic acid. 1,901,565; Mar. 14.
Pateo, Inc. (See Harris, Ford W., assignor.)
Patent Button Company, The. (See Peterson, Frederick H., assignor.)
Patent Button Company, The. (See White, Franklin R., assignor.)
Patent and Licensing Corporation, The. (See Kirschbraun, Lester, assignor.)
Patent and Licensing Corporation. (See Plunkett, John H., assignor.)
Paullin, Amos R., Newton, Iowa. Hedge trimmer. 1,901,327; Mar. 14.
Payne, William M. (See Grundy, J. A., and Payne.)
Pearson, Axel A., Kansas City, Mo. Producing photogravure plates. 1,901,468; Mar. 14.
Peck, Harry D. (See Mann, Leo, assignor.)
Pellymounter, Otis A., San Francisco, Calif. Shipping container. 1,901,530; Mar. 14.
Pelton, Earl L. (See Strosacker, C. J., Kennedy, and Pelton.)
Pennsylvania Powder Company. (See Schless, Robert, assignor.)
Perfection Store Company. (See Keith, David F., assignor.)
Perkins, B. F., & Son, Inc. (See Senna, Samuel N., assignor.)
Peroni, John H., Freeport, N. Y., and S. H. Alexander, Englewood, N. J. Separable weatherproof plug. 1,901,040; Mar. 14.
Peroni, John H., Freeport, N. Y., and S. H. Alexander, Englewood, N. J. One-piece plug and receptacle. 1,901,041; Mar. 14.
Peterson, Eugene, assignor to Western Electric Company, Incorporated, New York, N. Y. Bilateral modulator circuit. 1,901,408; Mar. 14.
Peterson, Frederick H., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button attaching machine. 1,901,375; Mar. 14.
Peterson, Harold O., Riverhead, N. Y., assignor to Radio Corporation of America. Receiving system. 1,901,117; Mar. 14.
Petsch, Herman, assignor to the Firm: Carl Still, Recklinghausen, Germany. Gas-fired furnace. 1,901,770; Mar. 14.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Hydraulic turbine control system. 1,901,771; Mar. 14.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Fluid pressure servo-motor for tilting propeller blades. 1,901,772; Mar. 14.
Pfau, Arnold, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Propeller blade adjusting system. 1,901,773; Mar. 14.
Pfeifer, Frank E., assignor to The Ezry Register Company, Dayton, Ohio. Autographic register. 1,901,258; Mar. 14.
Pfizer, Charles, & Company. (See Pasternack, R., and Ammerman, assignors.)
Phelps, Benjamin B., assignor of one-third to W. J. Kelly and one-third to H. Haskell, Minneapolis, Minn. Lawn mower sharpening tool. 1,901,328; Mar. 14.
Phillips, John E. (See Phillips, Joseph D., assignor.)
Phillips, Joseph D., assignor of one-half to J. E. Phillips, Helena, Mont. Rumble seat window appliance. 1,901,329; Mar. 14.
Phillips, Louis A., Tenafly, N. J. Display card. 1,901,188; Mar. 14.
Phoenix, Ernest T. (See Cooper, W. B., and Phoenix.)
Phosphate Mining Co., The. (See Bullwinkel, John T., assignor.)
Piccard, Jean, Marshallton, assignor to Hercules Powder Company, Wilmington, Del. Blasting cap. 1,901,469; Mar. 14.
Pittman, Ralph E., Pine Bluff, Ark. Arc interrupter. 1,901,609; Mar. 14.
Pixley, Merritt E., Clackamas County, Oreg. Guide for saw blades in wood sawing. 1,901,376; Mar. 14.
Pizzi, Decio, Barcelona, Spain. Burner for heavy oil. 1,901,610; Mar. 14.
Plibrico Jointless Firebrick Company. (See Wiley, Roger F., assignor.)
Pliske, Bert H., Cleveland, Ohio. Electrical socket device. 1,901,470; Mar. 14.
Plunkett, John H., Beverly Hills, Calif., assignor to The Patent and Licensing Corporation, Boston, Mass. Rool roofing package. 1,901,856; Mar. 14.
Pneumatic Tire Inflating Devices Corporation. (See White, Ellis E., assignor.)
Pneumatic Tube Supply Co. of Delaware. (See Needham, John T., assignor.)
Poberejsky, Jacques, Bois-Colombe, France, assignor to "Superflexit." Fluid-conductive hose. 1,901,330; Mar. 14.
Poe, Fred M., Suffern, assignor to The American Brake Shoe and Foundry Company, New York, N. Y. Coating material for casting molds. 1,901,409; Mar. 14.
Poegel, Emil, Newark, N. J. Coating for buildings and making same. 1,901,410; Mar. 14.
Poehlman, Herbert W., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,901,668; Mar. 14.
Pohl, Ernst. (See Gorschlueter, F., and Pöhl.)
Pope, Elton A., Oakville, assignor to The Chase Companies, Incorporated, Waterbury, Conn. Waste and overflow fitting. 1,901,118; Mar. 14.
Porter, Kirk E., assignor to The Buckeye Aluminum Company, Worcester, Ohio. Drip coffee maker. 1,901,611; Mar. 14.
Portteus, James G., Toledo, Ohio. Container and roller of cigarettes. 1,901,259; Mar. 14.
Potthoff, Kurt T., Brooklyn, N. Y. Rotary conveyer system and apparatus therefor. 1,901,471; Mar. 14.
Potthoff, Kurt T., Brooklyn, N. Y. Method and apparatus for tilting tray conveyer systems. 1,901,948; Mar. 14.
Poux, Roland J., assignor to Hookless Fastener Company, Meadville, Pa. Forming separable fastener sliders. 1,901,189; Mar. 14.
Powell, Alan R., and A. W. Scott, assignors to Johnson-Matthey & Company, Limited, London, England. Electrodeposition of platinum. 1,901,531; Mar. 14.
Powell, Henry K., and A. G. Ballenberg, assignors to Morris Paper Mills, Chicago, Ill. Folding carton. 1,901,532; Mar. 14.
Powers Regulator Company, The. (See Snediker, Morton O., assignor.)
Powers, Robert E., New York, N. Y. Dump car. 1,901,260; Mar. 14.
Pratt & Whitney Aircraft Company, The. (See Ryder, Earle A., assignor.)
Precision Moderne. (See Ricordel, Auguste L., assignor.)
Preidey, George H., San Francisco, Calif. Filing receptacle. 1,901,533; Mar. 14.
Prentice, George E., Berlin, Conn. Slider for fasteners. 1,900,949; Mar. 14.
Presbrey, Otis F., Brooklyn, N. Y. Article handling device. 1,901,566; Mar. 14.
Pressed Steel Car Company. (See Sundholm, Frans J., assignor.)
Pridham, Edwin S., assignor to The Magnavox Company, Oakland, Calif. Electrodynamic loud-speaker. 1,901,331; Mar. 14.
Prodorite, S. A. (See Zimmermann, Georg, assignor.)
Production Machine Company. (See Fuller, Rufus W., assignor.)
Provincial, Firmin, Woonsocket, R. I. Furnace construction. 1,901,821; Mar. 14.
Pryor, Leo E., Delano, Calif. Automobile jack. 1,901,332; Mar. 14.
Puls, Erich F., assignor to the Firm Pulsgetriebe Gesellschaft mit beschrankter Haftung, Eisenach, Germany. Brake band apparatus. 1,901,774; Mar. 14.
Pulsgetriebe Gesellschaft mit beschrankter Haftung, the Firm. (See Puls, Erich F., assignor.)

Putnam, Walter, Pasadena, Calif. Flush valve. 1,901,119; Mar. 14.
Rabe, Frederick W., St. Louis, Mo. Refrigerating apparatus. 1,901,190; Mar. 14.
Radio Corporation of America. (See Dalheimer, Walther, assignor.)
Radio Corporation of America. (See Franklin, Charles S., assignor.)
Radio Corporation of America. (See Hansell, Clarence W., assignor.)
Radio Corporation of America. (See Karolus, August, assignor.)
Radio Corporation of America. (See Lely, Dirk, assignor.)
Radio Corporation of America. (See Peterson, Harold O., assignor.)
Radio Corporation of America. (See Wolff, Irving, assignor.)
Radio-Keith-Orpheum Corporation. (See Spotts, Ralph K., assignor.)
Raffinerie Tirlemontoise, Société Anonyme. (See Bergé, Julien, assignor.)
Rah, Joseph, assignor to The Delta-Star Electric Company, Chicago, Ill. Flexible connecter for cable terminators. 1,901,665; Mar. 14.
Rah, Joseph, assignor to The Delta-Star Electric Company, Chicago, Ill. Cable terminator cap assembly. 1,901,666; Mar. 14.
Rah, Joseph C., assignor to The Delta Star Electric Company, Chicago, Ill. Cable terminator. 1,901,667; Mar. 14.
Rah, Joseph, assignor to The Delta-Star Electric Company, Chicago, Ill. Cable terminator provided with means for insulating ends of cable sheaths. 1,901,669; Mar. 14.
Ramage, Alexander S., assignor, by mesne assignments, to M. Wiley and O. L. Smith, trustees, Detroit, Mich. Conversion of gaseous paraffin or olefine hyd ocarbon into liquid aromatic hydrocarbons. 1,900,997; Mar. 14.
Ramos, Sebastião K., Lagoa Vermelha, Brazil. Automobile extractor. 1,901,261; Mar. 14.
Randel, Wilbur S., Farnams, Mass., assignor to United States Gypsum Company, Chicago, Ill. Model plaster. 1,901,056; Mar. 14.
Randel, Wilbur S., and M. C. Dailey, assignors to United States Gypsum Company, Chicago, Ill. High strength calcined gypsum and manufacturing same. 1,901,051; Mar. 14.
Randle, O. R., et al. (See Tedford, Julian P., assignor.)
Rankin, William A., Rock Island, assignor to Birtman Electric Company, Chicago, Ill. Swivel base construction. 1,901,120; Mar. 14.
Ransome Concrete Machinery Company. (See Bushnell, J. E., and Lukachovic, assignors.)
Rasmussen, Frank H. (See MacCourt, W. D., Walsh, and Rasmussen.)
Raulerson, Felder J. and H. H., Jacksonville, Fla. Speed boat. 1,901,357; Mar. 14.
Raulerson, Hardy H. (See Raulerson, Felder J. and H. H.)
Rawers, William B., assignor, by mesne assignments, to Gas Krakker Corporation, Chicago, Ill. Gas and air mixer for hydrocarbon engines. 1,901,191; Mar. 14.
Raybestos-Manhattan, Incorporated. (See Bodine, Alfred V., assignor.)
Raymond Bag Company, The. (See Sharkey, William E., assignor.)
Raymond, Lambert L., Minneapolis, Minn. Reflector for Christmas trees. 1,901,472; Mar. 14.
Raytheon Inc. (See Smith, Charles G., assignor.)
Read, Philip C. (See Hauk, Joseph, assignor.)
Ready, Gladys M., et al. (See McCorquodale, Wilmer E., assignor.)
Reclamation Company, The. (See Holt, G. J., Hocking, Matson, and Knickerbocker, assignors.)
Redfield, Clyde S., Shortsville, N. Y. Combination lunch box and bottle. 1,901,534; Mar. 14.
Redington, F. B., Co. (See Milmoe, Michael J., assignor.)
Reed, Claude D., Lebanon, Pa., assignor to Bethlehem Steel Company. Apparatus for forming ladders. 1,901,334; Mar. 14.
Reed Roller Bit Company. (See Harrington, George G., assignor.)
Regensburger, Richard W. (See De Vout, A. W., and Regensburger.)
Rehor, Joseph E., Shaker Heights, assignor to The Rotor Air Tool Company, Cleveland, Ohio. Fluid pressure motor. 1,900,950; Mar. 14.
Reichhardt, Herman C., Evanston, assignor to Star-Brite Corporation, Chicago, Ill. Combined casing or frame and bracket for light reflector signal. Des. 89,468; Mar. 14.
Reichhardt, Herman C., Evanston, assignor to Star-Brite Corporation, Chicago, Ill. Vehicle rear light casing. Des. 89,469; Mar. 14.
Reichold, Ludwig, assignor to The Fitzgerald Manufacturing Company, Winsted, Conn. Thermostatic switch unit. 1,901,775; Mar. 14.
Reiner, Robert, New York, N. Y. Knitting machinery. 1,901,857; Mar. 14.
Reinhardt, Gustav A., and R. H. Eurich, Youngstown, Ohio, assignors to Bacharach Industrial Instrument Company, Pittsburgh, Pa. Apparatus for measuring temperatures of moving bodies. 1,901,192; Mar. 14.
Reisinger, George, Rochester, N. Y. Fountain brush. 1,901,822; Mar. 14.
Reiss, William, Bronx, N. Y. Bracelet. Des. 89,450; Mar. 14.
Remington Rand Inc. (See Landsiedel, Harry, assignor.)
Renault, Louis. (See Salves, Léon, assignor.)
Reo Motor Car Company. (See Thomas, Horace T., assignor.)
Respess, William R., Grassmere, N. Y., assignor to Nas-Dar Company, Chicago, Ill. Stenciling machine. 1,901,473; Mar. 14.
Reynolds, Adolph R., Columbia, S. C. Bottle filling machine. 1,901,335; Mar. 14.
Rhein, Charles E. (See Davis, W. T., and Rhein.)
Rhode Island Warp Stop Equipment Company. (See Smith, Edwin C., assignor.)
Rich, Clarence A., Lynn, Mass. Signaling traffic by a hand device. 1,901,411; Mar. 14.
Richards, Donald, et al. (See Brooks, J. H., and Goldstone, assignors.)
Richardson, Arthur W., Shell Haven, Thames Haven, assignor to Shell-Mex, Limited, London, England. Burner. 1,900,998; Mar. 14.
Richardson Company, The. (See Stevenson, Earl P., assignor.)
Richardson Taylor-Globe Corporation, The. (See Marx, Frank A., assignor.)
Richter, George A., W. B. Van Arsdel, and R. B. Hill, assignors to Brown Company, Berlin, N. H. Manufacture of rubber-impregnated products. 1,900,951; Mar. 14.
Richter, William A., New York, N. Y. Lock. 1,901,412; Mar. 14.
Ricordel, Auguste L., assignor to Precision Moderne, Paris, France. Filing device for demountable machine-guns. 1,900,999; Mar. 14.
Riddle, George W., et al. (See Tedford, Julian P., assignor.)
Riebel, Frederick, jr., and D. M. Dow, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio. Floor polisher. 1,901,670; Mar. 14.
Riebel, Frederick, jr., and D. M. Dow, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio. Electric switch. 1,901,671; Mar. 14.
Riggs, Alger S., North Bergen Township, Hudson County, N. J. Radio receiving system. 1,901,121; Mar. 14.
Rimele, Eugen. (See Neelmeier, W., Rimele, and Glienenberg.)
Ring, Joseph J., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Turbine control system. 1,901,776; Mar. 14.
Rink, Ross J., Staples, Minn. Garment hanger. 1,901,777; Mar. 14.
Ritter Dental Manufacturing Company. (See Moore, Clarence W., assignor.)
Rixson, Oscar C., Company, The. (See Noltin, Fred, assignor.)
Robbins, Frank, Sacramento, assignor of one-half to Libby, McNeill & Libby, San Francisco, Calif. Fruit pitting machine. 1,901,042; Mar. 14.
Robe, Walter B., Towson, Md., assignor to Thermal Control Corporation. Heat transferrer for controlling solid CO_2 for refrigeration purposes. 1,901,000; Mar. 14.
Roberts & Mander Stove Company. (See Antrim, William D., assignor.)
Robideau, Eli, Malone, N. Y. Dust collector. 1,901,262; Mar. 14.
Robins Conveying Belt Company. (See Robins, Samuel D., assignor.)
Robins, Samuel D., Hewlett, N. Y., assignor to Robins Conveying Belt Company, Passaic, N. J. Vibrator for screens and other apparatus. 1,901,122; Mar. 14.
Robinson, Harry G., Waterbury, Conn., assignor to Industries of America, Inc. Compensating let-off mechanism. 1,900,952; Mar. 14.
Robinson, Malcolm B., Woodbridge, Conn. Collapsible tube closure. 1,901,823; Mar. 14.
Rodgers, James A., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo. Motor support. 1,901,474; Mar. 14.
Roe, De Forest Elyria, assignor to The Colson Company, Cleveland, Ohio. Buffer. 1,901,377; Mar. 14.
Rogats, Henry, Amarillo, Tex. Apparatus for surveying drill holes. 1,901,567; Mar. 14.
Rogers, Paul H., Hartsville, S. C. Manufacture of paperboard. 1,901,378; Mar. 14.
Rohleder, Frederick, Vauxhall, N. J. Lathering device. 1,901,001; Mar. 14.
Rolph, John A. (See Hildebrand, David A., assignor.)
Roos, Carlisle K., Wheaton, assignor to United States Gypsum Company, Chicago, Ill. Acoustic corrective material. 1,901,057; Mar. 14.
Roosenstein, Hans O., assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Oscillation generator. 1,901,043; Mar. 14.
Roselle, Walter A., New York, N. Y. Valve construction for containers. 1,901,413; Mar. 14.
Rosen, Shy, Bloomington, assignor, by mesne assignments, to Shellmar Products Company, Chicago, Ill. Package forming method. 1,900,953; Mar. 14.
Ross, William, Surbiton, England. Device for feeding and controlling the flow of materials. 1,901,002; Mar. 14.
Rotor Air Tool Company. (See Rehor, Joseph E., assignor.)

Rowley, Lancelot C., Grand Rapids Township, Kent County, Mich. Glare eliminator for vehicle headlights. 1,901,058; Mar. 14.

Royal Typewriter Company, Inc. (See Dowd, Bernard J., assignor.)

Royle, Vernon, Paterson, N. J. Gear casing for tubing machines. 1,901,569; Mar. 14.

Ruth Company, The. (See Ruth, Joseph P., jr., assignor.)

Ruth, Joseph P., jr., assignor to The Ruth Company, Denver, Colo. Flotation machine. 1,901,128; Mar. 14.

Ruud, Otto S., Oslo, Norway. Internal combustion engine. 1,901,263; Mar. 14.

Ryder, Earle A., West Hartford, assignor to The Pratt & Whitney Aircraft Company, East Hartford, Conn. Crank shaft. 1,901,358; Mar. 14.

San, Robert, Auburn, Calif. Adjustable shade roller mounting. 1,901,535; Mar. 14.

"Sachtleben" Aktiengesellschaft für Bergbau und Chemische Industrie. (See Müller, Johannes, assignor.)

Saeger, Charles M., jr., Bowmanstown, Pa. Process and product for coating molds and cores. 1,901,124; Mar. 14.

Safety Car Heating & Lighting Company. (See Broekhuysen, Willem C., assignor.)

Sager, Solomon M., Evanston, Ill. Combination fountain pen and pencil. 1,901,414; Mar. 14.

St. Joseph Lead Company. (See Weaton, George F., assignor.)

Saives, Léon, assignor to L. Renault, Billancourt, France. System for the central lubrication of vehicles. 1,901,379; Mar. 14.

Salerni, Piero M., Westminster, London, England. Power transmission mechanism. 1,901,193; Mar. 14.

Salerni, Piero M., Westminster, London, England. Power transmission mechanism. 1,901,194; Mar. 14.

Salisbury, William, Toledo, Ohio. Tile manufacture. 1,901,195; Mar. 14.

Salone, Jacques C. G., and G. D. Lucas, assignors to Société Salone, Ing. E. C. P. & Lucas, Paris, France. Parachute equipment. 1,901,380; Mar. 14.

Saltzman, Eli J., Philadelphia, Pa. Window ventilator. 1,901,568; Mar. 14.

Sandeman, Edward K., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Distributor for use in telegraphy or the like. 1,900,954; Mar. 14.

Sargent & Greenleaf, Inc. (See Diesel, William F., assignor.)

Sassen, Bernard. (See De Haas, M., and Sassen.)

Sauer, Henry J., assignor to The Kilborn-Sauer Company, Fairfield, Conn. Automobile signal lamp. Des. 89,451; Mar. 14.

Schafer, John C. F. Mount Pulaski, and J. F. Bleser, Springfield, Ill.; said Bleser assignor to said Schafer. Damper. 1,901,125; Mar. 14.

Schäfer, Josef, assignor to the Firm J. R. Geigy, S. A., Basel, Switzerland. Manufacture of tanning substances. 1,901,536; Mar. 14.

Scheibell, Gordon B., Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y. System of electrical distribution. 1,901,059; Mar. 14.

Schenkel, Moritz, Berlin-Charlottenberg, Germany, assignor to Westinghouse Electric & Manufacturing Company. Mercury arc rectifier. 1,901,612; Mar. 14.

Schering-Kahlbaum Aktiengesellschaft. (See Schoeller, W., Jordan, and Clerc, assignors.)

Schindler, Robert B., Spring City, Pa. Stocking. Des. 89,470; Mar. 14.

Schlag, Hiram P., Fortuna, Calif. Hoe. 1,901,778; Mar. 14.

Schless, Robert, assignor to Pennsylvania Powder Company, Emporium, Pa. Explosive composition. 1,901,126; Mar. 14.

Schlotterbose, Conrad, Wesermunde-Wulsdorf, Germany. Producing animal food. 1,901,264; Mar. 14.

Schmid, Arnold, Vienna, Austria; H. Schmid and I. Schmid, administrators of said Arnold Schmid, deceased, assignors to Karl Schmid, Mannheim, Germany. Washing nitroglycerine and similar esters. 1,901,003; Mar. 14.

Schmid, Hans, et al., administrators. (See Schmid, Arnold.)

Schmid, Irma, et al., administrators. (See Schmid, Arnold.)

Schmid, Karl. (See Schmid, Arnold, assignor.)

Schmidt, Ommo, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Antenna. 1,901,060; Mar. 14.

Schmidt, Otto, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of foils. 1,901,045; Mar. 14.

Schmidt, Otto, and B. Schnell, Ludwigshafen-on-the-Rhine, and E. Meyer, Mannheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of artificial masses. 1,901,044; Mar. 14.

Schneider, Frank A., San Francisco, Calif. Atomizer. 1,901,415; Mar. 14.

Schneider, Heinrich, Beloit, Wis. Transmission. 1,901,265; Mar. 14.

Schnell, Berthold. (See Schmidt, O., Schnell, and Meyer.)

Schnell, William. (See Morgan, J. R., and Schnell.)

Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Outside door handle or similar article for an automotive vehicle. Des. 89,452; Mar. 14.

Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Automobile radiator ornament or similar article. Des. 89,453; Mar. 14.

Schoeller, Walter, Berlin-Charlottenburg, H. Jordan, Berlin-Steglitz, and E. Clerc, Berlin, Germany, assignors to the Firm Schering-Kahlbaum Aktiengesellschaft. Production of phenolic compounds. 1,901,824; Mar. 14.

Scholes, Daniel R., Oak Park, assignor to Aermotor Company, Chicago, Ill. Pump. 1,901,061; Mar. 14.

Schrader's, A., Son, Inc. (See Lewis, Arthur J., assignor.)

Schreiber, Louis J. J. (See Deakin, G., and Schreiber.)

Schroeder, Max, Berlin, Germany. Production of gaseous mixtures containing sulphur dioxide. 1,901,416; Mar. 14.

Schubert & Saezer Maschinenfabrik Aktiengesellschaft. (See Heinitz, Woldemar, assignor.)

Schulte, William H., Trenton, N. J. Drinking fountain. 1,901,046; Mar. 14.

Schultis, Caritheo. (See Fleischhauer, R., and Schultis.)

Schumann, Theodor E. W., Elisabeth, N. J., assignor to Combustion Utilities Corporation, New York, N. Y. Carbonizing coal. 1,901,476; Mar. 14.

Schundler, Hans O. (See Havill, Owen A., assignor.)

Schweizer, Jack, Rye, N. Y. Textile fabric or the like. Des. 89,454; Mar. 14.

Scott, Arthur W. (See Powell, A. B., and Scott.)

Scott, E. H. (See Haggstrom, Arthur C., assignor.)

Scovill Manufacturing Company. (See Clemmons, Herbert D., assignor.)

Sebell, Harry, Boston, assignor to Arthur H. Parker, Lexington, Mass. Machine for sealing cans 1,901,266; Mar. 14.

Secretary of War, in behalf of the United States. (See Nelson, Paul R., assignor.)

Seibert, Carl F., Hamilton, and E. J. Seibert, Cincinnati, Ohio. Applicator for treating surfaces. 1,901,825; Mar. 14.

Seibert, Carl F., Hamilton, and E. J. Seibert, Cincinnati, Ohio. Applicator for treating surfaces. 1,901,826; Mar. 14.

Seibert, Elmer J. (See Seibert, Carl F. and E. J.)

Seibt, Georg, Berlin-Schoneberg, Germany. Electric glow discharge tube. 1,901,004; Mar. 14.

Seid, George. (See Coots, F. J., jr., and Seid.)

Sekella, Youston, Elmira Heights, assignor to Eclipse Machine Company, Elmira, N. Y. Starting mechanism for internal combustion engines. 1,901,267; Mar. 14.

Semet-Solvay Engineering Corporation. (See Eberlein, J. B., and Steere, assignors.)

Semet-Solvay Engineering Corporation. (See Steere, George R., assignor.)

Semet-Solvay Engineering Corporation. (See Tenney, Charles I., assignor.)

Senna, Samuel N., Chicopee, assignor to B. F. Perkins & Son, Inc., Holyoke, Mass. Testing apparatus. 1,901,359; Mar. 14.

Setter, Joseph A., Schenectady, N. Y., assignor to General Electric Company. Motor control system. 1,901,672; Mar. 14.

Shafer, Samuel, jr., assignor to Chain Belt Company, Milwaukee, Wis. Trolley conveyor. 1,901,850; Mar. 14.

Shank, Edwin A., New Rochelle, N. Y. Folding tire display holder. 1,901,475; Mar. 14.

Sharkey, William E., assignor to The Raymond Bag Company, Middletown, Ohio. Counting and bunching device. 1,901,062; Mar. 14.

Shaw, Wesley J., Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Guard for wood heel turning machines. 1,901,063; Mar. 14.

Sheindelman, Samuel, Lawrence, N. Y. Sweater. 1,901,537; Mar. 14.

Shell Development Company. (See Voogt, George, assignor.)

Shell-Mex, Limited. (See Richardson, Arthur W., assignor.)

Shell Oil Company. (See Bond, Lewis A., assignor.)

Shellmar Products Company. (See Rosen, Shy, assignor.)

Shepherdson, Arnold. (See Davidson, A., and Shepherdson.)

Shera, John W., assignor to American Flange & Manufacturing Company, Chicago, Ill. Closure device. 1,901,196; Mar. 14.

Shindel, Harry F., assignor to Willson Products, Inc., Reading, Pa. Goggle ventilator. 1,900,955; Mar. 14.

Shipley, Bernis M., assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,901,064; Mar. 14.

Shockey, H. H. (See Lack, Arnold, assignor.)

Siemens Brothers & Company Limited. (See Christian, David A., assignor.)

Siemens & Halske, Aktiengesellschaft. (See Becker, Ernst, assignor.)

Siemens & Halske Aktiengesellschaft. (See Mathias, Maximilian, assignor.)

Siemens & Halske Aktiengesellschaft of Wernerwerk. (See Stich, Johannes, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Altenkirch, Edmund, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Eule, M., and Anders, assignors.)

Simmons Company. (See Kusterle, Frank, assignor.)

Simmons, Leon E., Claremont, N. H., assignor to Sullivan Machinery Company. Mining machine. 1,901,127; Mar. 14.

Simpson, Ray, River Forest, Ill., assignor, by mesne assignments, to Jewell Electrical Instrument Company. Electrical measuring instrument. 1,901,197; Mar. 14.

Sinclair, Charles W., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Wheel. Des. 89,455; Mar. 14.

Singer Manufacturing Company, The. (See Karle, John D., assignor.)

Skeel, Lewis, and F. P. Miller, assignors to McCrosky Tool Corporation, Meadville, Pa. Power hammer. 1,901,779; Mar. 14.

Slavik, Josef, Brunn, Czechoslovakia. Measuring arrangement of ratio of transformation and phase angles of voltage and current transformers. 1,901,336; Mar. 14.

Sleeper, Milton B., New York, N. Y., assignor, by mesne assignments, to Television Products, Inc. Electrical controlling apparatus. 1,901,673; Mar. 14.

Sleeper, Myron O., Hanson, assignor to G. A. Clapp, Brookline, and C. F. Woods, Winchester, receivers of E. H. Clapp Rubber Company, Boston, Mass. Weatherstrip. 1,901,780; Mar. 14.

Sleeper, Myron O., Hanson, assignor to George A. Clapp, Brookline, and C. F. Woods, Winchester, receivers of E. H. Clapp Rubber Company, Boston, Mass. Making shoe welting. 1,901,781; Mar. 14.

Sleeper, Oliver S., assignor to J. P. Devine Manufacturing Company, Mount Vernon, Ill. Pump. 1,901,417; Mar. 14.

Slobotkin, Nathan, Brooklyn, N. Y. Adjustable mounting for window shades. 1,901,674; Mar. 14.

Smith, Charles G., Medford, assignor to Raytheon Inc., Cambridge, Mass. Electric lamp. 1,901,128; Mar. 14.

Smith, Clyde L. (See Harnsberger, A. E., and Smith.)

Smith, Edwin C., Providence, R. I., assignor to Rhode Island Warp Stop Equipment Company, Portland, Me. Timing device for loom stop-motions. 1,901,418; Mar. 14.

Smith, Frederick A., assignor to Oakes Products Corporation, North Chicago, Ill. Spare wheel carrier and lock. 1,901,613; Mar. 14.

Smith, Garfield P., Brooklyn, N. Y. Gas engine muffler and supercharger. 1,901,851; Mar. 14.

Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose organic derivative composition of matter containing a BB'-dialkoxy diethyl adipate. 1,901,130; Mar. 14.

Smith, Henry B., and S. J. Carroll, assignors to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing phenyl stearate. 1,901,129; Mar. 14.

Smith, Maurice C., jr., and E. C. Heilbecker, Bristol, R. I.; said Heilbecker assignor to said Smith. Shoe and making same. 1,901,782; Mar. 14.

Smith, Ora L. (See Ramage, Alexander S., assignor.)

Smith, Willoughby S., Benchams, N. Poppleford, and H. J. Garnett, Lymne, Soledelda, Sevenoaks, and J. N. Dean, Orpington, England. Manufacture of loaded electric signaling conductors. 1,901,005; Mar. 14.

Snediker, Morton O., assignor to The Powers Regulator Company, Chicago, Ill. Water mixer. 1,901,268; Mar. 14.

Snelerson, Samuel L., Roxbury, and Eiffel B. Gale, Auburndale, Mass., assignors, by mesne assignments, to Carling Tool & Machine Company, Hartford, Conn. Canopy switch. 1,901,337; Mar. 14.

Snow, Earl H., Sleepy Eye, Minn. Incubator. 1,901,614; Mar. 14.

Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Track laying tractor. 1,901,269; Mar. 14.

Snow, Karl F., Brecksville, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio. Apparatus for handling cylindrical articles and the like. 1,901,360; Mar. 14.

Societe Salone, Ing. E. C. P. & Lucas. (See Salone, J. C. G., and Lucas, assignors.)

Somersall, William W., assignor to New England Pressed Steel Company, Natick, Mass. Portable heater. 1,900,956; Mar. 14.

Sommer, William H. (See Herman, W., and Sommer.)

Sonoco Products Company. (See Dunlap, Charles K., assignor.)

Sorensen, Andrew J., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electric control system. 1,901,047; Mar. 14.

Sorensen, John T., assignor to Zenith Heater Company, Chicago, Ill. Unit heater. 1,901,338; Mar. 14.

Soulary, Paul, Bruay-en-Artois, France. Apparatus for the pneumatic separation of materials of different densities. 1,901,783; Mar. 14.

Southwick, William S., assignor to Thomson-Gibb Electric Welding Company, Lynn, Mass. Fabric welding machine. 1,901,477; Mar. 14.

Spain, Charles W., Hartford, Conn. Paper dispensing receptacle. 1,901,006; Mar. 14.

Specialty Insulation Manufacturing Company. (See Batcholts, Clinton, assignor.)

Speidel Chain Co. (See Carlson, Edwin G., assignor.)

Spencer, Owen H., Indianapolis, Ind. Cylinder port control. 1,901,198; Mar. 14.

Spencer Thermostat Company. (See Maurer, Rufus H., assignor.)

Sperry Products, Inc. (See Drake, Harcourt C., assignor.)

Spotts, Ralph K., Los Angeles, Calif., assignor to Radio-Keith-Orpheum Corporation. Microphone windshield. 1,901,065; Mar. 14.

Square D Company. (See Jackson, John G., assignor.)

Square D Company. (See Kaufman, Thomas J., assignor.)

Stacy, Thomas F., assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Valve device. 1,901,181; Mar. 14.

Standard Oil Company. (See Atwell, Harold V., assignor.)

Stanley, Fred D., assignor to The Oil Country Specialties Mfg. Co., Coffeyville, Kans. Driving mechanism. 1,901,270; Mar. 14.

Stanley, Harold H. V., Hayes, and G. F. Clark, West Drayton, England. Free-wheel coupling. 1,900,957; Mar. 14.

Stanley, Paul H., Glenside, assignor to Autogiro Company of America, Philadelphia, Pa. Rotary-winged aircraft. 1,901,182; Mar. 14.

Stanley Works, The. (See King, Patrick F., assignor.)

Star-Brite Corporation. (See Reichhardt, Herman C., assignor.)

Steere, George R. (See Eberlein, J. B., and Steere.)

Steere, George R., Larchmont, assignor to Semet-Solvay Engineering Corporation, New York, N. Y. Gas manufacture. 1,900,959; Mar. 14.

Steindorf, Robert T., assignor to Chain Belt Company, Milwaukee, Wis. Scraper for shaft bearings. 1,901,851; Mar. 14.

Steinert, Marie H., Chemnitz, Germany. Tooth-cleaner. 1,901,419; Mar. 14.

Stenfors, Frans I. E. (See Olsson, J. G., and Stenfors.)

Stephenson Laboratories Trust. (See Mitchie, Jean G., assignor.)

Stern, Charles. (See Feeley, M. R., and Stern, assignors.)

Sternaman, John R., Springfield, Ill. Pipe structure. 1,901,420; Mar. 14.

Stevenson, Earl P., Newton, Mass., assignor to The Richardson Company, Lockland, Ohio. Fibrous composition containing filler and binder substances and making them. 1,901,882; Mar. 14.

Stevenson, Edward E., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif. Sucker-rod elevator. 1,901,339; Mar. 14.

Stewart, Fenton, et al. (See Gritt, F. A., and Stewart.)

Stich, Johannes, Berlin-Siemensstadt, assignor to Siemens & Halske Aktiengesellschaft of Wernerwerk, Siemensstadt, near Berlin, Germany. Automatic telephone system. 1,901,133; Mar. 14.

Still, Firm Carl. (See Petsch, Herman, assignor.)

Stimpson, Wallace I., assignor to Draper Corporation, Hopedale, Mass. Bobbin and bobbin clutching spindle. 1,901,538; Mar. 14.

Stine, Walter H., assignor of one-half to Lyman M. King, jr., Los Angeles, Calif. Piston and ring therefor. 1,901,199; Mar. 14.

Stokes, James B. (See Stokes, Robert H. and J. B.)

Stokes, John S. (See Novotny, Emil E., assignor.)

Stokes, Robert H. and J. B., Lufkin, Tex. Pumping unit. 1,901,827; Mar. 14.

Stolfa, Hermann, and R. Zwerina, Vienna, Austria. Rocket. 1,901,852; Mar. 14.

Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Automatic depth control for plows. 1,901,134; Mar. 14.

Streeter, Richard S., Oakland, and O. E. Hendrick, Alameda, Calif. Roofing. Des. 89,471; Mar. 14.

Streich, A., & Bro. Company. (See Streich, Frederick A., assignor.)

Streich, Frederick A., assignor to A. Streich & Bro. Company, Oshkosh, Wis. Track laying device. 1,901,421; Mar. 14.

Stromberg-Carlson Telephone Manufacturing Company, The. (See Levy, Maurice L., assignor.)

Strong, Leslie P., Lakewood, assignor to The Clark Manufacturing Company, Cleveland, Ohio. Steam trap. 1,901,200; Mar. 14.

Strong, Leslie P., assignor to The Clark Manufacturing Company, Cleveland, Ohio. Steam trap. 1,901,833; Mar. 14.

Stroeacker, Charles J., C. C. Kennedy, and E. L. Pelton, assignors to The Dow Chemical Company, Midland, Mich. Preparing brom-isatin. 1,901,615; Mar. 14.

Stuhlmann, Hans C., Premnitz, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Treating artificial fibers. 1,901,007; Mar. 14.

Suez, Edward, Philadelphia, Pa. Cigarette box and display. 1,901,784; Mar. 14.

Sullivan, Charles H. (See Cotroumpas, Stephanos, assignor.)

Sullivan Machinery Company. (See Simmons, Leon E., assignor.)

Sundholm, Frans J., Bellevue, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Side bearing. 1,901,675; Mar. 14.

Sundstrand Corporation. (See Sundstrand, Oscar J., assignor.)

Sundstrand, Oscar J., Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del. Carriage-return mechanism. 1,901,135; Mar. 14.

Sunnen, Joseph, Kirkwood, Mo. Honing device for cylinders. Re18,763; Mar. 14.

"Superflexit." (See Poberejsky, Jacques, assignor.)

Sutton, Grover C., and P. H. Witschge, assignors to General Machinery Company, Spokane, Wash. Compressor and valve therefor. 1,901,478; Mar. 14.

Swann Research, Incorporated. (See Booth, Charles F., assignor.)

Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,901,008; Mar. 14.

Swanson, Earl R., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill. Railway car. 1,901,009; Mar. 14.

Sweetland, Ernest J., Piedmont, Calif. Apparatus for reconditioning used oil. 1,901,010; Mar. 14.

Swindin, Norman, Acton, London, England. Apparatus comprising siphons. 1,901,785; Mar. 14.

Taber, George H., Binghamton, N. Y. Cover for use in testing vehicle wheels for misalignment. 1,901,786; Mar. 14.

Taft Oil Burner Company. (See Taft, William E., assignor.)

Taft, William E., assignor to Taft Oil Burner Company, Athol, Mass. Liquid fuel burner. 1,901,271; Mar. 14.

Takeda, Kenjiro, Osaka, Japan. Decorating metal surfaces. 1,900,960; Mar. 14.

Taplin, Fred W., et al. (See Brooks, J. H., and Goldstone, assignors.)

Tapp, John W., Glendale, Ariz. Agricultural machine. 1,901,539; Mar. 14.

Tatro, Lysle G., assignor to H. B. Montgomery, Decorah, Iowa. Coordinated battery construction. 1,901,272; Mar. 14.

Taylor, Arthur K., Baltimore, Md. Material forwarding mechanism. 1,901,677; Mar. 14.

Taylor, Arthur K., assignor to United States Printing and Lithograph Co., Baltimore, Md. Paper cutter. 1,901,676; Mar. 14.

Taylor, Gordon A., Camden, N. J. Heel for ladies' shoes. 1,901,340; Mar. 14.

Taylor, James F., South Bethlehem, Pa. Silk cleaner. 1,901,273; Mar. 14.

Taylor, James H., Oak Park, Ill. Forming and reenforcing flanged apertures in hollow bodies. 1,901,201; Mar. 14.

Tedford, Julian P., Oklahoma City, Okla., assignor to L. N. Farr, O. R. Randle, W. H. Courtner, and G. W. Riddle. Antiglare device for automobiles. 1,901,011; Mar. 14.

Telefunken Gesellschaft fur Drahtlose Telegraphie, m. b. H. (See Roosenstein, Hans O., assignor.)

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Schmidt, Ommo, assignor.)

Television Products, Inc. (See Sleeper, Milton B., assignor.)

Tenney, Charles I., Newton, Iowa., assignor, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y. Gas making apparatus. 1,900,961; Mar. 14.

Ternstedt Manufacturing Company. (See Carlson, Eric S., assignor.)

Ternstedt Manufacturing Company. (See Morgan, J. R., and Schnell, assignors.)

Ternstedt Manufacturing Company. (See Schnell, William, assignor.)

Textile Machinery Corporation. (See Goldthwait, Charles F., assignor.)

Thermal Control Corporation. (See Robe, Walter B., assignor.)

Thomas, Adolph A., New York, N. Y. Electrostatic loudspeaker. 1,901,202; Mar. 14.

Thomas, Horace T., Lansing, Mich., assignor to Reo Motor Car Company. Fuel feed mechanism. 1,901,835; Mar. 14.

Thompson, George S., Pueblo, assignor to The Colorado Fuel and Iron Company, Denver, Colo. Coal feeder. 1,901,203; Mar. 14.

Thomson-Gibb Electric Welding Company. (See Southwick, William S., assignor.)

Tietze, Ernst. (See Hentrich, W., Ossenbeck, and Tietze.)

Tilliard, Gilbert V., Jackson Heights, N. Y. Textile fabric or the like. Des. 89,456; Mar. 14.

Tinius Olsen Testing Machine Company. (See Lewis, Robert B., assignor.)

Tinnerman, Albert H., Cleveland, Ohio. Stove panel assembly. Des. 89,457; Mar. 14.

Told, Arnold H., Chicago, Ill. Wheel atop. 1,901,204; Mar. 14.

Tourriol, Jean, Paris, France. Headlight for vehicles. 1,901,012; Mar. 14.

Tracy, Elwyn B., Littleton, assignor of one-half to The Macallen Company, Boston, Mass. Safety device for motor vehicles. 1,901,361; Mar. 14.

Travis, John M., St. Louis, Mo. Faucet. 1,901,479; Mar. 14.

Tregoning, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Apparatus for molding insulating articles. 1,901,205; Mar. 14.

Trein, Norman O., Los Angeles, Calif. Time control mechanism. 1,901,862; Mar. 14.

Tribune Company, The. (See von der Horst, Frederick, assignor.)

Trinchero, Ferruccio, Genoa, assignor to Enrico Garda, Turin, Italy. Controlling means for electric lighting installation of railway cars. 1,901,274; Mar. 14.

Trobeck, Olof E., Berlin, Germany, assignor to The National Acme Company, Cleveland, Ohio. Multiple-spindle metal working machine. 1,901,206; Mar. 14.

Tropic-Aire, Incorporated. (See Butterfield, Vernon J., assignor.)

Tube Reducing Corporation. (See Coe, George B., assignor.)

Tumim, Herbert B., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Mixing device. 1,901,207; Mar. 14.

Turner, Harry W., Schenectady, N. Y., assignor to General Electric Company. Making textile material permanently flexible, weatherproof, and fire resistant. 1,901,678; Mar. 14.

Turner, Ransom H., Auburndale, assignor to Intertype Corporation, Brooklyn, N. Y. Typographical mold. 1,901,836; Mar. 14.

Twomley, Herbert E., Riverside, Calif., assignor to C. B. Parker, executrix of G. D. Parker, deceased. Conveyer system. 1,901,066; Mar. 14.

Uber, Harold R. (See Krans, H. W., Holden, and Uber.)

Uebermuth, Werner, Oberschoneweide, Germany, assignor to General Electric Company. Gas blast circuit breaker. 1,901,679; Mar. 14.

Uher, Edmond, jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Process and apparatus for photographic type composing. 1,901,013; Mar. 14.

Uhertype Aktiengesellschaft. (See Uher, Edmond, jr., assignor.)

Ulrich, Carl J., Minneapolis, Minn., assignor, by mesne assignments, to Kingston Products Corporation, Kokomo, Ind. Doorlock actuating mechanism. 1,901,541; Mar. 14.

Underwood Elliott Fisher Company. (See Helmond, William F., assignor.)

Underwood Elliott Fisher Company. (See Lentz, Lawrence E., assignor.)

Union Special Machine Company. (See Cooper, Grover C., assignor.)

Union Switch & Signal Company, The. (See Coleman, John P., assignor.)

Union Switch & Signal Company, The. (See Liebel, John G. H., assignor.)

Union Switch & Signal Company, The. (See Sorensen, Andrew J., assignor.)

United Metal Products Company, The. (See Lawson, Gottfrid C., assignor.)

United Shoe Machinery Corporation. (See Bates, Arthur, assignor.)

United Shoe Machinery Corporation. (See Cavanagh, James, assignor.)

United Shoe Machinery Corporation. (See Jorgensen, Jacob C., assignor.)

United Shoe Machinery Corporation. (See Shaw, Wesley J., assignor.)

United States Gypsum Company. (See Dailey, Manvel C., assignor.)

United States Gypsum Company. (See Edge, Jacob, assignor.)

United States Gypsum Company. (See Linzell, Harry K., assignor.)

United States Gypsum Company. (See Randel, Wilbur S., assignor.)

United States Gypsum Company. (See Randel, W. S., and Dailey, assignors.)

United States Gypsum Company. (See Roos, Carlisle K., assignor.)

United States Printing and Lithograph Co. (See Taylor, Arthur K., assignor.)

Vahle, Edgar W., assignor to The Huffman Manufacturing Company, Dayton, Ohio. Liquid dispensing apparatus. 1,901,480; Mar. 14.

Van Arsdel, Wallace B. (See Richter, G. A., Van Arsdel, and Hill.)

Van Deinse, Francis C., et al. (See Johnston, Mordica O., assignor.)

Van Schaack Bros. Chemical Works, Inc. (See Van Schaack, Robert H., jr., assignor.)

Van Schaack, Robert H., jr., Evanston, assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill. Distributor for liquids. 1,901,481; Mar. 14.

Varchetta, George, Brooklyn, N. Y. Balanced railroad crossing gate. 1,901,680; Mar. 14.

Vaughan, Victor G., Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company. Automatic cooking device. 1,901,616; Mar. 14.

Vayda, Louis L., Aspinwall, Pa., assignor to Bacharach Industrial Instrument Company. Process and apparatus for measuring temperatures of moving bodies. 1,901,208; Mar. 14.

Vayda, Louis L., Aspinwall, Pa., assignor to Bacharach Industrial Instrument Company. Apparatus for measuring temperatures of moving bodies. 1,901,209; Mar. 14.

Veale, George W., Cleveland Heights, assignor to Eaton Manufacturing Company, Cleveland, Ohio. Bumper. 1,901,540; Mar. 14.

Vedder, Edwin H., and E. O. Erickson, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company. Smoke indicator. 1,901,570; Mar. 14.

Vezey, John B., London, England, assignor to International Standard Electric Corporation, New York, N. Y. Continuously loaded telegraph cable. 1,900,962; Mar. 14.

Vicensi, John J., Boston, Mass. Floor surfacing machine. 1,901,681; Mar. 14.

Vickers, Harry F., Detroit, Mich. Machine for cutting metal bars and the like. 1,901,067; Mar. 14.

Vickers, James S., Alexander City, Ala. Animal trap. 1,901,210; Mar. 14.

Vincent, Harry S., Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y. Steam engine. 1,901,571; Mar. 14.

Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Transmission mechanism. 1,901,713; Mar. 14.

Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Clutch mechanism. 1,901,714; Mar. 14.

Vincent, Sidney C., assignor to The Automatic Lighting Company, Baltimore, Md. Reflector unit for signs. 1,901,341; Mar. 14.

Vivid, Incorporated. (See Flanigan, John J., assignor.)

Vogelman, Philip A., assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,472; Mar. 14.

Voigt & Haeffner A. G. (See Cippitelli, Cesare, assignor.)

Vollmann, Heinrich, et al. (See Kraenzlein, G., Vollmann, and Corell.)

Von Allmen, Samuel, assignor to Chemical Works, formerly Sandoz, Basel, Switzerland. Preparation of new dyestuffs of the anthraquinone series. 1,901,048; Mar. 14.

Von der Horst, Frederick, assignor to The Tribune Company, Chicago, Ill. Roll handling device. 1,901,482; Mar. 14.

Von Heinrich, Friedrich, assignor of one-half to National Bank of Hungary, Budapest, Hungary. Production of genuine watermark papers without using relief molds. 1,901,049; Mar. 14.

Voogt, George, Hamburg, Germany, assignor to Shell Development Company, San Francisco, Calif. Recovering the oil-soluble sulphonic compounds formed in the acid refining of mineral oils. 1,901,383; Mar. 14.

Voorhees, John S., Derby, Conn. Reeling means. 1,901,050; Mar. 14.

Wagenhorst, James H., Detroit, Mich. Cabinet for arc lamps. 1,901,384; Mar. 14.

Wagner, Charles F., Swissvale, and L. R. Golladay, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Transmission-line device. 1,901,572; Mar. 14.

Wagner Electric Corporation. (See Brunner, Albert, assignor.)

Wagner Electric Corporation. (See Dick, Burns, assignor.)

Wallace, Campbell. (See Nichols, Marion F., assignor.)

Wallis, George E., Evanston, assignor to The Creamery Package Mfg. Company, Chicago, Ill. Milk cooling and storing apparatus. 1,901,014; Mar. 14.

Walsh, Tom F. (See MacCourt, Walsh, and Rasmussen.)

Walter, Frederick B., Wabash, Ind. Refectory table. 1,901,015; Mar. 14.

Wansor, William B., Locust Valley, N. Y. Brush. 1,901,542; Mar. 14.

Wappler Electric Company. (See Mutscheller, Arthur, assignor.)

Ward, Patrick C., Homeville, Pa. Time limit relay. 1,901,617; Mar. 14.

Ware, John H., jr., Oxford, Pa. Display box. 1,901,488; Mar. 14.

Warnell Patents Limited. (See Warner, H. K., and Elliott, assignors.)

Warner, Archibald A., Dearborn, Mich. Vibration damper. 1,901,853; Mar. 14.

Warner, Horace K., and G. R. Elliott, assignors to Warnell Patents Limited, Auckland, New Zealand. Electric iron. 1,901,385; Mar. 14.

Warner & Swasey Company, The. (See Hudson, Thomas J., assignor.)

Warth, Albin H., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle closure. 1,900,963; Mar. 14.

Warth, Albin H., Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y. Bottle closure. 1,901,682; Mar. 14.

Watairway Manufacturing Corporation, The. (See Guidetti, F., and Bontempi, assignors.)

Waters, Harry H., and R. F. Gagg, Clinton, Iowa, assignor to Climax Engineering Company, Chicago, Ill. Internal combustion engine. 1,901,618; Mar. 14.

Weaton, George F., Beaver, Pa., assignor to St. Joseph Lead Company, New York, N. Y. Metallurgical condenser. 1,901,543; Mar. 14.

Weber, Matthias J., assignor to The Health-O-Meter Company, Chicago, Ill. Scale. 1,900,964; Mar. 14.

Wehr Motor Company, The. (See Haller, Harvey H., assignor.)

Weidman, John H., Marcellus, N. Y. Mechanical dishwasher. 1,901,683; Mar. 14.

Weinerth, George S., Reading, Pa. Controlling mechanism for full fashion textile machines. 1,901,422; Mar. 14.

Weisker, Ellis, New York, N. Y. Combined focusing screen and retaining member for sensitised material. 1,901,423; Mar. 14.

Weiss, Frank, Revere, Mass. Illuminated razor. 1,900,965; Mar. 14.

Wells, Merritt R., Cleveland Heights, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Electric welding machine. 1,901,211; Mar. 14.

Wells, Merritt R., Cleveland Heights, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Electric welding machine. 1,901,212; Mar. 14.

Wells, Merritt R., Cleveland Heights, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa. Making tire chains. 1,901,213; Mar. 14.

Welsford, William M., Meringur, Victoria, Australia. Traction wheel. 1,901,544; Mar. 14.

West, Ernst. (See West, Frederick J. and E.)

West, Frederick J. and E., assignors to West's Gas Improvement Company, Limited, Manchester, England. Coke discharger for retorts for the carbonization of coal and the like. 1,901,016; Mar. 14.

Western Electric Company. (See Bradley, Robert W., assignor.)

Western Electric Company, Incorporated. (See Peterson, Eugene, assignor.)

Western Union Telegraph Company. (See Haglund, Hakon H., assignor.)

Western Union Telegraph Company, The. (See Milnor, Joseph W., assignor.)

Westinghouse Electric & Manufacturing Company. (See Ashbaugh, John H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Barnholdt, Harold L., assignor.)

Westinghouse Electric & Manufacturing Company. (See Baxter, Harold G., assignor.)

Westinghouse Electric & Manufacturing Company. (See Brainard, Maurice W., assignor.)

Westinghouse Electric & Manufacturing Company. (See Carlisle, R. W., and Nye, assignors.)

Westinghouse Electric & Manufacturing Company. (See Dunlop, James, assignor.)

Westinghouse Electric & Manufacturing Company. (See Ellington, William M., assignor.)

Westinghouse Electric & Manufacturing Company. (See Eschholz, Otto H., assignor.)

Westinghouse Electric & Manufacturing Company. (See Fuller, Bert F., assignor.)

Westinghouse Electric & Manufacturing Company. (See Loewe, Siegmund, assignor.)

Westinghouse Electric & Manufacturing Company. (See Martin, George F., jr., assignor.)

Westinghouse Electric & Manufacturing Company. (See Matthews, George A., assignor.)

Westinghouse Electric & Manufacturing Company. (See McCarty, Roy A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Minkler, William A., assignor.)

Westinghouse Electric & Manufacturing Company. (See Nottage, Stanley G., assignor.)

Westinghouse Electric & Manufacturing Company. (See Schenkel, Moritz, assignor.)

Westinghouse Electric & Manufacturing Company. (See Vaughan, Victor G., assignor.)

Westinghouse Electric & Manufacturing Company. (See Vedder, E. H., and Erickson, assignors.)

Westinghouse Electric & Manufacturing Company. (See Wagner, C. F., and Golladay, assignors.)

West's Gas Improvement Company. (See West, Frederick J. and E., assignors.)

Wettig, Theodore A. (See Meier, C., and Wettig.)

Whelan, James W., Washington, D. C. Toy windwheel. Des. 89,473; Mar. 14.

White, Charles H., and F. T. Court, assignors to Deere & Company, Moline, Ill. Cultivator. 1,901,684; Mar. 14.

White, Ellis E., assignor to Pneumatic Tire Inflating Devices Corporation, Los Angeles, Calif. Automatic tire inflator for vehicles. 1,901,017; Mar. 14.

White, Ernest A., Belton, Tex. Internal combustion rotary motor. 1,901,787; Mar. 14.

White, Franklin R., assignor to The Patent Button Company, Waterbury, Conn. Button attaching machine. 1,901,886; Mar. 14.

Whitehead & Kales Company. (See Judd, Irving H., assignor.)

Whiting, Max A., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,901,685; Mar. 14.

Wicks, John, Oak Park, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Multioffice telephone system. 1,901,068; Mar. 14.

Wiedemann, Karl, Leverkusen-I. G. Werk, and H. Clingestein, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Asodyestuffs. 1,901,387; Mar. 14.

Wilcox, William D., Lawrence, Kans. Dissociating hydrocarbon gases and vapors to produce a mixture of nitrogen and hydrogen in determined proportions. 1,901,136; Mar. 14.

Wiley, Merlin. (See Ramage, Alexander S., assignor.)

Wiley, Roger F., Denver, Colo., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill. Lining anchoring means. 1,901,424; Mar. 14.
Willems, Edgar, Chenes-Bougeries, Geneva, Switzerland. Movable key device for musical instruments having keys. 1,901,214; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,458; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,474; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,475; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,476; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,477; Mar. 14.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,478; Mar. 14.
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Hellman, Carl R., assignor.)
Willheim, William, Co. (See Vogelman, Philip A., assignor.)
William Hall & Company Limited. (See Fawcett, John R., assignor.)
Williams, Francis C., Detroit, Mich. Speed reduction transmission and adjustable bearings therefor. 1,901,619; Mar. 14.
Williams, Harrison R., New York, N. Y. Paper-marking machine. 1,901,425; Mar. 14.
Williams, Harry S., assignor to W. A. Bryans, Denver, Colo. Collapsible fountain syringe. 1,901,069; Mar. 14.
Williams, Robert T., Quincy, Ill. Motor operated valve. 1,901,070; Mar. 14.
Willis, James M., Scotia, N. Y. Lawn trimmer. 1,901,788; Mar. 14.
Wilms, Gustav O., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Electric switch. 1,901,573; Mar. 14.
Wilson, Lyndon F., Chicago, Ill. Apparatus for conditioning boiler feed water. 1,901,215; Mar. 14.
Wilson, Lyndon F., Chicago, Ill. Feed water conditioner. 1,901,216; Mar. 14.
Wilson Products, Inc. (See Shindel, Harry F., assignor.)
Wimberley, Calvin H., New Braunfels, Tex. Rod. 1,901,789; Mar. 14.
Winograd, Harold, Collingwood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Rectifier cooling system control. 1,901,071; Mar. 14.
Winslow, Charles A., Vallejo, and E. J. Hall, Berkeley, Calif. Oil filter. 1,901,484; Mar. 14.
Winthrop Chemical Company, Inc. (See Dobmaier, Karl, assignor.)
Winthrop Chemical Company. (See Meerwein, Hans, assignor.)
Wired Radio, Inc. (See Crossley, Alfred, assignor.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wired Radio, Inc. (See Scheibell, Gordon B., assignor.)
Wirt, Harry M., Spokane, Wash., assignor to March Construction Co. Tractor scoop structure. 1,901,485; Mar. 14.
Wirth, Louis E., Pittsburgh, Pa., assignor to Cotton Harvester Corporation of America. Cotton harvesting machine. 1,901,686; Mar. 14.
Witschge, Peter H. (See Sutton, G. C., and Witschge.)
Wolfe, Walter G., Greenwood, assignor to Wilmot R. Evans, trustee, Boston, Mass. Projection apparatus. 1,900,966; Mar. 14.
Wolff, Irving, Merchantville, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Method and apparatus for eliminating the effect of cabinet resonance. 1,901,388; Mar. 14.
Wolfram, Gerhard, Dessau, Germany. Portable work bench. 1,901,790; Mar. 14.
Wood, Frank S., Quincy, Mass. Safety paper. 1,900,967; Mar. 14.
Wood, John M., Carrollton, Ky. Boat. 1,901,545; Mar. 14.
Wood, Robert O., Hamburg, assignor to National Aniline & Chemical Company, Inc., New York, N. Y. Preparing dye paste for printing and dyeing. 1,901,275; Mar. 14.
Woodeson, William A., assignor to Clarke Chapman & Company, Limited, Gateshead-on-Tyne, England. Removing dust such as from plant fired by pulverulent fuel. 1,901,791; Mar. 14.
Woods, Carl F., et al. (See Sleeper, Myron O., assignor.)
Wood's, T. B., Sons Company. (See Homer, John W., assignor.)
Woods, William J., Schenectady, N. Y., assignor to General Electric Company. Hydraulic operator. 1,901,620; Mar. 14.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,900,968; Mar. 14.
Worrall, Arthur G., assignor to L. J. Kolb, Philadelphia, Pa. Making laminated glass. 1,901,574; Mar. 14.
Wright, Esmond P. G., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Automatic or semiautomatic telephone exchange system. 1,900,969; Mar. 14.
Wurster, Carl, Ludwigshafen-on-the-Rhine, and M. Gruber, Mannheim assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Pure anhydrous aluminium chloride. 1,901,486; Mar. 14.
Yerkes, John A., and R. H. Lemmon, Long Beach, Calif. Inserted guide and bumper for blind cages. 1,901,217; Mar. 14.
Young, John, Welland, Ontario, Canada. Arc furnace control apparatus. 1,901,426; Mar. 14.
Young, Wilson T., Oakmont, Pa., assignor to The Farrell Company. Coin counting and wrapping machine. 1,901,715; Mar. 14.
Zenith Heater Company. (See Sorensen, John T., assignor.)
Zimmer Manufacturing Company. (See Ettinger, Joe J., assignor.)
Zimmermann, Georg, Mannheim-Rheinau, Germany, assignor to Prodorite S. A., Geneva, Switzerland. Bituminous and like compositions. 1,901,792; Mar. 14.
Zook, Dott E., Chicago, Ill. Machine for measuring body volume. 1,901,687; Mar. 14.
Zwerina, Rudolf. (See Stolfa, H., and Zwerina.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 14TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrading and polishing machine, Portable. T. F. Brackett. 1,901,627; Mar. 14.
Abrasive body and making the same. E. E. Novotny. 1,901,324-5; Mar. 14.
Acid, Amides of d-gluconic. R. Pasternack and C. P. Ammerman. 1,901,565; Mar. 14.
Acid ester, Hydrogenating abietic. R. J. Byrkit, jr. 1,901,630; Mar. 14.
Acid esters, Phosphoric. H. Bertsch. 1,900,973; Mar. 14.
Acoustic corrective material. C. K. Roos. 1,901,057; Mar. 14.
Aerial. C. S. Franklin. 1,901,025; Mar. 14.
Aggregate spreader and truck body. F. B. Hurt. 1,901,297; Mar. 14.
Agricultural machine. J. W. Tapp. 1,901,539; Mar. 14.
Air controlling means for carburetors. W. A. Heide. 1,901,810; Mar. 14.
Aircraft. S. Cotroumpas. 1,901,784; Mar. 14.
Aircraft, Rotary-winged. P. H. Stanley. 1,901,132; Mar. 14.
Air, Liquefying and rectifying. M. Hasard-Flamand. 1,901,389; Mar. 14.
Airplane landing gear. G. M. Bellanca. 1,901,795; Mar. 14.
Airplane landing wheel. A. G. Maranville. 1,901,759; Mar. 14.
Airship. O. A. Havill. 1,901,809; Mar. 14.
Alloys and products resulting therefrom, Treatment of magnetic. C. G. Bieber. 1,901,018; Mar. 14.
Aluminium chloride, Pure anhydrous. C. Wurster. 1,901,486; Mar. 14.
Amplifier, Cascade. A. Hund. 1,901,558; Mar. 14.
Anchor, Expansion joint. J. C. Bartholet. 1,900,895; Mar. 14.
Angle detector. W. D. Allen. 1,901,793; Mar. 14.
Animal trap. J. S. Vickers. 1,901,210; Mar. 14.
Antenna. O. Schmidt. 1,901,060; Mar. 14.
Antifreezing solution. R. Masuda. 1,901,111; Mar. 14.
Antifriction bearing. G. R. Bott. 1,901,580; Mar. 14.
Antiglare device for automobiles. J. P. Tedford. 1,901,011; Mar. 14.
Antiskid device. F. Lloyd. 1,901,311; Mar. 14.
Apertures in hollow bodies, Forming and reenforcing flanged. J. H. Taylor. 1,901,201; Mar. 14.
Applicator for treating surfaces. C. F. and E. J. Seibert. 1,901,825-6; Mar. 14.
Arc interrupter. R. R. Pittman. 1,901,609; Mar. 14.
Arch support. J. G. Mitchie. 1,901,353; Mar. 14.
Article handling device. O. F. Presbrey. 1,901,566; Mar. 14.
Atomizer. T. J. Fulton. 1,901,806; Mar. 14.
Atomizer. F. A. Schneider. 1,901,415; Mar. 14.
Automobile body. A. E. Northrup. Des. 89,445; Mar. 14.
Automobile extractor. S. K. Ramos. 1,901,261; Mar. 14.
Automobile jack. L. E. Pryor. 1,901,332; Mar. 14.
Azodyestuffs. K. Wiedemann and H. Clingestein. 1,901,357; Mar. 14.
Azodyestuffs and making same, Black. R. Fleischhauer and C. Schultis. 1,901,390; Mar. 14.
Azodyestuffs, Diarylsulphone. W. Hentrich, A. Ossenbeck, and E. Tietze. 1,901,515; Mar. 14.
Bag and making the same. H. L. Fischer. 1,901,858; Mar. 14.
Bag filling apparatus. H. A. Buxton. 1,900,907; Mar. 14.
Bank, Registering. O. C. Hoffman. 1,901,030; Mar. 14.
Banner, Aerial. M. S. Du Pont. 1,901,855; Mar. 14.
Bar: *See*—
Confection bar.
Base construction, Swivel. W. A. Rankin. 1,901,120; Mar. 14.
Bathroom fixture. J. E. Bruckenmiller. 1,901,151; Mar. 14.
Battery. R. Eckstein. 1,901,588; Mar. 14.
Battery construction, Coordinated. L. G. Tatro. 1,901,272; Mar. 14.
Bearing: *See*—
Antifriction bearing. Side bearing.
Bearings, Making lined. E. P. Kerruish. 1,900,938; Mar. 14.
Bed, Hospital. J. J. Ettinger. 1,901,841; Mar. 14.
Belt tightener. J. W. Homer. 1,901,557; Mar. 14.
Belts, Manufacturing. A. L. Freedlander. 1,901,442; Mar. 14.
Bench, Portable work. G. Wolfram. 1,901,790; Mar. 14.
Bending apparatus. F. H. Meyer. 1,901,762; Mar. 14.
Bensanthrone, Purifying. W. Becker. 1,900,972; Mar. 14.
Billboard construction. E. G. Burket. 1,901,282; Mar. 14.
Bit: *See*—
Drill bit.
Bit control, Rotary well drilling. J. H. Hollestelle. 1,900,932; Mar. 14.
Bituminous and like compositions. G. Zimmermann. 1,901,792; Mar. 14.
Blade clip. H. J. Gaisman. 1,901,880; Mar. 14.
Blade ring structure, Manufacturing. W. J. Delles. 1,901,704; Mar. 14.
Block: *See*—
Snatch block.
Block structure for electric fixtures, Reenforced. J. G. Jackson. 1,901,165; Mar. 14.
Board: *See*—
Fuse panel board.
Boat. J. M. Wood. 1,901,545; Mar. 14.
Boat hoist. W. I. Bowden. 1,900,905; Mar. 14.
Boat, Speed. F. J. and H. H. Raulerson. 1,901,357; Mar. 14.
Bobbin and bobbin clutching spindle. W. I. Stimpson. 1,901,538; Mar. 14.
Body for automobiles, Inclosed. G. N. Hein. 1,901,289; Mar. 14.
Boiler: *See*—
Sectional boiler.
Boiler. B. M. Brooks. 1,901,730; Mar. 14.
Boiler cleaner. F. W. Linaker. 1,901,604; Mar. 14.
Boiler structure, Steam. J. E. Muhlfeld. 1,901,465; Mar. 14.
Bookkeeping machine. J. G. Dunker. 1,901,153; Mar. 14.
Book, pad, and tablet, and line ruler therefor. P. H. Kaufmann. 1,901,246; Mar. 14.
Book sectioner. G. Baker. 1,901,137; Mar. 14.
Bottle closure. A. H. Warth. 1,900,963; Mar. 14.
Bottle closure. A. H. Warth. 1,901,682; Mar. 14.
Bottle handling machine. J. Hauk. 1,901,596; Mar. 14.
Bottle filling machine. A. R. Reynolds. 1,901,835; Mar. 14.
Bottle receiving and coin dispensing device. H. Olsen. 1,901,528; Mar. 14.
Box: *See*—
Display box. Dummy display box.
Box and bottle, Combination lunch. C. S. Redfield. 1,901,534; Mar. 14.
Box and display, Cigarette. E. Suez. 1,901,784; Mar. 14.
Bracelet. W. Reiss. Des. 89,450; Mar. 14.
Brake: *See*—
Sled brake.
Brake. V. Bendix. 1,901,695; Mar. 14.
Brake. L. E. La Brie. 1,901,657; Mar. 14.
Brake. J. P. Mahoney. 1,901,662; Mar. 14.
Brake. H. W. Poehlman. 1,901,668; Mar. 14.
Brake and gas collector, Muzzle. G. M. Barnes. 1,901,138; Mar. 14.
Brake band apparatus. E. F. Puls. 1,901,774; Mar. 14.
Brake beam adjuster and release device. S. A. Crone. 1,901,437; Mar. 14.
Brake block and means of attaching. A. V. Bedine. 1,901,696; Mar. 14.
Brake mechanism. J. G. Blunt. 1,901,019; Mar. 14.
Brake throw measuring device. L. L. Graham. 1,901,292; Mar. 14.
Bread and the like for wrapping, Preparation of. W. Muller. 1,901,115; Mar. 14.
Break disconnecting switch, Horizontal. A. Alsaker, W. O. Hampton, and C. A. Koerner. 1,901,688; Mar. 14.
Breathing apparatus. J. L. Belcher. 1,901,219; Mar. 14.
Bridge, Drop cord and canopy supporting. J. B. Glowacki. 1,901,233; Mar. 14.
Bridge, Fixture. J. B. Glowacki. 1,901,235; Mar. 14.
Broaching machine. W. Ferris. 1,901,500; Mar. 14.
Brom-isatin, Preparing. C. J. Stroeacker, C. C. Kennedy, and E. L. Pelton. 1,901,615; Mar. 14.
Brush. G. B. Aufmesser. Des. 89,433; Mar. 14.
Brush. G. B. Aufmesser. Des. 89,461; Mar. 14.
Brush. M. C. Barton. 1,901,129; Mar. 14.
Brush. W. B. Wansor. 1,901,542; Mar. 14.
Brush, Fountain. G. Reisinger. 1,901,822; Mar. 14.
Brush, Rotary. R. A. Fessenden. 1,901,503; Mar. 14.
Bucket, Mechanically-operated. V. S. Firestone. 1,901,555; Mar. 14.
Buffer. D. Roe. 1,901,877; Mar. 14.
Built-in table. D. A. Hildebrand. 1,901,847; Mar. 14.
Bumper. G. W. Veale. 1,901,540; Mar. 14.
Bumper, Vehicle. F. M. Cossaiter. 1,901,227; Mar. 14.
Bumper with cushioned ends. H. S. Jandus and H. L. Brooks. 1,901,601; Mar. 14.
Burner: *See*—
Gas burner. Oil burner.
Liquid fuel burner.
Burner. A. W. Richardson. 1,900,996; Mar. 14.
Burner for heavy oil. D. Pinsl. 1,901,610; Mar. 14.

Bus with superimposed seats, Single deck. E. A. Corbin. 1,901,023; Mar. 14.
Button attaching machine. F. H. Peterson. 1,901,375; Mar. 14.
Button attaching machine. F. R. White. 1,901,386; Mar. 14.
Cabinet, Combination tray heating and refrigerating. C. G. Hall. 1,901,509; Mar. 14.
Cabinet for arc lamps. J. H. Wagenhorst. 1,901,384; Mar. 14.
Cabinet for shears, Shipping and display. J. J. Conway. 1,901,583; Mar. 14.
Cable, Continuously loaded telegraph. J. R. Vezey. 1,900,962; Mar. 14.
Cable take-up device, Slack. J. Dunlop. 1,901,635; Mar. 14.
Cable terminator. J. C. Rah. 1,901,667; Mar. 14.
Cable terminator cap assembly. J. Rah. 1,901,666; Mar. 14.
Cable terminator provided with means for insulating ends of cable sheaths. J. Rah. 1,901,669; Mar. 14.
Cables equipped with a long sea-earth, Balancing. J. W. Milnor. 1,901,318; Mar. 14.
Calculating machine. J. G. Dunker. 1,901,152; Mar. 14.
Calculating machine. H. Landsiedel. 1,901,372; Mar. 14.
Camphene, Preparing. C. O. Henke and G. Etsel. 1,901,746; Mar. 14.
Can: *See*—
Liquid dispensing can.
Can covering apparatus. J. Hauk. 1,901,594; Mar. 14.
Can testing machine. W. Dieter. 1,900,918; Mar. 14.
Can washing machine. J. Hauk. 1,901,595; Mar. 14.
Candle light, Pick-up. G. C. Fullmer. 1,901,589; Mar. 14.
Canopy switch. S. L. Snelerson and E. B. Gale. 1,901,337; Mar. 14.
Cap, Blasting. J. Piccard. 1,901,469; Mar. 14.
Car, Dump. R. E. Powers. 1,901,260; Mar. 14.
Car, Railway. E. R. Swanson. 1,901,008–9; Mar. 14.
Cars, Apparatus for precooling refrigerator. F. E. Greene. 1,901,505; Mar. 14.
Carbon disulphide soluble in water, Rendering. K. Döbmaier. 1,900,981; Mar. 14.
Carbon from tubes, Removing. W. T. Davis and C. E. Rhein. 1,901,804; Mar. 14.
Carbonaceous material, Distillation of solid. L. C. Karrick. 1,901,169; Mar. 14.
Carburetor. O. H. Ensign. Re18,767; Mar. 14.
Carburetor. H. V. McCarty. 1,901,564; Mar. 14.
Card, Display. L. A. Phillips. 1,901,188; Mar. 14.
Carnation. A. F. J. Baur. Pl. Pat. 56; Mar. 14.
Carpet or rug, Reversible tuft-pile. W. B. Cooper and E. T. Phoenix. 1,901,840; Mar. 14.
Carriage return mechanism. O. J. Sundstrand. 1,901,135; Mar. 14.
Carrier: *See*—
Egg case carrier. Package carrier.
Carrier and lock, Spare wheel. F. A. Smith. 1,901,613; Mar. 14.
Carrier for ovens, furnaces, or the like. E. T. Bennington. 1,900,908; Mar. 14.
Carton. W. S. Kinkead. 1,901,036; Mar. 14.
Carton, Folding. H. K. Powell and A. G. Ballenberg. 1,901,532; Mar. 14.
Cash register. F. L. Fuller. 1,901,093; Mar. 14.
Cash register. C. W. Green. 1,901,097; Mar. 14.
Cash register. B. M. Shipley. 1,901,064; Mar. 14.
Casing for tubing machines, Gear. V. Royle. 1,901,569; Mar. 14.
Casing or frame and bracket for light reflector signal, Combined. H. C. Reichhardt. Des. 89,468; Mar. 14.
Catch, Locking. B. G. Buss. 1,901,021; Mar. 14.
Cellulose organic derivative composition of matter containing BB'-dialkoxy diethyl adipate. H. B. Smith. 1,901,130; Mar. 14.
Centerless grinding or polishing machine. R. W. Fuller. 1,900,984; Mar. 14.
Centrifugal separator machine. H. O. Lindgren. 1,901,461; Mar. 14.
Chain connecting link. E. G. Carlson. 1,901,345; Mar. 14.
Chains, Making tire. M. R. Wells. 1,901,213; Mar. 14.
Charge forming apparatus for internal combustion engines. A. Moore. 1,901,848; Mar. 14.
Charges for internal combustion engines, Supplying and mixing. A. Moore. 1,901,847; Mar. 14.
Chart, Educational. E. G. Martin. Des. 89,467; Mar. 14.
Chill ring, Removable. D. G. Dawkins. 1,901,634; Mar. 14.
Chlorinating apparatus. W. Moschel. 1,901,524; Mar. 14.
Chuck. T. J. Hudson. 1,900,034; Mar. 14.
Chuck for nut tapping machines. S. Barber. 1,901,579; Mar. 14.
Circuit, Bilateral modulator. E. Peterson. 1,901,408; Mar. 14.
Circuit breaker. H. G. Baxter. 1,901,692; Mar. 14.
Circuit breaker control system. H. V. Nye. 1,901,406; Mar. 14.
Circuit breaker, Gas blast. W. Uebermuth. 1,901,679; Mar. 14.
Circuit breaker, Vacuum. O. H. Eschholz. 1,901,630; Mar. 14.
Circuit interrupter. G. A. Burnham. 1,901,363; Mar. 14.
Circuit interrupter. Reclosing. F. W. Harris. 1,901,512 Mar. 14.
Circuit protective system, Electric. L. M. Applegate. 1,901,488; Mar. 14.
Circuits, Phase shifting. B. D. Bedford. 1,901,694; Mar. 14.
Clamp: *See*—
270° clamp.
Clamp and support for flash-lights. F. R. Meginniss. 1,901,253; Mar. 14.
Clamp for pressure cooking vessels, Cover. F. W. Burpee. 1,901,699; Mar. 14.
Clamping device. W. E. McClintock. 1,901,760; Mar. 14.
Clamping of flexible printing blocks or stereos on the form-cylinder of copper-plate or intaglio printing machines, Device for the. P. Gietz. 1,900,986; Mar. 14.
Cleaner: *See*—
Boiler cleaner. Tooth-cleaner.
Silk cleaner. Vacuum cleaner.
Cleaning device. L. W. Johnson. 1,901,518; Mar. 14.
Cleaning machine. W. T. Howald, E. H. Klingelfuss, and F. P. Kenny. 1,901,647; Mar. 14.
Clip: *See*—
Blade clip. Hair and wave clip.
Clock case. F. J. Abel. Des. 89,459–60; Mar. 14.
Closet attachment, Sanitary water. F. Guidetti and G. Bontempi. 1,901,160; Mar. 14.
Closure. A. H. Cipullo. 1,901,551; Mar. 14.
Closure device. J. W. Shera. 1,901,196; Mar. 14.
Closure for containers. A. J. Chamberlain. 1,901,581; Mar. 14.
Closure operating and locking device. P. R. Forman. 1,901,711; Mar. 14.
Clothes cleaning machine. E. G. Gettings. 1,900,927; Mar. 14.
Clutch control mechanism. J. Hauk. 1,901,597; Mar. 14.
Clutch control system, Automobile. E. H. Lange. 1,901,371; Mar. 14.
Clutch mechanism. J. G. Vincent. 1,901,714; Mar. 14.
Coal, Carbonizing. T. E. W. Schumann. 1,901,476; Mar. 14.
Coal feeder. G. S. Thompson. 1,901,203; Mar. 14.
Coating for buildings and making same. E. Poegel. 1,901,410; Mar. 14.
Coating material for casting molds. F. M. Poe. 1,901,409; Mar. 14.
Cock, Ball. H. D. Clemmons. 1,901,633; Mar. 14.
Cock, Bellows checked cylinder. M. R. Feeley and C. Stern. 1,901,740; Mar. 14.
Cock, Bellows operated safety cylinder. M. R. Feeley and C. Stern. 1,901,805; Mar. 14.
Coffee maker, Drip. K. E. Porter. 1,901,611; Mar. 14.
Coil, Multiple heat exchange. M. Eule and E. Anders. 1,901,090; Mar. 14.
Coil, storage tank, and cooling the water in the tank, Cooling. C. T. Morse and E. L. Hogan. 1,901,664; Mar. 14.
Coin counting and wrapping machine. W. T. Young. 1,901,715; Mar. 14.
Coin exchanging mechanism. W. F. Newall. 1,901,323; Mar. 14.
Coin handling machine. H. Olsen. 1,901,529; Mar. 14.
Coke discharger for retorts for the carbonization of coal and the like. F. J. and E. West. 1,901,016; Mar. 14.
Combination washer. C. Forberg. 1,901,391; Mar. 14.
Compensating let-off mechanism. H. G. Robinson. 1,900,952; Mar. 14.
Composition and the production thereof. P. C. Christensen. 1,901,145; Mar. 14.
Composition for molding investment inlays. M. C. Dailey. 1,901,052; Mar. 14.
Composition of matter containing phenyl stearate, Cellulosic. H. B. Smith and S. J. Carroll. 1,901,129; Mar. 14.
Compound film gate. L. S. Frappier and E. Boecking. 1,900,925; Mar. 14.
Compressor. G. Neidl. 1,901,817; Mar. 14.
Compressor and valve therefor. G. C. Sutton and P. H. Witschge. 1,901,478; Mar. 14.
Concrete mixing and distributing apparatus. J. E. Bushneil and J. C. Lukachovic. Re18,764; Mar. 14.
Condenser: *See*—
Metallurgical condenser.
Condenser control apparatus. F. L. Kallam. 1,901,104; Mar. 14.
Conductor support. S. S. Matthes. 1,901,401; Mar. 14.
Conductor system, Concentric. A. Carpe and F. A. Leibe. 1,900,976; Mar. 14.
Conductors, Manufacture of loaded electric signaling. W. S. Smith, H. J. Garnett, and J. N. Dean. 1,901,005; Mar. 14.
Confection bar, Ice cream. B. R. J. Hassell. 1,901,894; Mar. 14.
Connecter: *See*—
Ground connecter. Helical connecter.
Connecter. T. F. Johnson. 1,900,990; Mar. 14.
Connecter for cable terminators, Flexible. J. Rah. 1,901,665; Mar. 14.
Connection, Joint. M. G. Giordano. 1,901,026; Mar. 14.
Contact device. C. Cippitelli. 1,900,977; Mar. 14.
Container: *See*—
Shipping container.
Container. C. G. Fitzhugh. 1,901,742; Mar. 14.

Container and roller of cigarettes. J. G. Portteus. 1,901,259; Mar. 14.
Container for powder, Nonrefillable. L. Kahn. 1,901,651; Mar. 14.
Containers, Leading-in device for metallic vacuum-discharge. W. Dallenbach. 1,901,802; Mar. 14.
Control system. W. A. Minkler. 1,901,683; Mar. 14.
Control system. S. G. Nottage. 1,901,608; Mar. 14.
Control system. M. A. Whiting. 1,901,685; Mar. 14.
Controlling means for electric lighting installation of railway cars. F. Trinchero. 1,901,274; Mar. 14.
Conveyer system. H. E. Twomley. 1,901,066; Mar. 14.
Conveyer system and apparatus therefor, Rotary. K. T. Potthoff. 1,901,471; Mar. 14.
Conveyer, Trolley. S. Shafer, jr. 1,901,850; Mar. 14.
Cooking device, Automatic. V. G. Vaughan. 1,901,616; Mar. 14.
Copper oxide rectifier. G. F. Martin, jr. 1,901,563; Mar. 14.
Core laminæ, Making. J. C. Daley. 1,901,584; Mar. 14.
Corn harvesting machine. H. D. Fisk. 1,901,092; Mar. 14.
Cotton harvesting machine. L. E. Wirth. 1,901,686; Mar. 14.
Cotton, Modified. C. F. Goldthwait. 1,901,095; Mar. 14.
Counting and bunching device. W. E. Sharkey. 1,901,062; Mar. 14.
Coupler for glass supporting tables. L. L. Handy. 1,901,511; Mar. 14.
Coupling: *See*—
Free-wheel coupling. Rod coupling.
Coupling. F. S. Barks. 1,900,902; Mar. 14.
Coupling device. P. C. Gordon. 1,901,843; Mar. 14.
Coupling for steam and other pressure fluid supply circuits, Rotary. G. H. Davies. 1,900,899; Mar. 14.
Cover for use in testing vehicle wheels for misalignment. G. H. Taber. 1,901,786; Mar. 14.
Covering such as linoleum, Surface. C. F. Humphreys. 1,901,559; Mar. 14.
Crank shaft. A. Lack. 1,901,175; Mar. 14.
Crank shaft. E. A. Ryder. 1,901,358; Mar. 14.
Crossing gate, Balanced railroad. G. Varchetta. 1,901,680; Mar. 14.
Cultivator. C. H. White and F. T. Court. 1,901,684; Mar. 14.
Current rectifying element, Alternating. J. G. H. Liebel. 1,901,756; Mar. 14.
Current tapping device, Electric. R. Eckstein. 1,901,587; Mar. 14.
Curtain and shade fixture. M. Bell. 1,901,796; Mar. 14.
Cuspidor, Fountain. C. W. Moore. 1,901,319; Mar. 14.
Cutter: *See*—
Paper cutter.
Cutter mechanism for corn harvesters. S. H. Hale. 1,901,099; Mar. 14.
Cutting and ornamenting die. A. W. Altvater. 1,901,575; Mar. 14.
Cutting mechanism. A. Messer. 1,901,254; Mar. 14.
Cylinder, Air-cooled. E. Becker. 1,901,603; Mar. 14.
Cylinder port control. O. H. Spencer. 1,901,198; Mar. 14.
Cystoscope and the like. L. Buerger. 1,901,731; Mar. 14.
Damper. J. C. F. Schafer and J. F. Bieser. 1,901,125; Mar. 14.
Damper construction, Fireplace. J. Koberling. 1,901,753; Mar. 14.
Damper, Vibration. A. A. Warner. 1,901,853; Mar. 14.
Delivery mechanism for nut tappers. W. L. Clouse. 1,901,146; Mar. 14.
Dental investment composition. M. C. Dailey. 1,901,053; Mar. 14.
Dental model stone composition. M. C. Dailey. 1,901,054; Mar. 14.
Dial for timepieces. M. Brunswig. Des. 89,434; Mar. 14.
Dial operator. J. F. Currivan. 1,900,916; Mar. 14.
Diaphragm. R. W. Carlisle and R. W. Nye. 1,901,631; Mar. 14.
Die: *See*—
Cutting and ornamenting die.
Direction signal. A. L. Johnson. 1,901,395; Mar. 14.
Dirigible-airplane. H. L. Kuhn. 1,901,173; Mar. 14.
Discharge tube, Electric glow. G. Seibt. 1,901,004; Mar. 14.
Dishwasher, Mechanical. J. H. Weidman. 1,901,683; Mar. 14.
Disk clutch, Adjustable. M. Goldschmidt. 1,901,856; Mar. 14.
Disks, Making cold rolled. G. L. Kelley and E. G. Budd. 1,901,035; Mar. 14.
Dispenser. P. H. Horwitt. 1,901,243; Mar. 14.
Dispenser or meter, Fluid. D. Kapuczin. 1,901,348; Mar. 14.
Dispensing apparatus, Coin controlled. H. J. Halsted and N. R. Briggs. 1,900,989; Mar. 14.
Dispensing device. E. Alexander. 1,901,487; Mar. 14.
Dispensing receptacle, Paper. C. W. Spain. 1,901,006; Mar. 14.
Display box. J. H. Ware, jr. 1,901,483; Mar. 14.
Display device. W. O. Allen. 1,901,717; Mar. 14.
Display device, Reflective. W. D. MacCourt, T. F. Walsh, and F. H. Rasmussen. 1,901,661; Mar. 14.
Display screen, Portable. B. McCandless. 1,901,182; Mar. 14.
Display stand. S. Gordon. Des. 89,463; Mar. 14.
Distributor for use in telegraphy and the like. E. K. Sandeman. 1,900,954; Mar. 14.
Divider, Proportional. C. Cattaneo. 1,901,801; Mar. 14.
Door arrangement, Sliding. P. F. King. 1,901,304; Mar. 14.
Door, Automobile. B. M. Calvert. Des. 89,435; Mar. 14.
Door control device, Garage. E. S. Bagley. 1,900,901; Mar. 14.
Door elevating arrangement. C. Late. 1,901,758; Mar. 14.
Door hanger. F. B. Howard. 1,901,648; Mar. 14.
Doorlock actuating mechanism. C. J. Ulrich. 1,901,541; Mar. 14.
Doorlock, Electric. F. Beal. 1,901,721; Mar. 14.
Doorlocking system, Automobile. F. Beal. 1,901,548; Mar. 14.
Doors, Attachment for. H. F. Keil. 1,901,303; Mar. 14.
Drill bit. G. G. Harrington. 1,901,643; Mar. 14.
Drill holes, Apparatus for surveying. H. Regats. 1,901,567; Mar. 14.
Drill stem and drill pipe, Apparatus for guiding and steadying. W. H. Endsley. 1,900,921; Mar. 14.
Drinking fountain. W. H. Schulte. 1,901,646; Mar. 14.
Drive and guide in four wheels, combined with triple differential and brake in one unit, Motor vehicle differential gear. P. P. Adams. 1,901,276; Mar. 14.
Drive construction, Four-wheel vehicle. A. R. Le Moon. 1,901,809; Mar. 14.
Drive shaft and pinion assembly puller. J. W. Crumpacker. 1,901,736; Mar. 14.
Driving mechanism. F. D. Stanley. 1,901,270; Mar. 14.
Driving mechanism for valves and other devices. C. W. Kuhn. 1,901,397; Mar. 14.
Drop cord protector. J. B. Glowacki. 1,901,282; Mar. 14.
Drop testing machine. R. B. Lewis. 1,901,460; Mar. 14.
Drum-grinding machine. W. J. Andres. 1,901,690; Mar. 14.
Drum head tightener. S. H. Newberry. 1,901,765; Mar. 14.
Drying device. J. G. Olsson and F. I. E. Stenfors. 1,901,326; Mar. 14.
Dual wheel. F. W. Burger. 1,901,629; Mar. 14.
Dummy display box. F. A. Marx. 1,901,851; Mar. 14.
Duplex equalizing apparatus. C. B. Coates. 1,901,496; Mar. 14.
Duplicating machine. J. J. Flanigan. 1,901,440; Mar. 14.
Dust collector. E. Robideau. 1,901,362; Mar. 14.
Dust separating and collecting device. M. H. Kuhner. 1,901,370; Mar. 14.
Dust such as from plant fired by pulverulent fuel, Removing. W. A. Woodeson. 1,901,791; Mar. 14.
Dye paste for printing and dyeing, Preparing. E. O. Wood. 1,901,275; Mar. 14.
Dyestuffs and of intermediate products relating thereto, Manufacture of vat. A. Davidson and A. Shepherdson. 1,901,288; Mar. 14.
Dyestuffs of the anthraquinone series, Preparation of new. S. von Allmen. 1,901,048; Mar. 14.
Dyestuffs of the isodibenzanthrone series and making them, Vat. M. A. Kunz and K. Koeberle. 1,901,806; Mar. 14.
Dyestuffs of the 3.4.3.9.- and 4.5.8.9.-dibenzpyrenequinone series and preparing them. G. Kraenzlein, H. Vollmann, and M. Corell. 1,901,307; Mar. 14.
Dyestuffs, Secondary diazo. J. Baddiley and J. Hill. 1,901,278; Mar. 14.
Edible substances, Heat treating. F. D. Chapman. 1,901,085; Mar. 14.
Edging apparatus. H. J. Hamann. 1,901,510; Mar. 14.
Egg case carrier. L. L. Amspacker. 1,901,277; Mar. 14.
Ejector. R. Black. 1,901,797; Mar. 14.
Electric crystal system, Pieso-. A. Crossley. 1,901,735; Mar. 14.
Electric discharge device. D. Lely. 1,901,037; Mar. 14.
Electric furnace. F. A. Fahrenwald. 1,901,499; Mar. 14.
Electric generating system, Constant current variable voltage. G. Austin, J. C. and W. A. Macfarlane. 1,901,218; Mar. 14.
Electric heater. D. S. Marshall. 1,901,035; Mar. 14.
Electric illuminating apparatus, Portable. L. O. Brown. 1,900,906; Mar. 14.
Electric instrument. M. Eastham. 1,901,343; Mar. 14.
Electric machine, Dynamo-. R. N. Early. 1,901,366; Mar. 14.
Electric switch. L. Haag. 1,900,929; Mar. 14.
Electric switch. L. A. Kempton. 1,901,658; Mar. 14.
Electric switch. G. M. Mortenson. 1,901,320; Mar. 14.
Electric switch. F. Riebel, jr., and D. M. Dow. 1,901,671; Mar. 14.
Electric switch. G. O. Wilms. 1,901,573; Mar. 14.
Electric welding machine. M. R. Wells. 1,901,211–12; Mar. 14.
Electrical control system. A. J. Sorensen. 1,901,047; Mar. 14.
Electrical controlling apparatus. M. B. Sleeper. 1,901,673; Mar. 14.
Electrical coupling device. J. P. Coleman. 1,900,918; Mar. 14.
Electrical distribution system. G. B. Scheibell. 1,901,689; Mar. 14.
Electrical measuring instrument. B. Sippean. 1,901,197; Mar. 14.
Electrical socket device. B. H. Pliske. 1,901,470; Mar. 14.
Electrical system of distribution. W. C. Brookhuyser. 1,901,828; Mar. 14.

Electrodes of thermionic tubes, Apparatus for mechanically mounting. W. Dalheimer. 1,901,087; Mar. 14.
Electrodes, Welding. E. H. Kuhlman. 1,900,941; Mar. 14.
Electromagnetic switch. D. A. Christian. 1,900,912; Mar. 14.
Elevator: *See*—
Sucker-rod elevator.
Emulsions, Treating. C. G. Hinrichs. 1,901,163; Mar. 14.
Engine: *See*—
Hoisting engine. Rotary engine.
Internal-combustion engine. Steam engine.
Engines, Driving internal combustion. R. Erren. 1,901,709; Mar. 14.
Engines, Fueling internal combustion. A. Moore. 1,901,849; Mar. 14.
Evaporation losses, Prevention of. H. V. Atwell. 1,901,576; Mar. 14.
Explosive composition. R. Schless. 1,901,126; Mar. 14.
Extractor: *See*—
Automobile extractor.
Fabric and making the same, Flexible wear-resisting sealing. E. H. Berger. 1,900,904; Mar. 14.
Fabric welding machine. W. S. Southwick. 1,901,477; Mar. 14.
Fabricated frame. R. A. McCarty. 1,901,315; Mar. 14.
Fastener: *See*—
Window fastener.
Fastener sliders, Forming separable. R. J. Poux. 1,901,189; Mar. 14.
Faucet. J. M. Travis. 1,901,479; Mar. 14.
Feed mixer. I. Edland. Re18,768; Mar. 14.
Feeder: *See*—
Coal feeder. Tile feeder.
Hog feeder.
Fibers, Treating artificial. H. C. Stuhlmann. 1,901,007; Mar. 14.
Fibrous compositions containing filler and binder substances and making them. E. P. Stevenson. 1,901,382; Mar. 14.
Filing device. J. H. Field. 1,901,365; Mar. 14.
Filing receptacle. G. H. Preddey. 1,901,533; Mar. 14.
Film printing machine. A. Heine and F. W. Dustmann. 1,901,645; Mar. 14.
Filter: *See*—
Oil filter.
Filtering material. W. C. Davidson. 1,901,438; Mar. 14.
Finish remover. T. F. Bradley. 1,901,728; Mar. 14.
Fins on tubes, Method and machine for rolling. R. K. Hopkins. 1,901,516; Mar. 14.
Fire, Animated imitation hearth. F. A. Gritt and F. Stewart. 1,901,294; Mar. 14.
Firecracker tube rolling machine. W. F. Gongaware. 1,900,928; Mar. 14.
Fireplace screen. A. H. Bailey. 1,901,073; Mar. 14.
Firing-device for demountable machine-guns. A. L. Ricordel. 1,900,999; Mar. 14.
Fish scaling device. C. Birdseye. 1,901,625; Mar. 14.
Fishing reel. J. R. Fawcett. 1,901,091; Mar. 14.
Fitting, Waste and overflow. E. A. Pope. 1,901,118; Mar. 14.
Fixture and canopy support. J. B. Glowacki. 1,901,234; Mar. 14.
Floor surfacing machine. J. J. Vicenzi. 1,901,681; Mar. 14.
Flooring, composition, and preparing, Mastic. H. K. Linsell. 1,901,055; Mar. 14.
Flooring, Method of and apparatus for bundling. E. C. Dittmar. 1,900,980; Mar. 14.
Flotation machine. J. P. Ruth, jr. 1,901,123; Mar. 14.
Fluid flow control device. F. L. Kallam. 1,901,032; Mar. 14.
Fluid injecting device. C. C. Corkran. 1,901,085; Mar. 14.
Fluid pressure motor. J. E. Rehor. 1,900,950; Mar. 14.
Flush valve. W. Putnam. 1,901,119; Mar. 14.
Foils, Production of. O. Schmidt. 1,901,045; Mar. 14.
Folding table. J. Kovats. 1,901,105; Mar. 14.
Folding table. J. Kovats. 1,901,106–7; Mar. 14.
Food, Producing animal. C. Schlotterbose. 1,901,264; Mar. 14.
Foot rest device. W. Moloney. 1,901,184; Mar. 14.
Form, Concrete. J. S. Frederick. 1,901,392; Mar. 14.
Fountain: *See*—
Drinking fountain.
Frame: *See*—
Fabricated frame. Tube frame.
Free-wheel coupling. H. H. V. Stanley and G. F. Clark. 1,900,957; Mar. 14.
Fruit pitting machine. F. Robbins. 1,901,042; Mar. 14.
Fruits, Apparatus for washing. R. R. Kennedy. 1,901,455; Mar. 14.
Fuel feed mechanism. H. T. Thomas. 1,901,835; Mar. 14.
Fuel injection device for internal combustion engines. H. Junkers. 1,901,814; Mar. 14.
Furnace: *See*—
Electric furnace. Open hearth furnace.
Gas-fired furnace.
Furnace construction. F. Provincial. 1,901,821; Mar. 14.
Furnace construction, Open hearth. K. C. McCutcheon. 1,900,942; Mar. 14.
Furnace control apparatus, Arc. J. Young. 1,901,426; Mar. 14.
Furnace wall, Sectional. D. S. Jacobus. 1,901,560; Mar. 14.
Furniture. A. Ernest. 1,901,638; Mar. 14.
Fuse panel board. J. G. Jackson. 1,901,164; Mar. 14.
Game board. W. R. Cluff. Des. 89,488; Mar. 14.
Game table, Folding. E. A. Clark. 1,901,782; Mar. 14.
Garment hanger. J. G. and L. A. Campbell. 1,900,908; Mar. 14.
Garment hanger. R. J. Rink. 1,901,777; Mar. 14.
Gas burner. W. D. Antrim. 1,901,716; Mar. 14.
Gas burner. F. J. Cox. 1,901,086; Mar. 14.
Gas-fired furnace. H. Petsch. 1,901,770; Mar. 14.
Gas making apparatus. C. I. Tenney. 1,900,961; Mar. 14.
Gas manufacture. J. B. Eberlein and G. R. Steere. 1,900,958; Mar. 14.
Gas manufacture. G. R. Steere. 1,900,959; Mar. 14.
Gas producer. A. L. Galusha. 1,901,807; Mar. 14.
Gaseous mixtures containing sulphur dioxide, Production of. M. Schroeder. 1,901,416; Mar. 14.
Gases and vapors to produce a mixture of nitrogen and hydrogen in determined proportions, Dissociating hydrocarbon. W. D. Wilcox. 1,901,136; Mar. 14.
Gases, Apparatus for preparing pressure. C. W. P. Heylandt. 1,901,447; Mar. 14.
Gases, Apparatus for transferring and storing liquefied. C. W. P. Heylandt. 1,901,445; Mar. 14.
Gases, Conserving liquefied. C. W. P. Heylandt. 1,901,446; Mar. 14.
Gate: *See*—
Compound film gate. Regulating and controlling gate.
Crossing gate.
Gate for motion picture machines. A. Dina. 1,900,920; Mar. 14.
Gate valve. D. J. Moran. 1,901,255; Mar. 14.
Gauge: *See*—
Grinding gauge.
Gauge. H. G. Jackson. 1,901,451; Mar. 14.
Gauge for sheet metal shears, Automatic. E. B. Hudson. 1,900,933; Mar. 14.
Gear: *See*—
Airplane landing gear.
Generator: *See*—
Multiple booster or multiple vibration generator. Oscillation generator.
Germicidal and detergent substances. A. R. Cade and H. O. Halvorson. 1,901,434; Mar. 14.
Glare eliminator for vehicle headlights. L. C. Rowley. 1,901,058; Mar. 14.
Glass machinery. T. S. Beeson. 1,901,491; Mar. 14.
Glass, Making laminated. A. G. Worrall. 1,901,574; Mar. 14.
Glass, Manufacture of wired. A. L. Forster. 1,901,743; Mar. 14.
Glass sheets, Apparatus for handling. R. J. Louviaux. 1,901,463; Mar. 14.
Goggle ventilator. H. F. Shindel. 1,900,955; Mar. 14.
Golf club. N. S. Main. 1,901,562; Mar. 14.
Governor. S. L. Kerr. 1,901,831; Mar. 14.
Grain and fertilizer distributor, Combined. B. P. Johnson. 1,901,301; Mar. 14.
Grain distributor, Double run force feed. B. P. Johnson. 1,901,300; Mar. 14.
Grate. O. S. Bowman. 1,901,698; Mar. 14.
Griddle. M. W. McArdle. 1,901,314; Mar. 14.
Grinding gauge, Circular chaser. W. J. Hogg. 1,901,242; Mar. 14.
Grinding machine. W. J. Guild. 1,901,236; Mar. 14.
Gripping face for chucks and making the same. L. R. Evans. 1,900,922; Mar. 14.
Ground connecter. G. L. Barnes and H. D. Chapman. 1,900,894; Mar. 14.
Guard for wood heel turning machines. W. J. Shaw. 1,901,063; Mar. 14.
Guard, Guy. T. Birkenmaier. 1,901,220; Mar. 14.
Guide and bumper for blind cages, Inserted. J. A. Yerkes and R. H. Lemmon. 1,901,217; Mar. 14.
Guide for saw blades in wood sawing. M. E. Pixley. 1,901,376; Mar. 14.
Gypsum and manufacturing same, High strength calcined. W. S. Randel and M. C. Dailey. 1,901,051; Mar. 14.
Hair and wave clip, Sliding. S. Allmena and W. Neumann. 1,900,970; Mar. 14.
Hair winding mechanism. G. E. Björkman. 1,901,430; Mar. 14.
Hammer, Power. L. Skeel and F. P. Miller. 1,901,779; Mar. 14.
Handle or similar article for an automotive vehicle, Outside door. E. S. Carlson. Des. 89,436; Mar. 14.
Handle or similar article for an automotive vehicle, Outside door. W. Schnell. Des. 89,452; Mar. 14.
Handle support. N. L. Jordon. 1,901,166; Mar. 14.
Handling cylindrical articles and the like, Apparatus for. K. F. Snow. 1,901,860; Mar. 14.
Hanger: *See*—
Door hanger. Picture hanger.
Garment hanger.
Harmonic analyzer. W. A. Marrison. 1,901,400; Mar. 14.
Hat brim trimming tool. J. Mosca. 1,901,764; Mar. 14.
Headlight for vehicles. J. Tourriol. 1,901,012; Mar. 14.
Heat-producing compound. L. Mann. 1,901,318; Mar. 14.

Heat transferrer for controlling solid CO_2 for refrigeration purposes. W. B. Robe. 1,901,000; Mar. 14.
Heater: *See*—
Electric heater. Unit heater.
Portable heater.
Heater attachment, Hot water. W. E. McCorquodale. 1,901,761; Mar. 14.
Heater for coffee making, Water. L. B. Green. 1,901,028; Mar. 14.
Heating apparatus for automotive vehicles. V. J. Butterfield. 1,901,082; Mar. 14.
Hedge trimmer. A. R. Paullin. 1,901,327; Mar. 14.
Heel. J. Cavanagh. 1,901,144; Mar. 14.
Heel for ladies' shoes. G. A. Taylor. 1,901,340; Mar. 14.
Helical connecter. W. A. Holt. 1,901,747; Mar. 14.
Hide and leather dressing machine. D. Mercier. 1,901,317; Mar. 14.
Hinge. G. W. Aldeen. 1,901,072; Mar. 14.
Hinge. B. J. Dowd. 1,901,289; Mar. 14.
Hoe. H. P. Schlag. 1,901,778; Mar. 14.
Hog feeder. J. D. Duuck. 1,901,089; Mar. 14.
Hoisting engine. C. W. Kahlerth. 1,900,937; Mar. 14.
Holder: *See*—
Screwless holder. Tire display holder.
Strap holder.
Holding member for projection machines, Interchangeable. F. N. Jones. 1,901,245; Mar. 14.
Honing device for cylinders. J. Sunnen. Re18,763; Mar. 14.
Horn, Air operated. R. T. Osborne. 1,901,187; Mar. 14.
Hose connections, Making. B. Dick. 1,901,088; Mar. 14.
Hose fitting. A. Brunner. 1,901,143; Mar. 14.
Hose, Fluid-conductive. J. Poberejsky. 1,901,330; Mar. 14.
Hose reel. R. O. Lund. 1,901,660; Mar. 14.
Hospital table. F. Kusterle. 1,901,174; Mar. 14.
Humidifying apparatus. G. D. Doherty. Re18,762; Mar. 14.
Hydraulic clutch. W. O. and W. C. Higby. 1,901,241; Mar. 14.
Hydraulic operator. W. J. Woods. 1,901,620; Mar. 14.
Hydraulic press. W. Ernst. 1,901,291; Mar. 14.
Hydrocarbons into lighter hydrocarbons, Converting heavy. A. E. Harnsberger and C. L. Smith. 1,901,593; Mar. 14.
Hydrocarbons, Refining. T. T. Gray. 1,901,158; Mar. 14.
Hydrogen sulphide into sulphur, Method and apparatus for converting. B. H. Lincoln. 1,901,249; Mar. 14.
Ignition device for aircraft engines. E. Klaiber. 1,901,846; Mar. 14.
Ignition system for gas burners. R. H. Maurer. 1,901,251; Mar. 14.
Impulse transmission system. T. A. McCann. 1,900,992; Mar. 14.
Incubator. E. H. Snow. 1,901,614; Mar. 14.
Indicator: *See*—
Leak indicator. Smoke indicator.
Power-level indicator.
Indicator device. J. C. Conn. 1,901,346; Mar. 14.
Instep protector. F. A. Larack. 1,901,659; Mar. 14.
Insulating articles, Apparatus for molding. W. C. Tregoning. 1,901,205; Mar. 14.
Insulating spacer. H. L. Crowley. 1,901,703; Mar. 14.
Interferometer. C. W. Chamberlain. 1,901,682; Mar. 14.
Interlock, Swing door inclosure. L. G. Jacobson. 1,901,517; Mar. 14.
Interlocking system for railroads. W. K. Howe. 1,901,748; Mar. 14.
Internal combustion engine. P. Belyavin. 1,901,723; Mar. 14.
Internal combustion engine. C. F. High. 1,901,448; Mar. 14.
Internal combustion engine. O. S. Ruud. 1,901,263; Mar. 14.
Internal combustion engine. H. H. Waters and R. F. Gagg. 1,901,618; Mar. 14.
Internal combustion engine. L. M. Woolson. 1,900,968; Mar. 14.
Iron, Electric. H. K. Warner and G. R. Elliott. 1,901,885; Mar. 14.
Jack: *See*—
Automobile jack.
Jar. J. B. Clark. Des. 89,437; Mar. 14.
Jar, Rotary. F. W. Harris. 1,901,513; Mar. 14.
Joint: *See*—
Rail joint.
Joint and supporting structure for illuminating devices, Universal. P. A. and C. D. Nirdlinger, and E. M. Miller. 1,901,527; Mar. 14.
Key device for musical instruments having keys, Movable. E. Willems. 1,901,214; Mar. 14.
Key lock, Multiple. W. F. Diesel. 1,901,229; Mar. 14.
Knitting machine sinker. T. H. Jones. 1,901,751; Mar. 14.
Knitting machinery. R. Reiner. 1,901,857; Mar. 14.
Knitting machines, Row counter for flat. W. Heinits. 1,901,745; Mar. 14.
Label. L. Davis. 1,901,495; Mar. 14.
Label picking mechanism. C. Holm. 1,901,101; Mar. 14.
Ladders, Apparatus for forming. C. D. Reed. 1,901,334; Mar. 14.
Lamp, Automobile signal. H. J. Sauer. Des. 89,351; Mar. 14.
Lamp, Electric. C. G. Smith. 1,901,128; Mar. 14.
Lamp, Electric head. O. O. McBride. 1,901,180; Mar. 14.
Lamp, Flash. H. T. and H. H. Hipwell. 1,900,931; Mar. 14.
Larynx, Artificial. G. W. Burchett. 1,901,433; Mar. 14.
Latches for rail switches and blanks for the same, Making. B. R. Barber. 1,901,718; Mar. 14.
Lathering device. F. Robleder. 1,901,001; Mar. 14.
Leak indicator, Pressure. R. W. Bradley. 1,901,432; Mar. 14.
Lens generating machine, Toric. J. J. McCabe. 1,901,181; Mar. 14.
Lifter. J. F. Brewer. 1,901,729; Mar. 14.
Light: *See*—
Candle light.
Light casing, Vehicle rear. H. C. Reichhardt. Des. 89,469; Mar. 14.
Light modulator and constructing the same. R. A. Fessenden. 1,901,502; Mar. 14.
Lightning or surge absorber. E. D. T. Norris. 1,901,767; Mar. 14.
Liner. C. Butterfield. 1,900,897; Mar. 14.
Lining anchoring means. E. F. Wiley. 1,901,424; Mar. 14.
Lining for casting mold cavities. J. D. Alley. 1,901,427; Mar. 14.
Liquid dispensing apparatus. E. W. Vahle. 1,901,480; Mar. 14.
Liquid dispensing can. P. D. Fulton. 1,901,504; Mar. 14.
Liquid dispensing meter. J. F. Malm. 1,901,178; Mar. 14.
Liquid fuel burner. W. E. Taft. 1,901,271; Mar. 14.
Liquid measure, Nondecanting. R. B. Munday. 1,901,256; Mar. 14.
Liquid purification. R. H. Kean. 1,901,652; Mar. 14.
Liquids, Distributor for. R. H. Van Schaack, jr. 1,901,481; Mar. 14.
Liquids, Treating. M. F. Nichols. 1,900,995; Mar. 14.
Lithium, Electrolytic process for producing alloys of. H. Osborg. 1,901,407; Mar. 14.
Loading structure for a signaling conductor. R. L. Hughes and E. Baguley. 1,900,935; Mar. 14.
Lock: *See*—
Key lock. Nut lock.
Lock. W. A. Richter. 1,901,412; Mar. 14.
Lock slider. S. H. Norton. 1,901,257; Mar. 14.
Loom. S. P. Parker. 1,901,769; Mar. 14.
Loom stop-motions, Timing device for. E. C. Smith. 1,901,418; Mar. 14.
Looms for weaving tufted pile fabrics, Tuft yarn frame for. E. F. Clark. 1,901,435; Mar. 14.
Loud-speaker, Electrodynamic. E. S. Pridham. 1,901,831; Mar. 14.
Loud-speaker, Electrostatic. A. A. Thomas. 1,901,202; Mar. 14.
Lubricating apparatus, Force feed. D. Grattan. 1,901,027; Mar. 14.
Lubricating means. J. L. Creveling. 1,901,148; Mar. 14.
Lubrication of vehicles, System for the central. L. Saives. 1,901,379; Mar. 14.
Machine for cutting metal bars and the like. H. F. Vickers. 1,901,067; Mar. 14.
Machine for distributing sand, gravel, and the like, Automatically loading. E. J. N. Millet. 1,901,523; Mar. 14.
Machine for inserting fastenings. J. C. Jorgensen. 1,901,167; Mar. 14.
Machine for making and assembling a valve pin and valve gasket support. A. J. Lewis. 1,901,459; Mar. 14.
Machine for making composite sheets. L. McCarthy. 1,901,352; Mar. 14.
Machine for making panel cork stock from mill clippings and the like. J. L. Hersog. 1,901,598; Mar. 14.
Machine for manufacturing boxes. B. A. E. Johnson. 1,901,750; Mar. 14.
Machine for measuring body volume. D. E. Zook. 1,901,687; Mar. 14.
Machine for sealing cans. H. Sebell. 1,901,266; Mar. 14.
Machine for shaving and slotting screws. F. E. Newton. 1,901,405; Mar. 14.
Machine tool. W. D. Archea. 1,901,489; Mar. 14.
Magnifier, Portable. O. Hauser. 1,900,930; Mar. 14.
Manifold, Intake. A. Moore. 1,901,768; Mar. 14.
Marker, Grave. F. L. Michaels. Des. 89,445–6; Mar. 14.
Marker, Road. E. T. D. Myers, jr. 1,900,945; Mar. 14.
Masses, Production of artificial. O. Schmidt, B. Schnell, and E. Meyer. 1,901,044; Mar. 14.
Masses resembling linoxyn, Production of. M. Luther and H. Beller. 1,901,374; Mar. 14.
Mat, Reversible. E. J. Mammes. 1,901,110; Mar. 14.
Material and rubber from waste rubber stock, Recovery of fibrous. J. K. Mitchell. 1,900,944; Mar. 14.
Material, Constructional. A. C. Fischer. Re18,765; Mar. 14.
Material forwarding mechanism. A. K. Taylor. 1,901,677; Mar. 14.
Material, Gastification of carbonaceous. L. C. Karrick. 1,901,170; Mar. 14.
Material, Treating. F. D. Chapman. 1,901,084; Mar. 14.
Materials, Device for feeding and controlling the flow of. W. Ross. 1,901,002; Mar. 14.
Materials of different densities, Apparatus for the pneumatic separation of. P. Soulary. 1,901,783; Mar. 14.
Measuring and dispensing device for containers. C. Hochstatter. 1,901,811; Mar. 14.
Measuring appliance. N. G. Bennett. 1,901,724; Mar. 14.
Measuring arrangement for measurement of ratio of transformation and phase angles of voltage and current transformers. J. Slavik. 1,901,336; Mar. 14.

Measuring device. S. Baroni. 1,901,719; Mar. 14.
Mercury arc rectifier. M. Schenkel. 1,901,612; Mar. 14.
Metal aligning device. H. J. Gaisman. 1,901,829; Mar. 14.
Metal by means of gases, Cutting. J. L. Anderson. 1,901,428; Mar. 14.
Metal jamb, Reenforced. I. A. Baum. 1,901,624; Mar. 14.
Metal, Purifying molten. H. C. Drake. 1,901,585; Mar. 14.
Metal sulphates and recovery of metal from waste metallic compounds, Making basic. E. O. Cummings. 1,901,364; Mar. 14.
Metal surfaces, Decorating. K. Takeda. 1,900,960; Mar. 14.
Metal working machine, Multiple spindle. O. E. Trobeck. 1,901,206; Mar. 14.
Metallurgical condenser. G. F. Weaton. 1,901,543; Mar. 14.
Metals and metal alloys low in carbon, Producing. E. G. T. Gustafsson. 1,901,367; Mar. 14.
Metals of the iron group from solutions containing salts of one or more of the said metals, Removing one or more of the. K. W. Palmaer. 1,900,996; Mar. 14.
Meter: *See*—
Liquid dispensing meter.
Milk cooling and storing apparatus. G. E. Wallis. 1,901,014; Mar. 14.
Milling machine. W. D. Arches. 1,901,490; Mar. 14.
Milling machine. M. De Haas and B. Sassen. 1,901,295; Mar. 14.
Milling machine. S. Einstein and L. F. Nenninger. 1,901,290; Mar. 14.
Mining machine. L. E. Simmons. 1,901,127; Mar. 14.
Mixer: *See*—
Feed mixer. Water mixer.
Mixer blade, Concrete. A. Knowles. 1,901,305; Mar. 14.
Mixer for hydrocarbon engines, Gas and air. W. B. Hawers. 1,901,191; Mar. 14.
Mixing device. H. R. Tumim. 1,901,207; Mar. 14.
Mixtures of sulphonated alkylated neodyeing aromatic carbocyclic compounds and their salts. F. Guenther. 1,901,507; Mar. 14.
Mold: *See*—
Typographical mold.
Molds and cores, Process and product for coating. C. M. Saeger, jr. 1,901,124; Mar. 14.
Molding, Apparatus for shaping. H. C. Kinney. 1,900,939; Mar. 14.
Molten substances and gases, Apparatus for performing reactions between. W. Moschel. 1,901,525; Mar. 14.
Money handling machine. E. J. Brandt. 1,901,081; Mar. 14.
Mop. H. L. Firtion. 1,901,842; Mar. 14.
Motor: *See*—
Fluid pressure motor. Rotary motor.
Motor control system. J. A. Setter. 1,901,672; Mar. 14.
Motor for tilting propeller blades, Fluid pressure servo. A. Pfau. 1,901,772; Mar. 14.
Motor operated mechanism. I. E. McCabe. 1,901,402; Mar. 14.
Motor operated valve. R. T. Williams. 1,901,070; Mar. 14.
Motor starting system, Electric. R. N. Early. 1,901,636; Mar. 14.
Motor support. J. A. Rodgers. 1,901,474; Mar. 14.
Mounting for window shades, Adjustable. N. Slobotkin. 1,901,674; Mar. 14.
Mowing device. B. F. Gravely. 1,901,293; Mar. 14.
Muffler and supercharger, Gas engine. G. P. Smith. 1,901,381; Mar. 14.
Mug, Barber. E. Eaves. 1,901,738; Mar. 14.
Multicontact switch. J. F. D. Hoge. 1,901,449; Mar. 14.
Multiple booster or multiple vibration generator. S. Loewe. 1,901,605; Mar. 14.
Navigating and like operations, Means for use in. C. de V. Le Sueur. 1,901,755; Mar. 14.
Nitrocellulose and the product thereof, Dehydrating. A. Langmeier. 1,901,561; Mar. 14.
Nitrogen-hydrogen mixture in the synthesis of ammonia, Purifying the. L. C. Jones. Re18,766; Mar. 14.
Nitroglycerine and similar esters, Washing. A. Schmid. 1,901,003; Mar. 14.
Nut hulling machine. F. Boomer. 1,901,798; Mar. 14.
Nut lock. E. G. Glover. 1,901,744; Mar. 14.
Oil and liquid dispensing device. H. M. Keith. 1,901,815; Mar. 14.
Oil, Apparatus for reconditioning used. E. J. Sweetland. 1,901,010; Mar. 14.
Oil burner. G. Kinsman. 1,901,456; Mar. 14.
Oil conductors, Constructing and maintaining crude. T. de la Mare. 1,900,978; Mar. 14.
Oil filter. C. A. Winslow and E. J. Hall. 1,901,484; Mar. 14.
Oil from certain residuums, Recovering drip. G. N. Harcourt. 1,901,238; Mar. 14.
Oil, Heating. A. E. Harnsberger and C. L. Smith. 1,901,592; Mar. 14.
Oil refining apparatus, Decarbonizing. W. T. Davis. 1,901,803; Mar. 14.
Oil treatment process and apparatus therefor. H. C. Kirk. 1,901,172; Mar. 14.
Oil well control, Subterranean automatic. G. Battelle. 1,901,141; Mar. 14.
Oil well testing device. M. O. Johnston. 1,901,813; Mar. 14.
Oiling device for bearings. R. V. D. Firth. 1,900,924; Mar. 14.
Oils, Dewaxing. A. Henriksen. 1,901,240; Mar. 14.
Open hearth furnace. A. J. Boynton. 1,901,079; Mar. 14.
Ore conditioning process. G. J. Holt, R. O. Hocking, A. E. Matson, and A. K. Knickerbocker. 1,901,102; Mar. 14.
Organ stop action, Combination. J. T. Austin. 1,901,622; Mar. 14.
Organ stop mechanism, Combination. J. T. Austin. 1,901,623; Mar. 14.
Organs, Combination box for electropneumatic pipe. C. C. Dargis. 1,901,552; Mar. 14.
Ornament or similar article, Automobile radiator. J. R. Morgan and W. Schnell. Des. 89,447; Mar. 14.
Ornament or similar article, Automobile radiator. W. Schnell. Des. 89,453; Mar. 14.
Oscillation generator. H. O. Roosenstein. 1,901,043; Mar. 14.
Out-of-order signal. B. D. Newton. 1,901,404; Mar. 14.
Oxides of nitrogen, Absorption of. E. Lüscher. 1,901,816; Mar. 14.
Package carrier. J. L. Baldwin. 1,901,279; Mar. 14.
Package forming method. S. Rosen. 1,900,953; Mar. 14.
Packing. R. C. Newhouse. 1,901,766; Mar. 14.
Packing structure. G. D. Becker and R. C. Newhouse. 1,901,722; Mar. 14.
Pan, Multiple bake. E. H. Chandonia. 1,901,022; Mar. 14.
Panel, Theater switch. B. F. Fuller. 1,901,640; Mar. 14.
Paper-board, Manufacture of. P. H. Rogers. 1,901,378; Mar. 14.
Paper cutter. A. K. Taylor. 1,901,676; Mar. 14.
Paper-marking machine. H. R. Williams. 1,901,425; Mar. 14.
Paper, Safety. F. S. Wood. 1,900,967; Mar. 14.
Paper, Wall. J. H. Goff. 1,900,987; Mar. 14.
Papers without using relief molds, Production of genuine watermark. F. von Heinrich. 1,901,049; Mar. 14.
Parachute equipment. J. C. G. Salone and G. D. Lucas. 1,901,380; Mar. 14.
Paraffin or olefin hydrocarbon into liquid aromatic hydrocarbons, Conversion of gaseous. A. S. Ramage. 1,900,997; Mar. 14.
Pen and pencil, Combination fountain. S. M. Sager. 1,901,414; Mar. 14.
Pen, Fountain. R. C. Parker. Des. 89,449; Mar. 14.
Petroleum, Removal of impurities from crude. L. L. Davis, A. Henriksen, and J. J. Allinson. 1,901,228; Mar. 14.
Phenolic compounds, Production of. W. Schoeller, H. Jordan, and R. Clerc. 1,901,824; Mar. 14.
Phonofilms, Recording and reproducing. A. Karolus. 1,901,033–4; Mar. 14.
Phonographs and the like, Automatic braking device for. R. O. de la Quintana. 1,901,553; Mar. 14.
Phosphate-rock, Mining and treatment of. J. T. Bullwinkel. 1,901,221; Mar. 14.
Phosphates, Preparation of pure. C. F. Booth. 1,901,020; Mar. 14.
Photo-electric tube. K. T. Bainbridge. 1,901,577; Mar. 14.
Photo-electric tubes, Preparing. K. T. Bainbridge. 1,901,578; Mar. 14.
Photogravure plates, Producing. A. A. Pearson. 1,901,468; Mar. 14.
Photopaper, Apparatus for testing. J. Norworth. 1,901,186; Mar. 14.
Picture hanger, Duplex. C. W. Harsin. 1,901,644; Mar. 14.
Picture projection machines, Combined ventilating and fire shutter for motion. A. Dina. 1,900,919; Mar. 14.
Pipe cleaning machine. F. Kinsbach. 1,901,247; Mar. 14.
Pipe structure. J. R. Sternsman. 1,901,420; Mar. 14.
Piston. A. C. Matheson. 1,900,991; Mar. 14.
Piston and ring therefor. W. H. Stine. 1,901,199; Mar. 14.
Piston construction. W. J. Lucas. 1,901,312; Mar. 14.
Piston for internal combustion engines. O. Baur. 1,901,838; Mar. 14.
Piston ring compressor. S. B. Bussinger. 1,901,224; Mar. 14.
Plaster, Model. W. S. Randel. 1,901,056; Mar. 14.
Plastic material, Making. J. Edge. 1,901,024; Mar. 14.
Plate surface. C. Batcholts. 1,901,837; Mar. 14.
Platform of a tilted body, Self-leveling. W. H. Heise. 1,901,029; Mar. 14.
Platinum, Electrodisposition of. A. R. Powell and A. W. Scott. 1,901,531; Mar. 14.
Plows, Automatic depth control for. C. G. Strandlund. 1,901,184; Mar. 14.
Plug: *See*—
Weatherproof plug.
Plug and fuse, Combination. A. J. Friesel. 1,900,926; Mar. 14.
Plug and receptacle, One-piece. J. H. Peroni and S. H. Alexander. 1,901,041; Mar. 14.
Polisher, Floor. A. O. Engberg and T. E. D. Bilde. 1,901,497; Mar. 14.
Polisher, Floor. F. Riebel, jr., and D. M. Dow. 1,901,670; Mar. 14.
Polyazodyestuffs. E. Glietenberg. 1,901,393; Mar. 14.

Portable heater. W. W. Somersall. 1,900,956; Mar. 14.
Power-level indicator. J. W. Horton. 1,901,344; Mar. 14.
Power transmission mechanism. P. M. Salerni. 1,901,193; Mar. 14.
Power transmission mechanism. P. M. Salerni. 1,901,194; Mar. 14.
Precipitates formed by hard water, Rendering harmless the., F. Münz. 1,901,321; Mar. 14.
Preservative composition. J. H. Brooks and J. Goldstone. 1,901,799; Mar. 14.
Press: *See*—
Hydraulic press. Rotary press.
Printing press.
Printing press. F. P. Carlson. 1,901,284; Mar. 14.
Printing press. F. Failert. 1,900,923; Mar. 14.
Printing press roller. L. C. Okerberg. 1,901,818; Mar. 14.
Projection apparatus. W. G. Wolfe. 1,900,906; Mar. 14.
Projector comprising automatic picture changing means. A. Oschwald. 1,901,819; Mar. 14.
Propeller blade adjusting system. A. Pfau. 1,901,773; Mar. 14.
Protector: *See*—
Drop cord protector. Shrub protector.
Instep protector.
Pulp, Production of. T. L. Dunbar. 1,901,706; Mar. 14.
Pump: *See*—
Rotary plunger pump. Vacuum condensation pump.
Pump. W. Ferris. 1,901,501; Mar. 14.
Pump. D. R. Scholes. 1,901,061; Mar. 14.
Pump. O. S. Sleeper. 1,901,417; Mar. 14.
Pump dial, Illuminated. C. W. Hoffrits. 1,901,100; Mar. 14.
Pumping apparatus. G. A. Humason. 1,901,031; Mar. 14.
Pumping unit. R. H. and J. B. Stokes. 1,901,827; Mar. 14.
Radiator. G. C. Carnahan. 1,900,909; Mar. 14.
Radiator support. G. I. Barclay. 1,901,074; Mar. 14.
Radiocabinet. A. C. Haggstrom. Des. 89,441; Mar. 14.
Radio receiving system. A. S. Riggs. 1,901,121; Mar. 14.
Radio signaling system. M. L. Levy. 1,901,350; Mar. 14.
Rail joint. J. Brunner. 1,900,975; Mar. 14.
Razor, Illuminated. F. Weiss. 1,900,965; Mar. 14.
Razor, Safety. C. A. Godshalk. 1,901,591; Mar. 14.
Receiving system. H. O. Peterson. 1,901,117; Mar. 14.
Receptacle: *See*—
Dispensing receptacle. Filing receptacle.
Receptacle for liquids. S. W. Farber. 1,901,155; Mar. 14.
Rectifier cooling system control. H. Winograd. 1,901,071; Mar. 14.
Reel: *See*—
Fishing reel. Hose reel.
Reeling. J. S. Voorhees. 1,901,050; Mar. 14.
Refectory table. F. B. Walter. 1,901,015; Mar. 14.
Reflector for Christmas trees. L. L. Raymond. 1,901,472; Mar. 14.
Refrigerating apparatus. F. W. Rabe. 1,901,190; Mar. 14.
Refrigerating machine, Absorption. E. Altenkirch. 1,901,794; Mar. 14.
Refrigeration. A. Lenning. 1,901,458; Mar. 14.
Refrigerator. L. J. Gottschalk. 1,901,556; Mar. 14.
Register, Autographic. F. E. Pfeiffer. 1,901,258; Mar. 14.
Regulating and controlling gate, Automatic. S. Kambara. 1,901,396; Mar. 14.
Regulator system. J. H. Ashbaugh. 1,901,021; Mar. 14.
Relay, Invar. W. N. Ellingson. 1,901,708; Mar. 14.
Resonance, Method and apparatus for eliminating the effect of cabinet. I. Wolff. 1,901,388; Mar. 14.
Ribbon and making same, Ornamental. H. A. Evans. 1,900,900; Mar. 14.
Robe or blanket, Automobile. L. C. Bush. 1,901,223; Mar. 14.
Rock, Treatment of phosphate. J. T. Bullwinkel. 1,901,222; Mar. 14.
Rocket. H. Stolfa and R. Zwerina. 1,901,852; Mar. 14.
Rod. C. H. Wimberley. 1,901,789; Mar. 14.
Rod, Coupling. G. B. Coe. 1,901,286; Mar. 14.
Rod coupling, Sectional. M. Kalben. 1,901,168; Mar. 14.
Rods, Producing wire. W. Herman and W. H. Sommer. 1,901,514; Mar. 14.
Roll handling device. F. von der Horst. 1,901,482; Mar. 14.
Roller: *See*—
Printing press roller.
Roller mounting, Adjustable shade. R. Saa. 1,901,535; Mar. 14.
Roofing. R. S. Streeter and O. E. Hendrick. Des. 89,471; Mar. 14.
Roofing and making same. L. Kirschbraun. 1,900,940; Mar. 14.
Roofing package, Roll. J. H. Plunkett. 1,901,356; Mar. 14.
Rosin, Refining. J. N. Borglin. 1,901,626; Mar. 14.
Rotary engine. N Christie 1,900,898; Mar. 14.
Rotary motor, Internal combustion. E. A. White. 1,901,787; Mar. 14.
Rotary plunger pump. S. A. Johnson. 1,901,602; Mar. 14.
Rotary press, Changeable. H. F. Bechman. 1,901,075–6; Mar. 14.
Rotor construction. H. L. Barnholdt. 1,901,280; Mar. 14.
Rubber and legging, Combined. C. F. Berry. 1,901,492; Mar. 14.
Rubber-impregnated products, Manufacture of. G. A. Richter, W. B. Van Arsdel, and R. B. Hill. 1,900,951; Mar. 14.
Rubber-like masses and preparing same, Mixed. K. Meisenburg. 1,901,354; Mar. 14.
Rubber vulcanization. C. Coleman. 1,901,582; Mar. 14.
Safety control for motor vehicles. F. P. De Wilde. 1,901,554; Mar. 14.
Safety device for motor vehicles. E. B. Tracy. 1,901,361; Mar. 14.
Sand blast machine for applying pressure to abrasive. F. J. Hull. 1,901,450; Mar. 14.
Sausage linking machine. P. A. Jacobson. 1,901,452; Mar. 14.
Scaffold. C. Bonnet. 1,901,726; Mar. 14.
Scale. M. J. Weber. 1,900,964; Mar. 14.
Scarf. W. L. Blayney. 1,901,725; Mar. 14.
Scraper for shaft bearings. R. T. Steindorf. 1,901,851; Mar. 14.
Screen: *See*—
Display screen. Fireplace screen.
Screen and retaining member for sensitised material, Combined focusing. E. Weisker. 1,901,423; Mar. 14.
Screwless holder. J. J. Flynn. 1,901,866; Mar. 14.
Seal, Mud-drum. M. Liptak. 1,901,462; Mar. 14.
Seal, Oil. C. W. Marsh. 1,901,606; Mar. 14.
Sectional boiler. C. A. Olson. 1,900,947; Mar. 14.
Seeding machine. B. P. Johnson. 1,901,298; Mar. 14.
Sewers, Apparatus for automatically flushing. H. W. Jewell. 1,901,244; Mar. 14.
Sewing machine presser-foot. J. D. Karle. 1,901,752; Mar. 14.
Sewing machines, Uncurler guide for. G. C. Cooper. 1,901,733; Mar. 14.
Sharpening tool, Lawn mower. B. B. Phelps. 1,901,328; Mar. 14.
Shear pin for crushing machines. W. W. Guest. 1,901,159; Mar. 14.
Shears, Attachment for. K. Engel. 1,901,739; Mar. 14.
Shield for the freezing space of refrigeration apparatus, Thermal. D. F. Keith. 1,901,845; Mar. 14.
Shield, Guy. F. N. Bierce. 1,901,550; Mar. 14.
Shingle. N. P. Harshberger. 1,901,161; Mar. 14.
Ship, Self-unloading. C. H. Bradley. 1,901,549; Mar. 14.
Shipping container. O. A. Pellymounter. 1,901,530; Mar. 14.
Shock absorber. E. L. Beecher. 1,901,839; Mar. 14.
Shoe and making same. M. C. Smith, jr., and E. C. Hellhecker. 1,901,782; Mar. 14.
Shoe and making same, Jeweled. C. H. Daniels. 1,901,494; Mar. 14.
Shoe bottom attaching apparatus. G. H. Barge. 1,901,546; Mar. 14.
Shoe welting, Making. M. O. Sleeper. 1,901,781; Mar. 14.
Shrub protector. E. W. Carpenter. 1,901,700; Mar. 14.
Side-bearing. F. J. Sundholm. 1,901,675; Mar. 14.
Sight. C. E. Lyman, jr. 1,901,899; Mar. 14.
Sign: *See*—
Traffic sign.
Sign. P. H. Bethea. 1,900,896; Mar. 14.
Signs, Reflector unit for. S. C. Vincent. 1,901,341; Mar. 14.
Signal: *See*—
Direction signal. Out-of-order signal.
Signal transmitting means. E. D. McArthur. 1,901,112; Mar. 14.
Signaling. C. W. Hansell. 1,901,642; Mar. 14.
Signaling device. J. S. Garvin. 1,901,443; Mar. 14.
Signaling traffic by a hand device. C. A. Rich. 1,901,411; Mar. 14.
Silk cleaner. J. F. Taylor. 1,901,273; Mar. 14.
Silk manufacture. W. H. Furness. 1,901,590; Mar. 14.
Silver salt emulsions, Making photographic. S. Frankel. 1,901,441; Mar. 14.
Siphons, Apparatus comprising. N. Swindin. 1,901,785; Mar. 14.
Skimmer, Cream. A. O. Middlemiss. 1,900,993; Mar. 14.
Sled brake. G. W. Johnston and S. Muchnik. 1,901,902; Mar. 14.
Slider for fasteners. G. E. Prentice. 1,900,949; Mar. 14.
Sling and making the same. J. F. Drew. 1,901,439; Mar. 14.
Slug casting machine. R. R. Mead. 1,901,113; Mar. 14.
Smoke indicator. E. H. Vedder and E. O. Erickson. 1,901,570; Mar. 14.
Snatch block. A. B. Esseltine. 1,901,498; Mar. 14.
Socket for toy automobiles, Combined fender and tail light. H. T. Kingsbury. Des. 89,444; Mar. 14.
Solder fittings and method of soldering. A. L. Parker. 1,901,820; Mar. 14.
Sole fitting, Method of and machine for. A. Bates. 1,901,140; Mar. 14.
Sound correction in an electric circuit. W. N. Barlow. 1,901,429; Mar. 14.
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27: 1,901,245
28: 1,901,819
30: 1,900,920
51: 1,901,922
89— 37: 1,900,989
42: 1,901,128
90— 11: 1,901,489
15: 1,901,489
18: 1,901,268
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33: 1,901,283
91— 43: 1,901,489
67. 8: 1,901,515
67. 95: 1,900,987
68: 1,900,986
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70. 2: 1,901,494
92— 3: 1,901,278
11: 1,901,705
21: 1,901,262
30: 1,901,494
40: 1,901,040
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95— 5: 1,901,715
35: 1,900,966
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40: 1,901,780
51: 1,900,936
98: 1,901,682
94— 13: R. 18,705
44: 1,901,207
1,901,523
51: 1,900,988
95— 4. 5: 1,901,013
5. 7: 1,901,469
7: 1,901,441
10: 1,901,188
75: 1,901,147
1,901,645
96— 15: 1,900,982
20: 1,901,499
97— 47: 1,901,888
1,901,694
58: 1,901,268
103: 1,901,124
98— 99: 1,901,114
1,901,588
99— 8: 1,901,974
8: 1,901,683
11: 1,901,284
100— 31: 1,901,699
101— 123: 1,901,673
232: 1,901,675
247: 1,901,693
253: 1,901,698
257: 1,901,514
413. 1: 1,901,727
102— 8: 1,901,120
9: 1,901,499
26: 1,901,512
103— 5: 1,901,511
6: 1,901,164
161: 1,901,821
1,901,822
262: 1,901,707
263: 1,901,714
264: 1,901,284
105— 4: 1,901,675
265: 1,901,289
106— 23: 1,901,702
34: 1,901,695
107— 1: 1,901,689
178: 1,901,688
111— 52: 1,901,738
112— 39: 1,901,702
235: 1,901,703
113— 1: 1,901,288
162: 1,901,694
112: 1,901,699
116: 1,901,710
114— 64. 5: 1,901,227
116— 39: 1,901,283
117— 36: 1,901,514
127: 1,901,227
118— 36: 1,901,514
39: 1,901,514
119— 14: 1,901,434
34: 1,901,699
124: 1,901,720
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125— 99: 1,901,466
165: 1,901,720
216: 1,901,957
126— 179: 1,901,733
184: 1,901,493
189— 34: 1,901,703
37: 1,901,704
129— 10: 1,901,727
39: 1,901,709
130— 45. 1: 1,901,499
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135: 1,901,710
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131— 15: 1,901,289
132— 11: 1,901,737
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133— 14: 1,901,276
134— 69: 1,901,197
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135: 1,901,709
136: 1,901,289
234: 1,901,290
235: 1,901,291
314: 1,901,292
137— 61: 1,901,143
71: 1,901,169
139— 7: 1,901,731
57: 1,901,681
78: 1,901,283
84: 1,901,741
227: 1,901,289

172— 1,901,694
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278: 1,901,696
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279: 1,901,699
173— 280: 1,901,700
273: 1,901,702
281: 1,901,703
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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

M. V. C. Laboratories. (See Mountain Varnish & Color Works, Inc.)

Macdonald, Greenlees Limited, Leith, Scotland. Whisky. Serial No. 334,756; Mar. 21. Class 49.

Mann Chemical Co. (See Zeigerman, Benjamin.)

Manoil, Jack, doing business as Manoil Specialty Co., New York, N. Y. Pussle or game. Serial No. 334,612; Mar. 21. Class 22.

Marvin, W. H., Company, The, Urbana, Ohio. Dried currants. Serial No. 333,232; Mar. 21. Class 46.

McEwen, Denby & Hart-Briggs Limited, Sunbury-on-Thames, England. Abrasive preparations. Serial No. 332,779; Mar. 21. Class 4.

Michelin Tire Company, Milltown, N. J. Pneumatic tires. Serial No. 333,861; Mar. 21. Class 35.

Moran Shoe Company, Inc., The, Carlyle, Ill. Shoes. Serial No. 334,226; Mar. 21. Class 39.

Morris, Mann & Reilly, Inc., Chicago, Ill. Ladies' hand bags and vanity bags. Serial No. 332,563; Mar. 21. Class 3.

Mountain Varnish & Color Works, Inc., doing business as M. V. C. Laboratories, Toledo, Ohio. Pharmaceutical or toilet preparation. Serial No. 328,068; Mar. 21. Class 6.

Neilan Co., Ltd., Los Angeles, Calif. Ball bearing reducing regulators, vacuum regulators, parabolic gradual opening valves, etc. Serial No. 321,117; Mar. 21. Class 13.

Northwest Bituminous Corporation, Des Moines, Iowa. Road grading machines and attachments therefor. Serial No. 334,445; Mar. 21. Class 23.

Owens-Illinois Pacific Coast Company, San Francisco, Calif. Glass bottles, jars, containers. Serial No. 334,069; Mar. 21. Class 33.

P T H Laboratory. (See Jackson, Marcellus C.)

Parfumerie Rigaud, Inc., New York, N. Y. Perfumes, toilet water, face powder. Serial No. 334,020; Mar. 21. Class 6.

Parfumerie St. Denis, New York, N. Y. Astringents, astringent cerates, bleach creams, etc. Serial No. 334,024; Mar. 21. Class 6.

Parker Pen Company, The, Janesville, Wis. Engraving machines and parts thereof. Serial No. 329,353; Mar. 21. Class 23.

Peninsular Paper Company, Ypsilanti, Mich. Cover paper and announcement paper. Serial No. 334,497; Mar. 21. Class 37.

Pichel Products Co., Inc., New York, N. Y. Nonalcoholic, maltless flavoring for drinks. Serial No. 334,446; Mar. 21. Class 45.

Plate, Robert T., doing business as The Plate Mfg. Co., Detroit, Mich. Non-electrical hair curlers. Serial No. 331,318; Mar. 21. Class 40.

Poirette Corsets, Inc., New York, N. Y. Foundation garments. Serial No. 334,113; Mar. 21. Class 39.

Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections and syrups, extracts used in the preparation thereof. Serial No. 332,892; Mar. 21. Class 46.

Poster Products, Inc., Chicago, Ill. Felt letters and numerals, felt window trimmings, advertising display pieces, etc. Serial No. 330,181; Mar. 21. Class 50.

Potter & Johnston Machine Company, Pawtucket, R. I. Carburetters and gas engine control devices. Serial No. 334,547; Mar. 21. Class 28.

Powermor Utilities Corporation, New York, N. Y. Spark plug cleaning machine. Serial No. 333,838; Mar. 21. Class 28.

Ranlo Manufacturing Company, Gastonia, N. C. Mohair tapestry and upholstery piece-goods. Serial No. 333,718; Mar. 21. Class 42.

Reboux, Caroline. (See Société à Responsabilité Limitée Lucienne Rabaté & Cie.)

Red Band Company, Inc., Johnson City, Tenn. Prepared flour. Serial No. 333,013; Mar. 21. Class 46.

Red Bridge Book Cloth Company, Limited, The, Bolton, England. Tracing cloth and tracing paper. Serial Nos. 334,573–7; Mar. 21. Class 37.

Rosenberg, August, doing business as Estatement System, New York, N. Y. Loose leaf binders, and forms. Serial No. 333,196; Mar. 21. Class 37.

Rosenberg, August, doing business as Estatement System, New York, N. Y. Looseleaf books and pages therefor. Serial No. 333,197; Mar. 21. Class 38.

Rosenberg, August, doing business as Estatement System, New York, N. Y. Loose leaf binders, and forms. Serial No. 333,238; Mar. 21. Class 37.

Rowland, Mary Scott, Ltd., Jersey City, N. J. Perfumes, toilet waters, and powders. Serial No. 333,639; Mar. 21. Class 6.

Sajor & Budzeyko, Inc., Brooklyn, N. Y. Pork sausage. Serial No. 329,386; Mar. 21. Class 46.

Sani-Moth, Inc. (See Home Sanitation Company, Inc.)

Sav-A-Call Lock Co., Inc., New York, N. Y. Locks. Serial No. 334,448; Mar. 21. Class 25.

Schwartz, Philip, doing business as K-O-K Co., Springfield, Mass. Non-alcoholic maltless beverages and syrup therefor. Serial No. 327,109; Mar. 21. Class 45.

Seacoast Canning Company, Lubec, Me. Canned sardines. Serial No. 334,718; Mar. 21. Class 46.

Sears, Roebuck and Co., Chicago, Ill. Sharpening stones and grinding wheels. Serial No. 333,895; Mar. 21. Class 4.

Seidon, Lillian, doing business as Arnold Laboratories, Brooklyn, N. Y. Ointment. Serial No. 330,670; Mar. 21. Class 6.

Sheerr, Philip L., & Sons, Philadelphia, Pa. Pamphlet. Serial No. 334,936; Mar. 21. Class 38.

Sherka Chemical Company, Inc., New York, N. Y. Chemicals. Serial No. 333,982; Mar. 21. Class 6.

Société à Responsabilité Limitée Lucienne Rabaté & Cie., doing business as Caroline Reboux, Paris, France. Women's hats, bonnets, berets, and scarfs. Serial No. 322,236; Mar. 21. Class 39.

Southern Dairies, Inc., Washington, D. C. Ice cream, ices, sherbets, etc. Serial No. 334,620; Mar. 21. Class 46.

Southern Friction Fabric Company, Charlotte, N. C. Brake lining. Serial No. 334,411; Mar. 21. Class 35.

Standard Brands Incorporated, New York, N. Y. Dough improver. Serial Nos. 331,448–9; Mar. 21. Class 46.

Standard Nut Margarine Co., Indianapolis, Ind. Oleomargarine. Serial No. 330,526; Mar. 21. Class 46.

Star-Chronicle Publishing Company, St. Louis, Mo. Daily newspaper. Serial No. 324,406; Mar. 21. Class 38.

Stetson Press, The, Boston, Mass. Printing inks. Serial No. 324,018; Mar. 21. Class 11.

Terri Cosmetics Corporation, New York, N. Y. Creams, lotions, deodorants, etc. Serial No. 333,538; Mar. 21. Class 6.

Union Asbestos & Rubber Company, Chicago, Ill. Brake lining. Serial No. 334,478; Mar. 21. Class 35.

United States Cigar Co., Inc., York, Pa. Cigars. Serial No. 334,720; Mar. 21. Class 17.

Ure Druggist, Inc., Cleveland, Ohio. Aspirin, Bay rum, digestive tonic, etc. Serial No. 331,964; Mar. 21. Class 6.

Walter, A. A., & Company, Albany, N. Y. Pop corn. Serial No. 333,090; Mar. 21. Class 46.

Wesco Products, Inc., Buffalo, N. Y. Composition used in dry cleaning of garments, hats, etc. Serial No. 334,512; Mar. 21. Class 4.

Western Clock Company, Peru, Ill. Clocks. Serial No. 331,766; Mar. 21. Class 27.

Wiley, J. Elliott, doing business as Blurex Mfg. Co., Philadelphia, Pa. Starching compounds. Serial No. 333,648; Mar. 21. Class 6.

Wilmsen, Bernard, doing business as B. Wilmsen, Philadelphia, Pa. Metal sponges. Serial No. 334,659; Mar. 21. Class 4.

World Wide Gum Co. (See Goudey Gum Co., The.)

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Boxes, cartons, and cases. Serial No. 330,911; Mar. 21. Class 2.

Würsburg, Brauhaus, Aktiengesellschaft, Wursburg, Germany. Malt beverage. Serial No. 309,370; Mar. 21. Class 48.

Zeigerman, Benjamin, doing business as Mann Chemical Co., Chester, Pa. Fermented milk preparation. Serial No. 333,781; Mar. 21. Class 46.

LIST OF REGISTRANTS OF TRADE-MARKS

Adams, Alda H. (See Alda's Laboratories, assignor.)

Advanx Ty-Re-Pair Company Limited, Sydney, Australia. Machinery for vulcanizing and retreading tires. 301,905; Mar. 21; Serial No. 325,160; published Jan. 10, 1933. Class 23.

Aktiebolaget Astra Apotekarnas Kemiska Fabriker, Sodertalje, Sweden. Preparation in powder form containing iodoacetic acid. 301,938; Mar. 21; Serial No. 320,147; published Dec. 27, 1932. Class 6.

Aktiengesellschaft vorm. B. Siegfried, Zofingen, Switzerland. Pharmaceutical solution. 91,628; renewed May 20, 1933.

Alda's Laboratories, assignor to Alda H. Adams, Long Beach, Calif. Cream, face powder, hand lotion, etc. 301,918; Mar. 21; Serial No. 331,719; published Jan. 3, 1933. Class 6.

Altose, Esther, Bellingham, Wash. Beauty products. 301,926; Mar. 21; Serial No. 325,030; published Jan. 10, 1933. Class 6.

Amal, Limited. (See Brown & Barlow Ltd., assignor.)

American Optical Co., assignor to American Optical Company, Southbridge, Mass. Eyeglass and spectacle frames or mountings. 89,751; renewed Feb. 10, 1933.

Apothecaries Hall Company, Waterbury, Conn. Anodes used for plating metal. 302,043; Mar. 21. Class 21.

Asbell, Charles C., St. Louis, Mo. Income savings stamps. 301,866; Mar. 21; Serial No. 331,242; published Jan. 3, 1933. Class 38.

Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Tonic. 301,919–20; Mar. 21; Serial Nos. 331,534–5; published Jan. 3, 1933. Class 6.

Bailly, P., & Cie., to P. Bailly & Cie., Paris, France, successor. Shoulder-braces and suspenders. 89,327; renewed Dec. 10, 1932.

Bakelite Corporation. (See Condensite Company of America, assignor.)

Baumeister, Fitch J., Chicago, Ill. Gasoline. 301,875; Mar. 21; Serial No. 331,665; published Jan. 3, 1933. Class 15.

Biggs, Floyd R., doing business as Pioneer Asbestos Company, St. Louis, Mo. Brake-linings. 302,016; Mar. 21; Serial No. 327,998; published Jan. 3, 1933. Class 35.

Biltmore Paper Co., Inc., The, New York, N. Y. Toilet paper. 301,929; Mar. 21; Serial No. 332,690; published Jan. 10, 1933. Class 37.

Binney & Smith Co., New York, N. Y. Plasticizer. 301,979; Mar. 21; Serial No. 330,775; published Dec. 27, 1932. Class 6.

Bishop, Alfred, Limited, London, England. Effervescent chemical substances. 39,767; renewed Feb. 10, 1933.

Bloch Bros., Glasgow, Scotland. Whiskey. 302,030; Mar. 21; Serial No. 332,025; published Jan. 10, 1933. Class 49.

Bowman, Mae C., doing business as Southeastern Chemical Co., Alexandria, Va. Insecticides. 301,932; Mar. 21; Serial No. 331,985; published Jan. 10, 1933. Class 6.

Broemmel's Laboratories. (See Nik-O-Kleen Co.)

Bromo-Pep, Incorporated, St. Louis, Mo. Medicine. 301,915; Mar. 21; Serial No. 331,848; published Dec. 27, 1932. Class 6.

Brown & Barlow Ltd., assignor to Amal, Limited, Birmingham, England. Carbureters. 90,289; renewed Feb. 18, 1933.

Brown Company, Portland, Me., and Berlin, N. H. Papers. 301,859; Mar. 21; Serial No. 332,175; published Jan. 10, 1933. Class 37.

Brown & Williamson Tobacco Corporation, Louisville, Ky. Cigars, cigarettes, tobacco, etc. 302,022; Mar. 21; Serial No. 332,443; published Jan. 10, 1933. Class 17.

Buchanan, James, & Co. Ld., London, England. Liqueur whisky. 302,050; Mar. 21. Class 49.

Bucking, Henry J., San Francisco, Calif. Apparatus in the nature of a vent. 301,902; Mar. 21; Serial No. 304,398; published Jan. 10, 1933. Class 13.

Bulova Watch Company, Inc., New York, N. Y. Bracelet watches and their attached bracelets. 302,038; Mar. 21; Serial No. 329,526; published Jan. 3, 1933. Class 27.

Burrow-Jones-and Dyer Shoe Co., St. Louis, Mo., to Craddock Terry Company, Lynchburg, Va., successor. Shoes. 90,508; renewed Mar. 4, 1933.

Capehart Corporation, The, Fort Wayne, Ind. Disk change phonographs, and phonograph record changers. 302,049; Mar. 21. Class 36.

Carborundum Company, The, Niagara Falls, N. Y. Filter plates and tubes, diffuser plates, etc. 301,999; Mar. 21; Serial No. 332,292; published Jan. 10, 1933. Class 31.

Carnrick, G. W., Co., New York, N. Y., assignor to G. W. Carnrick Co., Newark, N. J. Internal secretions to supply deficient secretions. 92,635; renewed July 22, 1933.

Central Fibre Products Co., Inc., Hutchinson, Kans. Wall board. 301,887; Mar. 21; Serial No. 330,990; published Jan. 3, 1933. Class 12.

Central Press Association, Inc., New York, N. Y. Newspaper cartoon. 301,949; Mar. 21; Serial No. 332,835; published Jan. 10, 1933. Class 38.

Charm Laboratories, Inc., New York, N. Y. Herbaceous laxative. 301,967; Mar. 21; Serial No. 331,771; published Jan. 10, 1933. Class 6.

Chiantis, Harry T., Boston, Mass. Liniments. 301,916; Mar. 21; Serial No. 331,851; published Jan. 3, 1933. Class 6.

Christmas Club, New York, N. Y. Publication. 301,952; Mar. 21; Serial No. 332,710; published Jan. 10, 1933. Class 38.

Cleveland Container Co., The, Cleveland, Ohio. Construction building sets. 301,993; Mar. 21; Serial No. 332,518; published Jan. 10, 1933. Class 22.

Collins & Aikman Company, Montclair, N. J., and Philadelphia, Pa., assignor, by mesne assignments, to Collins & Aikman Corporation, Philadelphia, Pa. Piece goods and cut lengths. 90,510; renewed Mar. 4, 1933.

Columbia Chemical Company, Portland, Oreg. Paints and paint enamels. 301,865; Mar. 21; Serial No. 331,888; published Jan. 10, 1933. Class 16.

Columbus Dental Manufacturing Co., The, Columbus, Ohio. Display cards. 301,968; Mar. 21; Serial No. 332,182; published Jan. 10, 1933. Class 2.

Condensite Company of America, Glen Ridge, N. J., assignor to Bakelite Corporation, New York, N. Y. Phenol-methylene liquid, semisolid and solid plastic compounds. 91,556; renewed May 13, 1933.

Consolidated Wire & Associated Corporations, Chicago, Ill. Cord for bare, insulated wire, cables, and radio antenna wire. 301,989; Mar. 21; Serial No. 319,500; published Jan. 3, 1933. Class 21.

Contal, Camille, Paris, France. Motion picture projection machines. 301,960; Mar. 21; Serial No. 326,893; published Jan. 10, 1933. Class 26.

Continental Optical Company, Indianapolis, Ind. Ophthalmic frames and mountings. 302,005; Mar. 21; Serial No. 332,183; published Jan. 10, 1933. Class 26.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Wire. 301,981; Mar. 21; Serial No. 332,615; published Jan. 10, 1933. Class 14.

Cooke & Cobb Company, The, Brooklyn, N. Y. Expanding files, envelopes, folders, etc. 302,027; Mar. 21; Serial No. 332,184; published Jan. 3, 1933. Class 37.

Cooney, Laura S., New York, N. Y. Suspenders. 92,877; renewed Aug. 8, 1933.

Craddock Terry Company. (See Burrow-Jones-and Dyer Shoe Co.)

Crawford Manufacturing Co., Inc., Richmond, Va. Seat covers for automobiles. 302,053; Mar. 21. Class 19.

Crazy Water Hotel Company, Mineral Wells, Tex. Medicinal preparation. 301,893; Mar. 21; Serial No. 331,853; published Jan. 10, 1933. Class 6.

Creco Company, Inc., Long Island City, N. Y. Waxes. 301,886; Mar. 21; Serial No. 332,402; published Jan. 10, 1933. Class 16.

Crescent Braid, Inc., Providence, R. I. Cables. 301,871; Mar. 21; Serial No. 332,333; published Jan. 10, 1933. Class 21.

Croxon, Inc., New York, N. Y. Depilatories. 302,040; Mar. 21. Class 6.

Dakota Improved Seed Company, Mitchell, S. Dak. Flower, vegetable, and cereal seeds. 92,328; renewed July 1, 1933.

Dana, Charles A., and J. B. Pierce, receivers. (See Federal Rubber Manufacturing Co., assignor.)

Daugherty, J. Walter, doing business as Maltona Distributing Company, Cincinnati, Ohio. General system tonic. 301,935; Mar. 21; Serial No. 320,721; published Dec. 29, 1931. Class 6.

Davis & Lawrence Co., New York, N. Y. Antiseptic dressing. 301,986; Mar. 21; Serial No. 330,160; published Jan. 10, 1933. Class 6.

Delatone Company, The, Chicago, Ill. Perspiration preventatives or deodorant. 301,901; Mar. 21; Serial No. 328,001; published Dec. 27, 1932. Class 6.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Rip gages. 302,012; Mar. 21; Serial No. 331,250; published Jan. 10, 1933. Class 26.

Delta Manufacturing Company, doing business as Delta Specialty Company, Milwaukee, Wis. Miter gages. 302,013; Mar. 21; Serial No. 331,249; published Jan. 10, 1933. Class 26.

Dixie Laboratories. (See Hinkle, Mrs. Z. B.)

Dralle, Georg, Hamburg, Germany. Perfumery. 301,896–9; Mar. 21; Serial Nos. 326,182–5; published Dec. 27, 1932. Class 6.

Edison, Thomas A., Incorporated, West Orange, N. J. Storage batteries. 301,881; Mar. 21; Serial No. 331,251; published Jan. 3, 1933. Class 21.

Enterprise Manufacturing Company, The, Akron, Ohio. Insecticides. 301,940; Mar. 21; Serial No. 317,922; published Nov. 24, 1931. Class 6.

Esterbrook Steel Pen Manufacturing Company, The, Camden, N. J. Fountain pens, feeds, caps, etc. 302,029; Mar. 21; Serial No. 328,839; published Jan. 3, 1933. Class 37.

Exhibit Supply Company, The. (See Meyer, John F.)

Fargo, Charles R., Beverly Hills, Calif. Table games. 302,006; Mar. 21; Serial No. 332,062; published Jan. 10, 1933. Class 22.

Federal Rubber Manufacturing Co., Milwaukee and Cudahy, Wis., assignor, by mesne assignments, to C. A. Dana and J. B. Pierce, receivers of the Fisk Rubber Company, Chicopee Falls, Mass. Rubber vehicle tires. 90,524; renewed Mar. 4, 1933.

Firestone Tire & Rubber Company, The, Akron, Ohio. Rubber solvent. 301,970; Mar. 21; Serial No. 331,674; published Dec. 27, 1932. Class 6.

Fischer's Surfa-Saver, Inc., Cincinnati, Ohio. Saponaceous material. 301,948; Mar. 21; Serial No. 321,248; published Jan. 3, 1933. Class 4.

Fisk Rubber Company. (See Federal Rubber Manufacturing Co.)

Foley & Company, Chicago, Ill. Laxatives. 301,964; Mar. 21; Serial No. 332,227; published Jan. 3, 1933. Class 6.

Fort Howard Paper Company, Green Bay, Wis. Toilet paper, paper towels, napkins, etc. 302,024; Mar. 21; Serial No. 332,871; published Jan. 3, 1933. Class 37.

Friez, Julien P., & Sons, Inc., Baltimore, Md. Weather direction transmitter, thermometer, hygrometer, etc. 301,941; Mar. 21; Serial No. 316,328; published Aug. 4, 1931. Class 26.

Fulton Bag & Cotton Mills, Atlanta, Ga. Cotton flour bags. 302,029; Mar. 21; Serial No. 332,144; published Jan. 10, 1933. Class 2.

Gabail Limited, London, England. Medicines. 301,985; Mar. 21; Serial No. 330,255; published Jan. 10, 1933. Class 6.

Gates-Pfeiffer Engineering Company, New York, N. Y. Apparatus used in treatment of textile materials. 301,933; Mar. 21; Serial No. 321,102; published Jan. 10, 1933. Class 23.

Gay-Day Corporation, Chicago, Ill. Paint enamel and paint and varnish remover. 301,964; Mar. 21; Serial No. 331,952; published Jan. 10, 1933. Class 16.

Gelbart, Abraham L., doing business as Gelco Co., Brooklyn, N. Y. Insecticides. 301,956; Mar. 21; Serial No. 330,544; published Jan. 3, 1933. Class 6.

Gelco Co. (See Gelbart, Abraham L.)

General Dyestuff Corporation, New York, N. Y. Coal-tar dyes. 301,892; Mar. 21; Serial No. 331,577; published Dec. 27, 1932. Class 6.

Gephart, Frank C., New York, N. Y. Creams and lotions. 302,042; Mar. 21. Class 6.

Goldblatt Bros., Inc., Chicago, Ill. Toilet soap. 301,966; Mar. 21; Serial No. 331,925; published Jan. 3, 1933. Class 4.

Grant, W. T., Company, New York, N. Y. Washboards. 301,961; Mar. 21; Serial No. 332,813; published Jan. 10, 1933. Class 24.

Gremal Products Company, Inc., New York, N. Y. Preparation useful for a mouth wash, toothpowder, and in oral hygiene. 301,968; Mar. 21; Serial No. 331,734; published Jan. 3, 1933. Class 6.

Guarantee Lamp Co., Brooklyn, N. Y. Incandescent lamps or bulbs. 301,872; Mar. 21; Serial No. 332,068; published Jan. 10, 1933. Class 21.

Guardian Valve Company. (See Skner, Samuel.)

Guardite Corporation, The, Chicago, Ill. Gaseous fumigating material. 301,971; Mar. 21; Serial No. 331,614; published Dec. 27, 1932. Class 6.

Hanson, Arthur C., doing business as Slimmers Company, Minneapolis, Minn. Preparation for reducing weight. 301,894; Mar. 21; Serial No. 332,065; published Jan. 10, 1933. Class 6.

Hat Manufacturers Supply Co. Ltd., The, Chestergate, Stockport, England. Hats and caps. 90,328; renewed Feb. 18, 1933.

Hatton, Frank, Miami, Fla. Preparation for a prophylactic treatment. 301,987; Mar. 21; Serial No. 329,669; published Jan. 10, 1933. Class 6.

Hershkowitz, J., Inc., New York, N. Y. Tailor's marking crayons. 301,928; Mar. 21; Serial No. 332,692; published Jan. 10, 1933. Class 37.

Herz Laboratories, Incorporated, New York, N. Y. Depilatory. 301,914; Mar. 21; Serial No. 331,641; published Dec. 27, 1932. Class 6.

Hersberg, Louis, Los Angeles, Calif. Nail polish, cuticle oil, nail white, etc. 301,925; Mar. 21; Serial No. 327,940; published Jan. 3, 1933. Class 6.

Hinkle, Mrs. Z. B., doing business as Dixie Laboratories, Atlanta, Ga. Toilet water, hair tonic, vanishing cream, etc. 301,907; Mar. 21; Serial No. 326,101; published Dec. 27, 1932. Class 6.

Hofheimer Brothers Company, to Hofheimer's Inc., Norfolk, Va., successor. Boots and shoes. 89,259; renewed Dec. 3, 1932.

Hollywood Laboratories, Los Angeles, Calif. Dandruff remover and hair restorer. 301,965; Mar. 21; Serial No. 331,084; published Jan. 3, 1933. Class 6.

Holt, Alberta, doing business as Holt Chemical Company, Memphis, Tenn. Salve. 301,924; Mar. 21; Serial No. 328,989; published Jan. 10, 1933. Class 6.

Holyoke Card & Paper Company, Springfield, Mass. Paper. 302,028; Mar. 21; Serial No. 332,149; published Jan. 3, 1933. Class 37.

Hurlbut Paper Company, South Lee, Mass. Paper. 302,025; Mar. 21; Serial No. 332,325; published Jan. 10, 1933. Class 37.

Hurlbut Paper Company, South Lee, Mass. Paper. 302,026; Mar. 21; Serial No. 332,322; published Jan. 10, 1933. Class 37.

Hyg-A-Tabs Laboratories. (See Miceli, John N.)

International News Service, Inc., New York, N. Y. Printed news messages, dispatches, and newspapers. 301,867; Mar. 21; Serial No. 331,065; published Jan. 3, 1933. Class 38.

International Nickel Company, Inc., The, New York, N. Y. Nickel-containing iron castings. 302,033; Mar. 21; Serial No. 331,791; published Jan. 10, 1933. Class 14.

International Paper Company, New York, N. Y. Wrapping paper. 302,034; Mar. 21; Serial No. 331,466; published Jan. 3, 1933. Class 37.

International Typesetting Machine Company, New York, assignor to Intertype Corporation, Brooklyn, N. Y. Type casting, setting, and composing machines. 91,876; renewed June 3, 1933.

Interstate Chemical Mfg. Co. (See Leggett & Brother.)

Intertype Corporation. (See International Typesetting Machine Company, assignor.)

Johns-Manville Corporation, New York, N. Y. Thermal insulating materials. 301,888; Mar. 21; Serial No. 331,000; published Jan. 3, 1933. Class 12.

Johnson & Johnson, New Brunswick, N. J. Papoid. 301,910; Mar. 21; Serial No. 331,051; published Jan. 10, 1933. Class 6.

Kansas Cooperative Wheat Marketing Association, The, Wichita, Kans. Publication. 301,868; Mar. 21; Serial No. 327,281; published Jan. 10, 1933. Class 38.

Kashike, A. H., Inc., Tulsa, Okla. Well-drilling rigs and derricks therefor. 302,015; Mar. 21; Serial No. 328,611; published Jan. 10, 1933. Class 23.

Kee, Look Teong, Honolulu, Hawaii. Fertilizing compound. 302,020; Mar. 21; Serial No. 332,586; published Jan. 10, 1933. Class 10.

Kelly-Springfield Tire Company, The, New York, N. Y. Tires and tubes. 301,994; Mar. 21; Serial No. 332,491; published Jan. 3, 1933. Class 35.

Keratese, Inc., East Orange, N. J. Foot medications. 301,978; Mar. 21; Serial No. 331,468; published Dec. 27, 1932. Class 6.

Krupin, Philip, doing business as Proven Products Company, Newark, N. J. Compositions for eliminating offensive breath odors. 301,921; Mar. 21; Serial No. 331,088; published Jan. 3, 1933. Class 6.

Lacy Products Corporation, Chicago, Ill. Food warmer. 302,004; Mar. 21; Serial No. 332,190; published Jan. 10, 1933. Class 34.

Larkin Refrigerating Corporation, Atlanta, Ga. Refrigerating coils. 302,007; Mar. 21; Serial No. 331,114; published Jan. 10, 1933. Class 31.

Larrañaga, John F., doing business as Ultralyn Essential Products Company, New York, N. Y. Dry cleaning fluids and cleaners. 301,967; Mar. 21; Serial No. 328,193; published Jan. 3, 1933. Class 4.

Laymon, Herman B. (See Twenty Grand Blade Company, Inc., assignor.)

Leggett & Brother, New York, N. Y., to Interstate Chemical Mfg. Co., Jersey City, N. J., successor. Pharmaceutical preparations. 86,997; renewed June 18, 1932.

Legrand, Orisa L., Inc., Wilmington, Del., and New York, N. Y. Perfumes and toilet water. 301,891; Mar. 21; Serial No. 331,560; published Dec. 27, 1932. Class 6.

Levine, Joseph, New York, N. Y. Formed razor sharpeners. 301,997; Mar. 21; Serial No. 332,372; published Jan. 10, 1933. Class 28.

Lewis Coal & Oil Co. Inc., Port Washington, N. Y. Motor fuel and lubricating and fuel oil. 301,880; Mar. 21; Serial No. 331,470; published Jan. 10, 1933. Class 15.

Lifton, George J., doing business as McDonald Medicine Company of Canada, Detroit, Mich. Laxative. 301,984; Mar. 21; Serial No. 330,268; published Jan. 10, 1933. Class 6.

Lincoln Oil Refining Company, Robinson, Ill. Gasoline, kerosene, and lubricating oils and greases. 301,874; Mar. 21; Serial No. 331,747; published Jan. 3, 1933. Class 15.

Lomberg, Ernst, G. m. b. H., Berlin, Germany. Sensitised photographic films and plates. 301,959; Mar. 21; Serial No. 327,225; published Jan. 10, 1933. Class 26.

Majestic Pictures Corporation, New York, N. Y. Moving picture films. 302,008; Mar. 21; Serial No. 331,928; published Jan. 10, 1933. Class 26.

Major Petroleum Company, Wilmington, Del., and Philadelphia, Pa. Gasoline, lubricating oil, kerosene, etc. 301,885; Mar. 21; Serial No. 329,817; published Jan. 10, 1933. Class 15.

Maltona Distributing Company. (See Daugherty, J. Walter.)

Marietta Paint & Color Co., The, Marietta, Ohio. Paints, wax, and compounds. 90,358; renewed Feb. 18, 1933.

McBride, Dwight D., doing business as The Dwight McBride Co., Golden City, Mo. Lunch and game baskets. 302,037; Mar. 21; Serial No. 330,305; published Jan. 10, 1933. Class 2.

McClelland's Ointment Co., Butler, N. J. Ointment. 301,977; Mar. 21; Serial No. 331,311; published Dec. 27, 1932. Class 6.

McCord Radiator & Mfg. Co., Detroit, Mich. Stocking and display fixtures, racks, etc. 302,046; Mar. 21. Class 32.

McDonald Medicine Company of Canada. (See Lifton, George J.)

McGrew, Orville V., doing business as McGrew Paint and Asphalt Co., Chicago, Ill. Asphaltic compound. 301,889; Mar. 21; Serial No. 331,057; published Jan. 3, 1933. Class 12.

Meyer, John F., doing business as The Exhibit Supply Company, Chicago, Ill. Coin-operated amusement machines. 301,991; Mar. 21; Serial No. 332,728; published Jan. 10, 1933. Class 22.

Miceli, John N., M. D., doing business as Hyg-A-Tabs Laboratories, Brooklyn, N. Y. Antiseptic vaginal tablets. 301,900; Mar. 21; Serial No. 327,803; published Dec. 20, 1932. Class 6.

Mikimoto, Kokichi, Tokyo, Japan, and New York, N. Y. Cultured pearls. 301,883; Mar. 21; Serial No. 330,506; published Jan. 10, 1933. Class 28.

Moore, B. J., Sons' Co., Utica, N. Y. Rat poison. 301,922; Mar. 21; Serial No. 331,060; published Jan. 3, 1933. Class 6.

Mulhern, John, Company, San Francisco, Calif. Syrups and fruit juices. 301,903; Mar. 21; Serial No. 299,587; published Dec. 27, 1932. Class 46.

Napp, H. R., Limited, London, England. Pharmaceutical preparation. 301,909; Mar. 21; Serial No. 328,670; published Dec. 27, 1932. Class 6.

National Aluminate Corporation, Chicago, Ill. Chemicals. 301,906; Mar. 21; Serial No. 325,719; published May 31, 1932. Class 6.

National Machine Products Company, Detroit, Mich. Nuts, bolts, and screws. 302,002; Mar. 21; Serial No. 332,263; published Jan. 10, 1933. Class 13.

National Sheriffs' & Police Ass'n., Inc., Denver, Colo. Periodical. 301,953; Mar. 21; Serial No. 332,819; published Jan. 10, 1933. Class 38.

Nedrox Manufacturing Co., The. (See Senay, Harry J.)

Nik-O-Kleen Co., doing business as Broemmel's Laboratories, San Francisco, Calif. Preparation for removing tobacco and nicotine stains from the skin. 301,943; Mar. 21; Serial No. 324,968; published Jan. 10, 1933. Class 6.

Nils & Moser Cigar Co., Kansas City, Mo. Cigars. 90,567; renewed Mar. 4, 1933.

O'Connell Products Company, Chicago, Ill. Cleansing preparation. 301,942; Mar. 21; Serial No. 307,242; published Jan. 10, 1933. Class 4.

O-Do Company. (See Smith, Clyde S.)

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Electric motors and generators, switching equipment, etc. 301,877; Mar. 21; Serial No. 331,700; published Jan. 3, 1933. Class 21.

Otis Elevator Company, Jersey City, N. J., and New York, N. Y. Electric motors and generators, switching equipment, etc. 301,878; Mar. 21; Serial No. 331,697; published Jan. 3, 1933. Class 21.

Packard, M. A., Company, Brockton, Mass. Shoes. 91,994; renewed June 10, 1933.

Park & Tilford, New York, N. Y. Perfumeries, lotions, rouge, etc. 301,912; Mar. 21; Serial No. 330,864; published Jan. 10, 1933. Class 6.

Parker, Arthur L., doing business as The Parker Appliance Company, Cleveland, Ohio. Solder pipe fittings. 302,044; Mar. 21. Class 13.

Parsan Chemical Company, New York, N. Y. Medicines. 301,923; Mar. 21; Serial No. 329,058; published Jan. 10, 1933. Class 6.

Pearson, Andrew R., and Robert S. Allen, Washington, D. C. News columns and special articles. 301,861; Mar. 21; Serial No. 332,072; published Jan. 3, 1933. Class 38.

Perkins-Goodwin Company, The, New York, N. Y. Paper. 302,021; Mar. 21; Serial No. 332,465; published Jan. 3, 1933. Class 37.

Perth Shoe Company Limited, Perth, Ontario, Canada. Boots, shoes, slippers, and sandals. 301,890; Mar. 21; Serial No. 331,317; published Dec. 27, 1932. Class 39.

Phillips, I. W., Chicago, Ill. Cartoons. 301,950; Mar. 21; Serial No. 332,414; published Jan. 3, 1933. Class 38.

Pierce Governor Company, The, Anderson, Ind. Speed operable fuel control device for internal combustion engines. 301,958; Mar. 21; Serial No. 327,565; published Jan. 10, 1933. Class 23.

Pioneer Asbestos Company. (See Biggs, Floyd R.)

Pleville, Jersey City, N. J. Cream, skin freshener, shampoo, etc. 302,041; Mar. 21. Class 6.

Postage Meter Company, The, Stamford, Conn. Envelopes. 301,927; Mar. 21; Serial No. 332,781; published Jan. 10, 1933. Class 37.

Pratt-Mallory Company, Sioux City, Iowa. Toilet tissue. 302,031; Mar. 21; Serial No. 331,907; published Jan. 3, 1933. Class 37.

Proctor & Gamble Co., The, Cincinnati, and Ivorydale, assignor to The Proctor & Gamble Company, Cincinnati, Ohio. Seed oils and seed products. 89,763; renewed Feb. 10, 1933.

Proven Products Company. (See Krupin, Philip.)

Prybrands, Inc., Long Island City, N. Y. Razors and razor blades. 302,014; Mar. 21; Serial No. 330,756; published Jan. 10, 1933. Class 28.

Quigley Company, Inc., New York, N. Y. Plastic neutral base. 301,895; Mar. 21; Serial No. 332,160; published Jan. 10, 1933. Class 12.

Rare Chemicals, Inc., Nepera Park, N. Y. Antiseptic and germicidal preparation. 301,961; Mar. 21; Serial No. 330,551; published Jan. 10, 1933. Class 6.

Rawls, Walter C., assignor to W. C. Rawls & Company, Incorporated, Norfolk, Va. Radio receiving sets, television receiving sets and combination radio and television receiving sets, and radio tubes. 302,018; Mar. 21; Serial No. 328,405; published Jan. 3, 1933. Class 21.

Reed & Carnrick, Jersey City, N. J. Alkaline tablets. 301,974; Mar. 21; Serial No. 331,441; published Dec. 27, 1932. Class 6.

Remington Arms and Ammunition Company, as assignee of Remington Ammunition Co., Weehawken, N. J., assignor, by mesne assignments, to Remington Arms Company, Incorporated, Bridgeport, Conn., Ilion and New York, N. Y. Cartridges, caps, primers, etc. 91,002; renewed May 13, 1933.

Riegel, Guy R., Spokane, Wash. Malt beverages. 301,990; Mar. 21; Serial No. 332,782; published Jan. 10, 1933. Class 48.

Riegel Paper Corporation, Riegelsville, N. J., and New York, N. Y. Greaseproof wrapping paper. 302,035; Mar. 21; Serial No. 330,899; published Jan. 3, 1933. Class 37.

Robinson Bros., New York, to Robinson Brothers Buffalo Ammonia, Inc., Brooklyn, N. Y., successor. Ammoniawater. 91,699; renewed May 20, 1933.

Robinson, Perry, Corporation, The, New York, N. Y. Chemical composition. 301,945; Mar. 21; Serial No. 321,964; published Jan. 10, 1933. Class 16.

Rockwell, W. S., Company, New York, N. Y. Industrial furnaces. 302,017; Mar. 21; Serial No. 327,707; published Jan. 10, 1933. Class 34.

Rockwell, W. S., Company, New York, N. Y. Industrial electric furnaces and parts thereof. 302,019; Mar. 21; Serial No. 327,705; published Jan. 3, 1933. Class 21.

Roedex Health Products. (See Ross, Irene.)

Ross, Irene, doing business as Roedex Health Products, Philadelphia, Pa. Laxatives. 301,972; Mar. 21; Serial No. 331,476; published Dec. 27, 1932. Class 6.

R-Own Laboratories, Inc., Brooklyn, N. Y. Antiseptic ointment. 302,045; Mar. 21.

Russell, Robert H., Cleveland, Ohio. Electric motors, rheostats, switches, etc. 301,873; Mar. 21; Serial No. 331,873; published Jan. 3, 1933. Class 21.

Russell, Robert H., Cleveland, Ohio. Gear pumps, steam turbines, compressors, etc. 302,009; Mar. 21; Serial No. 331,872; published Jan. 10, 1933. Class 23.

Ryerson, Joseph T., & Son, Inc., Chicago, Ill. Machinery bearings and bearing collars. 302,010; Mar. 21; Serial No. 331,659; published Jan. 10, 1933. Class 23.

Safety Electrical Appliances, Inc., Detroit, Mich. Electric sad irons. 301,876; Mar. 21; Serial No. 331,663; published Jan. 3, 1933. Class 21.

Safety Electrical Appliances, Inc., Detroit, Mich. Electric sad irons. 301,879; Mar. 21; Serial No. 331,653; published Jan. 3, 1933. Class 21.

Sakele Perfume Co. Inc., New York, N. Y. Plastic cream. 302,051; Mar. 21. Class 6.

Sallusto, Giustino, & Co., New York, to Giustino Sallusto, doing business as Giustino Sallusto Company, Brooklyn, N. Y., successor. Tonic for the blood and nervous system. 89,704; renewed Dec. 31, 1932.

Santoline, Rocco, Baskine Ridge, N. J. Hair tonics and shampoo. 301,962; Mar. 21; Serial No. 329,293; published Jan. 10, 1933. Class 6.

Schmidt, Michael, Inc., New York, N. Y. Face powders, nail polish, hair tonic, etc. 301,989; Mar. 21; Serial No. 328,849; published Dec. 27, 1932. Class 6.

Schubart, Henry A., New York, N. Y. Periodical publication. 301,951; Mar. 21; Serial No. 332,604; published Jan. 3, 1933. Class 38.

Schwalb, Max, Jackson Heights, N. Y. Powder preparation. 301,975; Mar. 21; Serial No. 331,884; published Dec. 27, 1932. Class 6.

Scott & Gilbert Co., San Francisco, Calif. Sheep dip, cathartic pills, tablets, etc. 301,944; Mar. 21; Serial No. 322,714; published May 17, 1933. Class 6.

Seamless Rubber Company, The, assignor to The Seamless Rubber Company, Inc., New Haven, Conn. Dental, medical, and surgical appliances. 92,724; renewed July 22, 1933.

Sears, Roebuck and Co., Chicago, Ill. Levels, miter boxes, squares, etc. 302,001; Mar. 21; Serial No. 332,271; published Jan. 10, 1933. Class 26.

Seminole Paper Corporation, The, Chicago, Ill. Toilet paper. 302,032; Mar. 21; Serial No. 331,836; published Jan. 3, 1933. Class 37.

Senay, Harry J., doing business as The Nedrox Manufacturing Co., West Palm Beach, Fla. Ointments or salves. 301,983; Mar. 21; Serial No. 330,358; published Dec. 27, 1932. Class 6.

Settlement Cook Book Company, The, Milwaukee, Wis. Printed books. 301,862; Mar. 21; Serial No. 332,047; published Jan. 3, 1933. Class 38.

Shea, George V., doing business as George V. Shea & Co., Woodside, N. Y. Animal substances for medicinal use. 301,947; Mar. 21; Serial No. 321,827; published Apr. 26, 1932. Class 6.

Shedd Products Company, Detroit, Mich. Maltless carbonated beverages and syrups and extracts for making the same. 302,003; Mar. 21; Serial No. 332,238; published Jan. 10, 1933. Class 45.

Simplex Valve and Meter Company, Philadelphia, Pa. Air-release valves, vacuum valves, rate-of-flow controllers, etc. 301,904; Mar. 21; Serial No. 289,546; published Nov. 26, 1929. Class 13.

Simson & Frey, Inc., New York, N. Y. Strings for violins and similar musical instruments. 302,052; Mar. 21. Class 36.

Singer Manufacturing Company, The, New York, N. Y., to The Singer Manufacturing Company, Elizabeth, N. J. Sewing machines, attachments, and parts thereof. 40,288; renewed May 5, 1933.

Singer Manufacturing Company, The, Elizabeth, N. J. Sewing machine needles. 91,518; renewed May 6, 1933.

Singer Manufacturing Company, The, Elizabeth, N. J. Sewing-machines, parts and attachments thereof. 91,911; renewed June 3, 1933.

Skner, Samuel, doing business as Guardian Valve Company, New York, N. Y. Valves. 301,905; Mar. 21; Serial No. 332,470; published Jan. 10, 1933. Class 13.

Slimmers Company. (See Hanson, Arthur C.)

Smith, Clyde S., doing business as O-Do Company, Dallas, Tex. Deodorant and astringent. 301,978; Mar. 21; Serial No. 331,012; published Jan. 3, 1933. Class 6.

Smith, L. C., & Corona Typewriters, Inc., New York, N. Y. Typewriting machines. 302,000; Mar. 21; Serial No. 332,272; published Jan. 10, 1933. Class 23.

Smukler, Nathan, New York, N. Y. Enamel paint. 301,962; Mar. 21; Serial No. 332,813; published Jan. 3, 1933. Class 16.

Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier, St. Fons, by change of name to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Chemical substances. 39,977; renewed Mar. 24, 1933.

Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier, St. Fons, by change of name to Societe des Usines Chimiques Rhone-Poulenc, Paris, France. Pharmaceutical products. 39,978; renewed Mar. 24, 1933.

Societe des Usines Chimiques Rhone-Poulenc. (See Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier.)

Societe Worth, Paris, France. Perfumes. 301,937; Mar. 21; Serial No. 320,608; published Dec. 27, 1932. Class 6.

Society of Chemical Industry in Basle, Basel, Switzerland. Pharmaceutical product. 301,965; Mar. 21; Serial No. 332,077; published Jan. 3, 1933. Class 6.

Sonneborn, L., Sons, Inc., New York, N. Y. Lubricating oil. 301,870; Mar. 21; Serial No. 332,499; published Jan. 10, 1933. Class 15.

Southeastern Chemical Co. (See Bowman, Mae C.)

Standard Brands Incorporated, New York, N. Y. Amylolytic or starch-liquefying preparation. 301,913; Mar. 21; Serial No. 331,517; published Jan. 10, 1933. Class 6.

Standard Company, The, assignor to The Torrington Company, Torrington, Conn. Spokes and nipples of vehicles. 91,813; renewed May 27, 1933.

Standard Oil Company of California, Wilmington, Del., and San Francisco, Calif. Lubricating oils. 301,882; Mar. 21; Serial No. 331,323; published Jan. 10, 1933. Class 15.

Stanley, Wm. H., Inc., New York, N. Y. Canned fish. 301,908; Mar. 21; Serial No. 327,172; published Dec. 20, 1932. Class 46.

Stephano Brothers, Philadelphia, Pa. Cigars, cigarettes, and tobacco. 302,023; Mar. 21; Serial No. 332,886; published Jan. 10, 1933. Class 17.

Sterile Products Company, Inc., San Diego, Calif. Tablets. 301,980; Mar. 21; Serial No. 330,730; published Dec. 27, 1932. Class 6.

Sunday Company, The, New York, N. Y. Tooth whitener. 301,969; Mar. 21; Serial No. 331,269; published Jan. 3, 1933. Class 6.

Superior Products Company, Dallas, Tex. Petrolatum, rubbing alcohol, bay rum, etc. 301,911; Mar. 21; Serial No. 330,584; published Dec. 6, 1932. Class 6.

Taj Perfume Co., Detroit, Mich. Incense. 301,954; Mar. 21; Serial No. 331,129; published Jan. 3, 1933. Class 6.

Thermoid Rubber Company, Trenton, N. J. Brake linings. 301,992; Mar. 21; Serial No. 332,667; published Jan. 10, 1933. Class 35.

Topics Publishing Company, Inc., New York, N. Y. Periodical publication. 301,863; Mar. 21; Serial No. 332,014; published Jan. 3, 1933. Class 38.

Torrington Company, The. (See Standard Company, The, assignor.)

Traphagen (Leigh), Ethel, doing business as Traphagen School of Fashion, New York, N. Y. Artistic drawings for textile designs. 301,860; Mar. 21; Serial No. 332,168; published Jan. 10, 1933. Class 38.

Trapier, Pierre P. A., Washington, D. C. Picture post cards and art prints. 301,857; Mar. 21; Serial No. 332,350; published Jan. 10, 1933. Class 38.

Trifari, Krussman & Fishel, Inc., New York, N. Y. Pearls. 301,884; Mar. 21; Serial No. 330,388; published Jan. 3, 1933. Class 28.

Triplex Tire Co., Ltd., Oakland, Calif. Pneumatic rubber tires. 302,036; Mar. 21; Serial No. 330,800; published Jan. 3, 1933. Class 35.

Tropical Juice Corporation, Miami and Titusville, Fla. Maltless fruit juices. 301,930; Mar. 21; Serial No. 332,637; published Jan. 10, 1933. Class 45.

Troponwerke Dinklage & Co., Cologne-Mulheim, Germany. Compound for use in the treatment of headaches, neuralgia, etc. 301,917; Mar. 21; Serial No. 331,764; published Jan. 3, 1933. Class 6.

Twenty Grand Blade Company, Inc., assignor to Herman B. Laymon, doing business under the name and style of Twenty Grand Blade Company, Spencer, Ind. Razor blades. 301,998; Mar. 21; Serial No. 332,858; published Jan. 10, 1933. Class 28.

Ultralyn Essential Products Company. (See Larrañaga, John F.)

Union Fishermens Co-Operative Packing Co., Astoria, Oreg. Canned salmon. 90,771; renewed Mar. 18, 1933.

Union Special Machine Company, Chicago, Ill. Sewing machine needles. 301,996; Mar. 21; Serial No. 332,888; published Jan. 10, 1933. Class 23.

United States Bedding Company, St. Paul, Minn. Bed springs. 301,936; Mar. 21; Serial No. 320,649; published Jan. 10, 1933. Class 32.

United States Bronze Powder Works, Inc., New York, N. Y. Aluminum bronze powders and paint. 302,048; Mar. 21. Class 16.

United States Electric Mfg. Corp., New York, N. Y. Combination pocket lighter and flashlight. 301,869; Mar. 21; Serial No. 332,638; published Jan. 10, 1933. Class 21.

United States Graphite Company, The, Saginaw, Mich. Pulverized graphite. 92,292–3; renewed June 24, 1933.

United States Graphite Company, The, Saginaw, Mich. Pulverized graphite. 92,297; renewed June 24, 1933.

United States Graphite Company, The, Saginaw, Mich. Pulverized graphite. 92,300; renewed June 24, 1933.

United States Rubber Company, New York, N. Y. Hose. 301,934; Mar. 21; Serial No. 321,043; published Jan. 3, 1933. Class 35.

Universal Appliance Company, Boston, Mass. Oil burners and equipment for ranges. 302,011; Mar. 21; Serial No. 331,600; published Jan. 10, 1933. Class 34.

Viavi Company, The, San Francisco, Calif. Medicines. 301,946; Mar. 21; Serial No. 322,338; published Jan. 3, 1933. Class 6.

Wells & Richardson Company, Inc., Burlington, Vt. Preparation for coloring butter. 301,976; Mar. 21; Serial No. 331,352; published Dec. 27, 1932. Class 6.

Western Clock Company, Peru, Ill. Clocks and watches. 302,047; Mar. 21. Class 27.

Western Tablet and Stationery Corporation, Dayton, Ohio. Writing paper, note books, envelopes, etc. 301,858; Mar. 21; Serial No. 332,285; published Jan. 3, 1933. Class 37.

Williams and Smale, Ashley, Ohio. Hog preparation for the treatment of worms, rickets, and cholera. 301,982; Mar. 21; Serial No. 330,500; published Jan. 10, 1933. Class 6.

LIST OF REGISTRANTS OF LABELS

Arnold Bros., Incorporated, Chicago, Ill. Guest Ham—Famous for Flavor. For Ham. 41,850; Mar. 21.

Economy Co. (See Scotland, Bayard S.)

Florio, Frank J., Philadelphia, Pa. Philadelphia Leader. For Cigars. 41,851; Mar. 21.

Goldmark, Adolph, & Sons Corp., New York, N. Y. Gold Mark. For Mushrooms. 41,852; Mar. 21.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Good Housekeeping. For Fruit Jar Rings. 41,853; Mar. 21.

Kolb's Baking Company, Baltimore, Md. Kolb's Maryland B-R-E-D. For Bread. 41,854; Mar. 21.

Kwickorn Sales Company. (See Waterhouse, Ernest C.)

Masterknit Mills, New York, N. Y. Infants' Wear. For Infants Wear. 41,855; Mar. 21.

Midwest Hardware Company, doing business as Midwest Laboratories, Chicago, Ill. Black Reaper. For Mothproofing Compound. 41,856; Mar. 21.

Modern Health Products, Milwaukee, Wis. Nutro-Links. For Intensified Food. 41,857; Mar. 21.

N. B. Laboratories. (See Nassour Brothers Inc. Ltd.)

Nassour Brothers Inc. Ltd., doing business as N. B. Laboratories, Los Angeles, Calif. Encore Astringent & Deodorant Mouth Wash. For Mouth Wash. 41,858; Mar. 21.

Northern Paper Mills, Green Bay, Wis. Belson's Softo Tissue. For Tissue. 41,859; Mar. 21.

Northern Paper Mills, Green Bay, Wis. Softo Tissue. For Tissue. 41,860; Mar. 21.

Northern Paper Mills, Green Bay, Wis. Western Crepe Tissue. For Crepe Tissue. 41,861; Mar. 21.

Northern Paper Mills, Green Bay, Wis. Softo White Genuine Crepe. For Absorbent Crepe. 41,862; Mar. 21.

Northern Paper Mills, Green Bay, Wis. Flossinette Crepe Tissue. For Tissue. 41,863; Mar. 21.

Pike, Mathilda, New York, N. Y. Maria-Josefa. For New Viennese Facial Preparation. 41,864; Mar. 21.

Port-Vana Cigar Co., Dallastown, Pa. Frings Bros. Kings. For Cigars. 41,865; Mar. 21.

Potosi Brewing Company, Potosi, Wis. Potosi. For Brew. 31,866; Mar. 21.

Potosi Brewing Company, Potosi, Wis. Wisconsin Lager Supreme. For Lager. 41,867; Mar. 21.

Scotland, Bayard S., doing business as Economy Co., Joliet, Ill. Big Nickel. For Gelatin Dessert. 41,868; Mar. 21.

Snell-Jones Tack Corporation, Brockton, Mass. Snell-Jones Tack Corporation. For Nails, Staples, and Tacks. 41,869; Mar. 21.

Victory Packing Company, San Francisco, Calif. Victory. For Dog and Cat Food. 41,870; Mar. 21.

Waterhouse, Ernest C., doing business as Kwickorn Sales Company, Los Angeles, Calif. Kwickorn. For a Food Preparation for Making Corn Muffins, Corn Bread, Corn Pone, Corn Pan Cakes, Etc. 41,871; Mar. 21.

LIST OF REGISTRANTS OF PRINTS

Arden, Elisabeth, of New York, Ltd., doing business as Elizabeth Arden, New York, N. Y. Elizabeth Arden Tells You How to Achieve Loveliness with Economy. For Cleansing Cream and Skin Tonic. 14,070; Mar. 21.

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. The Mark of Master Weavers. For Rugs and Carpets. 14,071; Mar. 21.

Hills Bros., San Francisco, Calif. Aw Red! Leave Bill Alone—My Mother Gave Me Hills Bros Too—Adform 180. For Coffee. 14,072; Mar. 21.

Hills Bros., San Francisco, Calif. Here's Why Hills Bros Coffee Has and Holds So Many Friends. For Coffee. 14,073; Mar. 21.

Hills Bros., San Francisco, Calif. When You Taste Hills Bros Coffee, You're Tasting a Flavor No Other Coffee Has. For Coffee. 14,074; Mar. 21.

Hills Bros., San Francisco, Calif. Hills Bros' Patented Process "Does Right" By the Rare Blend of Coffees. For Coffee. 14,075; Mar. 21.

Hills Bros., San Francisco, Calif. The Flavor That Makes Hills Bros Coffee Famous, Is the Same in Every Pound. For Coffee. 14,076; Mar. 21.

Hills Bros., San Francisco, Calif. You'll Never Know What "Matchless, Uniform Flavor" Means, Until You Use Hills Bros Coffee. For Coffee. 14,077; Mar. 21.

Hills Bros., San Francisco, Calif. They Call It "The World's Finest Coffee" . . . And Here Is The Reason. For Coffee. 14,078; Mar. 21.

Hills Bros., San Francisco, Calif. It Is Surprising How Deliciously Different Hills Bros Coffee Tastes. For Coffee. 14,079; Mar. 21.

Hills Bros., San Francisco, Calif. When You Taste Hills Bros Coffee, You'll Realize the Importance of Perfect Roasting. For Coffee. 14,080; Mar. 21.

Hills Bros., San Francisco, Calif. Any Two Pounds of Hills Bros Coffee Are Perfect Flavor-Twins. For Coffee. 14,081; Mar. 21.

Hills Bros., San Francisco, Calif. Look For the Arab Trade-Mark . . . That Means Hills Bros Coffee. For Coffee. 14,082; Mar. 21.

Hills Bros., San Francisco, Calif. There is Flavor Such as You Never Dreamed of in Every Pound of Hills Bros Coffee. For Coffee. 14,083; Mar. 21.

Hills Bros., San Francisco, Calif. It's a Revelation to Your Taste to Drink a Cup of Hills Bros Coffee. For Coffee. 14,084–5; Mar. 21.

Hills Bros., San Francisco, Calif. The Flavor That Makes Hills Bros Coffee Famous, is the Same in Every Pound. For Coffee. 14,086; Mar. 21.

Hills Bros., San Francisco, Calif. Why Hills Bros Coffee Has and Holds So Many Friends. For Coffee. 14,087; Mar. 21.

Hills Bros., San Francisco, Calif. When You Taste Hills Bros Coffee, You're Tasting a Flavor No Other Coffee Has. For Coffee. 14,088; Mar. 21.

Hills Bros., San Francisco, Calif. You'll Never Know What "Matchless, Uniform Flavor" Means Until You Use Hills Bros Coffee. For Coffee. 14,089; Mar. 21.

Hills Bros., San Francisco, Calif. It Is Surprising How Deliciously Different Hills Bros Coffee Tastes. For Coffee. 14,090; Mar. 21.

Hills Bros., San Francisco, Calif. When You Taste Hills Bros Coffee, You'll Realize the Importance of Perfect Roasting. For Coffee. 14,091; Mar. 21.

Hills Bros., San Francisco, Calif. Any Two Pounds of Hills Bros Coffee Are Perfect Flavor-Twins. For Coffee. 14,092; Mar. 21.

Hills Bros., San Francisco, Calif. There is Flavor Such as You Never Dreamed of, in Every Pound of Hills Bros Coffee. For Coffee. 14,093; Mar. 21.

Hills Bros., San Francisco, Calif. Look for the Arab Trade-Mark . . . That Means Hills Bros Coffee. For Coffee. 14,094; Mar. 21.

Hills Bros., San Francisco, Calif. The Flavor That Makes Hills Bros Coffee Famous is the Same in Every Pound. For Coffee. 14,095; Mar. 21.

Hills Bros., San Francisco, Calif. It's a Revelation to Your Taste to Drink a Cup of Hills Bros Coffee. For Coffee. 14,096; Mar. 21.

Hills Bros., San Francisco, Calif. Here's why Hills Bros Coffee has and holds so many friends. For Coffee. 14,097; Mar. 21.

Hills Bros., San Francisco, Calif. When you taste Hills Bros Coffee, you're tasting a flavor no other coffee has. For Coffee. 14,098; Mar. 21.

Hills Bros., San Francisco, Calif. Hills Bros' patented process "does right" by the rare blend of coffees. For Coffee. 14,099; Mar. 21.

Hills Bros., San Francisco, Calif. You'll never know what "matchless uniform flavor" means until you use Hills Bros Coffee. For Coffee. 14,100; Mar. 21.

Hills Bros., San Francisco, Calif. They call it the world's finest coffee . . . and here is the reason. For Coffee. 14,101; Mar. 21.

Hills Bros., San Francisco, Calif. It is surprising how deliciously different Hills Bros Coffee tastes. For Coffee. 14,102; Mar. 21.

Hills Bros., San Francisco, Calif. Any two pounds of Hills Bros Coffee are perfect flavor-twins. For Coffee. 14,103; Mar. 21.

Hills Bros., San Francisco, Calif. Look for the Arab trade-mark . . . that means Hills Bros Coffee. For Coffee. 14,104; Mar. 21.

Hills Bros., San Francisco, Calif. There is flavor such as you never dreamed of, in every pound of Hills Bros Coffee. For Coffee. 14,105; Mar. 21.

Hills Bros., San Francisco, Calif. It's a revelation to your taste to drink a cup of Hills Bros Coffee. For Coffee. 14,106; Mar. 21.

Hills Bros., San Francisco, Calif. The flavor that makes Hills Bros Coffee famous, is the same in every pound. For Coffee. 14,107; Mar. 21.

Hills Bros., San Francisco, Calif. Here's why Hills Bros Coffee has and holds so many friends. For Coffee. 14,108; Mar. 21.

Hills Bros., San Francisco, Calif. When you taste Hills Bros Coffee, you're tasting a flavor no other coffee has. For Coffee. 14,109; Mar. 21.

Hills Bros., San Francisco, Calif. Hills Bros' patented process "does right" by the rare blend of coffees. For Coffee. 14,110; Mar. 21.

Hills Bros., San Francisco, Calif. You'll never know what "matchless, uniform flavor" means until you use Hills Bros Coffee. For Coffee. 14,111; Mar. 21.

Hills Bros., San Francisco, Calif. They call it the world's finest coffee . . . and here is the reason. For Coffee. 14,112; Mar. 21.

Hills Bros., San Francisco, Calif. It is surprising how deliciously different Hills Bros Coffee tastes. For Coffee. 14,113; Mar. 21.

Hills Bros., San Francisco, Calif. When you taste Hills Bros Coffee, you'll realize the importance of perfect roasting. For Coffee. 14,114; Mar. 21.

Hills Bros., San Francisco, Calif. Any two pounds of Hills Bros Coffee are perfect flavor-twins. For Coffee. 14,115; Mar. 21.

Hills Bros., San Francisco, Calif. There is a flavor such as you never dreamed of, in every pound of Hills Bros Coffee. For Coffee. 14,116; Mar. 21.

Hills Bros., San Francisco, Calif. Look for the Arab trade-mark . . . that means Hills Bros Coffee. For Coffee. 14,117; Mar. 21.

Larrowe Milling Company, The, Minneapolis, Minn. Larro calf meal. For Calf Meal Gruel, Calf Meal (Dry) and Dairy Feed (Dry). 14,118; Mar. 21.

Lobl Manufacturing Company, The, Middleboro, Mass. Mento-twin jr. For Menthol Inhalers. 14,119; Mar. 21.

Lobl Manufacturing Company, The, Middleboro, Mass. Mentolette. For Menthol Pencils. 14,120; Mar. 21.

Scheidt, Adam, Brewing Company, Norristown, Pa. Happy days are here again. For Beer. 14,121; Mar. 21.

Stayform Company, The, Chicago, Ill. Health comfort style poise. For Corsets. 14,122; Mar. 21.

Younghusband, J. L., Chicago, Ill. Dewan's permanent hair remover. For Hair Remover. 14,123; Mar. 21.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Graphite. United States Graphite Company. 92,292–3; renewed June 24, 1933.

Graphite. United States Graphite Company. 92,297; renewed June 24, 1933.

Graphite. United States Graphite Company. 92,300; renewed June 24, 1933.

Phenol-methylene liquid, semisolid, and solid plastic compounds. Condensite Company of America. 91,556; renewed May 13, 1933.

Seeds, Flower, vegetable, and cereal. Dakota Improved Seed Company. 92,528; renewed July 1, 1933.

CLASS 2

Bags, Cotton flour. Fulton Bag & Cotton Mills. 302,029; Mar. 21; Serial No. 333,144; published Jan. 10, 1933.

Baskets. D. W. McBride. 302,037; Mar. 21; Serial No. 330,305; published Jan. 10, 1933.

Cards, Display and shipping. Columbus Dental Manufacturing Co. 301,963; Mar. 21; Serial No. 332,182; published Jan. 10, 1933.

CLASS 4

Cleansing preparation. O'Connell Products Company. 301,942; Mar. 21; Serial No. 307,242; published Jan. 10, 1933.

Dry cleaning fluids and cleansers. J. F. Larrañaga. 301,957; Mar. 21; Serial No. 328,193; published Jan. 3, 1933.
Saponaceous material. Fischer's Surfa-Saver, Inc. 301,948; Mar. 21; Serial No. 321,243; published Jan. 3, 1933.
Soap, Toilet. Goldblatt Bros., Inc. 301,966; Mar. 21; Serial No. 331,925; published Jan. 3, 1933.

CLASS 6

Alkaline tablets. Reed & Carnrick. 301,974; Mar. 21; Serial No. 331,441; published Dec. 27, 1932.
Ammonia-water. Robinson Bros. 91,699; renewed May 20, 1933.
Amylolytic or starch liquefying preparation. Standard Brands Incorporated. 301,913; Mar. 21; Serial No. 331,517; published Jan. 10, 1933.
Animal substances for medicinal use. G. V. Shea. 301,947; Mar. 21; Serial No. 321,827; published Apr. 26, 1932.
Anodes used for plating metal. Apothecaries Hall Company. 302,043; Mar. 21.
Antiseptic and germicidal preparation. Rare Chemicals, Inc. 301,981; Mar. 21; Serial No. 330,551; published Jan. 10, 1933.
Antiseptic dressing. Davis & Lawrence Co. 301,986; Mar. 21; Serial No. 330,160; published Jan. 10, 1933.
Antiseptic vaginal tablets. J. N. Micell, M. D. 301,900; Mar. 21; Serial No. 327,803; published Dec. 20, 1932.
Beauty products. E. Altrose. 301,926; Mar. 21; Serial No. 325,030; published Jan. 10, 1933.
Chemical substance, Effervescent. Alfred Bishop Limited. 89,767; renewed Feb. 10, 1933.
Chemical substances. Société Chimique des Usines du Rhonex Anct. Gilliard, P. Monnet & Cartier. 89,977; renewed Mar. 24, 1933.
Chemicals. National Alumnite Corporation. 301,906; Mar. 21; Serial No. 325,719; published May 31, 1932.
Compositions for eliminating offensive breath odors. P. Krupin. 301,921; Mar. 21; Serial No. 331,088; published Jan. 3, 1933.
Compound for use in the treatment of headaches, neuralgia, etc. Troponwerke Dinklage & Co. 301,917; Mar. 21; Serial No. 331,764; published Jan. 3, 1933.
Cream, face powder, hand lotion, etc. Alda's Laboratories. 301,918; Mar. 21; Serial No. 331,719; published Jan. 3, 1933.
Cream, Plastic. Sakel Perfume Co. Inc. 302,051; Mar. 21.
Cream, skin freshener, shampoo, etc. Pleville. 302,041; Mar. 21.
Creams and lotions. F. C. Gephart. 302,042; Mar. 21.
Dandruff remover and hair restorer. Hollywood Laboratories. 301,955; Mar. 21; Serial No. 331,084; published Jan. 3, 1933.
Deodorant and astringent. C. S. Smith. 301,978; Mar. 21; Serial No. 331,012; published Jan. 3, 1933.
Depilatories. Croxon, Inc. 302,040; Mar. 21.
Depilatory. Herz Laboratories, Incorporated. 301,914; Mar. 21; Serial No. 331,641; published Dec. 27, 1932.
Dyes, Coal tar. General Dyestuff Corporation. 301,892; Mar. 21; Serial No. 331,577; published Dec. 27, 1932.
Fumigating material, Gaseous. Guardite Corporation. 301,971; Mar. 21; Serial No. 331,614; published Dec. 27, 1932.
Hair tonics and shampoo. R. Santoline. 301,988; Mar. 21; Serial No. 329,293; published Jan. 10, 1933.
Hog preparation. Williams and Smale. 301,982; Mar. 21; Serial No. 330,500; published Jan. 10, 1933.
Incense. Taj Perfume Co. 301,954; Mar. 21; Serial No. 331,129; published Jan. 3, 1933.
Insecticides. M. C. Bowman. 301,932; Mar. 21; Serial No. 331,985; published Jan. 10, 1933.
Insecticides. Enterprise Manufacturing Company. 301,940; Mar. 21; Serial No. 317,922; published Nov. 24, 1931.
Insecticides. A. L. Gelbart. 301,956; Mar. 21; Serial No. 330,544; published Jan. 3, 1933.
Laxative. G. J. Lifton. 301,984; Mar. 21; Serial No. 330,268; published Jan. 10, 1933.
Laxative, Herbaceous. Charm Laboratories, Inc. 301,967; Mar. 21; Serial No. 331,771; published Jan. 10, 1933.
Laxatives. Foley & Company. 301,964; Mar. 21; Serial No. 332,227; published Jan. 3, 1933.
Laxatives. I. Ross. 301,972; Mar. 21; Serial No. 331,476; published Dec. 27, 1932.
Liniments. H. T. Chiantis. 301,916; Mar. 21; Serial No. 331,851; published Jan. 3, 1933.
Medications, Foot. Keratese, Inc. 301,973; Mar. 21; Serial No. 331,468; published Dec. 27, 1932.
Medicinal preparation. Crazy Water Hotel Company. 301,893; Mar. 21; Serial No. 331,853; published Jan. 10, 1933.
Medicine. Bromo-Pep, Incorporated. 301,915; Mar. 21; Serial No. 331,848; published Dec. 27, 1932.
Medicines. Gabail Limited. 301,985; Mar. 21; Serial No. 330,255; published Jan. 10, 1933.
Medicines. Parsan Chemical Company. 301,928; Mar. 21; Serial No. 329,058; published Jan. 10, 1933.
Medicines. Viavi Company. 301,946; Mar. 21; Serial No. 322,838; published Jan. 3, 1933.
Nail polish, cuticle oil, nail white, etc. L. Hersberg. 301,925; Mar. 21; Serial No. 327,940; published Jan. 3, 1933.
Ointment. McClelland's Ointment Co. 301,977; Mar. 21; Serial No. 331,311; published Dec. 27, 1932.
Ointment, Antiseptic. R-Own Laboratories, Inc. 302,045; Mar. 21.
Ointments or salves. H. J. Senay. 301,983; Mar. 21; Serial No. 330,358; published Dec. 27, 1932.
Papoid. Johnson & Johnson. 301,910; Mar. 21; Serial No. 331,051; published Jan. 10, 1933.
Perfumeries, lotions, rouge, etc. Park & Tilford. 301,912; Mar. 21; Serial No. 330,864; published Jan. 10, 1933.
Perfumery, G. Dralle. 301,896–9; Mar. 21; Serial Nos. 326,132–5; published Dec. 27, 1932.
Perfumes. Societe Worth. 301,937; Mar. 21; Serial No. 320,608; published Dec. 27, 1932.
Perfumes and toilet water. Orisa L. Legrand, Inc. 301,891; Mar. 21; Serial No. 331,560; published Dec. 27, 1932.
Perspiration preventatives or deodorant. Delatone Company. 301,901; Mar. 21; Serial No. 328,001; published Dec. 27, 1932.
Petrolatum, rubbing alcohol, bay rum, etc. Superior Products Company. 301,911; Mar. 21; Serial No. 330,584; published Dec. 6, 1932.
Pharmaceutical preparation. H. R. Napp Limited. 301,909; Mar. 21; Serial No. 328,670; published Dec. 27, 1932.
Pharmaceutical preparations. Leggett & Brother. 86,997; renewed June 18, 1932.
Pharmaceutical product. Society of Chemical Industry in Basle. 301,965; Mar. 21; Serial No. 332,077; published Jan. 3, 1933.
Pharmaceutical products. Société Chimique des Usines du Rhone Anct. Gilliard, P. Monnet & Cartier. 89,978; renewed Mar. 24, 1933.
Pharmaceutical solution. Aktiengesellschaft vorm. B. Siegfried. 91,628; renewed May 20, 1933.
Plasticiser. Binney & Smith Co. 301,979; Mar. 21; Serial No. 330,775; published Dec. 27, 1932.
Poison, Rat. B. J. Moore Sons' Co. 301,922; Mar. 21; Serial No. 331,060; published Jan. 3, 1933.
Powder preparation. M. Schwalb. 301,975; Mar. 21; Serial No. 331,384; published Dec. 27, 1932.
Powders, nail polish, hair tonic, etc., Face. Michael Schmidt, Inc. 301,989; Mar. 21; Serial No. 328,849; published Dec. 27, 1932.
Preparation for a prophylactic treatment. F. Hatton. 301,987; Mar. 21; Serial No. 329,669; published Jan. 10, 1933.
Preparation for coloring butter. Wells & Richardson Company. 301,976; Mar. 21; Serial No. 331,352; published Dec. 27, 1932.
Preparation for reducing weight. A. C. Hanson. 301,894; Mar. 21; Serial No. 332,065; published Jan. 10, 1933.
Preparation for removing tobacco and nicotine stains from the skin. Nik-O-Kleen Co. 301,943; Mar. 21; Serial No. 324,968; published Jan. 10, 1933.
Preparation in powder form containing iodoacetic acid. Aktiebolaget Astra Apotekarnas Kemiska Fabriker. 301,938; Mar. 21; Serial No. 320,147; published Dec. 27, 1932.
Preparation useful for a mouth wash, toothpowder, and in oral hygiene. Gremal Products Company. 301,968; Mar. 21; Serial No. 331,734; published Jan. 3, 1933.
Salve. A. Holt. 301,924; Mar. 21; Serial No. 328,989; published Jan. 10, 1933.
Secretions to supply deficient secretions, Internal. G. W. Carnrick Co. 92,635; renewed July 22, 1933.
Sheep dip, cathartic pills, headache tablets, etc. Scott & Gilbert Co. 301,944; Mar. 21; Serial No. 322,714; published May 17, 1932.
Solvent, Rubber. Firestone Tire & Rubber Company. 301,970; Mar. 21; Serial No. 331,674; published Dec. 27, 1932.
Tablets. Sterile Products Company. 301,980; Mar. 21; Serial No. 330,730; published Dec. 27, 1932.
Toilet water, hair tonic, vanishing cream, etc. Mrs. Z. B. Hinkle. 301,907; Mar. 21; Serial No. 326,101; published Dec. 27, 1932.
Tonic. Bahama Isles Foods Corporation. 301,919–20; Mar. 21; Serial Nos. 331,534–5; published Jan. 3, 1933.
Tonic. Giustino Sallusto & Co. 89,704; renewed Dec. 31, 1932.
Tonic, General system. J. W. Daugherty. 301,935; Mar. 21; Serial No. 320,721; published Dec. 29, 1931.
Tooth whitener. Sunday Company. 301,969; Mar. 21; Serial No. 331,269; published Jan. 3, 1933.

CLASS 9

Cartridges, caps, primers, etc. Remington Arms and Ammunition Company. 91,602; renewed May 18, 1933.

CLASS 10

Fertilising compound. L. T. Kee. 302,020; Mar. 21; Serial No. 332,586; published Jan. 10, 1933.

CLASS 12

Asphaltic compound. O. V. McGrew. 301,889; Mar. 21; Serial No. 331,057; published Jan. 3, 1933.
Insulating materials, Thermal. Johns-Manville Corporation. 301,888; Mar. 21; Serial No. 331,000; published Jan. 3, 1933.
Plastic neutral base. Quigley Company. 301,895; Mar. 21; Serial No. 332,160; published Jan. 10, 1933.

Wall board. Central Fibre Products Co. 301,887; Mar. 21; Serial No. 330,990; published Jan. 3, 1933.

CLASS 13

Apparatus in the nature of a vent. H. J. Bucking. 301,902; Mar. 21; Serial No. 304,898; published Jan. 10, 1933.
Nuts, bolts, and screws. National Machine Products Company. 302,002; Mar. 21; Serial No. 332,263; published Jan. 10, 1933.
Pipe fittings, Solder. A. L. Parker. 302,044; Mar. 21.
Valves. S. Skner. 301,995; Mar. 21; Serial No. 332,470; published Jan. 10, 1933.
Valves, rate of flow controllers, etc., Air release and vacuum. Simplex Valve and Meter Company. 301,904; Mar. 21; Serial No. 289,546; published Nov. 26, 1929.

CLASS 14

Castings, Nickel-containing iron. International Nickel Company. 302,033; Mar. 21; Serial No. 331,791; published Jan. 10, 1933.
Wire. Continental Steel Corporation. 301,931; Mar. 21; Serial No. 332,615; published Jan. 10, 1933.

CLASS 15

Fuel and lubricating and fuel oil, Motor. Lewis Coal & Oil Co. Inc. 301,880; Mar. 21; Serial No. 331,470; published Jan. 10, 1933.
Gasoline. F. J. Baumeister. 301,875; Mar. 21; Serial No. 331,665; published Jan. 3, 1933.
Gasoline, kerosene, and lubricating oils and greases. Lincoln Oil Refining Company. 301,874; Mar. 21; Serial No. 331,747; published Jan. 3, 1933.
Gasoline, lubricating oil, kerosene, etc. Major Petroleum Company. 301,885; Mar. 21; Serial No. 329,817; published Jan. 10, 1933.
Oil, Lubricating. L. Sonneborn Sons, Inc. 301,870; Mar. 21; Serial No. 332,499; published Jan. 10, 1933.
Oils, Lubricating. Standard Oil Company of California. 301,882; Mar. 21; Serial No. 331,328; published Jan. 10, 1933.

CLASS 16

Aluminum bronze powders and paint. United States Bronze Powder Works, Inc. 302,048; Mar. 21.
Chemical composition. Perry Robinson Corporation. 301,945; Mar. 21; Serial No. 321,964; published Jan. 10, 1933.
Enamel and paint and varnish remover, Paint. Gay-Day Corporation. 301,864; Mar. 21; Serial No. 331,952; published Jan. 10, 1933.
Paint and paint enamels. Columbia Chemical Company. 301,865; Mar. 21; Serial No. 331,888; published Jan. 10, 1933.
Paint, Enamel. N. Smukler. 301,962; Mar. 21; Serial No. 332,313; published Jan. 3, 1933.
Paints, wax and compounds. Marietta Paint & Color Co. 90,358; renewed Feb. 18, 1933.
Waxes. Creco Company. 301,886; Mar. 21; Serial No. 332,402; published Jan. 10, 1933.

CLASS 17

Cigars. Nils & Moser Cigar Co. 90,567; renewed Mar. 4, 1933.
Cigars, cigarettes, and tobacco. Stephano Brothers. 302,023; Mar. 21; Serial No. 332,386; published Jan. 10, 1933.
Cigars, cigarettes, tobacco, and snuff. Brown & Williamson Tobacco Corporation. 302,022; Mar. 21; Serial No. 332,443; published Jan. 10, 1933.

CLASS 19

Seat covers for automobiles. Crawford Manufacturing Co. 302,053; Mar. 21.
Spokes and nipples of vehicles. Standard Company. 91,813; renewed May 27, 1933.

CLASS 21

Batteries, Storage. Thomas A. Edison, Incorporated. 301,881; Mar. 21; Serial No. 331,251; published Jan. 3, 1933.
Cables. Crescent Braid, Inc. 301,871; Mar. 21; Serial No. 332,333; published Jan. 10, 1933.
Cord for bare, insulated wire, cables, and radio antenna wire. Consolidated Wire & Associated Corporations. 301,939; Mar. 21; Serial No. 319,509; published Jan. 3, 1933.
Electric furnaces and parts thereof, Industrial. W. S. Rockwell Company. 302,019; Mar. 21; Serial No. 327,708; published Jan. 3, 1933.
Electric motors and generators, switching equipment, etc. Otis Elevator Company. 301,877; Mar. 21; Serial No. 331,700; published Jan. 3, 1933.
Electric motors and generators, switching equipment, etc. Otis Elevator Company. 301,878; Mar. 21; Serial No. 331,697; published Jan. 3, 1933.
Electric motors, rheostats, switches, etc. R. H. Russell. 301,873; Mar. 21; Serial No. 331,873; published Jan. 3, 1933.
Electric sad irons. Safety Electrical Appliances, Inc. 301,876; Mar. 21; Serial No. 331,653; published Jan. 3, 1933.
Electric sad irons. Safety Electrical Appliances, Inc. 301,879; Mar. 21; Serial No. 331,652; published Jan. 3, 1933.
Lamps and bulbs, Incandescent. Guarantee Lamp Co. 301,872; Mar. 21; Serial No. 332,063; published Jan. 10, 1933.
Lighter and flashlight, Combination pocket. United States Electric Mfg. Co. 301,869; Mar. 21; Serial No. 332,638; published Jan. 10, 1933.
Radio and television receiving sets and combination radio and television receiving sets, and radio tubes. W. C. Rawls. 302,018; Mar. 21; Serial No. 328,406; published Jan. 3, 1933.

CLASS 22

Amusement machines, Coin-operated. J. F. Meyer. 301,991; Mar. 21; Serial No. 332,728; published Jan. 10, 1933.
Building sets, Construction. Cleveland Container Co. 301,993; Mar. 21; Serial No. 332,518; published Jan. 10, 1933.
Games. C. R. Fargo. 302,006; Mar. 21; Serial No. 332,062; published Jan. 10, 1933.

CLASS 23

Apparatus used in treatment of textile materials. Gates-Pfeiffer Engineering Company. 301,933; Mar. 21; Serial No. 321,102; published Jan. 10, 1933.
Bearings and bearing collars, Machinery. Joseph T. Ryerson & Son, Inc. 302,010; Mar. 21; Serial No. 331,659; published Jan. 10, 1933.
Carburetors. Brown & Barlow Ltd. 90,289; renewed Feb. 18, 1933.
Machinery for vulcanising and retreading tires. Advanx Ty-R-Pair Company Limited. 301,905; Mar. 21; Serial No. 325,160; published Jan. 10, 1933.
Needles, Sewing machine. Singer Manufacturing Company. 91,518; renewed May 6, 1933.
Needles, Sewing machine. Union Special Machine Company. 301,996; Mar. 21; Serial No. 332,888; published Jan. 10, 1933.
Pumps, steam turbines, compressors, etc., Gear. R. H. Russell. 302,009; Mar. 21; Serial No. 331,872; published Jan. 10, 1933.
Razor blades. Twenty Grand Blade Company. 301,998; Mar. 21; Serial No. 332,358; published Jan. 10, 1933.
Razors and razor blades. Prybrands, Inc. 302,014; Mar. 21; Serial No. 330,756; published Jan. 10, 1933.
Rigs and derricks therefor, Well-drilling. A. H. Kastshke Inc. 302,015; Mar. 21; Serial No. 328,611; published Jan. 10, 1933.
Sewing machine attachments and parts thereof. Singer Manufacturing Company. 40,288; renewed May 5, 1933.
Sewing machines, parts and attachments thereof. Singer Manufacturing Company. 91,911; renewed June 3, 1933.
Sharpeners, Formed razor. J. Levine. 301,997; Mar. 21; Serial No. 332,373; published Jan. 10, 1933.
Speed operable control device. Pierce Governor Company. 301,958; Mar. 21; Serial No. 327,565; published Jan. 10, 1933.
Type casting, setting, and composing machines. International Typesetting Machine Company. 91,876; renewed June 3, 1933.
Typewriting machines. L. C. Smith & Corona Typewriters, Inc. 302,000; Mar. 21; Serial No. 332,272; published Jan. 10, 1933.

CLASS 24

Washboards W. T. Grant Company. 301,961; Mar. 21; Serial No. 332,813; published Jan. 10, 1933.

CLASS 26

Direction transmitter, thermometer, hygrometer, etc., Weather. Julien P. Friez & Sons, Inc. 301,941; Mar. 21; Serial No. 316,323; published Aug. 4, 1931.
Films and plates, Sensitized photographic. Ernst Lomberg G. m. b. H. 301,959; Mar. 21; Serial No. 327,225; published Jan. 10, 1933.
Films, Moving picture. Majestic Pictures Corporation. 302,008; Mar. 21; Serial No. 331,928; published Jan. 10, 1933.
Frames and mountings, Eyeglass and spectacle. American Optical Co. 89,751; renewed Feb. 10, 1933.
Gages, Miter. Delta Manufacturing Company. 302,013; Mar. 21; Serial No. 331,249; published Jan. 10, 1933.
Gages, Rip. Delta Manufacturing Company. 302,012; Mar. 21; Serial No. 331,250; published Jan. 10, 1933.
Levels, miter boxes, squares, etc. Sears, Roebuck and Co. 302,001; Mar. 21; Serial No. 332,271; published Jan. 10, 1933.
Ophthalmic frames and mountings. Continental Optical Company. 302,005; Mar. 21; Serial No. 332,188; published Jan. 10, 1933.
Picture projection machines, Motion. C. Contal. 301,960; Mar. 21; Serial No. 325,893; published Jan. 10, 1933.

CLASS 27

Clocks and watches. Western Clock Company. 302,047; Mar. 21.
Watches and their attached bracelets, Bracelet. Bulova Watch Company. 302,028; Mar. 21; Serial No. 329,526; published Jan. 3, 1933.

CLASS 28

Pearls. Trifari, Krussman & Fishel, Inc. 301,884; Mar. 21; Serial No. 330,388; published Jan. 3, 1933.
Pearls, Cultured. K. Mikimoto. 301,883; Mar. 21; Serial No. 330,566; published Jan. 10, 1933.

CLASS 31

Filter plates and tubes, dispenser plates, etc. Carborundum Company. 301,999; Mar. 21; Serial No. 332,292; published Jan. 10, 1933.
Refrigerating coils. Larkin Refrigerating Corporation. 302,007; Mar. 21; Serial No. 331,114; published Jan. 10, 1933.

CLASS 32

Fixtures, racks, etc., Stocking and display. McCord Radiator & Mfg. Co. 302,046; Mar. 21
Springs, Bed. United States Bedding Company. 301,936; Mar. 21; Serial No. 320,649; published Jan. 10, 1933.

CLASS 34

Burners and equipment for ranges, Oil. Universal Appliance Company. 302,011; Mar. 21; Serial No. 331,600; published Jan. 10, 1933.
Furnaces, Industrial. W. S. Rockwell Company. 302,017; Mar. 21; Serial No. 327,707; published Jan. 10, 1933.
Warmer, Food. Lacy Products Corporation. 302,004; Mar. 21; Serial No. 332,190; published Jan. 10, 1933.

CLASS 35

Brake-linings. F. R. Biggs. 302,016; Mar. 21; Serial No. 327,998; published Jan. 3, 1933.
Brake linings. Thermoid Rubber Company. 301,992; Mar. 21; Serial No. 332,667; published Jan. 10, 1933.
Hose. United States Rubber Company. 301,934; Mar. 21; Serial No. 321,043; published Jan. 3, 1933.
Tires. Federal Rubber Manufacturing Co. 90,524; renewed Mar. 4, 1933.
Tires. Triplex Tire Co. 302,036; Mar. 21; Serial No. 330,800; published Jan. 3, 1933.
Tires and tubes. Kelly-Springfield Tire Company. 301,994; Mar. 21; Serial No. 332,491; published Jan. 3, 1933.

CLASS 36

Phonographs, and phonograph record changers, Disk change. Capehart Corporation. 302,049; Mar. 21.
Strings for violins and similar musical instruments. Simson & Frey, Inc. 302,052; Mar. 21.

CLASS 37

Crayons, Tailors' marking. J. Hershkowitz, Inc. 301,928; Mar. 21; Serial No. 332,692; published Jan. 10, 1933.
Envelopes. Postage Meter Company. 301,927; Mar. 21; Serial No. 332,731; published Jan. 10, 1933.
Files, envelopes, folders, etc., Expanding. Cooke & Cobb Company. 302,027; Mar. 21; Serial No. 332,184; published Jan. 3, 1933.
Paper. Holyoke Card & Paper Company. 302,028; Mar. 21; Serial No. 332,149; published Jan. 3, 1933.
Paper. Hurlbut Paper Company. 302,025; Mar. 21; Serial No. 332,325; published Jan. 10, 1933.
Paper. Hurlbut Paper Company. 302,026; Mar. 21; Serial No. 332,322; published Jan. 10, 1933.
Paper. Perkins-Goodwin Company. 302,021; Mar. 21; Serial No. 332,465; published Jan. 3, 1933.
Paper. Riegel Paper Corporation. 302,035; Mar. 21; Serial No. 330,899; published Jan. 3, 1933.
Paper, note books, envelopes, etc., Writing. Western Tablet and Stationery Corporation. 301,858; Mar. 21; Serial No. 332,285; published Jan. 3, 1933.
Paper, paper towels, napkins, etc., Toilet. Fort Howard Paper Company. 302,024; Mar. 21; Serial No. 332,371; published Jan. 3, 1933.
Paper, Toilet. Biltmore Paper Co. 301,929; Mar. 21; Serial No. 332,680; published Jan. 10, 1933.
Paper, Toilet. Seminole Paper Corporation. 302,032; Mar. 21; Serial No. 331,836; published Jan. 3, 1933.
Paper, Wrapping. International Paper Company. 302,034; Mar. 21; Serial No. 331,466; published Jan. 3, 1933.
Papers. Brown Company. 301,859; Mar. 21; Serial No. 332,175; published Jan. 10, 1933.
Pens, feeds, caps, etc., Fountain. Esterbrook Steel Pen Manufacturing Company. 302,039; Mar. 21; Serial No. 328,889; published Jan. 3, 1933.
Tissue, Toilet. Pratt-Mallory Company. 302,031; Mar. 21; Serial No. 331,907; published Jan. 3, 1933.

CLASS 38

Books. Settlement Cook Book Company. 301,862; Mar. 21; Serial No. 332,047; published Jan. 3, 1933.
Cards and art prints, Picture post. P. P. A. Trapier. 301,857; Mar. 21; Serial No. 332,350; published Jan. 10, 1933.
Cartoon, Newspaper. Central Press Association, Inc. 301,949; Mar. 21; Serial No. 332,835; published Jan. 10, 1933.
Cartoons. I. W. Phillips. 301,950; Mar. 21; Serial No. 332,414; published Jan. 3, 1933.
Drawings for textile designs, Artistic. E. Traphagen (Leigh). 301,860; Mar. 21; Serial No. 332,168; published Jan. 10, 1933.
Messages, dispatches, and newspapers, Printed news. International News Service. 301,867; Mar. 21; Serial No. 331,085; published Jan. 3, 1933.
News columns and special articles. Andrew R. Pearson and Robert S. Allen. 301,861; Mar. 21; Serial No. 332,072; published Jan. 3, 1933.
Periodical. National Sheriffs' & Police Ass'n., Inc. 301,953; Mar. 21; Serial No. 332,819; published Jan. 10, 1933.
Periodical. H. A. Schubart. 301,951; Mar. 21; Serial No. 332,604; published Jan. 3, 1933.
Publication. Christmas Club. 301,952; Mar. 21; Serial No. 332,710; published Jan. 10, 1933.
Publication. Kansas Cooperative Wheat Marketing Association. 301,868; Mar. 21; Serial No. 327,281; published Jan. 10, 1933.
Publication. Topics Publishing Company. 301,863; Mar. 21; Serial No. 332,014; published Jan. 3, 1933.
Stamps, Income savings. C. C. Axbell. 301,866; Mar. 21; Serial No. 331,242; published Jan. 3, 1933.

CLASS 39

Boots and shoes. Hofheimer Brothers Company. 89,259; renewed Dec. 3, 1932.
Boots, shoes, slippers, and sandals. Perth Shoe Company Limited. 301,890; Mar. 21; Serial No. 331,317; published Dec. 27, 1932.
Braces and suspenders, Shoulder. P. Bailly & Cie. 89,327; renewed Dec. 10, 1932.
Hats and caps. Hat Manufacturers Supply Co. Ltd. 90,328; renewed Feb. 18, 1933.
Shoes. Burrow-Jones and Dyer Shoe Co. 90,508; renewed Mar. 4, 1933.
Shoes. M. A. Packard Company. 91,994; renewed June 10, 1933.
Suspenders. L. S. Cooney. 92,877; renewed Aug. 5, 1933.

CLASS 42

Piece goods and cut lengths. Collins & Aikman Company. 90,510; renewed Mar. 4, 1933.

CLASS 44

Dental, medical, and surgical appliances. Seamless Rubber Company. 92,724; renewed July 22, 1933.

CLASS 45

Beverages and syrups and extracts for making the same, Maltless carbonated. Shedd Products Company. 302,003; Mar. 21; Serial No. 332,238; published Jan. 10, 1933.
Juices. Maltless fruit. Tropical Juice Corporation. 301,930; Mar. 21; Serial No. 332,637; published Jan. 10, 1933.

CLASS 46

Canned fish. Wm. H. Stanley, Inc. 301,908; Mar. 21; Serial No. 327,172; published Dec. 20, 1932.
Canned salmon. Union Fishermens Co-Operative Packing Co. 90,771; renewed Mar. 18, 1933.
Oils and seed products, Seed. Procter & Gamble Co. 39,788; renewed Feb. 10, 1933.
Syrups and fruit juices. John Mulhern Company. 301,903; Mar. 21; Serial No. 299,587; published Dec. 27, 1932.

CLASS 48

Malt beverages. G. E. Riegel. 301,990; Mar. 21; Serial No. 332,782; published Jan. 10, 1933.

CLASS 49

Whiskey. Bloch Bros. 302,030; Mar. 21; Serial No. 332,025; published Jan. 10, 1933.
Whisky, Liqueur. James Buchanan & Co. Ld. 302,050; Mar. 21.

LIST OF LABELS

Belson's Softo Tissue. For Tissue. Northern Paper Mills. 41,859; Mar. 21.
Big Nickel. For Gelatin Dessert. B. S. Scotland. 41,868; Mar. 21.
Black Reaper. For Moth Proofing Compound. Midwest Hardware Company. 41,856; Mar. 21.
Encore Astringent & Deodorant Mouth Wash. For Mouth Wash. Nassour Brothers Inc. Ltd. 41,858; Mar. 21.
Flossinette Crepe Tissue. For Tissue. Northern Paper Mills. 41,863; Mar. 21.
Frings Bros. Kings. For Cigars. Port-Vana Cigar Co. 41,865; Mar. 21.
Gold Mark. For Mushrooms. Adolph Goldmark & Sons Corp. 41,852; Mar. 21.
Good Housekeeping. For Fruitjar Rings. Hamilton Rubber Manufacturing Company. 41,853; Mar. 21.

Guest Ham—Famous for Flavor. For Ham. Arnold Bros., Incorporated. 41,850; Mar. 21.
Infants Wear. For Infants Wear. Masterknit Mills. 41,855; Mar. 21.
Kolb's Maryland B-R-E-D. For Bread. Kolb's Baking Company. 41,854; Mar. 21.
Kwickorn. For a Food Preparation for Making Corn Muffins, Corn Bread, Corn Pone, Corn Pan Cakes, Etc. E. C. Waterhouse. 41,871; Mar. 21.
Maria-Josefa. For New Viennese Facial Preparation. M. Pike. 41,854; Mar. 21.
Nutro-Links. For Intensified Food. Modern Health Products. 41,857; Mar. 21.
Philadelphia Leaders. For Cigars. F. J. Eliorio. 41,851; Mar. 21.
Potosi. For Brew. Potosi Brewing Company. 41,866; Mar. 21.
Snell-Jones Tack Corporation. For Nails, Staples, and Tacks. Snell-Jones Tack Corporation. 41,869; Mar. 21.
Softo Tissue, For Tissue. Northern Paper Mills. 41,860; Mar. 21.
Softo White Genuine Crepe. For Absorbent Crepe. Northern Paper Mills. 41,862; Mar. 21.
Victory. For Dog and Cat Food. Victory Packing Company. 41,870; Mar. 21.
Western Crepe Tissue. For Crepe Tissue. Northern Paper Mills. 41,861; Mar. 21.
Wisconsin Lager Supreme. For Lager. Potosi Brewing Company. 41,867; Mar. 21.

LIST OF PRINTS

Any Two Pounds of Hills Bros Coffee Are Perfect Flavortwins. For Coffee. Hills Bros. 14,081; Mar. 21.
Any two pounds of Hills Bros Coffee are perfect flavortwins. For Coffee. Hills Bros. 14,092; Mar. 21.
Any two pounds of Hills Bros Coffee are perfect flavortwins. For Coffee. Hills Bros. 14,103; Mar. 21.
Any two pounds of Hills Bros Coffee are perfect flavortwins. For Coffee. Hills Bros. 14,115; Mar. 21.
Aw Red! Leave Bill Alone—My Mother Gave Me Hills Bros Too—Adform 130. For Coffee. Hills Bros. 14,072; Mar. 21.
Dewan's Permanent Hair Remover. For Hair Remover. J. L. Younghusband. 14,123; Mar. 21.
Elisabeth Arden Tells You How to Achieve Loveliness with Economy. For Cleansing Cream and Skin Tonic. Elisabeth Arden of New York, Ltd. 14,070; Mar. 21.
Happy days are here again. For Beer. Adam Scheidt Brewing Company. 14,121; Mar. 21.
Health comfort style poise. For Corsets. Stayform Company. 14,122; Mar. 21.
Here's Why Hills Bros Coffee Has and Holds So Many Friends. For Coffee. Hills Bros. 14,078; Mar. 21.
Here's why Hills Bros Coffee has and holds so many friends. For Coffee. Hills Bros. 14,097; Mar. 21.
Here's why Hills Bros Coffee has and holds so many friends. For Coffee. Hills Bros. 14,108; Mar. 21.
Hills Bros' Patented Process "Does Right" by the Rare Blend of Coffees. For Coffee. Hills Bros. 14,099; Mar. 21.
Hills Bros' Patented Process "Does Right" By the Rare Blend of Coffees. For Coffee. Hills Bros. 14,075; Mar. 21.
Hills Bros' patented process "does right" by the rare blend of coffees. For Coffee. Hills Bros. 14,110; Mar. 21.
It Is Surprising How Deliciously Different Hills Bros Coffee Tastes. For Coffee. Hills Bros. 14,079; Mar. 21.
It is surprising how deliciously different Hills Bros Coffee tastes. For Coffee. Hills Bros. 14,090; Mar. 21.
It is surprising how deliciously different Hills Bros Coffee Tastes. For Coffee. Hills Bros. 14,102; Mar. 21.
It is surprising how deliciously different Hills Bros Coffee tastes. For Coffee. Hills Bros. 14,113; Mar. 21.
It's a Revelation to Your Taste to Drink a Cup of Hills Bros Coffee. For Coffee. Hills Bros. 14,084–5; Mar. 21.
It's a revelation to your taste to drink a cup of Hills Bros Coffee. For Coffee. Hills Bros. 14,096; Mar. 21.
It's a revelation to your taste to drink a cup of Hills Bros Coffee. For Coffee. Hills Bros. 14,106; Mar. 21.
Larro Calf Meal. For Calf Meal Gruel, Calf Meal (Dry) and Dairy Feed (Dry). Larrowe Milling Company. 14,118; Mar. 21.
Look For The Arab Trade-Mark . . . That Means Hills Bros Coffee. For Coffee. Hills Bros. 14,082; Mar. 21.
Look for the Arab trade-mark . . . that means Hills Bros Coffee. For Coffee. Hills Bros. 14,094; Mar. 21.
Look for the Arab trade-mark . . . that means Hills Bros Coffee. For Coffee. Hills Bros. 14,104; Mar. 21.
Look for the Arab trade-mark . . . that means Hills Bros Coffee. For Coffee. Hills Bros. 14,117; Mar. 21.
Mentolette. For Menthol Pencils. Lobl Manufacturing Company. 14,120; Mar. 21.
Mento-twin Jr. For Menthol Inhalers. Lobl Manufacturing Company. 14,119; Mar. 21.
The Flavor That Makes Hills Bros Coffee Famous, Is The Same In Every Pound. For Coffee. Hills Bros. 14,076; Mar. 21.
The Flavor That Makes Hills Bros Coffee Famous, is the same in Every Pound. For Coffee. Hills Bros. 14,086; Mar. 21.
The flavor that makes Hills Bros Coffee famous is the same in every pound. For Coffee. Hills. Bros. 14,095; Mar. 21.
The flavor that makes Hills Bros Coffee famous, is the same in every pound. For Coffee. Hills Bros. 14,107; Mar. 21.
The mark of Master Weavers. For Rugs and Carpets. Bigelow-Sanford Carpet Co. 14,071; Mar. 21.
There is a flavor such as you never dreamed of, in every pound of Hills Bros Coffee. For Coffee. Hills Bros. 14,116; Mar. 21.
There is Flavor Such as You Never Dreamed of in Every Pound of Hills Bros Coffee. For Coffee. Hills Bros. 14,083; Mar. 21.
There is flavor such as you never dreamed of, in every pound of Hills Bros Coffee. For Coffee. Hills Bros. 14,093; Mar. 21.
There is flavor such as you never dreamed of, in every pound of Hills Bros Coffee. For Coffee. Hills Bros. 14,105; Mar. 21.
They Call It "The World's Finest Coffee" . . . And Here Is the Reason. For Coffee. Hills Bros. 14,078; Mar. 21.
They call it the world's finest coffee . . . and here is the reason. For Coffee. Hills Bros. 14,101; Mar. 21.
They call it the world's finest coffee . . . and here is the reason. For Coffee. Hills Bros. 14,112; Mar. 21.
When You Taste Hills Bros Coffee, You'll Realize The Importance Of Perfect Roasting. For Coffee. Hills Bros. 14,080; Mar. 21.
When you taste Hills Bros Coffee, you'll realise the importance of perfect roasting. For Coffee. Hills Bros. 14,091; Mar. 21.
When you taste Hills Bros Coffee, you'll realise the importance of perfect roasting. For Coffee. Hills Bros. 14,114; Mar. 21.
When You Taste Hills Bros Coffee, You're Tasting a Flavor No Other Coffee Has. For Coffee. Hills Bros. 14,074; Mar. 21.
When you taste Hills Bros Coffee, you're tasting a flavor no other coffee has. For Coffee. Hills Bros. 14,088; Mar. 21.
When you taste Hills Bros Coffee, you're tasting a flavor no other coffee has. For Coffee. Hills Bros. 14,098; Mar. 21.
When you taste Hills Bros Coffee, you're tasting a flavor no other coffee has. For Coffee. Hills Bros. 14,109; Mar. 21.
Why Hills Bros Coffee has and holds so many friends. For Coffee. Hills Bros. 14,087; Mar. 21.
You'll Never Know What "Matchless, Uniform Flavor" Means, Until You Use Hills Bros Coffee. For Coffee. Hills Bros. 14,077; Mar. 21.
You'll never know what "matchless, uniform flavor" means until you use Hills Bros Coffee. For Coffee. Hills Bros. 14,089; Mar. 21.
You'll never know what "matchless, uniform flavor" means until you use Hills Bros Coffee. For Coffee. Hills Bros. 14,100; Mar. 21.
You'll never know what "matchless, uniform flavor" means until you use Hills Bros Coffee. For Coffee. Hills Bros. 14,111; Mar. 21.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 21ST DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abatgis, George, et al. (See Davison, Goliat, assignor.)
Abramson, Alexander, Prague, Czechoslovakia. Device for turning piston rings. 1,901,942; Mar. 21.
Acheson, Marcus A., Schenectady, N. Y., assignor to General Electric Company. Electron discharge device. 1,902,481; Mar. 21.
Acheson, Marcus A., and J. L. Zehner, Schenectady, N. Y., assignors to General Electric Company. Electron discharge apparatus. 1,902,482; Mar. 21.
Actiengesellschaft C. P. Goerz Optische Anstalt Actiova spolecnost K. P. Goerz Opticky ustav. (See von Hoft, C., and Schier, assignors.)
Adam, Frederick B., St. Louis, Mo. Lighting control apparatus. 1,901,886; Mar. 21.
Adell, John A., Orange, Mass. Junction box. 1,901,943; Mar. 21.
Aktiebolaget Gerh. Arehns Mekaniska Verkstad. (See Johnson, Bror A. E., assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Keller, Robert, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Kern, Erwin, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Urich, Moritz, assignor.)
Aktiengesellschaft für Stickstoffdünger. (See Geis, Wilhelm T., assignor.)
Albertson & Company. (See Albertson, Frans O., assignor.)
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Valve seat tool. 1,902,207; Mar. 21.
Albrecht, Christian A., Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y. Wiping mechanism for matrix composing and line casting machines. 1,902,482; Mar. 21.
Alex, Max, Alhambra, Calif., assignor to York Water Corporation, Ltd. Stand for bottled water or the like. Des. 89,526; Mar. 21.
Allen, Clarence. (See Melin, Otto, assignor.)
Allen, Lawrence H., Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,901,944; Mar. 21.
Allerding, Cletus N., Metropolis, Ill. Folding table. 1,901,887; Mar. 21.
Allis-Chalmers Manufacturing Company. (See Grow, John H., assignor.)
Allis-Chalmers Manufacturing Company. (See Newhouse, Ray C., assignor.)
Allis-Chalmers Manufacturing Company. (See Nichols, Louis C., assignor.)
Allis-Chalmers Manufacturing Company. (See Sprado, Carl G., assignor.)
Amburgen Construction Company. (See Burroughs, Edgar H., assignor.)
American Bemberg Corporation. (See Meyer-Gaus, Karl, assignor.)
American Chain Company. (See Nalle, John M., assignor.)
American Dairy Supply Company, The. (See Thomas, Sherman O., assignor.)
American Floor Surfacing Machine Company, The. (See Myers, Harry L., assignor.)
American Glanzstoff Corporation. (See Krause, Alfons, assignor.)
American Glanzstoff Corporation. (See Schmidt, Kurt, assignor.)
American Glanzstoff Corporation. (See Stöckly, J. J., and Witte, assignors.)
American Optical Company. (See Gunning, William A., assignor.)
American Telephone and Telegraph Company. (See Holden, William H. T., assignor.)
American Windsor Glass Company. (See Clark, Henry F., assignor.)
Amsler-Morton Company, The. (See Geer, Paul L., assignor.)
Anciens Etablissements R. Cornely & Cie (Societe Anonyme.) (See Morel, Felix, assignor.)
Anderson, Arvid E., Lansdowne, Pa., assignor to General Electric Company. Automatic reclosing circuit breaker system. 1,902,488; Mar. 21.
Anderson, Carl O. (See Davis, S. H., Anderson, Smith, and Hanley.)
Anderson, Felix F., Oslo, Norway. Pneumatic tire. 1,901,862; Mar. 21.
Anderson, Gustaf E., Brockton, Mass. Machine for attaching ornaments to shoes. 1,902,605; Mar. 21.
Anderson, Louis W., Elizabeth, N. J., assignor to Gillette Safety Razor Company, Boston, Mass. Strip supporting mechanism. 1,902,010; Mar. 21.
Anderson, Maurice, Mason City, Iowa. Life preserver suit. 1,901,859; Mar. 21.
Anderson, Maurice, Edgewood, R. I., assignor to Levy, Anderson Co., Inc. Foldable buckle. 1,902,585; Mar. 21.
Andrew, Fred. W., Philadelphia, Pa., assignors to Briggs & Stratton Corp., Milwaukee, Wis. Making a spring cover. 1,902,606; Mar. 21.
Andrews, Paul D., Schenectady, N. Y., assignor to General Electric Company. Regulating means for high power electric discharge amplifiers. 1,902,484; Mar. 21.
Anetsberger, Frank A. and W., Chicago, Ill. Humidifying apparatus. 1,901,888; Mar. 21.
Anetsberger, William. (See Anetsberger, Frank A. and W.)
Anklam, Otto, Minneapolis, Minn. Street lamp cable securing device. Re18,760; Mar. 21.
Appleton Electric Company. (See Goetzelman, William, assignor.)
Arkenburgh, Weber H., Schenectady, N. Y., assignor to General Electric Company. Electrical control system. 1,902,485; Mar. 21.
Armstrong Cork Company. (See Farmer, J. A., and Fichter, assignors.)
Armstrong Cork Company. (See Halliwell, Robert G., assignor.)
Armstrong Cork Company. (See Pieper, E. J., Smith, and Vogt, assignors.)
Arnest, Howard P. (See Brooks, Linzy W., assignor.)
Ashby, John T. (See Welch, S. A., Guyler, Ashby, and Boaler.)
Asser, Erich, Wandsbek, Germany. Treating drying oils. 1,902,684; Mar. 21.
Associated Electric Laboratories, Inc. (See Saunders, Norman H., assignor.)
Atlantic Carton Corporation. (See Whitehead, Earl B., assignor.)
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Transmission line. 1,901,880; Mar. 21.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Conductor clamp. 1,902,008; Mar. 21.
Austin, Arthur O., near Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Conductor attachment. 1,902,009; Mar. 21.
Austin, Arthur O., Barberton, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio. Electrostatic condenser. 1,902,152; Mar. 21.
Austin, Dwight E., Los Angeles, Calif. Automobile stage body. 1,902,607; Mar. 21.
Automatic Safe-Start Company. (See Knapp, Arthur S., assignor.)
Automatic Water Softener Company. (See Dotterweich, Andrew J., assignor.)
Avery, Edward S., East Hampton, N. Y. Cushioning device. 1,901,945; Mar. 21.
Avery, Henry C., New Brunswick, and L. Kirschbraun, Leonia, N. J., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass. Roofing and building material. 1,902,298; Mar. 21.
Avery Power Machinery Co. (See Mentor, E. W., and Scranton, assignors.)
Avery Power Machinery Co. (See Reynolds, J. N., and Scranton, assignors.)
Babcock & Wilcox Company, The. (See Kerr, Howard J., assignor.)
Bachhuber, Philip. (See Dorst, J., and Bachhuber.)
Bachrach, Joseph. (See Nilsson, O. F., and Bachrach.)
Back, Robert, and G. A. Cooper, Chicago, Ill., assignors, by mesne assignments, to Pen Desk Set Company. Desk pen holder. 1,902,208; Mar. 21.
Badgley, Laurie C., assignor of one-half to R. C. Chattin, Boise, Idaho. Windrowing machine. 1,901,889; Mar. 21.
Baird, Cliff, and W. E. Robertson, Eugene, Oreg. Attaching means for fishing reels. 1,902,749; Mar. 21.
Bakelite Building Products Company. (See Harshberger, Norman P., assignor.)
Baker, Ida S., Indianapolis, Ind. Artist's kit. 1,901,861; Mar. 21.
Baker, William H., Montreal, Quebec, Canada. Warp-stop motion for looms. 1,902,518; Mar. 21.
Baldwin, Nathaniel, East Mill Creek, Utah. Combination tongs and poker device for fire grates and fireplaces. 1,902,685; Mar. 21.
Ballard, Milton H., and D. G. McLean, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J. Press. 1,902,664; Mar. 21.
Baltzley, Louis E., Glen Ridge, and F. Goertz, Newark, N. J. Glass holder. 1,902,606; Mar. 21.
Barden, William S. (See Beers, G. L., and Barden.)

Bark, Walter, Annaburg, Germany. Tree-planer for cutting or working out resin-passages in trees. 1,901,946; Mar. 21.

Barks, Frank S., St. Louis, Mo. Dispensing apparatus. 1,902,750; Mar. 21.

Barnes, Frank J., St. Louis, Mo. Stiffener pin for soft collars. 1,902,153; Mar. 21.

Barnhart, George E., New Brighton, and H. E. Pfaff, Warren, assignors to J. M. Guthrie and W. B. Wharton, trustees, Pittsburgh, Pa. Cementitious composition. 1,901,890; Mar. 21.

Barrington, Arthur H., et al. (See Foss, Leland L., assignor.)

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging. 1,902,299; Mar. 21.

Barrows, Donald S., Rochester, assignor to The Symington Company, New York, N. Y. Draft rigging backstop. 1,902,300; Mar. 21.

Bartholomew, Tracy, Pittsburgh, Pa. Treatment of slag. 1,901,891; Mar. 21.

Bates, Albert J., assignor to Ditto Incorporated, Chicago, Ill. Duplicating apparatus. 1,902,278; Mar. 21.

Bauman, Frank, Honesdale, Pa. Spindle. 1,902,751; Mar. 21.

Baumann, Paul, H. Schilling, and A. Fischer, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Treating carbonaceous materials with electric arcs. 1,902,351; Mar. 21.

Baumgärtel, Carl, Zeulenroda, Germany. Straight bar knitting machine. 1,902,752; Mar. 21.

Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for rock drills. 1,902,536; Mar. 21.

Beanblossom, Emmett M., Corydon, Ind. Foliage trimmer. 1,902,114; Mar. 21.

Beardsley, Edwin W., and D. M. Evans, Texas City, Tex., assignor to Petroleum Conversion Corporation, New York, N. Y. Distilling mineral oils. 1,901,863; Mar. 21.

Beaver, David J., Elizabeth, N. J., assignor to General Atlas Carbon Company, Dover, Del. Method of and apparatus for producing carbon black. 1,902,753; Mar. 21.

Bechler, André, Moutier, Switzerland. Automatic lathe for high speed work. 1,902,754; Mar. 21.

Beerbower, Russell D., Fort Wayne, Ind. Mechanical toy. 1,902,154; Mar. 21.

Beers, George L., East Pittsburgh, and W. S. Barden, North Braddock, Pa., assignors to Westinghouse Electric and Manufacturing Company. Loud speaker mounting. 1,902,609; Mar. 21.

Behimer, Otto, Chicago, Ill., assignor to The Texas Company, New York, N. Y. Treating hydrocarbon oils. 1,902,056; Mar. 21.

Bell, Forrest F., assignor to Curtis Companies, Incorporated, Clinton, Iowa. Window frame construction. 1,902,209; Mar. 21.

Bell, John W., Chicago, Ill. Coffee dispenser. Des. 89,479; Mar. 21.

Bell Telephone Laboratories, Incorporated. (See Allen, Lawrence H., assignor.)

Bell Telephone Laboratories, Incorporated. (See Bescherer, Edwin A., assignor.)

Bell Telephone Laboratories, Incorporated. (See Clarke, Harry R., assignor.)

Bell Telephone Laboratories, Incorporated. (See Dixon, J. B., and Honan, assignors.)

Bell Telephone Laboratories, Incorporated. (See Gooderham, John W., assignor.)

Bell Telephone Laboratories, Incorporated. (See Means, Winthrop J., assignor.)

Bell Telephone Laboratories, Incorporated. (See Peterson, Eugene, assignor.)

Bell Telephone Laboratories, Incorporated. (See Tinus, William C., assignor.)

Bellanca, Giuseppe M., Wilmington, Del. Aeroplane wing construction. 1,901,864; Mar. 21.

Beluche, Fernand E. (See Brace, W. F., and Beluche.)

Bendix Aviation Corporation. (See Evans, William F., assignor.)

Bendix Aviation Corporation. (See Wilson, Wesley, assignor.)

Bendix Brake Company. (See La Brie, Ludger E., assignor.)

Bendix Brake Company. (See McDonald, Eugene G., assignor.)

Bendix Brake Company. (See Norton, Raymond J., assignor.)

Bendix Brake Company. (See Sanford, Roy S., assignor.)

Bendix Brake Company. (See Thomas, George J., assignor.)

Bernaud, Felicie E. A. W., Paris, France. Case for lipsticks. 1,902,537; Mar. 21.

Berkheimer, Jesse H., Tacoma, Wash. Interlocking shingle. 1,902,155; Mar. 21.

Bernstein, Max. (See Parker, Clark W., assignor.)

Berry, Herbert H., London, England. Electric imitation fire. 1,902,274; Mar. 21.

Bescherer, Edwin A., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Supporting device. 1,901,947; Mar. 21.

Bessy, Peter F., Detroit, Mich. Windshield wiper. 1,902,610; Mar. 21.

Beste, Ernst A., Kohler, Wis. Drilling machine. 1,902,055; Mar. 21.

Better Packages, Incorporated. (See Krueger, Theodore H., assignor.)

Bigelow, George E., et al. (See Weis, Arthur E., assignor.)

Bigga, John L., Chicago, Ill., assignor to Queen Anne Candy Company, Hammond, Ind. Confection machine. 1,902,755; Mar. 21.

Binlek, Georg, Berlin, assignor to Telephon-Apparat Fabrik E. Zwietusch and Company, Charlottenburg, Berlin, Germany. Pay station apparatus. 1,902,210; Mar. 21.

Bins, Arthur, Berlin, and C. Rith, Rangdorf, Germany. Heterocyclic arseno-compounds and purifying same. 1,902,756; Mar. 21.

Birdsey, Charles R., Oak Park, and H. W. Reel, Hinsdale, assignors to United States Gypsum Company, Chicago, Ill. Ceiling construction. 1,902,796; Mar. 21.

Bishop, Leon C., Binghamton, and S. E. Swick, assignors to International Time Recording Company of New York, Endicott, N. Y. Card rack. 1,902,156; Mar. 21.

Bjorklund, Henry L., Minneapolis, Minn. Hair collecting device. 1,902,211; Mar. 21.

Bjorkman, George E., Djursholm, Sweden, and J. Geloso, New York, N. Y. Hair curler. 1,901,892; Mar. 21.

Blackman, Earl P. and L. D., Battle Creek, Mich.; said Earl P. Blackman assignor to said Leon D. Blackman. Carrier for cable and wire reels. 1,902,611; Mar. 21.

Blackman, Leon D. (See Blackman, Earl P. and L. D.)

Bloedel, Henry A., Pittsburgh, Pa. Combination cabinet and seat construction. 1,902,819; Mar. 21.

Blomstrom, Charles, Minneapolis, Minn. Measuring and dispensing device for receptacles. 1,902,157; Mar. 21.

Blossom, Carl W., Cleveland, and W. H. Staples, Cleveland Heights, Ohio. Vending machine. 1,902,612; Mar. 21.

Blue, Edward B., executor. (See Blue, Louis V.)

Blue, Louis V., deceased, Pittsburgh, Pa., Edward B. Blue, executor. Automatic closer for windows and the like. 1,902,392; Mar. 21.

Blumberg, Gustav, Berlin-Spandau, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Fuse. 1,902,613; Mar. 21.

Boaler, William H. (See Welch, S. A., Guyler, Ashby, and Boaler.)

Bock, William E., West Palm Beach, Fla. Folding golf tee. 1,901,948; Mar. 21.

Bohn Aluminum & Brass Corporation. (See Fiegel, William J., assignor.)

Boley, Roy A., Indianapolis, Ind., assignor to J. B. Colt Company. Acetylene generator. 1,902,757; Mar. 21.

Boljahn, Adolf W. C., Jersey City, N. J., assignor to Wired Radio, Inc., New York, N. Y. Radio receiving system. 1,902,352; Mar. 21.

Bonce, Fred, Seattle, Wash. Towing device. 1,902,212; Mar. 21.

Bonicot Corporation of America. (See Herrmann, Karl, assignor.)

Borgeson, Charles A., San Francisco, Calif. Gas saver. 1,902,275; Mar. 21.

Bosch, Alberto, Habana, Cuba. Anchor for boats. 1,902,393; Mar. 21.

Bouwers, Albert, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. X-ray installation. 1,901,865; Mar. 21.

Bower, Harry A., Los Angeles, Calif. Control mechanism for vibra harps. 1,902,614; Mar. 21.

Bowman, A. B. (See Brockway, John P., assignor.)

Bowser, S. F., & Company. (See Brace, W. F., and Beluche, assignors.)

Bowser, S. F., & Company. (See Warner, Joseph R., assignor.)

Boyce, William S., Chicago, Ill. Rail support and fastening means. 1,902,615; Mar. 21.

Brace, William F., and F. E. Beluché, Buffalo, N. Y., assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Distilling apparatus. 1,902,538; Mar. 21.

Brauer, Carl F., Stettin, Germany. Stencil. 1,902,589; Mar. 21.

Braun, Gustav F. (See Smith, B. M., Langley, and Braun.)

Brehmer, Gebruder. (See Kleinschmit, Oscar, assignor.)

Brenaman, Harry A. (See Schmidt, V. P., and Brenaman.)

Brennan, Daniel A., Chicago, Ill. Fastener. Re18,770; Mar. 21.

Brewer, Chas. A., & Sons. (See Brewer, Kenneth E., assignor.)

Brewer, Kenneth E., assignor to Chas. A. Brewer & Sons, Chicago, Ill. Collapsible holder. 1,902,011; Mar. 21.

Bridgwater Machine Company, The. (See Kraft, Herman T., assignor.)

Briggs & Stratton Corp. (See Andrew, Fred W., assignor.)

Bristol Nurseries, Inc. (See Cumming, Alexander, jr., assignor.)

Britton, John G. (See Hopkinson, H., and Britton.)

Brockway, John P., Coronado, assignor to A. B. Bowman, San Diego, Calif. Reproducing images on metallic surfaces. 1,902,213; Mar. 21.

Brodie, George H., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electrical protector device. 1,901,893; Mar. 21.

Brodsky, Michel, Paris, France, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,480; Mar. 21.

Brooks, Linzy W., assignor of one-third to H. P. Arnest, Portland, Oreg. Shoe heel. 1,902,686; Mar. 21.

Brooks, Manley E. (See Plant, R. A., and Brooks.)

Brown, Cicero C., Houston, Tex. Well control device. 1,902,540; Mar. 21.

Brown Company. (See Burke, Edmund, assignor.)

Brown, Franklin, assignor to General Health Corporation, Philadelphia, Pa. Nipple. 1,902,483; Mar. 21.

Brown, George G., and M. Souders, jr., Ann Arbor, Mich. Method and apparatus for igniting combustible mixtures. 1,902,541; Mar. 21.

Brown, Robert N., assignor to Packard Motor Car Company, Detroit, Mich. Machine tool. 1,902,012; Mar. 21.

Brump, Herbert L., F. O., and F. E. Gray, assignors to General Motors Radio Corporation, Dayton, Ohio. Automatic phonograph. 1,902,158; Mar. 21.

Brungardt, Alphonse O., Scituate, F. H. Morehead, Brookline, and J. W. Morrissey, Medford, Mass. Portable pipe cutter. 1,902,616; Mar. 21.

Brush Laboratories Company, The. (See Sawyer, Charles B., assignor.)

Bryan, Hamilton V., U. S. Navy. Toothbrush. 1,901,866; Mar. 21.

Bryce, James W., Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y. Controlling devic for record-controlled machines. 1,902,013; Mar. 21.

Buckeye Steel Castings Company, The. (See Murphy, George M., assignor.)

Budd Wheel Company. (See Ekserdjian, Carolus L., assignor.)

Budd Wheel Company. (See Ragsdale, Earl J. W., assignor.)

Buettner, Raymond J., and R. A. Found, West Allis, Wis., J. M. Muntner, Chicago, and J. J. Neits, Naperville, Ill., and Frank C. Zansig, Milwaukee, Wis., assignors to Dudley Lock Corporation, Chicago, Ill. Self-closing combination lock. 1,902,214; Mar. 21.

Bull, Charles S., Colton, Calif. Gauge for low temperature fluids. 1,902,276; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,482; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,483; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,484; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,485; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,486; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,487; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,488; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Coffee pot or similar article. Des. 89,489; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,490; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,490; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,491; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,492; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,493; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,494; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,495; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,496; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,497; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,498; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,499; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,500; Mar. 21.

Buma, Yukio, assignor to Morimura Bros. Inc., New York, N. Y. Plate or similar article. Des. 89,501; Mar. 21.

Burd High Compression Ring Company. (See Haegg, Rudolph A., assignor.)

Burke, Edmund, Portland, Me., assignor to Brown Company, Berlin, N. H. Fuse cut-out. 1,901,894; Mar. 21.

Burke, Stephen P., New York, N. Y., assignor to General Atlas Chemical Company, Dover, Del. Carbon black process and apparatus. 1,902,797; Mar. 21.

Burnham, Walter E. (See Rawdon, H., and Burnham.)

Burr, Gordon A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. High-voltage bushing device. 1,902,617; Mar. 21.

Burroughs, Edgar H., Scarsdale, assignor to Ambursen Construction Company, Inc., New York, N. Y. Dam. 1,902,353; Mar. 21.

Burt, F. N., Company, Ltd. (See Breux, Alexander H., assignor.)

Burt, Harold A., St. Albans, N. Y., assignor to Mergenthaler Linotype Company. Knife wiper. 1,902,424; Mar. 21.

Burtnett, Everett R., Pasadena, Calif. Transmission mechanism. 1,902,618; Mar. 21.

Burton, Henry, Gardena, Calif. Selective system. 1,901,867; Mar. 21.

Burton, Stuart M., Burnham, England. Heat exchanger. 1,902,220; Mar. 21.

Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Brake beam support bracket. 1,902,215; Mar. 21.

Butler, Henry E., East Orange, N. J., and C. J. Young, Ardmore, Pa., assignors to General Electric Company. Picture transmission. 1,902,496; Mar. 21.

Battress, Joseph A., South Pasadena, Calif., assignor of one-half to George Parker, Jackson, Miss. Exterior gripping device. 1,902,216; Mar. 21.

Bunnaird, Raleigh R., Washington, D. C. Sheet of paper. Des. 89,481; Mar. 21.

Calkins, Elmer H. (See Miller, L. M., Greene, Miller, and Calkins.)

Calvert, Francis V., Madison, Me., assignor to General Electric Company. Oil-filled high tension cable. 1,902,487; Mar. 21.

Camerpta, Louis A., Burlington, N. J., assignor to Walter Wood, Philadelphia, Pa. Chuck for centrifugal casting machines. 1,902,301; Mar. 21.

Campbell, Arthur W., Stow, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Rubber composition and preserving rubber. 1,902,115; Mar. 21.

Campbell, Guy O., West Grinstead, Horsham, England. Ash tray. 1,902,014; Mar. 21.

Campbell, William B., Nashville, Tenn. Flush-tank lever. 1,902,758; Mar. 21.

Cane, Gordon F., assignor, by mesne assignments, to T. Thompson, San Francisco, Calif. Counterbalancing means for foldable beds. 1,902,619; Mar. 21.

Cape, William H., Cumberland Mills, Me., assignor to S. D. Warren Company, Boston, Mass. Paper making apparatus. 1,902,796; Mar. 21.

Capps, Frank L., Milford, assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn. Wire stylus and feeding same. 1,902,087; Mar. 21.

Carbon Monoxide Eliminator Corporation. (See Fraser, J. C. W., and Kassel, assignor.)

Carlson, George, Bridgeport, Conn., assignor to General Electric Company. Outlet box. 1,902,488; Mar. 21.

Carpenter, Charles H., Chicago, Ill. Doughnut machine and the like. 1,902,058; Mar. 21.

Carrier Engineering Corporation. (See Lewis, Leo L., assignor.)

Carteret, Paul A., Neuilly-sur-Seine, France. Suspension spring. 1,902,394; Mar. 21.

Case, J. I., Company. (See Huddle, Edwin F., assignor.)

Castle, Wilmot V., assignor to Wilmot Castle Co., Rochester, N. Y. Sterilizing apparatus. 1,902,687; Mar. 21.

Castlen, Robert C., assignor to Palm Beach Garment Company, West Palm Beach, Fla. Waist band construction. 1,902,116; Mar. 21.

Catarau, Jules, Seattle, Wash. Fish-bait adjusting device. 1,902,217; Mar. 21.

Cataudella, Alfred S., Bridgeport, Conn. Brake band signaling device. 1,902,759; Mar. 21.

Caterpillar Tractor Co. (See Wickersham, Elmer H., assignor.)

Celanese Corporation of America. (See Moss, William H., assignor.)

Celanese Corporation of America. (See Moss, W. H., and White, assignors.)

Celanese Corporation of America. (See Welch, S. A., Guyler, Ashby, and Boaler, assignors.)

Century Zinc Company, The. (See Davis, S. H., Anderson, Smith, and Hanley, assignors.)

Cesario, Mary, Kenosha, Wis. Mop wringer. 1,902,688; Mar. 21.

Champion Spring Company, The. (See Ianzy, Frank L., assignor.)

Chapman, Penrose E., St. Louis, Mo. Testing instrument and regulator. 1,902,542; Mar. 21.

Charlesworth, Ira L., Newton, Iowa. Tractor cultivator. 1,902,689; Mar. 21.

Chase Candy Company. (See Chase, Charles C., assignor.)

Chase, Charles C., assignor to Chase Candy Company, St. Joseph, Mo. Special package. 1,902,760; Mar. 21.

Chase, Curtis D., Boston, Mass., assignor to Chase Rights Corporation, Philadelphia, Pa. Printing of films. 1,902,277; Mar. 21.

Chase, Curtis D., Boston, Mass., assignor to Chase Rights Corporation, Philadelphia, Pa. 1,902,278; Mar. 21.

Chase Rights Corporation. (See Chase, Curtis D., assignor.)

Chatillon, John, & Sons. (See Reis, Leonard W., assignor.)

Chattin, Robert C. (See Bafgley, Laurie C., assignor.)

Cheatham Electric Switching Device Company. (See Richterkessing, Frank H., assignor.)

"Chemical Works formerly Sandoz." (See Kreis, Walter, assignor.)

Chemische Fabrik Pott & Co. (See Muller, Robert, assignor.)

Cheney, Sarah E., Los Angeles, Calif. (Packing frame for automobile trunks and suitcases. 1,901,895; Mar. 21.

Chicago, Bridge & Iron Company. (See Horton, George T., assignor.)

Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)

Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)

Chikuan Oil Tool Company. (See Ellingsen, Frank, assignor.)

Chiles, George S. (See Dreibuss, H. C., and Chiles.)
Christiance Harry C., Compton, Ill. Hay unloading apparatus. 1,902,761; Mar. 21.
Chrysler Corporation. (See Herreshoff, Alexander G., assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See Sanders, Rufus C., assignor.)
Clark, Edgar M., Greenwich, Conn., assignor to Standard-I. G. Company. (Method and apparatus for hydrogenation and distillation. 1,902,015; Mar. 21.
Clark, Frank M., Pittsfield, Mass., assignor to General Electric Company. Insulating composition. 1,902,489; Mar. 21.
Clark, George E., assignor to The George P. Clark Company, Windsor Locks, Conn. Fastening means for securing the ends of a length of material to a reel. 1,901,949; Mar. 21.
Clark, George P., Company, The. (See Clark, George E., assignor.)
Clark, Henry F., New Kensington, assignor to American Window Glass Company, Pittsburgh, Pa. Glass drawing apparatus. 1,901,896; Mar. 21.
Clark, Willard F., Chicago, Ill. Radiator cap ornament. Des. 89,502; Mar. 21.
Clarke, Harry R., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Sound translating device. 1,901,898; Mar. 21.
Clayton, Martin, M., Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y. Elbow fitting for electrical systems. 1,901,897; Mar. 21.
Clute, Donald. (See Ferris, J. P., Clute, and Wiedmann.)
Cobb, Leland D., assignor to The New Departure Manufacturing Company, Bristol, Conn. Bearing and seal therefor. 1,902,620; Mar. 21.
Coleman, Howard D. (See Stewart, Duncan J., assignor.)
Collins & Aikman Corporation. (See Costello, Joseph P., assignor.)
Colt, J. B., Company. (See Boley, Roy A., assignor.)
Columbia Phonograph Company. (See Capps, Frank I., assignor.)
Comstock, Francis M., et al. (See Knight, Clarence F., assignor.)
Condit Electrical Manufacturing Corporation. (See Edsall, William S., assignor.)
Conlon, Bartholomew J., assignor to The Conlon Manufacturing Company, Bridgeport, Conn. Rivet drilling machine. 1,902,762; Mar. 21.
Conlon Manufacturing Company, The. (See Conlon, Bartholomew, J., assignor.)
Connelly, Lawrence E., Cleveland Heights, Ohio, assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y. Water tube boiler. 1,901,899; Mar. 21.
Conover Company, The. (See Hilpert, W. S., and Stoddard, assignors.)
Conover Company, The. (See Stoddard, Edgar S., assignor.)
Consortium fuer Elektrochemische Industrie, G. m. b. H. (See Hermann, W. O., and Deutsch.)
Continental Can Company. (See Punte, William F., assignor.)
Cook, Asa S., Company, The. (See Crosby, R. S., and Sponsel, assignors.)
Cook Electric Company. (See Persons, Lawrence M., assignor.)
Coomber, Louis L., Freeport, Ill. Wheel ramp. 1,902,218; Mar. 21.
Cooper, Glenn A. (See Back, R., and Cooper.)
Cooper, William, & Newphews Incorporated. (See Timson, Charles E., assignor.)
Copeland Products, Inc. (See Replogle, John B., assignor.)
Copeman Laboratories Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., assignor to Copeman Laboratories Company, Flint, Mich. Refrigerating apparatus. 1,902,016; Mar. 21.
Corke, Ruloff D., Yonkers and Frederik Hansen, White Plains, N. Y. Combination holder and cover for bottles. 1,902,354; Mar. 21.
Cornic, Emil, Paris, France. Umbrella. 1,902,395; Mar. 21.
Coronet Phosphate Company. (See Gooch, S. D., and Kerschbaum, assignors.)
Corporon, George J., Hooksett, N. H. Table leg brace. 1,902,690; Mar. 21.
Costello, Joseph P., assignor to Collins & Aikman Corporation, Philadelphia, Pa. Stop motion for looms. 1,902,302; Mar. 21.
Coty, Inc. (See Tourtois, Fernand, assignor.)
Covey, Clarence F., assignor to McAuley Automatic Trap Company, Pittsburgh, Pa. Steam trap. 1,902,219; Mar. 21.
Cox, Nostrand and Gunnison. (See Gallagher, Vincent J., assignor.)
Crago, Harry R., Schenectady, N. Y., assignor to General Electric Company. Electroresponsive latching mechanism. 1,902,490; Mar. 21.
Creamery Package Mfg. Company, The. (See Hippenmeyer, Irving R., assignor.)
Crews, Clarence S. (See Maxam, Leonard L., assignor.)
Critchett, James H., Douglaston, N. Y., assignor to Electro Metallurgical Company. Production of alloy surface castings. 1,902,059; Mar. 21.
Croft, Hiram D. (See Perkins, J. L., and Croft.)
Crosby, Reuben S., Hartford, and C. W. Sponsel, Wethersfield, assignors to The Asa S. Cook Company, Hartford, Conn. Screw making machine. 1,902,117; Mar. 21.
Crossman, Archibald K., Oakland, Calif. Nonglare reflector. 1,902,321; Mar. 21.
Cuming, George W., New York, N. Y., assignor to M. A. Cuming & Co. Inc. Machine for treating hat bodies. 1,902,118; Mar. 21.
Cuming, M. A., & Co. Inc. (See Cuming, George W., assignor.)
Cumming, Alexander, jr., assignor to Bristol Nurseries, Inc., Bristol, Conn. Chrysanthemum. Pl. Pt. 58; Mar. 21.
Curtis Companies. (See Bell, Forrest F., assignor.)
Curtiss Aeroplane & Motor Company. (See Hathorn, Charles E., assignor.)
Curtiss Aeroplane & Motor Company. (See Page, George A., jr., assignor.)
Curtiss Aeroplane & Motor Company. (See Pearson, Fred A. A., assignor.)
Curtiss Aeroplane & Motor Company. (See Trimbach, Clem G., assignor.)
Curtiss Aeroplane & Motor Company. (See Vaughn, Stanley I., assignor.)
Cutler-Hammer, Inc. (See Tregoning, William C., assignor.)
Czapiewski, Frank M., Milwaukee, Wis. Wind indicator for airplane landing fields. 1,902,763; Mar. 21.
Dabrasky, August, Washington, D. C. Supplying cartridge belts to a feed mechanism. 1,901,868; Mar. 21.
Dahl, Otto, Berlin-Wilmersdorf, and J. Pfaffenberger, Berlin-Mariendorf, Germany, assignors to General Electric Company. Magnetic core. 1,902,491; Mar. 21.
Dahlstrom Metallic Door Company. (See Rose, Gustaf A., assignor.)
Daly, George F., and R. E. Page, assignors to The Tabulating Machine Company, Endicott, N. Y. Tabulating machine for nondecimal systems. 1,902,017; Mar. 21.
D'Andrea, Michael, assignor of one-half to E. J. Stieger, St. Paul, Minn. Stencil cabinet. 1,902,220; Mar. 21.
Dansboe, Harry H., Dallas, Tex., assignor to General Electric Company. Protective device for walking beam pumping rigs. 1,902,492; Mar. 21.
Dantsizen, Christian, Schenectady, N. Y., assignor to General Electric Company. Wire making process. 1,902,493; Mar. 21.
Daux, Gaston, Sevran, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure regulator. 1,901,900; Mar. 21.
David, Bruce W., Cleveland Heights, Ohio, assignor to The Moonbeam Manufacturing Company. Signal viewing attachment for automobiles. 1,902,322; Mar. 21.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Actuating mechanism for pressing machines. 1,902,018; Mar. 21.
Davis, Sidney H., and C. O. Anderson, Baxter Springs, Kans., W. N. Smith, Platteville, Wis., and H. R. Hanley, Rolla, Mo., assignors to The Century Zinc Company. Zinc coated article. 1,902,621; Mar. 21.
Davison, Goliat, assignor of one-third to J. Speroulias and one-third to G. Abatgis, St. Louis, Mo. Hanger for fur scarfs and the like. 1,902,622; Mar. 21.
Day, David E., Los Angeles, Calif. Purifying naphtha stocks. 1,902,221; Mar. 21.
Day, Levi, and W. van Ee, Long Beach, Calif. Tubing cutter. 1,902,355; Mar. 21.
Day, Salisbury M., assignor to General Railway Signal Company, Rochester, N. Y. Flashing light signal. 1,902,799; Mar. 21.
Dayton Air Compressor Company, The. (See Gurley, John W., assignor.)
Dayton Scale Company. (See Ford, Eugene A., assignor.)
Dayton Scale Company. (See Fuller, Frederick L., assignor.)
Dayton Scale Company. (See Reussenzehn, Ernst A., assignor.)
Dechêne, Peter, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y. Printing mechanism. 1,902,060; Mar. 21.
Deere & Company. (See Johnson, Christian E., assignor.)
De Ferranti, Gertrude R. Z., legal representative. (See de Ferranti, Sebastian Z.)
De Ferranti, Sebastian Z., deceased, Hollinwood, by G. R. Z. de Ferranti, London, England, legal representative, assignor to Ferranti Inc., New York, N. Y. Prepayment electricity meter. 1,902,396; Mar. 21.
De Give, Henry L., executor. (See de Give, Julius L., assignor.)
De Give Julius L., deceased, Atlanta, Ga.; Henry L. de Give, executor. Mail bag. 1,902,764; Mar. 21.
Dehydro Company, The. (See Kaplan, Philip, assignor.)
Deitsch, Carl E., Marion, Ohio. Safety cut-out switch. 1,902,765; Mar. 21.
Delage & Cie. (See Eimer, Ernest, assignor.)
De Land, John Del Rea, Pico, Calif. Orchard protective system. 1,902,119; Mar. 21.
Dellinger, Martin C. (See Kulp, H. W., and Dellinger.)
De Loach, Bert H., et al. (See Foss, Leland L., assignor.)
Delta Manufacturing Company. (See Tate, James, assignor.)

De Monge, Gérard, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli, Societa Anonima, Milan, Italy. Chamber of variable volume. 1,902,823; Mar. 21.
De Monge, Gérard, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli, Societa Anonima, Milan, Italy. System for transmitting movement. 1,902,856; Mar. 21.
De Nio, Edgar, Woodford, N. Y. Scraping and cleaning implement. 1,902,766; Mar. 21.
Deppe, William P. (See Musso, Alfred, assignor.)
Detachable Bit Corporation of America. (See Rea, Walter C., assignor.)
Dettlebach, Samuel E., et al. (See Jaworowski, Joseph F., assignor.)
Deutsch, Hans. (See Herrmann, W. O., and Deutsch.)
De Witt, William J., assignor to Shoe Form Co., Inc., Auburn, N. Y. Shoe form. 1,902,120; Mar. 21.
Diamond Power Specialty Corporation. (See Thomas, Willis P., assignor.)
Dickey, John H., Wenatchee, Wash., assignor to Stark Bro's. Nurseries & Orchards Company, Louisiana, Mo. Apple tree. Pl. Pt. 57; Mar. 21.
Dickson, George F., assignor to G. A. Pearson and L. Minter, Chicago, Ill. Marking containers for ice cream and the like. 1,902,543; Mar. 21.
Diefenbach, Ernst. (See Kraeuslein, G., and Diefenbach.)
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Grain door for cars. 1,902,544; Mar. 21.
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Grain door for cars. 1,902,545; Mar. 21.
Ditchfield, Frank, assignor to The Youngstown Steel Door Company, Cleveland, Ohio. Metal door construction. 1,902,546. Mar. 21.
Ditto Incorporated. (See Bates, Albert J., assignor.)
Dixon, John B., Red Bank, and E. M. Honan, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing of electrical contacts. 1,901,901; Mar. 21.
Doherty Research Company. (See Gordon, Philip C., assignor.)
Dorfan, Morton I., assignor to Pangborn Corporation, Hagerstown, Md. Pneumatic cleaning air treatment. 1,902,061; Mar. 21.
Dorst, James, and P. Bachhuber, Mayville, Wis. Freewheeling attachment. 1,902,623; Mar. 21.
Dortmunder, Vulkan A. G. (See Hegemann, Otto, assignor.)
Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Valve mechanism. 1,902,624; Mar. 21.
Dougherty, Robert J., Ambler, assignor to John Wood Manufacturing Company, Conshohocken, Pa. Electrical controlling system for gas water heaters. 1,902,803; Mar. 21.
Dow Chemical Company, The. (See Harlow, I. F., Kenaga, and Dressel, assignors.)
Dow Chemical Company, The. (See Plant, R. A., and Brooks, assignors.)
Dow Chemical Company, The. (See Schwegler, Clarence C., assignor.)
Downie, Robert R., Beaver Falls, Pa. Excavating machine. 1,902,691; Mar. 21.
Downie, Robert R., Beaver Falls, Pa. Excavating machine. 1,902,692; Mar. 21.
Downie, Robert R., Beaver Falls, Pa. Excavating machine. 1,902,693; Mar. 21.
Doyle, Otis F., New Orleans, La. Sheet piling bulkheads. 1,902,397; Mar. 21.
Drapeau, Joseph E., jr. (See O'Brien, W. J., and Drapeau.)
Draper, Ernst E., Scarsdale, assignor to The Perser Corporation, New York, N. Y. Metal binding. 1,901,902; Mar. 21.
Dreibuss, Harry C., and G. S. Chiles, assignors to Scullin Steel Company, St. Louis, Mo. Truck side frame. 1,902,805; Mar. 21.
Dreibuss, Harry C., and G. S. Chiles, assignors to Scullin Steel Co., St. Louis, Mo. Truck bolster. 1,902,806. Mar. 21.
Dreibuss, Harry C., and G. S. Chiles, assignors to Scullin Steel Co., St. Louis, Mo. Reenforced truck bolster. 1,902,807; Mar. 21.
Dressel, Grayton F. (See Harlow, I. F., Kenaga, and Dressel.)
Dresser, S. R., Manufacturing Company. (See Whitaker, Louis P., assignor.)
Dreux, Alexander H., Buffalo, N. Y., assignor to F. N. Burt Company, Ltd., Toronto, Ontario, Canada. Sifter container. 1,902,324; Mar. 21.
Duart Manufacturing Co. Ltd. (See Moseley, Tomlinson I., assignor.)
Dubbs, Carhon P., Wilmette, assignor to Universal Oil Products Company, Chicago, Ill. Apparatus for treating petroleum and other hydrocarbons. 1,901,950; Mar. 21.
Dube, Isadore H., Cincinnati, Ohio. Match box. 1,902,767; Mar. 21.
Dudley Lock Corporation. (See Buettner, R. J., Found, Muntner, Neits, and Zansig, assignors.)
Duer, Edward C., assignor of one-half to J. Harrah, Los Angeles, Calif. Rotary internal combustion engine. 1,902,768; Mar. 21.
Duesenberg, Frederick S., assignor to Duesenberg, Inc., Indianapolis, Ind. Damping device for crank shafts. 1,902,787; Mar. 21.
Duesenberg, Inc. (See Duesenberg, Frederick S., assignor.)
Duffy, Tom I., assignor, by mesne assignments, to Young Motor Trunk Company, Flint, Mich. Running board trim and securing means. 1,901,899; Mar. 21.
Dunham, Arthur L., Tomkinsville, N. Y. Method and apparatus for sterilizing. 1,902,825; Mar. 21.
Dunham, Carlton R., and A. H. Roche, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y. Multiplex telegraph distributor. 1,901,951; Mar. 21.
Du Pont, E. I., de Nemours & Company. (See Kirst, William E., assignor.)
Du Pont, E. I., de Nemours & Company. (See Williams, I., and Neal, assignors.)
Duryea, O. C., Corporation. (See Duryea, Otho C., assignor.)
Duryea, Otho C., Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del. Car construction. 1,902,019; Mar. 21.
Edison, Thomas A., Incorporated. (See Smith, B. M., Langley, and Braun, assignors.)
Edsall, William S., Brookline, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Circuit interruption. 1,902,357; Mar. 21.
Edwards, Reid A., Albert Lea, Minn. Gymnastic apparatus. 1,902,694; Mar. 21.
Edwards, Russell T., assignor to Signode Steel Strapping Company, Chicago, Ill. Sealing tool. 1,901,906; Mar. 21.
Edwards, Walter, Luton, England. Cartridge. 1,902,695; Mar. 21.
Eggen, Oscar E., Charles City, Iowa, assignor to Oliver Farm Equipment Company. Device for synchronizing the speed of a vehicle with the steering mechanism thereof. 1,902,626; Mar. 21.
Ehrlich, William, Chicago, Ill. Safe. 1,901,904; Mar. 21.
Eimer, Ernest, assignor to Delage & Cie., Courbevoie, France. Valve control gear for internal combustion engines. 1,902,696; Mar. 21.
Eisinger, Rudolph J. (See Reavis, A. B., and Isinger.)
Ekstergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Making wheel hubs. 1,902,222; Mar. 21.
Ekstergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Making hubs. 1,902,223; Mar. 21.
Ekstergian, Carolus L., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Making wheel hubs. 1,902,224; Mar. 21.
Elbogen, Paul, Mount Kisco, assignor of one-third to G. D. Kratz, Scarsdale, N. Y. Mold and making the same. 1,902,627; Mar. 21.
Elder, Willis G., West Somerville, Mass. Filter. 1,902,435; Mar. 21.
Electric Vacuum Cleaner Company, Inc. (See Tutsur, Julius, assignor.)
Electro Metallurgical Company. (See Critchett, James H., assignor.)
Electro Metallurgical Company. (See Norwood, Stanley M., assignor.)
Ellen, Samuel. (See Zullig, Emil G., assignor.)
Ellingsen, Frank, Brea, assignor to Chilsan Oil Tool Company, Fullerton, Calif. Coupling. 1,902,697; Mar. 21.
Emerson, Sam W., et al. (See Jaworowski, Joseph F., assignor.)
Emerson, Victor L., Philadelphia, Pa. Variable radius attachment for milling, planing, grinding, or scraping machines. 1,901,952; Mar. 21.
Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Cylinder head fastening means. 1,902,494; Mar. 21.
Endter, Waldemar A., Long Beach, Calif. Rotary belt doorlock. 1,902,547; Mar. 21.
Endter, Waldemar A., Long Beach, Calif. Doorlock. 1,902,628; Mar. 21.
Erfass, Ragnar. (See Ousbäck, Mats, G. H., assignor.)
Eschmann, Max. (See Steinbuch, E., Eschmann, and Schwammberger.)
Esdorn, John H., New Rochelle, N. Y. Store fixture display molding. 1,902,769; Mar. 21.
Evans, Benjamin. (See Sutton, H., Sidery, and Evans.)
Evans, Drue M. (See Beardsley, E. W., and Evans.)
Evans Elevator Equaliser Company. (See Frost, William P., assignor.)
Evans Flexible Reamer Corporation. (See Evans, William H., assignor.)
Evans, Harold, Niagara Falls, Ontario, Canada, assignor to Pollard Machinery Company, Niagara Falls, N. Y. Stone cutting machine. 1,902,279; Mar. 21.
Evans, Sylvester M., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Manufacturing vulcanized rubber and products obtained thereby. 1,902,896; Mar. 21.
Evans, William F., South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y. Drum truing machine. 1,902,629; Mar. 21.
Evans, William H., assignor to Evans Flexible Reamer Corporation, Chicago, Ill. Expansion reamer. 1,902,062; Mar. 21.
Ewing, Herbert O., Middleport, Ohio. Internal combustion engine. 1,902,020; Mar. 21.

Fabrica Italiana Magneti Marelli, Societa Anonima. (See de Monge, Gérard, assignor.)
Faigle, Carl. (See Faigle, Friedrich and C.)
Faigle, Friedrich and C., Hard, near Bregenz, Austria. Apparatus for the multiple or multicolor dyeing of hanks of yarn. 1,902,358; Mar. 21.
Fair, Frank. (See Morgen, R. A., and Fair.)
Fairchild, Alice M., assignor, by mesne assignments, to The Mantle Lamp Company of America, Chicago, Ill. Ceramic catalyzer. 1,902,630; Mar. 21.
Falulah Paper Company. (See Lowe, Joseph A., assignor.)
Farmer, Clyde C., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,901,905; Mar. 21.
Farmer, John A., Lancaster, and H. A. Fichter, Pittsburgh, assignors to Armstrong Cork Company, Lancaster, Pa. Life preserver. 1,901,906; Mar. 21.
Felt & Tarrant Mfg. Company, (See Turck, Joseph A. V., assignor.)
Fenwick, Francis F., jr., East Orange, N. J. Water carrier and the like. 1,902,548; Mar. 21.
Ferranti Inc. (See de Ferranti, Sebastian Z., assignor.)
Ferrario, Achille, Milan, Italy. Propeller with automatic regulation. 1,901,963; Mar. 21.
Ferris, John P., assignor to The Oilgear Company, Milwaukee, Wis. Hydraulic drive. 1,902,487; Mar. 21.
Ferris, John P., Whitefish Bay, Wis., D. Clute, Detroit, Mich., and R. Wiedmann, assignors to The Oilgear Company, Milwaukee, Wis. Furnace operating mechanism. 1,902,063; Mar. 21.
Fiat Società Anonima. (See Pirinoli, Guglielmo, assignor.)
Fichter, Henry A. (See Farmer, J. A., and Fichter.)
Fiegel, William J., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich. Method and apparatus for tinning connecting rod bearings. 1,902,770; Mar. 21.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sole laying machine. 1,902,325; Mar. 21.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sole laying machine. 1,902,899; Mar. 21.
Firebar Corporation. (See Thompson, James S., assignor.)
Fischer, Albert. (See Baumann, P., Schilling, and Fischer.)
Fischer, Albert C., Chicago, Ill., assignor to the Philip Carey Manufacturing Company. Expansion joint. 1,901,870; Mar. 21.
Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. Electric power converting apparatus. 1,902,495; Mar. 21.
Fitz Gerald, Alan S., Wynnewood, Pa., assignor to General Electric Company. High frequency measurement. 1,902,496; Mar. 21.
Flanagan, George J., Chicago, Ill., Earle C. Grannan, executor. Bookholder. 1,902,549; Mar. 21.
Flintermann, Gerhard, West Orange, N. J. Seat. 1,902,631; Mar. 21.
Flintermann, Gerhard, West Orange, N. J. Adjustably supported seat. 1,902,632; Mar. 21.
Flintkote Corporation, The. (See Kirschbraun, Lester, assignor.)
Flüga Aktiengesellschaft. (See Heylandt, Christian W. P., assignor.)
Foley, John R., New York, N. Y. Insulated article. 1,902,438; Mar. 21.
Foley, William J., West Somerville, Mass. Fountain pen. 1,902,633; Mar. 21.
Foote-Burte Company, The. (See Randles, George E., assignor.)
Forbes, Kingston, Flint, assignor to General Motors Corporation, Detroit, Mich. Radiator shutter. Des. 89,503; Mar. 21.
Ford, Eugene A., Scarsdale, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Slicing machine. 1,902,021; Mar. 21.
Ford, Eugene A., Scarsdale, assignor to The Tabulating Machine Company, Endicott, N. Y. Perforating machine. 1,902,064; Mar. 21.
Foreman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Furnace. 1,902,359; Mar. 21.
Forney Combustion Engineering Company. (See Forney, Ross H., assignor.)
Forney, Ross H., assignor to Forney Combustion Engineering Company, Dallas, Tex. Fuel burner. 1,902,225; Mar. 21.
Forrest, Henry O., Andover, Mass., and P. K. Frolich, Elizabeth, N. J., assignors to National Synthetic Corporation, Painesville, Ohio. Oxidising cyclic organic compounds. 1,902,550; Mar. 21.
Foss, Leland L., Statesboro, assignor of fourteen per cent to R. T. Skeffington, fourteen per cent to B. H. DeLoach, and three per cent to A. H. Barrington, Savannah, fourteen per cent to L. V. Graham, Chatham County, and five per cent to S. J. Foss, Statesboro, Ga. Flying worm steam motor. 1,902,439; Mar. 21.
Foss, Sam J., et al. (See Foss, Leland L., assignor.)
Foster, Walter W., Wichita Falls, Tex. Pump rod stuffing box mounting. 1,902,360; Mar. 21.
Found, Robert A. (See Buettner, R. J., Found, Muntner, Neita, and Zanzig.)
Fraser, Joseph C. W., Baltimore, Md., and L. S. Kassel; said Kassel assignor to Carbon Monoxide Eliminator Corporation, Pittsburgh, Pa. Using oxidation catalysts. 1,902,160; Mar. 21.
Fredrickson, Milton O., San Pedro, Calif. Wedge removing tool for electric motors and generators. 1,902,551; Mar. 21.
French Battery Company. (See Shannon, James L., assignor.)
Friedberger-Aaron Manufacturing Company. (See Goldsmith, Edwin M., assignor.)
Frigidaire Corporation. (See Hofferberth, George F., assignor.)
Frigidaire Corporation. (See Mann, Cecil A., assignor.)
Froelicher, Victor, Ridgewood, N. J., assignor to Textile Dyeing and Printing Co. of America, Inc. Weighted silk and weighting the same. 1,902,226; Mar. 21.
Frolich, Per K. (See Forrest, H. O., and Frolich.)
Foster Wheeler Corporation. (See Connelly, Lawrence E., assignor.)
Fox, Jonas H., Seattle, Wash. Boiler. 1,902,159; Mar. 21.
Frelin, Fritjof, Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Pump. 1,902,065; Mar. 21.
Frost, William J., Jackson Heights, N. Y., assignor to Evans Elevator Equaliser Company, Bedford, Ind. Suspension device for equalising the strain on elevator cables. 1,902,161; Mar. 21.
Fruth, Hal F., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Liquid spray device. 1,901,954; Mar. 21.
Fuller, Frederick L., West Orange, N. J., assignor to Dayton Scale Company, Dayton, Ohio. Computing scale. 1,902,066; Mar. 21.
Fuller, Frederick L., West Orange, N. J., assignor to International Time Recording Company, New York, N. Y. Time recorder. 1,902,067; Mar. 21.
Fulton, Otho, Bromley, England. Apparatus for picture transmission or the like. 1,902,552; Mar. 21.
Gaidos, Alonzo F., Redwood City, Calif. Practice cartridge. 1,902,771; Mar. 21.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Metal sharpening machine. 1,902,022; Mar. 21.
Gallagher, Vincent J., Pelham, assignor to Cox, Nostrand and Gunnison, Brooklyn, N. Y. Shade holder for lighting fixtures. 1,902,023; Mar. 21.
Gallagher, Walter J., New York, N. Y. Advertising folder. 1,902,121; Mar. 21.
Garretson, Harry D., assignor to H. F. Waite, New York, N. Y. High potential current unidirectional system and method. 1,902,227; Mar. 21.
Garretson, Harry D., assignor to H. F. Waite, New York, N. Y. Impulse timer. 1,902,228; Mar. 21.
Gasser, Leonides J. (See Gasser, Victor E. and L. J.)
Gasser, Victor E. and L. J., Madison, Wis. Collapsible tube cap. 1,902,698; Mar. 21.
Gebhardt, Frank C., assignor to United Oil Manufacturing Company, Erie, Pa. Grease and making the same. 1,902,635; Mar. 21.
Geer, Paul L., Bellevue, assignor to The Amsler-Morton Company, Pittsburgh, Pa. Apparatus for annealing glassware. 1,902,326; Mar. 21.
Geiger, William A., assignor to W. H. Miner, Inc., Chicago, Ill. Railway draft rigging. 1,902,636; Mar. 21.
Geis, Wilhelm T., Knapsack, near Cologne-on-the-Rhine, assignor to Aktiengesellschaft für Stickstoffdünger, Cologne-on-the-Rhine, Germany. Highly active carbon and preparing it. 1,902,068; Mar. 21.
Geloso, John. (See Bjorkman, George E., and Geloso.)
General Aniline Works, Inc. (See Huismann, J., and Schweitzer, assignors.)
General Aniline Works, Inc. (See Kraenzlein, G., and Diefenbach, assignors.)
General Atlas Carbon Company. (See Beaver, David J., assignor.)
General Atlas Chemical Company. (See Burke, Stephen P., assignor.)
General Electric Company. (See Acheson, Marcus A., assignor.)
General Electric Company. (See Acheson, M. A., and Zebner, assignors.)
General Electric Company. (See Anderson, Arvid E., assignor.)
General Electric Company. (See Andrews, Paul D., assignor.)
General Electric Company. (See Arkenburgh, Weber H., assignor.)
General Electric Company. (See Butler, H. R., and Young, assignors.)
General Electric Company. (See Calvert, Francis V., assignor.)
General Electric Company. (See Carlson, George, assignor.)
General Electric Company. (See Clark, Frank M., assignor.)
General Electric Company. (See Crago, Harry R., assignor.)
General Electric Company. (See Dahl, O., and Pfaffenberger, assignors.)
General Electric Company. (See Dansboe, Harry H., assignor.)
General Electric Company. (See Dantsizen, Christian, assignor.)

General Electric Company. (See Emmet, William L. R., assignor.)
General Electric Company. (See Fitz Gerald, Alan S., assignor.)
General Electric Company. (See Green, Charles F., assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Henshaw, Marshall D., assignor.)
General Electric Company. (See Hill, C. H., and Swerdlow, assignors.)
General Electric Company. (See Hobart, H. M., Stebbins, and Gettelman, assignors.)
General Electric Company. (See Hofmann, Walter, assignor.)
General Electric Company. (See Howe, Goodwin H., assignor.)
General Electric Company. (See Howell, Fred B., assignor.)
General Electric Company. (See Johnson, Wilfrid B., assignor.)
General Electric Company. (See Juhlin, Gustaf A., assignor.)
General Electric Company. (See Kearsley, William K., assignor.)
General Electric Company. (See McEachron, K. B., and Wade, assignors.)
General Electric Company. (See Mittag, Albert H., assignor.)
General Electric Company. (See Orr, Clark, assignor.)
General Electric Company. (See Palmer, Harry L., assignor.)
General Electric Company. (See Paul, William E., assignor.)
General Electric Company. (See Pratt, William H., assignor.)
General Electric Company. (See Ratkovsky, Ferencz, assignor.)
General Electric Company. (See Sabbah, Camil A., assignor.)
General Electric Company. (See Seede, John A., assignor.)
General Electric Company. (See Steenstrup, Christian, assignor.)
General Electric Company. (See Thomson, Elihu, assignor.)
General Electric Company. (See Ungelenk, A., and Hoffman, assignors.)
General Electric Company. (See Valentine, Irving R., assignor.)
General Electric Company. (See Walle, Ludwig S., assignor.)
General Electric Company. (See Warner, Donald F., assignor.)
General Electric Company. (See Warren, H. W. H., Newbound, and Ward, assignors.)
General Electric Company. (See Wiegand, Erich, assignor.)
General Electric Company. (See Woodruff, Henry S., assignor.)
General Electric Company. (See Woods, William J., assignor.)
General Health Corporation. (See Brown, Franklin, assignor.)
General Motors Corporation. (See Forbes, Kingston, assignor.)
General Motors Radio Corporation. (See Brump, H. L. and Frederick O. and F. E., Gray, assignors.)
General Railway Signal Company. (See Day, Salisbury M., assignor.)
General Railway Signal Company. (See Taylor, Herbert B., assignor.)
General Railway Signal Company. (See Willing, Joseph E., assignor.)
Georgoff, Jordan A., Harbin, China. Circulating system. 1,901,871; Mar. 21.
Gerjets, Harry H., Bellingham, Wash. Cigarette receptacle and roller. 1,902,699; Mar. 21.
Gerlach, Hugh. (See Gerlach (née Parker), B. E., and Gerlach.)
Gerlach (née Parker), Bessie E., and H. Gerlach, London, England. Type cleaning instrument. 1,902,024; Mar. 21.
Gesellschaft für Kohlentechnik mit beschränkter Haftung. (See Glund, Wilhelm, assignor.)
Gessner, Ernest, Aktiengesellschaft. (See Wensel, Emil, assignor.)
Gettelman, Arthur F. (See Hobart, H. M., Stebbins, and Gettelman.)
Gewerkschaft Wallram. (See Mentsch, Adolf, assignor.)
Giaimo, Charles V., Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y. Making commutators. 1,901,955; Mar. 21.
Gilbert, Tilmon I., Mount Vernon, Ill. Weir structure. 1,901,956; Mar. 21.
Gill, Edwin R., jr., Yonkers, N. Y., assignor to Prismo Holding Corporation. Sign. 1,902,440; Mar. 21.
Gillette Safety Razor Company. (See Anderson, Louis W., assignor.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette Safety Razor Company. (See Schumacher, Conrad R., assignor.)
Gilpin, Garth G., Riverside, assignor to Railway Metal Products Company, Chicago, Ill. Railway car door fixture. 1,902,772; Mar. 21.
Gioiosa, Joseph, Milton, Mass. Machine for forming waterproof tubing around firework fuse material. 1,902,123; Mar. 21.
Girdwood, Kennet J., Montreal, Quebec, Canada. Revolving parachute. 1,901,957; Mar. 21.
Giuliano, Ronald, South Orange, N. J. Protective head covering. 1,902,441; Mar. 21.
Gluud, Wilhelm, assignor to Gesellschaft für Kohlentechnik mit beschränkter Haftung, Dortmund-Eving, Germany. Producing guanidine-thiocyanate. 1,902,400; Mar. 21.
Goddu, George, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Lasting machine. 1,902,162; Mar. 21.
Goerts, Frederick. (See Baltsley, L. E., and Goerts.)
Goetselman, William, Chicago, Ill., assignor to Appleton Electric Company. Pipe connector. 1,902,329; Mar. 21.
Goldsmith, Alfred N., and I. Welt, New York, N. Y., assignors to Radio Corporation of America. Sound reproducer. 1,902,442; Mar. 21.
Goldsmith, Edwin M., assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa. Buttonhole tape. 1,902,553; Mar. 21.
Gooch, Stapleton D., Lake Wales, and F. P. Kerschbaum, Winter Haven, Fla., assignors to Coronet Phosphate Company, New York, N. Y. Producing red phosphorus. 1,902,144; Mar. 21.
Gooderham, John W., Larchmont, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Substation circuit. 1,901,958; Mar. 12.
Goodman Manufacturing Company. (See Radius, Edward W., assignor.)
Goodman Manufacturing Company. (See Vodos, Frederick W., assignor.)
Goodrich, B. F., Company, The. (See Campbell, Arthur W., assignor.)
Goodrum, Charles L., Athens, Ga., assignor of one-half to L. G. Pacent, New York, N. Y. Control circuit for switches for automatic telephone systems. 1,902,123. Mar. 21.
Goodrum, Charles L., Athens, Ga., assignor of one-half to L. G. Pacent, New York, N. Y. Switch control mechanism for automatic telephone systems. 1,902,163; Mar. 21.
Gordon, Philip C., assignor to Doherty Research Company, New York, N. Y. Flexible transmission. 1,902,800; Mar. 21.
Goss, Byron C., Cleveland, Ohio. System for protecting banks, stores and the like, against robbery, by gas and smoke. 1,901,959; Mar. 21.
Goss, Byron C., Cleveland, Ohio. Insecticidal solution. 1,901,960; Mar. 21.
Gotteman, Joseph M., Paris, France, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,504; Mar. 21.
Graham, Lee V., et al. (See Foss, Leland L., assignor.)
Grannan, Earle C., executor. (See Flanagan, George J., assignor.)
Grant, William F., Newport News, Va., assignor to Newport News Shipbuilding and Dry Dock Company. Rotary valve. 1,901,961. Mar. 21.
Grauer, Solomon, Brooklyn, N. Y. Sadiron. 1,902,025; Mar. 21.
Gray, Floyd E. (See Brump, H. L., and Frederick O. and F. E. Gray.)
Gray, Frederick O. (See Brump, H. L., and Frederick O. and F. E. Gray.)
Gray & Prior Machine Company, The. (See Prior, George A., assignor.)
Grayson Heat Control Inc. (See Vaughn, Sidney P., assignor.)
Great Western Fuse Company. (See La Mar, Frank C., assignor.)
Green, Charles F., Schenectady, N. Y., assignor to General Electric Company. Indicating device. 1,902,497; Mar. 21.
Greene, Haskell M., Whittier, Calif. Device for indicating tension and length of lines in oil wells. 1,901,962; Mar. 21.
Greene, Lynn M. (See Miller, L. M., Greene, Miller, and Calkins.)
Grob, Hugo, Berlin, Germany. Voltage regulating apparatus. 1,902,554; Mar. 21.
Gross, Nathan A., assignor to W. Gross, Fords, N. J. Drop seat pajama. 1,902,624; Mar. 21.
Gross, William. (See Gross, Nathan A., assignor.)
Grow, John H., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Apparatus for treating objects. 1,902,687; Mar. 21.
Grumman, Fred C., Norwalk, Conn., assignor to Mergenthaler Linotype Company. Matrix cabinet. 1,902,443; Mar. 21.
Guhl, Maclyn, Forest Hills, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,505; Mar. 21.
Gühring, Eugen. (See Hagedorn, M. Reichert, and Gühring.)
Guiberson Diesel Engine Company. (See Thaheld, Paul A., assignor.)

Gundersen, Otto C. N., Spokane, Wash. Fire escape. 1,902,230; Mar. 21.
Gunning, William A., assignor to American Optical Company, Southbridge, Mass. Ophthalmological apparatus. 1,902,401; Mar. 21.
Gurley, John W., Miamisburg, assignor to The Dayton Air Compressor Company, Dayton, Ohio. Automatic unloading check valves. 1,902,281; Mar. 21.
Gustafsson, Emil G. T., Stockholm, Sweden. Melting metals in electric furnaces. 1,902,638; Mar. 21.
Guthrie, James M., et al. (See Barnhart, G. E., and Pfaff, assignors.)
Guyler, Albert F. (See Welch, S. A., Guyler, Ashby, and Boaler.)
Hadano, Rinjiro, Honolulu, Hawaii. Switch for direction indicators. 1,902,700; Mar. 21.
Haegg, Rudolph A., assignor to Burd High Compression Ring Company, Rockford, Ill. Piston ring snagging machine. 1,902,164; Mar. 21.
Haertel, Walter G., Minneapolis, Minn. Cleaner for furs and the like and cleaning. 1,902,232; Mar. 21.
Hagedorn, Max, O. Reichert, and G. Gühring, Dessau in Anhalt, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Making mixed cellulose esters and cellulose ether esters. 1,902,280; Mar. 21.
Hahn, Edgar, et al. (See Jaworowski, Joseph E., assignor.)
Halbig, Paul, and F. Kaufler, Munich, assignor to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Germany. Alkoxyldehyde and production of same. 1,902,070; Mar. 21.
Hale, William J., Midland, Mich. Protecting granules of hygroscopic sugars and article produced thereby. 1,902,778; Mar. 21.
Halfvarson, Gustaf A., Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company. Brake. 1,902,640; Mar. 21.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Continuous heat regulator. 1,902,327; Mar. 21.
Hall, Chester I., Philadelphia, Pa., assignor to General Electric Company. Control device. 1,902,498; Mar. 21.
Hall, Nelson W., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Reflector socket. 1,902,026; Mar. 21.
Haller, Hervey H., assignor to The Wehr Motor Company, Los Angeles, Calif. Valve construction. 1,902,069; Mar. 21.
Halliwell, Robert G., Wilmette, Ill., assignor to Armstrong Cork Company, Lancaster, Pa. Building insulation and applying same. 1,902,639; Mar. 21.
Halloran, John P., Mayfield Heights, Ohio. Air driven automobile. 1,902,124; Mar. 21.
Hamersley, Carl S., New York, N. Y. Cushioning pad. 1,902,861; Mar. 21.
Hamilton Foundry and Machine Company, The. (See McDaniel, Donald, assignor.)
Hanavan, William L., Montclair, N. J. Receptacle and closure therefor. 1,902,362; Mar. 21.
Hanley, Herbert B. (See Davis, S. H., Anderson, Smith, and Hanley.)
Hansen, Frank A., Fergus Falls, Minn. Washing machine. 1,902,165; Mar. 21.
Hansen, Frederik. (See Corke, Ruloff D., assignor.)
Hansen, John P., Elmhurst, N. Y. Support and stretching mechanism for motion picture screens. 1,901,963; Mar. 21.
Hanson Scale Company. (See Hanssen, Stan L., assignor.)
Hanssen, Stan L., assignor to Hanson Scale Company, Chicago, Ill. Weighing scale. 1,902,233; Mar. 21.
Harford, Charles G., Quincy, Mass., assignor to The Philadelphia & Reading Coal & Iron Company, Philadelphia, Pa. Coating and coating composition. 1,902,642; Mar. 21.
Harlow, Ivan F., I. A. Kenaga, and G. F. Dressel, assignors to The Dow Chemical Company, Midland, Mich. Continuous process of preparing liquid bromide. 1,902,801; Mar. 21.
Harrah, John. (See Duer, Edward C., assignor.)
Harrod, Horace H., Morris, Ill. Ice cream container. 1,902,072; Mar. 21.
Harshberger, Norman P., Scarsdale, N. Y., assignor to Bakelite Building Products Company, Inc., New York, N. Y. Shingle. Re18,772; Mar. 21.
Harter, Evan C., Sturgis, Mich. Caster mechanism for stands and the like. 1,902,166; Mar. 21.
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Rowe, George E., assignor.)
Hartford-Empire Company. (See Smith, Algy J., assignor.)
Harwick-Etter Company. (See Struen, John A., assignor.)
Hastell, William B., Springfield, Mass. Playground device. 1,901,964; Mar. 21.
Hassell, Marian E., and M. A. Todd, Miami, Fla., assignors of one-third to Starke Hassell, Greeneville, N. C. Egg carton. 1,902,167; Mar. 21.
Hassell, Starke. (See Hassell, M. E., and Todd, assignors.)
Hathorn, Charles E., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company. Stabilizer adjusting mechanism. 1,902,071; Mar. 21.
Haupt, Hans, Berlin, Germany. Telescopic umbrella. 1,902,363; Mar. 21.
Haupt, Hans, Berlin-Wilmersdorf, Germany. Telescopic umbrella. 1,902,774; Mar. 21.
Haveles, Evangel A., Los Angeles, Calif. Restaurant check holder. 1,902,641; Mar. 21.
Hazel, Melvin R., et al. (See Knight, Clarence F., assignor.)
Heckel, Hermann, Cincinnati, assignor to The Twitchell Process Company, St. Bernard, Ohio. Flexible transparent gelatinous product. 1,902,304; Mar. 21.
Hegemann, Otto, assignor of one-half to Dortmunder Vulkan A. G., Dortmund, Germany. Ship drive-coupling mechanism. 1,902,701; Mar. 21.
Heinke, Alfred J., Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y. Textile fabric or similar article of manufacture. Des. 89,506; Mar. 21.
Heints & Kaufman, Ltd. (See Heints, Ralph M., assignor.)
Heints Manufacturing Company. (See Lambert, Albert L., assignor.)
Heints, Ralph M., Palo Alto, assignor to Heints & Kaufman, Ltd., San Francisco, Calif. Receiver for continuous waves. 1,902,234; Mar. 21.
Heints, Ralph M., Palo Alto, assignor to Heints & Kaufman, Ltd., San Francisco, Calif. Radioreceiver power supply. 1,902,235; Mar. 21.
Heints, Ralph M., Palo Alto, assignor to Heints & Kaufman, Ltd., San Francisco, Calif. Connecting plug receptacle. 1,902,236; Mar. 21.
Helms, Waters L., Brooklyn, N. Y., assignor to The New Photomaton, Inc., New York, N. Y. Feeding mechanism for photographic strips. 1,902,281; Mar. 21.
Henkel, Norman F., Sheboygan, Wis. Relief valve. 1,902,027; Mar. 21.
Henny, David C., Portland, Oreg. Concrete dam. 1,902,168; Mar. 21.
Henshaw, Marshall D., Erie, Pa., assignor to General Electric Company. Driving apparatus for self-propelled vehicles. 1,902,500; Mar. 21.
Hering, Herbert C., Cincinnati, Ohio. Curtain display hanger. 1,902,402; Mar. 21.
Herreshoff, Alexander G., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Vehicle body door stiffener. 1,902,499; Mar. 21.
Herrmann, Karl, Vienna, Austria, assignor, by mesne assignments, to Bonicot Corporation of America. Rendering nonpoisonous the tobacco fumes during smoking. 1,902,775; Mar. 21.
Herrmann, Willy O., and H. Deutsch, assignors to Consortium fuer Elektrochemische Industrie, G. m. b. H., Munich, Germany. Producing unsaturated ethers. 1,902,169; Mar. 21.
Hesselman, Knut J. E., Saltsjo-Storangen, Sweden. Internal combustion engine. 1,902,776; Mar. 21.
Hewitt, William R., New York, N. Y. Combination fuel pump and carburetor. 1,902,403; Mar. 21.
Heyer, Don, Los Angeles, Calif. Frame for a power unit. Des. 89,507; Mar. 21.
Heylandt, Christian W. P., Berlin-Britz, Germany, assignor to Flüga Aktiengesellschaft, St. Moritz, Switzerland. Transferring liquefied gases. Re18,774; Mar. 21.
Heywood, Rushie F., Fulton, Ky. Combination cigarette holder and ash tray. 1,902,028; Mar. 21.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Check protector. 1,901,907; Mar. 21.
Hiering, William C., assignor to J. E. Mergott Company, Newark, N. J. Bag frame fastener. 1,901,965; Mar. 21.
Higburg, William, and P. C. Reilly; said Higburg assignor to said Reilly, Indianapolis, Ind. Treating tar and like oils. 1,901,872; Mar. 21.
High, Jurjen S., Oaklyn Manor, N. J., assignor to Westinghouse Electric & Manufacturing Company. Electrical translating device. 1,902,643; Mar. 21.
Hilcken, Valentin, Gersthofen, near Augsburg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing fatty acid esters of borneol and isoborneol. 1,902,364; Mar. 21.
Hilger, Adam, Limited. (See Twyman, Frank, assignor.)
Hill, Charles H., Drexel Hill, and N. Swerdlow, Philadelphia, Pa., assignors to General Electric Company. Bus bar structure. 1,902,501; Mar. 21.
Hills, William M., Hartford, Conn. Water heater. 1,902,365; Mar. 21.
Hilpert, Willis S., Winnetka, and E. S. Stoddard, Berwyn, assignors to The Conover Company, Chicago, Ill. Dishwashing machine. 1,902,237; Mar. 21.
Hintze, Harry, Paterson, N. J. Weighting of natural and artificial silk fibers. 1,902,777; Mar. 21.
Hintze, Harry, Paterson, N. J. Weighting of natural and artificial silk fibers. 1,902,778; Mar. 21.
Hippenmeyer, Irving R., Waukesha, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill. Can washing machine. 1,902,238; Mar. 21.
Hobart, Henry M., Niskayuna, F. O. Stebbins, Schenectady, N. Y., and A. F. Gettelman, Duluth, Minn., assignors to General Electric Company. Operating polyphase alternating current motors. 1,902,444; Mar. 21.
Hobart Manufacturing Company, The. (See Johnston, H. L., and Meeker, assignors.)
Hobbs, John W., assignor to Mechanics Universal Joint Company, Rockford, Ill. Automotive vehicle with radio equipment. 1,902,802; Mar. 21.

Hockensmith Wheel & Mine Car Company. (See Ogilvie, George E., assignor.)
Hofferberth, George F., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,902,445; Mar. 21.
Hoffman, Frank K., Dunkirk, N. Y. Making radiator elements. 1,902,779; Mar. 21.
Hoffman, Ragnar E., Elmwood Park, and C. Paulson, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Apparatus for gauging material. 1,901,966; Mar. 21.
Hofmann, Walter. (See Ungelenk, A., and Hofmann.)
Hofmann, Walter, Erlangen, Germany, assignor to General Electric Company. X-ray tube. 1,902,502; Mar. 21.
Hoge, Daniel W., assignor to C. W. Newbery, Los Angeles, Calif. Treating resins. 1,902,073; Mar. 21.
Hoge, Daniel W., assignor to C. W. Newbery, Los Angeles, Calif. Motor fuel. 1,902,125; Mar. 21.
Holbert, Glen C., San Diego, Calif. Pipe straightening apparatus. 1,902,029; Mar. 21.
Holden Knitting Co. (See Holden, R. M., and Roberts, assignors.)
Holden, Roger M., and J. F. Roberts, assignors to Holden Knitting Co., Worcester, Mass. Knitted lining for rubber footwear and making same. 1,902,780; Mar. 21.
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Gain control apparatus. 1,902,030; Mar. 21.
Holden, William H. T., Brooklyn, N. Y., assignor to American Telephone and Telegraph Company. Filtering apparatus. 1,902,031; Mar. 21.
Holdgrafer, Clem, Clinton, Iowa. Bread serving appliance. 1,902,239; Mar. 21.
Holinger, Emil F., assignor to Hudson Electrical Heating Corporation, New York, N. Y. Electric house heater. 1,902,074; Mar. 21.
Holland Furnace Company. (See Selby, Charles M., assignor.)
Holmes, George A., Newton, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Pin fastener. 1,902,447; Mar. 21.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,902,446; Mar. 21.
Holswarth, Hans, Dusseldorf, Germany, assignor to Holswarth Gas Turbine Co., San Francisco, Calif. Multistage constant volume explosion process and apparatus. 1,901,873; Mar. 21.
Holswarth Gas Turbine Co. (See Holswarth, Hans, assignor.)
Honan, Edward M. (See Dixon, J. B., and Honan.)
Hookless Fastener Company. (See Norton, Samuel H., assignor.)
Hookless Fastener Company. (See Piebl, Henry J., assignor.)
Hoover, Ray B., Oak Park, assignor to Shafer Bearing Corporation, Chicago, Ill. Antifriction bearing. 1,901,967; Mar. 21.
Hopkinson, Harry, and J. G. Britton, Lansdowne, assignors of one-third to T. R. Williams, Scranton, Pa. Plastic composition. 1,902,803; Mar. 21.
Horine, Irving, assignor to The Mengel Company, Louisville, Ky. Method of and apparatus for making flexible veneer. 1,902,032; Mar. 21.
Horton, George T., assignor to Chicago Bridge & Iron Company, Chicago, Ill. Floating roof and sealing means therefor. 1,901,874; Mar. 21.
Horvath, Anthony, Wallingford, Conn. Lifting jack. 1,902,448; Mar. 21.
Hotchkiss, Clifford. (See Phelan, L. A. M., and Hotchkiss.)
Hotse, John K., St. Louis, Mo. Bowl shaped base for golf bags. 1,902,644; Mar. 21.
Howard, James H., assignor to J. H. McEvoy & Company, Houston, Tex. Tubing hanger. 1,902,075; Mar. 21.
Howe, Goodwin H., Scotia, N. Y., assignor to General Electric Company. Coating metals. 1,902,508; Mar. 21.
Howell, Fred B., Schenectady, N. Y., assignor to General Electric Company. Truck. 1,902,504; Mar. 21.
Howenstine, Charles D., North Charleroi, Pa. Machine for counting and delivering coins. 1,902,328; Mar. 21.
Hoyer, Henrik, New York, assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y. Scale. Des. 89,503; Mar. 21.
Hoyos, Ernesto J., Boston, Mass., assignor to Hudson Motor Car Company, Detroit, Mich. Body striping. 1,901,908; Mar. 21.
Hubbard, Edward L., Piedmont, assignor to Water Works Supply Company, San Francisco, Calif. Liquid gauge. 1,902,329; Mar. 21.
Huddle, Edwin F., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Pitman for agricultural implements. 1,901,968; Mar. 21.
Hudson Electrical Heating Corporation. (See Holinger, Emil F., assignor.)
Hudson Motor Car Company. (See Hoyos, Ernesto J., assignor.)
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Hydrocarbon oil conversion. 1,901,969; Mar. 21.
Huff, Lyman C., assignor to Universal Oil Products Company, Chicago, Ill. Fluid heating apparatus. 1,901,970; Mar. 21.
Hughes, Frederick G., assignor to The New Departure Manufacturing Company, Bristol, Conn. Grinding machine. 1,902,505; Mar. 21.
Hughes, Hughey V., assignor of one-third to J. A. Weaver, Oakland, Calif. Combined positive drive with differential characteristics and free-wheeling. 1,902,449; Mar. 21.
Huismann, Johann, and H. Schweitzer, Wiesdorf, near Cologne-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Reserving of animal fibers. 1,902,450; Mar. 21.
Hultgren, Charles R., assignor to S. Karpen & Bros., Chicago, Ill. Reversible seat or chair. 1,902,232; Mar. 21.
Humphreys, Austin G., Brighton, England. Assisting and testing the memory. 1,902,404; Mar. 21.
Hungerbühler, Paul, Oberwil, Switzerland, assignor to Landis & Gyr, A.-G. Horological mechanism. 1,902,126; Mar. 21.
Hunt, Herbert W. and P., Manchester, England. Machine for sharpening screwing taps and the like. 1,902,240; Mar. 21.
Hunt, Percy. (See Hunt, Herbert W. and P.)
Huseon, Emma V., Brooklyn, N. Y. Silencer mouthpiece for telephone transmitters. 1,902,556; Mar. 21.
I. G. Farbenindustrie Aktiengesellschaft. (See Baumann, P., Schilling, and Fischer, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hagedorn, M., Reichert, and Gühring, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hilcken, Valentin, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Neubauer, Carl, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schmid, Otto, assignor.)
Ilgenfritz, Curtis B., York, assignor to United States Glass Company, Pittsburgh, Pa. Pitcher or similar article. Des. 89,525; Mar. 21.
Illinois Tool Works. (See Olson, Carl G., assignor.)
Imatomi, Shoichiro. (See Tanaka, H., and Imatomi.)
Ingalls, Elwin H., Aroma Park, Ill. Gas gun. 1,902,127; Mar. 21.
Ingersoll, Andrew J. (See Jackson, J. C., and Ingersoll.)
Ingersoll Milling Machine Company, The. (See Oberhoffken, Alexander, assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Ingersoll-Rand Company. (See Frelin, Fritjof, assignor.)
Ingersoll-Rand Company. (See Lear, Earl E., assignor.)
Ingersoll-Rand Company. (See McAllister, Raymond C., assignor.)
Ingersoll-Rand Company. (See Terry, Edward F., assignor.)
Ingram, Joseph R., Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Age resisting vulcanized rubber product and manufacturing same. 1,902,405; Mar. 21.
Inokuty, Haruhisa, Hongo-ku, Tokyo, and K. Nagaoka, Shitaya-ku, Tokyo, Japan. Motor for turbo-blowers, centrifugal pumps and the like. 1,902,406; Mar. 21.
Insulex Corporation. (See Nelson, William K., assignor.)
International Business Machines Corporation. (See Wood, George R., assignor.)
International Motor Company. (See Leipert, August H., assignor.)
International Motor Company. (See Matthews, Joseph L., assignor.)
International Printing Company. (See Rector, Frank J., assignor.)
International Time Recording Company of New York. (See Bishop, L. C., and Swick, assignors.)
International Time Recording Company of New York. (See Fuller, Frederick L., assignor.)
Iorio, Adrian J., Randolph, Mass. Fountain pen. 1,901,971; Mar. 21.
Isle, Cecil, London, England. Internal combustion engine. 1,902,761; Mar. 21.
Jackson, Joseph C., and A. J. Ingersoll, Wildwood, N. J. Tire tool. 1,902,283; Mar. 21.
Jacobs Bros. Co., The. (See Hoyer, Henrik, assignor.)
Jacobs, Earl, Brooklyn, N. Y. Combined bridge bid indicator and container. Des. 89,509; Mar. 21.
Jaisale, Gottlob, Feuerbach, near Stuttgart, Germany, assignor to Uhrenfabrik J. Kienzle, Komotau, Czechoslovakia. Escapement and pendulum mechanism. 1,902,366; Mar. 21.
James, Edmund D., assignor to Scovill Manufacturing Company, Waterbury, Conn. Snap fastener socket. 1,902,557; Mar. 21.
Jaworowski, Joseph F., assignor of one-third to S. E. Dettelbach and one-third to S. W. Emerson, Cleveland, Ohio. Pumping apparatus. 1,902,076; Mar. 21.
Jaworowski, Joseph F., assignor of five-eighteenths to S. E. Dettelbach, five-eighteenths to S. Emerson, and two-eighteenths to E. Hahn, Cleveland, Ohio. Pumping apparatus. 1,902,077; Mar. 21.
Jenkins, Ralph M., Orleans, Ind. Shotgun. 1,902,702; Mar. 21.
Jenks, Harry N., San Jose, Calif. Mixing device or sewage treatment plant. 1,902,078; Mar. 21.
Jensen, Louis, Chicago, Ill., assignor to United Autographic Register Co. Autographic register. 1,902,304; Mar. 21.
Jensen Salsbery Laboratories, Inc., The. (See Pilgrim, Ernest C., assignor.)

Jewell, Archer A., Peckham, London, England. Holder for containers. 1,902,285; Mar. 21.
Joachim, Herman L., Ridgefield Park, N. J. Method of and apparatus for stacking sheets. 1,902,486; Mar. 21.
Johns, Martha B., Norfolk, Va. Bag. 1,902,368; Mar. 21.
Johnson, Arthur A., Bridgeport, Conn. Manifolding. 1,902,128; Mar. 21.
Johnson, Arthur E., Oak Park, assignor to Wm. Wrigley Jr. Company, Chicago, Ill. Box wrapping machine. 1,902,079; Mar. 21.
Johnson, Bror A. E., Alsten, assignor to Aktiebolaget Gebr. Arehns Mekaniska Verkstad, Stockholm, Sweden. Winding device for the manufacturing of boxes, for instance the outer casings of push boxes and similar articles. 1,902,033; Mar. 21.
Johnson, Christian E., assignor to Deere & Company, Moline, Ill. Agricultural implement. 1,901,909; Mar. 21.
Johnson, Clayton R., Los Angeles, Calif. Apparatus for and method of localising and measuring by X-ray. 1,902,558; Mar. 21.
Johnson, Everard L., Patchogue, N. Y. Seat. 1,902,367; Mar. 21.
Johnson, Lane, Ingram, and J. A. Smitmans, Pittsburgh, Pa., assignors to United Engineering & Foundry Company. Shear. 1,901,910; Mar. 21.
Johnson, Roy W., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Thermostatic switch for use with heaters. 1,902,451; Mar. 21.
Johnson, Roy W., Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Thermostatic switch. 1,902,452; Mar. 21.
Johnson, Wilfrid E., Schenectady, N. Y., assignor to General Electric Company. Flywheel. 1,902,505; Mar. 21.
Johnston, Herbert L., and D. A. Meeker, assignors to The Hobart Manufacturing Company, Troy, Ohio. Food handling apparatus. 1,902,506; Mar. 21.
Johnston, Horace G., Corsicana, Tex. Well drilling rotary. 1,902,242; Mar. 21.
Jones, Charles A., Campbell, Calif. Bird cage and utility hanger. 1,902,241; Mar. 21.
Jordan, Henry F., Lansdale, Pa. Combination hat. 1,902,080; Mar. 21.
Jugel, Ewald H., Goppingen, Germany. Soldering machine. 1,902,703; Mar. 21.
Juhlin, Gustaf A., Timperley, England, assignor to General Electric Company. Electric circuit interrupter. 1,902,507; Mar. 21.
Kadlec, Charles, assignor to Waite Carpet Company, Oshkosh, Wis. Tufting mechanism. 1,902,704; Mar. 21.
Kahn, Isaac T., Cleveland Heights, Ohio. Container sealing device. 1,901,911; Mar. 21.
Kaiser, Charles, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y. Casserole or similar article. Des. 89,527; Mar. 21.
Kaiser, Harry N., Washington, D. C. Eel grip. 1,902,453; Mar. 21.
Kaplan, Morris L., Hazelton, Pa. Collar-stretching machine. 1,902,330; Mar. 21.
Kaplan, Philip, Brooklyn, N. Y., assignor to The Dehydro Company, Tulsa, Okla. Breaking water in oil emulsions. 1,902,129; Mar. 21.
Karpen, S., & Bros. (See Huitgren, Charles R., assignor.)
Kassel, Louis S. (See Frazer, J. C. W., and Kassel.)
Kaufer, Felix. (See Halbig, P., and Kaufer.)
Kaupke, Lee H., assignor to The Rock Island Plow Company, Rock Island, Ill. Hay loader. 1,902,243; Mar. 21.
Kearsley, William K., Schenectady, N. Y., assignor to General Electric Company. Time switch. 1,902,508; Mar. 21.
Kee, William B., Atlanta, Ga. Hoe. 1,902,705; Mar. 21.
Keese, Frank E., jr., Iron River, Mich. Combination fuse holder and lighter. 1,902,706; Mar. 21.
Keister, James, Steubenville, Ohio. Internal combustion engine. 1,902,130; Mar. 21.
Keller, Robert, Ennetbaden, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Automatic parallel connecting system. 1,902,645; Mar. 21.
Kemp, Charles and E., Bloomfield, Ind. Renewable electric fuse. 1,902,707; Mar. 21.
Kemp, Ernest. (See Kemp, Charles and E.)
Kemp, William E., assignor to Kingston Products Corporation, Kokomo, Ind. Mold. 1,902,559; Mar. 21.
Kenaga, Ivan A. (See Harlow, I. F., Kenaga, and Dressel.)
Kern, Erwin, Ennetbaden, Switzerland, assignor to Aktiengesellschaft, Brown Boveri & Cie., Baden, Switzerland. Direct current motor commutating device. 1,902,131; Mar. 21.
Kerr, Howard J., Westfield, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam drum baffle. 1,901,912; Mar. 21.
Kerschbaum, Friedrich P. (See Gooch, S. D., and Kerschbaum.)
Kershaw, William E., Gwynedd Valley, and J. L. Woodbridge, Philadelphia, Pa. Counter-electromotive-force-cells. 1,902,081; Mar. 21.
Keyser, Hans, et al. (See Müller, Johan J., assignor.)
Keyston Bros. (See Keyston, Fredrick B., assignor.)
Keyston, Frederick B., San Mateo, assignor to Keyston Bros., San Francisco, Calif. Toy pistol. 1,902,708; Mar. 21.
Kilimnik, Philip, Middle Village, N. Y. Tube protector. 1,902,082; Mar. 21.
Kilpatrick, John J., San Francisco, Calif. Spinner. 1,902,560; Mar. 21.
Kimball, Vernon R., Palisades Park, N. J., assignor to The Western Union Telegraph Company, New York, N. Y. Dividing received intelligence into two or more groups. 1,902,170; Mar. 21.
King, Della, Louisville, Ky. Invalid's chair. 1,902,709; Mar. 21.
King, Joseph F., Burbank, assignor of one-half to L. C. King, Glendale, Calif. Egg candling machine. 1,902,244; Mar. 21.
King, Leo C. (See King, Joseph F., assignor.)
Kingston Products Corporation. (See Kemp, William E., assignor.)
Kinser, Vernon, Butterfield, Mo. Automatic transmission. 1,902,245; Mar. 21.
Kirschbraun, Leiter. (See Avery, H. C., and Kirschbraun.)
Kirschbraun, Lester, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Producing asphalt. 1,902,805; Mar. 21.
Kirst, William E., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Evaporation of nitric acid. 1,901,875; Mar. 21.
Kirton, Thomas A., assignor to Lanier-Kirton Co. Inc., Jacksonville, Fla. Self-locking bolt. 1,902,454; Mar. 21.
Kitchen, Francis A., Cleveland, Ohio. Air cooling. 1,902,246; Mar. 21.
Klapper, Benjamin A., assignor to Sprague, Warner & Company, Chicago, Ill. Display case. 1,902,132; Mar. 21.
Kleinschmit, Oscar, assignor to Gebruder Brehmer, Leipzig-Plagwitz, Germany. Method of and mechanism for extracting interconnecting threads between stitched books. 1,902,286; Mar. 21.
Klier, Pete, Bisbee, N. Dak. Static eliminator. 1,902,407; Mar. 21.
Klingloff, Andrew R., Shrewbury, Mass. Packing. 1,902,247; Mar. 21.
Knapp, Arthur S., Glendale, Calif., assignor to Automatic Safe-Start Company. Automatic starting system for internal combustion engines. 1,902,646; Mar. 21.
Knight, Clarence F., Warren, assignor of one-fourth to M. R. Hazel, Youngstown, and one-fourth to F. M. Comstock, Warren, Ohio. Roll for use in strip and sheet mills. 1,902,034; Mar. 21.
Knight, Raymond R., Toronto, Ontario, Canada. Process and apparatus for purification of sewage and trade wastes. 1,902,248; Mar. 21.
Kohut, Alexander, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,528; Mar. 21.
Koizumi, Yuko. (See Tamaru, S., and Koizumi.)
Kondo, Masaru, Puunene, Maui, Hawaii. Fuse refilling tool. 1,902,710; Mar. 21.
Kongsted, Ludvig P., Longmeadow, assignor to United American Bosch Corporation, Springfield, Mass. Display device. 1,902,331; Mar. 21.
Kopp, Charles A., Kansas City, Mo. Septic tank. 1,902,171; Mar. 21.
Korittke, Karl. (See Kuhnel, C., and Korittke.)
Kovács, Theodor, Berlin-Schoneberg, Germany. Writing, drawing, or ruling pen. 1,902,782; Mar. 21.
Kraenslein, George and E. Diefenbach, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Condensation products of the anthraquinone series. 1,902,083; Mar. 21.
Kraenslein, Georg and E. Diefenbach, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Acid dyestuffs of the anthraquinone series. 1,902,084; Mar. 21.
Kraft, Herman T., assignor to The Bridgewater Machine Company, Akron, Ohio. Tire building drum. 1,902,806; Mar. 21.
Kratz, George D. (See Elbogen, Paul, assignor.)
Krause, Alfons, Breslau-Cawallen, Giesche-Siedlung, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Artificial silk spinning machine attachment. 1,902,332; Mar. 21.
Kreidel, Hans, Wiesbaden, Germany. Wick oiler. 1,901,972; Mar. 21.
Kreis, Walter, Binningen, near Basel, assignor to "Chemical Works formerly Sandoz," Basel, Switzerland. Manufacture of new cardio-active glucosides of bulbus scillæ. 1,902,408; Mar. 21.
Kronenberger, Ferdinand, Brooklyn, N. Y. Flat and filler for egg holding cases. 1,901,913; Mar. 21.
Kruckenberg, Frans, and C. Stedefeld, Hanover, Germany. Side wind protection for railway systems. 1,902,783; Mar. 21.
Krueger, Theodore H., New York, N. Y., assignor to Better Packages, Incorporated, Shelton, Conn. Adhesive tape for fastening packages and for like purposes. 1,902,369; Mar. 21.
Kuhnel, Carl, and K. Korittke, Berlin-Charlottenburg, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Vacuum cleaner. 1,902,561; Mar. 21.
Kulp, Harry W., and M. C. Dellinger, Lancaster, Pa. Bushing remover. 1,902,711; Mar. 21.

Kunstdünger-Patent-Verwertungs-Aktiengesellschaft. (See Larsson, Markus, assignor.)
Kurlash Company, The. (See Tuttle, W. R., and Stickel, assignors.)
La Branch, Jefferson N., San Diego, Calif. Air venting device. 1,902,409; Mar. 21.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,902,455; Mar. 21.
La Brie, Ludger E., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,902,647; Mar. 21.
Lafayette Instruments, Inc. (See Shuster, Carl N., assignor.)
Lake, Clair D., Binghamton, assignor to The Tabulating Machine Company, Endicott, N. Y. Transfer mechanism. 1,902,035; Mar. 21.
Lakewood Manufacturing Co. (See Roberts, Edward W., assignor.)
La Mar, Frank C., assignor to Great Western Fuse Company, New York, N. Y. Fuse clip lock. 1,902,804; Mar. 21.
Lambert, Albert L., assignor to Heintz Manufacturing Company, Philadelphia, Pa. Latch for automobile doors. 1,902,172; Mar. 21.
Landis & Gyr, A.-G. (See Hunggerbühler, Paul, assignor.)
Landis & Gyr, A.-G. (See Mettler, Josef, assignor.)
Landis & Gyr, A.-G. (See Pudelko, Riccard, assignor.)
Landis Tool Company. (See Miner, Harry H., assignor.)
Langley, Sam G. (See Smith, B. M., Langley, and Braun.)
Lanier-Kirton Co. Inc. (See Kirton, Thomas A., assignor.)
Lansy, Frank L., assignor to The Champion Spring Company, Cleveland, Ohio. Adjustable back rest for beds. 1,902,249; Mar. 21.
Larkin, Fred V., Bethlehem, Pa. Testing device. 1,902,807; Mar. 21.
Larkin, Lester U., assignor to Larkin Refrigerating Corporation, Atlanta, Ga. Refrigeration system. 1,902,784; Mar. 21.
Larkin Refrigerating Corporation. (See Larkin, Lester U., assignor.)
Larson, John M., assignor to National Regulator Co., Chicago, Ill. Humidity controller. 1,902,173; Mar. 21.
Larsson, Markus, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Leaching raw phosphate. 1,902,648; Mar. 21.
Larsson, Markus, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Producing ammonium sulphate. 1,902,649; Mar. 21.
Lavandeira, Raul, Buenos Aires, Argentina. Supporting frame for winding mechanism. 1,902,370; Mar. 21.
Lavelle, Thomas B., Hempstead, N. Y. Aircraft control means. 1,902,133; Mar. 21.
Lear, Earl B., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Blowing device for pneumatic tools. 1,902,562; Mar. 21.
Leathers, Ward, Haworth, N. J., assignor to The Quadrex Corporation. Vacuum cleaner filter valve. 1,902,838; Mar. 21.
Lee, Fred L., Binghamton, N. Y., and B. H. Phillips, Montclair, N. J., assignors to The Tabulating Machine Company, Endicott, N. Y. Circuit closing device. 1,902,035; Mar. 21.
Lee, Roger K., assignor to Chrysler Corporation, Highland Park, Mich. Internal combustion engine mounting. 1,902,509; Mar. 21.
Legg, Joseph W., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Remote control system for oscillographs. 1,902,650; Mar. 21.
Lehde, Henry, Forks, N. Y. Method and apparatus for photographing magnetic curves. 1,901,876; Mar. 21.
Leipert, August H., College Point, assignor to International Motor Company, New York, N. Y. Chain drive. 1,902,712; Mar. 21.
Lemoine, Henry G. L., Perriers-sur-Andelle, France. Interchangeable toothbrush. 1,902,410; Mar. 21.
Levy-Anderson Co. (See Anderson, Maurice, assignor.)
Lewis, Goodrich Q., Wheaton, assignor to W. H. Miner, Inc., Chicago, Ill. Bumper. 1,902,651; Mar. 21.
Lewis, Leo L., Plainfield, assignor to Carrier Engineering Corporation, Newark, N. J. Apparatus for conditioning enclosures. 1,902,563; Mar. 21.
Lewis, Miles J., Long Beach, Calif. Well bore straightening tool. 1,902,174; Mar. 21.
Liljenroth, Frans G., Stockholm, Sweden. Producing mixed fertilizers. 1,902,652; Mar. 21.
Linde Air Products Company, The. (See Wall, Matthew J., assignor.)
Lindenberg, Theodore, Columbus, Ohio. Sound amplifier. 1,902,250; Mar. 21.
Lindenblad, Nils E., Port Jefferson, N. Y., assignor to Radio Corporation of America. Energizing antenna. 1,902,036; Mar. 21.
Lindgren, Charles F., Duluth, Minn. Meat chopper. 1,902,653; Mar. 21.
Lindhe, Eric G., Hastings upon Hudson, N. Y. Spring. 1,902,036; Mar. 21.
Lindhe, Eric G., Hastings upon Hudson, N. Y. Spring construction. 1,902,134; Mar. 21.
Linsert, Otto, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Crystalline antirachitically active product and preparing the same. 1,902,785; Mar. 21.
Lionel Corporation, The. (See Giaimo, Charles V., assignor.)
Livingston, John W., Kirkwood, assignor to Monsanto Chemical Works, St. Louis, Mo. Manufacture of maleic acid. 1,901,914; Mar. 21.
Lison, Michael. (See Toniewicz, I. E., and Lison.)
Lloyd, Lester T., assignor to W. G. Lloyd Company, Chicago, Ill. Loose-leaf binder. 1,902,786; Mar. 21.
Lloyd, W. G., Company. (See Lloyd, Lester T., assignor.)
Locher & Cie. (See Seger, Jacob, assignor.)
Locke Insulator Corporation. (See Plimpton, Bentley A., assignor.)
Loeffler, Edmund J., Glendale, Calif. Self opening and closing three-way mirror. 1,902,037; Mar. 21.
Loetscher, Emil C., Dubuque, Iowa. Reproducing surface inlays on panels of composite fibrous materials. 1,902,087; Mar. 21.
Log Cottage Company. (See Muffley, H. A., and McLees, assignor.)
Loughridge, Matthew H., Bogota, N. J. Lifting jack. 1,901,915; Mar. 21.
Lowe, Joseph A., assignor to Faluiah Paper Company, Fitchburg, Mass. Machine for pasting webs of paper together. 1,902,713; Mar. 21.
Lurie, Arnold N., Chicago, Ill. Article of manufacture. 1,902,175; Mar. 21.
Mabey, Charles W., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind. Bun puncher and toaster. 1,902,564; Mar. 21.
Mabey Electric and Manufacturing Company. (See Mabey, Charles W., assignor.)
Macey, Eugene J., Rosbolt, S. Dak. Lubricator fitting. 1,901,973; Mar. 21.
Macy, Walter C., South Dartmouth, Mass. Sash latch. 1,901,974; Mar. 21.
Magnuson, Carl A., and C. H. Uggla, Minneapolis, Minn. Combination table. 1,901,975; Mar. 21.
Maier, Fred R., Kansas City, Mo. Boot tree. 1,902,251; Mar. 21.
Mallinson, H. R., & Co. Inc. (See Heinke, Alfred J., assignor.)
Mann, Cecil A., assignor to Frigidaire Corporation, Dayton, Ohio. Coating process and apparatus. 1,902,564; Mar. 21.
Mantle Lamp Company of America, The. (See Fairchild, Alice M., assignor.)
Marks, Herbert E., Sewickley, Pa., assignor to United States Gypsum Company, Chicago, Ill. Slab floor or roof construction. 1,902,565; Mar. 21.
Marsh, Harry V., Chicago, Ill. Display rack. 1,902,566; Mar. 21.
Martin, Jean A., Buffalo, N. Y. Awning of metal or like rigid material. 1,901,976; Mar. 21.
Martin, John F., assignor to United American Bosch Corporation, Springfield, Mass. Magneto timing indicator. 1,902,655; Mar. 21.
Martin, Lester B., Columbus, Ohio. Calendar and record. 1,902,567; Mar. 21.
Martin, Rhetberford B., Roselle, N. J. Supershock absorption. 1,902,714; Mar. 21.
Maschinenfabrik Oerlikon. (See Wellauer, Max, assignor.)
Matthews, Joseph L., New Brunswick, N. J., assignor to International Motor Company, New York, N. Y. Manufacturing gearing. 1,902,656; Mar. 21;
Matthews, William H., Fort Valley, Ga. Tank cover. 1,902,456; Mar. 21.
Maurer, Edward C., St. Paul, Minn. Laundry sorting machine. 1,902,088; Mar. 21.
Maxam, Lester L., Los Angeles, assignor of one-third to C. S. Crews, San Pedro, Calif. Fused electrical plug. 1,902,568; Mar. 21.
Maynard, George S., Newtonville, assignor to United-Carr Fastener Corporation, Cambridge, Mass. Pin fastener. 1,902,308; Mar. 21.
McAllister, Raymond C., Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J. Connecter. 1,902,038; Mar. 21.
McAnley Automatic Trap Company. (See Covey, Clarence F., assignor.)
McArdle, Michael W., Chicago, Ill. Electric circuit connection. 1,901,977; Mar. 21.
McCann, Ronald A., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway signaling. 1,902,135; Mar. 21.
McCarthy, Joseph A., Richmond Hill, N. Y. Forced draft deflector for gas stoves. 1,902,411; Mar. 21.
McCauley, Joseph B., Charles Town, W. Va. Antifreeze composition for radiators and the like. 1,902,287; Mar. 21.
McCoy, Clarence E., Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Power transmission device. 1,901,916; Mar. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Train pipe coupling. 1,901,917; Mar. 21.
McCune, Joseph C., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,901,918; Mar. 21.

McDaniel, Donald, assignor to The Hamilton Foundry and Machine Company, Hamilton, Ohio. Post cap. 1,902,511; Mar. 21.
McDonald, Eugene G., assignor to Bendix Brake Company, South Bend, Ind. Operating device. 1,902,569; Mar. 21.
McEachern, John, Winnipeg, Manitoba, Canada. Combination grain dump. 1,902,252; Mar. 21.
McEachron, Karl B., and E. J. Wade, Pittsfield, Mass., assignors to General Electric Company. Electrical discharge device. 1,902,510; Mar. 21.
McEvoy, J. H., & Company. (See Howard, James H., assignor.)
McGinnis, Harry B., Chicago, Ill. Steam heating system. 1,902,288; Mar. 21.
McKee, Clarence A., Bronx, assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Art of telephony signaling. 1,901,919; Mar. 21.
McLaughlin, John J., North Tonawanda, N. Y. Metal heating method and apparatus. 1,902,039; Mar. 21.
McLean, Donald G. (See Ballard, M. H., and McLean.)
McLeer, Edward F. (See Mufley, H. A., and McLeer.)
McMullan, Samuel, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Method and apparatus for drawing wire. 1,901,920; Mar. 21.
Means, Winthrop J., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Electrical meter. 1,901,921; Mar. 21.
Mechanics Universal Joint Company. (See Hobbs, John W., assignor.)
Meeker, David A. (See Johnston, H. L., and Meeker.)
Mehl, Arthur J., Omaha, Nebr., assignor to Swift and Company, Chicago, Ill. Combination conveyer and scale. 1,902,512; Mar. 21.
Meier, Albert J., Glendale, Mo., assignor to The New Jersey Zinc Company, New York, N. Y. Manufacture of powders. 1,901,978; Mar. 21.
Mekler, Lev A., assignor to Universal Oil Products Company, Chicago, Ill. Furnace. 1,901,922; Mar. 21.
Melin, Otto, assignor of one-half to Clarence Allen, Livingston, Mont. Mechanical irrigator. 1,902,412; Mar. 21.
Mendelsohn, Albert, Painesdale, Mich. Apparatus for loading broken rock. 1,902,457; Mar. 21.
Mengel Company, The. (See Horine, Irving, assignor.)
Mentor, Earl W., and C. J. Scranton, jr., assignor to Avery Power Machinery Co., Peoria, Ill. Grain distributing means for combines. 1,902,289; Mar. 21.
Mergenthaler Linotype Company. (See Albrecht, Christian A., assignor.)
Mergenthaler Linotype Company. (See Burt, Harold A., assignor.)
Mergenthaler Linotype Company. (See Grumman, Fred C., assignor.)
Mergenthaler Linotype Company. (See Stouges, Anthony J., assignor.)
Mergott, J. E., Company. (See Hiering, William C., assignor.)
Merwin, George E., and F. W. Shoemaker, Port Arthur, Tex. Thread cutting attachment for lathes. 1,902,657; Mar. 21.
Mesta Machine Company. (See Trinks, Willibald, assignor.)
Mettler, Josef, Zug, Switzerland, assignor to Landis Gyr, A.-G. Time-controlled electric switch. 1,902,570; Mar. 21.
Meusy, Eugene E., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis. Gas cock. 1,901,979; Mar. 21.
Meutsch, Adolf, assignor to Gewerkschaft Wallram, Essen, Germany. Making and hardening steel tools provided with hard metal members. 1,902,513; Mar. 21.
Meyer-Gaus, Karl, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Thread guide. 1,902,458; Mar. 21.
Meyer, Geo. J., Manufacturing Company. (See Meyer, George J., assignor.)
Meyer, George J., assignor to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis. Washing apparatus. 1,902,253; Mar. 21.
Meyer, John F., Chicago, Ill. Amusement machine. 1,902,040; Mar. 21.
Middleditch, L., Company. (See Middleditch, Lyman, assignor.)
Middleditch, Lyman, assignor to L. Middleditch Company, New York, N. Y. Loose leaf assembly. 1,901,980; Mar. 21.
Midland Creosoting Company. (See Newton, Harold M., assignor.)
Mietzsch, Fritz. (See Schulemann, W., Mietzsch, and Wingler.)
Miller, Arthur F., Jackson, Mich., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa. Method of and apparatus for multiple stage grinding. 1,902,413; Mar. 21.
Miller, Herbert E., Allentown, Pa. Guy wire anchor connection. 1,902,459; Mar. 21.
Miller, Herbert E., assignor to Utilities Service Company, Inc., Allentown, Pa. Guy wire protector. 1,902,414; Mar. 21.
Miller, Joseph G. (See Miller, L. M., Greene, Miller, and Calkins.)
Miller, Lloyd M., Los Angeles, L. M. Greene, Whittier, J. G. Miller, Los Angeles, and E. E. Calkins, Whittier, Calif. Control for pump actuating mechanisms and the like. 1,902,371; Mar. 21.
Miller, Oscar W., Appleton, Wis. Car mover device. 1,902,658; Mar. 21.
Mills, Fred H., Fort Edward, N. Y. Toy building block. 1,902,186; Mar. 21.
Milwaukee Gas Specialty Company. (See Meusy, Eugene E., assignor.)
Miner, Harry H., Paris, France, assignor to Landis Tool Company, Waynesboro, Pa. Mandrel for hollow crank shafts. 1,902,176; Mar. 21.
Miner, W. H., Inc. (See Geiger, William A., assignor.)
Miner, W. H., Inc. (See Lewis, Goodrich J., assignor.)
Minerals Separation North American Corporation. (See Wright, Percy C., assignor.)
Minneapolis-Honeywell Regulator Company. (See Johnson, Roy W., assignor.)
Minneapolis-Honeywell Regulator Company. (See Phelan, L. A. M., and Hotchkiss, assignors.)
Mitchell, David F., Staten Island, N. Y. Apparatus for extracting tubes. 1,902,571; Mar. 21.
Mitchell, Orville, Dallas, Tex. Producing saws. 1,902,177; Mar. 21.
Mitsubishi Kogyo Kabushiki Kaisha. (See Tamaru, S., and Koisumi, assignors.)
Mittag, Albert H., Schenectady, N. Y., assignor to General Electric Company. Electric translating circuits. 1,902,460; Mar. 21.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,902,572; Mar. 21.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Moloney, William J., Seattle, Wash. Log carrying barge. 1,901,877; Mar. 21.
Monitor Controller Company. (See Whittingham, George H., assignor.)
Monrad, Karl J., Little Falls, N. Y. Sweetened and flavored dessert made with rennin. 1,902,415; Mar. 21.
Monsanto Chemical Works. (See Livingston, John W., assignor.)
Moonbeam Manufacturing Company, The. (See David, Bruce W., assignor.)
Morehead, French H. (See Brungardt, A. C., Morehead, and Morrissey.)
Morehouse, Silas A., Los Angeles, Calif. Windshield cleaner device for airplanes. 1,902,254; Mar. 21.
Morel, Felix, Fayettas, par Rassac-sur-l'Isle, assignor to Anciens Etablissements R. Cornely & Cie (Societe Anonyme), Paris, France. Sewing machine. 1,902,041; Mar. 21.
Morgen, Ralph A., and F. Fair, Kansas City, Mo. Clarifying dry cleaning fluid. 1,902,514; Mar. 21.
Morimura Bros. Inc. (See Buma, Yukio, assignor.)
Morimura Bros. Inc. (See Kaiser, Charles, assignor.)
Morris Paper Mills. (See Powell, Henry K., assignor.)
Morrissey, James W. (See Brungardt, A. O., Morehead, and Morrissey.)
Moseley, Tomlinson I., assignor to Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company Ltd., San Francisco, Calif. Hair drier. 1,902,334; Mar. 21.
Moss, William F., Upper Montclair, N. J. Casement window protection. 1,902,335; Mar. 21.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y. Coating composition and film produced thereby. 1,902,256; Mar. 21.
Moss, William H., Cumberland, Md., assignor to Celanese Corporation of America. Derivative of cellulose composition. 1,902,257; Mar. 21.
Moss, William H., and B. B. White, Cumberland, Md., assignors to Celanese Corporation of America, New York, N. Y. Coating composition and film produced thereby. 1,902,255; Mar. 21.
Mosshart, Donald J., Lansdowne, Pa. assignor to Westinghouse Electric & Manufacturing Company. Combustion apparatus. 1,902,372; Mar. 21.
Motor and Plane Accessories, Inc. (See Stanley, Edgar C., assignor.)
Mueller, Hilmar, assignor to The Mueller Machine Company, Trenton, N. J. Apparatus for manufacturing ceramic articles. 1,901,928; Mar. 21.
Mueller Machine Company, The. (See Mueller, Hilmar, assignor.)
Mufley, Harry A., Minneapolis, Minn., and E. F. McLeer, Gordon, Wis., assignors to Log Cottage Company, Minneapolis, Minn. Log house. 1,902,809; Mar. 21.
Müller-Clemm, Hellmuth, assignor to the Firma Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Apparatus for the continuous control of the properties of solid bodies dispersed in a liquid. 1,902,659; Mar. 21.
Muller, Franz G. D., assignor to The Staytite Company, Houston, Tex. Flame arrester. 1,902,258; Mar. 21.
Müller, Johann J., assignor to Dr. F. G. Schumacher, Basel, and Hans Keyser, Aarau, Switzerland. Machine for dyeing, bleaching, and the like of loose yarns or bobbins. 1,902,042; Mar. 21.
Muller, Robert, Pirna-Copitz, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Producing water-soluble condensation products and the products produced. 1,902,515; Mar. 21.
Muller, Rudolph G., Irvington, N. J. Hat making machine. 1,902,516; Mar. 21.

Muntner, Joseph M. (See Buettner, R. J., Pound, Muntner, Neits, and Zansig.)
Murphy, George M., assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Car coupling. 1,902,043; Mar. 21.
Murray, Ralph L., Philadelphia, Pa. Balanced valve. 1,902,336; Mar. 21.
Musso, Alfred, East Orange, N. J., assignor of one-half to W. P. Deppe, New York, N. Y. Mineral reduction and metal extraction. 1,902,089; Mar. 21.
Musso, Alfred, East Orange, N. J., assignor of one-half to W. P. Deppe, New York, N. Y. Low temperature reduced pressure or partial vacuum reduction of metals. 1,902,090; Mar. 21.
Muter, Leslie, et al. (See Dickson, George F., assignor.)
Myers, Harry L., assignor to The American Floor Surfacing Machine Company, Toledo, Ohio. Rotary disk edging machine. Des. 89,511; Mar. 21.
N. V. Philips', Gloeilampenfabrieken. (See Bouwers, Albert, assignor.)
Nachman, Harold J., assignor to Washington Gas Light Company, Washington, D. C. Gas refrigerating apparatus. 1,902,715; Mar. 21.
Nagaoka, Zyunkiti. (See Inokuty, H., and Nagaoka.)
Nalle, John M., Fairfield, Conn., assignor to American Chain Company, Inc. Flexible joint. 1,901,924; Mar. 21.
Nathanson, Isidore. (See Rodstein, H., and Nathanson.)
National Electric Products Corporation. (See Clayton, Martin M., assignor.)
National Machine Products Company. (See Stoll, Albert, assignor.)
National Regulator Co. (See Larson, John M., assignor.)
National Rubber Machinery Company. (See Pfeiffer, Fred B., assignor.)
National Rubber Machinery Company. (See Shook, Florain J., assignor.)
National Synthetic Corporation. (See Forrest, H. O., and Frolich, assignors.)
National Transit Pump & Machine Company. (See Valentine, Warren P., assignor.)
Natural Gas Hydrogen Corporation. (See Yunker, James A., assignor.)
Natural Products Refining Co. (See Vetter, Joseph J., assignor.)
Neal, Arthur M. (See Williams, I., and Neal.)
Negbaur, H., & Co. (See Negbaur, Harry, assignor.)
Negbaur, Harry, New York, N. Y., assignor to H. Negbaur & Co., Inc. Cream pitcher or analogous article. Des. 89,529; Mar. 21.
Negbaur, Harry, New York, N. Y., assignor to H. Negbaur & Co., Inc. Match box holder or article of analogous nature. Des. 85,580; Mar. 21.
Negbaur, Harry, New York, N. Y., assignor to H. Negbaur & Co., Inc. Sugar bowl or article of analogous nature. Des. 89,531; Mar. 21.
Negbaur, Harry, New York, N. Y., assignor to H. Negbaur & Co., Inc. Smoker's tray or article of analogous nature. Des. 89,532; Mar. 21.
Neidich, Samuel A., Edgewater Park, N. J. Forming tubes of celluloid and the like. 1,902,573; Mar. 21.
Neits, John J. (See Buettner, R. J., Pound, Muntner, Neits, and Zansig.)
Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Power feeding device. 1,902,574; Mar. 21.
Nelson, Edwin F., assignor to Universal Oil Products Company, Chicago, Ill. Conversion of hydrocarbons. 1,902,808; Mar. 21.
Nelson, Hans P., Grantwood, N. J. Pony polo mallet. 1,902,660; Mar. 21.
Nelson, Oscar W., Portland, Oreg. Grinding machine. 1,902,661; Mar. 21.
Nelson, William K., assignor, by mesne assignments, to Insulex Corporation, Chicago, Ill. Insulating block. 1,902,178; Mar. 21.
Neubauer, Carl, Mannheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of films, lacquers and the like. 1,902,837; Mar. 21.
Neuman, Harry T., Los Angeles, Calif. Game apparatus. 1,902,137; Mar. 21.
Neveling, Aloys, Chicago, Ill. Method of and apparatus for controlling dredges. 1,902,259; Mar. 21.
Newbery, Carlos W. (See Hoge, Daniell W., assignor.)
Newbound, Reginald. (See Warren, H. W. H., Newbound, and Ward.)
New Departure Manufacturing Company, The. (See Cobb, Leland D., assignor.)
New Departure Manufacturing Company, The. (See Hughes, Frederick G., assignor.)
Newhouse, Ray C., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Rotary cooler. 1,902,517; Mar. 21.
New Jersey Zinc Company, The. (See Meier, Albert J., assignor.)
New Photomaton, Inc., The. (See Helms, Waters L., assignor.)
Newport News Shipbuilding and Dry Dock Company. (See Grant, William F., assignor.)
Newton, Harold M., Clayton, Mo., assignor to Midland Creosoting Company, Toledo, Ohio. Flooring. 1,902,716; Mar. 21.
Nichols, Louis C., Wauwatosa, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Treating objects. 1,902,575; Mar. 21.
Nilsson, Oscar F., and J. Bachrach, assignors to L. E. Waterman Company, New York, N. Y. Inkstand. 1,902,091; Mar. 21.
Norristown Magnesia & Asbestos Company. (See Wilson, Grant V., assignor.)
Norton, Clifford, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company. Mechanism for operating elevator doors. 1,902,188; Mar. 21.
Norton, Raymond J., Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind. Friction surfaces. 1,902,576; Mar. 21.
Norton, Samuel H., Meadville, Pa., assignor to Hookless Fastener Company. Separable fastener. 1,902,416; Mar. 21.
Norwood, Stanley M., Flushing, N. Y., assignor to Electro Metallurgical Company. Production of castings with coatings composed of high-chromium alloys. 1,902,092; Mar. 21.
Novick, Abraham, Flushing, N. Y., assignor to United States Envelope Company, Worcester, Mass. Paper drinking cup. 1,902,717; Mar. 21.
Novotny, Emil E., Philadelphia, assignor to J. S. Stokes, Spring Valley Farms, Huntingdon Valley, Pa. Thermosetting resinous product and making the same. 1,902,461; Mar. 21.
Oakley, Edward C. F., Norbury, England. Nonreturn valve. 1,902,577; Mar. 21.
Oberhoffken, Alexander, assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Machine tool. 1,902,179; Mar. 21.
O'Brien, William J., Cleveland, Ohio, and J. B. Drapeau, jr., New York, N. Y., assignors to The Glidden Company, Cleveland, Ohio. Removing chlorine from zinc sulphate solutions. 1,901,925; Mar. 21.
Oehlsen, George W., jr., assignor to Stewart-Warner Corporation, Chicago, Ill. Radiocabinet. Des. 89,533; Mar. 21.
Ogilvie, George E., Westmoreland, Pa., assignor to Hockensmith Wheel & Mine Car Company. Dumping body. 1,902,093; Mar. 21.
Ohio Brass Company, The. (See Austin, Arthur O., assignor.)
Oilgear Company, The. (See Ferris, John P., assignor.)
Oilgear Company, The. (See Ferris, J. P., Clute, and Wiedmann, assignors.)
Oliver Farm Equipment Company. (See Eggen, Oscar E., assignor.)
Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Hob grinding machine. 1,901,926; Mar. 21.
Olson, Carl G., assignor to Shakeproof Lock Washer Company, Chicago, Ill. Lock washer. 1,901,927; Mar. 21.
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Chicago, Ill. Automatic spacer. 1,901,928; Mar. 21.
Olson, Samuel, & Company, Inc. (See Olson, Samuel, assignor.)
Optische Anstalt C. P. Goerz, Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav. (See Schier, J., Petschenig, and Peinl, assignors.)
Orr, Clark, Fort Wayne, Ind., assignor to General Electric Company. Refrigerating machine. 1,902,518; Mar. 21.
Otis Elevator Company. (See Norton, Clifford, assignor.)
Ousbäck, Mats G. H., assignor to Ragnor Erfass, Stockholm, Sweden. Motor-driven mechanical hammer. 1,901,981; Mar. 21.
Overstrud, Orrin B. (See Thoen, Bennett E., assignor.)
Pacent, Louis G. (See Goodrum, Charles L., assignor.)
Pacific Hair Goods Company Ltd. (now Duart Manufacturing Co. Ltd.). (See Moseley, Tomlinson I., assignor.)
Pacific Pump Works et al. (See Weis, Arthur K., assignor.)
Packard Motor Car Company. (See Brown, Robert N., assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Page, George A., jr., Freeport, N. Y., assignor, by mesne assignments, to Curtiss Aeroplane & Motor Company, Inc. Rudder pedal adjusting mechanism. 1,902,094; Mar. 21.
Page, Milton H., Cohoes, N. Y. Sound recording device. 1,902,290; Mar. 21.
Page, Ralph E. (See Daly, G. F., and Page.)
Palm Beach Garment Company. (See Castles, Robert C., assignor.)
Palmer, Harry L., Schenectady, N. Y., assignor to General Electric Company. Electrical control system. 1,902,462; Mar. 21.
Pangborn Corporation. (See Dorfan, Morton I., assignor.)
Pardue, John L., assignor of one-third to T. M. Pardue and one-third to W. A. Pardue, St. Louis County, Mo. Closure for receptacles. 1,901,982; Mar. 21.
Pardue, Theodore M., et al. (See Pardue, John L., assignor.)
Pardue, William A., et al. (See Pardue, John L., assignor.)
Parker, Clark W., assignor, by mesne assignments, to Max Bernstein, New York, N. Y. Apparatus for delivering lighted cigarettes and cigars. 1,902,291; Mar. 21.
Parker, George. (See Buttress, Joseph A., assignor.)
Parsons, Ben G., Houston, Tex. Blower and driving gear for engines. 1,902,095; Mar. 21.

Parsons, William M., Seattle, Wash. Circuit closer for an automatic signaling device. 1,902,578; Mar. 21.
Pass & Seymour, Inc. (See Hall, Nelson W., assignor.)
Patent and Licensing Corporation, The. (See Avery, Henry C., and Kirschbraun, assignors.)
Patterson, Thomas A., Clintonville, Wis. Brake testing device for vehicle wheels. 1,902,718; Mar. 21.
Paul, William E., Schenectady, N. Y., assignor to General Electric Company. Electric circuit breaker. 1,902,463; Mar. 21.
Paul, William E., Schenectady, N. Y., assignor to General Electric Company. Electric circuit breaker. 1,902,464; Mar. 21.
Paulson, Christian. (See Hoffman, H. E., and Paulson.)
Payton, Thomas, Rock Rapids, Iowa. Cleansing metering drums. 1,902,719; Mar. 21.
Pearson, Fred A. A., Valley Stream, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Propeller. 1,902,096; Mar. 21.
Pearson, George A., et al. (See Dickson, George F., assignor.)
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Glass feeding apparatus and method. 1,902,788; Mar. 21.
Peinl, Anton. (See Schier, J., Petschenig, and Peinl.)
Pen Desk Set Company. (See Back, R., and Cooper, assignors.)
Penick, Arthur J. and K. T., Houston, Tex. Blowout-preventer. 1,902,097; Mar. 21.
Penick, Kirby T. (See Penick, Arthur J. and K. T.)
Perkins, Julian L., West Springfield, Mass. Wringer. 1,902,579; Mar. 21.
Perkins, Julian L., West Springfield, and H. D. Croft, Springfield, Mass. Wringer. 1,902,580; Mar. 21.
Perser Corporation, The. (See Draper, Ernest E., assignor.)
Persons, Lawrence M., Des Moines, Iowa, assignor to Cook Electric Company, Chicago, Ill. Heat motor. 1,902,260; Mar. 21.
Peterson, Christen J., Chicago, Ill. Oil burner. 1,901,983; Mar. 21.
Peterson, Eugene, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Voltage limiting system. 1,901,929; Mar. 21.
Petroleum Conversion Corporation. (See Beardsley, E. W., and Evans, assignors.)
Petschenig, Karl. (See Schier, J., Petschenig, and Peinl.)
Pfaff, Harry E. (See Barnhart, G. E., and Pfaff.)
Pfaffenberger, Joachim. (See Dahl, O., and Pfaffenberger.)
Pfeiffer, Fred B., assignor to National Rubber Machinery Company, Akron, Ohio. Method and apparatus for separating adhesively joined sheets. 1,902,139; Mar. 21.
Phelan, Louis A. M., Chicago, Ill., and C. Hotchkiss, Minneapolis, Minn., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Temperature control apparatus. Re18,771; Mar. 21.
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Packing ring for shaft bearings. 1,902,662; Mar. 21.
Phelps, Arthur F., assignor to West Virginia Armature Co., Bluefield, W. Va. Locomotive journal box. 1,902,720; Mar. 21.
Philadelphia & Reading Coal & Iron Company, The. (See Harford, Charles G., assignor.)
Philip Carey Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Phillips, Burdett H. (See Lee, F. L., and Phillips.)
Phillips, Heman H., Charlemont, Mass. Trellis, arbor, and the like. 1,902,663; Mar. 21.
Piehl, Henry J., Hudson, Ohio, assignor to Hookless Fastener Company. Slide fastener. 1,902,417; Mar. 21.
Pieper, Ernest J., Lancaster, Pa., D. F. Smith, Pensacola, Fla., and C. C. Vogt, assignors to Armstrong Cork Company, Lancaster, Pa. Distributing binder over fibrous materials. 1,901,930; Mar. 21.
Pieper, Ernest J., D. F. Smith, and C. C. Vogt, Haddonfield, N. J., assignors to Armstrong Cork Company, Pittsburgh, Pa. Making heat insulating bodies. 1,901,984; Mar. 21.
Pilcher, Allen C. and L. C., Louisville, Ky., assignors to The Russ Manufacturing Company, Cleveland, Ohio. Sirup pump. 1,902,261; Mar. 21.
Pilcher, Lawrence C. (See Pilcher, Allen C. and L. C.)
Pilgrim, Ernest C., Okmulgee, Okla., assignor to The Jensen Salsbery Laboratories, Inc., Kansas City, Mo. Surgical instrument. 1,902,418; Mar. 21.
Pineo, Orrin W., Milo, Me., assignor to Sprague Specialties Co., North Adams, Mass. Portable screen. 1,902,373; Mar. 21.
Pirinoli, Guglielmo, assignor to Fiat Società Anonima, Turin, Italy. Reducing gear. 1,902,374; Mar. 21.
Pitter Trust. (See Pitter, Walter C., assignor.)
Pitter, Walter C., London, England, assignor to Pitter Trust. Clutch. 1,902,375; Mar. 21.
Plant, R. A., and M. E. Brooks, assignors to The Dow Chemical Company, Midland, Mich. Molding composition and treating. 1,902,419; Mar. 21.
Plimpton, Bentley A., assignor to Locke Insulator Corporation, Baltimore, Md. Making insulator caps. 1,902,310; Mar. 21.
Pollard Machinery Company. (See Evans, Harold, assignor.)
Pollock, Robert T., Cambridge, Mass., assignor to Universal Oil Products Company, Chicago, Ill. Process and apparatus for treating oils. 1,901,931; Mar. 21.
Pommer, Ernesto J., Moron, Argentina. Automobile radiator. 1,902,044; Mar. 21.
Powell, Henry K., assignor to Morris Paper Mills, Chicago, Ill. Foldable display carton. 1,902,262; Mar. 21.
Powelson, Wilfrid V. N., New York, N. Y., and W. Travell, San Bernardino, Calif. Airship. 1,902,519; Mar. 21.
Pratt, William H., Lynn, Mass., assignor to General Electric Company. Centralized meter recording. 1,902,465; Mar. 21.
Prior, George A., West Hartford, assignor to The Gray-Prior Machine Company, Hartford, Conn. Gauge for determining pitch of propeller blades. 1,902,180; Mar. 21.
Prismo Holding Corporation. (See Gill, Edwin R., jr., assignor.)
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Pudelko, Riccard, Zug, Switzerland, assignor to Landis & Gyr, A.-G. Maximum and total demand meter. 1,902,045; Mar. 21.
Pulvis Aktiengesellschaft. (See Rudqvist, Carl A., assignor.)
Punte, William F., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Metal container. 1,902,664; Mar. 21.
Purdin, Conn A., Chico, Calif. Food mixer. 1,902,376; Mar. 21.
Quadrex Corporation, The. (See Leathers, Ward, assignor.)
Queen Anne Candy Company. (See Biggs, John L., assignor.)
Radio Corporation of America. (See Goldsmith, A. N., and Wolff, assignors.)
Radio Corporation of America. (See Lindenblad, Nils E., assignor.)
Radio Corporation of America. (See Ranger, Richard H., assignor.)
Radius, Edward W., assignor to Goodman Manufacturing Company, Chicago, Ill. Cutter chain for mining machines. 1,902,420; Mar. 21.
Ragsdale, Earl J. W., assignor to Budd Wheel Company, Philadelphia, Pa. Self-adjusting brake mechanism. 1,902,181; Mar. 21.
Railway Metal Products Company. (See Gilpin, Garth G., assignor.)
Raines, Ewell A., Tulsa, Okla. Dispensing apparatus. 1,902,046; Mar. 21.
Randles, George E., assignor to The Foote-Burt Company, Cleveland, Ohio. Indexing mechanism for machine tools. 1,902,520; Mar. 21.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Electrical music system. 1,901,985; Mar. 21.
Ranger, Richard H., Newark, N. J., assignor to Radio Corporation of America. Electrical music system. 1,901,986; Mar. 21.
Rasp, John N., McKeesport, Pa. Curtain rod tip or curtain protector. 1,902,182; Mar. 21.
Räth, Curt. (See Bing, A., and Räth.)
Ratkovszky, Ferencz, Budapest, Hungary, assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Apparatus for regulating alternating current circuits. 1,902,466; Mar. 21.
Rawdon, Herbert, and W. E. Burnham, Wichita, Kans., assignor to Travel Air Company. Shock absorber. 1,902,421; Mar. 21.
Rea, Walter C., assignor to Detachable Bit Corporation of America, New York, N. Y. Drill. 1,902,098; Mar. 21.
Reavis, Andrew B., Swarthmore, and R. J. Eisinger, Moores, Pa., assignors to Westinghouse Electric and Manufacturing Company. Governing mechanism. 1,902,311; Mar. 21.
Rector, Frank J., Pendleton, assignor to International Printing Company, Indianapolis, Ind. Gluing machine. 1,902,264; Mar. 21.
Reel, Herbert W. (See Birdsey, C. B., and Reel.)
Reel, Herbert W., Hinsdale, assignor to United States Gypsum Company, Chicago, Ill. Precast ceiling construction. 1,902,789; Mar. 21.
Reichert, Otto. (See Hagedorn, M., Reichert, and Gübring.)
Reid, James S., Shaker Heights, assignor to The Reid Products Company, Cleveland, Ohio. Glass run channel structure. 1,902,422; Mar. 21.
Reid Products Company, The. (See Reid, James S., assignor.)
Reilly, Peter C. (See Higburg, W., assignor, and Reilly.)
Reinhold, Frederick E., Los Angeles, Calif. Padlock. 1,902,665; Mar. 21.
Reis, Leonard W., Dumont, N. J., assignor to John Chatillon & Sons, New York, N. Y. Suspension ring for scale pans. 1,902,581; Mar. 21.
Remington Rand Inc. (See Wolters, Carl F., assignor.)
Reno, William E., Glendale, Calif. Heater. 1,902,099; Mar. 21.
Replogle, John R., Detroit, assignor to Copeland Products, Inc., Mount Clemens, Mich. Refrigerator cabinet. Des. 89,534; Mar. 21.

Replogle, John R., Detroit, assignor to Copeland Products, Inc., Mount Clemens, Mich. Refrigerator top. Des. 89,535; Mar. 21.
Replogle, John R., Detroit, assignor to Copeland Products, Inc., Mount Clemens, Mich. Refrigerator door. Des. 89,536; Mar. 21.
Reussenzehn, Ernest A., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,902,100; Mar. 21.
Reynolds, George A., Los Angeles, Calif. Rock crusher and separator. 1,902,721; Mar. 21.
Reynolds, James N., and C. J. Scranton, jr., assignors to Avery Power Machinery Co., Peoria, Ill. Accelerating feed roll. 1,902,292; Mar. 21.
Reynolds, Posey D., Rustburg, Va. Piston tool. 1,902,722; Mar. 21.
Riblet, Royal N., Spokane, Wash. Conveyer bucket. 1,902,582; Mar. 21.
Rice, Elmer V., Covina, Calif. Spiked sandal. 1,902,521; Mar. 21.
Richterkessing, Frank H., assignor to Cheatham Electric Switching Device Company, Louisville, Ky. Automatic electric switch control. 1,902,263; Mar. 21.
Rieber, Frank, San Francisco, Calif. System for receiving and recording vibrations. 1,902,183; Mar. 21.
Rieber, Frank, San Francisco, Calif. Vibration sensitive system. 1,902,184; Mar. 21.
Rieber, Frank, Berkeley, assignor to Frank Rieber, Inc., San Francisco, Calif. Electrical prospecting system. 1,902,265; Mar. 21.
Rieber, Frank, Inc. (See Rieber, Frank, assignor.)
Riley, Clarence E., South Pasadena, Calif. Photoengraver's glass dipping rack. 1,902,338; Mar. 21.
Ripp, Frank X., Madison, Wis. Operating mechanism for windows. 1,902,266; Mar. 21.
Ritzerfeld, Wilhelm, Berlin, Germany. Manifolding machine. 1,902,293. Mar. 21.
Robb, Lewis J., Rochester, N. Y. Combined vending and change making machine. 1,902,467; Mar. 21.
Robbins, Theodore J., New Egypt, N. J. Portable ice saw. 1,902,666; Mar. 21.
Roberts, Edward W., assignor to Lakewood Manufacturing Co., Chicago, Ill. Container. 1,902,728; Mar. 21.
Roberts, John F. (See Holden, R. M., and Roberts.)
Robertson, William R. (See Baird, C., and Robertson.)
Robinson, Edward A., Montreal, Quebec, Canada, assignor to Joseph Robinson, New York, N. Y. Bracket for connector heads. 1,902,101; Mar. 21.
Robinson, Joseph. (See Robinson, Edward A., assignor.)
Roche, Alleman H. (See Dunham, C. R., and Roche.)
Rock Island Plow Company, The. (See Kaupke, Lee H., assignor.)
Roderick, Thomas E., Bronx, N. Y. Hat protector. 1,901,987; Mar. 21.
Rodstein, Harry, and I. Nathanson, Brooklyn, N. Y. Footboard for a bedstead or similar article. Des. 89,537; Mar. 21.
Rodstein, Harry, and I. Nathanson, Brooklyn, N. Y. Footboard for a bedstead or similar article. Des. 89,538; Mar. 21.
Rodstein, Harry, and I. Nathanson, Brooklyn, N. Y. Footboard for a bedstead or similar article. Des. 89,539; Mar. 21.
Rodstein, Harry, and I. Nathanson, Brooklyn, N. Y. Footboard for a bedstead or similar article. Des. 89,540; Mar. 21.
Rose, Gustaf A., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y. Imitating wood graining. 1,902,522; Mar. 21.
Rose, Joseph P., jr., Wellfleet, Mass. Machine for making cement blocks. 1,902,523; Mar. 21.
Rosenberg, Paul, Berlin, assignor to W. Rosenberg, Berlin, Pankow, Germany. Flash light. 1,902,377; Mar. 21.
Rosenberg, Walter. (See Rosenberg, Paul, assignor.)
Rosenthal China Corporation, The. (See Wesp, George, assignor.)
Roth, Lester B., Prophetstown, Ill. Power lawn mower. 1,902,524; Mar. 21.
Rothe, Horst, Berlin, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Coating electrodes of discharge tubes. 1,902,185; Mar. 21.
Rous, Bernard, Brooklyn, N. Y. Duplex roll of corrugated paper and making the same. 1,902,312; Mar. 21.
Rowe, George E., Wethersfield, assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of hollow glassware. 1,902,140; Mar. 21.
Rowe, George E., West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of hollow glassware. 1,902,141; Mar. 21.
Rowe, George E., Wethersfield, assignor to Hartford-Empire Company, Hartford, Conn. Manufacture of hollow glassware. 1,902,142; Mar. 21.
Rowley, Charles A., Los Angeles, Calif. Mixer. 1,902,525; Mar. 21.
Rubber Service Laboratories Company, The. (See Evans, Sylvester M., assignor.)
Rubber Service Laboratories Co., The. (See Ingram, Joseph E., assignor.)
Rubber Service Laboratories Co., The. (See Scott, Winfield, assignor.)
Rubovits, Walter I., Chicago, Ill. Container. 1,902,294; Mar. 21.
Ruby, Ernst L., Jenkintown, Pa. Switch heater. 1,902,339; Mar. 21.
Rudqvist, Carl A., Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland. Power transmission. 1,901,988; Mar. 21.
Rupert, Hughes T. (See Sanderson, Arthur E., assignor.)
Rupp, John L., Wilkinsburg, Pa., assignor, by mesne assignments, to Wubco Battery Corporation, Niagara Falls, N. Y. Storage battery separator. 1,902,267; Mar. 21.
Russ Manufacturing Company, The. (See Pilcher, Allen C. and L. C., assignors.)
Russel George J., Waltham, Mass. Lubricating system. 1,902,583; Mar. 21.
Sabbah, Camil A., Schenectady, N. Y., assignor to General Electric Company. Electric power converting apparatus. 1,902,468; Mar. 21.
Safety Car Heating & Lighting Company, The. (See Von Ohlsen, Louis H., assignor.)
Sager, Samuel N., Chicago, Ill. Pull-off legging. 1,902,584; Mar. 21.
Saladino, C. & Sons, Inc. (See Saladino, Frank, J., and S., assignors.)
Saladino, Frank, J., and S., assignors to C. Saladino & Sons, Inc., Chelsea, Mass. Composition for treating strings. 1,902,143; Mar. 21.
Saladino, Joseph. (See Saladino, Frank, J., and S.)
Saladino, Salvatore. (See Saladino, Frank, J., and S.)
Sample, Warren M., Muncie, Ind. Upright display rack. Des. 89,512; Mar. 21.
Sanders, Rufus C., assignor to Chrysler Corporation, Detroit, Mich. Accelerator pedal. 1,902,667; Mar. 21.
Sanderson, Arthur E., assignor of one-half to H. T. Rupert, San Pedro, Calif. Garment rack. 1,902,724; Mar. 21.
Sanford, Roy S., assignor to Bendix Brake Company, South Bend, Ind. Cable control. 1,902,585; Mar. 21.
Santini, Danilo. (See Williams, H. W., and Santini.)
Santos, Joseph A., Oakland, Calif. Chair. 1,902,586; Mar. 21.
Sargent & Company. (See Shaw, John H., assignor.)
Saunders, Norman H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,902,186; Mar. 21.
Saunders, Norman H., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,902,187; Mar. 21.
Sawin, Kenneth A., Winthrop, assignor to Wheeler Reflector Company, Boston, Mass. Floodlight. 1,902,587; Mar. 21.
Sawyer, Charles B., Cleveland Heights, assignor to The Brush Laboratories Company, Cleveland, Ohio. Flow meter. 1,902,427; Mar. 21.
Sbicca, Frank, assignor to Sbicca-Method Shoes Incorporated, Philadelphia, Pa. Producing complementary insole-outsole combinations. 1,902,725; Mar. 21.
Sbicca-method Shoes Incorporated. (See Sbicca, Frank, assignor.)
Schacht, William F., Huntington, Ind. Caster roller. 1,902,726; Mar. 21.
Schantz, Henry, New Castle, Pa. Molding tool for molding machines. 1,902,047; Mar. 21.
Schaub, James B., Wilmette, Ill. Air current conveyer. 1,901,932; Mar. 21.
Scherer, Abe, Matewan, W. Va. Wearing apparel. 1,902,268; Mar. 21.
Schier, Johann. (See Von Hofe, C., and Schier.)
Schier, Johann, Karl Petschenig, and A. Peinl, Vienna, Austria, assignors to the Firm Optische Anstalt C. P. Goerz; Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav, Bratislava, Czechoslovakia. Apparatus for determining the position of aircraft not visible to the naked eye. 1,902,727; Mar. 21.
Schiffman, Robert P., Chicago, Ill. Railroad crossing sign. 1,901,879; Mar. 21.
Schilling, Heinrich. (See Baumann, P., Schilling, and Fischer.)
Schmid, Otto, Rottweil-on-the-Neckar, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of viscose. 1,902,102; Mar. 21.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Fluid pressure governing system. 1,902,340; Mar. 21.
Schmidt, Henry F., Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company. Reduction gear. 1,902,341; Mar. 21.
Schmidt, Kurt, Wuppertal-Elberfeld-Grenze, Germany, assignor to American Glanzstoff Corporation, New York, N. Y. Filament treatment. 1,902,526; Mar. 21.
Schmidt, Paul, Munich, Germany. Conveying liquids at high pressure by means of ejectors. 1,902,728; Mar. 21.
Schmidt, Paul, Munich, Germany. Multistage liquid driven ejector for delivering liquids. 1,902,729; Mar. 21.
Schmidt, Victor P., and H. A. Brenaman, Altoona, Pa. Machine for grinding axles or the like. 1,902,188; Mar. 21.
Schneebeli, Hugo, Courbevoie, France. Carburetor. 1,902,378; Mar. 21.

Schönhöfer, Fritz, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Manufacture of quinoline derivatives and the products. 1,902,103; Mar. 21.

Schulemann, Werner, Vohwinkel, near Elberfeld, F. Mietzsch, Elberfeld, Germany, and A. Wingler, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y. Compounds of the xanthene series. 1,902,104; Mar. 21.

Schullerman, Ludwig, Astoria, N. Y. Suspenders. 1,902,342; Mar. 21.

Schumacher, Conrad R., Lynbrook, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Metal sharpening machine. 1,902,527; Mar. 21.

Schumacher, F. G., et al. (See Müller, Johann J., assignor.)

Schutt, William A., Litchfield, Ill. Highway sign. 1,902,189; Mar. 21.

Schwammberger, Hans. (See Steinbuch, E., Eschmann, and Schwammberger.)

Schwantes, Everett J., Chicago, Ill. Protecting inscriptions. 1,901,989; Mar. 21.

Schwartz, Samuel A., St. Paul, Minn. Towel service apparatus. 1,902,588; Mar. 21.

Schwegler, Clarence C., assignor to The Dow Chemical Company, Midland, Mich. Electric furnace. 1,902,668; Mar. 21.

Schweitzer, Hugo. (See Huismann, J., and Schweitzer.)

Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,513; Mar. 21.

Schwenk, Ladislas W., Flushing, N. Y. Portable stand and filter for barrels and the like. 1,901,878; Mar. 21.

Scott, Howard, Wilkinsburg, assignor to Westinghouse Electric & Manufacturing Company. Bimetal thermostat. 1,902,589; Mar. 21.

Scott, Winfield, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio. Age resisting rubber compound and making same. 1,902,379; Mar. 21.

Scovill Manufacturing Company. (See Janes, Edmund D., assignor.)

Scranton, Charles J., jr. (See Mentor, E. W., and Scranton.)

Scranton, Charles J., jr. (See Reynolds, J. N., and Scranton.)

Scullin Steel Co. (See Dreibuss, H. C., and Chiles.)

Seede, John A., Schenectady, N. Y., assignor to General Electric Company. Welding apparatus. 1,902,469; Mar. 21.

Seger, Jacob, assignor to the Firm Locher & Cie., Zurich, Switzerland. Annular dowel for timber bonds. 1,902,380; Mar. 21.

Selby, Charles M., hesignor to Holland Furnace Company, Holland, Mich. Thermostatic control. 1,902,105; Mar. 21.

Sell, Helmut, Berlin-Siemensstadt, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Microphone. 1,901,933; Mar. 21.

Seltzer, William H., Lehighton, Pa. Flower holding device. 1,902,423; Mar. 21.

Shafer Bearing Corporation. (See Hoover, Ray B., assignor.)

Shakeproof Lock Washer Company. (See Olson, Carl G., assignor.)

Shannon, James L., Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis. Electric flash-light. 1,902,590; Mar. 21.

Shaw, Arthur W., Cambridge, Mass. Side arm cushion. 1,902,730; Mar. 21.

Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. 1,902,343; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,514; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,515; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,516; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,517; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,518; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. Des. 89,519; Mar. 21.

Sheindelman, Samuel, Lawrence, N. Y. Sweater or similar article. 89,520; Mar. 21.

Shepherd, Chester G., Freeport, Ill. Article delivery device. 1,902,669; Mar. 21.

Shepherd, Solomon W., Orlo Vista, Fla. Amusement device. 1,902,381; Mar. 21.

Sherman, Donald W., assignor to A. O. Smith Corporation, Milwaukee, Wis. Drafting table. 1,902,424; Mar. 21.

Sherman, Warren S., Oklahoma City, Okla. Locking cover. 1,902,731; Mar. 21.

Shields, Michael P., Quebec, Quebec, Canada. Method of and apparatus for economizing feed water. 1,902,732; Mar. 21.

Shoe Form Co. (See De Witt, William J., assignor.)

Shoemaker, Frank W. (See Merwin, G. E., and Shoemaker.)

Shoemaker, Fred G., Syracuse, N. Y. Spark plug ignition terminal. 1,902,882; Mar. 21.

Shook, Florain J., assignor to National Rubber Machinery Company, Akron, Ohio. Extruding machine. 1,902,296; Mar. 21.

Shuster, Carl N., West Orange, N. J., assignor to La Fayette Instruments, Inc., New York, N. Y. Device for determining altitudes and trigonometric functions thereof. 1,901,880; Mar. 21.

Sidery, Arthur J. (See Sutton, H., Sidery, and Evans.)

Siemens & Halske Aktiengesellschaft. (See Blumberg, Gustav, assignor.)

Siemens & Halske Aktiengesellschaft. (See Sell, Helmut, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Kühnel, C., and Korittke, assignors.)

Signode Steel Strapping Company. (See Edwards, Russell T., assignor.)

Simanek, Wenzel J., Racine, Wis. Advertising frame. 1,901,990; Mar. 21.

Simanek, Wenzel J., Racine, Wis. Frame. 1,901,991; Mar. 21.

Simmen, Oscar, Erlach, Switzerland, assignor to the Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Water cooled internal combustion engine cylinder. 1,902,528; Mar. 21.

Sisnc, Julius, Torrington, Wyo. Tractor operated beet loader. 1,902,883; Mar. 21.

Skeffington, Edward T., et al. (See Foss, Leland L., assignor.)

Slemmer, William B., Malden, assignor to Warren Brothers Company, Cambridge, Mass. Apparatus designed for handling cement and like material. 1,902,145; Mar. 21.

Slotoroff, Abraham, Brooklyn, N. Y. Bathing garment. 1,902,190; Mar. 21.

Smestad, Hans M., Bainville, Mont. Grain treating and elevating device. 1,902,733; Mar. 21.

Smith, Algy J., Bloomfield, assignor to Hartford-Empire Company, Hartford, Conn. Forming parisons. 1,901,934; Mar. 21.

Smith, Alyson E., Ogden, Utah. Combined rack and utility table. 1,902,670; Mar. 21.

Smith, A. O., Corporation. (See Sherman, Donald W., assignor.)

Smith, A. O., Corporation. (See Stresau, Richard, assignor.)

Smith, Bruno M., West Orange, S. G. Langley, Maplewood, and G. F. Braun, Elizabeth, assignors to Thomas A. Edison, Incorporated, West Orange, N. J. Dictating machine cabinet. Des. 89,521; Mar. 21.

Smith, D. Montgomery, Portland, Oreg. Lawn edger and trimmer. 1,901,992; Mar. 21.

Smith, Dillon F. (See Pieper, E. J., Smith, and Vogt.)

Smith, Norman S., Eastaboga, Ala. Cultivator tractor. 1,901,993; Mar. 21.

Smith, William N. (See Davis, S. H., Anderson, Smith, and Hanley.)

Smitmans, John A. (See Johnson, L., and Smitmans.)

Smola, William H., sr., Central City, Iowa. Saw. 1,902,671; Mar. 21.

Society of Chemical Industry in Basle. (See Steinbuch, E., Eschmann, and Schwammberger, assignors.)

Soss, Joseph, Roselle, N. J. Covered joint hinge. 1,901,994; Mar. 21.

Souders, Mott, jr. (See Brown, G. G., and Souders.)

Sperber, Raymond L., Cheviot, Ohio, assignor to Wells & Richardson Company, Inc., Burlington, Vt. Color meter. 1,902,672; Mar. 21.

Speroulias, John, et al. (See Davison, Goliat, assignor.)

Sponsel, Charles W. (See Crosby, R. S., and Sponsel.)

Sprado, Carl G., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Grinding, refining, and mixing machine. 1,902,591; Mar. 21.

Sprague Specialties Co. (See Pineo, Orrin W., assignor.)

Sprague, Warner & Company. (See Klapper, Benjamin A., assignor.)

Standard-I. G. Company. (See Clark, Edgar M., assignor.)

Standard Radium Corporation of America. (See Tyrer, Alfred H., assignor.)

Stanley, Edgar C., Glen Cove, N. Y., assignor, by mesne assignments, to Motor and Plane Accessories, Inc., Detroit, Mich. Oiling system for motor cars. 1,902,592; Mar. 21.

Staples, William H. (See Blossom, C. W., and Staples.)

Stark Bro's. Nurseries & Orchards Company. (See Dickey, John H., assignor.)

Starrett, Henry F., Chicago, Ill. Panel-board and panel-board construction. 1,902,790; Mar. 21.

Staytite Company, The. (See Muller, Frans G. D., assignor.)

Stebbins, Frederick O. (See Hobart, H. M., Stebbins, and Gettelman.)

Stedefeld, Curt. (See Kruckenberg, F., and Stedefeld.)

Stegnstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Voltage compensated motor starter. 1,902,470; Mar. 21.

Steinbuch, Ewald, Basel, M. Eschmann and H. Schwammberger, Monthey, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Producing chemical reactions in gases and vapors with aid of a high tension electric arc. 1,902,384; Mar. 21.

Steiner Sales Company. (See Thompson, Charles W., assignor.)

Stemmons, Clarence H., Kansas City, Mo. Shoe. Des. 89,541; Mar. 21.

Sterling Products Company. (See Wilkinson, Arthur W., assignor.)

Stevenson, Horace N., Trenton, N. J. Adjustable springboard. 1,902,675; Mar. 21.

Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Control for heating systems. 1,901,995; Mar. 21.

Stewart-Warner Corporation. (See Oehlsen, George W., jr., assignor.)

Stickel, Charles W. (See Tuttle, W. B., and Stickel.)

Stieger, Ray J. (See D'Andrea, Michael, assignor.)

Stine, Ruby P., Shelbyville, Ind. Snath. 1,902,191; Mar. 21.

Stöckly, Johann J., Teltow, and E. Witte, Berlin-Lichterfelde, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Artificial silk. 1,902,529; Mar. 21.

Stoddard, Edgar S. (See Hilpert, W. S., and Stoddard.)

Stoddard, Edgar S., Berwyn, assignor to The Conover Company, Chicago, Ill. Dishwashing machine. 1,902,192; Mar. 21.

Stoddard, Edgar S., Berwyn, assignor to The Conover Company, Chicago, Ill. Washing machine. 1,902,193; Mar. 21.

Stokes, John S. (See Novotny, Emil E., assignor.)

Stoll, Albert, assignor to National Machine Products Company, Detroit, Mich. Apparatus for making lock washers. 1,902,269; Mar. 21.

Stouges, Anthony J., Queens Village, N. Y., assignor to Mergenthaler Linotype Company. Matrix cabinet. 1,902,425; Mar. 21.

Strasser, Rosetta R., New York, N. Y. Smoker's finger glove. 1,902,426; Mar. 21.

Streng Bakery Appliance Company. (See Streng, Leo F., assignor.)

Streng, Leo F., assignor to Streng Bakery Appliance Company, Columbia, Mo. Bread wrapping machine. 1,902,734; Mar. 21.

Stressau, Richard, Wauwatosa, assignor to A. O. Smith Corporation, Milwaukee, Wis. Annealing vessels. 1,902,146; Mar. 21.

Streun, John A., assignor to Hardwicke-Etter Company, Sherman, Tex. Adjustable picker roller. 1,902,674; Mar. 21.

Streun, John A., assignor to Hardwicke-Etter Company, Sherman, Tex. Conveyer for cotton. 1,902,675; Mar. 21.

Struble, Mabel, New York, N. Y. Hat box. 1,902,313; Mar. 21.

Sullivan Machinery Company. (See Holmes, Morris P., assignor.)

Sulzer Freres Societe Anonyme. (See Simmen, Oscar, assignor.)

Sunnen, Joseph, St. Louis, Mo. Cylinder grinder. 1,902,194; Mar. 21.

Sutton, Hubert, A. J. Sidery, and B. Evans, South Farnborough, England. Hardening alloy steel. 1,902,676; Mar. 21.

Swahn, Adolph, Ellsworth, Wis. Locking system for strong boxes. 1,902,195; Mar. 21.

Swanson, Swan J., St. Louis, Mo. Rotary amusement device. 1,901,935; Mar. 21.

Swerdlow, Nathan. (See Hill, C. H., and Swerdlow.)

Swick, Seward E. (See Bishop, L. C., and Swick.)

Swift and Company. (See Mehl, Arthur J., assignor.)

Symington Company, The. (See Barrows, Donald S., assignor.)

Tabulating Machine Company, The. (See Bryce, James W., assignor.)

Tabulating Machine Company, The. (See Daly, G. F., and Page, assignors.)

Tabulating Machine Company, The. (See Dechêne, Peter, assignor.)

Tabulating Machine Company, The. (See Ford, Eugene A., assignor.)

Tabulating Machine Company, The. (See Lake, Clair D., assignor.)

Tabulating Machine Company, The. (See Lee, F. L., and Phillips, assignors.)

Talbot, George W., Bloomington, Ind. Vegetable and fruit shipping basket. 1,902,196; Mar. 21.

Tamarin, Bernard J., Philadelphia, Pa. Vacuum cleaner handle structure. 1,902,593; Mar. 21.

Tamaru, Setsuro, Kamakura Gun, Kanagawa Ken, and Y. Kolzumi, Ebara Gun, Tokyo Fu, assignors to Mitsubishi Kogyo Kabushiki Kaisha, Tokyo, Japan. Treating material containing tin. 1,902,735; Mar. 21.

Tanaka, Hiroshi, Komagome, Hongo-Ku, and S. Imatomi, Ikegami-Machi, Ebara-Gun, assignors to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Producing MgCl$_2$ containing chlorides of alkali metals or alkaline earth metals. 1,902,385; Mar. 21.

Tate, James, assignor to Delta Manufacturing Company, Milwaukee, Wis. Miter gauge. 1,902,270; Mar. 21.

Taylor, Eugene S., Montpelier, Ohio. Display table. 1,902,677; Mar. 21.

Taylor, George A., Hyde Park, Mass. Starting device for internal combustion engines. 1,901,996; Mar. 21.

Taylor, George A., Hyde Park, Mass. Engine starting device. 1,901,997; Mar. 21.

Taylor, Herbert B., assignor to General Railway Signal Company, Rochester, N. Y. Electrical plug coupler. 1,902,701; Mar. 21.

Teitelbaum, Maxwell, Brooklyn, N. Y. Adjustable hatrack. 1,902,147; Mar. 21.

Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H. (See Rothe, Horst, assignor.)

Telephon-Apparat Fabrik E. Zwietusch, and Company. (See Binick, Georg, assignor.)

Terry, Edward F., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Handle for rock drills. 1,902,530; Mar. 21.

Texas Company, The. (See Bekimer, Otto, assignor.)

Textile Dyeing and Printing Co. of America, Inc. (See Froelicher, Victor, assignor.)

Thabeld, Feri A., Dallas, Tex., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del. Fuel injector for engines. 1,902,197; Mar. 21.

Tharp, Charles W., Watsonville, Calif. Leveler. 1,901,936; Mar. 21.

Theobald, William M., Cleveland, Ohio. Apparatus for cleaning window shades. 1,902,344; Mar. 21.

Theodoropulos, Aristede A., New York, N. Y. Twin food mixer. 1,902,678; Mar. 21.

Thoen, Bennett E., assignor, by mesne assignments, of one-half to O. B. Ovestrud, Orfordville, Wis. Agitator. 1,901,998; Mar. 21.

Thomas & Betts Co., The. (See Thomas, George C., jr., assignor.)

Thomas, George C., jr., assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connecter. Re18,773; Mar. 21.

Thomas, George J., assignor to Bendix Brake Company, South Bend, Ind. Brake-lining testing. 1,902,594; Mar. 21.

Thomas, Mabel M., executrix. (See Thomas, Thomas H.)

Thomas, Sherman O., Washington, D. C., assignor to The American Dairy Supply Company, Augusta, Me. Matrix material for production of printing plates. 1,902,048; Mar. 21.

Thomas, Thomas H., deceased, Edgewood; Mabel M. Thomas, executrix, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid pressure brake. 1,901,937; Mar. 21.

Thomas, Willis P., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,902,736; Mar. 21.

Thompson, Charles W., Wollaston, Mass., assignor, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah. Roll towel cabinet. 1,902,198; Mar. 21.

Thompson, George D. (See Willi, Christopher B., assignor.)

Thompson, James S., New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio. Grate bar. 1,902,595; Mar. 21.

Thomsen, Alfred M., San Francisco, Calif. Manufacturing paper pulp. 1,902,106; Mar. 21.

Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electromagnetic clutch. 1,902,471; Mar. 21.

Timson, Charles E., assignor to William Cooper & Nephews Incorporated, Chicago, Ill. Marker or tag. 1,902,531; Mar. 21.

Tinus, William C., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Tapping a conductor. 1,901,938; Mar. 21.

Todd, Malverin A. (See Hassell, M. E., and Todd.)

Toulewics, Isidore E., and M. Lison, Buffalo, N. Y. Tool holder guard. 1,902,679; Mar. 21.

Torrance, John R., Bitton, England. Mill for reducing paints, colors, and pigments. 1,902,680; Mar. 21.

Tourtois, Fernand, New York, N. Y., assignor to Coty, Inc., Wilmington, Del. Cosmetic container. 1,902,199; Mar. 21.

Travel Air Company. (See Rawdon, H., and Burnham, assignors.)

Travell, Warren. (See Powelson, W. V. N., and Travell.)

Traylor Engineering & Manufacturing Company. (See Miller, Arthur F., assignor.)

Traylor Engineering & Manufacturing Company. (See Traylor, Samuel W., jr., assignor.)

Traylor, Samuel W., jr., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa. Producing oil from wells, and apparatus therefor. 1,902,296; Mar. 21.

Traylor, Samuel W., jr., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa. Liquid pump. 1,902,386; Mar. 21.

Treconing, William C., Wauwatosa, assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Combined plug receptacle and warning light fixture. 1,902,596; Mar. 21.

Trimbach, Clem G., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Machine gun mount for aircraft. 1,902,107; Mar. 21.

Trinks, Willibald, assignor to Mesta Machine Company, Pittsburgh, Pa. Operating, pickling machines. 1,902,532; Mar. 21.

True, Robert A., Peterborough, England. Liquid meter. 1,902,049; Mar. 21.

Tsavaris, John E., Tarpon Springs, Fla. Vehicle signal switch. 1,902,737; Mar. 21.

Turck, Joseph A. V., Wilmette, assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill. Calculating machine. 1,902,597; Mar. 21.
Turck, Joseph A. V., Wilmette, assignor to Felt & Tarrant Mfg. Company, Chicago, Ill. Calculating machine. 1,902,598; Mar. 21.
Tuteur, Julius, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio. Handle for vacuum cleaners. 1,902,472; Mar. 21.
Tuttle, Henry W., Chicago, Ill. Machine for expressing fruit juices and the like. 1,902,738; Mar. 21.
Tuttle, William R., and C. W. Stickel, assignors to The Kuriash Company, Inc., Rochester, N. Y. Cosmetic compact. 1,902,681; Mar. 21.
Twitchell Process Company, The. (See Heckel, Hermann, assignor.)
Twogood, Ralph S., San Francisco, Calif. Cover for oil storage tanks. 1,902,108; Mar. 21.
Twyman, Frank, assignor to Adam Hilger, Limited, London, England. Method of and apparatus for quantitative spectrum analysis. 1,902,109; Mar. 21.
Tyrer, Alfred H., Toronto, Ontario, Canada, assignor to Standard Radium Corporation of America, New York, N. Y. Device for impregnating drinking water with radium emanation. 1,902,200; Mar. 21.
Uggla, Carl H. (See Magnuson, C. A., and Uggla.)
Uhrenfabrik J. Kiensle. (See Jaissle, Gottlob, assignor.)
Ungelenk, Alfred, and W. Hofmann, Thuringen, Germany, assignors to General Electric Company. Device for supporting metal parts within a vacuum tube. 1,902,473; Mar. 21.
Ungelenk, Alfred, and W. Hofmann, Thuringen, Germany, assignors to General Electric Company. Protective cover for X-ray tubes. 1,902,474; Mar. 21.
Union Switch & Signal Company, The. (See McCann, Ronald A., assignor.)
United American Bosch Corporation. (See Kongsted, Ludvig P., assignor.)
United American Bosch Corporation. (See Martin, John F., assignor.)
United Autographic Register Co. (See Jensen, Louis, assignor.)
United-Carr Fastener Corporation. (See Holmes, George A., assignor.)
United-Carr Fastener Corporation. (See Maynard, George S., assignor.)
United-Carr Fastener Corporation. (See Walker, William J., assignor.)
United Engineering & Foundry Company. (See Johnson, L., and Smitmans, assignors.)
United Oil Manufacturing Company. (See Gebhardt, Frank C., assignor.)
United Shoe Machinery Corporation. (See Ballard, M. H., and McLean, assignors.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Goddu, George, assignor.)
United States Envelope Company. (See Novick, Abraham, assignor.)
United States Glass Company. (See Ilgenfritz, Curtis B., assignor.)
United States Gypsum Company. (See Birdsey, C. R., and Reel, assignors.)
United States Gypsum Company. (See Marks, Herbert E., assignor.)
United States Gypsum Company. (See Reel, Herbert W., assignor.)
Universal Oil Products Company. (See Dubbs, Carbon P., assignor.)
Universal Oil Products Company. (See Mekler, Lev A., assignor.)
Universal Oil Products Company. (See Nelson, Edwin F., assignor.)
Universal Oil Products Company. (See Pollock, Robert T., assignor.)
Universal Products Company. (See Huff, Lyman C., assignor.)
Upson, Charles A., assignor to The Upson Company, Lockport, N. Y. Insulating material and making the same. 1,901,999; Mar. 21.
Upson Company, The. (See Upson, Charles A., assignor.)
Upson Company, The. (See Winter, Otto R., assignor.)
Urich, Moritz, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Vapor discharge device. 1,902,110; Mar. 21.
Utilities Service Company. (See Miller, Herbert E., assignor.)
Valentine, Irving R., Erie, Pa., assignor to General Electric Company. Short cycle annealing process for producing malleable iron. 1,902,475; Mar. 21.
Valentine, Warren P., Line Lexington, assignor to National Transit Pump & Machine Company, Oil City, Pa. Fluid pressure pump. 1,902,345; Mar. 21.
Van Ee, Willem. (See Day, Levi, and van Ee.)
Van Sickle, Roswell C., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,902,314; Mar. 21.
Van Slyck, William, Brooklyn, N. Y. Mattress. 1,902,000; Mar. 21.
Vasselli, Anthony J., Newark, N. J. Synchronizing mechanism for talking motion pictures. 1,902,201; Mar. 21.
Vaughn, Sidney P., U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control Inc., Lynnwood, Calif. Thermostat. 1,901,881; Mar. 21.
Vaughn, Stanley I., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Metal joint and method of forming the same. 1,902,111; Mar. 21.
Vawter, John T., Los Angeles, Calif. Cement gun nozzle. 1,902,202; Mar. 21.
Vernet, Sergius, Brooklyn, N. Y. Cigarette dispensing and lighting machine. 1,902,599; Mar. 21.
Verstegen, Theodore A., Buffalo, N. Y. Cabin for aircraft and the like. 1,902,428; Mar. 21.
Verstoep, Dirk, The Hague, Netherlands. Apparatus for separating water from dredged material. 1,902,739; Mar. 21.
Vetter, Joseph J., Hackensack, assignor to Natural Products Refining Co., Jersey City, N. J. Producing chromates. 1,901,939; Mar. 21.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Lubricating means for automatic transmission mechanism. 1,902,050; Mar. 21.
Vock, William A., Long Beach, Calif. Bushing. 1,902,600; Mar. 21.
Vodos, Frederick W., Wilmette, assignor to Goodman Manufacturing Company, Chicago, Ill. Mining machine. 1,902,148. Mar. 21.
Vogt, Clarence C. (See Pieper, E. J., Smith, and Vogt.)
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Rotary pump. 1,902,315; Mar. 21.
Vogt, Clarence W., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky. Rotary pump. 1,902,346; Mar. 21.
Vogt, Clarence W., and W. E. Zoeller, assignors to Vogt Instant Freezers, Incorporated, Louisville, Ky. Rotary gear pump. 1,902,347; Mar. 21.
Vogt Instant Freezers, Incorporated. (See Vogt, Clarence W., assignor.)
Vogt Instant Freezers, Incorporated. (See Vogt, C. W., and Zoeller, assignors.)
Von Bichowsky, Foord, Glendale, Calif. Preparing titanium dioxide. 1,902,203; Mar. 21.
Von Bichowsky, Foord, Glendale, Calif. Producing pigments containing titanium. 1,902,204; Mar. 21.
Von Hofe, Christian, and J. Schier, Vienna, Austria, assignor to Actiengesellschaft C. P. Goers Optische Anstalt Actiova Spolecnost K. P. Goers Opticky Ustav, Pressburg, Bratislava, Czechoslovakia. Box shaped water level. 1,902,387; Mar. 21.
Von Ohlsen, Louis H., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company. System and apparatus for electric regulation. 1,901,882; Mar. 21.
Vykoupil, Karel, Mariampol, Lithuania. Evaporator. 1,902,533. Mar. 21.
Wacker, Dr. Alexander, Gesellschaft fur Elektrochemische Industrie. (See Halbig, P., and Kaufler, assignors.)
Wade, Elmer J. (See McEachron, K. B., and Wade.)
Wagstaff, James W., Youngstown, Ohio. Checker brick and checker work formed therefrom. 1,902,348; Mar. 21.
Waite Carpet Company. (See Kadlec, Charles, assignor.)
Waite, Harry F. (See Garretson, Harry D., assignor.)
Walker, William J., Waterbury, Conn., assignor to United-Carr Fastener Corporation, Cambridge, Mass. Bag frame structure and fastener therefor. 1,902,297; Mar. 21.
Wall, Matthew J., Jersey City, N. J., assignor to The Linde Air Products Company. Heat retaining means for autogenous welding and welding. 1,902,051; Mar. 21.
Wallace, R., & Sons Manufacturing Company. (See Warren, William S., assignor.)
Walle, Ludwig S., Lansdowne, Pa., assignor to General Electric Company. Circuit controlling apparatus. 1,902,476; Mar. 21.
Walrath, Ernest L., Bend, Oreg. Golf tee positioning device. 1,902,682; Mar. 21.
Walter, Albert B., Elm Grove, W. Va. Combination jack and shock absorbing structure. 1,902,740; Mar. 21.
Wandling, Harry T., Alton, Ill. Stoker link. 1,902,149; Mar. 21.
Ward, Alfred T. (See Warren, H. W. H., Newbound, and Ward.)
Warner, Donald F., Lynn, Mass., assignor to General Electric Company. Packing. 1,902,792; Mar. 21.
Warner, Harry S., Joliet, Ill. Wall structure. 1,902,271; Mar. 21.
Warner, Joseph R., assignor to S. F. Bowser & Company, Fort Wayne, Ind. Automatic lubricator. 1,902,601; Mar. 21.
Warren Brothers Company. (See Slemmer, William B., assignor.)
Warren, Henry W. H., Coventry, R. Newbound, Rugby, and A. T. Ward, Derby, England, assignors to General Electric Company. Manufacture of synthetic resins. 1,902,477; Mar. 21.
Warren, S. D., Company. (See Cape, William H., assignor.)
Warren, William S., Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or similar article. Des. 89,542; Mar. 21.
Washington Gas Light Company. (See Nachman, Harold J., assignor.)

Wasserberg, Max, Brooklyn, N. Y. Ownership identification device. 1,902,001; Mar. 21.
Waterman, L. E., Company. (See Nilsson, O. F., and Bachrach, assignors.)
Water Works Supply Company. (See Hubbard, Edward L., assignor.)
Weaver, John A. (See Hughes, Hughey V., assignor.)
Weber, Carl, Jacksonville, Fla. Diversion dam. 1,902,741; Mar. 21.
Webster, James M., New York, N. Y. Hangar for aeroplanes and the like. 1,902,205; Mar. 21.
Wehr Motor Company, The. (See Haller, Harvey H., assignor.)
Weis, Arthur R., assignor of one-half to Pacific Pump Works and one-half to G. E. Bigelow, Huntington Park, Calif. Main bearing construction for turbine pumps. 1,902,150; Mar. 21.
Weis, Arthur R., assignor of one-half to Pacific Pump Works and one-fourth to G. E. Bigelow, Huntington Park, Calif. Deep-well turbine leakproof and sandproof upper main bearing. 1,902,431; Mar. 21.
Welch, Clifton, Pensacola, Fla. Combined cigarette case and ash tray. 1,902,888; Mar. 21.
Welch, Sidney A., A. F. Guyler, J. T. Ashby, and W. H. Boaler, Spondon, near Derby, England, assignors to Celanese Corporation of America. Knitting machine. 1,902,151; Mar. 21.
Wellauer, Max, Oerlikon, near Zurich, assignor to Maschinenfabrik Oerlikon, Oerlikon, Switzerland. Mercury vapor anode. 1,902,002; Mar. 21.
Wells & Richardson Company. (See Sperber, Raymond L., assignor.)
Wentink, Alfred N., Chicago, Ill. Insulation stripping device. 1,902,742; Mar. 21.
Wenzel, Emil, assignor to Ernst Gessner Aktiengesellschaft, Aue, Germany. Moistening cloth. 1,902,429; Mar. 21.
Werder, John F., Lakewood, Ohio. Discharge nozzle. 1,902,003; Mar. 21.
Wesp, George, assignor to The Rosenthal China Corporation, New York, N. Y. Plate or similar article. Des. 89,522; Mar. 21.
Western Electric Company. (See Brodie, George H., assignor.)
Western Electric Company. (See Dinham, C. R., and Roche, assignors.)
Western Electric Company. (See Fruth, Hal F., assignor.)
Western Electric Company. (See Hoffman, R. E., and Paulson, assignors.)
Western Electric Company. (See McCoy, Clarence E., assignor.)
Western Electric Company. (See McKee, Clarence A., assignor.)
Western Electric Company. (See McMullan, Samuel, assignor.)
Western Electric Company. (See Wright, Esmond P. G., assignor.)
Western Union Telegraph Company, The. (See Kimball, Vernon R., assignor.)
Westinghouse Air Brake Company, The. (See Daux, Gaston, assignor.)
Westinghouse Air Brake Company, The. (See Farmer, Clyde C., assignor.)
Westinghouse Air Brake Company, The. (See McCune, Joseph C., assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Electric and Manufacturing Company. (See Beers, G. L., and Barden, assignors.)
Westinghouse Electric & Manufacturing Company. (See Burr, Gordon A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Foresman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Halfvarson, Gustaf A., assignor.)
Westinghouse Electric & Manufacturing Company. (See High, Jurjen S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Legg, Joseph W., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mosshart, Donald J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Reavis, A. B., and Isinger, assignors.)
Westinghouse Electric & Manufacturing Company. (See Schmidt, Henry F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Scott, Howard, assignor.)
Westinghouse Electric & Manufacturing Company. (See Van Sickle, Roswell C., assignor.)
Westinghouse Electric and Manufacturing Company. (See Williams, H. W., and Santini, assignors.)
West Virginia Armature Co. (See Phelps, Arthur F., assignor.)
Wharton, William B., et al. (See Barnhart, G. E., and Pfaff, assignors.)
Wheeler Reflector Company. (See Sawin, Kenneth A., assignor.)
Whitaker, Louis P., New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Making heat exchangers. 1,902,349; Mar. 21.
Whitaker, Louis P., New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Heat exchanger. 1,902,350; Mar. 21.
White and Wells Company. (See Wrigley, John R., assignor.)
White, Blanche B. (See Moss, W. H., and White.)
Whitehead, Earl B., assignor to Atlantic Carton Corporation, Norwich, Conn. Carton. 1,901,883; Mar. 21.
Whitlock Gas Process Company. (See Whitlock, Richard E., assignor.)
Whitlock, Richard E., Camarillo, Calif., assignor to Whitlock Gas Process Company, Inc., Dover, Del. Making oil gas. 1,902,004; Mar. 21.
Whittingham, George H., assignor to Monitor Controller Company, Baltimore, Md. Push button switch. 1,902,743; Mar. 21.
Wickersham, Elmer E., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif. Harvester. 1,902,430; Mar. 21.
Wiedmann, Ernst. (See Ferris, J. P., Clute, and Wiedmann.)
Wiegand, Erich, Berlin-Waidmannslust, Germany, assignor to General Electric Company. Manufacture of hot cathodes for electric discharge devices. 1,902,478; Mar. 21.
Wielats, Fred, Chicago, Ill. Vacuum cleaning device. 1,902,534; Mar. 21.
Wildhaber, Ernest, Brooklyn, N. Y. Worm gearing. 1,902,683; Mar. 21.
Wilkinson, Arthur W., assignor to Sterling Products Company, Easton, Pa. Container. 1,902,816; Mar. 21.
Willheim, William, Co. (See Brodsky, Michel, assignor.)
Willheim, William, Co. (See Gottesman, Joseph M., assignor.)
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Willheim, William, Co. (See Kohut, Alexander, assignor.)
Willheim, William, Co. (See Schweiser, Jack, assignor.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,543; Mar. 21.
Willi, Christopher B., assignor of one-fourth to G. D. Thompson, Heber, Calif. Circuit controlling device. 1,902,744; Mar. 21.
Williams, Harold W., and D. Santini, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company. Relay. 1,902,602; Mar. 21.
Williams, Ira, Woodstown, N. J., and A. M. Neal, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Preservation of rubber. 1,902,005; Mar. 21.
Williams, Tudor R. (See Hopkinson, H., and Britton, assignors.)
Willing, Joseph E., assignor to General Railway Signal Company, Rochester, N. Y. Thermal relay. 1,902,793; Mar. 21.
Willmann, Gustave, Paris, France. Wafer dosing, filling, and sealing machine. 1,902,272; Mar. 21.
Wilmot Castle Co. (See Castle, Wilmot V., assignor.)
Wilson, Grant V., Chicago, Ill., assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa. Heat insulating covering. 1,902,794; Mar. 21.
Wilson, Wesley, Chicago, Ill., assignor to Bendix Aviation Corporation, South Bend, Ind. Automatic priming device. 1,902,603; Mar. 21.
Windaus, Adolf, Cottingen, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Antirachitically active product. 1,902,745; Mar. 21.
Wingler, August. (See Schulemann, W. Mietzsch, and Wingler.)
Winter, Otto R., Cincinnati, Ohio, assignor to The Upson Company, Lockport, N. Y. Sheet severing mechanism. 1,902,604; Mar. 21.
Winthrop Chemical Company. (See Linsert, Otto, assignor.)
Winthrop Chemical Company. (See Schönhöfer, Fritz, assignor.)
Winthrop Chemical Company. (See Schulemann, W., Mietzsch, and Wingler, assignors.)
Winthrop Chemical Company. (See Windaus, Adolf, assignor.)
Wired Radio, Inc. (See Boljahn, Adolf W. C., assignor.)
Witte, Erhard. (See Stöckly, J. J., and Witte.)
Wolf Brothers. (See Wolf, Howard A., assignor.)
Wolf, Gregor, Betzdorf-on-the-Sieg, Germany. Hand cultivator. 1,902,389; Mar. 21.
Wolf, Howard A., assignor to Wolf Brothers, Philadelphia, Pa. Dispenser. 1,902,052; Mar. 21.
Wolff, Irving. (See Goldsmith, A. N., and Wolff.)
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Drawer suspension. 1,902,795; Mar. 21.
Wood, George R., Toronto, Ontario, Canada, assignor to International Business Machines Corporation, New York, N. Y. Printing ribbon. 1,902,007; Mar. 21.
Wood, John, Manufacturing Company. (See Dougherty, Robert J., assignor.)
Wood, Walter. (See Camerota, Louis A., assignor.)
Woodbridge, Joseph L. (See Kershaw, W. E., and Woodbridge.)
Woodruff, Henry S., Schenectady, N. Y., assignor to General Electric Company. Refrigerator cabinet. 1,902,479; Mar. 21.
Woods, Charles L., Alton, Ill. Boat. 1,902,006; Mar. 21.
Woods, William J., Schenectady, N. Y., assignor to General Electric Company. Hydraulic operator. 1,902,480; Mar. 21.
Wormley, James C., New York, N. Y. Sterilising process. 1,902,390; Mar. 21.

Wright, Esmond P. G., Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. 1,901,940; Mar. 21.
Wright, Percy C., Pittsburg, Calif., assignor to Minerals Separation North American Corporation, New York, N. Y. Froth-flotation concentration of ores. 1,902,317; Mar. 21.
Wrigley, John R., Norwalk, assignor to White and Wells Company, Waterbury, Conn. Holder for transparent pie covers. 1,902,206; Mar. 21.
Wrigley, Wm., Jr. Company. (See Johnson, Arthur E., assignor.)
Wubco Battery Corporation. (See Rupp, John L., assignor.)
Wulf, Louis P., Lost Nation, Iowa. Air-mail pick-up and deposit mechanism. 1,902,391; Mar. 21.
York, Carl R., North Tonawanda, N. Y. Necktie display holder. 1,901,941; Mar. 21.
York Water Corporation, Ltd. (See Alex, Max, assignor.)
Young, Archer E., Pittsburgh, Pa. Measuring apparatus. 1,902,112; Mar. 21.
Young, Charles J. (See Butler, H. R., and Young, assignors.)
Young Motor Trunk Company. (See Duffy, Tom I., assignor.)
Youngstown Steel Door Company, The. (See Ditchfield, Frank, assignor.)
Yunker, James A., Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y. Production of hydrogen-nitrogen gas mixtures. 1,901,884; Mar. 21.
Yunker, James A., Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y. Manufacture of industrial hydrogen. 1,901,885; Mar. 21.
Yunker, James A., Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y. Production of carbon black. 1,902,746; Mar. 21.
Yunker, James A., Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y. Reforming natural gas. 1,902,747; Mar. 21.
Zaboransky, Anton, Todtnau, Germany. Brush making machine. 1,902,113; Mar. 21.
Zaidan Hojin Rikagaku Kenkyujo. (See Tanaka, H., and Imatomi, assignors.)
Zansig, Frank C. (See Buettner, R. J., Found, Muntner, Neits, and Zansig.)
Zehner, James L. (See Acheson, M. A., and Zehner.)
Zellstoffabrik Waldhof. (See Müller-Clemm, Hellmuth, assignor.)
Zide, Samuel, New York, N. Y. Shoe. 1,902,503; Mar. 21.
Ziehl, Gustav H., Rodenkirchen, Germany. Drawer guide. 1,902,748; Mar. 21.
Zoeller, Walter E. (See Vogt, C. W., and Zoeller.)
Zullig, Emil G., Bergenfield, N. J., assignor to Samuel Ellen, New York, N. Y. Embroidered textile fabric trimming. Des. 89,523; Mar. 21.
Zullig, Emil G., Bergenfield, N. J., assignor to S. Ellen, New York, N. Y. Embroidered textile fabric. Des. 89,524; Mar. 21.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 21ST DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetylene generator. R. A. Boley. 1,902,757; Mar. 21.
Acid esters of borneol and isoborneol, Preparing fatty. V. Hilcken. 1,902,364; Mar. 21.
Acid, Evaporation of nitric. W. E. Kirst. 1,901,875; Mar. 21.
Acid, Manufacture of maleic. J. W. Livingston. 1,901,914; Mar. 21.
Adjustably supported seat. G. Flintermann. 1,902,682; Mar. 21.
Advertising frame. W. J. Simanek. 1,901,990; Mar. 21.
Aeroplane wing construction. G. M. Bellanca. 1,901,864; Mar. 21.
Agitator. B. E. Thoen. 1,901,998; Mar. 21.
Agricultural implement. C. E. Johnson. 1,901,909; Mar. 21.
Air cooling. F. A. Kitchen. 1,902,246; Mar. 21.
Aircraft control means. T. B. Lavelle. 1,902,133; Mar. 21.
Aircraft not visible to the naked eye, Apparatus for determining the position of. J. Schier, K. Petschenig, and A. Peinl. 1,902,727; Mar. 21.
Air-mail pick-up and deposit mechanism. L. P. Wulf. 1,902,391; Mar. 21.
Airship. W. V. N. Powelson and W. Travell. 1,902,519; Mar. 21.
Air treatment, Pneumatic cleaning. M. I. Dorfan. 1,902,061; Mar. 21.
Air venting device. J. N. La Branch. 1,902,409; Mar. 21.
Alkoxyaldehyde and production of same. P. Halbig and F. Kaufler. 1,902,070; Mar. 21.
Altitudes and trigonometric functions thereof, Device for determining. C. N. Shuster. 1,901,880; Mar. 21.
Ammonium sulphate, Producing. M. Larsson. 1,902,649; Mar. 21.
Amusement device. S. W. Shepherd. 1,902,881; Mar. 21.
Amusement device, Rotary. S. J. Swanson. 1,901,935; Mar. 21.
Amusement machine. J. F. Meyer. 1,902,040; Mar. 21.
Anchor for boats. A. Bosch. 1,902,393; Mar. 21.
Animal fibers, Reserving of. J. Hulsmann and H. Schweitzer. 1,902,450; Mar. 21.
Annealing process for producing malleable iron, Short cycle. I. R. Valentine. 1,902,475; Mar. 21.
Antenna, Energizing. N. E. Lindenblad. 1,902,086; Mar. 21.
Antifreeze composition for radiators and the like. J. B. McCauley. 1,902,287; Mar. 21.
Antifriction bearing. R. B. Hoover. 1,901,967; Mar. 21.
Antirachitically active product. A. Windaus. 1,902,745; Mar. 21.
Apparel, Wearing. A. Scherer. 1,902,268; Mar. 21.
Arseno-compounds and purifying same, Heterocyclic. A. Binz and C. Räth. 1,902,756; Mar. 21.
Article delivery device. C. G. Shepher. 1,902,669; Mar. 21.
Article of manufacture. A. N. Lurie. 1,902,175; Mar. 21.
Ash tray. G. O. Campbell. 1,902,014; Mar. 21.
Asphalt, Producing. L. Kirschbraun. 1,902,305; Mar. 21.
Autographic register. L. Jensen. 1,902,284; Mar. 21.
Automatic lubricator. J. R. Warner. 1,902,601; Mar. 21.
Automobile, Air driven. J. P. Halloran. 1,902,124; Mar. 21.
Automobile stage body. D. E. Austin. 1,902,607; Mar. 21.
Awning of metal or like rigid material. J. A. Martin. 1,901,976; Mar. 21.
Bag: *See*—
Mail bag.
Bag. M. E. Johns. 1,902,368; Mar. 21.
Bag frame fastener. W. C. Hiering. 1,901,965; Mar. 21.
Bag frame structure and fastener therefor. W. J. Walker. 1,902,297; Mar. 21.
Balanced valve. R. L. Murray. 1,902,336; Mar. 21.
Banks, stores, and the like, against robbery, by gas and smoke, System for protecting. B. C. Goss. 1,901,959; Mar. 21.
Bar: *See*—
Grate bar.
Barge, Log carrying. W. J. Moloney. 1,901,877; Mar. 21.
Base for golf bags, Bowl shaped. J. K. Hotse. 1,902,644; Mar. 21.
Basket, Vegetable and fruit shipping. G. W. Talbot. 1,902,196; Mar. 21.
Bearing: *See*—
Antifriction bearing. Upper main bearing.
Bearing and seal therefor. L. D. Cobb. 1,902,620; Mar. 21.
Bearing construction for turbine pumps, Main. A. R. Weis. 1,902,150; Mar. 21.
Bearings, Method and apparatus for tinning connecting rod. W. J. Fiegel. 1,902,770; Mar. 21.
Beds, Adjustable back rest for. F. L. Lansy. 1,902,249; Mar. 21.
Beds, Counterbalancing means for foldable. G. F. Cane. 1,902,619; Mar. 21.
Binder, Loose-leaf. L. T. Lloyd. 1,902,786; Mar. 21.
Binder over fibrous materials, Distributing. E. J. Pieper, D. F. Smith, and C. C. Vogt. 1,901,930; Mar. 21.
Binding, Metal. E. E. Draper. 1,901,902; Mar. 21.
Block: *See*—
Insulating block. Toy building block.
Blowing device for pneumatic tools. E. B. Lear. 1,902,562; Mar. 21.
Blowing device for rock drills. L. C. Bayles. 1,902,536; Mar. 21.
Blow-out preventer. A. J. and K. T. Penick. 1,902,097; Mar. 21.
Board trim and securing means, Running. T. I. Duffy. 1,901,869; Mar. 21.
Boat. C. L. Woods. 1,902,006; Mar. 21.
Body striping. E. J. Hoyos. 1,901,908; Mar. 21.
Boiler: *See*—
Water tube boiler.
Boiler. J. H. Fox. 1,902,159; Mar. 21.
Boiler cleaner. W. P. Thomas. 1,902,736; Mar. 21.
Bolt, Self-locking. T. A. Kirton. 1,902,454; Mar. 21.
Bookholder. G. J. Flanagan. 1,902,549; Mar. 21.
Boot tree. F. R. Maier. 1,902,251; Mar. 21.
Bore straightening tool, Well. M. J. Lewis. 1,902,174; Mar. 21.
Bowl or article of analogous nature, Sugar. H. Negbaur. Des. 89,531; Mar. 21.
Box: *See*—
Hat box. Match box.
Journal box. Outlet box.
Junction box.
Box wrapping machine. A. E. Johnson. 1,902,079; Mar. 21.
Brace: *See*—
Table leg brace.
Bracket: *See*—
Brake beam support bracket.
Bracket for connecter heads. E. A. Robinson. 1,902,101; Mar. 21.
Brake: *See*—
Fluid pressure brake.
Brake. G. A. Halfvarson. 1,902,640; Mar. 21.
Brake. L. E. La Brie. 1,902,455; Mar. 21.
Brake. L. E. La Brie. 1,902,647; Mar. 21.
Brake band signaling device. A. S. Cataudella. 1,902,750; Mar. 21.
Brake beam support bracket. E. G. Busse. 1,902,315; Mar. 21.
Brake-lining testing. G. J. Thomas. 1,902,594; Mar. 21.
Brake mechanism, Self-adjusting. E. J. W. Ragsdale. 1,902,181; Mar. 21.
Brake testing device for vehicle wheels. T. A. Patterson. 1,902,718; Mar. 21.
Bread serving appliance. C. Holdgrafer. 1,902,239; Mar. 21.
Bread wrapping machine. L. F. Streng. 1,902,734; Mar. 21.
Brick and checker work formed therefrom, Checker. J. W. Wagstaff. 1,902,346; Mar. 21.
Bridge bid indicator and container, Combined. E. Jacobs. Des. 89,529; Mar. 21.
Bromine, Continuous process of preparing liquid. I. F. Harlow, I. A. Kenaga, and G. F. Dressel. 1,902,301; Mar. 21.
Brush making machine. A. Zaboransky. 1,902,113; Mar. 21.
Bucket, Conveyer. E. N. Riblet. 1,902,582; Mar. 21.
Buckle, Foldable. M. Anderson. 1,902,535; Mar. 21.
Building insulation and applying same. E. G. Halliwell. 1,902,699; Mar. 21.
Bumper. G. Q. Lewis. 1,902,651; Mar. 21.
Bun puncher and toaster. C. W. Mabey. 1,902,564; Mar. 21.
Burner: *See*—
Fuel burner. Oil burner.
Bus bar structure. C. H. Hill and N. Swerdlow. 1,902,501; Mar. 21.
Bushing. W. A. Vock. 1,902,600; Mar. 21.
Bushing device, High-voltage. G. A. Burr. 1,902,617; Mar. 21.
Bushing remover. H. W. Kulp and M. C. Dellinger. 1,902,711; Mar. 21.
Cabin for aircraft and the like. T. A. Verstegen. 1,902,428; Mar. 21.
Cabinet and seat construction, Combination. E. A. Bloedel. 1,902,319; Mar. 21.

Wright, Esmond P. G., Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone exchange system. 1,901,940; Mar. 21.
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Zanzig, Frank C. (See Buettner, R. J., Found, Muntner, Neitz, and Zanzig.)
Zehner, James L. (See Acheson, M. A., and Zehner.)
Zellstofffabrik Waldhof. (See Müller-Clemm, Hellmuth, assignor.)
Zide, Samuel, New York, N. Y. Shoe. 1,902,503; Mar. 21.
Ziehl, Gustav H., Rodenkirchen, Germany. Drawer guide. 1,902,748; Mar. 21.
Zoeller, Walter E. (See Vogt, C. W., and Zoeller.)
Zullig, Emil G., Bergenfield, N. J., assignor to Samuel Ellen, New York, N. Y. Embroidered textile fabric trimming. Des. 89,523; Mar. 21.
Zullig, Emil G., Bergenfield, N. J., assignor to S. Ellen, New York, N. Y. Embroidered textile fabric. Des. 89,524; Mar. 21.

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Amusement device. S. W. Shepherd. 1,902,381; Mar. 21.
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Antirachitically active product. A. Windaus. 1,902,745; Mar. 21.
Apparel, Wearing. A. Scherer. 1,902,268; Mar. 21.
Arseno-compounds and purifying same, Heterocyclic. A. Binz and C. Räth. 1,902,756; Mar. 21.
Article delivery device. C. G. Shepher. 1,902,669; Mar. 21.
Article of manufacture. A. N. Lurie. 1,902,175; Mar. 21.
Ash tray. G. O. Campbell. 1,902,014; Mar. 21.
Asphalt, Producing. L. Kirschbraun. 1,902,305; Mar. 21.
Autographic register. L. Jensen. 1,902,284; Mar. 21.
Automatic lubricator. J. R. Warner. 1,902,601; Mar. 21.
Automobile, Air driven. J. P. Halloran. 1,902,124; Mar. 21.
Automobile stage body. D. E. Austin. 1,902,607; Mar. 21.
Awning of metal or like rigid material. J. A. Martin. 1,901,976; Mar. 21.
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Bag. M. E. Johns. 1,902,368; Mar. 21.
Bag frame fastener. W. C. Hiering. 1,901,965; Mar. 21.
Bag frame structure and fastener therefor. W. J. Walker. 1,902,297; Mar. 21.
Balanced valve. R. L. Murray. 1,902,336; Mar. 21.
Banks, stores, and the like, against robbery, by gas and smoke, System for protecting. B. C. Goss. 1,901,959; Mar. 21.
Bar: *See*—
Grate bar.
Barge, Log carrying. W. J. Moloney. 1,901,877; Mar. 21.
Base for golf bags, Bowl shaped. J. K. Hotze. 1,902,644; Mar. 21.
Basket, Vegetable and fruit shipping. G. W. Talbot. 1,902,196; Mar. 21.
Bearing: *See*—
Antifriction bearing. Upper main bearing.
Bearing and seal therefor. L. D. Cobb. 1,902,620; Mar. 21.
Bearing construction for turbine pumps, Main. A. R. Weis. 1,902,150; Mar. 21.
Bearings, Method and apparatus for tinning connecting rod. W. J. Fiegel. 1,902,770; Mar. 21.
Beds, Adjustable back rest for. F. L. Lansy. 1,902,249; Mar. 21.
Beds, Counterbalancing means for foldable. G. F. Cane. 1,902,619; Mar. 21.
Binder, Loose-leaf. L. T. Lloyd. 1,902,786; Mar. 21.
Binder over fibrous materials, Distributing. E. J. Pieper, D. F. Smith, and C. C. Vogt. 1,901,930; Mar. 21.
Binding, Metal. E. E. Draper. 1,901,902; Mar. 21.
Block: *See*—
Insulating block. Toy building block.
Blowing device for pneumatic tools. E. B. Lear. 1,902,562; Mar. 21.
Blowing device for rock drills. L. C. Bayles. 1,902,586; Mar. 21.
Blow-out preventer. A. J. and K. T. Penick. 1,902,097; Mar. 21.
Board trim and securing means, Running. T. I. Duffy. 1,901,869; Mar. 21.
Boat. C. L. Woods. 1,902,006; Mar. 21.
Body striping. E. J. Hoyos. 1,901,908; Mar. 21.
Boiler: *See*—
Water tube boiler.
Boiler. J. H. Fox. 1,902,159; Mar. 21.
Boiler cleaner. W. P. Thomas. 1,902,736; Mar. 21.
Bolt, Self-locking. T. A. Kirton. 1,902,454; Mar. 21.
Bookholder. G. J. Flanagan. 1,902,549; Mar. 21.
Boot tree. F. R. Maier. 1,902,251; Mar. 21.
Bore straightening tool, Well. M. J. Lewis. 1,902,174; Mar. 21.
Bowl or article of analogous nature, Sugar. H. Negbaur. Des. 89,531; Mar. 21.
Box: *See*—
Hat box. Match box.
Journal box. Outlet box.
Junction box.
Box wrapping machine. A. E. Johnson. 1,902,079; Mar. 21.
Brace: *See*—
Table leg brace.
Bracket: *See*—
Brake beam support bracket.
Bracket for connecter heads. E. A. Robinson. 1,902,101; Mar. 21.
Brake: *See*—
Fluid pressure brake.
Brake. G. A. Halfvarson. 1,902,640; Mar. 21.
Brake. L. E. La Brie. 1,902,455; Mar. 21.
Brake. L. E. La Brie. 1,902,847; Mar. 21.
Brake band signaling device. A. S. Cataudella. 1,902,759; Mar. 21.
Brake beam support bracket. E. G. Busse. 1,902,215; Mar. 21.
Brake-lining testing. G. J. Thomas. 1,902,594; Mar. 21.
Brake mechanism, Self-adjusting. E. J. W. Ragsdale. 1,902,181; Mar. 21.
Brake testing device for vehicle wheels. T. A. Patterson. 1,902,718; Mar. 21.
Bread serving appliance. C. Holdgrafer. 1,902,239; Mar. 21.
Bread wrapping machine. L. F. Streng. 1,902,734; Mar. 21.
Brick and checker work formed therefrom, Checker. J. W. Wagstaff. 1,902,348; Mar. 21.
Bridge bid indicator and container, Combined. E. Jacobs. Des. 89,509; Mar. 21.
Bromine, Continuous process of preparing liquid. I. F. Harlow, I. A. Kenaga, and G. F. Dressel. 1,902,801; Mar. 21.
Brush making machine. A. Zaboransky. 1,902,113; Mar. 21.
Bucket, Conveyer. R. N. Riblet. 1,902,582; Mar. 21.
Buckle, Foldable. M. Anderson. 1,902,535; Mar. 21.
Building insulation and applying same. R. G. Halliwell. 1,902,689; Mar. 21.
Bumper. G. Q. Lewis. 1,902,651; Mar. 21.
Bun puncher and toaster. C. W. Mabey. 1,902,564; Mar. 21.
Burner: *See*—
Fuel burner. Oil burner.
Bus bar structure. C. H. Hill and N. Swerdlow. 1,902,501; Mar. 21.
Bushing. W. A. Vock. 1,902,600; Mar. 21.
Bushing device, High-voltage. G. A. Burr. 1,902,617; Mar. 21.
Bushing remover. H. W. Kulp and M. C. Dellinger. 1,902,711; Mar. 21.
Cabin for aircraft and the like. T. A. Verstegen. 1,902,428; Mar. 21.
Cabinet and seat construction, Combination. H. A. Bloedel. 1,902,819; Mar. 21.

Cabinet, Dictating machine. B. M. Smith, S. G. Langley, and G. F. Braun. Des. 89,521; Mar. 21.
Cabinet, Matrix. F. C. Grumman. 1,902,443; Mar. 21.
Cabinet, Matrix. A. J. Stouges. 1,902,425; Mar. 21.
Cabinet, Refrigerator. J. R. Replogle. Des. 89,534; Mar. 21.
Cabinet, Refrigerator. H. S. Woodruff. 1,902,479; Mar. 21.
Cabinet, Roll towel. C. W. Thompson. 1,902,198; Mar. 21.
Cabinet, Stencil. M. D'Andrea. 1,902,220; Mar. 21.
Cable connecter. G. C. Thomas, jr. Re18,773; Mar. 21.
Cable control. R. S. Sanford. 1,902,585; Mar. 21.
Cable, Oil-filled high tension. F. V. Calvert. 1,902,487; Mar. 21.
Cable securing device, Street lamp. O. Anklam. Re18,769; Mar. 21.
Cage and utility hanger, Bird. C. A. Jones. 1,902,241; Mar. 21.
Calculating machine. J. A. V. Turck. 1,902,597–8; Mar. 21.
Calendar and record. L. B. Martin. 1,902,567; Mar. 21.
Can washing machine. I. R. Hippenmeyer. 1,902,238; Mar. 21.
Car construction. O. C. Duryea. 1,902,019; Mar. 21.
Car coupling. G. M. Murphy. 1,902,043; Mar. 21.
Car equipment, Safety. J. C. McCune. 1,901,918; Mar. 21.
Car mover device. O. W. Miller. 1,902,658; Mar. 21.
Carbon and preparing it, Highly active. W. T. Geis. 1,902,068; Mar. 21.
Carbon black, Method of and apparatus for producing. D. J. Beaver. 1,902,753; Mar. 21.
Carbon black process and apparatus. S. P. Burke. 1,902,797; Mar. 21.
Carbon black, Production of. J. A. Yunker. 1,902,746; Mar. 21.
Carbonaceous materials with electric arcs, Treating. P. Baumann, H. Schilling, and A. Fischer. 1,902,351; Mar. 21.
Carburetor. H. Schneebeli. 1,902,378; Mar. 21.
Card rack. L. C. Bishop and S. E. Swick. 1,902,156; Mar. 21.
Carrier and the like, Water. F. F. Fenwick, jr. 1,902,548; Mar. 21.
Carrier for cable and wire reels. E. P. and L. D. Blackman. 1,902,611; Mar. 21.
Carton. E. B. Whitehead. 1,901,883; Mar. 21.
Carton, Egg. M. E. Hassell and M. A. Todd. 1,902,167; Mar. 21.
Carton, Foldable display. H. K. Powell. 1,902,262; Mar. 21.
Cartridge. W. Edwards. 1,902,695; Mar. 21.
Cartridge belts to a feed mechanism, Supplying. A. Dabrasky. 1,901,868; Mar. 21.
Cartridge, Practice. A. F. Galdos. 1,902,771; Mar. 21.
Case: *See*—
Display case.
Case and ash tray, Combined cigarette. C. Welch. 1,902,388; Mar. 21.
Case for lipsticks. F. E. A. W. Bergaud. 1,902,537; Mar. 21.
Casserole or similar article. C. Kaiser. Des. 89,527; Mar. 21.
Caster mechanism for stands and the like. E. C. Harter. 1,902,166; Mar. 21.
Caster roller. W. F. Schacht. 1,902,726; Mar. 21.
Castings, Production of alloy surface. J. H. Critchett. 1,902,059; Mar. 21.
Castings with coatings composed of high-chromium alloys, Production of. S. M. Norwood. 1,902,092; Mar. 21.
Catalysts, Using oxidation. J. C. W. Frazer and L. S. Kassel. 1,902,160; Mar. 21.
Catalyzer, Ceramic. A. M. Fairchild. 1,902,630; Mar. 21.
Cathodes for electric discharge devices, Manufacture of hot. E. Wiegand. 1,902,478; Mar. 21.
Ceiling construction. C. R. Birdsey and H. W. Reel. 1,902,796; Mar. 21.
Ceiling construction, Precast. H. W. Reel. 1,902,789; Mar. 21.
Cellulose composition, Derivative of. W. H. Moss. 1,902,257; Mar. 21.
Cellulose esters and cellulose ether esters, Making mixed. M. Hagedorn, O. Reichert, and E. Güring. 1,902,280; Mar. 21.
Cement and like material, Apparatus designed for handling. W. B. Siemmer. 1,902,145; Mar. 21.
Cementitious composition. G. E. Barnhart and H. E. Pfaff. 1,901,890; Mar. 21.
Ceramic articles, Apparatus for manufacturing of. H. Mueller. 1,901,923; Mar. 21.
Chain drive. A. H. Leipert. 1,902,712; Mar. 21.
Chain for mining machines, Cutter. E. W. Radius. 1,902,420; Mar. 21.
Chair: *See*—
Invalid's chair.
Chair. J. A. Santos. 1,902,586; Mar. 21.
Chamber of variable volume. G. de Monge. 1,902,323; Mar. 21.
Check protector. W. C. Hiering. 1,901,907; Mar. 21.
Check valve, Automatic unloading. J. W. Gurley. 1,902,231; Mar. 21.
Chemical reactions in gases and vapors with aid of a high tension electric arc, Producing. E. Steinbuch, M. Eschmann, and H. Schwammberger. 1,902,384; Mar. 21.
Chlorine from zinc sulphate solutions, Removing. W. J. O'Brien and J. E. Drapeau, jr. 1,901,925; Mar. 21.
Chopper, Meat. C. F. Lindgren. 1,902,653; Mar. 21.
Chromates, Producing. J. J. Vetter. 1,901,939; Mar. 21.
Chrysanthemum. A. Cumming, jr. Pl. Pt. 58; Mar 21.
Chuck for centrifugal casting machines. L. A. Camerota. 1,902,301; Mar. 21.
Cigarette dispensing and lighting machine. S. Vernet. 1,902,599; Mar. 21.
Cigarettes and cigars, Apparatus for delivering lighted. C. W. Parker. 1,902,291; Mar. 21.
Circuit breaker. R. C. Van Sickle. 1,902,314; Mar. 21.
Circuit breaker, Electric. W. E. Paul. 1,902,463–4; Mar. 21.
Circuit breaker system, Automatic reclosing. A. E. Anderson. 1,902,483; Mar. 21.
Circuit closer for automatic signaling device. W. M. Parsons. 1,902,578; Mar. 21.
Circuit closing device. F. L. Lee and B. H. Phillips. 1,902,085; Mar. 21.
Circuit controlling apparatus. L. S. Walle. 1,902,476; Mar. 21.
Circuit controlling device. C. B. Willi. 1,902,744; Mar. 21.
Circuit for switches for automatic telephone systems, Control. C. L. Goodrum. 1,902,123; Mar. 21.
Circuit interrupter, Electric. G. A. Juhlin. 1,902,507; Mar. 21.
Circuit interruption. W. S. Edsall. 1,902,357; Mar. 21.
Circuit, Substation. J. W. Gooderham. 1,901,958; Mar. 21.
Circuits, Apparatus for regulating alternating current. F. Rathovszky. 1,902,466; Mar. 21.
Circuits, Electric translating. A. H. Mittag. 1,902,460; Mar. 21.
Circulating system. J. A. Georgoff. 1,901,871; Mar. 21.
Clamp: *See*—
Conductor clamp.
Cleaner: *See*—
Boiler cleaner. Vacuum cleaner.
Cleaner for furs and the like and cleaning. W. G. Haertel. 1,902,232; Mar. 21.
Cleansing metering drums. T. Payton. 1,902,719; Mar. 21.
Closer for windows and the like, Automatic. L. V. Blue. 1,902,392; Mar. 21.
Closure for receptacles. J. L. Pardue. 1,901,982; Mar. 21.
Cloth, Moistening. E. Wenzel. 1,902,429; Mar. 21.
Clutch: *See*—
Electromagnetic clutch.
Clutch. W. C. Pitter. 1,902,375; Mar. 21.
Coating and coating composition. C. G. Harford. 1,902,642; Mar. 21.
Coating composition and film produced thereby. W. H. Moss and B. B. White. 1,902,255–6; Mar. 21.
Coating process and apparatus. C. A. Mann. 1,902,654; Mar. 21.
Cock, Gas. E. E. Meusy. 1,901,979; Mar. 21.
Coffee dispenser. J. W. Bell. Des. 89,479; Mar. 21.
Coffee pot or similar article. Y. Buma. Des. 89,489; Mar. 21.
Collapsible holder. K. E. Brewer. 1,902,011; Mar. 21.
Collar-stretching machine. M. L. Kaplan. 1,902,330; Mar. 21.
Color meter. R. L. Sperber. 1,902,672; Mar. 21.
Combination lock, Self-closing. R. J. Buettner, R. A. Found, J. M. Munter, J. J. Neitz, and F. C. Zinzig. 1,902,214; Mar. 21.
Combination table. C. A. Magnuson and C. H. Uggla. 1,901,975; Mar. 21.
Combustible mixtures, Method and apparatus for igniting. G. G. Brown and M. Sounders, jr. 1,902,541; Mar. 21.
Combustion apparatus. D. J. Mossbart. 1,902,372; Mar. 21.
Commutators, Making. C. V. Gianmo. 1,901,955; Mar. 21.
Compact, Cosmetic. W. R. Tuttle and C. W. Stickel. 1,902,681; Mar. 21.
Composition for treating strings. F., J., and S. Saladino. 1,902,143; Mar. 21.
Compounds of the xanthene series. W. Schulemann, F. Mietzsch, and A. Wingler. 1,902,104; Mar. 21.
Condensation products and the products produced. Producing water-soluble. R. Muller. 1,902,515; Mar. 21.
Condensation products of the anthraquinone series. G. Kraeuzlein and E. Diefenbach. 1,902,083; Mar. 21.
Condenser: *See*—
Electrostatic condenser.
Conductor attachment. A. O. Austin. 1,902,009; Mar. 21.
Conductor clamp. A. O. Austin. 1,902,008; Mar. 21.
Conductor, Tapping a. W. C. Tinus. 1,901,938; Mar. 21.
Confection machine. J. L. Biggs. 1,902,755; Mar. 21.
Connecter: *See*—
Cable connecter. Pipe connecter.
Connecter. R. C. McAllister. 1,902,038; Mar. 21.
Connection, Electric circuit. M. W. McArdle. 1,901,977; Mar. 21.
Connection, Guy wire anchor. H. E. Miller. 1,902,459; Mar. 21.

Container: *See*—
Cosmetic container. Metal container.
Ice cream container. Sifter container.
Container. E. W. Roberts. 1,902,723; Mar. 21.
Container. W. I. Rubovits. 1,902,294; Mar. 21.
Container. A. W. Wilkinson. 1,902,316; Mar. 21.
Container sealing device. I. T. Kahn. 1,901,911; Mar. 21.
Containers for ice cream and the like, Marking. G. F. Dickson. 1,902,543; Mar. 21.
Control device. C. I. Hall. 1,902,498; Mar. 21.
Control for heating systems. D. J. Stewart. 1,901,995; Mar. 21.
Control for pump actuating mechanisms and the like. L. M. Miller, L. M. Greene, J. G. Miller and E. E. Calkins. 1,902,371; Mar. 21.
Control of the properties of solid bodies dispersed in a liquid, Apparatus for the continuous. H. Müller-Clemm. 1,902,659; Mar. 21.
Controlling device for record-controlled machines. J. W. Bryce. 1,902,013; Mar. 21.
Conveyer, Air current. J. B. Schaub. 1,901,932; Mar. 21.
Conveyer and scale, Combination. A. J. Mehl. 1,902,512; Mar. 21.
Conveyer for cotton. J. A. Streun. 1,902,675; Mar. 21.
Cooler: *See*—
Rotary cooler.
Core, Magnetic. O. Dahl and J. Pfaffenberger. 1,902,491; Mar. 21.
Cosmetic container. F. Tourtois. 1,902,199; Mar. 21.
Counter-electro-motive-force-cell. W. E. Kershaw and J. L. Woodbridge. 1,902,081; Mar. 21.
Coupling: *See*—
Car coupling. Pipe coupling.
Coupling. F. Ellingsen. 1,902,697; Mar. 21.
Cover: *See*—
Locking cover. Tank cover.
Cover for oil storage tanks. R. S. Twogood. 1,902,108; Mar. 21.
Cover for X-ray tubes, Protective. A. Ungelenk and W. Hofmann. 1,902,474; Mar. 21.
Cover, Making a spring. F. W. Andrew. 1,902,606; Mar. 21.
Covered joint hinge. J. Soss. 1,901,994; Mar. 21.
Covering, Heat insulating. G. V. Wilson. 1,902,794; Mar. 21.
Covering, Protective head. R. Giuliano. 1,902,441; Mar. 21.
Crystalline antirachitically active product and preparing the same. O. Linsert. 1,902,785; Mar. 21.
Cultivator, Hand. G. Wolf. 1,902,869; Mar. 21.
Cultivator tractor. N. S. Smith. 1,901,993; Mar. 21.
Cup: *See*—
Drinking cup.
Current unidirectional system and method, High potential. H. D. Garretson. 1,902,227; Mar. 21.
Curtain display hanger. H. C. Hering. 1,902,402; Mar. 21.
Cushion, Side arm. A. W. Shaw. 1,902,730; Mar. 21.
Cushioning device. E. S. Avery. 1,901,945; Mar. 21.
Cushioning pad. C. S. Hamersley. 1,902,361; Mar. 21.
Cutter: *See*—
Pipe cutter. Tubing cutter.
Cylinder head fastening means. W. L. R. Emmet. 1,902,494; Mar. 21.
Cylinder, Water cooled internal combustion engine. O. Simmen. 1,902,528; Mar. 21.
Dam. E. H. Burroughs. 1,902,353; Mar. 21.
Dam, Concrete. D. C. Henny. 1,902,168; Mar. 21.
Dam, Diversion. C. Weber. 1,902,741; Mar. 21.
Damping device for crank-shafts. F. S. Duesenberg. 1,902,787; Mar. 21.
Deflector for gas stoves, Forced draft. J. A. McCarthy. 1,902,411; Mar. 21.
Desk pen holder. R. Back and G. A. Cooper. 1,902,208; Mar. 21.
Dessert made with rennin, Sweetened and flavored. K. J. Monrad. 1,902,415; Mar. 21.
Dishwashing machine. W. S. Hilpert and E. S. Stoddard. 1,902,237; Mar. 21.
Dishwashing machine. E. S. Stoddard. 1,902,192; Mar. 21.
Disk edging machine, Rotary. H. L. Myers. Des. 89,511; Mar. 21.
Dispenser. H. A. Wolf. 1,902,052; Mar. 21.
Dispensing apparatus. F. S. Barks. 1,902,750; Mar. 21.
Dispensing apparatus. E. A. Raines. 1,902,016; Mar. 21.
Display case. B. A. Klapper. 1,902,132; Mar. 21.
Display device. L. P. Kongsted. 1,902,331; Mar. 21.
Display holder, Necktie. C. R. York. 1,901,941; Mar. 21.
Display rack. H. V. Marsh. 1,902,566; Mar. 21.
Display rack, Upright. W. M. Sample. Des. 89,512; Mar. 21.
Display table. E. S. Taylor. 1,902,677; Mar. 21.
Distilling apparatus. W. F. Brace and F. E. Beluche. 1,902,538; Mar. 21.
Door construction, Metal. F. Ditchfield. 1,902,546; Mar. 21.
Door fixture, Railway car. G. G. Gilpin. 1,902,772; Mar. 21.
Door for cars, Grain. F. Ditchfield. 1,902,545; Mar. 21.
Door lock. W. A. Endter. 1,902,628; Mar. 21.
Doorlock, Rotary bolt. W. A. Endter. 1,902,547; Mar. 21.
Door, Refrigerator. J. R. Replogle. Des. 89,536; Mar. 21.
Doors for cars, Grain. F. Ditchfield. 1,902,544; Mar. 21.
Doors, Mechanism for operating elevator. C. Norton. 1,902,138; Mar. 21.
Doughnut machine and the like. C. E. Carpenter. 1,902,058; Mar. 21.
Dowel for timber bonds, Annular. J. Seger. 1,902,880; Mar. 21.
Draft rigging. D. S. Barrows. 1,902,299; Mar. 21.
Draft rigging backstop. D. S. Barrows. 1,902,300; Mar. 21.
Draft rigging, Railway. W. A. Geiger. 1,902,636; Mar. 21.
Drafting table. D. W. Sherman. 1,902,424; Mar. 21.
Drawer guide. G. H. Ziehl. 1,902,748; Mar. 21.
Drawer suspension. C. F. Wolters. 1,902,795; Mar. 21.
Dredges, Method of and apparatus for controlling. A. Neveling. 1,902,259; Mar. 21.
Drier: *See*—
Hair drier.
Drill. W. C. Rea. 1,902,098; Mar. 21.
Drilling machine. E. A. Beste. 1,902,055; Mar. 21.
Drinking cup, Paper. A. Novick. 1,902,717; Mar. 21.
Drive, Hydraulic. J. P. Ferris. 1,902,437; Mar. 21.
Drive with differential characteristics and free wheeling, Combined positive. H. V. Hughes. 1,902,449; Mar. 21.
Driving apparatus for self-propelled vehicles. M. D. Henshaw. 1,902,500; Mar. 21.
Drum baffle, Steam. H. J. Kerr. 1,901,912; Mar. 21.
Drum truing machine. W. F. Evans. 1,902,029; Mar. 21.
Dumping body. G. E. Ogilvie. 1,902,093; Mar. 21.
Duplicating apparatus. A. J. Bates. 1,902,273; Mar. 21.
Dyestuffs of the anthraquinone series, Acid. G. Kraenslein and E. Diefenbach. 1,902,084; Mar. 21.
Eel grip. H. N. Kaiser. 1,902,458; Mar. 21.
Egg candling machine. J. F. King. 1,902,244; Mar. 21.
Electric furnace. C. E. Schwegler. 1,902,668; Mar. 21.
Electric house heater. E. F. Holinger. 1,902,074; Mar. 21.
Electric imitation fire. H. H. Berry. 1,902,274; Mar. 21.
Electric power converting apparatus. A. S. Fitz Gerald. 1,902,495; Mar. 21.
Electric power converting apparatus. C. A. Sabbah. 1,902,468; Mar. 21.
Electric regulation, System and apparatus for. L. H. Von Ohlsen. 1,901,882; Mar. 21.
Electric switch, Time-controlled. J. Mettler. 1,902,570; Mar. 21.
Electrical contacts, Testing of. J. B. Dixon and E. M. Honan. 1,901,901; Mar. 21.
Electrical control system. W. H. Arkenburgh. 1,902,485; Mar. 21.
Electrical control system. H. L. Palmer. 1,902,462; Mar. 21.
Electrical controlling system for gas water heaters. R. J. Dougherty. 1,902,303; Mar. 21.
Electrical discharge device. K. B. McEachron and E. J. Wade. 1,902,510; Mar. 21.
Electrical meter. W. J. Means. 1,901,921; Mar. 21.
Electrical music system. R. H. Ranger. 1,901,985–6; Mar. 21.
Electrical prospecting system. F. Rieber. 1,902,265; Mar. 21.
Electrical protector device. G. H. Brodie. 1,901,898; Mar. 21.
Electrical translating device. J. S. High. 1,902,643; Mar. 21.
Electricity meter, Prepayment. S. Z. de Ferranti. 1,902,396; Mar. 21.
Electrodes of discharge tubes, Coating. H. Rothe. 1,902,185; Mar. 21.
Electromagnetic clutch. E. Thomson. 1,902,471; Mar. 21.
Electron discharge apparatus. M. A. Acheson and J. L. Zehner. 1,902,432; Mar. 21.
Electron discharge device. M. A. Acheson. 1,902,481; Mar. 21.
Electrostatic condenser. A. O. Austin. 1,902,152; Mar. 21.
Engine: *See*—
Internal combustion engine
Engine starting device. G. A. Taylor. 1,901,997; Mar. 21.
Escapement and pendulum mechanism. G. Jaisle. 1,902,366; Mar. 21.
Ethers, Producing unsaturated. W. O. Herrmann and H. Deutsch. 1,902,169; Mar. 21.
Evaporator. K. Vykoupil. 1,902,533; Mar. 21.
Excavating machine. R. R. Downie. 1,902,691–3; Mar. 21.
Expansion joint. A. C. Fischer. 1,901,870; Mar. 21.
Explosion process and apparatus, Multistage constant volume. H. Holzwarth. 1,901,873; Mar. 21.
Extruding machine. F. J. Shook. 1,902,295; Mar. 21.
Fastener: *See*—
Bag frame fastener. Separable fastener.
Pin fastener. Slide fastener.
Fastener. D. A. Brennan. Re18,770; Mar. 21.
Fastening means for securing the ends of a length of material to a reel. G. E. Clark. 1,901,949; Mar. 21.
Feeding mechanism for photographic strips. W. L. Helms. 1,902,281; Mar. 21.
Fertilizers, Producing mixed. F. G. Liljenroth. 1,902,652; Mar. 21.
Filament treatment. K. Schmidt. 1,902,526; Mar. 21.
Film holder. C. D. Chase. 1,902,278; Mar. 21.
Film printing. C. D. Chase. 1,902,277; Mar. 21.

Films, lacquers, and the like, Manufacture of. C. Neubauer. 1,902,337; Mar. 21.
Filter. W. G. Elder. 1,902,435; Mar. 21.
Filter valve, Vacuum cleaner. W. Leathers. 1,902,333; Mar. 21.
Filtering apparatus. W. H. T. Holden. 1,902,031; Mar. 21.
Fire escape. O. C. N. Gundersen. 1,902,230; Mar. 21.
Fish-bait adjusting device. J. Catarau. 1,902,217; Mar. 21.
Fishing reel, Attaching means for. C. Baird and W. R. Robertson. 1,902,749; Mar. 21.
Fitting for electrical systems, Elbow. M. M. Clayton. 1,901,897; Mar. 21.
Flame arrester. F. G. D. Muller. 1,902,258; Mar. 21.
Flash light. P. Rosenberg. 1,902,377; Mar. 21.
Flash light, Electric. J. L. Shannon. 1,902,590; Mar. 21.
Flashing light signal. S. M. Day. 1,902,799; Mar. 21.
Flat and filler for egg holding cases. F. Kronenberger. 1,901,918; Mar. 21.
Flexible joint. J. M. Nalle. 1,901,924; Mar. 21.
Floodlight. K. A. Sawin. 1,902,587; Mar. 21.
Floor or roof construction, Slab. H. E. Marks. 1,902,565; Mar. 21.
Flow meter. H. M. Newton. 1,902,716; Mar. 21.
Flow meter. C. B. Sawyer. 1,902,427; Mar. 21.
Flower holding device. W. H. Seltzer. 1,902,423; Mar. 21.
Fluid, Clarifying dry cleaning. R. A. Morgen and F. Fair. 1,902,514; Mar. 21.
Fluid heating apparatus. L. C. Huff. 1,901,970; Mar. 21.
Fluid pressure brake. C. C. Farmer. 1,901,905; Mar. 21.
Fluid pressure brake. T. H. Thomas. 1,901,937; Mar. 21.
Fluid pressure governing system. H. F. Schmidt. 1,902,340; Mar. 21.
Fluid pressure pump. W. P. Valentine. 1,902,845; Mar. 21.
Fluid pressure regulator. G. Daux. 1,901,900; Mar. 21.
Flywheel. W. E. Johnson. 1,902,505; Mar. 21.
Folder, Advertising. W. J. Gallagher. 1,902,121; Mar. 21.
Folding table. C. N. Allerding. 1,901,887; Mar. 21.
Foliage trimmer. E. M. Beanblossom. 1,902,114; Mar. 21.
Food handling apparatus. H. L. Johnston and D. A. Meeker. 1,902,506; Mar. 21.
Food mixer. C. A. Purdin. 1,902,376; Mar. 21.
Food mixer, Twin. A. A. Theodoropulos. 1,902,678; Mar. 21.,
Footboard for a bedstead or similar article. H. Rodstein and I. Nathanson. Des. 89,537–40; Mar. 21.
Form, Shoe. W. J. De Witt. 1,902,120; Mar. 21.
Frame: *See*—
Advertising frame. Truck side frame.
Frame. W. J. Simanek. 1,901,991; Mar. 21.
Frame for a power unit. D. Heyer. Des. 89,507; Mar. 21.
Frame for winding mechanism, Supporting. R. Lavandeira. 1,902,370; Mar. 21.
Freewheeling attachment. J. Dorst and P. Bachhuber. 1,902,623; Mar. 21.
Friction surfaces. R. J. Norton. 1,902,576; Mar. 21.
Fuel burner. R. H. Forney. 1,902,225; Mar. 21.
Fuel injector for engines. F. A. Thaheld. 1,902,197; Mar. 21.
Fuel, Motor. D. W. Hoge. 1,902,125; Mar. 21.
Furnace: *See*—
Electric furnace.
Furnace. R. A. Foresman. 1,902,359; Mar. 21.
Furnace. L. A. Mekler. 1,901,922; Mar. 21.
Furnace operating mechanism. J. P. Ferris, D. Clute, and E. Wiedmann. 1,902,063; Mar. 21.
Fuse. G. Blumberg. 1,902,613; Mar. 21.
Fuse clip lock. F. C. La Mar. 1,902,804; Mar. 21.
Fuse cut-out. E. Burke. 1,901,894; Mar. 21.
Fuse holder and lighter, Combination. F. E. Keese, jr. 1,902,706; Mar. 21.
Fuse refilling tool. M. Kondo. 1,902,710; Mar. 21.
Fuse, Renewable electric. C. and E. Kemp. 1,902,707; Mar. 21.
Fused electrical plug. L. L. Maxam. 1,902,568; Mar. 21.
Gain control apparatus. W. H. T. Holden. 1,902,030; Mar. 21.
Game apparatus. H. T. Neuman. 1,902,137; Mar. 21.
Garment, Bathing. A. Slotoroff. 1,902,190; Mar. 21.
Garment rack. A. E. Sanderson. 1,902,724; Mar. 21.
Gas, making oil. R. E. Whitlock. 1,902,004; Mar. 21.
Gas, Reforming natural. J. A. Yunker. 1,902,747; Mar. 21.
Gas refrigerating apparatus. H. J. Nachman. 1,902,715; Mar. 21.
Gas saver. C. A. Borgeson. 1,902,275; Mar. 21.
Gases, Transferring liquefied. C. W. P. Heylandt. Re18,774; Mar. 21.
Gauge: *See*—
Liquid gauge. Miter gauge.
Gauge for determining pitch of propeller blades. G. A. Prior. 1,902,180; Mar. 21.
Gauge for low temperature fluids. C. S. Bull. 1,902,276; Mar. 21.
Gear: *See*—
Reducing gear.
Gear for engines, Blower and driving. B. G. Parsons. 1,902,095; Mar. 21.
Gear for internal combustion engine, Valve control. E. Elmer. 1,902,696; Mar. 21.
Gearing, Manufacturing. J. L. Matthews. 1,902,656; Mar. 21.
Gearing, Worm. E. Wildhaber. 1,902,683; Mar. 21.
Gelatinous product, Flexible transparent. H. Heckel. 1,902,304; Mar. 21.
Generator: *See*—
Acetylene generator.
Glass dipping rack, Photoengraver's. C. E. Riley. 1,902,338; Mar. 21.
Glass drawing apparatus. H. F. Clark. 1,901,896; Mar. 21.
Glass feeding apparatus and method. K. E. Peller. 1,902,788; Mar. 21.
Glass holder. L. E. Baltzley and F. Goertz. 1,902,608; Mar. 21.
Glass run channel structure. J. S. Reid. 1,902,422; Mar. 21.
Glassware, Apparatus for annealing. P. L. Geer. 1,902,326; Mar. 21.
Glassware, Manufacture of hollow. G. E. Rowe. 1,902,140; Mar. 21.
Glassware, Manufacture of hollow. G. E. Rowe. 1,902,141–2; Mar. 21.
Glove, Smoker's finger. R. R. Strasser. 1,902,426; Mar. 21.
Glucosides of bulbus scillæ, Manufacture of new cardioactive. W. Kreis. 1,902,408; Mar. 21.
Gluing machine. F. J. Rector. 1,902,264; Mar. 21.
Golf tee, Folding. W. E. Bock. 1,901,948; Mar. 21.
Golf tee positioning device. E. L. Walrath. 1,902,682; Mar. 21.
Governing mechanism. A. B. Reavis and R. J. Elsinger. 1,902,311; Mar. 21.
Grain distributing means for combines. E. W. Mentor and C. J. Scranton, jr. 1,902,289; Mar. 21.
Grain dump, Combination. J. McEachern. 1,902,252; Mar. 21.
Grain treating and elevating device. H. M. Smestad. 1,902,733; Mar. 21.
Grate bar. J. S. Thompson. 1,902,595; Mar. 21.
Grates and fireplaces, Combination tong and poker device for fire. N. Baldwin. 1,902,685; Mar. 21.
Grease and making the same. F. C. Gebhardt. 1,902,635; Mar. 21.
Grinder, Cylinder. Jos. Sunnen. 1,902,194; Mar. 21.
Grinding machine. F. G. Hughes. 1,902,555; Mar. 21.
Grinding machine. O. W. Nelson. 1,902,661; Mar. 21.
Grinding, refining, and mixing machine C. G. Sprado. 1,902,591; Mar. 21.
Gripping device, Exterior. J. A. Buttress. 1,902,216; Mar. 21.
Guanidine-thio cyanate, Producing. W. Gluud. 1,902,400; Mar. 21.
Guard, Tool holder. I. E. Toniewicz and M. Lizon. 1,902,679; Mar. 21.
Gun, Gas. E. H. Ingalls. 1,902,127; Mar. 21.
Guy wire protector. H. E. Miller. 1,902,414; Mar. 21.
Gymnastic apparatus. R. A. Edwards. 1,902,094; Mar. 21.
Hair collecting device. H. L. Bjorklund. 1,902,211; Mar. 21.
Hair curler. G. E. Bjorkman and J. Geloso. 1,901,892; Mar. 21.
Hair drier. T. I. Moseley. 1,902,334; Mar. 21.
Hammer, Motor-driven mechanical. M. G. H. Ousblick. 1,901,981; Mar. 21.
Handle for rock drills. E. F. Terry. 1,902,530; Mar. 21.
Handle for vacuum cleaners. J. Tuteur. 1,902,472; Mar. 21.
Handle structure, Vacuum cleaner. B. J. Tamarin. 1,902,593; Mar. 21.
Hangar for aeroplanes and the like. J. M. Webster. 1,902,205; Mar. 21.
Hanger: *See*—
Cage and utility hanger. Tubing hanger.
Curtain display hanger.
Hanger for fur scarfs and the like. G. Davison. 1,902,622; Mar. 21.
Harps, Control mechanism for vibra. H. A. Bower. 1,902,614; Mar. 21.
Harvester. E. E. Wickersham. 1,902,430; Mar. 21.
Hat box. M. Struble. 1,902,313; Mar. 21.
Hat, Combination. H. F. Jordan. 1,902,080; Mar. 21.
Hat making machine. R. G. Muller. 1,902,516; Mar. 21.
Hat protector. T. E. Roderick. 1,901,987; Mar. 21.
Hatrack, Adjustable. M. Teitelbaum. 1,902,147; Mar. 21.
Hay loader. L. H. Kaupke. 1,902,243; Mar. 21.
Hay unloading apparatus. H. C. Christiance. 1,902,761; Mar. 21.
Heat exchanger. S. M. Burton. 1,902,820; Mar. 21.
Heat exchanger. L. P. Whitaker. 1,902,350; Mar. 21.
Heat exchangers, Making. L. P. Whitaker. 1,902,849; Mar. 21.
Heat insulating bodies, Making. E. J. Pieper, D. F. Smith, and C. C. Vogt. 1,901,984; Mar. 21.
Heat motor. L. M. Persons. 1,902,260; Mar. 21.
Heat regulator, Continuous. C. I. Hall. 1,902,327; Mar. 21.
Heat retaining means for autogenous welding and method of welding. M. J. Wall. 1,902,051; Mar. 21.

Heater: *See*—
Electric house heater. Water heater.
Switch heater.
Heater. W. E. Reno. 1,902,099; Mar. 21.
Highway sign. W. A. Schutt. 1,902,189; Mar. 21.
Hinge: *See*—
Covered joint hinge.
Hob grinding machine. C. G. Olson. 1,901,926; Mar. 21.
Hoe. W. E. Kee. 1,902,705; Mar. 21.
Holder: *See*—
Collapsible holder. Film holder.
Desk pen holder. Glass holder.
Display holder. Restaurant check holder.
Holder and ash tray, Combination cigarette. R. F. Heywood. 1,902,028; Mar. 21.
Holder and cover for bottles, Combination. R. D. Corke and F. Hansen. 1,902,354; Mar. 21.
Holder for containers. A. A. Jewell. 1,902,285; Mar. 21.
Holder for lighting fixtures, Shade. V. J. Gallagher. 1,902,023; Mar. 21.
Holder for transparent pie covers. J. R. Wrigley. 1,902,206; Mar. 21.
Holder or article of analogous nature, Match box. H. Negbaur. Des. 89,530; Mar. 21.
Horological mechanism. P. Hungerbühler. 1,902,126; Mar. 21.
House, Log. H. A. Muffley and E. F. McLeer. 1,902,309; Mar. 21.
Hubs, Making. C. L. Eksergian. 1,902,223; Mar. 21.
Hubs, Making wheel. C. L. Eksergian. 1,902,222; Mar. 21.
Hubs, Making wheel. C. L. Eksergian. 1,902,224. Mar. 21.
Humidifying apparatus. F. A. Anetsberger and W. Anetsberger. 1,901,888; Mar. 21.
Humidity controller. J. M. Larson. 1,902,173; Mar. 21.
Hydraulic operator. W. J. Woods. 1,902,480; Mar. 21.
Hydrocarbons, Conversion of. E. F. Nelson. 1,902,808; Mar. 21.
Hydrogen, Manufacture of industrial. J. A. Yunker. 1,901,885; Mar. 21.
Hydrogen-nitrogen gas mixtures, Production of. J. A. Yunker. 1,901,884; Mar. 21.
Hydrogenation and distillation, Method and apparatus for. E. M. Clark. 1,902,015. Mar. 21.
Ice cream container. H. H. Harrod. 1,902,072; Mar. 21.
Identification device, Ownership. M. Wasserberg. 1,902,001; Mar. 21.
Ignition terminal, Spark plug. F. G. Shoemaker. 1,902,382; Mar. 21.
Images on metallic surfaces, Reproducing. J. P. Brockway. 1,902,213; Mar. 21.
Impulse timer. H. D. Garretson. 1,902,228; Mar. 21.
Inclosures, Apparatus for conditioning. L. L. Lewis. 1,902,563; Mar. 21.
Indexing mechanism for machine tools. G. E. Randles. 1,902,520. Mar. 21.
Indicating device. C. F. Green. 1,902,497; Mar. 21.
Indicator: *See*—
Magneto timing indicator.
Inkstand. O. F. Nilsson and J. Bachrach. 1,902,091; Mar. 21.
Inlays on panels of composite fibrous materials, Reproducing surface. E. C. Loetscher. 1,902,087; Mar. 21.
Inscriptions, Protecting. E. J. Schwantes. 1,901,989; Mar. 21.
Insecticidal solution. B. C. Goss. 1,901,960; Mar. 21.
Insole-outsole combinations, Producing complementary. F. Sbicca. 1,902,725; Mar. 21.
Insulated article. J. R. Foley. 1,902,438; Mar. 21.
Insulating block. W. K. Nelson. 1,902,178; Mar. 21.
Insulating composition. F. M. Clark. 1,902,489; Mar. 21.
Insulating material and making the same. C. A. Upson. 1,901,999; Mar. 21.
Insulation stripping device. A. N. Wentink. 1,902,742; Mar. 21.
Insulator caps, Making. B. A. Plimpton. 1,902,310; Mar. 21.
Intelligence into two or more groups, Dividing received. V. R. Kimball. 1,902,170; Mar. 21.
Internal combustion engine. H. O. Ewing. 1,902,020; Mar. 21.
Internal combustion engine. K. J. E. Hesselman. 1,902,776; Mar. 21.
Internal combustion engine. C. Isle. 1,902,781; Mar. 21.
Internal combustion engine. J. Keister. 1,902,130; Mar. 21.
Internal combustion engine, Rotary. E. C. Duer. 1,902,768; Mar. 21.
Invalid's chair. D. King. 1,902,709; Mar. 21.
Irrigator, Mechanical. O. Melin. 1,902,412; Mar. 21.
Jack: *See*—
Lifting jack.
Jack and shock absorbing structure, Combination. A. B. Walter. 1,902,740; Mar. 21.
Joint: *See*—
Expansion joint. Flexible joint.
Joint and forming the same, Metal. S. I. Vaughn. 1,902,111; Mar. 21.
Journal box, Locomotive. A. F. Phelps. 1,902,720; Mar. 21.
Junction box. J. A. Adell. 1,901,943; Mar. 21.
Kit, Artist's. I. S. Baker. 1,901,861; Mar. 21.
Knitting machine. S. A. Welch, A. F. Guyler, J. T. Ashby, and W. H. Boaler. 1,902,151; Mar. 21.
Knitting machine, Straight bar. C. Baumgärtel. 1,902,752; Mar. 21.
Lasting machine. G. Goddu. 1,902,162; Mar. 21.
Latch: *See*—
Sash latch.
Latch for automobile doors. A. L. Lambert. 1,902,172; Mar. 21.
Latching mechanism, Electroresponsive. H. R. Crago. 1,902,490; Mar. 21.
Lathe for high speed work, Automatic. A. Bechler. 1,902,754; Mar. 21.
Lathes, Thread cutting attachment for. G. E. Merwin and F. W. Shoemaker. 1,902,657; Mar. 21.
Laundry sorting machine. E. C. Maurer. 1,902,088; Mar. 21.
Lawn edger and trimmer. D. M. Smith. 1,901,992; Mar. 21.
Leaf assembly, Loose. L. Middleditch. 1,901,980; Mar. 21.
Legging, Pull-off. S. N. Sager. 1,902,584; Mar. 21.
Level, Box shaped water. C. von Hofe and J. Schier. 1,902,387; Mar. 21.
Leveler. C. W. Tharp. 1,901,936; Mar. 21.
Life preserver. J. A. Farmer and H. A. Fichter. 1,901,906; Mar. 21.
Lifting jack. A. Horvath. 1,902,448; Mar. 21.
Lifting jack. M. H. Loughridge. 1,901,915; Mar. 21.
Light: *See*—
Flash-light.
Lighting control apparatus. F. B. Adam. 1,901,886; Mar. 21.
Lining for rubber footwear and making same, Knitted. R. M. Holden and J. F. Roberts. 1,902,780; Mar. 21.
Link, Stoker. H. T. Wandling. 1,902,149; Mar. 21.
Liquid driven ejector for delivering liquids, Multistage. P. Schmidt. 1,902,729; Mar. 21.
Liquid gauge. E. L. Hubbard. 1,902,329; Mar. 21.
Liquid meter. R. A. True. 1,902,049; Mar. 21.
Liquid pump. S. W. Traylor, jr. 1,902,386; Mar. 21.
Liquid spray device. H. F. Fruth. 1,901,954; Mar. 21.
Liquids at high pressure by means of ejectors, Conveying. P. Schmidt. 1,902,728; Mar. 21.
Loader, Tractor operated beet. J. Sishc. 1,902,383; Mar. 21.
Lock: *See*—
Combination lock. Fuse clip lock.
Lock. J. H. Shaw. 1,902,343; Mar. 21.
Lock washer. C. G. Olson. 1,901,927; Mar. 21.
Locking cover. W. S. Sherman. 1,902,731; Mar. 21.
Locking system for strong boxes. A. Swahn. 1,902,195; Mar. 21.
Looms, Stop motion for. J. P. Costello. 1,902,302; Mar. 21.
Looms, Warp-stop motion for. W. H. Baker. 1,902,318; Mar. 21.
Lubricating means for automatic transmission mechanism. J. G. Vincent. 1,902,050; Mar. 21.
Lubricating system. G. J. Russell. 1,902,583; Mar. 21.
Lubricator: *See*—
Automatic lubricator.
Lubricator fitting. E. J. Macey. 1,901,973; Mar. 21.
Machine for attaching ornaments to shoes. G. E. Anderson. 1,902,605; Mar. 21.
Machine for counting and delivering coins. C. D. Howenstine. 1,902,328; Mar. 21.
Machine for dyeing, bleaching, and the like of loose yarns or bobbins. J. J. Müller. 1,902,042; Mar. 21.
Machine for expressing fruit juices and the like. H. W. Tuttle. 1,902,738; Mar. 21.
Machine for forming waterproof tubing around firework fuse material. J. Gioiosa. 1,902,122; Mar. 21.
Machine for grinding axles or the like. V. P. Schmidt and H. A. Brenaman. 1,902,188; Mar. 21.
Machine for making cement blocks. J. P. Rose, jr. 1,902,523; Mar. 21.
Machine for pasting webs of paper together. J. A. Lowe. 1,902,713; Mar. 21.
Machine for sharpening screwing taps and the like. H. W. and P. Hunt. 1,902,240; Mar. 21.
Machine for treating hat bodies. G. W. Cuming. 1,902,118; Mar 21.
Machine gun mount for aircraft. C. G. Trimbach. 1,902,107; Mar. 21.
Machine tool. R. N. Brown. 1,902,012; Mar. 21.
Machine tool. A. Oberhoffken. 1,902,179; Mar. 21.
Magnetic curves, Method and apparatus for photographing. H. Lehde. 1,901,876; Mar. 21.
Magneto timing indicator. J. F. Martin. 1,902,655; Mar. 21.
Mail bag. J. L. de Give. 1,902,764; Mar. 21.
Mallet, Pony polo. H. P. Nelson. 1,902,660; Mar. 21.
Mandrel for hollow crank shafts. H. H. Miner. 1,902,176; Mar. 21.
Manifolding. A. A. Johnson. 1,902,128; Mar. 21.
Manifolding machine. W. Ritzerfeld. 1,902,293; Mar. 21.
Marker or tag. C. E. Timson. 1,902,531; Mar. 21.
Match box. I. H. Dube. 1,902,767; Mar. 21.
Material, Apparatus for gauging. R. E. Hoffman and C. Paulson. 1,901,966; Mar. 21.
Material containing tin, Treating. S. Tamaru and Y. Koisumi. 1,902,735; Mar. 21.
Matrix material for production of printing plates. S. O. Thomas. 1,902,048; Mar. 21.

Mattress. W. Van Slyck. 1,902,000; Mar. 21.
Maximum and total demand meter. R. Pudelko. 1,902,045; Mar. 21.
Measurement, High frequency. A. S. Fitz Gerald. 1,902,496; Mar. 21.
Measuring apparatus. A. E. Young. 1,902,112; Mar. 21.
Memory, Assisting and testing the. A. G. Humphreys. 1,902,404; Mar. 21.
Mercury vapor anode. M. Wellauer. 1,902,002; Mar. 21.
Metal container. W. F. Punte. 1,902,664; Mar. 21.
Metal heating method and apparatus. J. J. McLaughlin. 1,902,039; Mar. 21.
Metal parts within a vacuum tube, Device for supporting. A. Ungelenk and W. Hofmann. 1,902,473; Mar. 21.
Metal sharpening machine. H. J. Gaisman. 1,902,022; Mar. 21.
Metal sharpening machine. C. R. Schumacher. 1,902,527; Mar. 21.
Metals, Coating. G. H. Howe. 1,902,503; Mar. 21.
Metals in electric furnaces, Melting. E. G. T. Gustafsson. 1,902,638; Mar. 21.
Metals, Low temperature reduced pressure or partial vacuum reduction of. A. Musso. 1,902,090; Mar. 21.
Meter: *See*—
Color meter. Liquid meter.
Electrical meter. Maximum and total demand meter.
Electricity meter.
Flow meter.
Meter recording, Centralized. W. H. Pratt. 1,902,465; Mar. 21.
$MgCl_2$ containing chlorides of alkali metals or alkaline earth metals, Producing. H. Tunaka and S. Imatomi. 1,902,385; Mar. 21.
Microphone. H. Sell. 1,901,933; Mar. 21.
Mill for reducing paints, colors, and pigments. J. R. Torrance. 1,902,680; Mar. 21.
Mineral reduction and metal extraction. A. Musso. 1,902,089; Mar. 21.
Mining apparatus. M. P. Holmes. 1,902,446; Mar. 21.
Mining machine. F. W. Vodoz. 1,902,148; Mar. 21.
Mirror, Self opening and closing three-way. E. J. Loeffler. 1,902,037; Mar. 21.
Miter gauge. J. Tate. 1,902,270; Mar. 21.
Mixer: *See*—
Food mixer.
Mixer. C. A. Rowley. 1,902,525; Mar. 21.
Mixing device or sewage treatment plant. H. N. Jenks. 1,902,078; Mar. 21.
Mold. W. E. Kemp. 1,902,559; Mar. 21.
Mold and making the same. P. Elbogen. 1,902,627; Mar. 21.
Molding composition and treating. R. A. Plant and M. E. Brooks. 1,902,419; Mar. 21.
Molding, Store fixture display. J. H. Esdorn. 1,902,769; Mar. 21.
Motor: *See*—
Heat motor. Steam motor.
Motor commutating device, Direct current. E. Kern. 1,902,131; Mar. 21.
Motors, Operating polyphase alternating current. H. M. Hobart, F. O. Stebbins, and A. F. Gettelman. 1,902,444; Mar. 21.
Mounting, Internal combustion engine. R. K. Lee. 1,902,509; Mar. 21.
Mounting, Loud speaker. G. L. Beers and W. S. Barden. 1,902,609; Mar. 21.
Mounting, Pump rod stuffing box. W. W. Foster. 1,902,360; Mar. 21.
Mouthpiece for telephone transmitters, Silencer. E. V. Hnsson. 1,902,556; Mar. 21.
Movement, System for transmitting. G. De Monge. 1,902,356; Mar. 21.
Mower, Power lawn. L. B. Roth. 1,902,524; Mar. 21.
Naphtha stocks, Purifying. D. E. Day. 1,902,221; Mar. 21.
Nipple. F. Brown. 1,902,483; Mar. 21.
Nonreturn valve. E. C. F. Oakley. 1,902,577; Mar. 21.
Nozzle, Cement gun. J. T. Vawter. 1,902,202; Mar. 21.
Nozzle, Discharge. J. F. Werder. 1,902,003; Mar. 21.
Objects, Apparatus for treating. J. H. Grow. 1,902,637; Mar. 21.
Objects, Treating. L. C. Nichols. 1,902,575; Mar. 21.
Oil burner. C. J. Peterson. 1,901,983; Mar. 21.
Oil conversion, Hydrocarbon. L. C. Huff. 1,901,969; Mar. 21.
Oil from wells, and apparatus therefor, Producing. S. W. Traylor, jr. 1,902,296; Mar. 21.
Oiler, Wick. H. Kreidel. 1,901,972; Mar. 21.
Oiling system for motor cars. E. C. Stanley. 1,902,592; Mar. 21.
Oils, Distilling mineral. E. W. Beardsley and D. M. Evans. 1,901,863; Mar. 21.
Oils, Process and apparatus for treating. R. T. Pollock. 1,901,931; Mar. 21.
Oils, Treating drying. E. Assor. 1,902,684; Mar. 21.
Oils, Treating hydrocarbon. O. Behimer. 1,902,056; Mar. 21.
Operating device. E. G. McDonald. 1,902,569; Mar. 21.
Ophthalmological apparatus. W. A. Gunning. 1,902,401; Mar. 21.
Orchard protective system. J. d. R. De Land. 1,902,119; Mar. 21.
Ores, Froth-flotation concentration of. P. C. Wright. 1,902,317; Mar. 21.
Organic compounds, Oxidizing cyclic. H. O. Forrest and P. K. Frolich. 1,902,550; Mar. 21.
Ornament, Radiator cap. W. F. Clark. Des. 89,502; Mar. 21.
Outlet box. G. Carlson. 1,902,488; Mar. 21.
Package, Special. C. C. Chase. 1,902,760; Mar. 21.
Packing. A. R. Klingloff. 1,902,247; Mar. 21.
Packing. D. F. Warner. 1,902,792; Mar. 21.
Packing frame for automobile trunks and suit cases. S. E. Cheney. 1,901,895; Mar. 21.
Packing ring for shaft bearings. A. F. Phelps. 1,902,662; Mar. 21.
Pad: *See*—
Cushioning pad.
Padlock. F. E. Reinhold. 1,902,665; Mar. 21.
Pajama, Drop seat. N. A. Gross. 1,902,634; Mar. 21.
Panel-board and panel-board construction. H. F. Starrett. 1,902,790; Mar. 21.
Paper making apparatus. W. H. Cape. 1,902,798; Mar. 21.
Paper pulp, Manufacturing. A. M. Thomsen. 1,902,106; Mar. 21.
Paper, Sheet of. R. B. Buzzaird. Des. 89,481; Mar. 21.
Parachute, Revolving. K. J. Girdwood. 1,901,957; Mar. 21.
Parallel connecting system, Automatic. R. Keller. 1,902,645; Mar. 21.
Parisons, Forming. A. J. Smith. 1,901,934; Mar. 21.
Pay station apparatus. G. Biniek. 1,902,210; Mar. 21.
Pedal, Accelerator. R. C. Sanders. 1,902,667; Mar. 21.
Pen, Fountain. W. J. Foley. 1,902,633; Mar. 21.
Pen, Fountain. A. J. Iorio. 1,901,971; Mar. 21.
Pen, Writing, drawing, or ruling. T. Kovacs. 1,902,782; Mar. 21.
Perforating machine. E. A. Ford. 1,902,064; Mar. 21.
Petroleum and other hydrocarbons, Apparatus for treating. C. P. Dubbs. 1,901,950; Mar. 21.
Phonograph, Automatic. H. L. Brump and F. O. and F. E. Gray. 1,902,158; Mar. 21.
Phosphate, Leaching raw. M. Larsson. 1,902,648; Mar. 21.
Phosphorus, Producing red. S. D. Gooch and F. P. Kerschbaum. 1,902,144; Mar. 21.
Picker roller, Adjustable. J. A. Streun. 1,902,674; Mar. 21.
Pickling machine, Operating. W. Trinks. 1,902,532; Mar. 21.
Picture transmission. H. R. Butler and C. J. Young. 1,902,486; Mar. 21.
Picture transmission or the like, Apparatus for. O. Fulton. 1,902,552; Mar. 21.
Pictures, Synchronizing mechanism for talking motion. A. J. Vasselli. 1,902,201; Mar. 21.
Pigments containing titanium, Producing. F. von Bichowsky. 1,902,204; Mar. 21.
Pin fastener. G. A. Holmes. 1,902,447; Mar. 21.
Pin fastener. G. S. Maynard. 1,902,308; Mar. 21.
Pin for soft collars, Stiffener. F. J. Barnes. 1,902,153; Mar. 21.
Pipe connecter. W. Goetzelman. 1,902,229; Mar. 21.
Pipe coupling, Train. J. C. McCune. 1,901,917; Mar. 21.
Pipe cutter, Portable. A. O. Brungardt, F. H. Morehead, and J. W. Morrissey. 1,902,616; Mar. 21.
Pipe straightening apparatus. G. C. Holbert. 1,902,029; Mar. 21.
Piston ring snagging machine. R. A. Haegg. 1,902,164; Mar. 21.
Piston rings, Device for turning. A. Abramson. 1,901,942; Mar. 21.
Piston tool. P. D. Reynolds. 1,902,722; Mar. 21.
Pitcher or analogous article, Cream. H. Neghaur. Des. 89,529; Mar. 21.
Pitcher or similar article. C. B. Ilgenfritz. Des. 89,525; Mar. 21.
Pitman for agricultural implements. E. F. Huddle. 1,901,968; Mar. 21.
Plastic composition. H. Hopkinson and J. G. Britton. 1,902,803; Mar. 21.
Plate or similar article. Y. Buma. Des. 89,482–8; Mar. 21.
Plate or similar article. Y. Buma. Des. 89,490–501; Mar. 21.
Plate or similar article. G. Wesp. Des. 89,522; Mar. 21.
Playground device. W. E. Haskell. 1,901,964; Mar. 21.
Plug: *See*—
Fused electrical plug.
Plug coupler, Electrical. H. B. Taylor. 1,902,791; Mar. 21.
Plug receptacle and warning light fixture, Combined. W. C. Tregoning. 1,902,596; Mar. 21.
Plug receptacle, Connecting. R. M. Heintz. 1,902,236; Mar. 21.
Portable screen. O. W. Pineo. 1,902,373; Mar. 21.
Post cap. D. McDaniel. 1,902,511; Mar. 21.
Powders, Manufacture of. W. J. Meier. 1,901,978; Mar. 21.
Power feeding device. G. M. Neil. 1,902,574; Mar. 21.
Power transmission. C. A. Rudqvist. 1,901,988; Mar. 21.
Power transmission device. C. E. McCoy. 1,901,916; Mar. 21.
Press. M. H. Ballard and D. G. McLean. 1,902,054; Mar. 21.
Pressing machines, Actuating mechanism for. E. Davis. 1,902,018; Mar. 21.

Priming device, Automatic. W. Wilson. 1,902,603; Mar. 21.
Printing mechanism. P. Dechêne. 1,902,060; Mar. 21.
Propeller. F. A. A. Pearson. 1,902,096; Mar. 21.
Propeller with automatic regulation. A. Ferrario. 1,901,953; Mar. 21.
Protective device for walking beam pumping rigs. H. H. Dansboe. 1,902,492; Mar. 21.
Protector: *See*—
Check protector. Hat protector.
Guy wire protector. Tube protector.
Pump: *See*—
Fluid pressure pump. Rotary pump.
Liquid pump. Sirup pump.
Rotary gear pump.
Pump. F. Frelin. 1,902,065; Mar. 21.
Pump and carburetor, Combination fuel. W. R. Hewitt. 1,902,403; Mar. 21.
Pumping apparatus. J. F. Jaworowski. 1,902,076–7; Mar. 21.
Push button switch. G. H. Whittingham. 1,902,743; Mar. 21.
Quinoline derivatives and the products, Manufacture of. F. Schönhöfer. 1,902,103; Mar. 21.
Rack: *See*—
Card rack. Garment rack.
Display rack. Glass dipping rack.
Rack and utility table, Combined. A. E. Smith. 1,902,670; Mar. 21.
Radiator. A. B. Modine. 1,902,572; Mar. 21.
Radiator, Automobile. E. J. Pommer. 1,902,044; Mar. 21.
Radiator elements, Making. F. K. Hoffman. 1,902,779; Mar. 21.
Radiator shutter. K. Forbes. Des. 89,503; Mar. 21.
Radiocabinet. G. W. Oehlsen, jr. Des. 89,533; Mar. 21.
Radioreceiver power supply. R. M. Heintz. 1,902,235; Mar. 21.
Radio receiving system. A. W. C. Boljahn. 1,902,352; Mar. 21.
Radius attachment for milling, planing, grinding, or scraping machines, Variable. V. L. Emerson. 1,901,952; Mar. 21.
Railroad crossing sign. R. P. Schiffmann. 1,901,879; Mar. 21.
Rail support and fastening means. W. S. Boyce. 1,902,615; Mar 21.
Reamer, Expansion. W. H. Evans. 1,902,062; Mar. 21.
Receiver for continuous waves. R. M. Heintz. 1,902,234; Mar. 21.
Receptacle: *See*—
Plug receptacle.
Receptacle and closure therefor. W. L. Hanavan. 1,902,362; Mar. 21.
Receptacle and roller, Cigarette. H. H. Gerjets. 1,902,699; Mar. 21.
Receptacles, Measuring and dispensing device for. C. Blomstrom. 1,902,157; Mar. 21.
Recorder: *See*—
Time recorder.
Reducing gear. G. Pirinoli. 1,902,374; Mar. 21.
Reduction gear. H. F. Schmidt. 1,902,341; Mar. 21.
Reflector, Nonglare. A. K. Crossman. 1,902,321; Mar. 21.
Refrigerating apparatus. L. G. Copeman. 1,902,016; Mar. 21.
Refrigerating apparatus. G. F. Hofferberth. 1,902,445; Mar. 21.
Refrigerating machine. C. Orr. 1,902,518; Mar. 21.
Refrigeration system. L. U. Larkin. 1,902,784; Mar. 21.
Refrigerator top. J. R. Replogle. Des. 89,535; Mar. 21.
Regulating means for high power electric discharge amplifiers. P. D. Andrews. 1,902,484; Mar. 21.
Regulator: *See*—
Fluid pressure regulator. Heat regulator.
Relay. H. W. Williams and D. Santini. 1,902,602; Mar. 21.
Relief valve. N. F. Henkel. 1,902,027; Mar. 21.
Remote control system for oscillographs. J. W. Legg. 1,902,650; Mar. 21.
Resinous product and making the same, Thermosetting. 1,902,461; Mar. 21.
Resins, Manufacture of synthetic. H. W. Warren. 1,902,477; Mar. 21.
Resins, Treating. D. W. Hoge. 1,902,073; Mar. 21.
Restaurant check holder. E. A. Haveles. 1,902,641; Mar. 21.
Ribbon, Printing. G. R. Wood. 1,902,007; Mar. 21.
Ring for scale pans, Suspension. L. W. Reis. 1,902,581; Mar. 21.
Rivet drilling machine. B. J. Conlin. 1,902,762; Mar. 21.
Rock, Apparatus for loading broken. A. Mendelsohn. 1,902,457; Mar. 21.
Rock crusher and separator. G. A. Reynolds. 1,902,721; Mar. 21.
Rod tip or curtain protector, Curtain. J. N. Rasp. 1,902,182; Mar. 21.
Roll, Accelerating feed. J. N. Reynolds and C. J. Scranton, jr. 1,902,292; Mar. 21.
Roll for use in strip and sheet mills. C. F. Knight. 1,902,084; Mar. 21.
Roll of corrugated paper and making the same, Duplex. B. Rous. 1,902,312; Mar. 21.
Roller: *See*—
Caster roller. Picker roller.
Roof and sealing means therefor, Floating. G. T. Horton. 1,901,874; Mar. 21.
Roofing and building material. H. C. Avery and L. Kirschbraun. 1,902,298; Mar. 21.
Rotary cooler. R. C. Newhouse. 1,902,517; Mar. 21.
Rotary gear pump. C. W. Vogt and W. E. Zoeller. 1,902,347; Mar. 21.
Rotary pump. C. W. Vogt. 1,902,315; Mar. 21.
Rotary pump. C. W. Vogt. 1,902,346; Mar. 21.
Rotary valve. W. F. Grant. 1,901,961; Mar. 21.
Rotor for turbo-blowers, centrifugal pumps and the like. H. Inokuty and Z. Nagaoka. 1,902,406; Mar. 21.
Rubber and products obtained thereby, Manufacturing vulcanized. S. M. Evans. 1,902,398; Mar. 21.
Rubber composition and preserving rubber. A. W. Campbell. 1,902,115; Mar. 21.
Rubber compound and making same, Age resisting. W. Scott. 1,902,379; Mar. 21.
Rubber, Preservation of. I. Williams and A. M. Neal. 1,902,005; Mar. 21.
Rubber product and manufacturing same, Age resisting vulcanized. J. R. Ingram. 1,902,405; Mar. 21.
Rudder pedal adjusting mechanism. G. A. Page, jr. 1,902,094; Mar. 21.
Sadiron. S. Grauer. 1,902,025; Mar. 21.
Safe. W. Ehrlich. 1,901,904; Mar. 21.
Safety cut-out switch. C. E. Deitsch. 1,902,765; Mar. 21.
Sandal, Spiked. E. V. Rice. 1,902,521; Mar. 21.
Sash latch. W. C. Macy. 1,901,974; Mar. 21.
Saw. W. H. Smola, sr. 1,902,671; Mar. 21.
Saw, Portable ice. T. J. Robbins. 1,902,666; Mar. 21.
Saws, Producing. O. Mitchell. 1,902,177; Mar. 21.
Scale. H. Hoyer. Des. 89,508; Mar. 21.
Scale, Computing. F. L. Fuller. 1,902,066; Mar. 21.
Scale, Weighing. S. L. Hanssen. 1,902,283; Mar. 21.
Scale, Weighing. E. A. Reussenzehn. 1,902,100; Mar. 21.
Scraping and cleaning implement. E. De Nio. 1,902,766; Mar. 21.
Screen: *See*—
Portable screen.
Screw making machine. R. S. Crosby and C. W. Sponsel. 1,902,117; Mar. 21.
Sealing tool. R. T. Edwards. 1,901,903; Mar. 21.
Seat: *See*—
Adjustably supported seat.
Seat. G. Flintermann. 1,902,681; Mar. 21.
Seat. E. L. Johnson. 1,902,367; Mar. 21.
Seat or chair, Reversible. C. R. Hultgren. 1,902,282; Mar. 21.
Selective system. H. Burton. 1,901,867; Mar. 21.
Separable fastener. S. H. Norton. 1,902,416; Mar. 21.
Separator: *See*—
Storage battery separator.
Septic tank. C. A. Kopp. 1,902,171; Mar. 21.
Sewage and trade wastes, Process and apparatus for purification of. E. B. Knight. 1,902,248; Mar. 21.
Sewing machine. F. Morel. 1,902,041; Mar. 21.
Shades, Apparatus for cleaning window. W. M. Theobald. 1,902,344; Mar. 21.
Shear. L. I. Johnson and J. A. Smitmans. 1,901,910; Mar. 21.
Sheet piling bulkhead. O. F. Doyle. 1,902,397; Mar. 21.
Sheet severing mechanism. O. R. Winter. 1,902,604; Mar. 21.
Sheets, Method and apparatus for separating adhesively joined. F. B. Pfeiffer. 1,902,139; Mar. 21.
Sheets, Method of and apparatus for stacking. H. L. Joachim. 1,902,436; Mar. 21.
Shingle. N. P. Harshberger. Re18,772; Mar. 21.
Shingle, Interlocking. J. E. Berkheimer. 1,902,155; Mar. 21.
Ship drive-coupling mechanism. O. Hegemann. 1,902,701; Mar. 21.
Shock absorber. H. Rawdon and W. E. Burnham. 1,902,421; Mar. 21.
Shoe. C. H. Stemmons. Des. 89,541; Mar. 21.
Shoe. S. Zide. 1,902,053; Mar. 21.
Shoe heel. L. W. Brooks. 1,902,656; Mar. 21.
Shotgun. R. M. Jenkins. 1,902,702; Mar. 21.
Sifter container. A. H. Dreux. 1,902,324; Mar. 21.
Sign: *See*—
Highway sign. Railroad crossing sign.
Sign. E. R. Gill, Jr. 1,902,440; Mar. 21.
Signal: *See*—
Flashing light signal.
Signal switch, Vehicle. J. E. Tsavaris. 1,902,737; Mar. 21.
Signal viewing attachment for automobiles. B. W. David. 1,902,322; Mar. 21.
Signaling, Railway. R. A. McCann. 1,902,185; Mar. 21.
Signaling, Telephony. C. A. McKee. 1,901,919; Mar. 21.
Silk and weighting the same, Weighted. V. Froelicher. 1,902,226; Mar. 21.
Silk, Artificial. J. J. Stöckly and E. Witte. 1,902,529; Mar. 21.
Silk fibers, Weighting of natural and artificial. H. Hintse. 1,902,777–8; Mar. 21.
Silk spinning machine attachment, Artificial. A. Krause. 1,902,382; Mar. 21.
Sirup pump. A. C. and L. C. Pilcher. 1,902,261; Mar. 21.
Slag treatment. T. Bartholomew. 1,901,891; Mar. 21.
Slicing machine. E. A. Ford. 1,902,021; Mar. 21.

Slide fastener. H. J. Piehl. 1,902,417; Mar. 21.
Snath. R. P. Stine. 1,902,191; Mar. 21.
Socket, Reflector. N. W. Hall. 1,902,026; Mar. 21.
Socket, Snap fastener. E. D. Janes. 1,902,557; Mar. 21.
Soldering machine. E. H. Jugel. 1,902,703; Mar. 21.
Sole laying machine. S. J. Finn. 1,902,325; Mar. 21.
Sole laying machine. S. J. Finn. 1,902,399; Mar. 21.
Sound amplifier. T. Lindenberg. 1,902,250; Mar. 21.
Sound recording device. M. H. Page. 1,902,290; Mar. 21.
Sound reproducer. A. N. Goldsmith and I. Wolff. 1,902,442; Mar. 21.
Sound translating device. H. R. Clarke. 1,901,898; Mar. 21.
Spacer, Automatic. S. Olson. 1,901,928; Mar. 21.
Spectrum analysis, Method of and apparatus for quantitative. F. Twyman. 1,902,109; Mar. 21.
Speed of a vehicle with the steering mechanism thereof, Device for synchronizing. O. E. Eggen. 1,902,626; Mar. 21.
Spindle. F. Bauman. 1,902,751; Mar. 21.
Spinner. J. J. Kilpatrick. 1,902 560; Mar. 21.
Spoon or similar article. W. S. Warren. Des. 89,542; Mar. 21.
Spring: *See*—
Suspension spring.
Spring. E. G. Lindhe. 1,902,036; Mar. 21.
Springboard, Adjustable. H. N. Stevenson. 1,902,678; Mar. 21.
Spring construction. E. G. Lindhe. 1,902,134; Mar. 21.
Stabilizer adjusting mechanism. C. E. Hathorn. 1,902,071; Mar. 21.
Stage grinding, Method of and apparatus for multiple. A. F. Miller. 1,902,418; Mar. 21.
Stand and filter for barrels and the like, Portable. L. W. Schwenk. 1,901,878; Mar. 21.
Stand for bottled water or the like. M. Alex. Des. 89,526; Mar. 21.
Starter, Voltage compensated motor. C. Steenstrup. 1,902,470; Mar. 21.
Starting device for internal combustion engines. G. A. Taylor. 1,901,996; Mar. 21.
Starting system for internal combustion engines, Automatic. A. S. Knapp. 1,902,646; Mar. 21.
Static eliminator. P. Kiler. 1,902,407; Mar. 21.
Steam heating system. H. B. McGinnis. 1,902,288; Mar. 21.
Steam motor, Flying worm. L. L. Foss. 1,902,439; Mar. 21.
Steam trap. C. F. Covey. 1,902,219; Mar. 21.
Steels, Hardening alloy. H. Sutton, A. J. Sidery, and B. Evans. 1,902,676; Mar. 21.
Stencil. C. F. Brauer. 1,902,539; Mar. 21.
Sterilizing apparatus. W. V. Castle. 1,902,687; Mar. 21.
Sterilizing, Method and apparatus for. A. L. Dunham. 1,902,625; Mar. 21.
Sterilizing process. J. C. Wormley. 1,902,390; Mar. 21.
Stone cutting machine. H. Evans. 1,902,279; Mar. 21.
Storage battery separator. J. L. Rupp. 1,902,267; Mar. 21.
Strip-supporting mechanism. L. W. Anderson. 1,902,010; Mar. 21.
Sugars and article produced thereby, Protecting granules of hygroscopic. W. J. Hale. 1,902,773; Mar. 21.
Suit, Life preserver. M. Anderson. 1,901,859; Mar. 21.
Supershock absorption. R. B. Martin. 1,902,714; Mar. 21.
Support and stretching mechanism for motion picture screens. J. P. Hansen. 1,901,963; Mar. 21.
Supporting device. E. A. Bescherer. 1,901,947; Mar. 21.
Surgical instrument. E. C. Pilgrim. 1,902,418; Mar. 21.
Suspenders. L. Schullerman. 1,902,342; Mar. 21.
Suspension device for equalizing the strain on elevator cables. W. P. Frost. 1,902,161; Mar. 21.
Suspension spring. P. Carteret. 1,902,894; Mar. 21.
Sweater or similar article. S. Sheindelman. Des. 89,514–20; Mar. 21.
Switch control, Automatic electric. F. H. Richterkessing. 1,902,263; Mar. 21.
Switch: *See*—
Electric switch.
Push button switch.
Safety cut-out switch.
Signal switch.
Thermostatic switch.
Time switch.
Switch control mechanism for automatic telephone systems. C. L. Goodrum. 1,902,163; Mar. 21.
Switch for direction indicators. R. Hadano. 1,902,700; Mar. 21.
Switch for use with heaters, Thermostatic. R. W. Johnson. 1,902,451; Mar. 21.
Switch heater. E. L. Ruby. 1,902,339; Mar. 21.
Table: *See*—
Combination table.
Display table.
Drafting table.
Folding table.
Table leg brace. G. J. Corporon. 1,902,690; Mar. 21.
Tabulating machine for nondecimal systems. G. F. Daly and R. E. Page. 1,902,017; Mar. 21.
Tank: *See*—
Septic tank.
Tank cover. W. H. Matthews. 1,902,456; Mar. 21.
Tank lever, Flush. W. B. Campbell. 1,902,758; Mar. 21.
Tape, Button-hole. E. M. Goldsmith. 1,902,553; Mar. 21.
Tape for fastening packages and for like purposes, Adhesive. T. H. Krueger. 1,902,369; Mar. 21.
Tar and like oils, Treating. W. Higburg and P. C. Reilly. 1,901,872; Mar. 21.
Telegraph distributor, Multiplex. C. E. Dunham and A. H. Roche. 1,901,951; Mar. 21.
Telephone exchange system. E. P. G. Wright. 1,901,940; Mar. 21.
Telephone system. L. H. Allen. 1,901,944; Mar. 21.
Telephone system. N. H. Saunders. 1,902,187; Mar. 21.
Telephone system, Automatic. N. H. Saunders. 1,902,186; Mar. 21.
Temperature control apparatus. L. A. M. Phelan and C. Hotchkiss. Re18,771; Mar. 21.
Tension and length of lines in oil wells, Device for indicating. H. M. Greene. 1,901,962; Mar. 21.
Testing device. F. V. Larkin. 1,902,307; Mar. 21.
Testing instrument and regulator. P. E. Chapman. 1,902,542; Mar. 21.
Textile fabric or similar article. M. Brodsky. Des. 89,480; Mar. 21.
Textile fabric or similar article. J. M. Gottesman. Des. 89,504; Mar. 21.
Textile fabric or similar article. M. Gubl. Des. 89,505; Mar. 21.
Textile fabric or similar article. A. Kohut. Des. 89,528; Mar. 21.
Textile fabric or similar article. J. Schweizer. Des. 89,513; Mar. 21.
Textile fabric or similar article. W. Willheim. Des. 89,543; Mar. 21.
Textile fabric or similar article of manufacture. A. J. Heinke. Des. 89,506; Mar. 21.
Thermal relay. J. E. Willing. 1,902,793; Mar. 21.
Thermostat. S. P. Vaughn. 1,901,881; Mar. 21.
Thermostat, Bimetal. H. Scott. 1,902,589; Mar. 21.
Thermostatic control. C. M. Selby. 1,902,105; Mar. 21.
Thermostatic switch. R. W. Johnson. 1,902,452; Mar. 21.
Thread guide. K. Meyer-Gaus. 1,902,458; Mar. 21.
Threads between stitched books, Method of and mechanism for extracting interconnecting. O. Kleinschmit. 1,902,286; Mar. 21.
Time recorder. F. L. Fuller. 1,902,067; Mar. 21.
Time switch. W. K. Kearsley. 1,902,508; Mar. 21.
Tire building drum. H. T. Kraft. 1,902,306; Mar. 21.
Tire, Pneumatic. F. F. Anderson. 1,901,862; Mar. 21.
Tire tool. J. C. Jackson and A. J. Ingersoll. 1,902,283; Mar. 21.
Titanium dioxide, Preparing. F. von Bichowsky. 1,902,203; Mar. 21.
Tobacco fumes during smoking, Rendering nonpoisonous the. K. Herrmann. 1,902,775; Mar. 21.
Tool: *See*—
Bore straightening tool.
Fuse refilling tool.
Machine tool.
Piston tool.
Sealing tool.
Tire tool.
Valve seat tool.
Tool for electric motors and generators, Wedge removing. M. O. Fredrickson. 1,902,551; Mar. 21.
Tool for molding machines, Molding. H. Schants. 1,902,047; Mar. 21.
Tools provided with hard metal members, Making and hardening. A. Meutsch. 1,902,513; Mar. 21.
Toothbrush. H. V. Bryan. 1,901,866; Mar. 21.
Toothbrush, Interchangeable. H. G. L. Lemoine. 1,902,410; Mar. 21.
Towel service apparatus. S. A. Schwarts. 1,902,588; Mar. 21.
Towing device. F. Bonge. 1,902,212; Mar. 21.
Toy building block. F. H. Mills. 1,902,186; Mar. 21.
Toy, Mechanical. R. D. Beerbower. 1,902,154; Mar. 21.
Toy pistol. F. B. Keyston. 1,902,708; Mar. 21.
Tractor cultivator. I. L. Charlesworth. 1,902,689; Mar. 21.
Transfer mechanism. C. D. Lake. 1,902,035; Mar. 21.
Transmission, Automatic. V. Kinser. 1,902,245; Mar. 21.
Transmission, Flexible. P. C. Gordon. 1,902,800; Mar. 21.
Transmission line. A. O. Austin. 1,901,860; Mar. 21.
Transmission mechanism. E. R. Burtnett. 1,902,618; Mar. 21.
Trap: *See*—
Steam trap.
Tray or article of analogous nature, Smoker's. H. Negbaur. Des. 89,532; Mar. 21.
Tree, Apple. J. H. Dickey. Pl. Pt. 57; Mar. 21.
Tree-planer for cutting or working out resin-passages in trees. W. Bark. 1,901,946; Mar. 21.
Trellis, arbor, and the like. H. H. Phillips. 1,902,663; Mar. 21.
Trimming, Embroidered textile fabric. E. G. Zullig. Des. 89,523–4; Mar. 21.
Truck. F. B. Howell. 1,902,504; Mar. 21.
Truck bolster. H. C. Dreibuss and G. S. Chiles. 1,902,806; Mar. 21.
Truck bolster, Reenforced. H. C. Dreibuss and G. S. Chiles. 1,902,807; Mar. 21.
Truck side frame. H. C. Dreibuss and G. S. Chiles. 1,902,805; Mar. 21.
Tube: *See*—
X-ray tube.
Tube cap, Collapsible. V. E. and L. J. Gasser. 1,902,698; Mar. 21.
Tube protector. P. Kilimnik. 1,902,082; Mar. 21.
Tubes, Apparatus for extracting. D. F. Mitchell. 1,902,571; Mar. 21.

Tubes of celluloid and the like, Forming. S. A. Neidich. 1,902,578; Mar. 21.
Tubing cutter. L. Day and W. van Ee. 1,902,355; Mar. 21.
Tubing hanger. J. H. Howard. 1,902,075; Mar. 21.
Tufting mechanism. C. Kadlec. 1,902,704; Mar. 21.
Type cleaning instrument. B. E. Gerlach (neé Parker) and H. Gerlach. 1,902,024; Mar. 21.
Umbrella. E. Cornic. 1,902,395; Mar. 21.
Umbrella, Telescopic. H. Haupt. 1,902,363; Mar. 21.
Umbrella, Telescopic. H. Haupt. 1,902,774; Mar. 21.
Upper main bearing, Deep well leakproof and sandproof. A. R. Wels. 1,902,431; Mar. 21.
Vacuum cleaner. C. Kühnel and K. Korittke. 1,902,561; Mar. 21.
Vacuum cleaning device. F. Wielats. 1,902,534; Mar. 21.
Valve: *See*—
Balanced valve.
Check valve.
Filter valve.
Nonreturn valve.
Relief valve.
Rotary valve.
Valve construction. H. H. Haller. 1,902,069; Mar. 21.
Valve mechanism. A. J. Dotterweich. 1,902,624; Mar. 21.
Valve seat tool. F. O. Albertson. 1,902,207; Mar. 21.
Vapor discharge device. M. Urich. 1,902,110; Mar. 21.
Vehicle body door stiffener. A. G. Herreshoff. 1,902,499; Mar. 21.
Vehicle with radio equipment, Automotive. J. W. Hobbs. 1,902,802; Mar. 21.
Vending and change making machine, Combined. L. J. Robb. 1,902,467; Mar. 21.
Vending machine. C. W. Blossom and W. H. Staples. 1,902,612; Mar. 21.
Veneer, Method of and apparatus for making flexible. I. Horine. 1,902,032; Mar. 21.
Vessels, Annealing. R. Stresau. 1,902,146; Mar. 21.
Vibration sensitive system. F. Rieber. 1,902,184; Mar. 21.
Vibrations, System for receiving and recording. F. Rieber. 1,902,183; Mar. 21.
Viscose, Manufacture of. O. Schmid. 1,902,102; Mar. 21.
Voltage limiting system. E. Peterson. 1,901,929; Mar. 21.
Voltage regulating apparatus. H. Grob. 1,902,554; Mar. 21.
Wafer dosing, filling, and sealing machine. G. Willmann. 1,902,272; Mar. 21.
Waist band construction. R. C. Castlen. 1,902,116; Mar. 21.
Wall structure. H. S. Warner. 1,902,271; Mar. 21.
Washer: *See*—
Lock washer.
Washers, Apparatus for making lock. A. Stoll. 1,902,269; Mar. 21.
Washing apparatus. G. J. Meyer. 1,902,253; Mar. 21.
Washing machine. F. A. Hansen. 1,902,165; Mar. 21.
Washing machine. E. S. Stoddard. 1,902,193; Mar. 21.
Water from dredged material, Apparatus for separating. D. Verstoep. 1,902,739; Mar. 21.
Water heater. W. M. Hills. 1,902,365; Mar. 21.
Water in oil emulsions, Breaking. P. Kaplan. 1,902,129; Mar. 21.
Water, Method of and apparatus for economizing feed. M. P. Shields. 1,902,732; Mar. 21.
Water tube boiler. L. E. Connelly. 1,901,899; Mar. 21.
Water with radium emanation, Device for impregnating drinking. A. H. Tyrer. 1,902,200; Mar. 21.
Weir structure. T. I. Gilbert. 1,901,956; Mar. 21.
Welding apparatus. J. A. Seede. 1,902,469; Mar. 21.
Well control device. C. C. Brown. 1,902,540; Mar. 21.
Well drilling rotary. H. G. Johnston. 1,902,242; Mar. 21.
Wheel ramp. L. L. Coomber. 1,902,218; Mar. 21.
Wind indicator for airplane landing fields. F. M. Czapiewski. 1,902,763; Mar. 21.
Wind protection for railway systems, Side. F. Kruckenberg and C. Stedefeld. 1,902,783; Mar. 21.
Winding device for the manufacturing of boxes, for instance the outer casings of push boxes and similar articles. B. A. E. Johnson. 1,902,033; Mar. 21.
Window frame construction. F. F. Beil. 1,902,209; Mar. 21.
Window protection, Casement. W. F. Moss. 1,902,385; Mar. 21.
Windows, Operating mechanism for. F. X. Ripp. 1,902,266; Mar. 21.
Windrowing machine. L. C. Badgley. 1,901,889; Mar. 21.
Windshield cleaner device for airplanes. S. A. Morehouse. 1,902,254; Mar. 21.
Wiper, Knife. H. A. Burt. 1,902,434; Mar. 21.
Wiper, Windshield. P. F. Bessy. 1,902,610; Mar. 21.
Wiping mechanism for matrix composing and line casting machines. C. A. Albrecht. 1,902,432; Mar. 21.
Wire making process. C. Dantsizen. 1,902,493; Mar. 21.
Wire, Method and apparatus for drawing. S. McMullan. 1,901,920; Mar. 21.
Wire stylus and feeding same. F. L. Capps. 1,902,057; Mar. 21.
Wood graining, Imitating. G. A. Rose. 1,902,522; Mar. 21.
Wringer. J. L. Perkins. 1,902,579; Mar. 21.
Wringer. J. L. Perkins and H. D. Croft. 1,902,580; Mar. 21.
Wringer, Mop. M. Cesario. 1,902,688; Mar. 21.
X-ray, Apparatus for and method of localizing and measuring by. C. R. Johnson. 1,902,558; Mar. 21.
X-ray installation. A. Bouwers. 1,901,865; Mar. 21.
X-ray tube. W. Hofmann. 1,902,502; Mar. 21.
Yarn, Apparatus for the multiple or multi-color dyeing of hanks of. F. and C. Faigle. 1,902,358; Mar. 21.
Zinc coated article. S. H. Davis, C. O. Anderson, W. N. Smith, and H. R. Hanley. 1,902,621; Mar. 21.

CLASSIFICATION OF PATENTS

ISSUED MARCH 21, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

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67: 1,902,190
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273— 32: 1,902,682
33: 1,901,948
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274— [illegible]: 1,902,609
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45: 1,902,057
276— 44: 1,902,[illegible]
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U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aktiebolaget Iggesunds Bruk, Iggesund, Sweden. Wood pulp. Serial No. 334,973; Mar. 28. Class 1.

Alpert, Jacob J., New York, N. Y. Deodorant cream. Serial No. 332,321; Mar. 28. Class 6.

Al-To Laboratories. (See Chamberlain, Darwin G.)

American Bemberg Corporation. (See I. P. Bemberg Aktiengesellschaft, assignor.)

American Diamalt Company, The, Cincinnati, Ohio. Malt syrup. Serial No. 330,822; Mar. 28. Class 46.

American Herb Company, San Jose, Calif. Herb tea. Serial No. 332,677; Mar. 28. Class 6.

Anderson Brick and Supply Co., Inc., New York, N. Y. Fire resisting plaster boards. Serial No. 334,551; Mar. 28. Class 12.

Arbuthnot Oil Company, Picher, Okla. Petroleum products. Serial No. 334,278; Mar. 28. Class 15.

Austenal Laboratories, Inc., New York, N. Y. Wire. Serial No. 332,510; Mar. 28. Class 44.

Banner Manufacturing Co. Inc., doing business as Gold Seal Mfg. Co., New York, N. Y. Anti-freeze solution. Serial No. 333,179; Mar. 28. Class 6.

Barber Asphalt Company, The, Philadelphia, Pa. Composition roofing. Serial No. 321,482; Mar. 28. Class 12.

Barrett Company, The, New York, N. Y. Building paper. Serial No. 332,750; Mar. 28. Class 12.

Barton, Edward E., London, England. Fuel. Serial No. 332,330; Mar. 28. Class 1.

Bauer, William S., London, England. Vaginal antiseptic preparation and an antiseptic and hygienic preparation. Serial No. 332,245; Mar. 28. Class 6.

Bee Line Manufacturing Company, Davenport, Iowa. Automobile frame straightchers, lifting jacks, and axle and wheel straightening presses. Serial No. 334,343; Mar. 28. Class 23.

Bench Dog Food Co. (See Gahan, A. J.)

Biloxi Canning & Packing Company, Inc., Biloxi, Miss. Canned fish. Serial Nos. 332,831–2; Mar. 28. Class 46.

Borden Quality, Inc., New York, N. Y. Dressed poultry, butter, and eggs. Serial No. 317,501; Mar. 28. Class 46.

Borden Quality Inc., New York, N. Y. Dressed poultry and eggs. Serial No. 323,520; Mar. 28. Class 46.

Bradford Gasoline Company of Bradford, Bradford, Pa. Illuminating oils, lubricating oils and greases, and motor fuel oils. Serial No. 332,806; Mar. 28. Class 15.

Bristol Aeroplane Company Limited, The, Bristol, England. Aircraft engines. Serial No. 333,667; Mar. 28. Class 23.

Brown & Wells, Inc., Boston, Mass. Neckties. Serial No. 334,790; Mar. 28. Class 39.

Brmemská Továrna na Smaltové a Kovové Zboží Bratří Gottliebové a Brauchbar, Brno, Czechoslovakia. Lining for clothes. Serial No. 334,275; Mar. 28. Class 42.

Buchanan, James, & Co. Ld., London, England. Whisky. Serial No. 332,983; Mar. 28. Class 49.

Burgess Battery Company, Madison, Wis. Dry cell batteries. Serial No. 334,042; Mar. 28. Class 21.

Burton, W., & Co., Inc., Brooklyn, N. Y. Flavoring extracts and imitations thereof. Serial No. 316,763; Mar. 28. Class 46.

Button Corporation of America, Inc., The, Orange, N. J. Buttons. Serial No. 333,820; Mar. 28. Class 40.

Calavo Growers of California, Los Angeles, Calif. Avocado oil, muscle oil, soaps, etc. Serial No. 329,254; Mar. 28. Class 6.

Caldwell, John H., New York, N. Y. Candy, ice cream, peanuts, etc. Serial No. 333,828; Mar. 28. Class 46.

California Consolidated Water Company, Los Angeles, Calif. Drinking water, distilled water. Serial No. 334,953; Mar. 28. Class 45.

Castel Rubber Company, East Butler, Pa. Electric connecting plugs. Serial No. 334,737; Mar. 28. Class 21.

Celanese Corporation of America, New York, N. Y. Fabrics. Serial No. 334,299; Mar. 28. Class 42.

Central Scientific Company, Chicago, Ill. Laboratory burners. Serial No. 324,061; Mar. 28. Class 34.

Cera-Lac Company, The, Los Angeles, Calif. Natural grain flour with bran, cereal breakfast food, bread. Serial No. 332,754; Mar. 28. Class 46.

Chalupa, Emil, New York, N. Y. Mustard. Serial No. 332,836; Mar. 28. Class 46.

Chamberlain, Darwin G., doing business as Al-To Laboratories, Cleveland, Ohio. Ointment. Serial No. 334,524; Mar. 28. Class 6.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Metal pipe. Serial No. 333,147; Mar. 28. Class 13.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Angles, wire, and sheet-metal. Serial No. 333,148; Mar. 28. Class 14.

Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Metal pipe. Serial No. 333,149; Mar. 28. Class 13.

Cincinnati Soap Company, The, Cincinnati, Ohio. Toilet soap. Serial No. 334,981; Mar. 28. Class 4.

Claman, Irving, New York, N. Y. Gas stoves, ranges, parts for stoves and ranges. Serial No. 333,212; Mar. 28. Class 34.

Cleveland Trinidad Paving Co., The, Cleveland, Ohio. Paving compositions. Serial No. 329,136; Mar. 28. Class 12.

Coast Fishing Company, Wilmington, Calif. Creamed tenderloin of tuna fish. Serial No. 334,955; Mar. 28. Class 46.

Columbia Phonograph Company, Inc., Bridgeport, Conn. Refrigerators and parts thereof. Serial No. 321,369; Mar. 28. Class 31.

Comfort Manufacturing Company, Chicago, Ill. Saponaceous compounds, shaving creams, shaving sticks, etc. Serial No. 335,017; Mar. 28. Class 4.

Connor, John B., Los Angeles, Calif. Lubricating oil. Serial No. 334,487; Mar. 28. Class 15.

Continental Car-Na-Var Corporation, Brazil, Ind. Liquid polish. Serial No. 334,514; Mar. 28. Class 16.

Continental Corporation, Chicago, Ill. Radio tubes, [illegible] lights, bulbs, etc. Serial No. 334,049; Mar. 28. Class 21.

Continental Pharmacal Co. (See Rubenstein, [illegible]na.)

Cuesta, Rey & Co., Tampa, Fla. Cigars. Serial No. 334,387; Mar. 28. Class 17.

Davis, R. B., Company, Hoboken, N. J. Baking powder and baking soda. Serial No. 325,365; Mar. 28. Class 6.

Dayton Pump & Manufacturing Company, The, Dayton, Ohio. Refrigerators. Serial No. 333,823; Mar. 28. Class 31.

Dayton Rubber Manufacturing Company, The, Dayton, Ohio. Tires and tubes. Serial No. 330,397; Mar. 28. Class 35.

Doyle, B. W., doing business as Doyle Packing Company, Los Angeles, Calif. Canned cat food. Serial No. 334,956; Mar. 28. Class 46.

Drew Canning Company, Ltd., San Jose, Calif. Canned fruits and vegetables. Serial No. 333,924; Mar. 28. Class 46.

Drug Products Co. (See Miller, George J.)

Duncan, Donald F., Inc., Chicago, Ill. Diabolos. Serial No. 335,113; Mar. 28. Class 22.

Du Pont, E. I., de Nemours and Company, Wilmington, Del. Sulfonated alcohols. Serial No. 334,090; Mar. 28. Class 6.

Duschock, Stephen M., doing business as Polamer Drug Co., South River, N. J. Medical preparation. Serial No. 333,925; Mar. 28. Class 6.

Eastaid Manufacturing Company, Toledo, Ohio. Prepared compound. Serial No. 333,926; Mar. 28. Class 46.

Electrical Products Corporation, Oakland, Calif. Electric lighting fixtures. Serial No. 333,968; Mar. 28. Class 21.

El Food and Drug Products, Philadelphia, Pa. Milk product. Serial No. 333,029; Mar. 28. Class 46.

Elgin American Manufacturing Co., Elgin, Ill. Vanity cases, compact boxes, jewel boxes, etc. Serial No. 334,600; Mar. 28. Class 2.

Estatement System. (See Rosenberg, August.)

Fischer, Albert C., doing business as Servicised Sales Company, Chicago, Ill. Expansion joint strips. Serial No. 334,628; Mar. 28. Class 12.

Fitzwater, Fanny F., New York, N. Y. Newspaper Fashion section. Serial No. 334,564; Mar. 28. Class 38.

Franco-Españolas, Bodegas, Logrono, Spain. Wines. Serial No. 333,368; Mar. 28. Class 47.

Fredericks Armature Corporation, Lock Haven, Pa. Armatures and generators. Serial No. 333,704; Mar. 28. Class 21.

Fuel Conservation Corp., Washington, D. C. Smoke pipe air checks. Serial No. 322,735; Mar. 28. Class 34.

Gahan, A. J., doing business as Bench Dog Food Co., San Francisco, Calif. Canned dog and cat food. Serial Nos. 334,958–60; Mar. 28. Class 46.

Garfinkel & Ritter, New York, N. Y. Brassières and bandeaux. Serial No. 334,282; Mar. 28. Class 39.

Garfinkel & Ritter, New York, N. Y. Slips. Serial No. 334,358; Mar. 28. Class 39.

General Railway Signal Company, Rochester, N. Y. Electrical equipment for the control and operation of signals and switches on railroads, and parts thereof. Serial No. 334,007; Mar. 28. Class 21.

Gibbs & Company, Inc., Baltimore, Md. Canned fruits, berries, vegetables, etc. Serial No. 333,355; Mar. 28. Class 46.

Gluek Brewing Company, Minneapolis, Minn. Brewed cereal beverages. Serial Nos. 326,212–13; Mar. 28. Class 48.

Goldblatt Bros., Inc., Chicago, Ill. Cigars. Serial No. 332,254; Mar. 28. Class 17.

Gold Seal Mfg. Co. (See Banner Manufacturing Co. Inc.)

Greenhill & Daniel, Inc., Brooklyn, N. Y. Bathing suits, sweaters, dresses, and skirts. Serial No. 334,253; Mar. 28. Class 39.

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Griffin, Edward O., jr., doing business as Griffin Specialty Sales Co., Los Angeles, Calif. Electrical cigar and cigarette lighters. Serial No. 333,228; Mar. 28. Class 21.

Hale-Justis Drug Company, The, doing business as The Hale-Justis Laboratories, Cincinnati, Ohio. Epsom salt, licorice powder, castor oil, etc. Serial No. 322,611; Mar. 28. Class 6.

Hamill, John A., New York, N. Y. Soapless oil shampoo, wave lotion, etc. Serial No. 334,102; Mar. 28. Class 6.

Hancock Oil Company of California, Long Beach, Calif. Gasoline. Serial Nos. 333,587–9; Mar. 28. Class 15.

Harper, Albert J., doing business as Harper Creamery Company, Cleveland, Ohio. Buttermilk. Serial No. 329,333; Mar. 28. Class 46.

Harris, Sidney, and W. Americus, Pittsburgh, Pa. Ginger ale, sirup and extract for making the same. Serial No. 334,010; Mar. 28. Class 45.

Harrison Wholesale Company, Chicago, Ill. Laundry washing machines. Serial No. 334,056; Mar. 28. Class 24.

Health Food Corporation, Chicago, Ill. Powdered health food. Serial No. 328,413; Mar. 28. Class 46.

Heddon's, James, Sons, Dowagiac, Mich. Artificial baits. Serial No. 327,754; Mar. 28. Class 22.

Hephaest A. G. fur Motorische Krafterzeugung, Zurich, Switzerland. Steam boilers, generators, and furnaces. Serial No. 330,995; Mar. 28. Class 34.

Hercules Powder Company, Wilmington, Del. Cellulose esters and ethers. Serial No. 334,129; Mar. 28. Class 6.

Hewitt Laboratories Inc., New York, N. Y. Gum healing antiseptic and germicide. Serial No. 333,884; Mar. 28. Class 6.

Hirsch, Louis, Textile Machines, Inc., New York, N. Y. Hosiery. Serial Nos. 334,217–18; Mar. 28. Class 89.

Hollingshead, R. M., Company, The, Camden, N. J. Polishing materials. Serial No. 325,260; Mar. 28. Class 16.

Hollyman, C. H., Alamosa, Colo. Honey. Serial No. 334,361; Mar. 28. Class 46.

Hoyt, Otis, Long Beach, Calif. Fresh citrus fruits, dates. Serial No. 332,773; Mar. 28. Class 46.

Hudson Valley Wine Co., Inc., Highland, N. Y. Medicinal tonic. Serial No. 334,012; Mar. 28. Class 6.

I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Sensitized photographic plates and films, and cinematographic films. Serial No. 334,677; Mar. 28. Class 26.

I. P. Bemberg Aktiengesellschaft, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignors to American Bemberg Corporation, New York, N. Y. Textile materials in the piece. Serial No. 326,661; Mar. 28. Class 42.

Ilford, Limited, Ilford, England. Sensitized cinematographic and photographic films. Serial No. 333,391; Mar. 28. Class 26.

Intellect-A-Ray Corporation, Pasadena, Calif. Electric apparatus. Serial No. 333,594; Mar. 28. Class 21.

International Motor Company, New York, N. Y. Commercial motor trucks and tractor trucks. Serial No. 332,717; Mar. 28. Class 19.

Irwin Auger Bit Company, The, Wilmington, Ohio. Auger bits. Serial No. 333,853; Mar. 28. Class 23.

Jaburg Brothers, Inc., New York, N. Y. Alimentary paste, butter, candies, etc. Serial No. 332,885; Mar. 28. Class 46.

Jacobs, Fred, doing business as Metalloy Products Co., New York, N. Y. Metal plating and polishing compound. Serial No. 332,256; Mar. 28. Class 6.

Jaeger Machine Company, The, Columbus, Ohio. Pumps. Serial No. 333 989; Mar. 28. Class 23.

Jayform, Inc., New York, N. Y. Boots and shoes. Serial No. 331,792; Mar. 28. Class 39.

Kemper, Merle E., doing business as Sta-Lube Company, St. Louis, Mo. Lubricating oils and greases. Serial No. 334,437; Mar. 28. Class 15.

Kester Solder Company, Chicago, Ill. Soldering fluxes. Serial No. 334,310; Mar. 28. Class 6.

Keyes Fibre Company, Inc., Waterville, Me. Plates and dishes. Serial No. 335,047; Mar. 28. Class 2.

Kress, S. H., & Co., New York, N. Y. Insecticides, germicides, fungicides, etc. Serial No. 334,219; Mar. 28. Class 6.

Kwickorn Sales Company. (See Waterhouse, Ernest C.)

L. B. Laboratories, Los Angeles, Calif. Hair oil, permanent wave oil, liniment, etc. Serial No. 322,049; Mar. 28. Class 6.

Leidy, Dr., Distributors. (See Trethewey, Robert J.)

Les Laboratoires Dausse, Societe Anonyme, Paris, France. Lotion for the skin and hair. Serial No. 334,364; Mar. 28. Class 6.

Lesquendieu, Incorporated, New York, N. Y. Nail polish, nail white, cuticle cream, etc. Serial No. 333,886; Mar. 28. Class 6.

Leverage, John T., Dover, Del. Salve compound. Serial No. 333,395; Mar. 28. Class 6.

Lipschultz Bros. Inc., St. Paul, Minn. Automobile seat covers. Serial No. 332,866; Mar. 28. Class 19.

Lipschultz Bros. Inc., St. Paul, Minn. Automobile seat covers. Serial Nos. 332,868–9; Mar. 28. Class 19.

Long, W. E., Company, The, Chicago, Ill. Bread. Serial No. 330,144; Mar. 28. Class 46.

Lowndes, Thomas, & Co., Limited, London, England. Rum. Serial No. 335,028; Mar. 28. Class 49.

Magnavox Company, The, Fort Wayne, Ind. Fruit juice extractors. Serial No. 334,399; Mar. 28. Class 23.

Marcotoon, Nicholas N., New York, N. Y. Tissue cream and protective cream. Serial No. 327,853; Mar. 28 Class 6.

Marshall, James, (Glasgow) Limited, Glasgow, Scotland. Preparation of wheat for infant feeding, puddings, cakes etc. Serial No. 333,161; Mar. 28. Class 46.

Metalloy Products Co. (See Jacobs, Fred.)

Miller, George J., doing business as Drug Products Co. Toledo, Ohio. Dental powder. Serial No. 334,258; Mar. 28. Class 6.

Model Brassiere Co. Inc., Brooklyn, N. Y. Combination garment. Serial No. 334,066; Mar. 28. Class 39.

Mooney, Joseph C., doing business as Reid Products Company, Yonkers, N. Y. Hair and scalp preparation. Serial No. 333,046; Mar. 28. Class 6.

Moore Plow & Implement Co., Greenville, Mich. Walking plows, hand cultivators, and parts thereof. Serial No. 332,012; Mar. 28. Class 23.

Multicycol Pump & Engine Corporation, New York, N. Y. Rotary pumps. Serial No. 334,228; Mar. 28. Class 23.

Mystic Brotherhood University, Inc., Tampa, Fla. Leaflets, manuscripts, booklets, etc. Serial No. 334,019; Mar. 28. Class 38.

New York & New Jersey Lubricant Company, New York, N. Y. Lubricating oils and oil compositions and greases. Serial No. 334,534; Mar. 28. Class 15.

Ohio Fibrated Asphalt and Rubber Company, Sandusky, Ohio. Cable trunking, expansion joints, moldings, etc. Serial No. 301,120; Mar. 28. Class 12.

Old Monk Olive Oil Co., Chicago, Ill. Mayonnaise, French dressing, tartar sauce, etc. Serial No. 332,781; Mar. 28. Class 46.

Old Trusty Dog Food Company, Needham Heights, Mass. Food for carnivorous animals. Serial No. 334,687; Mar. 28. Class 46.

Parker Brothers, Inc., Portland, Me., and Salem, Mass. Picture puzzles. Serial No. 335,130; Mar. 28. Class 22.

Patterson Publishing Company, Chicago, Ill. Magazine section or department. Serial No. 317,777; Mar. 28. Class 38.

"Pertrix" Chemische Fabrik Aktiengesellschaft, Berlin, Germany. Electric battery cells, electric batteries, lamps, etc., and parts thereof. Serial No. 327,411; Mar. 28. Class 21.

Pfluger, Clifford W., New York, N. Y. Charts. Serial No. 333,481; Mar. 28. Class 38.

Ph. D. Products Company, Philadelphia, Pa. Shaving cream. Serial No. 333,773; Mar. 28. Class 4.

Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. Serial No. 334,470; Mar. 28. Class 39.

Piston Ring Company, The, Muskegon, Mich. Piston rings. Serial No. 323,714; Mar. 28. Class 35.

Polamer Drug Co. (See Duschock, Stephen M.)

Pownall, George L., Cincinnati, Ohio. Small ice portions for table use. Serial No. 334,376; Mar. 28. Class 1.

Providence Milling Co., The, Grand Rapids, Ohio. Buckwheat and wheat flour compound, buckwheat flour and whole wheat pancake flour compound. Serial No. 333,839; Mar. 28. Class 46.

Publicker Commercial Alcohol Company, Philadelphia, Pa. Pure grain alcohol. Serial No. 334,967; Mar. 28. Class 49.

Red Band Company, Inc., Johnson City, Tenn. Prepared flour. Serial No. 333,012; Mar. 28. Class 46.

Reid Products Company. (See Mooney, Joseph C.)

Ricciardi, Co., Inc., The, New York, N. Y. Ice cream and frozen confections. Serial No. 324,232; Mar. 28. Class 46.

Rinshed-Mason Company, Detroit, Mich. Lacquer. Serial No. 331,064; Mar. 28. Class 16.

Rola Company, The, Cleveland, Ohio. Radio receiving sets and parts thereof, housings, plates, etc. Serial No. 332,002; Mar. 28. Class 21.

Rosenberg, August, doing business as Estatement System, New York, N. Y. Looseleaf binders, sheets, records, etc. Serial No. 334,232; Mar. 28. Class 37.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. Serial No. 334,322; Mar. 28. Class 42.

Rossie Velvet Company, Mystic, Conn. Pile fabrics. Serial Nos. 334,324–5; Mar. 28. Class 42.

Rubenstein, Dina, doing business as Continental Pharmacal Co., New York, N. Y. General nerve sedative. Serial No. 333,128; Mar. 28. Class 6.

S. M. A. Corporation, Cleveland, Ohio. Solution of carotene in oil. Serial No. 334,369; Mar. 28. Class 6.

S & M Lamp Co., Inc., Los Angeles, Calif. Flood lights. Serial No. 334,689; Mar. 28. Class 21.

Sanders, Fred, Detroit, Mich. Candy, ice cream, noodles, etc. Serial No. 333,129; Mar. 28. Class 46.

Schrank, M. C., Company, Bridgeton, N. J. Corsets, dresses, pajamas, etc. Serial No. 333,440; Mar. 28. Class 39.

Schwarze Electric Company, Adrian, Mich. Infra-red ray generators. Serial No. 320,875; Mar. 28. Class 21.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Schwarze Electric Company, Adrian, Mich. Combined electro-magnetic and pneumatic controllers and parts thereof. Serial No. 333,535; Mar. 28. Class 21.

Sealcell Corporation, New York, N. Y. Closures, closure frames, doors, etc. Serial No. 332,928; Mar. 28. Class 12.

Sears, Roebuck and Co., Chicago, Ill. Boxed paper and envelopes. Serial No. 333,610; Mar. 28. Class 37.

Sears, Roebuck and Co., Chicago, Ill. Brooms, handled floor brushes and dusters. Serial No. 333,611; Mar. 28. Class 29.

Sears, Roebuck and Co., Chicago, Ill. Fertilizer. Serial No. 334,933; Mar. 28. Class 10.

Servicized Sales Company. (See Fischer, Albert C.)

Shaler Company, The, Waupun, Wis. Repair patch equipment. Serial No. 325,998; Mar. 28. Class 35.

Simitsis Bros., Inc., New York, N. Y. Olive oil. Serial No. 334,124; Mar. 28. Class 46.

Smith, Luther C., doing business as L. C. Smith Laboratory, Canton, Ohio. Germicidal lotion. Serial No. 333,613; Mar. 28. Class 6.

Snappies, Inc., Tulsa, Okla. Garment clasps and bandage clasps. Serial No. 332,471; Mar. 28. Class 40.

Snyder, Sherwood P., doing business as The Sherwood Snyder Food Co. and Snyder's Community Kitchen, Dayton, Ohio. Noodle dinner, potato salad, macaroni salad, etc. Serial No. 323,468; Mar. 28. Class 46.

Sorrentino, Albert S., Detroit, Mich. Maltless beverage. Serial No. 334,732; Mar. 28. Class 45.

Sportswear Mfg. Co., San Francisco, Calif. Sweaters, coats, dresses, etc. Serial No. 297,337; Mar. 28. Class 39.

Sta-Lube Company. (See Kemper, Merle E.)

Standard Oil Company of New Jersey, Wilmington, Del. Lubricating oils. Serial No. 334,581; Mar. 28. Class 15.

Stearns' Electric Paste Company, Inc., Chicago, Ill. Poison. Serial No. 333,486; Mar. 28. Class 6.

Steril Tab Co. (See Ullrey, F. E.)

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Bread. Serial No. 330,973; Mar. 28. Class 46.

Sumner, James, doing business as Sumner Sales Co., St. Louis, Mo. Table board game. Serial No. 334,695; Mar. 28. Class 22.

Sun Heat Automatic Oil Burner Corp., New York, N. Y. Control device used in connection with automatic oil burners. Serial No. 333,209; Mar. 28. Class 21.

Takamine Laboratory, Inc., Clifton, N. J. Cleansing comopund. Serial No. 334,236; Mar. 28. Class 4.

Tam Tape Company, Orchard Lake, Mich. Adhesive tape. Serial No. 334,477; Mar. 28. Class 44.

Tetley, Joseph, & Co., Inc., New York, N. Y. Tea, coffee, cocoa, etc. Serial No. 332,167; Mar. 28. Class 46.

Thomas, Sidney, and F. J. Delves, Paris, France. Templates. Serial No. 315,809; Mar. 28. Class 23.

Tolfree, Edward R., doing business as "X" Laboratories, New York, N. Y. Dry cleaner. Serial Nos. 329,001–2; Mar. 28. Class 4.

Town Talk Food Products Corporation, New York and Brooklyn, N. Y. Flavoring syrups. Serial No. 329,692; Mar. 28. Class 46.

Trethewey, Robert J., doing business as Dr. Leidy, Distributors, Boyertown, Pa. Medicinal preparation. Serial No. 335,040; Mar. 28. Class 6.

Tucker's, Sophie, Food Products Company, Incorporated, Baltimore, Md. Noodles. Serial No. 333,627; Mar. 28. Class 46.

Ullrey, F. E., doing business as Steril Tab Co., Hamilton, Ohio. Medicine. Serial No. 317,262; Mar. 28. Class 6.

United Shoe Machinery Corporation, Paterson, N. J., and Boston, Mass. Cutting dies. Serial No. 323,506; Mar. 28. Class 23.

United States Radio & Television Corporation, Marion, Ind. Radio receiving sets. Serial No. 328,823; Mar. 28. Class 21.

United States Rubber Company, New York, N. Y. Golf balls. Serial No. 335,145; Mar. 28. Class 22.

Universal Dental Company, Philadelphia, Pa. Artificial teeth. Serial No. 334,027; Mar. 28. Class 44.

University Distributing Company, Cambridge, Mass. Bridge accessory. Serial No. 334,079; Mar. 28. Class 22.

Valentine & Company, New York, N. Y. Paint enamels, stains, and varnishes. Serial No. 334,544; published Mar. 28. Class 16.

Valley Shoe Corporation, St. Louis, Mo. Shoes. Serial No. 334,274; Mar. 28. Class 39.

Van Beuren Corporation, The, New York, N. Y. Motion picture films. Serial Nos. 334,656–7; Mar. 28. Class 26.

Vaughn, Ralph C., New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 334,127; Mar. 28. Class 6.

Victory Packing Company, Oakland, Calif. Canned dog and cat food. Serial No. 334,969; Mar. 28. Class 46.

Viking Manufacturing Company, Inc., Cambridge, Mass. Jig saw type puzzles. Serial No. 335,044; Mar. 28. Class 22.

Walther, Carl, Waffenfabrik, Zella-Mehlis, Germany. Howitzers, cannons, mortars, etc. Serial No. 331,019; Mar. 28. Class 9.

Warwick Chemical Company, West Warwick, R. I. Chemical products. Serial No. 334,330; Mar. 28. Class 6.

Waterhouse, Ernest C., doing business as Kwickorn Sale Company, Los Angeles, Calif. Food preparation. Serial Nos. 334,453–4; Mar. 28. Class 46.

Welgum & Frey, Victor, Calif. Fresh grapes. Serial No. 332,607; Mar. 28. Class 46.

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Glass or crystal in all forms. Serial No. 311,545; Mar. 28. Class 33.

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Cigar cutters, ash trays, tobacco pouches, etc. Serial No. 330,907; Mar. 28. Class 8.

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Electric lamps, and parts thereof. Serial No. 330,908; Mar. 28. Class 21.

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Mirrors. Serial No. 330,910; Mar. 28. Class 32.

Württembergische Metallwarenfabrik, Geislingen-Steige, Germany. Vases, dishes, plates, etc. Serial No. 330,918; Mar. 28. Class 13.

"X" Laboratories. (See Tolfree, Edward R.)

Yardley & Co., Limited, London, England. Face powders and creams. Serial No. 333,960; Mar. 28. Class 6.

LIST OF REGISTRANTS OF TRADE-MARKS

Aderer, Julius, Inc., New York, N. Y. Dental wire. 302,064–6; Mar. 28; Serial Nos. 332,674–6; published Jan. 17, 1933. Class 44.

Air-Way Electric Appliance Corporation, Toledo, Ohio. Floor wax. 302,158; Mar. 28. Class 16.

American Bird and Feed Store. (See Gabler, William M.)

American Dairy Supply Company, Washington, D. C. Paper tubular rolls. 302,170; Mar. 28. Class 2.

American Flexible Coupling Co., Erie, Pa. Flexible couplings for shafts. 302,152; Mar. 28. Class 23.

American Manufacturing Company, Boston, Mass., and Brooklyn, N. Y. Twine. 302,133; Mar. 28; Serial No. 332,362; published Jan. 17, 1933. Class 7.

Ames Harris Neville Co., San Francisco, Calif. Polishing, dusting, and/or cleaning cloth. 302,159; Mar. 28. Class 29.

Bachrach-Feld Company, Inc., doing business as Maltwort Concentrated Malt Co., The, Cincinnati, Ohio. Concentrated liquid malt syrup. 302,105; Mar. 28; Serial No. 332,244; published Jan. 10, 1933. Class 46.

Bahama Isles Foods Corporation, Dover, Del., and Miami, Fla. Conch chowder and/or broth. 302,095; Mar. 28; Serial No. 331,532; published Jan. 10, 1933. Class 46.

Barium Reduction Corporation, Charleston, W. Va. Vermin exterminator preparations, insecticides, etc. 302,080; Mar. 28; Serial No. 331,913; published Jan. 10, 1933. Class 6.

Berkeley Company, Chicago, Ill. Sanitary napkins. 302,079; Mar. 28; Serial No. 331,916; published Jan. 17, 1933. Class 44.

Bloomingdale Bros., Inc., New York, N. Y. Artificial trees. 302,090; Mar. 28; Serial No. 330,361; published Jan. 17, 1933. Class 50.

Bonus Tobacco Company, Cincinnati, Ohio. Chewing tobacco. 302,114; Mar. 28; Serial No. 332,874; published Jan. 17, 1933. Class 17.

Bowles, Frank A., doing business as Bowles Bros. Co., Los Angeles, Calif. Soaps. 302,067; Mar. 28; Serial No. 332,611; published Jan. 17, 1933. Class 4.

British Ropes Limited, London, England. Rope of jute and hemp. 302,134–7; Serial Nos. 331,918–21; published Jan. 17, 1933. Class 7.

Burns, Jabez, & Sons, Inc., New York, N. Y. Machines and parts thereof for grinding, mixing, and conveying coffee, etc. 302,157; Mar. 28. Class 23.

Calito Manufacturing Co. Ltd., Los Angeles, Calif. Soaps. 302,071; Mar. 28; Serial No. 332,575; published Jan. 10, 1933. Class 4.

Campbell, John, & Co., New York, N. Y. Dyes and dyestuffs. 302,077; Mar. 28; Serial No. 332,248; published Jan. 10, 1933. Class 6.

Capone, A. J., Company, New York, N. Y. Canned tomato paste and tomatoes, and canned sardines. 302,062; Mar. 28; Serial No. 321,906; published Jan. 10, 1933. Class 46.

Cardiff-Maryland Marble Co., The, New York, N. Y. Crushed marble. 302,166; Mar. 28. Class 1.

Carter, William, Company, The, Needham Heights, Mass. Knitted fabric of wool, cotton, etc. 302,160; Mar. 28. Class 42.

Carter, William, Company, The, Needham Heights, Mass. Infants' undergarments. 302,161; Mar. 28. Class 30.
Cary, Fred G., Lodi, Calif. Fresh grapes. 302,057; Mar. 28; Serial No. 311,720; published Jan. 10, 1933. Class 46.
Cassidy, John E., & Son, Boston, Mass., assignor, by mesne assignments, to Martini & Rossi S. A., Turin, Italy. Mixed drinks. 36,215; renewed Apr. 9, 1931.
Citrus Packing Company, Inc. (See Riley & Jones, assignor.)
Clark Thread Company, The, Newark, N. J. Thread and yarn. 302,102; Mar. 28; Serial No. 332,177; published Jan. 3, 1933. Class 43.
Clark Thead Company, The, Newark, N. J. Thread and yarn. 302,103–4; Mar. 28; Serial Nos. 332,179–80; published Jan. 3, 1933. Class 43.
Clem, E. D., doing business as Standard Amusement Company, Beaumont, Tex. Amusement device. 302,115; Mar. 28; Serial No. 332,436; published Jan. 17, 1933. Class 22.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. 302,078; Mar. 28; Serial No. 332,251; published Jan. 10, 1933. Class 4.
Collins, Ashton B., Birmingham, Ala. Mats, electrotypes, etc. 302,093; Mar. 28; Serial No. 331,039; published Jan. 17, 1933. Class 50.
Crigler, Robert L., Covington, Ky. Whiskey. 302,118; Mar. 28; Serial No. 332,875; published Jan. 17, 1933. Class 49.
Davison-Paxon Company, Atlanta, Ga. Cotton goods. 302,089; Mar. 28; Serial No. 329,889; published Jan. 3, 1933. Class 42.
Distillers Agency Limited, The, Edinburgh, Scotland. Scotch whiskey. 302,146; Mar. 28; Serial No. 330,454; published Jan. 17, 1933. Class 49.
Duffy, Louise, Los Angeles, Calif. Salad dressings and table syrups. 302,110; Mar. 28; Serial No. 332,578; published Jan. 17, 1933. Class 49.
Embrey & Hudson, doing business as Kephaldol Laboratories and Kephaldol Laboratory, Nashville, Tenn. Medicine. 302,073; Mar. 28; Serial No. 332,407; published Jan. 10, 1933. Class 6.
Enterprise Manufacturing Company, The, Akron, Ohio. Artificial bait. 302,121; Mar. 28; Serial No. 332,996; published Jan. 17, 1933. Class 22.
Frankel, Miriam, Brooklyn, N. Y. Lampshades. 302,092; Mar. 28; Serial No. 330,595; published Jan. 17, 1933. Class 34.
Fraskin Laboratories, San Francisco, Calif. Cleansing, scouring and polishing compound. 302,133; Mar. 28; Serial No. 331,661; published Jan. 10, 1933. Class 4.
Gabler, William M, doing business as American Bird and Feed Store, Baltimore, Md. Bird and fish foods. 302,149; Mar. 28. Class 46.
General Tire & Rubber Company, The, Akron, Ohio. Inner tubes for tires. 302,167; Mar. 28. Class 35.
Gilbert, A. C., Company, The, New Haven, Conn. Electric vibrators and hairdryers. 302,126; Mar. 28; Serial No. 330,368; published Jan. 17, 1933. Class 44.
Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. 302,138–40; Mar. 28; Serial Nos. 331,784–6; published Jan. 17, 1933. Class 49.
Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. 302,141; Mar. 28; Serial No. 331,788; published Jan. 17, 1933. Class 49.
Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. 302,142; Mar. 28; Serial No. 331,782; published Jan. 17, 1933. Class 49.
Griscom-Russell Company, The, New York, N. Y. Heating and ventilating apparatus and certain named apparatus relating thereto. 92,421; renewed July 8, 1933.
Hahn Department Stores, Inc., Wilmington, Del. Coats, dresses, suits, etc. 302,058; Mar. 28; Serial No. 317,935; published Jan. 12, 1932. Class 39.
Ha-Mail Medical Co., Carter, Okla. Liver and blood tonic, healing oil, medicine. 302,082; Mar. 28; Serial No. 331,735; published Jan. 10, 1933. Class 6.
Harvey, John, & Sons, Limited, Bristol, England. Scotch whisky. 302,145; Mar. 28; Serial No. 331,552; published Jan. 17, 1933. Class 49.
Heath & Milligan Mfg. Co., Chicago, Ill., to Heath & Milligan Mfg. Co., Cleveland, Ohio. Green paste paint. 92,981; renewed Aug. 12, 1933.
Highland Orange Association, Highland, Calif. Fresh citrus fruits. 302,056; Mar. 28; Serial No. 310,563; published May 26, 1931. Class 46.
Hindes Limited, Birmingham, England. Massage devices or appliances. 302,081; Mar. 28; Serial No. 331,861; published Jan. 10, 1933. Class 44.
Hitchcock, John L., Youngstown, Ohio. Chewing gum. 302,162; Mar. 28. Class 46.
Horwitz, Jacob, doing business as Utica Cotton Products Company, Utica, N. Y. Chemically treated cloth for dusting and polishing. 302,168; Mar. 28. Class 4.
Independent Druggists' Alliance Distributing Co., Chicago, Ill. Tooth paste. 302,125; Mar. 28; Serial No. 327,358; published Jan. 17, 1933. Class 6.
Iowa Soap Company, Burlington, Iowa. Laundry soap. 302,129; Mar. 28; Serial No. 330,628; published Jan. 10, 1933. Class 4.
Italian Food Products Company, Inc., Long Beach, Calif. Canned fish. 302,108; Mar. 28; Serial No. 332,540; published Jan. 10, 1933. Class 46.
Johnson & Johnson. (See Professional Products Corporation, assignor.)
K B Beverage Company, Bay City, Mich. Malt beverages. 302,119–20; Mar. 28; Serial Nos. 332,886–7; published Jan. 17, 1933. Class 48.
Kalenscher, William, doing business as Zing Manufacturing Co., Inc., Miami, Fla. Skin protecting compound. 302,084; Mar. 28; Serial No. 331,607; published Jan. 10, 1933. Class 6.
Kaufmann Department Stores, Inc., Pittsburgh, Pa. Dental cream. 302,072; Mar. 28; Serial No. 332,456; published Jan. 10, 1933. Class 6.
Kephaldol Laboratories. (See Embrey & Hudson.)
Kimball, C. M., Co., Everett, Mass. Preparation for cleaning glass, porcelain, etc. 302,153. Mar. 28. Class 4.
Kresge Department Store Corporation, Newark, N. J. Candy, popcorn, coffee, tea, etc. 302,094; Mar. 28; Serial No. 331,434; published Jan. 10, 1933. Class 46.
Kress, S. H., & Co., New York, N. Y. Hair nets, sport nets, towels, etc. 302,087; Mar. 28; Serial No. 329,087; published Jan. 10, 1933. Class 42.
La Crosse Refining Company, La Crosse, Wis. Malt syrup. 302,088; Mar. 28; Serial No. 329,603; published Jan. 10, 1933. Class 46.
Leavy, N. J., Los Angeles, Calif. Combination bottle closure and sediment trap. 302,171; Mar. 28. Class 50.
Lorraine Manufacturing Co., Pawtucket, R. I. Textile fabrics in the piece. 302,097; Mar. 28; Serial No. 331,796; published Jan. 10, 1933. Class 42.
Lowenfels, Frederick F., & Son, New York, N. Y. Butter and cheese. 302,164; Mar. 28. Class 46.
Malt-Diastase Company, Brooklyn, N. Y. Malt extracts and malt syrups. 302,055; Mar. 28; Serial No. 306,320; published June 14, 1932. Class 46.
Maltwort Concentrated Malt Co. (See Bachrach-Feld Company, Inc., The.)
Marshall, W. E., & Co., Inc., New York, N. Y. Lawn and grass seed. 302,107; Mar. 28. Serial No. 332,437; published Jan. 10, 1933. Class 1.
Martini & Rossi S. A. (See Cassidy, John E., & Son, assignor.)
Maury-Cole Company, Memphis, Tenn. Prepared biscuit flour. 302,112; Mar. 28; Serial No. 332,622; published Jan. 10, 1933. Class 46.
Metal Textile Corporation, doing business as Mystic Mit Makers, West Orange, N. J. Metallic abrasive pot cleaner. 302,127; Mar. 28; Serial No. 330,518; published Jan. 17, 1933. Class 4.
Metz, H. A., & Co., Inc., New York, N. Y. Preparation for finishing textile fabrics. 302,074; Mar. 28; Serial No. 332,378; published Jan. 10, 1933. Class 6.
Monrach Products Co. Inc., Shrewsbury, N. J. Valve grinding compounds. 302,068–9; Mar. 28; Serial Nos. 332,494–5; published Jan. 10, 1933. Class 4.
Mystic Mit Makers. (See Metal Textile Corporation.)
Nashua Manufacturing Company, Nashua, N. H. Cotton piece goods. 302,085; Mar. 28; Serial No. 327,661; published Jan. 10, 1933. Class 42.
National Milling & Chemical Company, Philadelphia, Pa. Soap compound, soaps, etc. 302,130; Mar. 28; Serial No. 330,580; published Jan. 17, 1933. Class 4.
Neisler Mills Inc., Kings Mountain, N. C. Table napkins. 302,099; Mar. 28; Serial No. 332,099; published Jan. 3, 1933. Class 42.
Neumann, R., & Company, Hoboken, N. J. Tanned leather. 302,111; Mar. 28; Serial No. 332,596; published Jan. 10, 1933. Class 1.
Neumann, R., & Company, Hoboken, N. J. Leather. 302,113; Mar. 28; Serial No. 332,625; published Jan. 10, 1933. Class 1.
New Jersey Porcelain Co., Trenton, N. J. Bathroom fixtures. 302,091; Mar. 28; Serial No. 330,384; published Jan. 17, 1933. Class 13.
New Yorker Hotel Corporation, The, New York, N. Y. Candies and chocolates. 302,061; Mar. 28; Serial No. 322,289; published Jan. 10, 1933. Class 46.
Noss Pretzel and Cone Co., The, Cleveland, Ohio. Pretzels, potato chips, noodles, and cheese sticks. 302,154; Mar. 28. Class 46.
Novocol Chemical Mfc. Co., New York, assignor to Novocol Chemical Mfg. Co. Inc., Brooklyn, N. Y. Anesthetic. 93,014; renewed Aug. 12, 1933.
Onarga Nursery Co., Onarga, Ill. Shrubs, trees, roses, etc. 302,169; Mar. 28. Class 1.
Osborne, Harold, doing business as Harold Osborne Company, Hynes, Calif. Fresh fruits and vegetables. 302,109; Mar. 28; Serial No. 332,544; published Jan. 10, 1933. Class 46.
Parker Brothers, Inc., Portland, Me., and Salem, Mass. Board game. 302,122; Mar. 28; Serial No. 333,009; published Jan. 17, 1933. Class 22.
Popsicle Corporation of the United States, The, New York, N. Y. Empty wrappers and bags. 302,156; Mar. 28. Class 2.
Professional Products Corporation, assignor to Johnson & Johnson, New Brunswick, N. J. Tablets. 302,070; Mar. 28; Serial No. 331,992; published Jan. 17, 1933. Class 6.
Ratcliff, Herbert C., Columbus, to Herbert C. Ratcliff, Kenton, Ohio. Salves. 90,242; renewed Feb. 11, 1933.

Real-Oil-Heat Burner Company, Winona, Minn. Oil burners, humidifiers, and heat savers. 302,059; Mar. 28; Serial No. 318,170; published Jan. 17, 1933. Class 34.
Reilly, Frank C., New York, N. Y. Astringents, astringent cerates, bleach creams, etc. 302,076; Mar. 28; Serial No. 332,265; published Jan. 10, 1933. Class 6.
Reliance Wax Products Corporation, Ltd., Los Angeles, Calif. Shoe polish and shoe burnishing ink. 302,128; Mar. 28; Serial No. 331,593; published Jan. 10, 1933. Class 4.
Restor Cement Laboratories. (See Sims, Edgar R.)
Riley & Jones, assignor to Citrus Packing Company, Inc., Riverside, Calif. Fresh citrus fruits. 302,163; Mar. 28. Class 46.
Roman Stripe Mills, Inc., Easton, Pa. Hosiery. 302,155; Mar. 28. Class 39.
Ruck, George, Philadelphia, Pa. Antipyreticum and analgesic and specific. 302,063; Mar. 28; Serial No. 332,734; published Jan. 17, 1933. Class 6.
Rush Chemical Company, Hamilton, Ohio. Waterproof adhesive cement. 302,151; Mar. 28. Class 5.
Sage, Peggy, Inc., New York, N. Y. Nail polish and white, cuticle remover, etc. 302,124; Mar. 28; Serial No. 328,622; published Jan. 10, 1933. Class 6.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Port wine. 302,143; Mar. 28; Serial No. 331,707; published Jan. 17, 1933. Class 47.
Sandeman, Geo. G., Sons & Co. Limited, Lonuon, England. Sherry wine. 302,144; Mar. 28; Serial No. 331,703; published Jan. 17, 1933. Class 47.
Sander, A., Packing Company, The, Cincinnati, Ohio. Foods. 93,119; renewed Aug. 19, 1933.
Schneider, George F., Brooklyn, N. Y. Maltless beverages, and sirups and extracts for making the same. 302,147; Mar. 28. Class 45.
Seminole Bottling Co., Chattanooga, Tenn. Maltless beverages, and syrups and extracts for making the same. 302,148; Mar. 28. Class 45.
Sherwin-Williams Company, The, Cleveland, Ohio. Paints, varnishes, lacquers, etc. 302,150; Mar. 28. Class 16.
Sims, Edgar R., doing business as Restor Cement Laboratories, Seattle, Wash. Cement. 302,165; Mar. 28. Class 5.
Skinner, William, & Sons, Holyoke, Mass., and New York, N. Y. Silk crêpes in the piece. 302,106; Mar. 28; Serial No. 332,201; published Jan. 10, 1933. Class 42.
Slessinger, Stephen, New York, N. Y. Toys. 302,131; Mar. 28; Serial No. 332,424; published Jan. 17, 1933. Class 22.
Slessinger, Stephen, New York, N. Y. Games. 302,132; Mar. 28; Serial No. 332,423; published Jan. 17, 1933. Class 22.
Standard Amusement Company. (See Clem, E. D.)
Standard Rice Company Inc., Houston, Tex., and Memphis, Tenn. Rice. 302,100; Mar. 28; Serial No. 332,103; published Jan. 10, 1933. Class 46.
Steinberger Bros. Inc., New York, N. Y. Yarns. 302,101; Mar. 28; Serial No. 332,129; published Jan. 10, 1933. Class 43.
Stevens Manufacturing Corporation, Fall River, Mass. Bedspreads. 302,096; Mar. 28; Serial No. 331,567; published Jan. 10, 1933. Class 42.
Summerour, Homer H., Duluth, Ga., assignor, by mesne assignments, to B. F. Summerour Seed Company, Norcross, Ga. Cotton-seed. 90,255; renewed Feb. 11, 1933.
Tesman, Jacob, doing business as Tesman Drug Co., Philadelphia, Pa. Liniment. 302,075; Mar. 28; Serial No. 332,327; published Jan. 17, 1933. Class 6.
Utica Cotton Products Company. (See Horwitz, Jacob.)
Valley Camp Coal Company, The, Cleveland, Ohio. Coke. 302,060; Mar. 28; Serial No. 321,701; published Jan. 10, 1933. Class 1.
Voyages, Harry, New York, N. Y. Hair tonic. 302,123; Mar. 28; Serial No. 326,725; published Jan. 17, 1933. Class 6.
Ward Baking Company, New York, N. Y. Cake. 302,054; Mar. 28; Serial No. 326,876; published Jan. 10, 1933. Class 46.
Warren, W., Thread Works, Westfield, Mass. Thread. 302,086; Mar. 28; Serial No. 329,068; published Jan. 3, 1933. Class 43.
White Horse Distillers, Limited, Glasgow, Scotland. Whisky. 302,116–17; Mar. 28; Serial Nos. 332,473–4; published Jan. 17, 1933. Class 49.
Windowitch Company, Cleveland, Ohio. Rubbing, squeegeeing, and polishing devices. 302,098; Mar. 28; Serial No. 331,812; published Jan. 17, 1933. Class 29.
Zing Manufacturing Co., Inc. (See Kalenscher, William.)

LIST OF REGISTRANTS OF LABELS

Hayward, Charles T., doing business as Hayward Products, Chicago, Ill. Pur Pos. For Tooth Powder. 41,872; Mar. 28.
Page Milling Company, The, Luray, Va. Favorite Feeds. For Turkey Feeds. 41,873; Mar. 28.
Seattle Cedar Lumber Manufacturing Company, Seattle, Wash. Maltese Cross. For Bevel Siding. 41,874; Mar. 28.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coke. Valley Camp Coal Company. 302,060; Mar. 28; Serial No. 321,701; published Jan. 10, 1933.
Leather. R. Neumann & Company. 302,113; Mar. 28; Serial No. 332,625; published Jan. 10, 1933.
Leather, Tanned. R. Neumann & Company. 302,111; Mar. 28; Serial No. 332,596; published Jan. 10, 1933.
Marble, Crushed. Cardiff-Maryland Marble Co. 302,166; Mar. 28.
Seed, Cotton. H. H. Summerour. 90,255; renewed Feb. 11, 1933.
Seed, Lawn and grass. W. E. Marshall & Co. 302,107; Mar. 28; Serial No. 332,437; published Jan. 10, 1933.
Shrubs, trees, roses, etc. Onarga Nursery Co. 302,169; Mar. 28.

CLASS 2

Rolls, Paper tubular. American Dairy Supply Company. 302,170; Mar. 28.
Wrappers and bags, Empty. Popsicle Corporation of the United States. 302,156; Mar. 28.

CLASS 4

Chemically treated cloth for dusting and polishing. J. Horwitz. 302,168; Mar. 28.
Cleansing, scouring and polishing compound. Fraskin Laboratories. 302,083; Mar. 28; Serial No. 331,661; published Jan. 10, 1933.
Metallic abrasive pot cleaners. Metal Textile Corporation. 302,127; Mar. 28; Serial No. 330,518; published Jan. 17, 1933.
Polish and burnishing ink, Shoe. Reliance Wax Products Corporation. 302,128; Mar. 28; Serial No. 331,593; published Jan. 10, 1933.
Preparation for cleaning glass, porcelain, etc. C. M. Kimball Co. 302,153; Mar. 28.
Soap. Colgate-Palmolive-Peet Company. 302,078; Mar. 28; Serial No. 332,251; published Jan. 10, 1933.
Soap compound, soaps, etc. National Milling & Chemical Company. 302,130; Mar. 28; Serial No. 330,580; published Jan. 17, 1933.
Soap, Laundry. Iowa Soap Company. 302,129; Mar. 28; Serial No. 330,628; published Jan. 10, 1933.
Soaps. F. A. Bowles. 302,067; Mar. 28; Serial No. 332,611; published Jan. 17, 1933.
Soaps. Calite Manufacturing Co. Ltd. 302,071; Mar. 28; Serial No. 332,575; published Jan. 10, 1933.
Valve grinding compounds. Monarch Products Co. Inc. 302,068–9; Mar. 28; Serial Nos. 332,494–5; published Jan. 10, 1933.

CLASS 5

Cement. E. R. Sims. 302,165; Mar. 28.
Cement Waterproof adhesive. Rush Chemical Company. 302,151; Mar. 28.

CLASS 6

Anesthetic. Novocol Chemical Mfc. Co. 93 014; renewed Aug. 12, 1933.
Antipyreticum and analgesic and specific. G. Ruck. 302,063; Mar. 28; Serial No. 332,734; published Jan. 17, 1933.
Astringents, astringent cerates, bleach creams, etc. F. C. Reilly. 302,076; Mar. 28; Serial No. 332,265; published Jan. 10, 1933.
Dental cream. Kaufmann Department Stores, Inc. 302,072; Mar. 28; Serial No. 332,456; published Jan. 10, 1933.
Dyes and dyestuffs. John Campbell & Co. 302,077; Mar. 28; Serial No. 332,248; published Jan. 10, 1933.
Hair tonic. H. Voyages. 302,123; Mar. 28; Serial No. 326,725; published Jan. 17, 1933.
Liniment. J. Tesman. 302,075; Mar. 28; Serial No. 332,327; published Jan. 17, 1933.
Massage devices or appliances. Hindes Limited. 302,081; Mar. 28; Serial No. 331,861; published Jan. 10, 1933.
Medicine. Embrey & Hudson. 302,073; Mar. 28; Serial No. 332,407; published Jan. 10, 1933.
Nail polish and white, cuticle remover, etc. Peggy Sage, Inc. 302,124; Mar. 28; Serial No. 328,622; published Jan. 10, 1933.

Preparation for finishing textile fabrics. H. A. Metz & Co. 302,074; Mar. 28; Serial No. 332,378; published Jan. 10, 1933.
Salves. H. C. Ratcliff. 90,242; renewed Feb. 11, 1933.
Skin protecting compound. W. Kalenscher. 302,084; Mar. 28; Serial No. 331,607; published Jan. 10, 1933.
Tablets for pains. Professional Products Corporation. 302,070; Mar. 28; Serial No. 331,992; published Jan. 17, 1933.
Tonic, healing oil, and medicine, Liver and blood. Ha-Mali Medical Co. 302,082; Mar. 28; Serial No. 331,735; published Jan. 10, 1933.
Tooth paste. Independent Druggists' Alliance Distributing Co. 302,125; Mar. 28; Serial No. 327,358; published Jan. 17, 1933.
Vermin exterminator preparations, insecticides, etc. Barium Reduction Corporation. 302,080; Mar. 28; Serial No. 331,913; published Jan. 10, 1933.

CLASS 7

Rope of jute and hemp. British Ropes Limited. 302,134–7; Mar. 28; Serial Nos. 331,918–21; published Jan. 17, 1933.
Twine. American Manufacturing Company. 302,133; Mar. 28; Serial No. 332,362; published Jan. 17, 1933.

CLASS 13

Bathroom-fixtures. New Jersey Porcelain Co. 302,091; Mar. 28; Serial No. 330,384; published Jan. 17. 1933.

CLASS 16

Paint, Green paste. Heath & Milligan Mfg. Co. 92,981; renewed Aug. 12, 1933.
Paints, varnishes, lacquers, etc. Sherwin-Williams Company. 302,150; Mar. 28.
Wax, Floor. Air-Way Electric Appliance Corporation. 302,158; Mar. 28.

CLASS 17

Tobacco, Chewing. Bonus Tobacco Company. 302,114; Mar. 28; Serial No. 332,874; published Jan. 17, 1933.

CLASS 22

Amusement device. E. D. Clem. 302,115; Mar. 28; Serial No. 332,436; published Jan. 17, 1933.
Bait, Artificial. Enterprise Manufacturing Company. 302,121; Mar. 28; Serial No. 332,996; published Jan. 17, 1933.
Game, Board. Parker Brothers, Inc. 302,122; Mar. 28; Serial No. 333,009; published Jan. 17, 1933.
Games. S. Siessinger. 302,132; Mar. 28; Serial No. 332,423; published Jan. 17, 1933.
Toys. S. Siessinger. 302,131; Mar. 28; Serial No. 332,424; published Jan. 17, 1933.

CLASS 23

Couplings for shafts, Flexible. American Flexible Coupling Co. 302,152; Mar. 28.
Machines and parts thereof for grinding, mixing, and conveying coffee, etc. Jabez Burns & Sons, Inc. 302,157; Mar. 28.

CLASS 29

Polishing, dusting, and/or cleaning cloth. Ames Harris Neville Co. 302,159; Mar. 28.
Rubbing, squeegeeing, and polishing devices. Windowitch Company. 302,098; Mar. 28; Serial No. 331,812; published Jan. 17, 1933.

CLASS 34

Burners, humidifiers, and heat savers, Oil. Real-Oil-Heat Burner Company. 302,059; Mar. 28; Serial. No. 318,170; published Jan. 17, 1933.
Heating and ventilating apparatus and certain named apparatus relating thereto. Griscom-Russell Company. 92,421; renewed July 8, 1933.
Lampshades. M. Frankel. 302,092; Mar. 28; Serial No. 330,595; published Jan. 17, 1933.

CLASS 35

Tubes for tires, Inner. General Tire & Rubber Company. 302,167; Mar. 28.

CLASS 39

Coats, dresses, suits, etc. Hahn Department Stores, Inc. 302,058; Mar. 28; Serial No. 317,935; published Jan. 12, 1932.
Hosiery. Roman Stripe Mills, Inc. 302,153; Mar. 28.
Undergarments, Infants'. William Carter Company. 302,161; Mar. 28.

CLASS 42

Bedspreads. Stevens Manufacturing Corporation. 302,096; Mar. 28; Serial No. 331,567; published Jan. 10, 1933.
Cotton goods. Davison-Paxon Company. 302,089; Mar. 28; Serial No. 329,889; published Jan. 3, 1933.
Cotton piece goods. Nashua Manufacturing Company. 302,085; Mar. 28; Serial No. 327,661; published Jan. 10, 1933.
Crepes in the piece, Silk. William Skinner & Sons. 302,106; Mar. 28; Serial No. 332,201; published Jan. 10, 1933.
Fabric of wool, cotton, etc., Knitted. William Carter Company. 302,160; Mar. 28.
Napkins, Table. Neisler Mills Inc. 302,099; Mar. 28; Serial No. 332,099; published Jan. 3, 1933.
Nets, towels, etc. Hair and sport. S. H. Kress & Co. 302,087; Mar. 28; Serial No. 329,087; published Jan. 10, 1933.
Textile fabrics. Lorraine Manufacturing Co. 302,097; Mar. 28; Serial No. 331,796; published Jan. 10, 1933.

CLASS 43

Thread. W. Warren Thread Works. 302,086; Mar. 28; Serial Nos. 332,674–6; published Jan. 17, 1933.
Thread and yarn. Clarke Thread Company. 302,102; Mar. 28; Serial No. 332,177; published Jan. 3, 1933.
Thread and yarn. Clark Thread Company. 302,103–4; Mar. 28; Serial Nos. 332,179–80; published Jan. 3, 1933.
Yarns. Steinberger Bros. Inc. 302,101; Mar. 28; Serial No. 332,129; published Jan. 10, 1933.

CLASS 44

Dental wire. Julius Aderer. Inc. 302,064–6; Mar. 28; Serial Nos. 332,674–6; published Jan. 17, 1933.
Sanitary napkins. Berkeley Company. 302,079; Mar. 28; Serial No. 331,916; published Jan. 17, 1933.
Vibrators and hairdryers. Electric. A. C. Gilbert Company. 302,126; Mar. 28; Serial No. 330,368; published Jan. 17, 1933.

CLASS 45

Beverages, and sirups and extracts for making the same, Maltless. G. F. Schneider. 302,147; Mar. 28.
Beverages, and syrups and extracts for making the same, Maltless. Seminole Bottling Co. 302,148; Mar. 28.

CLASS 46

Butter and cheese. Frederick F. Lowenfeld & Son. 302,164; Mar. 28.
Cake. Ward Baking Company. 302,054; Mar. 28; Serial No. 326,876; published Jan. 10, 1933.
Candies and chocolates. New Yorker Hotel Corporation. 302,061; Mar. 28; Serial No. 322,289; published Jan. 10, 1933.
Candy. Coffee, popcorn, tea, etc. Kresge Department Store Corporation. 302,094; Mar. 28; Serial No. 331,434; published Jan. 10, 1933.
Canned fish. Italian Food Products Company. 302,108; Mar. 28; Serial No. 332,540; published Jan. 10, 1933.
Canned tomato paste and tomatoes and canned sardines. A. J. Capone Company. 302,062; Mar. 28; Serial No. 321,905; published Jan. 10, 1933.
Conch chowder and/or broth. Bahama Isles Foods Corporation. 302,095; Mar. 28; Serial No. 331,532; published Jan. 10, 1933.
Extracts and malt syrups, Malt. Malt-Diastase Company. 302,055; Mar. 28; Serial No. 331,532; published June 14, 1932.
Flour, Prepared biscuit. Maury-Cole Company. 302,112; Mar. 28; Serial No. 332,622; published Jan. 10, 1933.
Foods. A. Sander Packing Company. 93,119; renewed Aug. 19, 1933.
Foods, Bird and fish. W. M. Gabler. 302,149; Mar. 28.
Fruits and vegetables, Fresh. H. Osborne. 302,109; Mar. 28; Serial No. 332,544; published Jan. 10, 1933.
Fruits, Fresh citrus. Highland Orange Association. 302,056; Mar. 28; Serial No. 310, 563; published May 26, 1931.
Fruits, Fresh citrus. Riley & Jones. 302,163; Mar. 28.
Grapes, Fresh. F. G. Cary. 302,057; Mar. 28; Serial No. 311,720; published Jan. 10, 1933.
Gum, Chewing. J. L. Hitchcock. 302,162; Mar. 28.
Pretzels, potato chips, noodles, and cheese sticks. Noss Pretzel and Cone Co. 302,154; Mar. 28.
Rice. Standard Rice Company, Inc. 302,100; Mar. 28; Serial No. 332,103; published Jan. 10, 1933.
Salad dressings and table syrups. L. Duffy. 302,110; Mar. 28; Serial No. 332,578; published Jan. 10, 1933.
Syrup, Concentrated liquid malt. Bachrach-Feld Company. 302,105; Mar. 28; Serial No. 332,244; published Jan. 10, 1933.
Syrup, Malt. La Crosse Refining Company. 302,088; Mar. 28; Serial No. 329,603; published Jan. 10, 1933.

CLASS 47

Wine, Port. Geo. G. Sandeman Sons & Co. Limited. 302,143; Mar. 28; Serial 331,707; published Jan. 17, 1933.
Wine, Sherry. Geo. G. Sandeman Sons & Co. Limited. 302,144; Mar. 28; Serial No. 331,703; published Jan. 17, 1933.

CLASS 48

Malt beverages. K B Beverage Company. 302,119–20; Mar. 28; Serial Nos. 332,886–7; published Jan. 17, 1933.

CLASS 49

Drinks, Mixed. John E. Cassidy & Son. 86,215; renewed Apr. 9, 1931.
Whisky. R. L. Crigler. 302,178; Mar. 28; Serial No. 332,875; published Jan. 17, 1933.

Whisky. Glenfyne Distillery Company Limited. 302,138–40; Mar. 28; Serial Nos. 331,784–6; published Jan. 17, 1933.
Whisky. Glenfyne Distillery Company Limited. 302,141; Mar. 28; Serial No. 331,788; published Jan. 17, 1933.
Whisky. Glenfyne Distillery Company Limited. 302,142; Mar. 28; Serial No. 331,782; published Jan. 17, 1933.
Whisky. White Horse Distillers, Limited. 302,116–17; Mar. 28; Serial Nos. 332,473–4; published Jan. 17, 1933.
Whisky, Scotch. Distillers Agency Limited. 302,146; Mar. 28; Serial No. 330,454; published Jan. 17, 1933.
Whisky, Scotch. John Harvey & Sons, Limited. 302,145; Mar. 28; Serial No. 331,552; published Jan. 17, 1933.

CLASS 50

Bottle closure and sediment trap, Combination. N. J. Leavy. 302,171; Mar. 28.
Mats, electrotypes, etc. A. B. Collins. 302,093; Mar. 28; Serial No. 331,039; published Jan. 17, 1933.
Trees, Artificial. Bloomingdale Bros., Inc. 302,090; Mar. 28; Serial No. 330,361; published Jan. 17, 1933.

LIST OF LABELS

Favorite Feeds. For Turkey Feeds. Page Milling Company. 41,873; Mar. 28.
Maltese Cross. For Bevel Siding. Seattle Cedar Lumber Manufacturing Company. 41,874; Mar. 28.
Pur Pos. For Tooth Powder. C. T. Hayward. 41,872; Mar. 28.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 28TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A C Spark Plug Company. (See Hans, Edmund E., assignor.)
A C Spark Plug Company. (See Zubaty, Joseph, assignor.)
Abbott, Harry W., Chicago, Ill. Centrifugal filtering device. 1,902,982; Mar. 28.
Acker, George H., assignor to The Cleveland Worm and Gear Company, Cleveland, Ohio. Gear casing. 1,902,934; Mar. 28.
Acme Steel Company. (See MacChesney, Chester M., assignor.)
Adams, Soren S., Asbury Park, N. J. Novelty toy. 1,903,082; Mar. 28.
Adler, Marcus, Chicago, and J. C. Janosik, Cicero, Ill. Combination vest and suspenders. 1,902,939; Mar. 28.
Adler, Stella, and C. B. Blank, St. Louis, Mo. Marionette control frame and cord wind-up. 1,902,983; Mar. 28.
Advance Machine Company. (See Richardson, M. H., and Gebert, assignors.)
Affel, Herman A., Ridgewood, and E. I. Green, East Orange, N. J., assignors to American Telephone and Telegraph Company. Communication with moving trains. 1,902,817; Mar. 28.
Ahrens, Harry E., Pasadena, Calif. Hinge construction. 1,903,251; Mar. 28.
Aktiebolaget Svenska Fläktfabriken. (See Olsson, J. G., and Stenfors, assignors.)
Aktiengesellschaft Brown, Boveri & Cie. (See Jonas, Julius, assignor.)
Aktiengesellschaft Brown, Boveri and Cie. (See Leonpacher, Josef, assignor.)
Alemite Corporation. (See Becker, Julius H., assignor.)
Alemite Corporation. (See Snodgrass, John L., assignor.)
Alemite Corporation. (See Thomas, George F., assignor.)
Allen, Howard G. (See Bliss, H. R., and Allen.)
Almen, John O., Royal Oak, assignor to General Motors Research Corporation, Detroit, Mich. Hydraulic mechanism. 1,903,083; Mar. 28.
Althouse, Arthur B., Drexel Hill, Pa. Vacuum controlled switch for starting motors. 1,902,940; Mar. 28.
American Engineering Company. (See Hummel, Willard A., assignor.)
American Glanzstoff Corporation. (See Oppenlaender, O. O., and Carter, assignors.)
American Manganese Steel Company. (See Meyer, Daniel H., assignor.)
American Ore Reclamation Company. (See Shallock, Edward W., assignor.)
American Ore Reclamation Company. (See Swinehart, George E., assignor.)
American Sheet and Tin Plate Company. (See Goodhue, Archie R., assignor.)
American Steel Foundries. (See Bender, Frederic H., assignor.)
American Steel Foundries. (See Lamont, J. A., and Lorenz, assignors.)
American Steel Foundries. (See Oelkers, Alfred H., assignor.)
American Telephone and Telegraph Company. (See Affel, H. A., and Green, assignors.)
American Telephone and Telegraph Company. (See Potter, Ralph K., assignor.)
Anderson, Carl E., East Orange, assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Slide. 1,902,935; Mar. 28.
Anderson, Oliver H., Superior, Ariz., assignor to Safeway Auto License System, Inc. License plate. 1,903,155; Mar. 28.
Anderson, Samuel M., Sharon, assignor to B. F. Sturtevant Company, Boston, Mass. Air conditioning control. 1,902,818; Mar. 28.
Anderson, William T., jr., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J. Electrode for vapor gas electric devices. 1,902,936; Mar. 28.
Arato, Achille, Turin, Italy. Brake control for vehicle wheels. 1,902,819; Mar. 28.
Arden, Harry B., New York, N. Y. Automatic electromagnetic wet separation. 1,902,937; Mar. 28.
Arden, Harry B., New York, N. Y. Automatic electromagnetic wet separation. 1,902,938; Mar. 28.
Armitage, Joseph B. (See Kearney, E. J., and Armitage.)
Armstrong, Sir W. G., Whitworth Aircraft Limited. (See Lloyd, John, assignor.)
Arndt, Raymond A. (See Mers, O. H., Arndt, and Lange.)
Arth, Isidor, assignor to Isidor Arth & Son, Oakland, Calif. Pistol holster. 1,903,084; Mar. 28.
Arth, Isidor, & Son. (See Arth, Isidor, assignor.)
Asbury, Dorsey F., Broomes Island, Md. Radio apparatus. 1,903,156; Mar. 28.
Asbury, Dorsey F., Broomes Island, Md. Variable condenser. 1,903,157; Mar. 28.
Asbury, Dorsey F., Broomes Island, Md. Exhaust valve stem shield. 1,903,158; Mar. 28.
Asbury, Dorsey F., Broomes Island, Md. Internal combustion engine. 1,903,159; Mar. 28.
Asbury, Dorsey F., Broomes Island, Md. Internal combustion engine structure. 1,903,160; Mar. 28.
Associated Electric Laboratories, Inc. (See Wicks, J., Richardson, and Bellamy, assignors.)
Astrawerke Aktiengesellschaft. (See Greve, John E. W., assignor.)
Atwood, George D., assignor to Decorated Metal Manufacturing Company, Inc., Brooklyn, N. Y. Stock box for typewriter ribbons. Des. 89,547; Mar. 28.
Austin, Dwight E., P. R. Bissell, and E. W. Crutchfield, Los Angeles, Calif. Chair. 1,903,253; Mar. 28.
Automatic Recording Safe Company. (See Grunwald, Albert C., assignor.)
Babcock & Wilcox Company, The. (See Kerr, H. J., and Ebbets, assignors.)
Bailey, Walter C., Norwalk, Conn. Rotary bit. 1,902,941; Mar. 28.
Bailey, William M., Lynn, Mass., assignor, by mesne assignments, to General Electric Company. Capacitor. 1,902 877; Mar. 28.
Baji, John, New York, N. Y. Refuse disposal truck. 1,902,985; Mar. 28.
Baker, Walter J., Wyckoff, N. J. Electric fluid heater. 1,902,877; Mar. 28.
Ball, George P., Allentown, Pa. Automobile lift. 1,902,820; Mar. 28.
Bancroft, Erwin P., Brooklyn, assignor to International Communications Laboratories, Inc., New York, N. Y. Keyboard transmitter. 1,902,943; Mar. 28.
Banks, Harry P. (See Ellertsen, L. W., Cone, Davidson, Laucks, and Banks.)
Barber, Joseph L., Greeley, Colo. Adjustable mask for photoprinting machines. 1,902,984; Mar. 28.
Barkan, Irving, Philadelphia, Pa. Toothbrush. 1,903,161; Mar. 28.
Barker, Maurice E., Edgewood Arsenal, Md. Producing activated charcoal from charcoal fines. 1,902,986; Mar. 28.
Barnes, Wilfred, jr., Glenolden, Pa. Hose rack. 1,903,085; Mar. 28.
Barrett Company, The. (See Long, Leonard F., assignor.)
Barvoets, Ernest F. (See Lynch, J. J., and Barvoets.)
Bassett, Gerald L., assignor to The Conklin Penn Company, Toledo, Ohio. Plunger type pen. 1,903,022; Mar. 28.
Bates, George H., Cranford Township, Union County, N. J., assignor to United Dry Docks, Incorporated, New York, N. Y. Apparatus for riveting plates of ships. 1,902,821; Mar. 28.
Baur, Ottmar, Stuttgart, and H. Lempp, Feilbach, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Shaft coupling. 1,903,162; Mar. 28.
Becker, Julius H., San Francisco, Calif., assignor to Alemite Company, Chicago, Ill. Grease dispensing device. 1,902,822; Mar. 28.
Bell, Frank H., assignor to General Motors Corporation, Detroit, Mich. Safety glass sealing instrument. 1,902,987; Mar. 28.
Bellamy, John I. (See Wicks, J., Richardson, and Bellamy.)
Bender, Frederic H., assignor to American Steel Foundries, Chicago, Ill. Truck frame mounting. 1,902,823; Mar. 28.
Benjamin Electric Mfg. Co. (See Benjamin, Reuben B., assignor.)
Benjamin Electric Manufacturing Company. (See Benjamin, R. B., and Waterbury, assignors.)
Benjamin, Reuben B., Chicago, Ill., assignor to Benjamin Electric Mfg. Co., Des Plaines, Ill. Shock absorbing socket. 1,903,086; Mar. 28.
Benjamin, Reuben B., and J. H. Waterbury, Chicago, assignors to Benjamin Electric Manufacturing Company, Des Plaines, Ill. Lighting construction. 1,903,087; Mar. 28.
Bennett, William E. (See Wullert, W. W., and Bennett.)
Bernier, Henry, et al. (See Dufault, Homer D., assignor.)
Bernier, Hiram, et al. (See Dufault, Homer D., assignor.)
Bessom, Earl A., Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-seat fitting machine. 1,902,824; Mar. 28.
Bickell, Charles H. (See Sparks, Stanley W., assignor.)
Bienenstein, Andreas, assignor to The Conklin Pen Company, Toledo, Ohio. Plunger type pen. 1,902,809; Mar. 28.

Bienenstein, Andreas, assignor to The Conklin Pen Company, Toledo, Ohio. Plunger type pen. 1,902,810; Mar. 28.

Bienenstein, Andreas, assignor to The Conklin Pen Company, Toledo, Ohio. Plunger type pen. 1,902,811; Mar. 28.

Bigelow-Sanford Carpet Co. (See Petersen, Elliott I., assignor.)

Birdsey, Charles R., Oak Park, assignor to The United States Gypsum Company, Chicago, Ill. Ceiling construction. 1,902,835; Mar. 28.

Bishop, Alois S., Kohler, Wis. Basket ball game. 1,903,254; Mar. 28.

Bissell, Percy R. (See Austin, D. E., Bissell, and Crutchfield.)

Black, Edward R., assignor to Black Systems, Inc., Chicago, Ill. Building covering. 1,903,023; Mar. 28.

Black Systems, Inc. (See Black, Edward R., assignor.)

Blackburn, Jasper, Webster Groves, Mo. Guy strand guard and lock. 1,902,945; Mar. 28.

Blackmore, Lloyd, assignor to General Motors Corporation, Detroit, Mich. Axle housing and making the same. 1,903,088; Mar. 28.

Blank, Cora B. (See Adler, S., and Blank.)

Bliss, H. R., Company. (See Bliss, H. R., and Allen, assignors.)

Bliss, Herbert R., and H. G. Allen, assignors to H. R. Bliss Company, Inc., Niagara Falls, N. Y. Stitching machine anvil. 1,902,825; Mar. 28.

Bobo, Henry S., Greenfield, Ohio. Storage and dispensing device for screen wire and the like. 1,902,826; Mar. 28.

Boehner, Georg. (See Honold, E., and Boehner.)

Boeing Airplane Company. (See Hughes, Edwin A., assignor.)

Bolens, Harry W., Port Washington, Wis. Hydraulic jack. 1,902,827; Mar. 28.

Bosch, Robert, Aktiengesellschaft. (See Baur, O., and Lempp, assignors.)

Botsford, Warren U., Moline, assignor to Rock Island Mfg. Co., Rock Island, Ill. Vise display stand. 1,903,163; Mar. 28.

Bott, George R., Stamford, Conn. Shaving machine. 1,902,988; Mar. 28.

Bottom, William G., Tulsa, Okla. Well bore angle detector and recorder. 1,902,828; Mar. 28.

Boucher, Adam, et al. (See Dufault, Homer D., assignor.)

Bouvier, Harold K., La Grange, assignor to Temple Corporation, Chicago, Ill. Loud speaker. 1,903,164; Mar. 28.

Bowman, Jesse R., Newburyport, Mass. Floor construction. 1,902,829; Mar. 28.

Bradford, William W., Clarendon, Va. Undergarment or similar article of manufacture. Des. 89,548; Mar. 28.

Bray, Stuart E., U. S. Navy. Angle multisector. 1,902,989; Mar. 28.

Breck, Spencer, Shaker Heights, Ohio. Coin bank. Des. 89,549; Mar. 28.

Breed, Maurice E., St. Louis, Mo. Safety cableless multiple elevators. 1,902,946; Mar. 28.

Brinton, H., Company. (See Levin, Nathan, assignor.)

Brinton, H., Company. (See Sanders, Joseph J., assignor.)

Brock, William M., East Windsor, Ontario, Canada. Suspension hanger. 1,903,024; Mar. 28.

Brown, Charles H. (See Steur, J. B., and Brown.)

Brown Instrument Company, The. (See Harrison, Thomas R., assignor.)

Brown, Roy W., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Instrument for controlling temperatures. 1,903,165; Mar. 28.

Browne, James H., East Liverpool, Ohio. Tire repair vulcanizer. 1,903,025; Mar. 28.

Browning, George, Wilmette, assignor to Chicago Flexible Shaft Company, Chicago, Ill. Automatically timed apparatus for heat treatment. 1,903,089; Mar. 28.

Bryant, David Y., Sarnia, Ontario, Canada. Mill for pulverizing and the like. 1,903,166; Mar. 28.

Buckley, Leo J., Binghamton, N. Y. Combination table. 1,903,026; Mar. 28.

Bull Dog Electric Products Company. (See Messing, Joseph, assignor.)

Bulova, Arde, assignor to Bulova Watch Company, New York, N. Y. Seal for gems. 1,902,830; Mar. 28.

Bulova Watch Company. (See Bulova, Arde, assignor.)

Burke, James P., Newark, N. J., assignor of twenty per cent to J. MacIntosh, Norristown, Pa., twenty per cent to K. W. Macksey, and ten per cent to S. I. Howell, Montclair, N. J. Internal combustion engine. 1,902,831; Mar. 28.

Burnett, Richard W., Chicago, Ill. Mounting railway car hand brakes. 1,902,812; Mar. 28.

Busch, Frank E. L., Erie, Pa. Antiknock fuel. 1,903,255; Mar. 28.

Butler, William H., Monrovia, Calif. Collapsible camp table and cover structure. 1,903,209; Mar. 28.

Caldwell, Paul, Quincy, assignor to Moorman Manufacturing Company, Chicago, Ill. Mineral feed. 1,902,832; Mar. 28.

Campbell, Leon J., Buchanan, Mich., assignor to Hand's Constant Mesh Transmission Company, Chicago, Ill. Clutch mechanism. 1,902,990; Mar. 28.

Capdet, Henri, Toulouse, France. Apparatus for forming sine tracks. 1,903,027; Mar. 28.

Cardon, Henry, Hillsdale, N. J. Shell lamp. 1,902,991; Mar. 28.

Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)

Carlson, Ralph G., assignor to Crane Co., Chicago, Ill. Externally suspended gland stud. 1,903,028; Mar. 28.

Carpenter, E. W., Manufacturing Company, The. (See Carpenter, E. W., La Reau, and Kellogg, assignors.)

Carpenter, Edward W., Fairfield, C. La Reau, Bridgeport, and H. M. Kellogg, Stratford, assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn. Shade holder. 1,902,947; Mar. 28.

Carpenter, Thomas E. (See West, F. R., and Carpenter.)

Carrier Engineering Corporation. (See Carrier, Willis H., assignor.)

Carrier, Willis H., Essex Fells, assignor to Carrier Engineering Corporation, Newark, N. J. Sealing and thrust balancing means. 1,903,210; Mar. 28.

Carter, Ralph H. (See Oppenlaender, O. O., and Carter.)

Castle, A. M., & Co. (See Castle, Alfred C., assignor.)

Castle, Alfred C., Lake Forest, Ill., assignor to A. M. Castle & Co. Welding electrode. 1,902,948; Mar. 28.

Catarau, Jules W., Seattle, Wash. Artificial bait. 1,903,256; Mar. 28.

Church, William H., Buffalo, assignor to Du Pont Rayon Company, New York, N. Y. Treating textile threads. 1,902,833; Mar. 28.

Chase, Theron P. (See Ramsaur, W. R., and Chase.)

Chicago Flexible Shaft Company. (See Browning, George, assignor.)

Chicago Telephone Supply Company. (See Schellenger, Newton C., assignor.)

Chittum, Elbert C., Catonsville, Md. Display card. 1,902,992; Mar. 28.

Chong, Jue L. (See Miller, T. S., and Chong, L. L., J. L., and S. L.)

Chong, Look L. (See Miller, T. S., and Chong, L. L., J. L., and S. L.)

Chong, Sam L. (See Miller, T. S., and Chong, L. L., J. L., and S. L.)

Christian, David A., assignor to Siemens Brothers & Company Limited, London, England. Electromagnetic switch. 1,903,211; Mar. 28.

Clark, Theodore E., Redford, assignor to General Motors Corporation, Detroit, Mich. Measuring devices. 1,903,090; Mar. 28.

Cleveland Cloth Mill Company. (See Craig, William P., assignor.)

Cleveland Worm and Gear Company, The. (See Acker, George H., assignor.)

Cohen-Venezian, Carlo, Turin, Italy. Tail-supporting truck for aeroplanes. 1,902,834; Mar. 28.

Colman, Howard D. (See Stewart, Duncan J., assignor.)

Colman, Howard D., and D. J. Stewart, Rockford, Ill.; said Stewart assignor to said Colman. Electric valve operator. 1,903,229; Mar. 28.

Colman, Howard D., and D. J. Stewart, Rockford, Ill.; said Stewart assignor to said Colman. Electric control unit. 1,903,231; Mar. 28.

Colonial Trust Company, The, et al. (See Summey, David L.)

Condon, Joseph P., Omaha, Nebr. Combined window guard and screen. 1,902,949; Mar. 28.

Cone, Charles N. (See Eilersten, L. W., Cone, Davidson Laucks, and Banks.)

Conklin Pen Company, The. (See Bassett, Gerald L., assignor.)

Conklin Pen Company, The. (See Bienenstein, Andreas, assignor.)

Convertible Door Mfg. Co. (See Merz, O. H., Arndt, and Lange, assignors.)

Cooper, William L., Kankakee, Ill. Cook stove. 1,903,091 Mar. 28.

Cordrey, Almon J., Detroit, Mich., assignor to Zero Ice Corporation. Pressure vessel for solid carbon dioxide. 1,903,167; Mar. 28.

Cordrey, Almon J., Detroit, Mich., assignor to Zero Ice Corporation. Pressure vessel for solid carbon dioxide. 1,903,168; Mar. 28.

Cordrey, Almon J., Detroit, Mich., assignor to Zero Ice Corporation. Insulated container for solid carbon dioxide. 1,903,169; Mar. 28.

Cordrey, Almon J., Detroit, Mich., assignor to Zero Ice Corporation. Solid CO_2 refrigerating system. 1,903,170; Mar. 28.

Cordrey, Almon J., Detroit, Mich., assignor to Zero Ice Corporation. Solid CO_2 receptacle. 1,903,171; Mar. 28.

Corn Products Refining Company. (See Sherman, Robert F., assignor.)

Cory, Russell G., Montclair, and W. M. Cory, Mahwah, N. J. Industrial elevator arrangement. 1,903,092; Mar. 28.

Cory, Walter M. (See Cory, Russell G., and W. M.)

Couch, Elsie C., guardian. (See McMinn, C. R., Robinson, and Holliday.)

Craig, William P., assignor of one-half to Cleveland Cloth Mill Company, Shelby, N. C. Timing device for loom stop mechanism. 1,902,837; Mar. 28.

Crane Co. (See Carlson, Ralph G., assignor.)

Crickmer, Charles S., assignor to The Gulberson Corporation, Dallas, Tex. Oil saver. 1,903,093; Mar. 28.

Crompton, George, jr., New York, N. Y. Aeroplane. 1,902,813; Mar. 28.

Crowther, Frederick K., New Malden, England. Recording of sounds. 1,902,814; Mar. 28.

Crutchfield, Edward W. (See Austin, D. E., Bissell, and Crutchfield.)

Cunningham, Orin D., assignor to P. C. Reilly, Indianapolis, Ind. Ore flotation and flotation reagent. 1,902,838; Mar. 28.

Cunningham, Orin D., assignor to P. C. Reilly, Indianapolis, Ind. Froth flotation and material employed to effect the same. 1,902,839; Mar. 28.

Dahl, Charles, Fernwood, Idaho. Shears. 1,903,257; Mar. 28.

Daily, Roy, assignor to Webster Electric Company, Racine, Wis. Combined reproducing and recording device. 1,902,950; Mar. 28.

Damsel, William B., assignor to Victaulic Company of America, New York, N. Y. Pipe coupling. 1,903,029; Mar. 28.

Darrah, William A., Chicago, Ill. Furnace equipment. 1,902,951; Mar. 28.

Darrow, Marius S., St. Louis, Mo., and L. S. Sweeney, Granite City, Ill. Treating Petroleum oils. 1,903,094; Mar. 28.

Davidson, Glenn. (See Eilertsen, L. W., Cone, Davidson, Laucks, and Banks.)

Davis, Alex B., Cincinnati, Ohio, assignor to Monsanto Chemical Works, St. Louis, Mo. Manufacture and purification of paranitraniline. 1,903,030; Mar. 28.

Davis, Clarence R., assignor to Davis Tool & Engineering Company, Detroit, Mich. Automobile license plate holder. 1,903,258; Mar. 28.

Davis Tool & Engineering Company. (See Davis, Clarence R., assignor.)

Decorated Metal Manufacturing Company. (See Atwood, George D., assignor.)

Desmond, John J., Hubbard Woods, Ill., assignor to Line Material Company, South Milwaukee, Wis. Gang operated switch. 1,903,095; Mar. 28.

Deutsch, Leonhard, Vienna, Austria. Coupling device for for keyboards. 1,902,840; Mar. 28.

Deutsche Telephonwerke and Kabelindustrie Aktiengesellschaft. (See Hochfeld, Arno, assignor.)

Devers, Sidney W. (See Ferrari, A., and Devers.)

Dickhauser, Ewald. (See Kränzlein, G., Dickhäuser, and Voss.)

Dodge, Milton L. (See Jordan, Hugh, A., assignor.)

Dodge, Milton L., Newburyport, Mass. Counter stiffener. 1,903,031; Mar. 28.

Doering, Ulrich. (See Spanner, H. J., and Doering.)

Doherty Research Company. (See Nevins, Charles A., assignor.)

Dow, John R., assignor to Interstate Bakeries Corporation, Kansas City, Mo. Display package. 1,903,096; Mar. 28.

Dravo Contracting Company, The. (See Kersting, Bernard H., assignor.)

Dufault, Homer D., assignor of one-sixth to A. Fugere, one-sixth to E. Fugere, one-sixth to A. Boucher, one-sixth to H. Bernier, and one-sixth to H. Bernier, Easthampton, Mass. Burner. 1,903,032; Mar. 28.

Dunford, Ray E., and E. W. F. McMillan, Everett, Wash. Weeder. 1,903,097; Mar. 28.

Dupois, Lucien G., and G. Tinel, assignors to Union d'Electricite, Paris, France. Protecting device for electric distributing systems. 1,903,033; Mar. 28.

Du Pont Rayon Company. (See Church, William H., assignor.)

Duro Metal Products Company. (See McNaught, N. F., and Peterson, assignors.)

Easter, George C., assignor, by mesne assignments, to The Vulcan Steel Products Company, Baltimore, Md. Forming nut bar for the manufacture of grip nuts and apparatus for performing the same. 1,902,841; Mar. 28.

Eastern Tool & Mfg. Co. (See Anderson, Carl E., assignor.)

Eaton, Milton, Shawinigan Falls, Quebec, Canada. Apparatus for regulating electric steam generators. 1,902,842; Mar. 28.

Ebbets, George D. (See Kerr, H. J., and Ebbets.)

Ecker, Will J., jr., St. Louis, Mo. Card holder. 1,903,098; Mar. 28.

Egan, Arthur L. (See Ewing, S. E., and Egan.)

Eilertsen, Leo W., C. N. Cone, G. Davidson, I. F. Laucks, and H. P. Banks, assignors to I. F. Laucks Inc., Seattle, Wash. Preparing soya bean protein containing material for the manufacture of an adhesive, and the product thereof. 1,903,172; Mar. 28.

Electrons, Inc. (See Spanner, H. J., and Doering, assignors.)

Ellerbeck, William L., Salt Lake City, Utah. Forming cellular products. 1,902,993; Mar. 28.

Elliott, Clarence E., and L. O. Nichols, Kansas City, assignors to Knapp Monarch Company, Inc., St. Louis, Mo. Fruit juice extractor. Re18,778; Mar. 28.

Erhard, Antonette. (See Erhard, John W. and A.)

Erhard, John W. and A., New York, N. Y. Container closure. 1,903,099; Mar. 28.

Esterling, William M., Long Beach, assignor of forty-five per cent to R. S. Hay, and ten per cent to R. E. Spencer, San Pedro, Calif. Oil burner. 1,903,100; Mar. 28.

Eurit, Carl, Tulsa, Okla. Straight lift beam hanger for oil well pumping rigs. 1,903,034; Mar. 28.

Euth, John E., assignor to United Autographic Register Co., Chicago, Ill. Tear-off device. 1,903,173; Mar. 28.

Ewing, Sydney E. T., and A. L. Egan, Johannesburg, Transvaal, Union of South Africa. Retarding device for machinery. 1,903,035; Mar. 28.

Fairbanks, E. and T., and Company. (See Hadley, Harlan A., assignor.)

Faley, Garnet, administratrix. (See Faley, Lloyd T.)

Faley, Lloyd T., deceased, Hermosa Beach; Garnet Faley, administratrix, assignor of one-half to A. F. Larrabee, Los Angeles, Calif. Sanding-in armature brushes for generators, motors, motor-generators, or starters and the like. 1,903,101; Mar. 28.

Farley, Francis S., Trenton, N. J., assignor to D. M. Sutherland, jr., Morrisville, Pa. Fiber board manufacture and apparatus therefor. 1,903,102; Mar. 28.

Faux, William T., Santa Barbara, Calif. Oil can. 1,902,994; Mar. 28.

Ferguson, James W., Marion, Ill. Film developer and dryer. 1,903,174; Mar. 28.

Ferrari, Albert, Drexel Hill, and S. W. Devers, Philadelphia, Pa. Bathing suit. 1,902,843; Mar. 28.

Fink, Louis, et al. (See Williams, Armand A., assignor.)

Fire stone Battery Company. (See Lewis, Robert H., assignor.)

Firestone Tire & Rubber Company. (See Brown, Roy W., assignor.)

Firestone Tire & Rubber Company, The. (See Stevens Horace D., assignor.)

Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Combined expansion and contraction joint. 1,902,944; Mar. 28.

Fischesser, Alfred, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Dyeing animal fibers. 1,903,175; Mar. 28.

Fiset, Alphonse, Cambridge, Mass. Abrading, polishing, or like surfacing tool. 1,902,844; Mar. 28.

Fisher, Fred D., assignor to Scientific Brake Service Laboratories, Inc., Chicago, Ill. Advertising device. 1,903,103; Mar. 28.

Fiskin, Leslie D., Darrouzett, Tex. Vehicle dump. 1,903,176; Mar. 28.

Flynn, Paul B., St. Louis, Mo. Jump-training device. 1,902,995; Mar. 28.

Fortuna, Francesco, and S. Giannangelo, Niagara Falls, N. Y. Container. 1,903,104; Mar. 28.

Francis, Charles B., Pittsburgh, Pa. Carbon combustion furnace. 1,903,036; Mar. 28.

Fraver, Ivan N., West Reading, Pa. Car heating, cooling, and ventilating means. 1,903,037; Mar. 28.

Freedman, Jennie, New York, N. Y. Shoulder strap retainer. 1,903,259; Mar. 28.

Fretter, Nathan F., Cleveland Heights, Ohio. Wick carrying means. 1,903,260; Mar. 28.

Friden, Carl M. F., Oakland, assignor to Marchant Calculating Machine Company, Emeryville, Calif. Calculating machine. 1,903,105; Mar. 28.

Frost, George S., Baldwin, assignor to New York Pie Baking Co., New York, N. Y. Pie package. 1,903,212; Mar. 28.

Fruehauf Trailer Company. (See Reid, Frederick M., assignor.)

Fugere, Alderic, et al. (See Dufault, Homer D., assignor.)

Fugere, Euclide, et al. (See Default, Homer D., assignor.)

Fujii, Tokutaro, Asabu Ku, Toyko, assignor to Eijiro Yumamoto, Tokyo, Japan. Felt rubber roller. 1,903,038; Mar. 28.

Gallagher, Arthur D. (See Graham, W. S., and Gallagher.)

Gebert, Albert E. (See Richardson, M. H., and Gebert.)

Gebruder, Brehmer. (See Kleinschmit, Oscar, assignor.)

Gebruder, Brehmer. (See Kleinschmit, O., and Müller, assignor.)

General Aniline Works, Inc. (See Fischesser, Alfred, assignor.)

General Aniline Works, Inc. (See Honold, E., and Boehner, assignors.)

General Aniline Works, Inc. (See Kunz, M. A., and Koeverle, assignors.)

General Aniline Works, Inc. (See Nawiasky, P., and Mueller, assignors.)

General Aniline Works, Inc. (See Zahn, Karl, assignor.)

General Electric Company. (See Bailey, William M., assignor.)

General Motors Corporation. (See Bell, Frank H., assignor.)

General Motors Corporation. (See Blackmore, Lloyd, assignor.)

General Motors Corporation. (See Clark, Theodore, E., assignor.)

General Motors Corporation. (See Humer, Frank, assignor.)

General Motors Corporation. (See McCuen, Charles L., assignor.)

General Motors Corporation. (See Phillips, William M., assignor.)

General Motors Corporation. (See Platt, Harry A., assignor.)

General Motors Corporation. (See Seaholm, E. W., and Parker, assignors.)

General Motors Corporation. (See Sterling, Claude H., assignor.)

General Motors Corporation. (See Thomson, Bernard, assignor.)

General Motors Corporation. (See Warren, E. F., and Schwarze, assignors.)
General Motors Research Corporation. (See Almen, John O., assignor.)
General Motors Research Corporation. (See Godley, Charles E., assignor.)
General Motors Research Corporation. (See Ramsaur, W. R., and Chase, assignors.)
General Motors Research Corporation. (See Wolf, Harry R., assignor.)
General Motors Research Corporation. (See Woolman, Nelson E., assignor.)
General Steel Castings Corporation. (See Lentz, W. L., and Pflager, assignors.)
General Steel Castings Corporation. (See Sheehan, W. M., and McGilvray, assignors.)
Gerard, Paul, Laurel, Mont. Valve actuating mechanism for internal combustion engines. 1,902,996; Mar. 28.
Giannangelo, Sabatino. (See Fortuna, F., and Giannangelo.)
Gianoli, Marcel L., Paris, France. Device for interlocking two movements. 1,903,039; Mar. 28.
Giesey, Russell, Oklahoma City, Okla., assignor to Reed Roller Bit Company, Houston, Tex. Deep well drill. 1,903,232; Mar. 28.
Gilbert, Archie V., Spokane, Wash. Slug casting machine. 1,902,847; Mar. 28.
Gilchrist & Company. (See Graham, Walton C., assignor.)
Gille, George W., assignor to Service Station Equipment Company, Bryan, Ohio. Apparatus for supplying air under pressure. 1,903,233; Mar. 28.
Gillies, William R., assignor to Union Asbestos & Rubber Company, Chicago, Ill. Waterproof heat insulating tape. 1,903,106; Mar. 28.
Gleason, William J., Houston, Tex. Parachute. 1,903,213; Mar. 28.
Gleason Works. (See Head, Ernest C., assignor.)
Goch, Joseph, Amsterdam, N. Y. Beam and mounting frame for Axminster looms. 1,903,040; Mar. 28.
Godley, Charles E., Ypsilanti, assignor to General Motors Research Corporation, Detroit, Mich. Lens mounting. 1,902,997; Mar. 28.
Goings, Bilton B., Export, Pa. Table or shelf for a stove. 1,903,262; Mar. 28.
Goldberg, Isidor, assignor to Pilot Radio and Tube Corporation, New York, N. Y. Cabinet for radioreceivers. Des. 89,555; Mar. 28.
Golden, John H., assignor of one-half to C. M. Sewell, Porterville, Calif. Arch support. 1,902,952; Mar. 28.
Gonard, John L., Englewood Cliffs, N. J. Device for preventing retrograde movement of an automobile. 1,903,178; Mar. 28.
Goodhue, Archie R., Vandergrift, Pa., assignor to American Sheet and Tin Plate Company. Manufacture of steel sheets. 1,902,815; Mar. 28.
Goransson, Oscar F., Springfield, Mass. Anchoring device. 1,903,214; Mar. 28.
Gottlieb, Joseph, Jersey City, N. J. Combined clock case and lamp or similar article. Des. 89,556; Mar. 28.
Gouldbourn, Joseph, and G. Hazelton, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J. Covering breasts of heels. 1,902,848; Mar. 28.
Graham, Walton C., Denver, Colo., assignor to Gilchrist & Company. Purification of solutions. 1,903,215; Mar. 28.
Graham, William S., Canton, Ill., assignor to International Harvester Company. Plow attachment for tractors. 1,902,846; Mar. 28.
Graham, William S., and A. D. Gallagher, Canton, Ill., assignors to International Harvester Company. Tractor plow. 1,902,845; Mar. 28.
Grant, Gerald M. M., Los Angeles, Calif. Compression ring. 1,903,107; Mar. 28.
Gray, Charles B., Millbourne, Pa. Cutting machine. 1,903,234; Mar. 28.
Gredell, Otto N., Kansas City, assignor to Standard Steel Works, North Kansas City, Mo. Trailer truck tank construction. 1,902,849; Mar. 28.
Green, Estill I. (See Affel, H. A., and Green.)
Greene, John H., Philadelphia, Pa. Dental instrument. 1,902,850; Mar. 28.
Grettie, Donald P. (See Newton, R. C., and Grettie.)
Greve, John E. W., assignor to Astrawerke Aktiengesellschaft, Chemnitz, Germany. Calculating machine. 1,903,179; Mar. 28.
Griswold, Donald G., Los Angeles, Calif. Liquid displacement gas compressor. 1,903,108; Mar. 28.
Grunwald, Albert C., assignor to The Automatic Recording Safe Company, Chicago, Ill. Savings bank. 1,903,177; Mar. 28.
Guardian Trust Company, The. (See Peck, Frank G., assignor.)
Gulberson Corporation, The. (See Crickmer, Charles S., assignor.)
Gusmer, A., Inc. (See Rosenblueth, Emilio, assignor.)
H. O. G. Holding Corp. (See Harris, Leonard B., assignor.)
Hadley, Harlan A., St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company. Coin-controlled weighing machine. 1,903,110; Mar. 28.
Hall, Ralph E., and H. A. Jackson, Mount Lebanon, assignors to J. M. Hopwood, Dormont, Pa. Water treatment. 1,903,041; Mar. 28.
Hammer, Thorvald F., Branford, Conn. Boot hook. Des. 89,558; Mar. 28.
Hammerly, Herman J., New Britain, assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Electric switch. 1,903,180; Mar. 28.
Hammermill Paper Company. (See Johnsen, Bjarne, assignor.)
Hampton, Audrey L., Houston, Tex. Overshot. 1,902,851; Mar. 28.
Hampton, Audrey L., Houston, Tex. Spear. 1,903,109; Mar. 28.
Hand's Constant Mesh Transmission Company. (See Campbell, Leon J., assignor.)
Hanovia Chemical and Manufacturing Company. (See Anderson, William T., jr., assignor.)
Hans, Edmund E., Detroit, assignor to A C Spark Plug Company, Flint, Mich. Gauge. 1,902,998; Mar. 28.
Harper, Harry, Minneapolis, Minn. Coffee making machine. 1,903,111; Mar. 28.
Harris, Leonard B., assignor to H. O. G. Holding Corp., New York, N. Y. Oil gas generator. 1,903,042; Mar. 28.
Harrison, Thomas R., Wyncote, assignor to The Brown Instrument Company, Philadelphia, Pa. Meter mechanism. 1,902,852; Mar. 28.
Hartley, George C. (See Wright, E. P. G., and Hartley.)
Hay, Robert S., et al. (See Esterling, William M., assignor.)
Hazel, Eardley, New York, N. Y., assignor to Revere Rubber Company, Providence, R. I. Method and apparatus for the manufacture of filamentary material. 1,902,953; Mar. 28.
Hazleton, George. (See Gouldbourn, J., and Hazleton.)
Head, Ernest C., assignor to Glesson Works, Rochester, N. Y. Cutting gears. 1,903,043; Mar. 28.
Hennig, Fred, assignor to Pittsburgh Taximeter Company, Pittsburgh, Pa. Means to prevent detachment of speedometer or disconnection of its drive means. 1,902,853; Mar. 28.
Henriod, Charles E., Areuse, Switzerland. Power transmission mechanism. 1,903,044; Mar. 28.
Henroteau, François C. P., Ottawa, Ontario, Canada. Television. 1,903,112; Mar. 28.
Henroteau, François C. P., Ottawa, Ontario, Canada. Television. 1,903,113; Mar. 28.
Herman Nelson Corporation. (See Shurtleff, Wilfred, assignor.)
Herzberg, Wilhelm, Berlin-Wilmersdorf, and H. Lange, Berlin-Friedenau, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y. Manufacturing substituted secondary amines of the benzyl-anilid type. 1,902,854; Mar. 28.
Hewitt, William R., New York, N. Y. Piston. 1,903,216; Mar. 28.
Hickish, Robert S. (See Titmas, R. W., and Hickish.)
Hinlein, Milton J., Philadelphia, Pa. Veil. 1,902,957; Mar. 28.
Hochfeld, Arno, assignor to Deutsche Telephonwerke und Kabelindustrie Aktiengesellschaft, Berlin, Germany. Small variable potential electric motor. 1,902,954; Mar. 28.
Hodge, George O., assignor to Standard Steel and Bearings Incorporated, Plainville, Conn. Ball bearing. 1,903,217; Mar. 28.
Hodges, Lee W., assignor, by mesne assignments, to Lectrolite Corporation, Defiance, Ohio. Manufacturing an electric water heater. 1,903,045; Mar. 28.
Holliday, James B. (See McMinn, C. R., Robinson, and Holliday.)
Holmes, Henry S., Brooklyn, N. Y., assignor to Metropolitan Engineering Company. Welding apparatus. 1,902,955; Mar. 28.
Holroyd, John, & Company Limited. (See Walker, Harry, assignor.)
Honold, Ernst, Frankfort-on-the-Main-Fechenheim, and G. Borbner, Friedirchsfeld in Baden, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Making nitrogenous vat dyestuffs of the acridine series. 1,903,181; Mar. 28.
Hopwood, John M. (See Hall, R. E., and Jackson.)
Horton, Charles W., Miami, Fla. Door operating mechanism. 1,903,182; Mar. 28.
House, Edwin G. (See Pottenger, F. M., jr., and House.)
Howard, Merton W., Lynn, assignor to Pope Machinery Corporation, Haverhill, Mass. Heel concaving machine. 1,902,855; Mar. 28.
Howell, Sidney I. (See Burke, James P., assignor.)
Hughes, Edwin A., assignor to Boeing Airplane Company, Seattle, Wash. Metallic airfoil. 1,902,956; Mar. 28.
Hughes, Thomas C., Newcastle-upon-Tyne, assignor to Larmuth & Bulmer Limited, Manchester, England. Bobbin or spool winding machine. 1,903,261; Mar. 28.
Humer, Frank, assignor to General Motors Corporation, Detroit, Mich. Automobile body. 1,902,999; Mar. 28.
Hummel, Willard A., assignor to American Engineering Company, Philadelphia, Pa. Hoisting apparatus. 1,903,235; Mar. 28.
Hunter, Sherwood, Newlyn, Penzance, England. Plant or installation for extracting dust from minerals such as coal. 1,903,046; Mar. 28.
I. G. Farbenindustrie Aktiengesellschaft. (See Kränzlein, G. Dickhäuser, and Voss, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Paquin, Max, assignor.)

Ilgenfritz, Curtis B., York, assignor to United States Glass Company, Pittsburgh, Pa. Sugar bowl or similar article. Des. 89,561; Mar. 28.
Ilgenfritz, Curtis B., York, assignor to United States Glass Company, Pittsburgh, Pa. Tumbler or similar article. Des. 89,562; Mar. 28.
Impey, Francis L., Northfield, Birmingham, assignor to Morland & Impey Limited, Birmingham, England. Signal for use on commercial and other records. 1,903,047; Mar. 28.
Industrial Rubber Goods Company. (See Palenske, Frederick C., assignor.)
Ingraham, E., Company, The. (See Mansfield, Arthur L., assignor.)
Inocencio, Felipe, Glendora, Calif. Receptacle cover. Des. 89,544; Mar. 28.
International Communications Laboratories, Inc. (See Bancroft, Erwin P., assignor.)
International Harvester Company. (See Graham, William S., assignor.)
International Harvester Company. (See Graham, W. S., and Gallagher, assignors.)
International Harvester Company. (See Pinson, James H., assignor.)
International Harvester Company. (See Robinson, Charles W., assignor.)
International Harvester Company. (See Wamhoff, W. E., and Thompson, assignors.)
International Standard Electric Corporation. (See Wright, E. P. G., and Hartley, assignors.)
Interstate Bakeries Corporation. (See Dow, John R., assignor.)
Jackson, Henry A. (See Hall, R. E., and Jackson.)
Jackson, Ray P., Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,902,958; Mar. 28.
Jackson, Victor H., Metuchen, N. J., assignor to New York Stock Exchange, New York, N. Y. Carrier for pneumatic dispatch systems. 1,902,856; Mar. 28.
Jahncke, Evelyn, New Orleans, La. Ladies' hand-bag. Des. 89,545; Mar. 28.
Jamieson, Charles C., Jacksonville, Fla. Pulverizer. 1,902,857; Mar. 28.
Jannopoulo, Achilles E., Webster Groves, Md. Fastener. 1,903,000; Mar. 28.
Janosik, Joseph C. (See Adler, M., and Janosik.)
Jenkins, Charles F., Washington, D. C., assignor to Jenkins Laboratories, Inc., Silver, Spring, Md. Synchronizing system. Re18,783; Mar. 28.
Jenkins Laboratories, Inc. (See Jenkins, Charles F., assignor.)
Jennings, O. D., & Company. (See Jennings, O. D., and Mihalek, assignors.)
Jennings, Ode D., Palatine, and E. Mihalek, assignors to O. D. Jennings & Company, Chicago, Ill. Coin controlled device. 1,903,048; Mar. 28.
Jessup, Stephen C., Salem, Ohio. Mower blade. 1,903,183; Mar. 28.
John, Ferdinand, Dusseldorf-Oberkassel, Germany. Rotary key clutch. 1,903,049; Mar. 28.
Johnsen, Bjarne, assignor to Hammermill Paper Company, Erie, Pa. Paper manufacture. 1,903,236; Mar. 28.
Johnson, Clarence G., Hartford City, Ind. Roller truck. 1,902,836; Mar. 28.
Johnson, Thomas J., Flint, Mich. Gaining head. 1,903,002; Mar. 28.
Johnston, Lemuel M., Parco, Wyo. Producing a carbonized fuel briquette. 1,903,237; Mar. 28.
Jonas, Julius, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective system. 1,903,001; Mar. 28.
Jordan, Hugh A., assignor to M. L. Dodge, Newburyport, Mass. Counter stiffener and forming it. 1,903,050; Mar. 28.
Jorgensen, Clarence H. (See Jorgensen, Peter J. and C. H.)
Jorgensen, Peter J. and C. H., Chicago, Ill. Thermostatic controlling device. 1,902,858; Mar. 28.
Joseph, Rudolph J., New York, N. Y. Fountain toothbrush. 1,902,859; Mar. 28.
Kay, William H., and E. McDaniel, St. Louis, Mo. Headlight. 1,902,860; Mar. 28.
Kearney, Edward J., and J. B. Armitage, Wauwatosa, assignors to Kearney & Trecker Corporation, West Allis, Wis. Machine tool. 1,903,114; Mar. 28.
Kearney & Trecker Corporation. (See Kearney, E. J., and Armitage, assignors.)
Kebler, Leonard, Bronxville, N. Y., assignor to Ward Leonard Electric Company. Resistance unit. 1,902,861; Mar. 28.
Keenan, John, Cincinnati, Ohio. Hair trimmer and dresser. Re18,781; Mar. 28.
Kellogg, Henry M. (See Carpenter, E. W., LaReau, and Kellogg.)
Keney, Victor, Woodside, N. Y. Combined eye and eyelash for dolls. 1,902,816; Mar. 28.
Kennedy, Homer R. (See Zens, J., and Kennedy.)
Kennedy, Homer R., Los Angeles, Calif. Wheel aligning gauge. 1,903,051; Mar. 28.
Kerlin, James R., Los Angeles, Calif. Wrench. 1,903,052; Mar. 28.
Kern, Albert L., Jackson, Mich. Conveying jack. 1,903,115; Mar. 28.
Kerr, Howard J., Westfield, and G. D. Ebbets, Kenilworth, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Pressure drum. 1,902,862; Mar. 28.
Kersting, Bernard H., Ben Avon, Pa., assignor to The Dravo Contracting Company. Concrete bucket. 1,902,863; Mar. 28.
Keystone Stamping Corporation. (See Wohlhieter, Joseph W., assignor.)
Klein, Mathias, & Sons. (See Wotherspoon, Henry H., assignor.)
Kleinschmidt, Oscar, assignor to G. Brehmer. Leipzig-Plagwitz, Germany. Method of and mechanism for extracting interconnecting threads between stitched books. 1,902,864; Mar. 28.
Kleinschmit, Oscar, and Oskar Müller, assignors to Firm Gebruder Brehmer, Leipzig-Plagwitz, Germany. Method of and mechanism for mechanically extracting the interconnecting threads between stitched books. 1,903,184; Mar. 28.
Knapp Monarch Company. (See Elliott, C. E., and Nichols, assignors.)
Knight, Elias, San Francisco, Calif. Chain block. 1,903,218; Mar. 28.
Koch, Daniel S., and W. Newberry, St. Paul, Minn. Box for milk bottles and other articles. 1,903,266; Mar. 28.
Koeberle, Karl. (See Kunz, M. A., and Koeberle.)
Koester, John V., assignor to E. Morrison, Los Angeles, Calif. Drafting instrument. 1,902,865; Mar. 28.
Koschka, Killian, St. Paul, Minn. Amusement device. 1,903,116; Mar. 28.
Kränzlein, George, Frankfort-on-the-Main-Hochst, E. Dickhäuser, Gersthofen near Augsburg, and A. Voss, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie, Aktiengesellschaft, Frankfort-on-the-Main, Germany. Acetals of cyclic ketones with polyhydric alcohols and preparing the same. 1,902,866; Mar. 28.
Kruse, Wilhelm. (See Liesk, Erwin, and Kruse.)
Kuba, Franz, Vienna, Austria. Screw gear. 1,903,053; Mar. 28.
Kunz, Max A., Mannheim, and K. Koeberle, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Allo-MS-naphthodianthrones. 1,902,867; Mar. 28.
Kupfer, Reinhold. (See Semenitz, Christian, assignor.)
La Bour, Harry E., Chicago Heights, Ill. Packing gland. 1,902,960; Mar. 28.
La Bour, Harry E., Elkhart, Ind. Pumping system. 1,902,961; Mar. 28.
Ladd, Lester L., Lockport, Ill. Kiln. 1,903,117; Mar. 28.
Ladd, Lester L., Lockport, Ill. Kiln. 1,903,118; Mar. 28.
Ladd, Lester L., Lockport, Ill. Kiln furniture. 1,903,119; Mar. 28.
Lafferty, John F., Haddon Heights, N. J. Guard for truck chains. 1,903,120; Mar. 28.
Lake, Donald W., Chicago, Ill. Air heater. Re18,777; Mar. 28.
Lamont, John A., and F. A. Lorenz, jr., assignor to American Steel Foundries, Chicago, Ill. Cast steel bottom drop door. 1,902,868; Mar. 28.
Landis, Hugh G., Los Angeles, Calif. Electric heater. 1,903,219; Mar. 28.
Lange, Carl B. (See Merz, O. H. Arndt, and Lange.)
Lange, Hans. (See Herzberg, W., and Lange.)
La Reau, Charles. (See Carpenter, E. W., La Reau, and Kellogg.)
Larmuth & Bulmer Limited. (See Hughes, Thomas C., assignor.)
Larrabee, Arthur F. (See Faley, Lloyd T., assignor.)
Larson, Sven P., Berkeley, Calif. Roll and bun splitter. 1,903,238; Mar. 28.
Lathe, Fred A., Oakland, assignor to G. Moulin, San Francisco, Calif. Rotatable turret camera back for exposing light sensitive photographic plates. 1,902,869; Mar. 28.
Lathrop, Harry D. (See Paulson, Walter H., assignor.)
Laucks, I. F., Inc. (See Eilertsen, L. W., Cone, Davidson, Laucks, and Banks, assignors.)
Laucks, Irving F. (See Eilertsen, L. W., Cone, Davidson, Laucks, and Banks.)
Laurent, Torbern, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Loading coil box. 1,903,054; Mar. 28.
Lectrolite Corporation. (See Hodges, Lee W., assignor.)
Lefland, Paul W., Arlington, Tex. Rear and parking view attachment. 1,903,239; Mar. 28.
Lemert, Louis J., Beverly, assignor to United States Pipe & Foundry Company, Burlington, N. J. Flange protector. 1,903,220; Mar. 28.
Lempp, Hermann. (See Baur, O., and Lempp.)
Lentz, William L., Tuckahoe, N. Y., and H. M. Pflager, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill. Locomotive structure. 1,902,962; Mar. 28.
Leonpacher, Josef, Munich, Germany, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. System of automatic control. 1,903,055; Mar. 28.
Lepage, François, and A. Martineau, Montreal, Quebec, Canada. Package opener. 1,902,963; Mar. 28.
Levin, Nathan, Trenton, N. J., assignor to H. Brinton Company, Philadelphia, Pa. Controlling means for knitting machines. 1,902,870; Mar. 28.
Lewis, Robert H., assignor to Firestone Battery Company, Akron, Ohio. Receptacle having a handle. 1,903,185; Mar. 28.

Liberty Lace and Netting Works. (See Moosherr, John, assignor.)
Liesk, Erwin, Berlin, and W. Kruse, Wilhelmshagen, near Berlin, assignors to C. Lorenz A. G., Berlin, Germany. Supervisory device for telegraph apparatus. 1,902,964; Mar. 28.
Line Material Company. (See Desmond, John J., assignor.)
Lloyd, John, assignor to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Landing gear for aircraft. 1,903,186; Mar. 28.
Lockhart, George R., Providence, assignor to Manville Jenckes Company, Pawtucket, R. I. Reenforced vulcanized rubber articles and making the same. 1,902,871; Mar. 28.
Long, Leonard F., Montreal, Quebec, Canada, assignor to The Barrett Company, New York, N. Y. Roofing. 1,902,872; Mar. 28.
Lorenz, C., A. G. (See Liesk, E., and Kruse, assignors.)
Lorenz, Frederick A., jr. (See Lamont, J. A., and Lorenz.)
Lussier, Alphonse L., Springfield, Mass. Dual wheel structure. 1,902,121; Mar. 28.
Lynch, James J., and E. F. Barvoets, assignors to J. B. Lyon Company, Albany, N. Y. Binder. 1,902,965; Mar. 28.
Lyon, J. B., Company. (See Lynch, J. J., and Barvoets, assignors.)
MacChesney, Chester M., assignor to Acme Steel Company, Chicago, Ill. Making expanded metal fences. 1,902,966; Mar. 28.
MacIntosh, James, et al. (See Burke, James P., assignor.)
MacKenzie, Philip, assignor of one-fourth to R. Mann, Oakland, and one-fourth to J. Mann, Berkeley, Calif. Automotive transmission. 1,903,221; Mar. 28.
Macksey, Kenneth W., et al. (See Burke, James P., assignor.)
Magnesium Development Corporation. (See Schreiber, Gustav, assignor.)
Mann, Joseph, et al. (See MacKenzie, Philip, assignor.)
Mann, Robert, et al. (See MacKenzie, Philip, assignor.)
Manning, Ralph F., Medford, Mass. Table ornament. Des. 89,546; Mar. 28.
Mansfield, Arthur L., assignor to The E. Ingraham Company, Bristol, Conn. Watch. 1,903,003; Mar. 28.
Manville Jenckes Company. (See Lockhart, George R., assignor.)
Marchant Calculating Machine Company. (See Friden, Carl M. F., assignor.)
Mariani, Paul, New York, N. Y. Shoe heel ornament. 1,903,004; Mar. 28.
Markel Electric Products, Inc. (See McFadden, Glenn E., assignor.)
Marone, Alfredo, Santa Vittoria d'Alba, Italy. Chain conveying apparatus. 1,902,873; Mar. 28.
Martin, John F., assignor to United American Bosch Corporation, Springfield, Mass. Dust protector device. 1,902,874; Mar. 28.
Martineau, Antoine. (See Lepage, F., and Martineau.)
Mason, Ralph R., Pittsburgh, Pa. Plot marker. 1,902,875; Mar. 28.
Mason, William H., assignor to Masonite Corporation, Laurel, Miss. Press. 1,903,222; Mar. 28.
Masonite Corporation. (See Mason, William H., assignor.)
Mattingly, Thomas B., Huntington Park, Calif. Closure operating device. 1,903,056; Mar. 28.
Mayer, Heinrich, assignor to Société Anonyme Adolphe Saurer, Arbon, Switzerland. Convertible vehicle top. 1,903,240; Mar. 28.
McCann, Michael, St. Albans, assignor to Frederick Osann Company, New York, N. Y. Blind stitch button sewing machine. 1,903,057; Mar. 28.
McClenahan, Francis M., Monmouth, Ill. Prepared silica and making same. 1,903,187; Mar. 28.
McCuen, Charles L., Lansing, assignor to General Motors Corporation, Detroit, Mich. Oil pump screen. 1,903,005; Mar. 28.
McDaniel, Eskel. (See Kay, W. H., and McDaniel.)
McEachern, Joseph H., assignor to Standard Oil Company of California, San Francisco, Calif. Tank truck emergency valve system and controller. 1,902,876; Mar. 28.
McFadden, Glenn E., assignor to Markel Electric Products, Inc., Buffalo, N. Y. Shade for an electric lamp. Des. 89,550; Mar. 28.
McGilvray, William S. (See Sheehan, W. M., and McGilvray.)
McIntosh, Roy E., New York, N. Y., asignor to J. Edward Ogden Company, Inc., East Orange, N. J. Expansion shield. 1,903,241; Mar. 28.
McKee, George K., Cincinnati, Ohio. Shock absorber. 1,903,006; Mar. 28.
McMillan, Eli W. F. (See Dunford, R. E., and McMillan.)
McMinn, Charles R., J. T. Robinson, and J. B. Holliday, incompetent, by E. C. Couch, guardian, Los Angeles, Calif., assignors, by mesne assignments, to The Simplex Piston Ring Company of America, Inc. Antislap ring. Re18,776; Mar. 28.
McNaught, Norris F., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Ratchet wrench. 1,902,878; Mar. 28.
McNaught, Norris F., and E. H. Peterson, assignors to Duro Metal Products Company, Chicago, Ill. Applying brake shoe linings. 1,903,058; Mar. 28.
McNish, Alexander F., assignor of one-half to J. Moncrieff Limited, Perth, Scotland. Circulating glass in gathering basins. 1,903,223; Mar. 28.
McPhail, Harold R., assignor to Norge Corporation, Detroit, Mich. Float valve structure. 1,902,967; Mar. 28.
Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)
Meininghaus, Ewald, Lancaster, N. Y. Hinge. 1,903,059; Mar. 28.
Mellor, James F., El Dorado, Ark. Earth boring apparatus. 1,902,968; Mar. 28.
Merz, Otto H., West Allis, R. A. Arndt, Wauwatosa, and C. B. Lange, Racine, assignors to Convertible Door Mfg. Co., West Allis, Wis. Knockdown assemblage. 1,903,122; Mar. 28.
Messing, Joseph., assignor to Bull Dog Electric Products Company, Detroit, Mich. Fuse blocks. Des. 18,779; Mar. 28.
Metropolitan Engineering Company. (See Holmes, Henry S., assignor.)
Meyer, Daniel H., Wilmington, assignor to American Manganese Steel Company, Chicago, Ill. Dipper. 1,903,123; Mar. 28.
Michlik, Stephen, Brooklyn, and C. L. O'Reilly, New York, N. Y., assignors to Sanitary Automatic Candy Corporation. Vending machine sign illuminating mechanism. 1,903,008; Mar. 28.
Middelboe, Kristian, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Packing machine for pulverulent material. 1,903,188; Mar. 28.
Mihalek, Emery. (See Jennings, O. D., and Mihalek.)
Miller, Charles F., Miami, Fla. Combined awning and shutter. 1,902,879; Mar. 28.
Miller Devices Inc. (See Miller, Philip M., assignor.)
Miller, Philip M., Cleveland, Ohio, assignor to Miller Devices Inc., New York, N. Y. Motor vehicle wheel. 1,903,189; Mar. 28.
Miller, Tony S., and L. L., J. L., and S. L. Chong, Isleton, Calif. Rotary ground working implement. 1,903,124; Mar. 28.
Mitchell, Orville, Dallas, Tex. Shaft mounting for rotatable cylinders. 1,903,060; Mar. 28.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,902,880; Mar. 28.
Modine, Arthur B., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,903,125; Mar. 28.
Modine Manufacturing Company. (See Modine, Arthur B., assignor.)
Mohawk Carpet Mills, Inc. (See Underwood, Garfield J., assignor.)
Moncrieff, John, Limited. (See McNish, Alexander F., assignor.)
Monsanto Chemical Works. (See Davis, Alex B., assignor.)
Moorman Manufacturing Company. (See Caldwell, Paul, assignor.)
Moosherr, John, assignor to Liberty Lace and Netting Works, New York, N. Y. Lace. Des. 89,551; Mar. 28.
Morgan, Gerry A., Garden City, assignor to A. Schrader's Sons, Incorporated, Brooklyn, N. Y. Valve bending tool. 1,902,881; Mar. 28.
Morland & Impey Limited. (See Impey, Francis L., assignor.)
Morris, Carrie B., administratrix. (See Morris, John O.)
Morris, John O., deceased, by C. B. Morris, Washington, D. C., assignor, by mesne assignments, to Tobacco Stemming Corporation, Dover, Del. Tobacco leaf stemming and straightening machine. 1,902,882; Mar. 28.
Morrison, Eugene. (See Koester, John V., assignor.)
Moulin, Gabriel. (See Lathe, Fred A., assignor.)
Mueller Julius. (See Nawiasky, P., and Mueller.)
Musch, Frank, New York, N. Y. Weighing and delivery machine. 1,903,263; Mar. 28.
Myers, George F., New York, N. Y. Flying machine. 1,903,009; Mar. 28.
Myers, Robert P., assignor to Research Laboratories of National Dairy Products Corporation, Inc., Baltimore, Md., Unfermented acidophilus milk. 1,902,959; Mar. 28.
Myers, Robert P., assignor to Research Laboratories of National Dairy Products Corp. Inc., Baltimore, Md. Unfermented milk product. 1,903,014; Mar. 28.
National Aniline and Chemical Company. (See Zwilgmeyer, Frithjof, assignor.)
Nawiasky, Paul, Ludwigshafen-on-the-Rhine, and J. Mueller, Manheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Production of vat dyestuffs of the dibenzanthrone series. 1,902,883; Mar. 28.
Neldner, Stephen W., Milwaukee, Wis. Valve lock. 1,903,190; Mar. 28.
Nevins, Charles A., assignor to Doherty Research Company, New York, N. Y. Piston and wrist pin construction. 1,903,191; Mar. 28.
Newberry, Wayne. (See Koch, D. S., and Newberry.)
Newman, Ray W., Wagner, S. Dak. Inkstand. 1,903,061; Mar. 28.

Newton, Roy C., and D. P. Grettie, assignors to Swift and Company, Chicago, Ill. Antioxidant for fats and oils. 1,903,126; Mar. 28.
New York Pie Baking Co. (See Frost, George S., assignor.)
New York Stock Exchange. (See Jackson, Victor H., assignor.)
Nichols, Leonard O. (See Elliott, C. E., and Nichols.)
Nixon, Jeddy D., Houston, Tex. Drill. 1,902,885; Mar. 28.
Norge Corporation. (See McPhail, Harold R., assignor.)
Norton Company. (See Trefethen, Charles G., assignor.)
Nygaard, Oscar, Saugus, Mass. Furnace walls. 1,903,062; Mar. 28.
Odell, Benjamin F. J., Chicago, Ill. Prepared fuel and producing it. 1,902,886; Mar. 28.
Oehrl, Ernest A., Grand Rapids, Mich. Spring and mattress construction. 1,903,224; Mar. 28.
Oelkers, Alfred H., assignor to American Steel Foundries, Chicago, Ill. Antifriction wheel and axle construction. 1,902,910; Mar. 28.
Ogden, J. Edward, Company, Inc. (See McIntosh, Roy E., assignor.)
Olsson, Johan G., Lidington, and F. I. E. Stenfors, Alsten, assignors to Aktiebolaget Svenska Fläktfabriken, Stockholm, Sweden. Drying device for wood, brick, pottery, etc., provided with heat recovering devices. 1,903,063; Mar. 28.
Onstott, Jacob T., Yuba City, Calif. Connecting rod. 1,903,064; Mar. 28.
Oppenheim, René, assignor to Société Anonyme le Carbon, Gennevilliers, France. Carburetor. 1,902,887; Mar. 28.
Oppenlaender, Oscar O., Elizabethton, and R. H. Carter, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y. Sealing means. 1,903,242; Mar. 28.
O'Reilly, Charles L. (See Michlik, S., and O'Reilly.)
O'Rourke, Lawrence, San Francisco, Calif. Insulating holder for Cooper-Hewitt tubes and inert gas tubes generally. 1,903,127; Mar. 28.
Osann, Frederick, Company. (See McCann, Michael, assignor.)
Ozlberger, Rudolf, Vienna, Austria. Alloy of nickel, silver, tin, and copper. 1,903,192; Mar. 28.
Packard, Charles A., Dallas, Tex. Recording lamp. 1,903,128; Mar. 28.
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Paget, Charles E., Huntsville, Ontario, Canada. Sectional door. 1,903,065; Mar. 28.
Palenske, Frederick C., assignor to Industrial Rubber Goods Company, St. Joseph, Mich. Rubber weatherstrip. 1,903,225; Mar. 28.
Palin, Fred C., Newton, Ind. Hoe, mulcher, and weed destroyer. 1,903,264; Mar. 28.
Paquette, Herman, Chicago, Ill. Frost eliminator for vehicles. 1,902,888; Mar. 28.
Paquin, Max, Konigstein-on-Taunus, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Urea condensation products and making them. 1,902,889; Mar. 28.
Parker, Guy E. (See Seaholm, E. W., and Parker.)
Parks, Walter, Denver, Colo. Feed water heater for locomotives. 1,902,969; Mar. 28.
Patent Button Company. (See Ross, Frederick N. assignor.)
Patent Button Co., The. (See Ross, F. N., and White, assignors.)
Paulson, Walter H., assignor to H. D. Lathrop, Chicago, Ill. Milk dumping device. 1,903,193; Mar. 28.
Pearson, Arthur D., Chicago, Ill. Pin-ball amusement game device. Des. 89,552; Mar. 28.
Peck, Elmer E., Long Beach, Calif. Steering mechanism for boats. 1,903,265; Mar. 28.
Peck, Frank G., New Haven, Conn., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio. Machine for making collapsed cartons. 1,903,243; Mar. 28.
Perkins Julian L., West Springfield, Mass. Wringer. 1,903,194; Mar. 28.
Perry, Harry L., Jamaica, N. Y. Multiple picture amusement device. 1,903,226; Mar. 28.
Petersen, Elliott I., Enfield, assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn. Label. Re18,782; Mar. 28.
Peterson, Edward H. (See McNaught, N. F., and Peterson.)
Peterson, John W., Cairo, Ill. Cotter key. 1,903,129; Mar. 28.
Pezzella, Rocco, Washington, D. C. Hair curling device. 1,903,066; Mar. 28.
Pfeiffer, Richard O., Newark, N. J. Wall fixture. 1,902,890; Mar. 28.
Pflager, Harry M. (See Lentz, W. L., and Pflager.)
Phillips, William M., Birmingham, assignor to General Motors Corporation, Detroit, Mich. Chromium plating process. 1,903,130; Mar. 28.
Picco, John, New York, N. Y. Aerial advertising device. 1,903,131; Mar. 28.
Pilot Radio and Tube Corporation. (See Goldberg, Isidor, assignor.)
Pinson, James H., Richmond, Ind., assignor to International Harvester Company. Check row planter. 1,902,891; Mar. 28.
Pittsburgh Equitable Meter Company. (See Weymouth, Harry G., assignor.)
Pittsburgh Taximeter Company. (See Hennig, Fred, assignor.)
Platt, Harry A., assignor to General Motors Corporation, Detroit, Mich. Adjustable sun visor. 1,903,132; Mar. 28.
Polak, Holland R., St. Louis, Mo. Game. 1,903,133; Mar. 28.
Pope Machinery Corporation. (See Howard, Merton W., assignor.)
Pottenger, Francis M., jr., Monrovia, and E. G. House, Los Angeles, Calif. Bottle stopper and flask connecter. 1,902,892; Mar. 28.
Potter, Ralph K., New York, N. Y., assignor to American Telephone and Telegraph Company. Signaling system. 1,902,893; Mar. 28.
Radio Corporation of America. (See Willans, P. W., and Ward, assignors.)
Ramsaur, Walter R., Lockport, N. Y., and T. P. Chase, assignors to General Motors Research Corporation, Detroit, Mich. Oil cooler. 1,902,970; Mar. 28.
Ream, Arthur, Chicago, Ill. Automobile heating system. 1,903,134; Mar. 28.
Rechnitzer, Rudolf, Berlin, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Current sources. 1,902,894; Mar. 28.
Reed, Henry M., jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company. Metallic baseboard element. 1,903,244; Mar. 28.
Reed Roller Bit Company. (See Giesey, Russell, assignor.)
Rees, Mackworth G., Detroit, Mich. Push button electric switch. 1,903,135; Mar. 28.
Reid, Frederick M., assignor to Fruehauf Trailer Company, Detroit, Mich. Radius rod and axle construction. 1,903,136; Mar. 28.
Reilly, Peter C. (See Cunningham, Orin D., assignor.)
Reiss, Louis P., Dallas, Tex. Air conditioning apparatus. 1,903,137; Mar. 28.
Remington Rand Inc. (See Wassell, Frank L., assignor.)
Research Laboratories of National Dairy Products Corporation. (See Myers, Robert P., assignor.)
Revere Rubber Company. (See Hazell, Eardley, assignor.)
Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung. (See Schöllkopf, K., and Serini, assignors.)
Richardson, Myron H., Chicago, and A. E. Gebert, Wilmette, assignors to Advance Machine Company, Chicago, Ill. Vending machine. 1,903,067; Mar. 28.
Richardson, Rodney G. (See Wicks, J., Richardson, and Bellamy.)
Rippon, Francis F. C., New York, N. Y. Toy. 1,902,971; Mar. 28.
Roberts, Clark L., Nampa, Idaho. Automobile seat. 1,903,267; Mar. 28.
Roberts and Schaefer Company. (See Stump, Earl, assignor.)
Robinson, Charles W., Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill. Rod weeder shoe. 1,902,897; Mar. 28.
Robinson, Frederick A., assignor to S. L. Robinson, Boston, Mass. Oil burner. 1,903,195; Mar. 28.
Robinson, Henry H., assignor to Robinson Orifice Fitting Company, Los Angeles, Calif. Construction for orifice meter fittings. 1,903,068; Mar. 28.
Robinson, James T. (See McMinn, C. R., Robinson, and Holliday.)
Robinson Orifice Fitting Company. (See Robinson, Henry H., assignor.)
Robinson, Sarah L. (See Robinson, Frederick A., assignor.)
Rock Island Mfg. Co. (See Botsford, Warren U., assignor.)
Rockwell, Edward A., Chicago, Ill. Brake operating mechanism. 1,903,138; Mar. 28.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Head retainer for drums and the like. 1,903,010; Mar. 28.
Roos, Henry W., Cincinnati, Ohio. Apparatus for forming concrete floors. 1,902,898; Mar. 28.
Roos, Henry W., Cincinnati, Ohio. Apparatus for forming concrete floors. 1,902,899; Mar. 28.
Rosenblueth, Emilio, Mexico, Mexico. Closure for metallic barrels or containers. 1,903,012; Mar. 28.
Rosenblueth, Emilio, Mexico, Mexico, assignor, by mesne assignments, to A. Gusmer, Inc., Woodbridge, N. J. Closure for metal containers. 1,903,011; Mar. 28.
Rosenstein, Ludwig, assignor to Shell Development Company, San Francisco, Calif. Tertiary xanthate flotation process. 1,903,140; Mar. 28.
Ross, Arthur, Lynbrook, assignor to Warner Bros. Pictures, Inc., New York, N. Y. Electric circuit control. 1,903,069; Mar. 28.
Ross, Frederick N., Detroit, Mich., assignor to Patent Button Company, Waterbury, Conn. Machine and method for sewing buttons onto fabric or the like. 1,903,268; Mar. 28.
Ross, Frederick N., Detroit, Mich., and F. B. White, assignors to The Patent Button Co., Waterbury, Conn. Machine for attaching buttons. 1,903,269; Mar. 28.
Rouse, Warren E., assignor to The Waterbury Tool Company, Waterbury, Conn. Mooring and hoisting apparatus. 1,902,972; Mar. 28.
Ruben, Samuel, New Rochelle, N. Y. Electrical phonograph pick-up. 1,902,900; Mar. 28.

Ruska, Max O., Voerde near Hagen, Germany. Manufacture of blanks and similar articles with jumped heads. 1,908,245; Mar. 28.
Saar, Adolf H., jr., Omaha, Nebr. Time controlled switch. Re18,780; Mar. 28.
Safeway Auto License System, Inc. (See Anderson, Oliver H., assignor.)
Sahmel, Viggo, Forest Hills, assignor to F. L. Smidth & Co., New York, N. Y. Control system for rotary kilns and the like. 1,903,070; Mar. 28.
Salerni, Picro M., Westminster, England. Power transmission mechanism. 1,903,013; Mar. 28.
Sanders, Joseph J., assignor to H. Brinton Company, Philadelphia, Pa. Design wheel. 1,902,903; Mar. 28.
Sanders, Louis E., Sacramento, Calif. Steam condensing well. 1,903,246; Mar. 28.
Sandin, Jerome, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Combination fuse and current limiting resistor. 1,902,902; Mar. 28.
Sandoz, Rollen, The Dalles, Oreg. Wrench. 1,903,270; Mar. 28.
Sanitary Automatic Candy Corporation. (See Michlik, S., and O'Reilly, assignors.)
Schabelitz, William, Lucerne, Switzerland. Device for the electrothermic treatment of metals. 1,902,896; Mar. 28.
Schellenger, Newton C., assignor to Chicago Telephone Supply Company, Elkhart, Ind. Resistance strip and making same. 1,903,142; Mar. 28.
Schiavulli, Rudolph, Providence, R. I. Spring shackle. 1,903,271; Mar. 28.
Schoening, William A., Chicago, Ill. Window construction. 1,902,973; Mar. 28.
Schöllkopf, Karl, Dusseldorf-Oberkassel, and A. Serini, Dusseldorf-Heerdt, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung, Dusseldorf-Oberkassel, Germany. Preparing thymol. 1,902,904; Mar. 28.
Schönhöfer, Fritz. (See Schulemann, W., Schönhöfer, and Wingler.)
Schrader's, A., Sons, Incorporated. (See Morgan, Gerry A., assignor.)
Schrader's, A., Sons, Incorporated. (See Wahl, John, assignor.)
Schreiber, Gustav, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation. Working magnesium and high percentage magnesium alloys by rolling. 1,902,905; Mar. 28.
Schulemann, Werner, Vohwinkel near Elberfeld, F. Schönhöfer, and A. Wingler, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Substituted amino quinolines and making the same. 1,903,196; Mar. 28.
Schwarze, Herman. (See Warren, E. F., and Schwarze.)
Schweizer, Jack, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,553; Mar. 28.
Scientific Brake Service Laboratories, Inc. (See Fisher, Fred D., assignor.)
Scott, Allison F. H., Detroit, Mich., assignor to Woodall Industries Incorporated. Casket. 1,903,197; Mar. 28.
Scott, Allison F. H., Detroit, Mich., assignor to Woodall Industries Incorporated. Casket. 1,903,198; Mar. 28.
Seaholm, Ernest W., and G. E. Parker, assignors to General Motors Corporation, Detroit, Mich. Radiator. 1,903,141; Mar. 28.
Seamark, Louis M. C., Outer Down, Chagford, England. Casing head equipment. 1,902,906; Mar. 28.
Sementis, Christian, Berlin, Charlottenburg, assignor to Reinhold Kupfer, Berlin, Germany. Episcopic projector. 1,902,907; Mar. 28.
Sensow, Anton C., assignor to U. S. Slicing Machine Company, La Porte, Ind. Cushioning device for slicing machines. 1,902,908; Mar. 28.
Seric Products Company. (See Steerup, Godfrey, assignor.)
Serini, Arthur. (See Schöllkopf, K., and Serini.)
Service Station Equipment Company. (See Gille, George W., assignor.)
Sewell, Chester M. (See Golden, John H., assignor.)
Shallock, Edward W., assignor to American Ore Reclamation Company, Chicago, Ill. Sintering machine. 1,902,911; Mar. 28.
Sharp, William E., Chicago, Ill. Lock nut and process of making. 1,902,912; Mar. 28.
Sheehan, William M., St. Louis, Mo., and W. S. McGilvray, assignors to General Steel Castings Corporation, Granite City, Ill. Car truck. 1,902,974; Mar. 28.
Shell Development Company. (See Rosenstein, Ludwig, assignor.)
Sherman, Robert F., Pekin, Ill., assignor to Corn Products Refining Company, New York, N. Y. Manufacture of starch. Re18,775; Mar. 28.
Shurtleff, Wilfred, assignor to The Herman Nelson Corporation, Moline, Ill. Unit ventilator. 1,903,143; Mar. 28.
Siemens Brothers & Company Limited. (See Christian, David A., assignor.)
Sievern, Fredrick, McKeesport, Pa. Pliers. 1,902,913; Mar. 28.
Simon, Hans, assignor to G. Wagner, Hanover, Germany. Duplicating stencil. 1,902,914; Mar. 28.
Simplex Piston Ring Company of America, Inc., The. (See McMinn, C. R., Robinson, and Holliday, assignors.)
Simpson, Frank, Fort Worth, Tex. Photography light reflector. 1,903,071; Mar. 28.
Small, Alfred B., Miama, Fla. Automatic safety reverse motion lock. 1,903,199; Mar. 28.
Smidth, F. L., & Co. (See Middelboe, Kristian, assignor.)
Smidth, F. L., & Co. (See Sahmel, Viggo, assignor.)
Smith, Frederick J. C., assignor to Tenova Limited, London, England. Supporting means for trousers and the like. 1,902,895; Mar. 28.
Snodgrass, John L., assignor to Alemite Corporation, Chicago, Ill. Grease gun. 1,903,227; Mar. 28.
Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Reversing mechanism. 1,903,200; Mar. 28.
Société Anonyme Adolphe Saurer. (See Mayer, Heinrich, assignor.)
Société Anonyme le Carbone. (See Oppenheim, René, assignor.)
Spanner, Hans J., Berlin, Germany, and Ulrich Doering, New York, N. Y., assignors to Electrons, Inc. Rectifying tube. 1,903,144; Mar. 28.
Spanner, Hans J., Berlin, Germany, and Ulrich Doering, New York, N. Y., assignors to Electrons, Inc. Rectifying tube. 1,903,145; Mar. 28.
Sparks, Stanley W., Brooklyn, N. Y., assignor to C. H. Bickell, trustee. Method of and apparatus for making extruded seamless metal shapes. 1,902,975; Mar. 28.
Spence, Paulsen, Orange, N. J. Valve. 1,903,248; Mar. 28.
Spencer, Raymond E., et al. (See Esterling, William M., assignor.)
Spicer, Clarence W., Plainfield, and G. L. Tarbox, North Plainfield, N. J. Casing for universal joints. 1,902,976; Mar. 28.
Standard Mirror Company. (See Weir, James B., assignor.)
Standard Oil Company of California. (See McEachern, Joseph H., assignor.)
Standard Sanitary Manufacturing Company. (See Reed, Henry M., jr., assignor.)
Standard Steel and Bearings Incorporated. (See Hodge, George O., assignor.)
Standard Steel Works. (See Gredell, Otto N., assignor.)
Starkey, Lewis P., Fort Collins, Colo. Automatic vending machine. 1,902,915; Mar. 28.
Starr, Charles E., Omaha, Nebr. Thermal decomposition of natural gas. 1,903,247; Mar. 28.
Steerup, Godfrey, Maywood, assignor to Seric Products Company, Chicago, Ill. Electric heating pad and control therefor. 1,903,015; Mar. 28.
Stenfors, Frans I. E. (See Olsson, J. G., and Stenfors.)
Sterling, Claude H., Syracuse, N. Y., assignor to General Motors Corporation, Detroit, Mich. Rear axle carrier. 1,903,146; Mar. 28.
Sterrett, Robert, Ambridge, Pa. Limit stop. 1,903,072; Mar. 28.
Steur, Jacques B., and C. H. Brown, San Francisco, Calif. Sound modifying device. 1,903,201; Mar. 28.
Stevens, Horace D., assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Collapsible tire-form. 1,903,202; Mar. 28.
Stevenson, Arthur, G., Rochester, N. Y. Combined pencil and lighter. 1,903,203; Mar. 28.
Stewart, Duncan J. (See Colman, H. D., and Stewart.)
Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Electric valve operator. 1,903,230; Mar. 28.
Strecker, Dr. Otto C., the Firm. (See Strecker, Otto H., assignor.)
Strecker, Otto H., assignor to the Firm Dr. Otto C. Strecker, Darmstadt, Germany. Decomposing plant fiber material by cooking with phenolates. 1,902,916; Mar. 28.
Ströher, Karl G., Rotherkirchen, Germany. Hair clamp for permanent hair waving. 1,903,249; Mar. 28.
Stubbins, Robert O. (See Watson, George V. E., and Stubbins.)
Stump, Earl, assignor to Roberts and Schaefer Company, Chicago, Ill. Classifying table. 1,902,917; Mar. 28.
Sturtevant, B. F., Company. (See Anderson, Samuel M., assignor.)
Sugarman, Miriam. (See Trompeter, David, assignor.)
Suhara, Toyotaro, Tokyo, Japan. Photographing device for high speed moving pictures. 1,903,204; Mar. 28.
Summey, David L., deceased, Waterbury, Conn., by The Colonial Trust Company and E. P. W. Summey, executors. Power control apparatus. 1,903,147; Mar. 28.
Summey, Richard P. W., et al, executor. (See Summey, David L.)
Sutherland, Daniel M., jr. (See Farley, Francis S., assignor.)
Sweeney, George K., et al. (See Williams, Armand A., assignor.)
Sweeney, Leo S. (See Darrow, M. S., and Sweeney.)
Swift and Company. (See Newton, R. C., and Grettie, assignors.)
Swinehart, George E., Buffalo, N. Y., assignor, by mesne assignments, to American Ore Reclamation Company, Chicago, Ill. Sintering machine. 1,902,918; Mar. 28.
Swisher, Samuel C., San Jose, Calif. Rope clamp. 1,903,148; Mar. 28.

Talbot, Frank A., Greenville, S. C. Coupling. 1,902,919; Mar. 28.
Tamagno, Peter, Natick, Mass. Mold for cast stone and using the same. 1,902,977; Mar. 28.
Tarbox, Gurdon L. (See Spicer, C. W., and Tarbox.)
Tebeau, Silas B., East Detroit, Mich. Toy animation picture device. 1,903,272; Mar. 28.
Tefft, Henry D., Chicago, Ill. Electrical stunning device. 1,902,901; Mar. 28.
Telefonaktiebolaget L. M. Ericsson. (See Laurent, Torbern, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Rechnitzer, Rudolf, assignor.)
Temple Corporation. (See Bouvier, Harold K., assignor.)
Tenney, Dwight, Montclair, N. J. Air conditioning apparatus. 1,903,250; Mar. 28.
Tenova Limited. (See Smith, Frederick J. C.)
Thomas, George F., Berwyn, assignor to Alemite Corporation, Chicago, Ill. Decarbonizing apparatus. 1,903,016; Mar. 28.
Thompson, William H. (See Wamhoff, W. F., and Thompson.)
Thomson, Bernard, Woldingham, England, assignor to General Motors Corporation, Detroit, Mich. Frictional gearing. 1,903,228; Mar. 28.
Thorssell, Carl T., Kassel, Germany. Production of soda and potassium hydroxide. 1,903,073; Mar. 28.
Tinel, Georges. (See Dupuis, L. G., and Tinel.)
Titmas Company. (See Titmas, R. W., and Hickish, assignors.)
Titmas, Reginald W., London, England, and R. S. Hickish, La Ceiba, Spanish Honduras, assignors to Titmas Company, Inc., New Orleans, La. Burner for liquid or semi-liquid fuel. 1,902,920; Mar. 28.
Tobacco Stemming Corporation. (See Morris, John O., assignor.)
Trefethen, Charles G., assignor to Norton Company, Worcester, Mass. Cam grinding apparatus. 1,903,149; Mar. 28.
Trompter, David, Amityville, N. Y., assignor to Miriam Sugarman, Baldwin, Long Island, N. Y. Nozzle. 1,903,139; Mar. 28.
Trumbull Electric Manufacturing Company, The. (See Hammerly, Herman J., assignor.)
Tyden, Emil, Hastings, Mich. Pendant sprinkler system. 1,903,150; Mar. 28.
Underwood, Garfield, J., assignor to Mohawk Carpet Mill, Inc., Amsterdam, N. Y. Making pile fabrics. 1,902,921; Mar. 28.
Union Asbestos & Rubber Company. (See Gillies, William R., assignor.)
Union d'Electricite. (See Tinel, Georges, and Dupuis, assignors.)
United American Bosch Corporation. (See Martin, John F., assignor.)
United Autographic Register Co. (See Euth, John E., assignor.)
United Dry Docks, Incorporated. (See Bates, George H., assignor.)
United Shoe Machinery Corporation. (See Bessom, Earl A., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, J., and Hazelton, assignors.)
United States Glass Company. (See Ilgenfritz, Curtis B., assignor.)
United States Gypsum Company, The. (See Birdsey, Charles R., assignor.)
United States Pipe & Foundry Company. (See Lemert, Louis J., assignor.)
U. S. Slicing Machine Company. (See Sensow, Anton C., assignor.)
Valko, John, Aguilar, Colo. Attachment for preventing buckling of coal conveyer troughs. 1,903,205; Mar. 28.
Victaulic Company of America. (See Damsel, William B., assignor.)
Viviani, Ettore, Milan, Italy. Apparatus for dry-spinning artificial textile fibers with recovery of the volatile solvents. 1,902,922; Mar. 28.
Von Frankenberg, Arthur, New York, N. Y. Receptacle. 1,902,978; Mar. 28.
Voss, Arthur. (See Krünzlein, G., Dickhäuser, and Voss.)
Vulcan Steel Products Company, The. (See Easter, George C., assignor.)
Wagner, Gunther. (See Simon, Hans, assignor.)
Wagner, Walter, Park Ridge, Ill. Map display device for motor vehicles. 1,902,884; Mar. 28.
Wahl, John, Rosedale, assignor to A. Schrader's Son Inc., New York, N. Y. Deflating machine. 1,902,923; Mar. 28.
Wakeman, Arthur G., Appleton, Wis. Apparatus for feeding pulp or fiber to paper making machinery. 1,903,151; Mar. 28.
Walker, Harry, Milnrow, near Rochdale, assignor of one-half to John Holroyd & Company Limited, Milnrow, near Rochdale, England. Worm gearing. 1,903,273; Mar. 28.
Wamhoff, William, F., Emblem, Wyo., and W. H. Thompson, Canton, Ill., assignors to International Harvester Company. Planter attachment for tractors. 1,902,924; Mar. 28.
Ward, George M., East Weymouth, Mass. Sales indicator. 1,902,925; Mar. 28.
Ward Leonard Electric Company. (See Kebler, Leonard, assignor.)
Ward, Mark. (See Willans, P. W., and Ward.)
Warner Bros. Pictures, Inc. (See Ross, Arthur, assignor.)
Warren, Edward F. and H. Schwarze, Birmingham, assignors to General Motors Corporation, Detroit, Mich. Transmission lock. 1,903,017; Mar. 28.
Wassell, Frank L., assignor to Remington Rand Inc., Buffalo, N. Y. Index. 1,903,206; Mar. 28.
Waterbury, John H.. (See Benjamin, R. B., and Waterbury.)
Waterbury Tool Company, The. (See Rouse, Warren E., assignor.)
Watson, Archie S., Highland Park, Mich. Garage handling mechanism. 1,903,274; Mar. 28.
Watson, George V. E., and R. O. Stubbins, Seattle, Wash. Mural decoration. 1,903,152; Mar. 28.
Wearn's Inventions, Ltd. (See Wilhelm, Harold F., assignor.)
Webster Electric Company. (See Dally, Roy, assignor.)
Weir, James B., New Dorp, assignor, by mesne assignments, to Standard Mirror Company, Inc., Buffalo, N. Y. Clock and mirror holder. 1,903,153; Mar. 28.
Wemp, Ernest E., Detroit, Mich. Clutch. 1,903,275; Mar. 28.
West, Frank R., and T. E. Carpenter, Detroit, Mich.; said Carpenter assignor to said West. Control device for electric circuits. 1,902,926; Mar. 28.
Westinghouse Electric & Manufacturing Company. (See Jackson, Ray P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Sandin, Jerome, assignor.)
Weston, William E., Kansas City, Mo. Heating and drying apparatus. 1,902,927; Mar. 28.
Weymouth, Harry G., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meter. 1,903,074; Mar. 28.
Wheeler, Vernon L., Sault Ste. Marie, Mich. Diestock. 1,902,909; Mar. 28.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
White, Franklin R. (See Ross, F. N., and White.)
White, Morris, New York, N. Y., assignor to Morris White Mfg. Co. Inc. Hand-bag. Des. 89,554; Mar. 28.
White, Morris, Mfg. Co. (See White, Morris, assignor.)
Whiteley, Frank A., Minneapolis, Minn. Thermostat. 1,902,979; Mar. 28.
Wicks, John, Oak Park, R. G. Richardson, Chicago, and J. I. Bellamy, Brookfield, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,903,207; Mar. 28.
Wilhelm, Harold F., East Orange, N. J., assignor, by mesne assignments, to Wearn's Inventions, Ltd., Auckland, New Zealand. Belt tightening pulley. 1,902,980; Mar. 28.
Willans, Peter W., Towcester, and M. Ward, London, England, assignors to Radio Corporation of America. Electrical transformer. 1,903,075; Mar. 28.
Willheim, William, Co. (See Schweizer, Jack, assignor.)
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,557; Mar. 28.
Williams, Armand A., assignor of one-fourth to L. Fink and one-fourth to G. K. Sweeney, Ghent, W. Va. Automatic gate. 1,903,208; Mar. 28.
Williams, William D., jr., Richmond, Ind. Kitchen cabinet. Des. 89,559; Mar. 28.
Willman, Charles, Retsil, Wash. Tool. 1,903,252; Mar. 28.
Wilmet, Georges, New York, N. Y., assignor to Armstrong Cork Company, Lancaster, Pa. Container cap. Des. 89,560; Mar. 28.
Wingler, August. (See Schulemann, W., Schönhöfer, and Wingler.)
Winkler, Kurt, Finsterwalde, Niederlausitz, Germany. Wood plate. 1,903,076; Mar. 28.
Winthrop Chemical Company. (See Hersberg, W., and Lange, assignors.)
Winthrop Chemical Company. (See Schulemann, W., Schönhöfer, and Wingler, assignors.)
Wirth, Dorsey M., Bucyrus, Ohio. Belt buckle. 1,902,981; Mar. 28.
Wohlbieter, Joseph W., East Orange, N. J., assignor to Keystone Stamping Corporation. Mopstick head. 1,903,018; Mar. 28.
Wolf, Harry R., assignor to General Motors Research Corporation, Detroit, Mich. Uniting dissimilar metals. 1,903,077; Mar. 28.
Woodall Industries Incorporated. (See Scott, Allison F. H., assignor.)
Woolman, Nelson E., Hermosa Beach, Calif., assignor to General Motors Research Corporation. Valve mechanism. 1,903,078; Mar. 28.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,079; Mar. 28.
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,080; Mar. 28.
Worthington, Charles C., Dunfield, N. J. Gang lawn mower. 1,902,928; Mar. 28.

Wotherspoon, Henry H., Lawrence, Mass., assignor to Mathias Klein & Sons, Chicago, Ill. Lineman's belt. 1,903,081; Mar. 28.
Wright, Esmond P. G., and G. C. Hartley, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Automatic or semi-automatic telephone exchange system. 1,903,019; Mar. 28.
Wullert, Wichard W., and W. E. Bennett, Bend, Oreg. Electromagnet. 1,903,154; Mar. 28.
Yanga, Eleuterio S., Valladolid, Occidental Negros, P. I. Fish trap. 1,903,276; Mar. 28.
Yumamoto, Eijiro. (See Fujii, Tokutaro, assignor.)
Zahn, Karl, Frankfort-on-the-Main, Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Condensation product or isatin-α-anilide and substituted anthrones and producing same. 1,902,929; Mar. 28.
Zenz, John, and H. R. Kennedy, Los Angeles, Calif.; said Zenz assignor to said Kennedy. Brake tester. 1,903,020; Mar. 28.
Zero Ice Corporation. (See Cordrey, Almon J., assignor.)
Zubaty, Joseph, Flint, Mich. Fuel pump. 1,902,930; Mar. 28.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Pressure gauge. 1,902,931; Mar. 28.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Instrument mounting. 1,902,932; Mar. 28.
Zubaty, Joseph, assignor to A C Spark Plug Company, Flint, Mich. Electric gasoline gauge. 1,902,933; Mar. 28.
Zwilgmeyer, Frithjof, Hamburg, assignor to National Aniline Chemical Company, Inc., New York, N. Y. Trisazo dye. 1,903,021; Mar. 28.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 28TH DAY OF MARCH, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Arbrading, polishing, or like surfacing tool. A. Fiset. 1,902,844; Mar. 28.
Acetals of cyclic ketones with polyhydric alcohols and preparing the same. G. Kränzlein, E. Dickhäuser, and A. Voss. 1,902,866; Mar. 28.
Advertising device. F. D. Fisher. 1,903,103; Mar. 28.
Advertising device, Aerial. J. Picco. 1,903,131; Mar. 28.
Aeroplane. G. Crompton, jr. 1,902,813; Mar. 28.
Air conditioning apparatus. L. P. Reiss. 1,903,137; Mar. 28.
Air conditioning apparatus. D. Tenney. 1,903,250; Mar. 28.
Air conditioning control. S. M. Anderson. 1,902,818; Mar. 28.
Airfoil, Metallic. E. A. Hughes. 1,902,956; Mar. 28.
Air heater. D. W. Lake. Re18,777; Mar. 28.
Air under pressure, Apparatus for supplying. G. W. Gille. 1,903,233; Mar. 28.
Allo-MS-naphthodianthrones. M. A. Kunz and K. Koeberle. 1,902,867. Mar. 28.
Alloy of nickel, silver, tin, and copper. 1,903,192; Mar. 28.
Amines of the benzyl-anilid type, Manufacturing substituted secondary. W. Herzberg and H. Lange. 1,902,854; Mar. 28.
Aminoquinolines and making the same, Substituted. W. Schulemann, F. Schönhöfer, and A. Wingler. 1,903,196; Mar. 28.
Amusement device. K. Koschka. 1,903,116; Mar. 28.
Anchoring device. O. F. Goransson. 1,903,214; Mar. 28.
Angle multisector. S. E. Bray. 1,902,989; Mar. 28.
Animal fibers, Dyeing. A. Fischesser. 1,903,175; Mar. 28.
Antislap ring. C. R. McMinn, J. T. Robinson, and J. B. Holliday. Re18,776; Mar. 28.
Antitoxicant for fats and oils. R. C. Newton and D. P. Grettie. 1,903,126; Mar. 28.
Anvil, Stitching machine. H. R. Bliss and H. G. Allen. 1,902,825; Mar. 28.
Arch support. J. H. Golden. 1,902,952; Mar. 28.
Automatic gate. A. A. Williams. 1,903,208; Mar. 28.
Automobile body. F. Humer. 1,902,999; Mar. 28.
Automobile, Device for preventing retrograde movement of an. J. L. Gonard. 1,903,178; Mar. 28.
Automobile lift. G. P. Ball. 1,902,820; Mar. 28.
Automobile seat. C. L. Roberts. 1,903,267; Mar. 28.
Awning and shutter, Combined. C. F. Miller. 1,902,879; Mar. 28.
Axle housing and making the same. L. Blackmore. 1,903,088; Mar. 28.
Bait, Artificial. J. W. Catarau. 1,903,256; Mar. 28.
Ball bearing. G. O. Hodge. 1,903,217; Mar. 28.
Bank, Coin. S. Breck. Des. 89,549; Mar. 28.
Bank, Savings. A. C. Grunwald. 1,903,177; Mar. 28.
Baseboard element, Metallic. H. M. Reed, jr. 1,903,244; Mar. 28.
Beam and mounting frame for Axminster looms. J. Goch. 1,903,040; Mar. 28.
Belt, Lineman's. H. H. Wotherspoon. 1,903,081; Mar. 28.
Binder. J. J. Lynch and E. F. Barvoets. 1,902,965; Mar. 28.
Bit: *See*—
Rotary bit.
Blanks and similar articles with jumped heads, Manufacture of. M. O. Ruska. 1,903,245; Mar. 28.
Block: *See*—
Chain block. Fuse block.
Bobbin or spool winding machine. T. C. Hughes. 1,903,261; Mar. 28.
Boot hook. T. F. Hammer. Des. 89,558; Mar. 28.
Bowl or similar article, Sugar. C. B. Ilgenfritz. Des. 89,561; Mar. 28.
Box: *See*—
Coil box.
Box for milk bottles and other articles. D. S. Koch and W. Newberry. 1,903,266; Mar. 28.
Box for typewriter ribbons, Stock. G. D. Atwood. Des. 89,547; Mar. 28.
Brake control for vehicle wheels. A. Arato. 1,902,819; Mar. 28.
Brake operating mechanism. E. A. Rockwell. 1,903,138; Mar. 28.
Brake tester. J. Zenz and H. R. Kennedy. 1,903,020; Mar. 28.
Brakes, Mounting railway car hand. R. W. Burnett. 1,902,812; Mar. 28.
Brushes for generators, motors, motor-generators, or starters and the like, Sanding-in armature. L. T. Faley. 1,903,101; Mar. 28.
Bucket, Concrete. B. H. Kersting. 1,902,863; Mar. 28.
Buckle, Belt. D. M. Wirth. 1,902,981; Mar. 28.
Building covering. E. R. Black. 1,903,023; Mar. 28.
Burner: *See*—
Oil burner.
Burner. H. D. Dufault. 1,903,032; Mar. 28.
Burner for liquid or semiliquid fuel. R. W. Titmas and R. S. Hickish. 1,902,920; Mar. 28.
Cabinet for radioreceivers. I. Goldberg. Des. 89,555; Mar. 28.
Cabinet, Kitchen. W. D. Williams. Des. 89,559; Mar. 28.
Calculating machine. C. M. F. Friden. 1,903,105; Mar. 28.
Calculating machine. J. E. W. Greve. 1,903,179; Mar. 28.
Cam grinding apparatus. C. G. Trefethen. 1,903,149; Mar. 28.
Camera back for exposing light sensitive photographic plates, Rotatable turret. F. A. Lathe. 1,902,869; Mar. 28.
Can: *See*—
Oil can.
Capacitor. W. M. Bailey. 1,902,942; Mar. 28.
Car heating, cooling, and ventilating means. I. N. Fraver. 1,903,037; Mar. 28.
Carbon combustion furnace. C. B. Francis. 1,903,036; Mar. 28.
Carburetor. R. Oppenheim. 1,902,887; Mar. 28.
Card, Display. E. C. Chittum. 1,902,992; Mar. 28.
Card holder. W. J. Ecker, jr. 1,903,098; Mar. 28.
Carrier: *See*—
Rear axle carrier.
Carrier for pneumatic dispatch systems. V. H. Jackson. 1,902,856; Mar. 28.
Casing: *See*—
Gear casing.
Casing for universal joints. C. W. Spicer and G. L. Tarbox. 1,902,976; Mar. 28.
Casing head equipment. L. M. C. Seamark. 1,902,906; Mar. 28.
Casket. A. F. H. Scott. 1,903,197–8; Mar. 28.
Ceiling construction. C. R. Birdsey. 1,902,835; Mar. 28.
Cellular products, Forming. W. L. Ellerbeck. 1,902,993; Mar. 28.
Chain block. E. Knight. 1,903,218; Mar. 28.
Chain conveying apparatus. A. Marone. 1,902,873; Mar. 28.
Chair. D. E. Austin, P. R. Bissell, and E. W. Crutchfield. 1,903,253; Mar. 28.
Charcoal from charcoal fines, Producing activated. M. E. Barker. 1,902,986; Mar. 28.
Chromium plating process. W. M. Phillips. 1,903,130; Mar. 28.
Circuit breaker. R. P. Jackson. 1,902,958; Mar. 28.
Circuit control, Electric. A. Ross. 1,903,069; Mar. 28.
Clamp: *See*—
Rope clamp.
Clamp for permanent hair waving, Hair. K. G. Ströher. 1,903,249; Mar. 28.
Classifying table. E. Stump. 1,902,917; Mar. 28.
Clock and mirror holder. J. B. Weir. 1,903,153; Mar. 28.
Clock case and lamp or similar article, Combined. J. Gottlieb. Des. 89,556; Mar. 28.
Closure for metal containers. E. Rosenblueth. 1,903,011; Mar. 28.
Closure for metallic barrels or containers. E. Rosenblueth. 1,903,012; Mar. 28.
Closure operating device. T. B. Mattingly. 1,903,056; Mar. 28.
Clutch: *See*—
Key clutch.
Clutch. E. E. Wemp. 1,903,275; Mar. 28.
Clutch mechanism. L. J. Campbell. 1,902,990; Mar. 28.
Coffee making machine. H. Harper. 1,903,111; Mar. 28.
Coil box, Loading. T. Laurent. 1,903,054; Mar. 28.
Coin controlled device. O. D. Jennings and E. Mihalek. 1,903,048; Mar. 28.
Combination table. L. J. Buckley. 1,903,026; Mar. 28.
Communication with moving trains. H. A. Affel and E. I. Green. 1,902,817; Mar. 28.
Compression ring. G. M. M. Grant. 1,903,107; Mar. 28.
Condensation product of isatin-α-anilide and substituted anthrones and producing same. E. Zahn. 1,902,929; Mar. 28.
Condenser: *See*—
Variable condenser.
Connecting rod. J. T. Onstott. 1,903,064; Mar. 28.
Container. F. Fortuna and S. Giannangelo. 1,903,104; Mar. 28.
Container cap. G. Wilmet. Des. 89,560; Mar. 28.

Container closure. J. W. and A. Erhard. 1,903,099; Mar. 28.
Container for solid carbon dioxide, Insulated. A. J. Cordrey. 1,903,169; Mar. 28.
Control device for electric circuits. F. R. West and T. E. Carpenter. 1,902,926; Mar. 28.
Control, System of automatic. J. Leonpacher. 1,903,055; Mar. 28.
Controlling means for knitting machines. N. Levin. 1,902,870; Mar. 28.
Conveying jack. A. L. Kern. 1,903,115; Mar. 28.
Cooler: *See*—
Oil cooler.
Counter stiffener. M. L. Dodge. 1,903,031; Mar. 28.
Counter stiffener and forming it. H. A. Jordan. 1,903,050; Mar. 28.
Coupling: *See*—
Pipe coupling. Shaft coupling.
Coupling. F. A. Talbot. 1,902,919; Mar. 28.
Coupling device for keyboards. L. Deutsch. 1,902,840; Mar. 28.
Current sources. R. Rechnitzer. 1,902,894; Mar. 28.
Cushioning device for slicing machines. A. C. Sensow. 1,902,908; Mar. 28.
Cutting machine. C. B. Gray. 1,903,234; Mar. 28.
Decarbonizing apparatus. G. F. Thomas. 1,903,016; Mar. 28.
Deep well drill. R. Giesey. 1,903,232; Mar. 28.
Deflating machine. J. Wahl. 1,902,923; Mar. 28.
Dental instrument. J. H. Greene. 1,902,850. Mar. 28.
Design wheel. J. J. Sanders. 1,902,903; Mar. 28.
Diestock. V. L. Wheeler. 1,902,909; Mar. 28.
Dipper. D. H. Meyer. 1,903,123; Mar. 28.
Door, Cast steel bottom drop. J. A. Lamont and F. A. Lorenz, jr. 1,902,868; Mar. 28.
Door operating mechanism. C. W. Horton. 1,903,182; Mar. 28.
Door, Sectional. C. E. Paget. 1,903,065; Mar. 28.
Drafting instrument. J. V. Koester. 1,902,865; Mar. 28.
Drill: *See*—
Deep well drill.
Drill. J. D. Nixon. 1,902,885; Mar. 28
Drums and the like, Head retainer for. C. H. Rollason. 1,903,010; Mar. 28.
Drying device for wood, brick, pottery, etc., provided with heat recovering devices. J. G. Olsson and F. I. E. Stenfors. 1,903,063; Mar. 28.
Dump, Vehicle. L. D. Fiskin. 1,903,176; Mar. 28.
Dust protector device. J. F. Martin. 1,902,874; Mar. 28.
Dye, Trisazo. F. Zwilgmeyer. 1,903,021; Mar. 28.
Dyestuffs of the acridine series, Making nitrogenous vat. E. Honold and G. Boehner. 1,903,181; Mar. 28.
Dyestuffs of the benzanthrone series, Production of vat. P. Nawiasky and J. Mueller. 1,902,883; Mar. 28.
Earth boring apparatus. J. F. Mellor. 1,902,968; Mar. 28.
Electric control unit. H. D. Colman and D. J. Stewart. 1,903,231; Mar. 28.
Electric fluid heater. W. J. Baker. 1,902,877; Mar. 28.
Electric heater. H. G. Landis. 1,903,219; Mar. 28.
Electric switch. H. J. Hammerly. 1,903,180; Mar. 28.
Electric switch, Push button. M. G. Rees. 1,903,135; Mar. 28.
Electric valve operator. H. D. Colman and D. J. Stewart. 1,903,229; Mar. 28.
Electric valve operator. D. J. Stewart. 1,903,230; Mar. 28.
Electrical stunning device. H. D. Tefft. 1,902,901; Mar. 28.
Electrical transformer. P. W. Willans and M. Ward. 1,903,075; Mar. 28.
Electrode for vapor gas electric devices. W. T. Anderson, jr. 1,902,936; Mar. 28.
Electrode, Welding. A. C. Castle. 1,902,948; Mar. 28.
Electromagnet. W. W. Wullert and W. E. Bennett. 1,903,154; Mar. 28.
Electromagnetic switch. D. A. Christian. 1,903,211; Mar. 28.
Electromagnetic wet separation, Automatic. H. B. Arden. 1,902,937–8; Mar. 28.
Elevator arrangement, Industrial. R. G. and W. M. Cory. 1,903,092; Mar. 28.
Elevators, Safety cableless multiple. M. E. Breed. 1,902,946; Mar. 28.
Engine: *See*—
Internal combustion engine.
Engine structure, Internal combustion. D. F. Asbury. 1,903,160; Mar. 28.
Expansion and contraction joint, Combined. A. C. Fischer. 1,902,844; Mar. 28.
Extractor: *See*—
Fruit juice extractor.
Eye and eyelash for dolls, Combined. V. Keney. 1,902,816; Mar. 28.
Fastener. A. E. Jannopoulo. 1,903,000; Mar. 28.
Feed, Mineral. P. Caldwell. 1,902,832; Mar. 28.
Felt rubber roller. T. Fujii. 1,903,038; Mar. 28.
Fences, Making expanded metal. C. M. MacChesney. 1,902,966; Mar. 28.
Fiberboard manufacture and apparatus therefor. F. S. Farley. 1,903,102; Mar. 28.
Filamentary material, Method and apparatus for the manufacture of. R. Hazel. 1,902,953; Mar. 28.
Film developer and dried. J. W. Ferguson. 1,903,174; Mar. 28.
Filtering device, Centrifugal. H. W. Abbott. 1,902,982; Mar. 28.
Fish trap. E. S. Yanga. 1,903,276; Mar. 28.
Flange protector. L. J. Lemert. 1,903,220; Mar. 28.
Floor construction. J. R. Bowman. 1,902,829; Mar. 28.
Floors, Apparatus for forming concrete. H. W. Roos. 1,902,898–9; Mar. 28.
Flying machine. G. F. Myers. 1,903,009; Mar. 28.
Form, collapsible tire. H. D. Stevens. 1,903,202; Mar. 28.
Frost eliminator for vehicles. H. Paquette. 1,902,888; Mar. 28.
Froth flotation and material employed to effect the same. O. D. Cunningham. 1,902,839; Mar. 28.
Fruit juice extractor. C. E. Elliott and L. O. Nichols. Re18,778; Mar. 28.
Fuel and producing it, Prepared. B. F. J. Odell. 1,902,886; Mar. 28.
Fuel, Antiknock. F. E. L. Busch. 1,903,255; Mar. 28.
Fuel briquette, Producing a carbonized. L. M. Johnston. 1,903,237; Mar. 28.
Fuel pump. J. Zubaty. 1,902,930; Mar. 28.
Furnace: *See*—
Carbon combustion furnace.
Furnace equipment. W. A. Darrah. 1,902,931; Mar. 28.
Fuse and current limiting resistor, Combination. J. Sandin. 1,902,902; Mar. 28.
Fuse block. J. Messing. Re18,779; Mar. 28.
Gaining head. T. J. Johnson. 1,903,002; Mar. 28.
Game. H. B. Polak. 1,903,133; Mar. 28.
Game, Basket ball. A. S. Bishop. 1,903,254; Mar. 28.
Game device, Pin-ball amusement. A. D. Pearson. Des. 89,552; Mar. 28.
Gang operated switch. J. J. Desmond. 1,903,095; Mar. 28.
Garage handling mechanism. A. S. Watson. 1,903,274; Mar. 28.
Gas compressor, Liquid displacement. D. G. Griswold. 1,903,108; Mar. 28.
Gas, Thermal decomposition of natural. C. E. Starr. 1,903,247; Mar. 28.
Gasoline gauge, Electric. J. Zubaty. 1,902,933; Mar. 28.
Gate: *See*—
Automatic gate.
Gauge: *See*—
Gasoline gauge. Wheel aligning gauge.
Pressure gauge.
Gauge. E. E. Hans. 1,902,998; Mar. 28.
Gear: *See*—
Screw gear.
Gear casing. G. H. Acker. 1,902,934; Mar. 28.
Gear for aircraft, Landing. J. Lloyd. 1,903,186; Mar. 28.
Gearing, Frictional. B. Thomson. 1,903,228; Mar. 28.
Gearing, Worm. H. Walker. 1,903,273; Mar. 28.
Gears, Cutting. E. C. Head. 1,093,043; Mar. 28.
Generator: *See*—
Oil gas generator.
Glass in gathering basins, Circulating. A. F. McNish. 1,903,223; Mar. 28.
Glass-sealing instrument, Safety. F. H. Bell. 1,902,987; Mar. 28.
Grease dispensing device. J. H. Becker. 1,902,822; Mar. 28.
Ground working implement, Rotary. T. S. Miller and L. L. J. L., and S. L. Chong. 1,903,124; Mar. 28.
Guard for truck chains. J. F. Lafferty. 1,903,120; Mar. 28.
Gun, Grease. J. L. Snodgrass. 1,903,227; Mar. 28.
Guy strand guard and lock. J. Blackburn. 1,902,945; Mar. 28.
Hair curling device. R. Pezzella. 1,903,066; Mar. 28.
Hair trimmer and dresser. J. Keenan. Re18,781; Mar. 28.
Hand-bag. M. White. Des. 89,554; Mar. 28.
Hanger: *See*—
Suspension hanger.
Hanger for oil well pumping rigs, Straight lift beam. C. Furit. 1,903,034; Mar. 28.
Headlight. W. H. Kay and E. McDaniel. 1,902,860; Mar. 28.
Heat treatment, Automatically timed apparatus for. G. Browning. 1,903,089; Mar. 28.
Heater: *See*—
Air heater. Electric heater.
Electric fluid heater.
Heater for locomotives, Feed water. W. Parks. 1,902,969; Mar. 28.
Heater, Manufacturing an electric water. L. W. Hodges. 1,903,045; Mar. 28.
Heating and drying apparatus. W. E. Weston. 1,902,927; Mar. 28.
Heating system, Automobile. A. Ream. 1,903,134; Mar. 28.
Heel concaving machine. M. W. Howard. 1,902,855; Mar. 28.
Heel-seat fitting machine. E. A. Bessom. 1,902,824; Mar. 28.
Heels, Covering breasts of. J. Gouldbourn and G. Hazelton. 1,902,848; Mar. 28.
Hinge. E. Meininghaus. 1,903,059; Mar. 28.
Hinge construction. H. E. Ahrens. 1,903,251; Mar. 28.
Hoe, mulcher, and weed destroyer. F. C. Palm. 1,903,264; Mar. 28.

Hoisting apparatus. W. A. Hummel. 1,903,235; Mar. 28.
Holder: *See*—
Card holder. License plate holder.
Clock and mirror holder. Shade holder.
Holder for Cooper-Hewitt tubes and inert gas tubes generally, Insulating. L. O'Rourke. 1,903,127; Mar. 28.
Holster, Pistol. I. Arth. 1,903,084; Mar. 28.
Hose rack. W. Barnes, jr. 1,903,085; Mar. 28.
Hydraulic jack. H. W. Bolens. 1,902,827; Mar. 28.
Hydraulic mechanism. J. O. Almen. 1,903,083; Mar. 28.
Index. F. L. Wassell. 1,903,206; Mar. 28.
Indicator: *See*—
Sales indicator.
Inkstand. R. W. Newman. 1,903,061; Mar. 28.
Instrument for controlling temperatures. R. W. Brown. 1,903,165; Mar. 28.
Interlocking two movements, Device for. M. L. Gianoli. 1,903,039; Mar. 28.
Internal combustion engine. D. F. Asbury. 1,903,159; Mar. 28.
Internal combustion engine. J. P. Burke. 1,902,831; Mar. 28.
Internal combustion engine. L. M. Woolson. 1,903,079–80; Mar. 28.
Jack: *See*—
Conveying jack. Hydraulic jack.
Joint: *See*—
Expansion and contraction joint.
Jump-training device. P. B. Flynn. 1,902,995; Mar. 28.
Keyboard transmitter. E. P. Bancroft. 1,092,943; Mar. 28.
Key clutch, Rotary. F. John. 1,903,049; Mar. 28.
Key, cotter. J. W. Peterson. 1,903,129; Mar. 28.
Kiln. L. L. Ladd. 1,903,117–18; Mar. 28.
Kiln furniture. L. L. Ladd. 1,903,119; Mar. 28.
Kilns and the like, Control system for rotary. V. Sahmel. 1,903,070; Mar. 28.
Knockdown assemblage. O. H. Merz, R. A. Arndt, and C. B. Lange. 1,903,122; Mar. 28.
Label. E. I. Petersen. Re18,782; Mar. 28.
Lace. J. Moosherr. Des. 89,551; Mar. 28
Ladies' hand-bag. E. Jabncke. Des. 89,545; Mar. 28.
Lamp, Recording. C. A. Packard. 1,903,128; Mar. 28.
Lamp, Shell. H. Cardon. 1,902,991; Mar. 28.
License plate. O. H. Anderson. 1,903,155; Mar. 28.
License plate holder, Automobile. C. R. Davis. 1,903,258; Mar. 28.
Lighting construction. R. B. Benjamin and J. H. Waterbury. 1,903,087; Mar. 28.
Linings, Applying brake shoe. N. F. McNaught and E. H. Peterson. 1,903,058; Mar. 28.
Lock: *See*—
Reverse lock. Valve lock.
Transmission lock.
Locomotive structure. W. L. Lentz and H. M. Pflager. 1,902,962; Mar. 28.
Loud speaker. H. K. Bouvier. 1,903,164; Mar. 28.
Machine and method for sewing buttons onto fabric or the like. F. N. Ross. 1,903,268; Mar. 28.
Machine for attaching buttons. F. N. Ross and F. R. White. 1,903,269; Mar. 28.
Machine for making collapsed cartons. F. G. Peck. 1,903,243; Mar. 28.
Machine tool. E. J. Kearney and J. B. Armitage. 1,903,114; Mar. 28.
Magnesium and high percentage magnesium alloys by rolling, Working. G. Schreiber. 1,902,905; Mar. 28.
Map display device for motor vehicles. W. Wagner. 1,902,884; Mar. 28.
Marionette control frame and cord wind-up. S. Adler and C. B. Blank. 1,902,983; Mar. 28.
Marker, Plot. R. R. Mason. 1,902,875; Mar. 28.
Mask for photoprinting machines, Adjustable. J. L. Barber. 1,902,984; Mar. 28.
Measuring device. T. E. Clark. 1,903,090; Mar. 28.
Metal shapes, Methods of and apparatus for making extruded seamless. S. W. Sparks. 1,902,975; Mar. 28.
Metals, Device for the electrothermic treatment of. W. Schabelitz. 1,902,896; Mar. 28.
Metals, Uniting dissimilar. H. R. Wolf. 1,903,077; Mar. 28.
Meter. H. G. Weymouth. 1,903,074; Mar. 28.
Meter fittings, Construction for orifice. H. H. Robinson. 1,903,068; Mar. 28.
Meter mechanism. T. R. Harrison. 1,902,852; Mar. 28.
Milk-dumping device. W. H. Paulson. 1,903,193; Mar. 28.
Milk product, Unfermented. R. P. Myers. 1,903,014; Mar. 28.
Milk, Unfermented acidophilus. R. P. Myers. 1,902,959; Mar. 28.
Mill, for pulverizing and the like. D. Y. Bryant. 1,903,166; Mar. 28.
Mold for cast stone and using the same. P. Tamagno. 1,902,977; Mar. 28.
Mooring and hoisting apparatus. W. E. Rouse. 1,902,972; Mar. 28.
Mopstick head. J. W. Wohlhieter. 1,903,018; Mar. 28.
Motor: *See*—
Potential electric motor.
Motor vehicle wheel. P. M. Miller. 1,903,189; Mar. 28.
Mounting for rotatable cylinders, Shaft. O. Mitchell. 1,903,060; Mar. 28.
Mounting, Instrument. J. Zubaty. 1,902,932; Mar. 28.
Mounting, Lens. C. E. Godley. 1,902,997; Mar. 28.
Mounting, Truck frame. F. H. Bender. 1,902,823; Mar. 28.
Mower blade. S. C. Jessup. 1,903,188; Mar. 28.
Mower, Gang lawn. C. C. Worthington. 1,902,928; Mar. 28.
Mural decoration. G. V. E. Watson and R. O. Stubbins. 1,903,152; Mar. 28.
Nozzle. D. Trompeter. 1,903,139; Mar. 28.
Nut and process of making, Lock. W. E. Sharp. 1,902,912; Mar. 28.
Nut bar for the manufacture of grip nuts and apparatus for forming the same, Forming. G. C. Easter. 1,902,841; Mar. 28.
Oil burner. W. M. Esterling. 1,903,100; Mar. 28.
Oil burner. F. A. Robinson. 1,903,195; Mar. 28.
Oil can. W. T. Faux. 1,902,994; Mar. 28.
Oil cooler. W. R. Ramsaur and T. P. Chase. 1,902,970; Mar. 28.
Oil gas generator. L. B. Harris. 1,903,042; Mar. 28.
Oil pump screen. C. L. McCuen. 1,903,005; Mar. 28.
Oil saver. C. S. Crickmer. 1,903,093; Mar. 28.
Opener, Package. F. Lepage and A. Martineau. 1,902,963; Mar. 28.
Ore flotation and flotation reagent. O. D. Cunningham. 1,902,838; Mar. 28.
Ornament, Shoe heel. P. Mariani. 1,903,004; Mar. 28.
Ornament, Table. R. F. Manning. Des. 89,546; Mar. 28.
Oversbot. A. L. Hampton. 1,902,851; Mar. 28.
Package, Display. J. R. Dow. 1,903,096; Mar. 28.
Packing gland. H. E. La Bour. 1,902,960; Mar. 28.
Packing machine for pulverulent material. K. Middelboe. 1,903,188; Mar. 28.
Pad and control therefor, Electric heating. G. Steerup. 1,903,015; Mar. 28.
Paper manufacture. B. Johnsen. 1,903,236; Mar. 28.
Parachute. W. J. Gleason. 1,903,213; Mar. 28.
Paranitraniline, Manufacture and purification of. A. B. Davis. 1,903,030; Mar. 28.
Pen, Plunger type. G. L. Bassett. 1,903,022; Mar. 28.
Pen, Plunger type. A. Bienenstein. 1,902,809–11; Mar. 28.
Pencil and lighter, Combined. A. G. Stevenson. 1,903,203; Mar. 28.
Petroleum oils, Treating. M. S. Darrow and L. S. Sweeney. 1,903,094; Mar. 28.
Phonograph pick-up, Electrical. S. Ruben. 1,902,900; Mar. 28.
Photographing device for high speed moving pictures. T. Subara. 1,903,204; Mar. 28.
Picture amusement device, Multiple. H. L. Perry. 1,903,226; Mar. 28.
Pie package. G. S. Frost. 1,903,212; Mar. 28.
Pile fabrics, Making. G. J. Underwood. 1,902,921; Mar. 28.
Pipe coupling. W. B. Damsel. 1,903,029; Mar. 28.
Piston. W. R. Hewitt. 1,903,216; Mar. 28.
Piston and wrist pin construction. C. A. Nevins. 1,903,191; Mar. 28.
Plant fiber material by cooking with phenolates, Decomposing. O. H. Strecker. 1,902,916; Mar. 28.
Plant or installation for extracting dust from minerals such as coal. S. Hunter. 1,903,046; Mar. 28.
Planter attachment for tractors. W. F. Wamhoff and W. H. Thompson. 1,902,924; Mar. 28.
Planter, Check row. J. H. Pinson. 1,902,891; Mar. 28.
Plate, Wood. K. Winkler. 1,903,076; Mar. 28.
Pliers. F. Sievern. 1,902,913; Mar. 28.
Plow attachment for tractors. W. S. Graham. 1,902,846; Mar. 28.
Plow, Tractor. W. S. Graham and A. D. Gallagher. 1,902,845; Mar. 28.
Potential electric motor, Small variable. A. Hochfeld. 1,902,954; Mar. 28.
Power control apparatus. D. L. Summey. 1,903,147; Mar. 28.
Power transmission mechanism. C. E. Henriod. 1,903,044; Mar. 28.
Power transmission mechanism. P. M. Salerni. 1,903,013; Mar. 28.
Press. W. H. Mason. 1,903,222; Mar. 28.
Pressure drum. H. J. Kerr and G. D. Ebbets. 1,902,862; Mar. 28.
Pressure gauge. J. Zubaty. 1,902,931; Mar. 28.
Projector, Episcope. C. Semenitz. 1,902,907; Mar. 28.
Protecting device for electric distributing systems. L. G. Dupois and G. Tinel. 1,903,033; Mar. 28.
Protective system. J. Jonas. 1,903,001; Mar. 28.
Protector: *See*—
Flange protector.
Pulley, Belt tightening. H. F. Wilhelm. 1,902,980; Mar. 28.
Pulp or fiber to paper making machinery, Apparatus for feeding. A. G. Wakeman. 1,903,151; Mar. 28.
Pulverizer. C. C. Jamieson. 1,902,857; Mar. 28.
Pump: *See*—
Fuel pump.
Pumping system. H. E. La Bour. 1,902,961; Mar. 28.
Rack: *See*—
Hose rack.
Radiator. A. B. Modine. 1,902,880; Mar. 28.
Radiator. A. B. Modine. 1,903,125; Mar. 28.

Radiator. E. W. Seaholm and G. E. Parker. 1,903,141; Mar. 28.
Radio apparatus. D. F. Asbury. 1,903,156; Mar. 28.
Ratchet wrench. N. F. McNaught and E. H. Peterson. 1,902,878; Mar. 28.
Rear and parking view attachment. P. W. Leilland. 1,903,239; Mar. 28.
Rear axle carrier. C. H. Sterling. 1,903,146; Mar. 28.
Receptacle: *See*—
Solid CO_2 receptacle.
Receptacle. A. von Frankenberg. 1,902,978; Mar. 28.
Receptacle cover. F. Inocencio. Des. 89,544; Mar. 28.
Receptacle having a handle. R. H. Lewis. 1,903,185; Mar. 28.
Rectifying tube. H. J. Spanner and U. Doering. 1,903,144–5; Mar. 28.
Reflector, Photography light. F. Simpson. 1,903,071; Mar. 28.
Refrigerating system, Solid-CO_2. A. J. Cordrey. 1,903,170; Mar. 28.
Reproducing and recording device, Combined. R. Dally. 1,902,950; Mar. 28.
Resistance strip and making same. N. C. Schellenger. 1,903,142; Mar. 28.
Resistance unit. L. Kebler. 1,902,861; Mar. 28.
Retarding device for machinery. S. E. T. Ewing and A. L. Egan. 1,903,035; Mar. 28.
Reverse motion lock, Automatic safety. A. B. Small. 1,903,199; Mar. 28.
Reversing mechanism. F. O. Snow, jr. 1,903,200; Mar. 28.
Ring: *See*—
Antislap ring. Compression ring.
Rod: *See*—
Connecting rod.
Rod and axle construction, Radius. F. M. Reid. 1,903,136; Mar. 28.
Rod weeder shoe. C. W. Robinson. 1,902,897; Mar. 28.
Roll and bun splitter. S. P. Larson. 1,903,238; Mar. 28.
Roller: *See*—
Felt rubber roller.
Roofing. L. F. Long. 1,902,872; Mar. 28.
Rope clamp. S. C. Swisher. 1,903,148; Mar. 28.
Rotary bit. W. C. Bailey. 1,902,941; Mar. 28.
Rubber articles and making the same, Reinforced vulcanized. G. R. Lockhart. 1,902,871; Mar. 28.
Rubber weather-strip. F. C. Palenske. 1,903,225; Mar. 28.
Sales indicator. G. M. Ward. 1,902,925; Mar. 28.
Screen: *See*—
Oil pump screen.
Screw gear. F. Kuba. 1,903,053; Mar. 28.
Seal for gems. A. Bulova. 1,902,830; Mar. 28.
Sealing and thrust balancing means. W. H. Carrier. 1,903,210; Mar. 28.
Sealing means. O. O. Oppenlaender and R. H. Carter. 1,903,242; Mar. 28.
Seat: *See*—
Automobile seat.
Sewing machine, Blind stitch button. M. McCann. 1,903,057; Mar. 28.
Shade for an electric lamp. G. E. McFadden. Des. 89,550; Mar. 28.
Shade holder. E. W. Carpenter, C. La Reau, and H. M. Kellogg. 1,902,947; Mar. 28.
Shaft coupling. O. Baur and H. Lempp. 1,903,162; Mar. 28.
Shaving machine. G. R. Bett. 1,902,988; Mar. 28.
Shears. C. Dahl. 1,903,257; Mar. 28.
Shield, Exhaust valve stem. D. F. Asbury. 1,903,158; Mar. 28.
Shield, Expansion. R. E. McIntosh. 1,903,241; Mar. 28.
Ships, Apparatus for riveting plates of. G. H. Bates. 1,902,821; Mar. 28.
Shock absorber. G. K. McKee. 1,903,006; Mar. 28.
Sign illuminating mechanism, Vending machine. S. Michlik and C. L. O'Reilly. 1,903,008; Mar. 28.
Signal for use on commercial and other records. F. L. Impey. 1,903,047; Mar. 28.
Signaling system. R. K. Potter. 1,902,893; Mar. 28.
Silica and making same, Prepared. F. M. McClenahan. 1,903,187; Mar. 28.
Sintering machine. E. W. Shallock. 1,902,911; Mar. 28.
Sintering machine. G. E. Swinehart. 1,902,918; Mar. 28.
Slide. C. E. Anderson. 1,902,935; Mar. 28.
Slug casting machine. A. V. Gilbert. 1,902,847; Mar. 28.
Socket, Shock absorbing. R. B. Benjamin. 1,903,086; Mar. 28.
Soda and potassium hydroxide, Production of. C. T. Thorsseil. 1,903,073; Mar. 28.
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March 7, 1933

Trade-Marks	221—No	301,474. to No.	301,694, inclusive.
T. M. Renewals	20		
Labels	26—No.	41,808 to No.	41,833, inclusive.
Prints	2—No.	14,086 to No.	14,087, inclusive.
Reissues	6—No.	18,756 to No.	18,761, inclusive.
Designs	50—No.	69,383 to No.	69,432, inclusive.
Patents	972—No.	1,899,921 to No.	1,900,893, inclusive.
Total	1,339		

Interference Notice

U. S. Patent Office, *Washington, Feb. 8, 1933.*

Harry Eggert, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the applications for patent of Daniel A. Brennan, of 10 South La Salle Street, Chicago, Ill., and Harry Eggert, care of A. G. Schneider, 10 South La Salle Street, Chicago, Ill., and a notice of such declaration sent to said Eggert at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Eggert, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. Patent Office, *Washington, Feb. 7, 1933.*

Motor Car Painting & Trimming Co., its assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Motor Car Painting & Trimming Co., 1444 Michigan Avenue, Chicago, Ill., No. 179,521, dated February 12, 1924, and the notice of such proceeding sent by registered mail to the said Motor Car Painting & Trimming Co., at the said address, having been returned by the post office as undeliverable, notice is hereby given that unless said Motor Car Painting & Trimming Co., its assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Changes in Classification

Order No. 3,235, February 20, 1933, directs:

In *class 234, Recorders* (Division 23), establish the following subclasses and definitions, these subclasses to be coordinate with and immediately preceding subclass 6:

5.3 Inclination.
5.4 Weighing.
5.5 Machine efficiency or output.
5.6 Vibration.
5.7 Sphygmographs.

5.3. INCLINATION. Devices for making a record of the amount and/or direction of deviation from the vertical. Includes bore-hole direction recorders.

Note.—See class 33, Geometrical Instruments, subclasses 204 and 206; class 177, Electric Signaling, subclass 251; and class 255, Earth Boring, subclasses 1 and 72.

5.4. WEIGHING. Devices for recording weight when the novelty resides in the recorder only.

Note.—For combinations of scale structure and recorders, where the weighing mechanism is an essential part, see class 265, Forch Measuring, subclasses 3–9.

5.5. MACHINE EFFICIENCY OR OUTPUT. Devices which record the amount of work performed by a machine or machines or the time of or speed of operation relative to that which is expected.

Note.—For time recorders, see this class, subclasses 36 and 36.5. For speed recorders, see this class, subclass 29, and the subclasses indented thereunder. For area integrators for lumber, see class 33, Geometrical Instruments, and class 235, Registers, subclass 61.

5.6. VIBRATION. Devices for recording the vibration of materials or machines.

Note.—For seismographs, see class 177, Electric Signaling, subclass 251. See also class 73, Measuring Instruments, subclass 51, and class 116, Signals and Indicators, subclass 129.

5.7. SPHYGMOGRAPHS. Devices for recording pulse-beats and heart-performance in general.

Note.—For sphygmoscopes, see class 73, Measuring Instruments, subclass 44.

The patents contained in these subclasses have been taken for the most part from class 234, subclasses 1 and 1.5.

Condition of Applications Under Examination at Close of Business February 18, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 55,326; Trade-Mark Division, 1,029. Oldest new case, Sept. 16, 1932; oldest amended, Sept. 16, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Sept. 23	Sept. 23	686
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Oct. 18	Oct. 18	990
4002	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Dec. 1	Nov. 22	640
7082	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 8	Nov. 5	455
3626	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 25	Nov. 29	471
4806C	6. LEWERS, A. M., Carbon Chemistry	Sept. 29	Oct. 3	1,126
5726	7. JARBOE, C. G., Optics; Photography	Oct. 24	Oct. 21	1,080
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Nov. 22	Nov. 26	419
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 25	Dec. 3	883
6812	10. HUNTER, O. P., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 1	Nov. 2	550
3087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Sept. 30	Oct. 10	626
7701	12. HENRY, C. C., Machine Elements	Nov. 1	Oct. 26	571
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Oct. 31	Oct. 31	709
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Nov. 26	Nov. 26	894
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 17	Oct. 17	1,344
5612	16. SPENCER, C. J., Telegraphy; Telephony	Nov. 20	Nov. 20	578
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Sept. 27	Sept. 27	1,180
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 12	Dec. 12	331
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Sept. 30	Sept. 28	1,265
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking.	Dec. 12	Dec. 15	345
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 18	Oct. 20	942
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Oct. 8	Oct. 12	778
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Sept. 28	Oct. 4	685
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 19	Dec. 21	457
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Oct. 10	Oct. 10	1,220
5808	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Nov. 1	Nov. 4	532
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Nov. 25	Nov. 25	637
4628	28. BENSON, A. R., Internal-Combustion Engines	Sept. 19	Sept. 19	1,618
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling.	Oct. 3	Oct. 6	498
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Oct. 20	Nov. 26	628
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 7	Oct. 6	1,206
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 21	Nov. 21	606
6006	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 1	Oct. 1	1,373
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Sept. 30	Sept. 30	966
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Sept. 30	Sept. 30	877
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Sept. 16	Sept. 16	1,430
5890	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Oct. 29	Nov. 5	705
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Sept. 28	Sept. 28	726
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Sept. 27	Sept. 27	1,001
7580	40. OBERLIN, J. J., Receptacles	Oct. 18	Oct. 18	1,621
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Oct. 8	Oct. 8	664
5882	42. CUTTING, H. O., Electric Signaling	Sept. 20	Sept. 22	1,150
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 3	Oct. 3	1,157
4067B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Sept. 19	Sept. 26	831
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 8	Dec. 8	808
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Oct. 3	Oct. 7	588
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Oct. 4	Oct. 6	1,440
5731	48. ROEPKE, O. B., Electricity, General Applications	Oct. 18	Oct. 12	716
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Sept. 19	Sept. 28	908
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Sept. 22	Sept. 30	1,268
5628	51. BACKUS, C. D., Radiant Energy	Nov. 10	Nov. 10	919
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Oct. 14	Oct. 14	866
6807	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	Dec. 14	Dec. 9	490
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 8	Oct. 8	985
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Nov. 28	Nov. 29	312
	55. BOWEN, S. T.—Designs	†Jan. 20	†Jan. 20	321
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 6	Oct. 6	1,002
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Oct. 18	Oct. 18	568
5808	58. DOWELL, E. F., Abrading; Typewriting	Oct. 14	Oct. 14	615
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Oct. 1	Oct. 6	756
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Sept. 27	Sept. 27	1,141
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 5	Oct. 8	839
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Oct. 15	Oct. 12	1,242
4889	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Sept. 27	Oct. 3	1,239
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 3	Oct. 3	981
3624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Sept. 26	Sept. 27	1,299
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†Jan. 18	†Feb. 6	880
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	†Jan. 18	†Jan. 26	149

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Barber

No. 3,048. Decided December 27, 1932

Design—Patentability—Flash Light Tubes.

A design for a flash light tube *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Messrs. Bohleber & Ledbetter and *Mr. Frederick Griswold, jr.*, for Barber.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.:*

Appellant has made application to the United States Patent Office for a patent upon a claimed new, original, and ornamental design for a flashlight tube. The design is embodied in a form of a flashlight tube, having a tubular body member, with screw threads for caps at each end, with circumferential beads near each end back of the threads, and with the body between these beads provided with longitudinal corrugations. These corrugated portions consist of six stripes, each having approximately nine parallel corrugations, which corrugations terminate at each end, some distance from said beads. Between the corrugated portions and between the ends of the corrugations and the beads, the surface of the tube is smooth. This arrangement, it is claimed by the appellant, gives the design the appearance of being panelled, and thus distinguishes it from the references which were cited by the Examiner and Board of Appeals, both of which tribunals rejected the claim for a patent.

These references are: Harsha, 22,186, January 31, 1893; Arkell, 29,594, November 1, 1898; "Long Range Pocket Flashlight," shown in Price List issued by National Carbon Co., Inc., of New York (May 1, 1926).

The basic reference relied upon is the design for a flashlight tube shown in the price list of the National Carbon Company. This reference shows a flashlight tube having threaded ends, and beads substantially as shown by appellant here. It also shows a series of corrugations extending lengthwise of the tube, these also ending at some distance from each end of the tube. The only appreciable difference between appellant's design and that of this reference is that, in the reference, there are but three corrugations in each longitudinal stripe and the intervening smooth portions are comparatively wider. There are also a greater number of such stripes in said reference.

The Board of Appeals calls attention to the fact that there is nothing inventive in appellant's design for a multiplicity of corrugations, arranged as appellant has arranged them, in view of Harsha, who shows stripes of four corrugations, and Arkell, who shows six. We agree with the Board in this respect.

The single question involved here is whether appellant's design is original and inventive. This must be determined by the appeal of the design to the eye. The number of corrugations may differ somewhat, but is the essential conception of the designer the same? To our minds, no substantial distinction exists, and the design is, therefore, unpatentable. *Gorham Company* v. *White*, 14 Wall. 511, 526; *Imperial Glass Co.* v. *Heisey & Co.*, 294 Fed. 267; *Martin Copeland Co.* v. *Pilot Elec. Co.*, 32 F.(2d) 235, 885 O. G. 513; *In re Walter*, 17 C. C. P. A. (Patents) 962, 39 F.(2d) 724, 896 O. G. 706; *In re Schierholtz*, 18 C. C. P. A. (Patents) 765, 45 F.(2d) 283, 402 O. G. 523; *In re Jordan*, 19 C. C. P. A. (Patents) 726, 53 F.(2d) 274, 414 O. G. 572; *In re Sadacca*, 19 C. C. P. A. (Patents) 1123, 56 F.(2d) 1085, 421 O. G. 854.

The decision of the Board of Appeals is affirmed. Affirmed.

U. S. Court of Customs and Patent Appeals

Hammers *v.* Bethenod

No. 3,028. Decided December 19, 1932

Interference—Priority—Reduction to Practice and Diligence.

Evidence reviewed and *Held* that priority was properly awarded to B. on the ground that, if H. was the first to conceive the invention, he had not established a reduction to practice thereof prior to B.'s effective date and had not established that he was diligent in reducing the invention to practice from the time that B. entered the field until he (H.) reduced the invention to practice.

Appeal from the Patent Office. Affirmed.

Mr. Frank B. Lloverance, jr., for Hammers.

Mr. Charles E. Tullar for Bethenod.

Lenroot, *J.:*

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner of Interferences, awarding priority of invention of the subject matter of the counts in issue to appellee.

There are seven counts involved, of which counts 2 and 3 are illustrative and read as follows:

Count 2. A method of electric welding or cutting by means of three independent three-phase arcs produced between the parts to be welded or cut, and two electrodes juxtaposed but insulated from each other, the parts to be welded or cut being connected to the third pole of the source of three phase current.

Count 3. A method of electric welding or cutting by means of two independent two phase arcs produced between the parts to be welded and two electrodes juxtaposed but insulated from each other, the parts to be welded or cut being themselves connected to the common conductor of a source of two phase current with three wires.

As indicated by the counts above quoted, the invention involved herein relates to polyphase electric arc welding or cutting, and the invention is directed to the use of a two-phase or a three-phase electrical-welding device; in the three-phase device, two electrodes are connected to two of the three wires of a three-phase electrical supply, said electrodes being

placed close together but insulated one from the other; the work upon which the welding is to be done is connected to the third leg of the three-phase system; in the two-phase device, the work upon which the welding is to be done is connected to the common wire of a two-phase, three-wire system, the other two wires of the system being connected to two electrodes which are close together but insulated from each other. While it is not an element of either of the counts quoted, the invention also involves an automatic switch or cut out, the purpose of which is to cut off the supply to the electrodes when the same are so far removed from the work as to break the arc from the electrodes to the work, thus preventing the maintenance of an arc from one electrode to the other after actual welding operations have been terminated.

Appellant's application was filed on November 1, 1926. Appellee's application was filed on January 5, 1926, and for dates of conception and reduction to practice he relies upon an application filed in France on January 8, 1925, for counts 1, 2, 4 and 5, and upon an application filed in France on October 15, 1925, for counts 3, 6 and 7. It is conceded that appellee is entitled to said dates of filing in France for conception and reduction to practice of the invention.

Appellant was formerly a resident of the Netherlands and came to the United States about the first of October, 1920. He testified that he conceived the invention, made drawings of the same, and constructed a device which supported all of the counts in issue before coming to this country; that he brought some of his drawings and some parts of his device with him to this country; that most of his drawings, made in the Netherlands, were lost or destroyed; a drawing was introduced in evidence, however, by appellant as Exhibit A, which he testified was one of the drawings he brought with him from the Netherlands. He further testified that the welder constructed in the Netherlands was so constructed as to operate on a fifty-cycle, 380-volt power supply, and that, inasmuch as power is supplied in the United States at either 30 or 60 cycles and 440 volts, the welder described by appellant as having been constructed in Holland could not be operated in the United States. He also testified that some of the parts brought to this country could be used, but that it was necessary to tear down and rebuild the transformers on a larger scale; that upon his arrival in this country he could not speak the English language, had difficulty in finding employment and, as a consequence, did not begin the construction of a new machine until early in 1924; that early in 1924, and thereafter until he filed his application for patent, he was engaged in business for himself in the operation of an electrical business in Grand Rapids, Mich.; that a drawing, introduced in evidence as Exhibit C, of the machine thereafter constructed was made in April of that year; that this machine was completed in June, 1924, and satisfactorily operated at that time. His testimony with respect to satisfactory operation was in response to questions which will hereafter be referred to. He further testified that thereafter he, together with his associate, one Winterhalter, began the construction of what is termed by appellant "a more perfect commercial machine," embodying the invention, and that said machine was ready for operation in October, 1925.

Appellant contends that the record establishes by a preponderance of evidence that the invention involved was disclosed by appellant to said Winterhalter, to appellant's wife, and to three other persons who were not experts in the electrical art, in the summer of 1924, and that all of said persons witnessed successful tests of the invention. All of said persons testified in behalf of appellant.

Both the Examiner of Interferences and the Board of Appeals held that conception of the invention prior to his filing date, November 1, 1926, had not been established by appellant; that if conception should be awarded to appellant in 1924, it was not established that the machine alleged to have been constructed in that year was operated and tested sufficiently to constitute a reduction to practice of the invention, and was therefore nothing more than an abandoned experiment; and that, even though conception be awarded to appellant in 1924, he had not shown diligence from immediately prior to appellee's entry into the field, namely January 8, 1925, as to counts 1, 2, 4 and 5, and October 15, 1925, as to counts 3, 6 and 7, to appellant's filing date, November 1, 1926. Therefore both Patent Office tribunals awarded priority of invention to appellee as to all of the counts in issue. From this award by the Board of Appeals appellant takes this appeal.

While a number of errors have been assigned by appellant, there is really but one question before us for determination, and that is whether, upon the record herein, appellant has established by a preponderance of evidence conception of the invention involved before appellee entered the field and reduction to practice prior to that time, or, if not reduced to practice before such time, whether he was diligent from immediately prior to appellee's entry into the field until his (appellant's) reduction of the invention to practice, constructively or otherwise.

As heretofore indicated, appellant relies for corroboration of both conception and reduction to practice of the invention upon the testimony of his associate, Winterhalter, his wife, and three nonexpert witnesses. Appellee seasonably filed in the Patent Office a motion to strike out specified questions and answers of appellant's witnesses because the questions were either leading or called merely for conclusions of nonexpert witnesses. This motion was denied by the Examiner. We do not find it necessary to pass upon this question because we are in accord with the conclusions of the Examiner of Interferences and the Board of Appeals that, even though said motion be denied, appellant has not established by a preponderance of evidence either reduction of the invention to practice before appellee's entry into the field, or diligence in reducing it to practice from immediately prior to appellee's entry into the field until appellant did reduce it to practice. Holding this view, we may assume that appellant's conception of the invention is established by a preponderance of evidence as not later than June, 1924, which was some time prior to appellee's entry into the field. We therefore come to an examination of the evidence in the case bearing upon the question of reduction to practice of the invention, assuming, without deciding, that it was conceived by appellant at the time above stated.

The invention involves an apparatus for the welding or cutting of materials. It is clear that such a device, in order to constitute a reduction to practice of the invention, must be tested to demonstrate that the apparatus will accomplish the purpose intended. Careful examination of the testimony discloses that there is no evidence as to what the material was that was claimed to have been welded in 1924, and there is no evidence that a useful weld was accomplished. It is true that appellant gave the following answers to questions propounded by his counsel:

Q79. When was the machine completed and first successfully operated in this country?
A. In June, 1924.
Q84. Was this first machine thoroughly and practically operative for arc welding, and did every essential part of it work efficiently when it was first constructed?
A. Yes, it was thoroughly operative. The principle of the machine was working in good condition.

The witness Winterhalter, appellant's associate, answered a question propounded by appellant's counsel as follows:

Q37. Did this machine operate successfully at that time, June, 1924?
A. Yes.

Later in his testimony, with reference to a cut-out device alleged to have been used in said machine in 1924, he testified as follows:

Q40. Did it operate successfully?
A. Yes.

With reference to two-phase operation, he testified that he saw it operate in 1924, but there is no testimony, by way of conclusion or otherwise, that the two-phase operation was successful.

With respect to the nonexpert witnesses, while they all described the operation of a machine that they saw, which we assume embodied appellant's conception, none of them testified as to the material that was welded or the nature of the weld that was produced.

We therefore can not hold, upon the testimony of appellant and these witnesses, that the alleged tests of the machine demonstrated that the machine would accomplish the purpose for which it was intended. For these reasons we can not find that there was a reduction to practice of the invention embodied in the counts during 1924, and we therefore agree with the tribunals of the Patent Office that the construction and alleged use of said machine during 1924 was only an abandoned experiment.

There is no evidence in the record upon which a reduction of the invention to practice can be based prior to October, 1925. Appellant's testimony is that, shortly after said alleged tests in June, 1924, he borrowed $700 from one Peter Horter, to be used for the promotion of a certain three-phase arc welder. This fact is established and the written agreement with respect to such loan is found in the record as an exhibit. The testimony of appellant and testimony on his behalf shows that thereafter work was begun, largely handwork, on the construction of a larger machine which would be commercially useful for all welding purposes. There is no testimony as to the dates of such activities, but both appellant and his associate Winterhalter testified that the second machine was built and ready for operation in October, 1925. This was about 10 months after appellee entered the field as to counts 1, 2, 4 and 5, and at about the time of appellee's entry into the field as to counts 3, 6 and 7. Appellant was chargeable with diligence in reducing his invention to practice from immediately prior to January 8, 1925, as to counts 1, 2, 4 and 5, and from immediately prior to October 15, 1925, as to counts 3, 6 and 7. Assuming, without deciding, that if the second machine had been completed and successfully tested in October, 1925, as alleged, diligence upon the part of appellant should be presumed, because of the character of the construction of the machine, from January, 1925, to October, 1925, we can not find that it is established by a preponderance of the evidence that said second machine was constructed and ready for operation in October, 1925. Appellant's testimony upon this point, after describing the second machine, is as follows:

Q110. When was the machine again in operative condition?
A. October, 1925.
Q111. Did you again use the machine *at that time*, and to what extent? (Italics ours.)
A. I used the machine, after it was finished, at the Certain-Teed Products, at Beverly, on steel ovens for about three days; at the Grand Rapids Road Equipment Company on road scraper parts; Michigan Chair Company, on steam boiler; then I put it in the plant of Haven-Busch Wire Company where they used it on sheet metal for two months.
Q112. Did the machine work perfectly satisfactorily on all of these jobs?
A. Yes, it did.

It will be observed that the plain effect of this testimony is that, beginning in October, 1925, the machine was ready for use and was tested in the places named in appellant's testimony. Were this testimony of appellant corroborated and there were no other testimony in the record tending to rebut the same, we of course should hold that the second machine was completed in October, 1925. The testimony of appellant's associate Winterhalter upon this point, after describing the construction of the second machine, is as follows:

Q55. When was the machine next in usable condition after you altered it from its original construction?
A. I would say that was in about October, 1925.
Q56. Did you put it to any use *at that time*?
A. Yes, that is in our shop, *shortly after we had it out on demonstration.* (Italics ours.)
Q57. Where did you put it out on demonstration?
A. At a wire company, the Haven-Busch Wire Works in Grand Rapids.
Q58. Do you know what type of work it was used on in that plant?
A. Sheet iron and steel.
Q59. How long was it in use in the plant?
A. Four weeks I believe approximately.
* * * * * * *
Q62. *After having demonstrated the machine in that condition in October, 1925*, what did you next do with the machine?
A. Well, we of course took it to the shop, and we made new patterns for a new cabinet and a new track, and immediately started completing the new type automatic control switches. (Italics ours.)

This testimony, standing alone, clearly corroborates the testimony of appellant that the second machine was constructed and subjected to test beginning in October, 1925. Although appellant called no witnesses who were employees (or officials) of the concerns mentioned in his testimony and that of Winterhalter, nevertheless we should hold that the testimony of these witnesses, standing alone, was sufficient to establish the completion of the second machine in October, 1925.

When appellant closed his testimony, it certainly must have been the intention to have the Patent Office tribunals and a reviewing court, if the case should be reviewed, understand that the second machine was completed and used in October, 1925, or shortly thereafter.

Appellee, however, produced witnesses from the various firms at which said second machine was alleged to have been demonstrated, and it is clearly established, not only by the testimony of such witnesses, but by bills and invoices from appellant himself to the firms named in his testimony, that the use of said second machine by such firms was not in October, 1925, or shortly thereafter, but in the spring of 1927. This is not denied by appellant's counsel, either in his brief or upon oral argument. We may observe, in passing, that the testimony of these witnesses establishes that when the machine was used in their plants it satisfactorily accomplished the purpose for which it was intended.

We are loath to believe that appellant and his associate Winterhalter testified intentionally falsely upon this very important point, and we prefer to take the view that both were mistaken in their recollection of when said second machine was completed and ready for operation, and actually demonstrated in the manner described by them.

It is inconceivable to us that the second machine should have been completed in 1925 and no effort made to test it or demonstrate it thereafter for a period of about one year and a half. This is so contrary to the natural course of human action that we must find from the evidence in the case that such second machine was not constructed and ready for operation in October, 1925, and probably was not constructed and ready for operation until early in 1927.

While appellant contends that the discrepancy between appellant's testimony as to the tests of the second machine and the testimony introduced by appellee upon that subject is immaterial, it is, as a matter of fact, highly material because, unless we can find that the second machine was constructed in October, 1925, there is a clear want of evidence establishing diligence upon the part of appellant in reducing his invention to practice during the time when he was chargeable with such diligence. We can not find, upon the evidence, that appellant exercised the diligence required.

The second machine, which was successfully demonstrated in 1927, was designed for operation on three-phase electrical supply only. With respect to reduction to practice of the two-phase machine, the evidence is even less satisfactory than in the case of the three-phase machine, there being nothing in the record with respect to a two-phase machine of a date later than 1924, and we find no corroborating evidence that the invention embodied in the two-phase machine was reduced to practice prior to appellant's filing date, November 1, 1928.

From the record before us, and by which we are governed in arriving at our conclusion, we are compelled to hold that appellant has failed to establish by a preponderance of evidence that he was the first inventor of the invention set forth in the various counts here in issue, and the decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,118,547, W. C. Griffin, Fruit drying machine; 1,122,018, C. C. McIntosh, Fruit drying apparatus; 1,466,798, H. M. Miller, Apparatus for and method of peeling vegetables or fruits; 1,468,873, W. D. Bost et al., Apparatus for peeling fruits or vegetables, D. C., W. D. Wash., N. Div., Doc. 772, *Stebler-Parker Co.* v. *C. M. Bryant* (*Fruit Machines Co.*). Dismissed with prejudice Dec. 22, 1932.

1,122,018. (See 1,118,547.)

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,239,852, F. K. Vreeland, Receiver of electrical impulses; 1,544,081, same, Transmitting intelligence by radiant energy; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc E 73/254, *Radio Corp. of America et al.* v. *John Wanamaker, N. Y.*

1,180,159, I. Langmuir, Incandescent electric lamp; 1,410,499, A. Pacz, Metals and their manufacture; 1,687,510, M. Pipkin, Electric lamp bulb, D. C., S. D. Calif. (Los Angeles), Doc. E Y-93-C, *General Electric Co.* v. *Standard Woodenware & Specialty Co.* Decree for plaintiff Dec. 20, 1932.

1,182,090. (See 1,695,557.) 1,195,632. (See 1,173,079.)

1,223,659, W. S. Barnickel, Treatment of crude oil; 1,467,831, same, Process for treating petroleum emulsions; 1,596,589, 1,596,590, M. De Groote, same, D. C., S. D. Calif. (Los Angeles), Doc. Y-39-C, *The Tretolite Co. et al.* v. *Oil Field Chemical Corp., Ltd., et al.* Decree for plaintiff Nov. 18, 1932.

1,231,764, F. Lowenstein, Telephone relay; 1,618,017, same, Wireless telegraph apparatus; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier; 1,507,016, L. De Forest, Radio signaling system; 1,507,017, same, Wireless telegraph and telephone system, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/253, *Radio Corp. of America et al.* v. *John Wanamaker, N. Y.*

1,239,852. (See 1,173,079.)

1,240,459, C. J. Klein, Electric switch; 1,651,035, 1,783,665, G. J. Meur, same, appeal filed Dec. 24, 1932, C. C. A., 2d Cir., Doc. 12493, *Cutler-Hammer, Inc.*, v. *Carling Tool & Machine Co., Inc.*

1,256,491, W. E. Urschel, Process for snipping string beans; 1,256,492, 1,336,991, same, Apparatus for snipping string beans, appeal filed Dec. 22, 1932, C. C. A., 4th Cir., Doc. 3443, *Chisholm-Ryder Co., Inc.*, v. *B. I. Buck.*

1,256,492. (See 1,256,491.)

1,257,084, A. E. Lard, Golf club, filed Jan. 5, 1933, D. C., S. D. N. Y., Doc. E 73/340, *The Metallic Shaft Co.* v. *A. G. Spalding & Bros.*

1,259,917, E. L. Sharpneck, Heel for shoes; 1,718,177, W. H. Nutt, Heel covering, filed Nov. 9, 1932, D. C., E. D. Pa., Doc. 7375, *United Shoe Machinery Corp.* v. *W. F. Cowon, jr., et al.*

1,279,454, D. H. Schweyer, Train stopping apparatus; 1,389,602, same, Automatic train control system, C. C. A., 3d Cir., Doc. 4679, *Schweyer Electric & Mfg. Co.* v. *Reading Co. et al.* Decree affirmed Jan. 4, 1933.

1,320,384, Godbold & Fletcher, Drill cutter; 1,480,014, F. L. Scott, Self-cleaning roller drill; 1,647,753, Scott & Wellenstek, Drill cutter, D. C., W. D. Okla. (Oklahoma City), Doc. E 1188, *Hughes Tool Co.* v. *Garber Tool Co.* Patent held valid and infringed Dec. 23, 1932.

1,336,991. (See 1,256,491.)

1,374,970, E. V. Weyand, Garment material, filed Jan. 6, 1933, D. C., S. D. N. Y., Doc. E 73/345, *Cockcroft Arts, Inc.*, v. *Novelties, Inc., et al.*

1,389,602. (See 1,279,454.) 1,403,475. (See 1,231,764.)

1,410,499. (See 1,180,159.)

1,423,956, Mitchell & White, Tipless incandescent lamp; 1,687,510, M. Pipkin, Electric lamp bulb, filed Dec. 14, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-85-J, *General Electric Co.* v. *S. Fujotha et al.* (*Union Importing Co.*).

1,440,168. (See Re. 17,393.)

1,448,279, 1,579,392, Pridham & Jensen, Electro dynamic receiver; 1,881,324, H. E. Metcalf, Signal reproducer, filed Dec. 23, 1932, D. C., S. D. Calif. (Los Angeles), Doc. E Y-99-H, *The Magnavox Co.* v. *Lansing Mfg. Co., et al.*

1,465,332. (See 1,231,764.) 1,466,798. (See 1,118,547.)

1,467,831. (See 1,223,659.) 1,468,873. (See 1,118,547.)

1,469,305. (See 1,683,096.) 1,480,014. (See 1,320,384.)

1,486,883, E. P. Halliburton, Method of hydrating cement; 1,500,385, same, Method of and apparatus for mixing material, filed Oct. 27, 1932, D. C., W. D. La. (Shreveport), Doc. E 510, *E. P. Halliburton, et al.* v. *E. L. Hunt.* Doc. E 511, *E. P. Halliburton et al.* v. *A. D. King et al.*

1,500,385. (See 1,486,883.) 1,507,016. (See 1,231,764.)

1,507,017. (See 1,231,764.)

1,526,982, E. W. Hill, Stencil sheet, D. C., S. D. N. Y., Doc. E 73/99, *A. B. Dick Co.* v. *Molling Equipment Corp. et al.* Consent decree for plaintiff (notice Jan. 9, 1933). Same, D. C., E. D. Pa., Doc. 7365, *A. B. Dick Co.* v. *Safe Guard Corp.* Consent decree for injunction Jan. 10, 1933.

1,529,544. (See 1,683,096.)

1,537,564, E. B. Symons, Gyratory cone crusher; 1,537,565, same, Process of crushing hard material, D. C., E. D. Wis. (Milwaukee), Doc. ——, *Nordberg Mfg. Co.* v. *Smith Engineering Works.* Patent held valid Dec. 29, 1932.

1,537,565. (See 1,537,564.) 1,544,081. (See 1,173,079.)

1,573,374. (See 1,173,079.) 1,579,392. (See 1,448,279.)

1,596,589. (See 1,223,659.) 1,596,590. (See 1,223,659.)

1,597,129, L. L. Watters, Bed-pan cleanser and sterilizer, D. C., S. D. N. Y., Doc. E 54/40, *L. L. Watters et al.* v. *The Kny-Scheerer Corp.* Patent sustained (notice Jan. 6, 1933).

1,611,012, F. H. Flowers, Three-way dump motor truck body, appeal filed Apr. 16, 1932, C. C. A., 3d Cir., Doc. 4898, *F. H. Flowers* v. *Mayor Car Corp.*

1,618,017. (See 1,231,764.)

1,621,360, R. N. Falge, Incandescent lamp, D. C., E. D. N. Y., Doc. E 6605, *General Electric Co.* v. *P. Sorensen Mfg. Co., Inc.* Consent decree for plaintiff Jan. 6, 1933.

1,622,957. (See Re. 17,393.) 1,633,789. (See 1,815,745.)

1,646,173, 1,693,005, M. C. Steichen, Hair waver, filed Dec. 28, 1932, D. C., S. D. N. Y., Doc. E 73/285, *M. C. Steichen* v. *A. D. Powers.*

1,647,753. (See 1,320,384.)

1,648,808, L. A. Hazeltine, Wave signaling system, filed Jan. 5, 1933, D. C., S. D. N. Y., Doc. E 73/337, *Hazeltine Corp.* v. *Pilot Radio & Tube Corp. et al.*

1,651,035. (See 1,240,459.)

1,658,223, L. Blackmore, Refrigerator control, filed Jan. 9, 1933, D. C., S. D. Iowa. (Des Moines), Doc. 4497, *Frigidaire Corp.* v. *W. G. MacGregor.*

1,683,096, R. M. Pyles, Rotary jar; Re. 15,760 (of 1,469,305), 1,529,544, J. A. Kammerdiner, same, D. C., S. D. Calif. (Los Angeles), Doc. E Y-83-H, *J. A. Kammerdiner* v. *Bush-Ross Tool Co.* "Decree after settlement by the parties Dec. 29, 1932".

1,687,510. (See 1,423,956 and 1,180,159.)

1,693,005. (See 1,646,173.)

1,695,557, R. H. Myers, Spark plug testing device; 1,836,891, C. W. Price, same; 1,182,090, A. P. Jackson, same, D. C., E. D. Mich. (Detroit), Doc. 5489, *Wayne Equipment Mfg. Co., Inc.*, v. *Champion Spark Plug Co.* Bill and counter-claim dismissed Dec. 28, 1932.

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/257, *Ruben Condenser Co. et al.* v. *Dumont Electric Co., Inc., et al.* Same, filed Jan. 20, 1933, D. C., S. D. N. Y., Doc. E 73/454, *Ruben Condenser Co. et al.* v. *A. M. Fleckheim & Co., Inc.*

1,714,191. (See 1,710,073.)

1,716,670, L. B. Sperry, Device for launching and landing aeroplanes from and upon suspended positions, D. C., E. D. N. Y., Doc. E 4082, *W. B. Perkins, jr., et al.* v. *The Lawrence Sperry Aircraft Co., Inc.* Patentee held in suit under Sec. 4915 R. S. to be first inventor Nov. 30, 1932.

1,718,177. (See 1,259,917.)

1,726,113, E. C. Miller, Machine for making annular pieces of candy, C. C. A., 2d Cir., Doc. 12056, *E. C. Miller et al* v. *Life Savers, Inc.* Decree affirmed (notice Jan. 9, 1933).

1,728,879. (See 1,173,079.)

1,755,114, L. A. Hazeltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/250, *Hazeltine Corp.* v. *Simplex Radio Corp.* Same, D. C., E. D. N. Y., Doc. E 6727, *Hazeltine Corp.* v. *Michaels Bros., Inc.* Consent decree for plaintiff Jan. 3, 1933.

1,755,115. (See 1,755,114.)

1,763,380, 1,798,962, C. E. Trube, Electric coupling system, D. C., S. D. N. Y., Doc. E 73/146, *Hazeltine Corp.* v. *Emerson Radio & Phonograph Corp.* Consent order of discontinuance (notice Dec. 29, 1932).

1,771,020, Thurm & Engels, Traveling tray ovens, C. C. A., 2d Cir., Doc. 12261, *Baker Perkins Co., Inc.*, v. *T. Roulston, Inc.* Decree affirmed (notice Jan. 9, 1933).

1,783,665. (See 1,240,459.)

1,789,949, A. Georgiev, Electrolytic cell, D. C., S. D. N. Y., Doc. E 57/340, *Aerovox Wireless Corp.* v. *Concourse Electric Co., Inc.* Dismissed Jan. 6, 1933.

1,797,205, H. W. Houck, Electron tube apparatus, D. C. Del., Doc. E 901, *Dubilier Condenser Corp.* v. *Pilot Radio & Tube Corp.* Dismissed Dec. 31, 1932.

1,798,962. (See 1,763,380.)

1,814,464, L. E. Baltzley, Machine for snelling fish hooks; 1,861,198, W. S. Torrence, Snelling machine; 1,869,857, H. W. Meyer, Fishhook snelling machine, filed Nov. 14, 1932, D. C., E. D. Pa., Doc. 7379, *W. H. Meyer & Son, Inc.*, v. *H. C. Kaufman.*

1,815,745, R. E. Thompson, Safety razor; 1,633,789 H. J. Gaisman, same, appeal filed Dec. 15, 1932, C. C. A. 2d Cir., Doc. 12478, *Gillette Safety Razor Co.* v. *Hewis Hardware Co.*

1,832,437, L. J. Wahl, Vibrator, D. C., E. D. Wis. (Milwaukee), Doc. 3596, *Wahl Clipper Corp.* v. *Andis Clipper Co. et al.* Claim 7 held void, dismissed for want of equity Jan. 4, 1933.

1,833,225, Neimeyer & Bruebaker, Tire, D. C., N. D. Ohio E. Div., Doc. 4321, *H. F. Freeman* v. *Seiberling Rubber Co* Dismissed Jan. 11, 1933.

1,836,891. (See 1,695,557.)

1,845,302, 1,857,055, W. A. MacDonald, Coupling system, filed Dec. 23, 1932, D. C., S. D. N. Y., Doc. E 73/251, *Hazeltine Corp.* v. *Simplex Radio Co.*

1,846,615, H. W. Russ. Wood heel grooving machine; 1,860,789, W. N. Sawyer, same, filed Nov. 9, 1932, D. C., E. D. Pa., Doc. 7373, *United Shoe Machinery Corp.* v. *W. F. Cowon, jr., et al.*

1,857,055. (See 1,845,306.) 1,860,789. (See 1,846,615.)

1,861,198. (See 1,814,464.) 1,869,857. (See 1,814,464.)

1,881,324. (See 1,448,279.)

1,881,324, H. E. Metcalf, Signal reproducer, filed Jan. 4, 1933, D. C., E. D. Mich. (Detroit), Doc. 5725, *The Magnavox Co.* v. *P. Smith Stamping Co., Inc.*

Re. 15,760. (See 1,683,096.)

Re. 17,393 (of 1,622,957), J. Mayer, Hair waving appliance and method; 1,440,163, E. Martin, Method for producing permanent waves in hair, filed Dec. 27, 1932, D. C., N. D. Ohio, E. Div., Doc. 4558, *The Philad Co. et al.* v. *The Nestle-Le Mur Co.*

Re. 18,879. (See 1,173,079.)

Des. 87,020. F. E. Packard, Shoe, D. C., S. D. N. Y., Doc. E 71/358, *G. E. Keith Co.* v. *K. & C. Shoe Co., Inc.* Consent decree for plaintiff (notice Jan. 9, 1933).

Des. 87,433, W. F. Haas, Button; Des. 87,434, same, Clasp. D. C., S. D. N. Y., Doc. E 72/40, *B. Blumenthal & Co., Inc.*, v. *Dickson Mfg. Co.* Consent decree for plaintiff (notice Jan. 4, 1933).

Des. 87,434. (See Des. 87,433.)

Des. 88,021. (See Des. 88,652.)

Des. 88,021, W. Willheim, Textile fabric; Des. 88,318, H. S. Murray, same, filed Dec. 29, 1932, D. C., S. D. N. Y., Doc. E 73/311, *W. Willheim Co., Inc.*, v. *R. H. Macy & Co., Inc.*

Des. 88,211. (See Des. 88,652.)

Des. 88,211, W. Willheim, Textile fabric; Des. 88,652, C. R. Hellman, same, filed Dec. 29, 1932, D. C., S. D. N. Y., Doc. E 73/310, *W. Willheim Co., Inc.*, v. *Freerose Dress Co., Inc., et al.*

Des. 88 315. (See Des. 88,652.)

Des. 88,316. (See Des. 88,652.)

Des. 88,318. (See Des. 88,021.)

Des. 88,464. (See Des. 88,652.)

Des. 88,652. (See Des. 88,211.)

Des. 88,652, Des. 88,464, C. R. Hellman, Textile fabric; Des. 88,315, Des. 88,316, H. S. Murray, same; Des. 88,211, Des. 88,021, W. Willheim, same, filed Dec. 29, 1932, D. C., S. D. N. Y., Doc. E 73/305, *W. Willheim Co., Inc.*, v. *Rose Silk Mills, Inc., et al.*

T. M. 75,658, The Amies Asphalt Co., Bituminous product, appeal filed June 18, 1932, C. C. A. 3d Cir., Doc. 4937, *Amiesite Asphalt Co. of America* v. *Interstate Amiesite Co.* (To correct error in 426 O. G., p. 8, originally published as Des. 75,568).

Adjudicated Patents

(D. C. Idaho) Smith patent, No. 1,262,860, for incubator, claims 1 and 2 *Held* infringed. *Smith* v. *Jensma*, 1 F. Supp. 999.

(C. C. A. N. Y.) Stein and Austin patent, No. 1,564,378, for bleached and dyed furs, claims 17 and 20 *Held* invalid and the other claims *Held* valid and infringed. *Steinfur Patents Corporation* v. *William Beyer, Inc.*, 62 F.(2d) 238.

(C. C. A. N. Y.) Stein and Austin patent, No. 1,573,200, for process of bleaching and dyeing furs, *Held* valid and infringed. *Id.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,812,749, R. H. Kienle and W. H. Schelber, Resinous material and method of making same, decided February 6, 1933, claims 1, 2, 3, 4, 5, 6, 7, 9, 11, and 12.

Pat. 1,869,681, P. K. Frolich, Method for the production of normally liquid hydrocarbons from gaseous or lower boiling hydrocarbon materials, decided February 9, 1933, claim 1.

Disclaimers

1,839,402.—*Rudolf Lorant*, Vienna, Austria. APPARATUS FOR TRANSFERRING DATA FROM PERFORATED RECORDS. Patent dated January 5, 1932. Disclaimer filed February 17, 1933, by the assignee, *The Tabulating Machine Company.*

Hereby enters this disclaimer to that part of the claims in said specification which is in the following words, to wit:

"1. A device for transferring data represented by perforations in a sheet to a receiving device comprising a sensing mechanism for simultaneously sensing a plurality of positions in one or more columns on the sheet for perforations, a receiving device and control means for controlling the latter successively in accordance with perforations in different columns on the sheet.

"2. A device for transferring perforations comprising a sensing mechanism for simultaneously sensing a plurality of columns of a record card, a punch, and controlling means for the punch controlled by the sensing mechanism to effect column by column operation of the punch in accordance with the simultaneous sensing of a plurality of columns by the sensing mechanism."

"4. A device for transmitting data comprising a sensing mechanism for simultaneously searching a plurality of positions in a plurality of columns on a sheet for perforations, a receiving device and a transmitter having a set of elements connected to the sensing mechanism, a second set of elements connected to the receiving device and means for coordinating the two sets of elements to transmit the several data according to the simultaneous sensing of the sheet successively to the receiving device.

"5. A device for transmitting data comprising a sensing mechanism for simultaneously searching a plurality of columns of a record sheet for perforations, a receiving device including mechanism for registering data successively column by column on the receiving device and a transmitter having a set of elements connected to the sensing mechanism, a second set of elements connected to the successively operating registering mechanism of the receiving device and means for coordinating the two sets of elements to bring the successively operating mechanism under control of the searching mechanism for column by column operation."

1,847,739.—*Arthur M. Wilhelm*, Randolph, N. Y. AVIATION MARKER. Patent dated March 1, 1932. Disclaimer filed February 3, 1933, by the patentee.

I disclaim the subject matter of claims 1 and 2 of my Patent No. 1,847,739, except as they apply to an aviation marker having an external information-imparting shape.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

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TRADE-MARKS

OFFICIAL GAZETTE, MARCH 7, 1933

[VOL. 428. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,763. J. E. OHLSENS ENKE, Copenhagen, Denmark. Filed June 6, 1932.

HELIOS

For Seeds, Such as Field, Vegetable, or Flower Seeds, Particularly Cauliflower Seeds, Bulbs, and Plants.
Claims use since May, 1924.

Ser. No. 334,249. EAGLE OTTAWA LEATHER COMPANY, Chicago, Ill., and Grand Haven, Mich. Filed Jan. 23, 1933.

DOWN CUSHION

For Leather.
Claims use since June, 1930.

Ser. No. 334,250. EAGLE OTTAWA LEATHER COMPANY, Chicago, Ill., and Grand Haven, Mich. Filed Jan. 23, 1933.

IROQUOIS

For Leather.
Claims use since Sept. 1, 1930.

CLASS 2

Receptacles

Ser. No. 333,947. GEORGE L. POWNALL, Cincinnati, Ohio. Filed Jan. 14, 1933.

KOLDEROL

For Ice Making Cans and Molds.
Claims use since Dec. 14, 1932.

Ser. No. 333,975. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Filed Jan. 16, 1933.

MENASHA frosty PACKIT

The word "Packit" is disclaimed apart from the mark as shown in the drawing.
For Receptacles Made of Pulp—Namely, Cartons.
Claims use since Sept. 1, 1932.

Ser. No. 333,976. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Filed Jan. 16, 1933.

MENASHA HUSKY PACKIT

The word "Packit" is disclaimed apart from the mark as shown in the drawing.
For Receptacles Made of Pulp—Namely, Cartons.
Claims use since Sept. 1, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 333,689. SAKS & COMPANY, New York, N. Y. Filed Jan. 5, 1933.

PATHFINDER IMPERIAL

For Trunks, Handbags, Suitcases and Other Forms of Luggage—Namely, Hat Boxes, Kit Bags, and Brief Cases.
Claims use since Nov. 4, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 331,833. OHIO LABORATORIES, INCORPORATED, Columbus, Ohio. Filed Nov. 2, 1932.



The drawing is lined for red and green. The representation of a man's face is fanciful. The words "Scotch," "Economical," and "Cleaner and Water Softener" are hereby disclaimed apart from the other features of the mark as shown in the drawing.

For Cleaning Compounds for General Use Having Incidental Water Softening Properties.

Claims use since June 21, 1932.

Ser. No. 332,681. A. J. BRYANT, doing business as Calite Mannfacturing Co., Los Angeles, Calif. Filed Dec. 2, 1932.

CALITE

For Colloidal Detergent—Namely, Soap.
Claims use since Oct. 27, 1931.

Ser. No. 332,964. SCOVILL MANUFACTURING COMPANY, Waterbury, Conn. Filed Dec. 10, 1932.

STONITE

For Razor Blade Sharpener Stones, Razor Hones, Razor Strops, Razor Strop Coatings and Softeners.
Claims use since Nov. 25, 1932.

Ser. No. 333,354. F. C. GALE & CO. INC., Boston, Mass. Filed Dec. 24, 1932.

Polmet
THE UNIVERSAL METAL POLISHING CLOTH

No claim is made to the words "The Universal Metal Polishing Cloth" aside from the mark as shown.

For Prepared Cleaning and Polishing Cloths.
Claims use since Nov. 19, 1925.

Ser. No. 333,537. GERTRUDE SOMMER, doing business as Sterling Cleaners, Chicago, Ill. Filed Dec. 30, 1932.

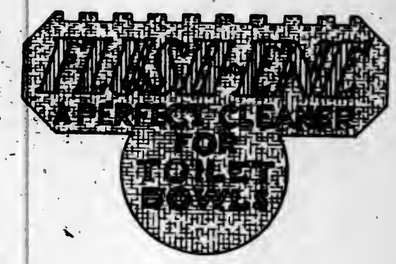


The ruling in the drawing indicates the color light red.

For Clothing and Fabric Dry Cleaner and Spot Remover.

Claims use since Nov. 21, 1932.

Ser. No. 333,727. CHURCHILL MFG. CO., Sioux City, Iowa. Filed Jan. 7, 1933.



The drawing is lined to indicate the colors red, yellow, and blue. No claim is made to the exclusive right to the words "A Perfect Cleaner for Toilet Bowls" apart from the other features of the mark as shown.

For Cleaning and Sterilizing Compounds—Namely, a Toilet Bowl Cleaner Which Incidentally May be Used for Cleaning Automobile Radiators.

Claims use since May 1, 1932.

Ser. No. 333,758. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Jan. 9, 1933.

PHOSFOAM

For Powdered Soap.
Claims use since 1924.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 322,178. RAYMOND LEE, St. Paul, Minn. Filed Dec. 16, 1931.



The representation of the female head is fanciful.

For Permanent Wave Solution and Permanent Wave Oil.

Claims use since Oct. 1, 1931.

Ser. No. 325,450. AMERICAN CHEMICAL PAINT COMPANY, Lower Gwynedd Township, Montgomery County, Pa. Filed Mar. 25, 1932.

GRANODE

For Chemical Rustproof Preventive Preparation.
Claims use since Feb. 20, 1932.

Ser. No. 325,938. A. BRESLAUER, INC., New York, N. Y. Filed Apr. 9, 1932.

TO-DAY'S

For Foundation Cream, Tissue Cream, Cleansing Cream, Face Powder, Rouge, Lipsticks, Astringent Lotion.
Claims use since Mar. 28, 1932.

Ser. No. 326,315. SEYDEL CHEMICAL COMPANY, Nitro, W. Va., and Jersey City, N. J. Filed Apr. 19, 1932.

AMINOCAINE

For Medicinal Compound Having Anesthetic and Antiseptic Qualities.
Claims use since Jan. 1, 1931.

Ser. No. 326,339. PER-CALX, INCORPORATED, Burley, Idaho. Filed Apr. 21, 1932.

Percalx

For Medicine in Powder Form for the Scientific Treatment of Calcium Deficiency.
Claims use since Feb. 26, 1932.

Ser. No. 326,855. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y. Filed May 7, 1932.

KERA-TONIC kurls

The words "Tonic" and "Kurls" are disclaimed apart from the mark as shown.

For Shampoo, Oil Preparation for Treatment of the Scalp, Hair Revitalizer, and for Use in Hair Waving.
Claims use since Feb. 18, 1931.

Ser. No. 326,910. BLANCHE PETERSON, Emery, Utah. Filed May 9, 1932.



The trade-mark as shown in the drawing is a bust picture of the applicant.

For Preparation for the Treatment of Diseases of the Stomach, Liver, and Nervous System.
Claims use since Nov. 17, 1931.

Ser. No. 328,055. THE B. & B. PRODUCTS CO., New York, N. Y. Filed June 17, 1932.

BEBEE SPRAY

No claim is made for the word "Spray" apart from the mark as shown.

For Insecticide for Extermination of Insects.
Claims use since June 1, 1932.

Ser. No. 330,958. MAXINE PRODUCTS COMPANY, INC., Detroit. Mich. Filed Oct. 5, 1932.



The word "Detroit" is disclaimed apart from the other features of the mark illustrated in the accompanying drawing.

For Perfume.

Claims use since December, 1927.

Ser. No. 331,203. ROBERT DAVIS STEVENSON, doing business as Mintkist Oil Co., Coshocton, Ohio. Filed Oct. 12, 1932.

Stevenson's Mintkist

For Mineral Oil for Medicinal Use.

Claims use since Sept. 30, 1932.

Ser. No. 331,338. NATIONAL OIL PRODUCTS COMPANY, Harrison, N. J. Filed Oct. 18, 1932.

Admiración

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Skin Whitener in Liquid and Solid Form, Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Eyebrow Pencils, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powder, Sachets, Hair Salves, Hair Elixirs, Chemical Preparations for Darkening the Lashes and Eyebrows, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powder, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Mouth Washes, Disinfectants, Nail Powders, Nail Polishes, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Waters.

Claims use since Oct. 1, 1918.

Ser. No. 331,692. MICHAEL A. MELLENTHIN, doing business as Mellenthin Laboratories, Los Angeles, Calif., assignor to Gurli Mellenthin, Los Angeles, Calif. Filed Oct. 29, 1932.

M. A. Mellenthin M.D.

The mark is a facsimile of the signature of the applicant.

For Medical Compounds to be Used for the Treatment of Stomach Ulcers, for the Treatment of the Gall Bladder, for the Treatment of Tonsils and Adenoids, for the Treatment of Rheumatism, for the Treatment of Kidneys, for the Treatment of Asthma, for the Treatment of Piles, a Blood Tonic, a Digestive Elixir, and an Externally Applied Liniment for the Treatment of Muscular Aches and Pains.

Claims use since Mar. 1, 1908.

Ser. No. 331,759. SUN-A-SURED, INC., Minneapolis, Minn. Filed Oct. 31, 1932.

SUN-A-SURED

For Medicinal Preparation and More Particularly Anti-Rachitic Preparations Containing Vitamin D.

Claims use since Sept. 7, 1932.

Ser. No. 331,821. FOURSOME LABORATORIES, INC., Syracuse and De Witt, N. Y. Filed Nov. 2, 1932.

4-EEZ

For Laxative Preparation.

Claims use since Nov. 1, 1932.

Ser. No. 331,906. POTTER & MOORE, LTD., New York, N. Y. Filed Nov. 4, 1932.

Crēmpact.

For Cosmetics—Namely, Beauty Creams, Cold Creams, Refreshing Creams, Dry Rouges, Liquid Rouges, Face Powders in Liquids, Paste Face Powders, and Cream Face Powders.

Claims use since Oct. 27, 1932.

Ser. No. 332,341. ERSLEVS EFTF. KEMISK LABORATORIUM VED CAND. PHARM. LOUIS FOERSOM, Copenhagen, Denmark. Filed Nov. 21, 1932.

LIMPIOL

For Chemical-Pharmaceutical Preparations in the Form of Ointments for Treatment of Cutaneous Diseases.

Claims use since Mar. 12, 1931.

Ser. No. 332,365. EDNA FAY BISBEE, doing business as Holly Lure Laboratories, Los Angeles, Calif. Filed Nov. 22, 1932.

HOLLY LURE

For After Shaving Lotions, Lemon Cream, Complexion Clay, Face Cream, Face Powder, Cleansing Cream, Pore Paste, Bleaching Cream, Acne Cream, Tissue Cream, Hand Lotion, Rouge, Lipstick, Brilliantine, Liquid Powder, and Astringent Lotion.

Claims use since December, 1931.

Ser. No. 332,660. HAROLD F. OHRT, M. D., Detroit, Mich. Filed Dec. 1, 1932.

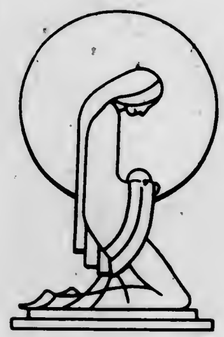
GON-INJECTION

No claim is made to the word "Injection" separate and apart from the mark shown.

For Preparation for the Treatment of Venereal Diseases.

Claims use since June 5, 1931.

Ser. No. 332,757. CHAYSON'S, LTD., Los Angeles and Hollywood, Calif. Filed Dec. 5, 1932.



For Face Powders, Foundation Creams, and Cream Rouge.

Claims use since Oct. 1, 1932.

Ser. No. 332,981. BOYD-MAYBELL CO., Reno, Nev. Filed Dec. 12, 1932.



The words "Boyd's," "Mucin," and "Compound" are disclaimed apart from the mark shown in the drawing.

For General Tonic for the Relief of Stomach Disorders.

Claims use since Mar. 15, 1930.

Ser. No. 333,117. SALVATORE J. DI BELLA, doing business as Di Bella Laboratories, New York, N. Y. Filed Dec. 16, 1932.

SPECIAL OINTMENT NO. 33

The words "Special Ointment" are hereby disclaimed apart from the mark as shown.

For Preparation for the Treatment of Skin Eruptions.

Claims use since May 1, 1932.

Ser. No. 333,591. EMILE HERISSE, doing business as W. G. R. Product Co., New York, N. Y. Filed Jan. 3, 1933.



No claim is made to the words "Elixir" and "World's Greatest Rejuvenating Tonic" apart from the mark shown on the drawing.

For Medicinal Preparation, for Use as a Tonic, Stimulant and Restorative.

Claims use since Dec. 7, 1932.

Ser. No. 333,716. OD PEACOCK SULTAN COMPANY, St. Louis, Mo. Filed Jan. 6, 1933.



The drawing is lined for shading purposes only.
For Pharmaceutical Preparations—Namely, Sanmetto, Bromides, Cactina, Pillets, Chionia, Prunoids and Seng.
Claims use since Aug. 21, 1931.

Ser. No. 333,746. TAYLOR CHEMICAL CORPORATION, Penn Yan, N. Y. Filed Jan. 7, 1933.

FUMA

For Carbon Bi-Sulphide.
Claims use since 1887.

Ser. No. 333,802. FEEDWATERS, INCORPORATED, New York, N. Y. Filed Jan. 10, 1933.

GLENE

For Preparations Used for the Prevention of Rust and Corrosion of Metals in Contact with Water; for the Prevention and Removal of Incrustations and Deposits in Water Lines, Heaters, Preheaters, Steam Boilers, Pumps, Engine Jackets, Condensers, Evaporators, Radiators, and the Like; for Inhibiting the Embrittlement of Metal in Boilers, Concentrators, and the Like; and for Minimizing Foaming, Priming, and Carry-Over Tendencies in Steam Boilers and the Like; for the Increasing of the Yield of Oil in Water Flooding Processes and the Like, and for Clarifying Sugar Juices and the Like, and for Clarifying Alcoholic Liquors.
Claims use since July 1, 1931.

Ser. No. 333,818. BEECHAMS PILLS, INC., Niagara Falls, N. Y. Filed Jan. 11, 1933.

BEECHALAX

For Candy-Like Laxative or Cathartic.
Claims use since Dec. 29, 1932.

Ser. No. 333,941. NATIONAL ALUMINATE CORPORATION, Chicago, Ill. Filed Jan. 14, 1933.

ALUGEL

For Chemicals Primarily Employed in the Preparation of Paper Sizing and Coating Compositions, Printing Inks, Paints, and as a Chemical Precipitant.
Claims use since Nov. 21, 1932.

Ser. No. 334,396. GULF STREAM LABORATORIES, St. Paul, Minn. Filed Jan. 27, 1933.

Gulf Stream

For Anti-Freeze Solution.
Claims use since Jan. 19, 1933.

CLASS 11

Inks and Inking Materials

Ser. No. 330,591. MICHAEL S. APTER, doing business as M. S. Apter Mfg. Co., Chicago, Ill. Filed Sept. 23, 1932.

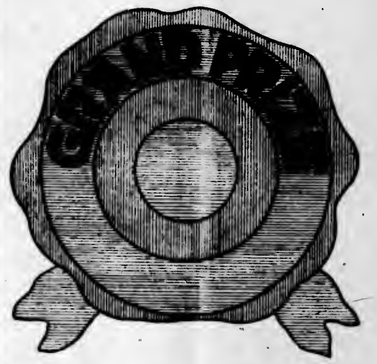
HERCULES

For Typewriter Ribbons.
Claims use since Mar. 1, 1923.

CLASS 12

Construction Materials

Ser. No. 293,944. UNITED STATES GYPSUM COMPANY, Chicago, Ill. Filed Dec. 20, 1929.



The words "Grand Prize" are disclaimed apart from the mark as shown. The drawing is lined for the colors blue and red.
For Lime and Plaster.
Claims use since Feb. 26, 1917.

Ser. No. 324,847. M AND M PLYWOOD CORPORATION, Longview, Wash., and Portland, Oreg. Filed Mar. 7, 1932.

PLYKRAFT

For Plywood.
Claims use since Nov. 5, 1930.

Ser. No. 328,692. MALINITE PRODUCTS, INC., Los Angeles, Calif. Filed July 11, 1932.

MALINITE

For Glazed Tile and Molded Ceramic Bodies—Namely Bead Strips, Risers, and Tile Trim, Unglazed Floor Tile and Paving Blocks.
Claims use since June 13, 1932.

Ser. No. 334,103. THE HOLSTEIN RUBBER PRODUCTS CO., INC., Hartford, Conn. Filed Jan. 19, 1933. Under 10-year proviso.

NON-DESTRUCTIBLE BRAND

For Rubber Flooring, Rubber Tile, and Rubber Tiling.
Claims use since 1894.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 333,609. RY-LOCK COMPANY, LTD., San Leandro, Calif. Filed Jan. 3, 1933.

Conectose

The representation of the goods is disclaimed apart from the mark as shown.
For Hose Couplings.
Claims use since Nov. 1, 1932.

Ser. No. 333,766. ILLINOIS MALLEABLE IRON COMPANY, Chicago, Ill. Filed Jan. 9, 1933.

M

For Pipe Couplings, Elbows, T's, Crosses, Y-Bends, Return-Bends, Caps, Lock Nuts, Waste-Nuts, Chandelier-Hooks, Wall Plates, Rod-Couplings, Bushings, Crossovers, Extension Pieces, Unions, Railing-Fittings, Branch T's, Flanges, Traps, Hook-Plates, Expansion-Plates, Beam-Hooks, Pipe-Hangers, Floor-Sleeves, Pipe-Saddles, Stop-Cock Boxes, Gas-Drip Boxes, Street-Manhole Frames and Covers, and Catch-Basin Covers and Rings.
Claims use since Jan. 1, 1909.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 334,106. KESTER SOLDER COMPANY, Chicago, Ill. Filed Jan. 19, 1933.



For Solder.
Claims use since Nov. 15, 1932.

Ser. No. 334,311. KESTER SOLDER COMPANY, Chicago, Ill. Filed Jan. 25, 1933.

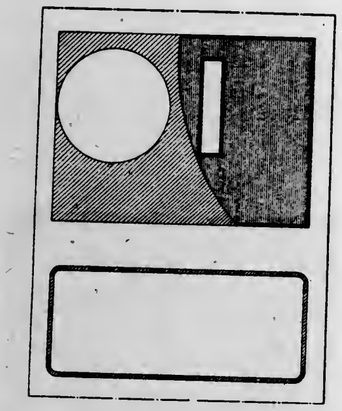


For Solder.
Claims use since Jan. 20, 1933.

CLASS 15

Oils and Greases

Ser. No. 334,337. WOLVERINE EMPIRE REFINING CO., New York, N. Y. Filed Feb. 9, 1933.



In the drawing, the oblique lines denote the color green and the horizontal lines the color blue. The background and unhatched areas are a yellowish white.

For Lubricating Oils and Greases.

Claims use since Jan. 9, 1933.

CLASS 16

Paints and Painters' Materials

Ser. No. 332,566. BATES SANT-I-MIST MANUFACTURING COMPANY, Houston, Tex. Filed Nov. 28, 1932.

SANT-I-MIST

For Floor and Furniture Polish.

Claims use since June 4, 1930.

CLASS 17

Tobacco Products

Ser. No. 334,262. PENN TOBACCO COMPANY, Wilkes-Barre, Pa. Filed Jan. 23, 1933.

CHEWGARS

For Chewing Cigars.

Claims use since Jan. 11, 1933.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 323,533. HENNEY MOTOR COMPANY, Freeport, Ill. Filed Jan. 28, 1932.

NU WAY

For Motor-Driven Ambulances, Hearses, Funeral Coaches, Combination Funeral Cars, and Trucks.

Claims use since Oct. 28, 1927.

Ser. No. 332,119. THE HERCULES CYCLE AND MOTOR COMPANY LIMITED, Birmingham, England. Filed Nov. 14, 1932.

HERCULES

For Cycles—Namely, Bicycles, Tricycles, Motor-Cycles, and Side-Cars Therefor.

Claims use since Dec. 12, 1929.

Ser. No. 334,319. ROCKNE MOTORS CORPORATION, Detroit, Mich. Filed Jan. 25, 1933.



For Automobiles and Structural Parts Thereof.

Claims use since Feb. 22, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 333,451. THE REPAIR PARTS AND REPLACEMENT COMPANY, Chicago, Ill. Filed Dec. 27, 1932.

JANITOR

For Electrical Vacuum Cleaners.

Claims use since Oct. 1, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 334,161. THE RICHARDSON COMPANY, Lockland, Ohio. Filed Jan. 20, 1933.

GENUINE HARD LUKON

No claim is made for the words "Genuine Hard" apart from the mark as shown in the drawing.

For Storage Battery Cases Made of Bituminous Composition.

Claims use since Jan. 12, 1933.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 334,050. CLAUDE H. DANIELS, Newton Center, Mass. Filed Jan. 18, 1933.

SATURDAY JIG

For Puzzles, Piece-Work Puzzles, Cut Out Puzzles, and Picture Puzzles.

Claims use since Jan. 7, 1933.

Ser. No. 334,419. S. H. KRESS & CO., New York, N. Y. Filed Jan. 27, 1933.



For Playing Cards.

Claims use since Dec. 1, 1932.

Ser. No. 334,436. THEODORE E. HERLIHY, Los Angeles, Calif. Filed Jan. 28, 1933.



For An Amusement Device Consisting of a Bowl Having Indentations and Various Indicia Thereon Upon Which Marbles Rest.

Claims use since Oct. 1, 1932.

Ser. No. 334,531. THE HORTON MANUFACTURING COMPANY, Bristol, Conn. Filed Feb. 1, 1933. Under section 5b of the act of 1905 as amended in 1920.

Bristol

For Fishing Lines, Steel Shafts for Golf Clubs, Fishing Reels, and Golf Clubs.

Claims use since Jan. 21, 1920, on fishing lines; since Dec. 9, 1921, on steel shafts for golf clubs; since July 15, 1931, on fishing reels; and since Dec. 9, 1921, on golf clubs.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 330,008. THE BRITISH VACUUM CLEANER & ENGINEERING CO. LTD., London, England. Filed Aug. 31, 1932.



For Suction Cleaning Machines for Carpets, Floors, Etc.

Claims use since July, 1927.

Ser. No. 331,072. J. H. WILLIAMS & CO., Buffalo, N. Y. Filed Oct. 7, 1932.

SUPERRATCHET

No claim is made for purposes of registration to the word "Ratchet" apart from the mark as shown by the drawing.

For Wrenches, Wrench Sets, Wrench Sockets, and Tool Handles.

Claims use since Sept. 19, 1932.

Ser. No. 333,334. MITCHELL DIAMOND DRILL COMPANY, LTD., San Francisco, Calif. Filed Dec. 23, 1932.

MITCHELL

Applicant disclaims any exclusive right to the name "Mitchell" and the representations of the goods apart from the mark as shown in the drawings.

For Power Rock Drills for Both Surface and Underground Use, Parts Therefor, Tools Used in Connection Therewith—Namely, Drilling Rods, Reamers, and Bits.

Claims use since Jan. 10, 1922.

Ser. No. 333,507. CRANE CO., Chicago, Ill. Filed Dec. 30, 1932.

CRANE

Applicant is the owner of trade-mark registration No. 293,974.

For Automatic Water Systems, Comprising Shallow Well and Deep Well Pumps and Reciprocating, Plunger, Turbine, Rotary, Centrifugal, and Vacuum Pumps, All Made of Iron, Brass, Glass, Marble, Wood or Earthenware.

Claims use since March, 1926.

Ser. No. 333,656. J. BUSCH, INC., New York, N. Y. Filed Jan. 4, 1933.

HANDY ANDY

For Knives.

Claims use since October, 1929.

Ser. No. 333,824. THE DE LAVAL SEPARATOR COMPANY, New York, N. Y. Filed Jan. 11, 1933.

A

For Rubber Liners for Teat Cups for Milking Machines.

Claims use since July 31, 1928.

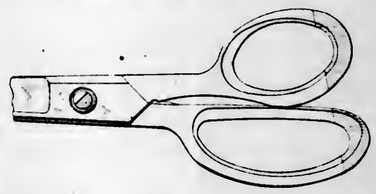
Ser. No. 333,864. REX TOOL COMPANY, INC., Miami, Fla. Filed Jan. 12, 1933.

CAN-FLO

For Attachable and Detachable Spout for Milk Cans.

Claims use since Dec. 30, 1932.

Ser. No. 333,992. THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Jan. 16, 1933.

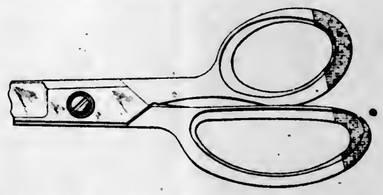


The trade-mark consists of a blue colored tip applied to the free ends of the handles of the goods as indicated by the lining on the drawing. The representation of the handle is disclaimed.

For Scissors and Shears.

Claims use since Oct. 8, 1932.

Ser. No. 333,993. THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Jan. 16, 1933.

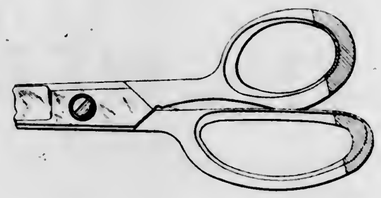


The trade-mark consists of a cream colored tip applied to the free ends of the handles of the goods as indicated by the linings on the drawing. The representation of the shear handles is disclaimed.

For Scissors and Shears.

Claims use since Oct. 8, 1932.

Ser. No. 333,994. THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Jan. 16, 1933.

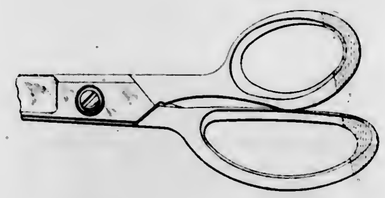


The trade-mark consists of a green colored tip applied to the free ends of the handles of the goods as indicated by the lining on the drawing. The representation of the handle is disclaimed.

For Scissors and Shears.

Claims use since Oct. 8, 1932.

Ser. No. 333,995. THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Jan. 16, 1933.



The trade-mark consists of a white colored tip applied to the free ends of the handles of the goods as indicated by the lining on the drawing. The representation of the sheaf handles is disclaimed.

For Scissors and Shears.

Claims use since Oct. 8, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 332,269. THE RUDOLPH WURLITZER MANUFACTURING COMPANY, North Tonawanda, N. Y. Filed Nov. 18, 1932.

MOHAWK

For Laundry Washing Machines, Clothes Wringers, and Mangles.

Claims use since Nov. 4, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 306,870. THE STANLEY WORKS, New Britain, Conn. Filed Oct. 17, 1932.



For Levels.

Claims use since June 3, 1930.

Ser. No. 329,677. FRITZ WERNER, AKTIENGESELLSCHAFT, Berlin, Germany. Filed Aug. 19, 1932.

MIKROLUX

For Comparators.

Claims use since June 18, 1929.

CLASS 27

Horological Instruments

Ser. No. 334,238. WESTERN CLOCK COMPANY, Peru, Ill Filed Jan. 21, 1933.

Hustler

For Clocks and Watches.

Claims use since Jan. 3, 1933.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 313,698. DER STAHLHELM, BUND DER FRONTSOLDATEN, New York, N. Y. Filed Apr. 22, 1931.

Der Stahlhelm

For Badges, Lapel Buttons, Scarf, Lapel, and Breast Pins; Cuff Links, Tie Clasps, Charms, Finger Rings; Belt Buckles, and Ornamental Shields Made of or Plated with Precious Metal.
Claims use since October, 1927.

Ser. No. 334,224. C. A. MARSH & CO. INC., Attleboro, Mass. Filed Jan. 21, 1933.

TONGUE-TYED

For Jewelry for Personal Wear or Adornment, Not Including Watches.
Claims use since July 15, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 334,271. TRU-BRISTLE BRUSH CO., INC., Seattle, Wash. Filed Jan. 23, 1933.

CLICK

For Tooth-Brushes.
Claims use since Jan. 17, 1933.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 331,133. HELEN SPEARMAN, North Hollywood, Calif. Filed Oct. 10, 1932.

Hele

For Handmade Pottery.
Claims use since Feb. 1, 1931.

CLASS 32

Furniture and Upholstery

Ser. No. 325,118. THE SENG COMPANY, Chicago, Ill. Filed Mar. 14, 1932.

SENGWEB

For Resilient Seats and Mattresses and Parts Thereof for Chairs, Couches, Davenports, Beds, and Similar Furniture.
Claims use since January, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 332,502. WASSMUTH, KURTH & CO., A.-G., Cologne-Dellbruck, Germany. Filed Nov. 26, 1932.

Anemostat

For Diffuser Type Air and Gas Distributing and Ventilating Units Consisting of Coaxially Spaced Members.
Claims use since September, 1931.

Ser. No. 333,062. J. T. EVANS, INC., Wilkes-Barre, Pa. Filed Dec. 14, 1932.

J. T. EVANS, INC.
—CONTRACTORS—ENGINEERS—
"SERVICE"
HEATING & PLUMBING
"J. T. EVANS, INC. CUT-TO-FIT SYSTEMS OF HEATING AND PLUMBING"

No claim is made for the notations "Service," "Contractors-Engineers;" "Heating & Plumbing;" and "Cut-to-Fit Systems of Heating and Plumbing" apart from the mark shown in the drawing.
For Ventilating Fans, Fan Casings, and Flues, Furnace Blowers, Oil Burners, Blow-Torches, Hot Air Furnaces, Steam and Hot Water Radiators, Radiator Inclosures, Coal and Gas Ranges, Water Heaters, Steam Boilers, Vent Pipes or Ducts for Heating and Ventilating, Hot Water Boilers, Humidifiers, Wall and Floor Registers, Ventilating Grills, Air Conditioners.
Claims use since April, 1931.

Ser. No. 333,846. AIR-O-MAT BURNER COMPANY, Detroit, Mich. Filed Jan. 12, 1933.

AIR-O-MAT

For Coal and Coke Burners.
Claims use since Jan. 2, 1931.

Ser. No. 334,256. KOHLER CO., Kohler, Wis. Filed Jan. 23, 1931. Under section 5b of the act of 1905 as amended in 1920.

KOHLER

For Heating Boilers and Radiators.
Claims use since Mar. 30, 1931.

CLASS 35

Belting, Hose, Machinery Packing, and Nonmetallic Tires

Ser. No. 322,662. THE S. K. WELLMAN COMPANY, Cleveland, Ohio. Filed Jan. 2, 1932.

Velvetruck

For Brake Linings and Transmission Linings.
Claims since July 13, 1925.

CLASS 37

Paper and Stationery

Ser. No. 333,534. SCHOOL THRIFT, INC., New York, N. Y. Filed Dec. 30, 1932.

PRENUMBERED REFILL
TIME CUT IN HALF
NO HAND STAMPING
SCHOOL THRIFT INC.

The words "Prenumbered Refill" and "No Hand Stamping" are disclaimed apart from the other features of the mark shown in the drawing.
For Savings Bank Pass Books Sold to the Trade as Such.
Claims use since Dec. 1, 1932.

Ser. No. 333,722. WILSON-JONES COMPANY, Chicago, Ill. Filed Jan. 6, 1933.

KraftLife

No claim is made herein to the use of the word "Kraft" apart from the mark shown in the drawing.
For Filing Envelopes, Mailing Envelopes, Filing Folders, and Filing Pockets.
Claims use since Aug. 6, 1932.

Ser. No. 333,723. WILSON-JONES COMPANY, Chicago, Ill. Filed Jan. 6, 1933.

ManilaLife

No claim is made herein to the use of the word "Manila" apart from the mark shown in the drawing.
For Filing Envelopes, Mailing Envelopes, Filing Folders, Filing Pockets, and Voucher and Ticket Binders.
Claims use since Aug. 6, 1932.

Ser. No. 333,812. TECHNICAL SUPPLY COMPANY, Scranton, Pa. Filed Jan. 10, 1933.

TESCO

For Tracing Cloth, Blank Books, Drawing Paper, Gummed Paper, Crayons, Thumb Tacks, Blue Print Clips, Pencils, Pens, Pen Points, Rubber Erasers, Pencil Sharpeners, Pencil Pointers, Paper Fasteners, Paper Clips, Erasing Shields, Pen Holders, Eyelet Pliers, and Sets, and Bristol Board.
Claims use since Jan. 1, 1913.

Ser. No. 333,980. AUGUST ROSENBERG, doing business as Estatement System, New York, N. Y. Filed Jan. 16, 1933.

InsuResult

For Looseleaf Binders, Looseleaf Binder Sheets, Looseleaf Records, Partially Printed Forms, Instruction Blanks, Blank Books, and Books and Sheets of a Blank Nature Used for Keeping Insurance Records and the Like Sold to the Trade as Such.
Claims use since Dec. 12, 1932.

Ser. No. 333,983. THE H. E. SMITH COMPANY, Newark, N. J. Filed Jan. 16, 1933.

HESCO

For Stencils for Duplicating Machines.
Claims use since Jan. 1, 1914.

CLASS 38

Prints and Publications

Ser. No. 323,165. PERCY L. CROSBY, McLean, Va. Filed Jan. 19, 1932.

"SOOKY"

For Drawings for Reproduction, and Comic Strips or Cartoons.
Claims use since December, 1923.

Ser. No. 333,822. J. RALPH CORBETT, INC., New York, N. Y. Filed Jan. 11, 1933.

BUSINESS TEMPO

For Weekly Publication in the Nature of a House Organ.
Claims use since Nov. 12, 1932.

Ser. No. 334,429. DELL PUBLISHING CO. INC., New York, N. Y. Filed Jan. 28, 1933.

THEATRICAL SCOREBOARD

For Magazine Section Published Weekly and at Other Intervals.
Claims use since Jan. 10, 1933.

Ser. No. 334,431. DELL PUBLISHING CO. INC., New York, N. Y. Filed Jan. 28, 1933.

NEW YORK SATURDAY NIGHT

For Magazine Section.
Claims use since Jan. 10, 1933.

Ser. No. 334,486. COMPREX OSCILLATOR CORPORATION, New York, N. Y. Filed Jan. 31, 1933.

RESECTION BRIEFS

For Publication Issued Periodically.
Claims use since February, 1932.

Ser. No. 334,511. JOSEPH A. CLIFFORD, New York, N. Y. Filed Feb. 1, 1933.

Ah K Oh

For Periodical Publication.
Claims use since Jan. 11, 1933.

CLASS 39

Clothing

Ser. No. 328,087. CARLO DE MICHELI DI E. SOCIETÁ ANONIMA, Milan, Italy. Filed June 18, 1932.

TROPICWEVE

For Braces or Suspenders, Garters and Elastic Arm Bands.
Claims use since May 18, 1932.

Ser. No. 333,171. THE SMITH-KASSON COMPANY, Cincinnati, Ohio. Filed Dec. 17, 1932.

HUDDLES FOR THE "ALL AMERICAN GIRL"

No claim is made to the words "For the" apart from the mark shown in the drawing.
For Women's Knit Tucked Stitched Vest and Panties, Constructed of Cotton and Rayon.
Claims use since Nov. 6, 1932.

Ser. No. 333,475. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Dec. 29, 1932.

Peers of England

For Shirts—Namely, Dress, Negligee, and Work Shirts; Collars and Underwear, Including Shorts and Pajamas.
Claims use since 1932.

Ser. No. 333,477. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Dec. 29, 1932.

SPECTATOR

For Collars and Shirts—Namely, Dress, Negligee, and Work Shirts.
Claims use since October, 1932.

Ser. No. 333,676. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Jan. 5, 1933.

House of Lords

For Shirts—Namely, Dress, Negligee, and Work Shirts; Collars and Underwear, Including Shorts and Pajamas.
Claims use since October, 1932.

Ser. No. 333,677. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Jan. 5, 1933.

Lord Sterling

For Shirts—Namely, Dress, Negligee, and Work Shirts, Collars, and Underwear, Including Shorts and Pajamas.
Claims use since October, 1932.

Ser. No. 333,682. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Jan. 5, 1933.

TATLER

For Shirts—Namely, Dress, Negligee, and Work Shirts, and Collars.
Claims use since October, 1932.

Ser. No. 333,709. DAVID MCCOSKER, INC., New York, N. Y. Filed Jan. 6, 1933.

OSAGE MILLS

For Women's and Children's Dresses, Skirts, Uniforms for Postulants and School Children, Mantles, Cloaks, Sweaters, Hosiery, Underwear, Corsets, Kimonos, Bathrobes, Cassocks, Night Gowns, Aprons, Bathing Suits, and Rain Coats.
Claims use since May 6, 1932.

Ser. No. 333,762. FEDDEN BROTHERS COMPANY, INC., New York, N. Y. Filed Jan. 9, 1933.

Sweetheart

For Hosiery.
Claims use since 1915.

Ser. No. 333,803. F. JACOBSON & SONS, New York, N. Y. Filed Jan. 10, 1933.

THE ARTISTIC

Applicant disclaims any exclusive right to the words "The Artistic" apart from the mark shown on the drawing.
For Dress, Negligee, and Work Shirts; Pajamas, Nightgowns, and Men's and Boys' Underwear.
Claims use since 1896.

Ser. No. 333,841. VIRGINIA SHOE COMPANY, INC., Fredericksburg, Va. Filed Jan. 11, 1933.

CENTURY 33 OF PROGRESS

For Shoes Made Wholly or Partly of Leather.
Claims use since Dec. 28, 1932.

Ser. No. 333,946. CLIFFORD B. POTTER, Manchester, N. H. Filed Jan. 14, 1933.

"WOOLINE"

For Bathing Suits.
Claims use since Jan. 9, 1933.

Ser. No. 334,345. BLAKE & SCHWABE, INC., New York, N. Y. Filed Jan. 26, 1933.

Zuni

For Hosiery and Underwear of Knitted and Textile Fabric for Men, Women, and Children.
Claims use since Dec. 20, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 328,286. JAMES F. WHITE & CO., INC., New York, N. Y. Filed June 24, 1932.



For Woven Cloths Made from Jute.
Claims use since June 6, 1932.

Ser. No. 331,494. CROMPTON COMPANY, West Warwick, R. I. Filed Oct. 24, 1932.

CARISSIMA

For Pile Fabrics, Including Corduroys and Plushes.
Claims use since Sept. 21, 1932.

Ser. No. 333,708. DAVID MCCOSKER, INC., New York, N. Y. Filed Jan. 6, 1933.

OSAGE MILLS

For Dry Goods, Consisting of Piece Goods of Silk, Silk and Wool, Mohair, Mohair and Cotton, Rayon, Cotton, Cotton and Wool, and Woven Wool Materials.
Claims use since May 6, 1932.

Ser. No. 333,829. GLENMOOR MILLS, INC., New York, N. Y. Filed Jan. 11, 1933.

CANVACO

For Tailor's Stiffening Canvas as an Interlining for Tailored Apparel for Men's, Women's, and Boys' Clothes.
Claims use since Dec. 10, 1932.

Ser. No. 333,978. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa. Filed Jan. 16, 1933.

MALABAN

For Textile Rugs and Carpets.
Claims use since Jan. 12, 1933.

Ser. No. 333,979. HUGH NELSON-COLUMBIA CARPET MILLS, INC., Philadelphia, Pa. Filed Jan. 16, 1933.

OMAR

For Textile Rugs and Carpets.
Claims use since Jan. 12, 1933.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 333,880. NINA W. BOND, doing business as N. Bond Co., New York, N. Y. Filed Jan. 13, 1933.

Bibi Band

No claim is made to the word "Band" except in the association shown.
For Headache Band.
Claims use since Nov. 29, 1932.

Ser. No. 334,122. JULIUS SCHMID, New York, N. Y. Filed Jan. 19, 1933.

LYNX

For Prophylactic Rubber and Membranous Articles for the Prevention of Contagious Diseases.
Claims use since Nov. 15, 1932.

Ser. No. 334,354. E. FREDERICS, INC., New York, N. Y. Filed Jan. 26, 1933.

Vitron

For Pads Used in the Permanent Waving of Human Hair.
Claims use since Nov. 29, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 331,849. L. R. BRUNO CO., Chicago, Ill., assignor to A. J. Canfield Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1932.

DIXIE Special

No claim is made to the word "Special" apart from the mark. The drawing is lined for red.
For Nonalcoholic Carbonated Beverages Sold as Soft Drinks.
Claims use since Dec. 18, 1931.

Ser. No. 332,464. THE PARAGUAY PRODUCTS CO., Cincinnati, Ohio. Filed Nov. 25, 1932.

Don "X"

For Nonalcoholic Maltless Beverages Sold as Soft Drinks and SyrupsTherefor.
Claims use since Nov. 3, 1932.

Ser. No. 332,697. MINERAL WATER CORPORATION, Los Angeles, Calif. Filed Dec. 2, 1932.

LA VIDA

For Mineral Water and Non-Alcoholic Maltless Beverages Sold as Soft Drinks.
Claims use since August, 1927.

Ser. No. 334,245. AMERICAN BEVERAGE CO. INC., New Orleans, La. Filed Jan. 23, 1933.

JIN-MIX-A

For Non-Alcoholic, Maltless, Carbonated Fruit Beverages Sold as Soft Drinks.
Claims use since Nov. 18, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 287,770. PEVELY DAIRY COMPANY, St. Louis, Mo. Filed July 27, 1929.



No claim is made to the representation of the vehicle body nor to the panels thereon, which are shown merely for the purpose of indicating the manner in which the mark is applied to the goods. No claim is made to the representation of the dish of ice-cream and berries, nor to the words "Pevely," nor to the words "Select Ice Cream," "It is Deliciously Different," nor to the words "Pevely Dairy Co.," nor to the notation "The Best Milk," apart from the trade-mark shown.
For Milk, Cream, Butter Milk, Ice Cream, Butter, Cottage Cheese, Cream Cheese, Fruit Ices and Sherbets.
Claims use since 1909.

Ser. No. 320,304. MAX GORDON, doing business as Gordon's All Pork Products Co., Detroit, Mich. Filed Oct. 22, 1931.



The drawing is lined for pink. No claim is made to the descriptive matter "Deliciously Flavored", "Conscientiously Prepared", "All Pork Sausage", "Its Goodness is Assured", and the word "Brand", apart from the mark as shown.
For Pork Sausage.
Claims use since September, 1926.

Ser. No. 322,652. REID, MURDOCH & CO., Chicago, Ill. Filed Jan. 2, 1932.

BO-TKA

For Coffee and Tea.
Claims use since 1898.

Ser. No. 323,091. TOM HUSTON CORPORATION, Columbus, Ga. Filed Jan. 16, 1932.



The word "Cocoanut" is disclaimed apart from the mark as shown.
For Candy.
Claims use since Oct. 6, 1931.

Ser. No. 326,366. EVANS MILLING COMPANY, Indianapolis, Ind. Filed Apr. 22, 1932.

PANSITOSE

For Cereal Products—Namely, a Product Manufactured from Indian Corn, to Which May or May Not be Added a Portion of Other Cereals for Food Purposes.
Claims use since November, 1898.

Ser. No. 327,270. CADICK MILLING COMPANY, Grand View, Ind. Filed May 20, 1932.



The words "Cake and Biscuit Flour" are hereby disclaimed apart from other features of the mark shown.
For Wheat Flour—Namely, Cake and Biscuit Flour.
Claims use since July 11, 1931.

Ser. No. 327,549. HYMAN BLUM, doing business as H. Blum, New York, N. Y. Filed May 28, 1932.



The words "Tasty Eggs" are disclaimed apart from the mark shown.
For Eggs.
Claims use since July, 1931.

Ser. No. 328,928. UNITED DRUG COMPANY, Boston, Mass. Filed July 20, 1932.



The shading on the drawing indicates the colors red, blue, yellow, and green, but applicant does not confine its claim to those colors. No claim is made to the words "Sublime Pure Virgin Olive Oil" apart from the mark shown in the drawing. The words "Distributed By", "Boston", "St. Louis", and "Toronto" are hereby disclaimed.
For Olive Oil.
Claims use since Nov. 25, 1927.

Ser. No. 329,275. STANDARD FRUIT & STEAMSHIP COMPANY, New Orleans, La. Filed Aug. 1, 1932.



The drawing is lined conventionally to represent the colors red, orange, yellow, and green. The face is golden with pink cheeks, the earrings yellow and white, and the hat white with yellow shading. No claim is made to the word "Bananas" except as shown in the drawing.
For Bananas.
Claims use since June 1, 1932.

Ser. No. 329,340. THE WELCH GRAPE JUICE COMPANY, Westfield, N. Y. Filed Aug. 4, 1932.

JEL-AID

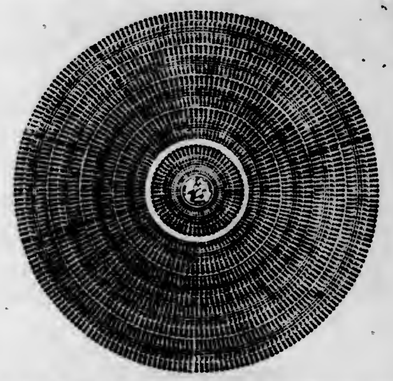
For Powdered Pectin for Use in Making Jams, Jellies, Etc.
Claims use since July 22, 1932.

Ser. No. 329,608. REFRIGERATING EQUIPMENT, INC., Cincinnati, Ohio. Filed Aug. 17, 1932.

Mt. Vernon Frigid Cream

Applicant disclaims any right to the exclusive use of the words "Frigid Cream" separate and apart from the marking shown in the drawing.
For Ice Cream.
Claims use since July 16, 1932.

Ser. No. 330,053. SWITZERLAND CHEESE ASSOCIATION INC., New York, N. Y. Filed Sept. 1, 1932.



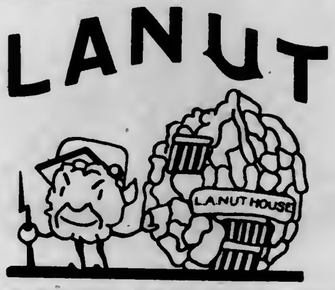
The words "Switzerland" and the expressions "Made in Switzerland" and "Switzerland Cheese", and the representation of the cheese are disclaimed apart from the mark as shown. Applicant is the owner of registered Trade-Marks 252,161, 266,078, and 268,576.
For Cheese Made in Switzerland.
Claims use since Aug. 8, 1932.

Ser. No. 330,155. CLYDE A. BLOUNT, Watsonville, Calif. Filed Sept. 7, 1932.



For Frozen Confection Containing Pulverized Fruit, Cream, and Other Ingredients.
Claims use since Sept. 2, 1932.

Ser. No. 331,435. L. A. NUT HOUSE, Los Angeles, Calif. Filed Oct. 21, 1932.



For Nut Products—Namely, Peanut Butter; Dried Fruits—Namely, Dates, Prunes, and Figs.
Claims use since June 29, 1932.

Ser. No. 332,159. NORDMARK-WERKE G. M. B. H., Hamburg, Germany. Filed Nov. 15, 1932.

TITTITRO

NORDMARK

For Malt Syrup for Food Purposes and Fodder.
Claims use since Feb. 29, 1932.

Ser. No. 332,171. NATIONAL CHEESE PRODUCERS' FEDERATION (CO-OPERATIVE), Plymouth, Wis. Filed Nov. 9, 1932.

MELLO-CREME

Exclusive right to the descriptive term "Creme" is disclaimed apart from the mark as shown on the drawing.
For Butter.
Claims use since Sept. 1, 1932.

Ser. No. 332,469. PAUL SCHULZE BISCUIT COMPANY, Chicago, Ill. Filed Nov. 25, 1932.

BEER SNACKS

For Cookies, Crackers, and Biscuits.
Claims use since Aug. 2, 1932.

Ser. No. 332,619. ROBERT A. JOHNSTON CO., Milwaukee, Wis. Filed Nov. 30, 1932.

TINTITE

For Cookies and Crackers.
Claims use since August, 1924.

Ser. No. 332,648. ERNEST D. FEAR, Kansas City, Mo. Filed Dec. 1, 1932.



The words "Pro-Teid", "Honey Bar" and "Trade Mark" are disclaimed apart from the mark as shown.
For Frozen Confections.
Claims use since Aug. 1, 1932.

Ser. No. 332,986. CANDY PRODUCTS CORPORATION, Owosso, Mich. Filed Dec. 12, 1932.



For Candies.
Claims use since Feb. 1, 1929.

Ser. No. 333,254. SIGRID BREITHOLTZ, New York, N. Y. Filed Dec. 21, 1932.



The words "Best-Ever" are hereby disclaimed apart from the mark as shown in the drawing.
For Pie Dough.
Claims use since Jan. 16, 1932.

Ser. No. 333,385. EAGLE NUT PRODUCTS, INC., Brooklyn, N. Y. Filed Dec. 27, 1932.



For Chocolates, Candies, Salted Nuts, and Nut Meats.
Claims use since August, 1932.

Ser. No. 333,489. MAMMY'S, Pittsburgh, Pa. Filed Dec. 28, 1932.



The descriptive words "Delicious Chicken Sandwiches" are disclaimed apart from the mark as shown on the drawing.
For Chicken Sandwiches.
Claims use since Oct. 10, 1932.

Ser. No. 333,576. BURNHAM & MORRILL COMPANY, doing business as Oxford Packing Co., Portland, Me. Filed Jan. 3, 1933.

Silver Dew

For Canned Vegetables.
Claims use since Dec. 9, 1931.

Ser. No. 333,774. SCIENTIFIC FOOD PRODUCTS, LIMITED, Toronto, Ontario, Canada. Filed Jan. 9, 1933.

VIP

For Tonic Food Drink.
Claims use since Jan. 8, 1933.

Ser. No. 333,851. FRANK H. FLEER CORPORATION, Philadelphia, Pa. Filed Jan. 12, 1933.

POST OFFICE

For Chewing Gum.
Claims use since Dec. 19, 1932.

Ser. No. 333,919. CALIFORNIA PRUNE & APRICOT GROWERS ASSOCIATION, San Jose, Calif. Filed Jan. 14, 1933.

TENDERSEALD

For Dried Fruits.
Claims use since Nov. 12, 1932.

Ser. No. 334,153. NATIONAL BISCUIT COMPANY, New York, N. Y. Filed Jan. 20, 1933.

APPETEASERS

For Bakery Products—Namely, Biscuit.
Claims use since Aug. 31, 1932.

Ser. No. 334,260. NORTH COAST IMPORTING CO., Seattle, Wash. Filed Jan. 23, 1933.

DAIKOKU

The word "Daikoku" is a Japanese word meaning "God of Rice."
For Rice, (Grain or Seed).
Claims use since Jan. 1, 1927.

CLASS 48

Malt Beverages and Liquors

Ser. No. 333,072. IMPERIAL MALT COMPANY, Chicago, Ill. Filed Dec. 14, 1932.

FAUST

For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since Nov. 1, 1932.

Ser. No. 333,759. JOSEPH DI SANTO, doing business as Di Santo & Co., Duluth, Minn. Filed Jan. 9, 1933.

HAPPY DAYS

For Malt Cereal Beverages Containing Not Over the Legal Alcoholic Content.
Claims use since Dec. 24, 1932.

Ser. No. 333,889. MOUND CITY PRODUCTS COMPANY, St. Louis, Mo. Filed Jan. 13, 1933.



The lining indicates the colors red and green. The words "Quality", "Purity", "Brand", "Beverage", "Mound City" and the representation of a label per se are disclaimed apart from the mark as shown.
For Malt Beverage of Not More Than the Legal Alcoholic Content.
Claims use since Dec. 9, 1932.

Ser. No. 333,933. GOTTFRIED KRUEGER BREWING CO., Newark, N. J. Filed Jan. 14, 1933.

Prosperity Brew

No claim is made to the exclusive use of the word "Brew" apart from the mark as shown in the drawing.
For Malt Beverage Containing Not More Than the Legal Alcoholic Content.
Claims use since Apr. 1, 1932.

CLASS 49

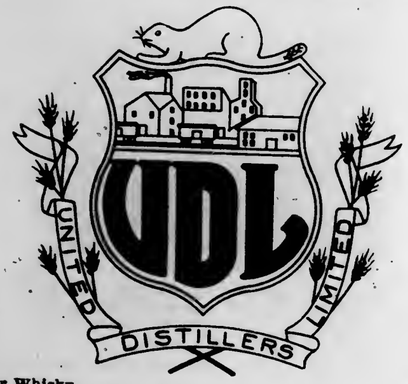
Distilled Alcoholic Liquors

Ser. No. 330,955. HULSTKAMP & ZOON & MOLIJN, Rotterdam, Netherlands. Filed Oct. 5, 1932. Under 10-year proviso.



The portrait appearing on the drawing is merely fanciful.
For Gin.
Claims use since Apr. 14, 1890.

Ser. No. 332,742. UNITED DISTILLERS LIMITED, Vancouver, British Columbia, Canada. Filed Dec. 3, 1932.



For Whisky.
Claims use since June 1, 1929.

Ser. No. 333,566. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Dec. 30, 1932.

MELVALE

For Whisky and Other Potable Spirits.
Claims use since October, 1880.

Ser. No. 333,712. MACDONALD, GREENLEES, LIMITED, Leith, Scotland. Filed Jan. 6, 1933.



No claim is made to any of the words shown on the drawing with the exception of the words "Sandy Mac" the name of the applicant company and the Latin inscription.
For Scotch Whisky.
Claims use since 1910.

Ser. No. 333,940. LONG JOHN DISTILLERIES, LIMITED, London, England. Filed Jan. 14, 1933.



For Whisky.
Claims use since July 31, 1911.

Ser. No. 333,967. DISTILLERS CORPORATION LIMITED, Montreal, Quebec, Canada. Filed Jan. 16, 1933.



For Potable Spirits, Whiskey, and Liquors.
Claims use since Jan. 4, 1933.

Ser. No. 334,394. JOHN GILLON & CO., LTD., Glasgow, Scotland. Filed Jan. 27, 1933.

KING WILLIAM IV

For Whisky.
Claims use since June 22, 1888.

Ser. No. 334,412. SLATER RODGER & COMPANY LIMITED, Glasgow, Scotland. Filed Jan. 27, 1933.



For Whisky.
Claims use since December, 1897.

Ser. No. 334,502. HIRAM WALKER & SONS LIMITED, Walkerville, Ontario, Canada. Filed Jan. 31, 1933.

Imperial

For Whisky.
Claims use since 1887.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 318,000. EXCELSIOR GRANITE COMPANY, INC., Montpelier, Vt. Filed Aug. 15, 1931.



The words "Barre Granite", "Certified", and "Montpelier. Vt." are disclaimed apart from the mark shown.
For Stone Memorials.
Claims use since Aug. 1, 1931.

Ser. No. 332,015. THE UNITED STATES BUNG MFG. CO., Cincinnati, Ohio. Filed Nov. 9, 1932.

KEYSTONE

For Bungs, Faucet Plugs, Compressed and Cut Taps and Plugs, Spiles, Taper Plugs, Trenail Wedges, Deck Plugs.
Claims use since 1900.

Ser. No. 333,470. COLUMBUS COATED FABRICS CORPORATION, Columbus, Ohio. Filed Dec. 29, 1932.



WINTEX

For Shade Cloth Made of Pyroxylin Coated Fabrics.
Claims use since Nov. 17, 1932.

Ser. No. 334,104. THE HOLSTEIN RUBBER PRODUCTS CO., INC., Hartford, Conn. Filed Jan. 19, 1933.

NON-DESTRUCTIBLE BRAND

For Rubber Sheeting.
Claims use since 1894.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MARCH 7, 1933

301,474. MEDICINE FOR ATHLETE'S FOOT, GOLFER'S ITCH AND OTHER RING WORM INFECTIONS. WILLIAM B. CRONIN, doing business as Cronin's Drug Store, Hartford City, Ind.
Filed October 10, 1932. Serial No. 331,102. PUBLISHED DECEMBER 20, 1932. Class 6.

301,475. CHEMICAL COMPOUND TO BE ADDED TO GASOLINE TO INCREASE ITS POWER AND TO REDUCE CARBON. THE BEVILITE COMPANY LTD., Los Angeles, Calif.
Filed October 10, 1932. Serial No. 331,098. PUBLISHED DECEMBER 20, 1932. Class 6.

301,476. MEDICINAL PREPARATIONS FOR PERSONAL USE—NAMELY, TOOTH POWDERS, TOOTH PASTES, ANTISEPTIC SOLUTIONS. JOSEPH A. STREKER, doing business as Twoclaimz Mfg. Co., Providence, R. I.
Filed October 4, 1932. Serial No. 330,938. PUBLISHED DECEMBER 20, 1932. Class 6.

301,477. MEDICINAL PREPARATION FOR THE RELIEF OF CONSTIPATION. VIVIAN L. APPLETON, doing business as The Actomint Company, St. Louis, Mo.
Filed October 3, 1932. Serial No. 330,882. PUBLISHED DECEMBER 20, 1932. Class 6.

301,478. PALATABLE EFFERVESCENT PREPARATIONS FOR INTERNAL USE AS A LAXATIVE AND REFRIGERANT. SAMUEL HELLER, doing business as Karsal Laboratories, Brooklyn, N. Y.
Filed October 1, 1932. Serial No. 330,849. PUBLISHED DECEMBER 20, 1932. Class 6.

301,479. COSMETICS—NAMELY, CLEANSING CREAM, TISSUE CREAM, FINISHING CREAM, PORE CREAM, ACNE CREAM, DEODORANT CREAM, SCALP OINTMENT AND EYELASH GROWER. RICHEL COMPANY, INC., Upper Darby, Pa.
Filed September 30, 1932. Serial No. 330,835. PUBLISHED DECEMBER 20, 1932. Class 6.

301,480. FABRIC MADE FROM COMBINATIONS OF MOHAIR, COTTON, WOOL, ALPACA, CAMEL-HAIR, SILK, AND ARTIFICIAL SILK, AND ALSO WOOLEN PIECE GOODS AND MOHAIR PIECE GOODS, USED FOR MEN'S AND BOYS' OUTER WEARING APPAREL. GOODALL WORSTED CO., Sanford, Me.
Filed October 31, 1932. Serial No. 331,737. PUBLISHED DECEMBER 27, 1932. Class 42.

301,481. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed October 26, 1932. Serial No. 331,572. PUBLISHED DECEMBER 27, 1932. Class 42.

301,482. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed October 26, 1932. Serial No. 331,571. PUBLISHED DECEMBER 27, 1932. Class 42.

301,483. FINISHED PILLOW CASES. MINOT, HOOPER & CO., New York, N. Y.
Filed October 1, 1932. Serial No. 330,859. PUBLISHED DECEMBER 27, 1932. Class 42.

301,484. FINISHED SHEETS AND PILLOW CASES. MINOT, HOOPER & CO., New York, N. Y.
Filed October 1, 1932. Serial No. 330,860. PUBLISHED DECEMBER 27, 1932. Class 42.

301,485. FINISHED SHEETS. MINOT, HOOPER & CO., New York, N. Y.
Filed October 1, 1932. Serial No. 330,858. PUBLISHED DECEMBER 27, 1932. Class 42.

301,486. VAGINAL ANTISEPTIC. WALKER, CORP & CO., INC., Syracuse, N. Y.
Filed September 24, 1932. Serial No. 330,641. PUBLISHED DECEMBER 20, 1932. Class 6.

301,487. ANTISEPTIC PREPARATION. CAVENDISH CHEMICAL CORPORATION, New York, N. Y.
Filed September 17, 1932. Serial No. 330,418. PUBLISHED DECEMBER 20, 1932. Class 6.

301,488. MEDICINAL PREPARATION USED TO SHRINK THE NASAL MUCOUS MEMBRANE AND TO AID IN THE VENTILATION OF THE SINUSES. ROBERT G. REAVES, Knoxville, Tenn.
Filed September 16, 1932. Serial No. 330,411. PUBLISHED DECEMBER 20, 1932. Class 6.

301,489. SILK PIECE GOODS. COHN HALL MARX CO., New York, N. Y.
Filed September 14, 1932. Serial No. 330,338. PUBLISHED DECEMBER 27, 1932. Class 42.

301,490. PREPARATION OF A TONIC FOR ANEMIA. THOMAS ROSA, New York, N. Y.
Filed September 15, 1932. Serial No. 330,382. PUBLISHED DECEMBER 20, 1932. Class 6.

301,491. INSECTICIDES. CAPITAL CHEMICAL DRUG COMPANY, INC., Montgomery, Ala.
Filed September 13, 1932. Serial No. 330,290. PUBLISHED DECEMBER 20, 1932. Class 6.

301,492. COSMETICS—NAMELY, FACE POWDER, ROUGE (DRY), LIP STICK, ANTI-WRINKLE CREAM, LIQUID CLEANSING CREAM, SOLID CLEANSING CREAM, FRECKLE CREAM, BLACK-HEAD CREAM, ASTRINGENT VEGETAL, DERMOL ASTRINGENT, PORE CREAM, ROUGE CREAM, NOURISHING CREAM, PROTECTION CREAM, ACNE CRYSTALS, PERFUMES, TOILET WATERS, BATH SALTS, BODY POWDER, TALCUM POWDER AND ACNE TABLETS, EPSOM SALTS, AND CREAMS AND OINTMENTS FOR THE TREATMENT OF THE SKIN, INCLUDING TOP AND LOWER LAYERS. MATA-HARI, INCORPORATED, Washington, D. C.
Filed August 29, 1932. Serial No. 329,971. PUBLISHED DECEMBER 20, 1932. Class 6.

301,493. SYNTHETIC RESIN. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,928. PUBLISHED DECEMBER 20, 1932. Class 6.

301,494. RADIO RECEIVING SETS. UNITED SCIENTIFIC LABORATORIES, INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,712. PUBLISHED DECEMBER 27, 1932. Class 21.

301,495. DRY CELL BATTERIES. S. H. KRESS & CO., New York, N. Y.
Filed October 26, 1932. Serial No. 331,587. PUBLISHED DECEMBER 27, 1932. Class 21.

301,496. TALKING MACHINES AND PARTS THEREOF, RECORDS FOR TALKING MACHINES, AND RECORD BLANKS. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed October 22, 1932. Serial No. 331,474. PUBLISHED DECEMBER 27, 1932. Class 36.

301,497. VACUUM TUBES FOR USE IN RADIO APPARATUS. ATLAS SUPPLY COMPANY, Newark, N. J.
Filed October 14, 1932. Serial No. 331,241. PUBLISHED DECEMBER 27, 1932. Class 21.

301,498. INDUCTANCE DEVICES FOR USE IN PLACE OF OR IN CONNECTION WITH AERIALS AND SOUND RECEIVING AND TRANSMITTING ELECTRICAL DEVICES ESPECIALLY FOR RADIO SETS. FOREST R. PALMER, doing business as Palmer Electric Mfg. Co., Toledo, Ohio.
Filed October 12, 1932. Serial No. 331,192. PUBLISHED DECEMBER 27, 1932. Class 21.

301,499. MEDICINAL PREPARATION FOR THE TREATMENT OF ARTHRITIS AND RHEUMATISM. CARL A. LEEMANN, East Orange, N. J.
Filed September 16, 1932. Serial No. 330,406. PUBLISHED DECEMBER 6, 1932. Class 6.

301,500. PHARMACEUTICAL PRODUCTS MORE ESPECIALLY CONTRACEPTIVE PREPARATIONS. NAAMLOOZE VENNOOTSCHAP CHEMISCH-PHARMACEUTISCHE FABRIEK "MENOLINE" (MENOLINE DRUG COMPANY), The Hague, Netherlands.
Filed September 9, 1932. Serial No. 330,206. PUBLISHED DECEMBER 20, 1932. Class 6.

301,501. FACIAL PREPARATION FOR USE AS A MASK, CLEANSER AND ASTRINGENT AND FACE POWDER. MATHILDA PIKE, New York, N. Y.
Filed August 30, 1932. Serial No. 330,000. PUBLISHED DECEMBER 6, 1932. Class 6.

301,502. PREPARATION FOR THE TREATMENT OF INDIGESTION. CAPSULOIDS (1909) LIMITED, doing business as The Cicfa Co., London, England.
Filed August 22, 1932. Serial No. 329,736. PUBLISHED DECEMBER 6, 1932. Class 6.

301,503. CLEANSING CREAM, MASSAGE CREAM, BLEACH CREAM, ACNE CREAM, EYE CREAM, PORE CREAM, FOUNDATION CREAM, SKIN TONIC, ASTRINGENT, LOTION FOR REMOVING MAKE-UP, ACNE LOTION, EYE LOTION, SKIN WHITENER, LIQUID POWDER, HAND LOTION, FACE AND BODY POWDERS, ROUGE, LIPSTICK, EYE BROW PENCIL, AND PERFUME. ANTOINE DE PARIS, INC., New York, N. Y.
Filed August 18, 1932. Serial No. 329,617. PUBLISHED DECEMBER 6, 1932. Class 6.

301,504. COSMETICS AND TOILET PREPARATIONS—NAMELY, COLD CREAM, LEMON CREAM, ASTRINGENT, FACE POWDER, ROUGE, LIPSTICK, TOILET WATER, AND HAIR TONIC. SAM HAGLER, doing business as Leeds Ltd., New York, N. Y.
Filed August 6, 1932. Serial No. 329,377. PUBLISHED DECEMBER 6, 1932. Class 6.

301,505. ANTACID AND INDIGESTION PREPARATION. R. F. DOWNS, doing business as Dow Pharmacal Co., Dallas, Tex.
Filed July 30, 1932. Serial No. 329,273. PUBLISHED DECEMBER 20, 1932. Class 6.

301,506. PERFUMES, TOILET WATER, FACE POWDER, TALCUM POWDER, ROUGE, LIPSTICKS, LOTION FOR THE SKIN AND HAIR. LES PARFUMS DE MOLYNEUX (SOCIETE A RESPONSABILITE LIMITEE), Paris, France.
Filed July 28, 1932. Serial No. 329,146. PUBLISHED December 20, 1932. Class 6.

301,507. MEDICINAL TABLETS ACTING AS A DUCTLESS GLAND FOOD AND NERVE STIMULANT BENEFICIAL IN CASES OF ENLARGED PROSTATE GLAND WITH MEN AND POSTPONES MENOPAUSE IN WOMEN. NEW LIFE MEDICINE CO., Hollywood, Calif.
Filed June 10, 1932. Serial No. 327,887. PUBLISHED DECEMBER 20, 1932. Class 6.

301,508. LUBRICATING OIL. JAMES F. CONRAN, St. Louis, Mo.
Filed October 7, 1932. Serial No. 331,041. PUBLISHED DECEMBER 27, 1932. Class 15.

301,509. LUBRICATING OILS. SAMUEL RADBILL, doing business as Columbia Petroleum Products Company, Philadelphia, Pa.
Filed October 6, 1932. Serial No. 331,008. PUBLISHED DECEMBER 27, 1932. Class 15.

301,510. PERFUMES AND TOILET PREPARATIONS, ETC. PALMERS LIMITED, Montreal, Quebec, Canada.
Filed April 20, 1932. Serial No. 326,312. PUBLISHED DECEMBER 6, 1932. Class 6.

301,511. THREAD CUTTING OIL. THE RIDGE TOOL COMPANY, Elyria, Ohio.
Filed November 19, 1932. Serial No. 332,810. PUBLISHED DECEMBER 27, 1932. Class 15.

301,512. GASEOUS DISCHARGE TUBULAR LAMPS. CLAUDE NEON ELECTRICAL PRODUCTS CORPORATION, LTD., Los Angeles, Calif.
Filed October 31, 1932. Serial No. 331,749. PUBLISHED DECEMBER 27, 1932. Class 21.

301,513. GASOLINE AND LUBRICATING OILS. SHELL OIL COMPANY, San Francisco, Calif.
Filed November 8, 1932. Serial No. 331,995. PUBLISHED DECEMBER 27, 1932. Class 15.

301,514. DECORATIVE WOVEN FABRICS IN THE PIECE, I. E., DAMASK DRAPERIES AND BED SPREADS. NEISLER MILLS INC., Kings Mountain, N. C.
Filed November 12, 1932. Serial No. 332,098. PUBLISHED DECEMBER 27, 1932. Class 42.

301,515. HOSIERY. B-Z-B KNITTING CO., Rockford, Ill.
Filed November 14, 1932. Serial No. 332,108. PUBLISHED DECEMBER 27, 1932. Class 39.

301,516. SOAP AND SHAVING CREAM. DAVID M. BELL, doing business as Pineglow Products, New York, N. Y.
Filed November 3, 1932. Serial No. 331,847. PUBLISHED DECEMBER 27, 1932. Class 4.

301,517. DISINFECTANT, ANTISEPTIC, AND DEODORANT. THE AMMONOL CHEMICAL COMPANY, New York, N. Y.
Filed October 29, 1932. Serial No. 331,717. PUBLISHED DECEMBER 20, 1932. Class 6.

301,518. MOTH REPELLANT. ODORA COMPANY, INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,693. PUBLISHED DECEMBER 20, 1932. Class 6.

301,519. CLEANING COMPOUND WITH INCIDENTAL WATER-SOFTENING PROPERTIES. THE J. B. FORD COMPANY, Wyandotte, Mich.
Filed October 28, 1932. Serial No. 331,637. PUBLISHED DECEMBER 27, 1932. Class 4.

301,520. DETERGENTS FOR USE IN DRY-CLEANING. AMERICAN DISINFECTING COMPANY, Sedalia, Mo.
Filed October 28, 1932. Serial No. 331,634. PUBLISHED DECEMBER 20, 1932. Class 4.

301,521. SOAP. SILICA PRODUCTS CORPORATION, New York, N. Y.
Filed October 27, 1932. Serial No. 331,626. PUBLISHED DECEMBER 27, 1932. Class 4.

301,522. CLEANING COMPOUNDS FOR WHITE SHOES. CHARLES B. WILLIAMS, doing business as C. W. Mfg. Co., Cleveland, Ohio.
Filed October 18, 1932. Serial No. 331,393. PUBLISHED DECEMBER 20, 1932. Class 4.

301,523. HAND CLEANSER. FREDERICK H. PARKER, doing business as Olminol, North Arlington, N. J.
Filed October 18, 1932. Serial No. 331,342. PUBLISHED DECEMBER 20, 1932. Class 4.

301,524. POLISHES, DRESSINGS, AND CLEANING PREPARATIONS FOR SHOES. MANHATTAN KREOLE PRODUCTS, INC., Brooklyn, N. Y.
Filed October 19, 1932. Serial No. 331,379. PUBLISHED DECEMBER 27, 1932. Class 4.

301,525. PREPARATION FOR TREATING EPILEPSY. BENJAMIN NAAR, doing business as Rev. Naar & Sons, New Brunswick, N. J.
Filed October 17, 1932, Serial No. 331,314. PUBLISHED DECEMBER 20, 1932. Class 6.

301,526. SOAP. FRANK BAKER, doing business as Baker Manufacturer, San Francisco, Calif.
Filed October 15, 1932. Serial No. 331,277. PUBLISHED DECEMBER 27, 1932. Class 4.

301,527. MEDICINAL PREPARATION. SMITH, KLINE & FRENCH LABORATORIES, Philadelphia, Pa.
Filed October 14, 1932. Serial No. 331,268. PUBLISHED DECEMBER 20, 1932. Class 6.

301,528. LIQUID DYE-SOAP FOR DYEING AND WASHING FABRICS. A. C. HORN COMPANY, Long Island City, N. Y.
Filed October 12, 1932. Serial No. 331,182. PUBLISHED DECEMBER 6, 1932. Class 6.

301,529. VITAMIN RICH TONIC. MARCO AURELIO HERRADORA, doing business as Unite Pharmaceutique Francaise, New York, N. Y.
Filed October 12, 1932. Serial No. 331,180. PUBLISHED DECEMBER 20, 1932. Class 6.

301,530. SHAVING CREAM. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn.
Filed October 10, 1932. Serial No. 331,131. PUBLISHED DECEMBER 27, 1932. Class 4.

301,531. POWDER PREPARATION FOR THE SKIN. HART DRUG CORPORATION, Miami, Fla.
Filed October 10, 1932. Serial No. 331,107. PUBLISHED DECEMBER 20, 1932. Class 6.

301,532. BLEACHING AND WASHING SOLUTION. GARBER-EAGLE OIL CORP., Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,949. PUBLISHED DECEMBER 20, 1932. Class 6.

301,533. SOAPS, DRY CLEANER, STEEL WOOL, ETC. KRESGE DEPARTMENT STORE CORP., Newark, N. J.
Filed September 29, 1932. Serial No. 330,791. PUBLISHED DECEMBER 27, 1932. Class 4.

301,534. PREPARATION FOR ATHLETE'S FOOT. NORVAL S. HERBERT, doing business as Buzze's Pharmaceutical Company, Washington, D. C.
Filed September 27, 1932. Serial No. 330,734. PUBLISHED DECEMBER 20, 1932. Class 6.

301,535. SOLUBLE CHEMICAL COMPOUNDS FOR USE AS DETERGENTS. THE COWLES DETERGENT COMPANY, Cleveland, Ohio.
Filed September 26, 1932. Serial No. 330,651. PUBLISHED DECEMBER 27, 1932. Class 4.

301,536. PURGAMENT AND PREPARATION FOR OBESITY. BRADY & SCHMIDGALL, Vienna, Austria.
Filed September 9, 1932. Serial No. 330,195. PUBLISHED DECEMBER 20, 1932. Class 6.

301,537. CLEANER FOR AUTOMOBILES, FURNITURE, ETC. ALBERT C. LIVERGOOD, doing business as Alco Seal Co., Philadelphia, Pa.
Filed August 22, 1932. Serial No. 330,174. PUBLISHED DECEMBER 27, 1932. Class 4.

301,538. SAND-BLAST ABRASIVE. PANGBORN CORPORATION, Hagerstown, Md.
Filed August 27, 1932. Serial No. 329,901. PUBLISHED DECEMBER 27, 1932. Class 4.

301,539. AMMONIA CLEANING COMPOUND. CHARLES COOPER & COMPANY, Newark, N. J., and New York, N. Y.
Filed August 20, 1932. Serial No. 329,704. PUBLISHED DECEMBER 20, 1932. Class 4.

301,540. PERMANENT WAVING SOLUTION. DUART MANUFACTURING CO. LTD., formerly Pacific Hair Goods Company, Ltd., San Francisco, Calif.
Filed August 8, 1932. Serial No. 329,398. PUBLISHED DECEMBER 20, 1932. Class 6.

301,541. AUTOMOBILE TOP DRESSING, SHOE POLISH, ETC. RAYNORSHYNE PRODUCTS, INC., San Antonio, Tex.
Filed July 28, 1932. Serial No. 329,153. PUBLISHED DECEMBER 20, 1932. Class 4.

301,542. DRY CLEANING FLUID. CHARLES J. MCCARTNEY, New York, N. Y.
Filed July 16, 1932. Serial No. 328,843. PUBLISHED DECEMBER 27, 1932. Class 4.

301,543. CLEANING PREPARATION FOR GENERAL USE. EDWARD RICHARDSON, doing business as R. D. R. Manufacturing Co., Maywood, Ill.
Filed July 29, 1932. Serial No. 329,202. PUBLISHED DECEMBER 20, 1932. Class 4.

301,544. PAPER DRESS PATTERNS. PICTORIAL REVIEW COMPANY, New York, N. Y.
Filed February 23, 1932. Serial No. 324,396. PUBLISHED DECEMBER 20, 1932. Class 26.

301,545. ROUGE, PERFUMERY, AND TOILET WATERS. AMORSKIN CORPORATION, Wilmington, Del., and New York, N. Y.
Filed February 10, 1932. Serial No. 324,027. PUBLISHED MARCH 29, 1932. Class 6.

301,546. HAIR BEAUTIFYING CREAM. MORTON MANUFACTURING CORPORATION, doing business as Blair Laboratories, Lynchburg, Va.
Filed February 8, 1932. Serial No. 323,956. PUBLISHED DECEMBER 20, 1932. Class 6.

301,547. PREPARATION FOR SKIN DISEASES. DR. SIDER ROSENBERG, doing business as Seboline Chemical Company, Kansas City, Mo.
Filed December 31, 1931. Serial No. 322,601. PUBLISHED DECEMBER 20, 1932. Class 6.

301,548. LINEN DRESS GOODS IN THE PIECE. EDWIN E. BERLINER & CO., New York, N. Y.
Filed November 25, 1931. Serial No. 321,483. PUBLISHED DECEMBER 20, 1932. Class 42.

301,549. TEXTILE BATH TOWELS. MOSSE, INCORPORATED, New York, N. Y.
Filed November 14, 1931. Serial No. 321,143. PUBLISHED DECEMBER 20, 1932. Class 42.

301,550. SYNCHRONIZED SOUND AND PICTURE PROJECTOR WITH PHONOGRAPH AND RADIO SET FEATURES IN COMBINATION. SPRAGUE SPECIALTIES COMPANY, North Adams, Mass.
Filed November 11, 1931. Serial No. 321,039. PUBLISHED DECEMBER 20, 1932. Class 26.

301,551. ELECTRICAL MACHINES, ELECTROTECHNICAL INSTRUMENTS AND APPLIANCES, ETC. SIEMENS-SCHUCKERTWERKE AKTIENGESELLSCHAFT, Berlin-Siemensstadt, Germany.
Filed November 6, 1931. Serial No. 320,876. PUBLISHED DECEMBER 27, 1932. Class 21.

301,552. PIECE GOODS OF HAIR, NATURAL OR ARTIFICIAL SILK, HEMP, FLAX, JUTE, ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, AND MIXED FIBRES SUCH AS NATURAL SILK AND ARTIFICIAL SILK, ARTIFICIAL SILK AND A BACKING, AND COTTON. BIANCHINI, FÉRIER, Lyon, France.
Filed October 16, 1931. Serial No. 320,119. PUBLISHED DECEMBER 27, 1932. Class 42.

301,553. PIECE GOODS OF WOOL, HAIR, NATURAL OR ARTIFICIAL SILK, HEMP, FLAX, JUTE ALPHA FIBRE, ALOE FIBRE, VEGETABLE FIBRE, AND MIXED FIBRES SUCH AS NATURAL SILK AND ARTIFICIAL SILK, ARTIFICIAL SILK AND A BACKING, AND COTTON. BIANCHINI, FÉRIER, Lyon, France.
Filed July 30, 1931. Serial No. 317,450. PUBLISHED DECEMBER 27, 1932. Class 42.

301,554. DENTIFRICES AND MOUTH WASHES. CHESTER PAUL SHOUDY, Spokane, Wash.
Filed March 16, 1931. Serial No. 312,202. PUBLISHED MAY 5, 1931. Class 6.

301,555. HAND AGRICULTURAL IMPLEMENTS—NAMELY, CUTTERS, HARVESTERS, CHISELS, CLEANERS, CULTIVATORS, EDGERS, FORKS, HOES, MATTOCKS, HOOKS, SCRAPERS, SPADES, TROWELS, WEEDERS, DRAGS, SHOVELS, SCOOPS, AND RAKES. THE UNION FORK & HOE COMPANY, Columbus, Ohio.
Filed February 26, 1931. Serial No. 311,496. PUBLISHED DECEMBER 20, 1932. Class 23.

301,556. ADVERTISING CASES AND CABINETS MADE OF SHEET METAL OR FIBRE OR MADE PARTLY OF SHEET METAL AND PARTLY OF FIBRE FOR THE DISPLAY OF A GREAT VARIETY OF PRODUCTS, BOTH INDOORS AND OUTDOORS. AMERICAN CAN COMPANY, New York, N. Y.
Filed October 23, 1930. Serial No. 307,083. PUBLISHED DECEMBER 20, 1932. Class 32.

301,557. FACE CREAM AND FACE POWDER. AMORSKIN CORPORATION, New York, N. Y., and Wilmington, Del.
Filed May 23, 1930. Serial No. 301,085. PUBLISHED MARCH 15, 1932. Class 6.

301,558. DOLLS, PUZZLES, GAMES, ETC. THE CHAD VALLEY CO. LTD., Birmingham, England.
Filed May 6, 1929. Serial No. 283,550. PUBLISHED DECEMBER 27, 1932. Class 22.

301,559. MEN'S, WOMEN'S, AND CHILDREN'S KNIT UNDERWEAR. SPRING CITY KNITTING CO., Spring City, Pa.
Filed July 1, 1932. Serial No. 328,510. PUBLISHED DECEMBER 27, 1932. Class 39.

301,560. PILLOWS. BULLOCK'S, INC., Los Angeles, Calif.
Filed September 6, 1932. Serial No. 330,118. PUBLISHED DECEMBER 20, 1932. Class 32.

301,561. DRESSES FOR WOMEN, MISSES, AND CHILDREN. B. TOBIAS, INC., New York, N. Y.
Filed September 28, 1932. Serial No. 330,765. PUBLISHED DECEMBER 20, 1932. Class 39.

301,562. COTTON PIECE GOODS. RIEGEL TEXTILE CORPORATION, New York, N. Y.
Filed October 5, 1932. Serial No. 330,967. PUBLISHED DECEMBER 13, 1932. Class 42.

301,563. CHILDREN'S MIDDY BLOUSES, GIRLS' DANCING ROMPERS; GYM APPAREL—NAMELY, ATHLETIC SHIRTS AND BLOUSES, SHORTS, RUNNING TRUNKS, BLOOMERS, GYMNASIUM ROMPERS, JERSEY SHIRTS. PENNANT SPORT TOGS COMPANY, New York, N. Y.
Filed October 6, 1932. Serial No. 331,023. PUBLISHED DECEMBER 27, 1932. Class 39.

301,564. ATHLETIC UNION SUITS, ATHLETIC SHIRTS, AND ATHLETIC SHORTS OF KNITTED FABRIC. SHOREWOOD MILLS, Milwaukee, Wis.
Filed October 15, 1932. Serial No. 331,293. PUBLISHED DECEMBER 27, 1932. Class 39.

301,565. WOMEN'S AND MISSES' DRESSES. BLOOMINGDALE BROS. INC., New York, N. Y.
Filed October 24, 1932. Serial No. 331,489. PUBLISHED DECEMBER 20, 1932. Class 39.

301,566. LADIES', MISSES', CHILDREN'S, AND INFANTS' DRESSES, APRONS, AND PAJAMAS OF ALL KINDS MADE OF COTTON, WOOL, SILK, OR RAYON FABRICS. ELY & WALKER DRY GOODS COMPANY, St. Louis, Mo.
Filed October 24, 1932. Serial No. 331,496. PUBLISHED DECEMBER 20, 1932. Class 39.

301,567. SILK PIECE GOODS. COHN HALL MARX CO., New York, N. Y.
Filed October 26, 1932. Serial No. 331,575. PUBLISHED DECEMBER 20, 1932. Class 42.

301,568. THREADS AND YARNS. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany.
Filed October 26, 1932. Serial No. 331,584. PUBLISHED DECEMBER 13, 1932. Class 43.

301,569. HOSIERY. CHESTER H. ROTH CO., INC., New York, N. Y.
Filed October 26, 1932. Serial No. 331,594. PUBLISHED DECEMBER 20, 1932. Class 39.

301,570. HOSIERY AND STOCKINGS. ORMOND HOSIERY SHOPS, INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,694. PUBLISHED DECEMBER 27, 1932. Class 39.

301,571. LADIES' WEARING APPAREL—NAMELY, COATS AND SUITS. BREITSTEIN MANUFACTURING CO., Los Angeles, Calif.
Filed November 2, 1932. Serial No. 331,815. PUBLISHED DECEMBER 27, 1932. Class 39.

301,572. TOWELLING. WEST POINT MANUFACTURING COMPANY, Langdale, Ala.
Filed November 2, 1932. Serial No. 331,840. PUBLISHED DECEMBER 20, 1932. Class 42.

301,573. BLANKETS MADE OF COTTON OR COTTON AND WOOL. BEACON MANUFACTURING COMPANY, New Bedford, Mass.
Filed November 7, 1932. Serial No. 331,944. PUBLISHED DECEMBER 20, 1932. Class 42.

301,574. LUBRICATING OILS. THE ATLANTIC REFINING COMPANY, Philadelphia, Pa.
Filed October 1, 1932. Serial No. 330,843. PUBLISHED DECEMBER 27, 1932. Class 15.

301,575. ELECTRIC GRILLS AND TOASTERS. SAMUEL FORESTEK, doing business as The Forestek Plating & Manufacturing Company, Cleveland, Ohio.
Filed September 16, 1932. Serial No. 330,401. PUBLISHED DECEMBER 27, 1932. Class 21.

301,576. ELECTRIC FANS, BEVERAGE MIXERS, SWITCHES, ETC. THE A. C. GILBERT COMPANY, New Haven, Conn.
Filed September 15, 1932. Serial No. 330,367. PUBLISHED DECEMBER 27, 1932. Class 21.

301,577. ELECTRIC LIGHTING UNITS FOR TABLE, FLOOR, WALL, AND CEILING, AND WIRING FIXTURES THEREFOR. THE VICBRIDGE LAMP COMPANY, Chicago, Ill.
Filed September 9, 1932. Serial No. 330,215. PUBLISHED DECEMBER 27, 1932. Class 21.

301,578. TOP CYLINDER LUBRICATION OIL. C. MARTIN HINGLE, Chicago, Ill.
Filed September 7, 1932. Serial No. 330,172. PUBLISHED DECEMBER 27, 1932. Class 15.

301,579. RADIO RECEIVING SETS. WALTER C. BRAUN, doing business as The Barawik Company, Chicago, Ill.
Filed August 23, 1932. Serial No. 329,766. PUBLISHED DECEMBER 27, 1932. Class 21.

301,580. LUBRICANTS USED IN WIRE-DRAWING. TECHNICAL EQUIPMENT CORPORATION, New York, N. Y.
Filed April 22, 1932. Serial No. 326,401. PUBLISHED DECEMBER 27, 1932. Class 15.

301,581. AUTOMOBILES AND STRUCTURAL PARTS THEREOF. H. H. FRANKLIN MANUFACTURING COMPANY, Syracuse, N. Y.
Filed November 17, 1932. Serial No. 332,228. PUBLISHED DECEMBER 27, 1932. Class 19.

301,582. BATH TUB HANGERS. KOHLER CO., Kohler, Wis.
Filed November 15, 1932. Serial No. 332,154. PUBLISHED DECEMBER 27, 1932. Class 13.

301,583. HOLLOW SET SCREWS, SOCKET HEAD CAP SCREWS, SQUARE HEAD SET SCREWS, SOCKET HEAD SHOULDER SCREWS, STRIPPER BOLTS, AND PIPE PLUGS. STANDARD PRESSED STEEL CO., Jenkintown, Pa.
Filed November 9, 1932. Serial No. 332,013. PUBLISHED DECEMBER 27, 1932. Class 13.

301,584. GROUND DEHYDRATED MANURE. JOHN A. MILLER, doing business as Meadow Brook Farms, Palmer Township and Nazareth, Pa.
Filed November 8, 1932. Serial No. 331,991. PUBLISHED DECEMBER 27, 1932. Class 10.

301,585. COIL SPRINGS. THE WM. D. GIBSON COMPANY, Chicago, Ill.
Filed November 8, 1932. Serial No. 331,988. PUBLISHED DECEMBER 27, 1932. Class 13.

301,586. COIL SPRINGS. THE WM. D. GIBSON COMPANY, Chicago, Ill.
Filed November 8, 1932. Serial No. 331,987. PUBLISHED DECEMBER 27, 1932. Class 13.

301,587. BATH SHOWER CURTAINS. JOSEPH A. KAPLAN, INC., New York, N. Y.
Filed October 31, 1932. Serial No. 331,744. PUBLISHED DECEMBER 27, 1932. Class 13.

301,588. MOTOR VEHICLES PARTICULARLY MOTORCYCLES AND BICYCLES. INDIAN MOTOCYCLE COMPANY, Springfield, Mass.
Filed October 31, 1932. Serial No. 331,742. PUBLISHED DECEMBER 27, 1932. Class 19.

301,589. BARBED WIRE AND WIRE FENCE. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio.
Filed October 31, 1932. Serial No. 331,724. PUBLISHED DECEMBER 27, 1932. Class 18.

301,590. TIRE CHAINS. COLUMBIAN ROPE COMPANY, Auburn, N. Y.
Filed October 28, 1932. Serial No. 331,635. PUBLISHED DECEMBER 27, 1932. Class 13.

301,591. FERTILIZER. SILICA PRODUCTS CORPORATION, New York, N. Y.
Filed October 27, 1932. Serial No. 331,628. PUBLISHED DECEMBER 27, 1932. Class 10.

301,592. PIPES. KAUFMANN BROS. & BONDY, INC., West New York, N. J.
Filed October 14, 1932. Serial No. 331,257. PUBLISHED DECEMBER 27, 1932. Class 8.

301,593. SEAT CUSHIONS OF MOTOR VEHICLES. SPONGE AIRE SEAT COMPANY, INC., Buffalo, N. Y.
Filed October 10, 1932. Serial No. 331,128. PUBLISHED DECEMBER 27, 1932. Class 19.

301,594. ALLOY STEEL CASTINGS, SMOOTH HAMMERED FORGINGS, AND ELECTRICALLY WELDED COMPOSITE—BEING STEEL CONSISTING OF LOW CARBON STEEL AND TOOL STEEL ELECTRICALLY WELDED TOGETHER. THE FORGING AND CASTING CORPORATION, Ferndale, Mich.
Filed October 3, 1932. Serial No. 330,894. PUBLISHED DECEMBER 27, 1932. Class 14.

301,595. ALLOY STEEL CASTINGS, SMOOTH HAMMERED FORGINGS, AND ELECTRICALLY WELDED COMPOSITE—BEING STEEL CONSISTING OF LOW CARBON STEEL AND TOOL STEEL ELECTRICALLY WELDED TOGETHER. THE FORGING AND CASTING CORPORATION, Ferndale, Mich.
Filed October 3, 1932. Serial No. 330,893. PUBLISHED DECEMBER 27, 1932. Class 14.

301,596. ALLOY STEEL CASTINGS, SMOOTH HAMMERED FORGINGS, AND ELECTRICALLY WELDED COMPOSITE—BEING STEEL CONSISTING OF LOW CARBON STEEL AND TOOL STEEL ELECTRICALLY WELDED TOGETHER. THE FORGING AND CASTING CORPORATION, Ferndale, Mich.
Filed October 3, 1932. Serial No. 330,892. PUBLISHED DECEMBER 27, 1932. Class 14.

301,597. FINISHED CASTINGS FOR USE AS BRAKE DRUMS FOR MOTOR AND OTHER SELF-PROPELLING VEHICLES. FEDERAL MALLEABLE COMPANY, West Allis, Wis.
Filed September 29, 1932. Serial No. 330,785. PUBLISHED DECEMBER 27, 1932. Class 19.

301,598. WATCHES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed August 15, 1932. Serial No. 329,568. PUBLISHED DECEMBER 27, 1932. Class 27.

301,599. NON-ILLUMINATED REFLECTING DEVICES FOR ATTACHMENT TO THE WHEELS OR OTHER PART OF AN AUTOMOBILE. SMAIL'S SALES SERVICE, INC., Warren, R. I.
Filed July 28, 1932. Serial No. 329,156. PUBLISHED DECEMBER 27, 1932. Class 50.

301,600. STAPLES, INCLUDING FENCE STAPLES, POULTRY NETTING STAPLES, COPPER VINE STAPLES, DOUBLE POINTED TACKS, TACKS, LATH NAILS, SHINGLE NAILS, BRADS, PLASTER BOARD NAILS, SMOOTH BOX NAILS, AND BARBED ROOFING NAILS. THE COLORADO FUEL AND IRON COMPANY, Denver, Colo.
Filed July 5, 1932. Serial No. 328,550. PUBLISHED DECEMBER 27, 1932. Class 13.

301,601. ROLLED OR PRESSED, STRAIGHT OR TAPERED, PLAIN OR FLUTED, METAL PIPES, TUBES, AND POLES. THE UNION METAL MANUFACTURING COMPANY, Canton, Ohio.
Filed May 13, 1932. Serial No. 327,074. PUBLISHED DECEMBER 27, 1932. Class 13.

301,602. TIME INDICATING AND REGISTERING APPARATUS—NAMELY, CLOCKS, WATCHES, CHRONOMETERS, MECHANISMS RESPONSIVE TO ELECTRIC CURRENT FOR DRIVING THE SAME, AND PARTS THEREOF. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 28, 1932. Serial No. 326,582. PUBLISHED DECEMBER 27, 1932. Class 27.

301,603. GRILLES FOR WALL OR FLOOR REGISTERS OR OPENINGS THROUGH WHICH HEATED, COOLED, OR VENTILATING AIR IS TO BE PASSED OR PROVIDING ONE OR MORE WALLS OF AN ENCLOSURE OR CABINET THROUGH WHICH AIR IS TO BE CIRCULATED. UNI-FLO GRILLE CORPORATION, Detroit, Mich.
Filed March 19, 1932. Serial No. 325,310. PUBLISHED MAY 10, 1932. Class 84.

301,604. PREPARATION USED IN THE TREATMENT OF RHEUMATISM AND GOUTY CONDITIONS. THEODORE LEVINE, doing business as The Myalora Company, Brooklyn, N. Y.
Filed October 14, 1932. Serial No. 331,261. PUBLISHED DECEMBER 20, 1932. Class 6.

301,605. PERFUMES AND FACE POWDER. COTY, INC., Wilmington, Del., and New York, N. Y.
Filed October 14, 1932. Serial No. 331,247. PUBLISHED DECEMBER 20, 1932. Class 6.

301,606. PERFUMES AND PERFUMERY. ELIZABETH ARDEN, INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,239. PUBLISHED DECEMBER 20, 1932. Class 6.

301,607. PERFUMES. SAKS & COMPANY, New York, N. Y.
Filed October 13, 1932. Serial No. 331,229. PUBLISHED DECEMBER 20, 1932. Class 6.

301,608. ANTI-FREEZE SOLUTION FOR AUTOMOBILE RADIATORS, AND RUBBER SOLVENT. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 12, 1932. Serial No. 331,179. PUBLISHED DECEMBER 20, 1932. Class 6.

301,609. PREPARATION FOR RELIEF OF BOILS. JOHN R. IVEY, Littleton, N. C.
Filed October 11, 1932. Serial No. 331,153. PUBLISHED DECEMBER 20, 1932. Class 6.

301,610. RAZOR STROPS. HENRY S. GUIO, Los Angeles, Calif.
Filed June 21, 1932. Serial No. 328,168. PUBLISHED DECEMBER 20, 1932. Class 4.

301,611. SOAPS, SCRUBBING COMPOUNDS, ABRASIVE CLEANING COMPOUNDS, ETC. RUSSELL SABOR, doing business as Aeronautical Industries Research, Minneapolis, Minn.
Filed April 15, 1932. Serial No. 326,161. PUBLISHED DECEMBER 20, 1932. Class 4.

301,612. WHISKY. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland.
Filed September 19, 1932. Serial No. 330,455. PUBLISHED DECEMBER 27, 1932. Class 49.

301,613. GOLF CLUBS. THE CRAWFORD, MCGREGOR AND CANBY COMPANY, Dayton, Ohio.
Filed September 19, 1932. Serial No. 330,506. PUBLISHED DECEMBER 27, 1932. Class 22.

301,614. SCOTCH WHISKY. JOHN DEWAR & SONS LIMITED, Perth, Scotland, and London, England.
Filed September 21, 1932. Serial No. 330,541. PUBLISHED DECEMBER 27, 1932. Class 49.

301,615. PACKING FOR STUFFING BOXES MADE OF METAL. BENNO SELIGER, Chicago, Ill.
Filed October 21, 1932. Serial No. 331,443. PUBLISHED DECEMBER 20, 1932. Class 35.

301,616. NON-METALLIC PACKING FOR FLANGES. BENNO SELIGER, Chicago, Ill.
Filed October 21, 1932. Serial No. 331,444. PUBLISHED DECEMBER 20, 1932. Class 35.

301,617. TABLE BOARD GAME PLAYED WITH PIECES. DONALD H. SWEET, Chicago, Ill.
Filed October 29, 1932. Serial No. 331,709. PUBLISHED DECEMBER 20, 1932. Class 22.

301,618. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,936. PUBLISHED DECEMBER 27, 1932. Class 31.

301,619. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,937. PUBLISHED DECEMBER 27, 1932. Class 31.

301,620. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES AND FRUIT JUICES SOLD AS SOFT DRINKS, AND UPON BEVERAGE SYRUPS, FLAVORS, AND EXTRACTS. WILLARD D. MILLER, doing business as Frsh Frut Products Co., El Paso, Tex.
Filed November 7, 1932. Serial No. 331,959. PUBLISHED DECEMBER 27, 1932. Class 45.

301,621. PEPPER AND SALT CELLARS. IMPERIAL METAL MANUFACTURING CORPORATION, Long Island City, N. Y.
Filed November 8, 1932. Serial No. 331,990. PUBLISHED DECEMBER 27, 1932. Class 2.

301,622. CONTAINERS, SUCH AS BUTTERTUBS, FIRKINS, BOXES, LARD AND GREASE BUCKETS, MADE CHIEFLY FROM PAPER; AND FOR WOUND PAPER PLUGS USED FOR SUPPORTING THE ENDS OF PAPER ROLLS. SHEP-ROID CORPORATION, St. Paul, Minn.
Filed November 10, 1932. Serial No. 332,048. PUBLISHED DECEMBER 27, 1932. Class 2.

301,623. CIDER. LAIRD & COMPANY, INCORPORATED, Eatontown, N. J.
Filed November 15, 1932. Serial No. 332,155. PUBLISHED DECEMBER 27, 1932. Class 45.

301,624. TWINES. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed November 16, 1932. Serial No. 332,174. PUBLISHED DECEMBER 27, 1932. Class 7.

301,625. MINERAL WATER. MONTAQUA MINERAL WELL CO., Joliet, Mont.
Filed November 22, 1932. Serial No. 332,879. PUBLISHED DECEMBER 27, 1932. Class 45.

301,626. HYGIENIC POWDER AND A SPECIAL LIQUID GERMICIDE FOR ADVANCED PERSONAL HYGIENE OF WOMEN. SOUTHWEST LABORATORIES, INC., St. Louis, Mo.
Filed October 7, 1932. Serial No. 331,067. PUBLISHED DECEMBER 6, 1932. Class 6.

301,627. PREPARATION TO PREVENT RUNS IN HOSIERY AND LINGERIE AND TO STRENGTHEN SILK AND RAYON FABRICS. MANDEL SHAPIRO, New York, N. Y.
Filed October 6, 1932. Serial No. 331,011. PUBLISHED DECEMBER 6, 1932. Class 6.

301,628. PERFUME. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich.
Filed October 5, 1932. Serial No. 330,968. PUBLISHED DECEMBER 6, 1932. Class 6.

301,629. PERFUME. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich.
Filed October 5, 1932. Serial No. 330,962. PUBLISHED DECEMBER 6, 1932. Class 6.

301,630. PERFUME. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich.
Filed October 5, 1932. Serial No. 330,961. PUBLISHED DECEMBER 6, 1932. Class 6.

301,631. PERFUME. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich.
Filed October 5, 1932. Serial No. 330,960. PUBLISHED DECEMBER 6, 1932. Class 6.

301,632. PERFUME. MAXINE PRODUCTS COMPANY, INC., Detroit, Mich.
Filed October 5, 1932. Serial No. 330,959. PUBLISHED DECEMBER 6, 1932. Class 6.

301,633. TOOTH PASTE. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed October 4, 1932. Serial No. 330,937. PUBLISHED DECEMBER 6, 1932. Class 6.

301,634. MEDICATED OINTMENT FOR TREATMENT OF SORE OR ITCHING FEET, RINGWORM, GOLF ITCH, AND ATHLETE'S FOOT. JOSEPH CHIARELLO, doing business as Lido Chemical Co., Los Angeles, Calif.
Filed October 4, 1932. Serial No. 330,919. PUBLISHED DECEMBER 6, 1932. Class 6.

301,635. PREPARATION FOR THE HAIR. ELIZABETH MOTLEY, doing business as Motley's Beauty Parlor, Washington, D. C.
Filed October 4, 1932. Serial No. 330,929. PUBLISHED DECEMBER 6, 1932. Class 6.

301,636. PILLS USED AS A DIURETIC ANTISEPTIC. DAVIS & LAWRENCE CO., New York, N. Y.
Filed October 4, 1932. Serial No. 330,922. PUBLISHED DECEMBER 6, 1932. Class 6.

301,637. INTERNAL MEDICINES FOR MALARIAL FEVER, MALARIA AND CONDITIONS CAUSED BY MALARIAL FEVERS. SOCIETE DES MARQUES ROBIN, SOCIETE A RESPONSABILITE LIMITEE, Paris, France.
Filed October 1, 1932. Serial No. 330,870. PUBLISHED DECEMBER 6, 1932. Class 6.

301,638. WATER-SOLUBLE ORGANIC IODINE COMPOUND USED AS A RADIOPAQUE MEDIUM FOR X-RAY EXAMINATIONS. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed September 29, 1932. Serial No. 330,804. PUBLISHED DECEMBER 6, 1932. Class 6.

301,639. FISH PARASITICIDAL PREPARATION AND WATER PLANTS NUTRITIVE SALT. NICHOLAS WAPLER COMPANY, New York, N. Y.
Filed September 22, 1932. Serial No. 330,581. PUBLISHED DECEMBER 6, 1932. Class 6.

301,640. RIBBON COMPOSED OF CELLULOSE COMPOSITION MATERIAL FOR TYING PACKAGES AND OTHER USES. FREYDBERG BROTHERS, INCORPORATED, New York, N. Y.
Filed November 16, 1932. Serial No. 332,186. PUBLISHED DECEMBER 27, 1932. Class 7.

301,641. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,935. PUBLISHED DECEMBER 27, 1932. Class 31.

301,642. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,934. PUBLISHED DECEMBER 27, 1932. Class 31.

301,643. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,932. PUBLISHED DECEMBER 27, 1932. Class 31.

301,644. REFRIGERATORS AND REFRIGERATING APPARATUS, NOT INCLUDING AIR CONDITIONING AND VENTILATING SYSTEMS. SERVEL, INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,931. PUBLISHED DECEMBER 27, 1932. Class 31.

301,645. TABLE BOARD GAME PLAYED WITH PIECES. JOSEPH A. BEAUDOIN, San Francisco, Calif.
Filed November 5, 1932. Serial No. 331,914. PUBLISHED DECEMBER 27, 1932. Class 22.

301,646. PORTABLE MARBLE SHOOTING PRIZE GAME APPARATUS. PHILIP W. PATTBERG, New York, N. Y.
Filed November 3, 1932. Serial No. 331,870. PUBLISHED DECEMBER 27, 1932. Class 22.

301,647. ROWING MACHINES AND TABLEBOARD GAMES PLAYED WITH BALLS. HEALTH DEVELOPING APPARATUS CO., INC., New York, N. Y.
Filed October 29, 1932. Serial No. 331,681. PUBLISHED DECEMBER 27, 1932. Class 22.

301,648. FACE LIFTING BANDAGE FOR USE IN BEAUTY CULTURE AND THE LIKE. KATHERINE WELSH, doing business as D-N Facial Bandage Co., Brooklyn, N. Y.
Filed October 26, 1932. Serial No. 331,601. PUBLISHED DECEMBER 27, 1932. Class 44.

301,649. HOSPITAL SUPPLIES—NAMELY, SURGICAL GOWNS, SURGICAL SUITS, INTERNES' SUITS, PATIENTS' GOWNS AND BINDERS. MARVIN-NEITZEL CORPORATION, Troy, N. Y.
Filed October 24, 1932. Serial No. 331,508. PUBLISHED DECEMBER 27, 1932. Class 44.

301,650. RICE. LOUISIANA STATE RICE MILLING COMPANY, INC., Abbeville, La.
Filed October 24, 1932. Serial No. 331,505. PUBLISHED DECEMBER 20, 1932. Class 46.

301,651. ELECTRICAL HAIR DRYERS AND PERMANENT WAVE MACHINES. HALLIWELL-SHELTON ELECTRIC CORPORATION, New York, N. Y.
Filed October 24, 1932. Serial No. 331,499. PUBLISHED DECEMBER 27, 1932. Class 44.

301,652. FIRST AID OR SURGICAL BANDAGES. PORUS-LASTIC CORP., Holbrook, Mass.
Filed October 22, 1932. Serial No. 331,473. PUBLISHED DECEMBER 27, 1932. Class 44.

301,653. ICE CREAM. FROZEN SPONGES, INC., Brooklyn, N. Y.
Filed October 18, 1932. Serial No. 331,332. PUBLISHED DECEMBER 20, 1932. Class 46.

301,654. SAUSAGE. ARNOLD BROS., INCORPORATED, Chicago, Ill.
Filed October 3, 1932. Serial No. 330,883. PUBLISHED DECEMBER 20, 1932. Class 46.

301,655. MENTHOL PENCILS AND INHALERS—NAMELY, HOLDERS AND APPLICATORS FOR MENTHOL. THE LOBL MANUFACTURING COMPANY, Middleboro, Mass.
Filed September 30, 1932. Serial No. 330,823. PUBLISHED DECEMBER 27, 1932. CLASS 44.

301,656. FROZEN CONFECTION IN ICICLE FORM. NATHAN WOLOSKI, New York, N. Y.
Filed September 8, 1932. Serial No. 330,188. PUBLISHED DECEMBER 20, 1932. Class 46.

301,657. CANNED OR BOTTLED TOMATO JUICE, TOMATO CATSUP, PORK AND BEANS, ETC. VINCENNES PACKING CORPORATION, Vincennes, Ind.
Filed May 16, 1932. Serial No. 327,175. PUBLISHED DECEMBER 20, 1932. Class 46.

301,658. FROZEN CONFECTIONS. FROSTED FRUIT CORPORATION, Chicago, Ill.
Filed May 2, 1932. Serial No. 326,677. PUBLISHED DECEMBER 20, 1932. Class 46.

301,659. NONALCOHOLIC, MALTLESS BEVERAGES SOLD AS SOFT DRINKS AND SYRUPS AND EXTRACTS THEREFOR. VIMOLA SALES COMPANY, New York, N. Y.
Filed April 22, 1932. Serial No. 326,404. PUBLISHED JUNE 14, 1932. Class 45.

301,660. MILK SUGAR U. S. P., LANOLINE ANHYDROUS U. S. P., COAL TAR DISINFECTANT, EXTRACT WITCH HAZEL, PEROXIDE HYDROGEN U. S. P., AND COCOA BUTTER U. S. P. CHAS. L. HUISKING & CO., INC., New York, N. Y.
Filed August 2, 1932. Serial No. 329,288. PUBLISHED DECEMBER 20, 1932. Class 6.

301,661. INK SOLVENT. JOHN H. FAXON, Jr., New York, N. Y.
Filed July 30, 1932. Serial No. 329,226. PUBLISHED DECEMBER 6, 1932. Class 6.

301,662. CALOMEL, THYROID, BISMUTH, PHENOLPHTHALEIN, CALCIUM, IRON, ARSENO-IRON, ARSENIC, ATROPINE, ALBUTANNIN, TARTAR EMETIC, AND TERPIN HYDRATE. ABBOTT LABORATORIES, Chicago, Ill.
Filed May 10, 1932. Serial No. 326,929. PUBLISHED DECEMBER 20, 1932. Class 6.

301,663. CHEMICAL REAGENTS FOR USE IN TESTING THE AVAILABLE AND WATER SOLUBLE POTASSIUM IN SOILS. THE URBANA LABORATORIES, Urbana, Ill.
Filed April 22, 1932. Serial No. 326,444. PUBLISHED DECEMBER 20, 1932. Class 6.

301,664. CARDIAC STIMULANT AND DIURETIC. ROBERT MCNEIL, Philadelphia, Pa.
Filed April 22, 1932. Serial No. 326,386. PUBLISHED DECEMBER 20, 1932. Class 6.

301,665. BURLAP IN THE PIECE FOR WRAPPING PURPOSES. HEMP JUTE & TEXTILITE MFG. CO., A. G., Vienna, Austria.
Filed April 16, 1932. Serial No. 326,185. PUBLISHED DECEMBER 27, 1932. Class 42.

301,666. BURLAP IN THE PIECE FOR WRAPPING PURPOSES. HEMP JUTE & TEXTILITE MFG. CO., A. G., Vienna, Austria.
Filed April 16, 1932. Serial No. 326,184. PUBLISHED DECEMBER 27, 1932. Class 42.

301,667. COLD CREAMS AND FACIAL CREAMS—NAMELY, LOTUS CREAM, CIRCULATION CREAM, CLEANSING CREAM, AND POWDER BASE. TERMINAL BARBER SHOPS, INC., New York, N. Y.
Filed March 25, 1932. Serial No. 325,488. PUBLISHED DECEMBER 6, 1932. Class 6.

301,668. PILLOWS, CUSHIONS, AND BED MATTRESSES. BARCALO MANUFACTURING COMPANY, Buffalo, N. Y.
Filed October 25, 1932. Serial No. 331,538. PUBLISHED DECEMBER 20, 1932. Class 32.

301,669. GARDEN AND AGRICULTURAL TOOLS—NAMELY, HAND PLANTERS, DIBBLES, CULTIVATORS, RAKES, PLOWS, WEEDING-CLAWS, GRUBBERS, SPADES, AND HOES. AUGUST WOLF, EISENWARENFABRIK GES. M. BESCHR. HAFTUNG, Betzdorf (Sieg), Germany.
Filed October 24, 1932. Serial No. 331,524. PUBLISHED DECEMBER 20, 1932. Class 23.

301,670. WATER MOTORS AND PORTABLE HAND FIRE EXTINGUISHERS. GLOBE AUTOMATIC SPRINKLER COMPANY, Philadelphia, Pa.
Filed September 19, 1932. Serial No. 330,441. PUBLISHED DECEMBER 20, 1932. Class 23.

301,671. PISTONS FOR INTERNAL COMBUSTION ENGINES. RAY DAY PISTON CORPORATION OF DETROIT, Detroit, Mich.
Filed October 18, 1932. Serial No. 331,343. PUBLISHED DECEMBER 20, 1932. Class 23.

301,672. PISTONS FOR INTERNAL COMBUSTION ENGINES. RAY DAY PISTON CORPORATION OF DETROIT Detroit, Mich.
Filed October 18, 1932. Serial No. 331,344. PUBLISHED DECEMBER 20, 1932. Class 23.

301,673. LIQUID METERS. AKTIEBOLAGET IMOINDUSSERI Stockholm, Sweden.
Filed October 14, 1932. Serial No. 331,238. PUBLISHED DECEMBER 20, 1932. Class 26.

301,674. ATTACHMENTS TO WEIGHING SCALES AND SIMILAR DEVICES, SAID ATTACHMENT CONSISTING ESSENTIALLY OF AN ELECTRICALLY OPERATED DEVICE TO INDICATE OR REGISTER, VISIBLY OR AUDIBLY, PREDETERMINED LIMITS OF WEIGHT OR LOAD ON SAID WEIGHING SCALES OR SIMILAR DEVICE. WILLARD E. JACKSON, Indianapolis, Ind.
Filed October 8, 1932. Serial No. 331,086. PUBLISHED DECEMBER 20, 1932. Class 26.

301,675. AIRCRAFT ENGINES. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England.
Filed September 19, 1932. Serial No. 330,445. PUBLISHED DECEMBER 20, 1932. Class 23.

301,676. SAFETY RAZORS AND SAFETY RAZOR BLADES. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y.
Filed September 7, 1932. Serial No. 330,152. PUBLISHED DECEMBER 20, 1932. Class 23.

301,677. IMPLEMENTS FOR SIMULTANEOUSLY PLOWING, CULTIVATING, AND SEEDING, AND PARTS OF SUCH IMPLEMENTS. COCKSHUTT PLOW COMPANY LIMITED, Brantford, Ontario, Canada.
Filed July 30, 1932. Serial No. 329,221. PUBLISHED DECEMBER 20, 1932. Class 23.

301,678. CONCRETE FORMING HAND TOOLS—NAMELY, SCRAPERS, HAND FLOATS, CONCRETE BROOMS, SPLIT FLOATS, ROLLERS, SPLIT EDGERS, HAND LUTES, CURB EDGERS, SLAB EDGERS, GROOVERS, AND STAKE PULLERS. L & M MANUFACTURING CO., Cleveland, Ohio.
Filed June 8, 1932. Serial No. 327,823. PUBLISHED DECEMBER 20, 1932. Class 23.

301,679. GOLF CLUBS. DEWEY LONGWORTH, Oakland, Calif.
Filed November 19, 1932. Serial No. 332,305. PUBLISHED DECEMBER 27, 1932. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

301,680. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. CARPENTER BAKING COMPANY, Milwaukee, Wis., assignor to The W. E. Long Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 19, 1933. Serial No. 334,086.

Old Country

For Bread.
Claims use since May 3, 1928.

301,681. (CLASS 31. FILTERS & REFRIGERATORS.) ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933. Serial No. 333,801.

WESTCHESTER

For Refrigerators, Household, and Store.
Claims use since January, 1931.

301,682. (CLASS 31. FILTERS & REFRIGERATORS.) ELECTROLUX SERVEL CORPORATION, New York, N. Y. Filed Jan. 10, 1933. Serial No. 333,792.

BALTIMORE

For Household and Store Refrigerators.
Claims use since January, 1932.

301,683. (CLASS 46. FOODS AND INGREDIENTS OF FOODS. MILANI'S INC., Seattle, Wash. Filed Nov. 5, 1932. Serial No. 331,978.

Milani's

For Spaghetti with Chicken Giblet Sauce, Italian Style Dinner with Imported Parmesan Cheese, Sliced Chicken, Minced Chicken, Chicken Broth, Chicken Tamale Pot Pie, and Boneless Roast Chicken.
Claims use since March, 1931.

301,684. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DREW CANNING COMPANY, LTD., San Jose, Calif. Filed Oct. 11, 1932. Serial No. 331,148.

Good Rich

For Canned Fruits and Canned Vegetables.
Claims use since Sept. 16, 1931.

301,685. (CLASS 39. CLOTHING.) MALONE KNITTING COMPANY, Springfield, Mass. Filed Sept. 28, 1932. Serial No. 330,752.

Adorable

For Infants' Wearing Apparel, Particularly Infants' Underwear.
Claims use since Apr. 23, 1930.

301,686. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAN-NAP-PAK MFG. CO. INC., New York, N. Y. Filed Aug. 26, 1932. Serial No. 329,870.

TENS

For Sanitary Napkins.
Claims use since Feb. 1, 1930.

301,687. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) SAN-NAP-PAK MFG. CO. INC., New York, N. Y. Filed Aug. 26, 1932. Serial No. 329,868.

NU MODE

For Sanitary Napkins.
Claims use since Jan. 5, 1929.

301,688. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE STEARNS & FOSTER COMPANY, Lockland, Cincinnati, Ohio. Filed Aug. 1, 1932. Serial No. 329,266.

WARM-LITE

For Cotton Batting.
Claims use since July 14, 1925.

301,689. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) PAUL J. HAGERTY, doing business as Shaco Manufacturing Co., Peoria, Ill. Filed June 2, 1932. Serial No. 327,656.

OAK CHIPS

For Charred Sticks for Coloring, Flavoring, and Purifying Liquids.
Claims use since Feb. 1, 1925.

301,690. (CLASS 37. PAPER AND STATIONERY.) E. E. LLOYD PAPER COMPANY, Chicago, Ill. Filed Apr. 18, 1932. Serial No. 326,221.

PRECISION

For Printing, Typewriting and Writing Paper.
Claims use since Mar. 31, 1930.

301,691. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill. Filed Jan. 25, 1932. Serial No. 323,415.

PERSONALITY INDICATOR

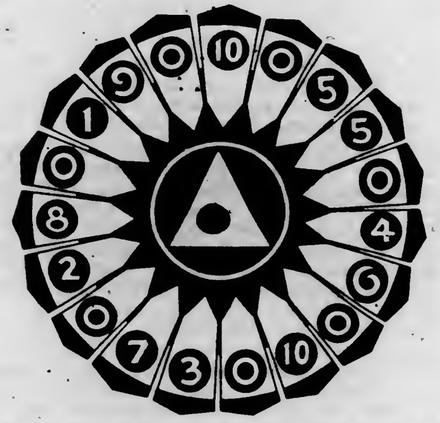
For Coin Controlled Amusement Machines.
Claims use since Jan. 20, 1932.

301,692. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE DEARBORN COMPANY, Chicago, Ill. Filed Jan. 25, 1932. Serial No. 323,393.

DEVON

For Tables.
Claims use since Jan. 16, 1932.

301,693. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) FREDERICK M. BERKLEY, New York, N. Y. Filed Nov. 19, 1931. Serial No. 321,265.



For Bowling Alleys, Played with Mechanically Operated Targets.
Claims use since Oct. 1, 1931.

301,694. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. BURTON & CO., INC., Brooklyn, N. Y. Filed July 9, 1931. Serial No. 316,765.

BURTON'S

For a Chocolate Flavored Syrup Containing Malt for Food Purposes.
Claims use since May 26, 1931.

TRADE-MARK REGISTRATIONS RENEWED

38,700. PNEUMATIC TIRES FOR BICYCLES, CARRIAGES, AND AUTOMOBILES. Registered July 29, 1902. FISK RUBBER COMPANY, Chicopee Falls and Springfield, Mass. Renewed July 29, 1932, to Charles A. Dana and John B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts, successor.

39,829. BLOWERS AND FORGES. Registered February 17, 1903. CHAMPION BLOWER & FORGE CO., Lancaster, Pa., a Corporation of Pennsylvania. Renewed February 17, 1933.

39,933. CIGARETTES. Registered March 17, 1903. SOCIÉTÉ ANONYME LE KHEDIVE, Brussels, Belgium, and Paris, France. Renewed March 17, 1933, to Ed. Laurens, Limited, London, England, and Alexandria, Egypt, a Corporation of Great Britain, assignee by mesne assignments.

40,032. LIFTING JACKS. Registered March 31, 1903. TEMPLETON, KENLY & CO., LTD., Chicago, Ill., a Corporation of Illinois. Renewed March 31, 1933.

40,330. MANUFACTURED FERTILIZERS. Registered May 12, 1903. SWIFT FERTILIZER WORKS, Chicago, Ill., and Atlanta, Ga. Renewed May 12, 1933, to Swift and Company, Chicago, Ill., a Corporation of Illinois, assignee.

40,433. CERTAIN NAMED PACKINGS. Registered May 26, 1903. TURNER BROTHERS, LIMITED. Renewed May 26, 1933, to Turner Brothers Asbestos Company, Limited, Spotland, Rochdale, England, a Corporation of Great Britain, assignee.

40,479. ANTISEPTIC COMPOUNDS. Registered June 2, 1903. THE MU-COL COMPANY, Providence, R. I. Renewed June 2, 1933, to The Mu-Col Company, Buffalo, N. Y., a Corporation of Rhode Island.

40,777. CASES FOR RAZORS AND RAZOR PARTS. Registered July 14, 1903. KAMPFE BROS., New York, N. Y. Renewed July 14, 1933, to American Safety Razor Corporation, Brooklyn, N. Y., a Corporation of Virginia, assignee by mesne assignments.

40,795. DISINFECTANTS. Registered July 21, 1903. WEST DISINFECTING CO., New York, N. Y. Renewed July 21, 1933, to West Disinfecting Company, Long Island City, N. Y., a Corporation of New York.

86,514. CERTAIN KNITTED, NETTED, AND TEXTILE FABRICS. Registered May 14, 1912. CONSOLIDATED COTTON DUCK COMPANY, Baltimore, Md. Renewed May 14, 1932, to Tucapau Mills, Boston, Mass., a Corporation of South Carolina, successor.

89,974. SUGAR. Registered January 28, 1913. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J. Renewed January 28, 1933, to The American Sugar Refining Company, New York, N. Y., a Corporation of New Jersey.

89,980. PITCH FOR ROOFING, WATERPROOFING, INSULATING, PAVING, ROAD-MAKING, AND KINDRED PURPOSES. Registered January 28, 1913. BARRETT MANUFACTURING COMPANY. Renewed January 28, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

90,025. CAKES, BISCUITS, CRACKERS, AND CANDY. Registered January 28, 1913. JOHNSON BISCUIT COMPANY, Sioux City, Iowa, a Corporation of Iowa. Renewed January 28, 1933.

90,071. CLOCKS AND WATCHES. Registered January 28, 1913. THE WESTERN CLOCK MANUFACTURING CO. (now by change of name Western Clock Co.) Renewed January 28, 1933, to Western Clock Company, Peru, Ill.; a Corporation of Illinois, assignee.

90,125. SCALES. Registered February 4, 1913. MORLEY BROTHERS, Saginaw, Mich., a Corporation of Michigan. Renewed February 4, 1933.

90,286. BASE-BALLS, BASKET-BALLS, PUSH-BALLS, HAND-BALLS, FOOT-BALLS, MEDICINE-BALLS, SQUASH-BALLS, AND TENNIS-BALLS. Registered February 11, 1913. OLIVER'S SPORTING GOODS HOUSE, Philadelphia, Pa., a Firm. Renewed February 11, 1933.

90,266. OILS FOR USE IN BLEACHING, CLEANING AND DYEING. Registered February 11, 1913. WILLIAM L. VOIGT, New York, N. Y. Renewed February 11, 1933, to Herrick-Voigt Chemical Corporation, Bayonne, N. J., a Corporation of New Jersey, assignee.

90,293. CERTAIN NAMED ELECTRICAL SUPPLIES. Registered February 18, 1913. C. CONRADTY, FABRIK ELEKTRISCHER U. GALVINISCHER KOHLEN, Nuremberg, Germany, a Firm. Renewed February 18, 1933.

90,879. METAL ORNAMENTS, MONOGRAMS, AND INITIALS FOR HARNESS. Registered February 18, 1913. SAMUEL M. RIKER, Renewed February 18, 1933, to The Riker Company, Newark, N. J., a Corporation of New Jersey, successor.

90,401. MANIFOLD-BOOKS. Registered February 25, 1913. AMERICAN SALES BOOK COMPANY, LIMITED, Toronto, Ontario, Canada; Niagara Falls, Elmira, and Glendale, N. Y. Renewed February 25, 1933, to American Sales Book Company, Limited, Toronto, Canada, a Corporation of Ontario, Canada.

90,460. GRINDSTONES, RAZOR-STROPS, AND RAZOR-HONES. Registered February 25, 1913. MORLEY BROTHERS, Saginaw, Mich., a Corporation of Michigan. Renewed February 25, 1933.

90,461. PENCILS. Registered February 25, 1913. MORLEY BROTHERS, Saginaw, Mich., a Corporation of Michigan. Renewed February 25, 1933.

90,497. SUGAR. Registered March 4, 1913. THE AMERICAN SUGAR REFINING CO., Jersey City, N. J. Renewed March 4, 1933, to The American Sugar Refining Company, New York, N. Y., a Corporation of New Jersey.

90,645. MEN'S AND WOMEN'S HOSIERY. Registered March 11, 1913. THE F. & R. LAZARUS & CO. Renewed March 11, 1933, to The F. and R. Lazarus and Company, Columbus, Ohio, a Corporation of Ohio, successor.

90,791. CERTAIN NAMED ARTICLES OF CLOTHING. Registered March 25, 1913. THE CAMP FIRE GIRLS. Renewed March 25, 1933, to Camp Fire Girls, Inc., New York, N. Y., a Corporation of New York, assignee.

90,837 CHICKEN FEED. Registered March 25, 1913. RALSTON PURINA COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed March 25, 1933.

90,885. CHILDREN'S ROMPERS. Registered April 1, 1913. HARRIS-LIPSITZ CO., Dallas, Tex., and New York, N. Y. Renewed April 1, 1933, to Higginbotham-Bailey-Logan Company, Dallas, Tex., a Corporation of Texas, assignee.

90,908. STEAM-BOILER INJECTORS AND BOILER-FEEDERS. Registered April 1, 1913. NATHAN MANUFACTURING COMPANY, New York, N. Y. a Corporation of New York. Renewed April 1, 1933.

90,925. PORT AND SHERRY WINE. Registered April 1, 1913. GEO. H. SANDEMAN, SONS & CO. LIMITED, London, England, a Corporation of Great Britain. Renewed April 1 1933.

91,148. WRITING-PAPER, COVER-PAPER, AND ENAMELED BOOK-PAPER. Registered April 22, 1913. THE ALLING & CORY COMPANY, Rochester, N. Y., a Corporation of New York. Renewed April 22, 1933.

91,226. PNEUMATIC BICYCLE AND AUTOMOBILE TIRES AND RUBBER HOSE FOR CONDUCTING WATER. Registered April 22, 1913. MORLEY BROTHERS, Saginaw, Mich., a Corporation of Michigan. Renewed April 22, 1933.

91,315. PERFUMED SOAP. Registered April 29, 1913. H. BRONNLEY & CO., LIMITED, London, England, a Corporation of Great Britain. Renewed April 29, 1933.

91,433. UNBLEACHED COTTON GOODS IN THE PIECE. Registered April 29, 1913. VICTOR MANUFACTURING COMPANY, Greenville, S. C. Renewed April 29, 1933, to Wallace Mfg. Co., Inc., Jonesville, S. C., a Corporation of South Carolina, assignee by mesne assignments.

91,470. CANNED FRUITS, VEGETABLES, PORK AND BEANS, SALMON, AND LOBSTER. Registered May 6, 1913. FARGO MERCANTILE COMPANY, Fargo, N. Dak. Renewed May 6, 1933, to Griggs, Cooper & Co., St. Paul, Minn., a Corporation of Delaware, assignee.

91,488. BAKING-POWDER. Registered May 6, 1913. THE HEEKIN SPICE COMPANY. Renewed May 6, 1933, to The Heekin Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

91,633. CLARET-WINE AND CHAMPAGNE. Registered May 20, 1913. D. ANTOLINI & CO. Renewed May 20, 1933, to Dante Antolini, New York, N. Y., assignee.

91,662. COFFEE, TEA, FLAVORING EXTRACTS, AND SPICES. Registered May 20, 1913. THE HEEKIN SPICE COMPANY. Renewed May 20, 1933, to The Heekin Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

91,703. SHERRY-WINE. Registered May 20, 1913. GEO. G. SANDEMAN, SONS & CO. LIMITED, London, England, a Corporation of Great Britain. Renewed May 20, 1933.

91,790. STERILIZED AND CONDENSED MILK. Registered May 27, 1913. NESTLE AND ANGLO-SWISS CONDENSED MILK COMPANY, Cham and Vevey, Switzerland. Renewed May 27, 1933, to Nestle's Milk Products, Inc., New York, N. Y., a Corporation of New York, assignee.

91,845. CANNED VEGETABLES, CANNED PORK AND BEANS, AND CANNED SALMON. Registered June 3, 1913. E. FRANKLIN BREWSTER. Renewed June 3, 1933, to Brewster, Gordon & Co., Inc., Rochester, N. Y., a Corporation of New York, assignee.

91,909. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. Registered June 3, 1913. MORRIS SINGER. Renewed June 3, 1933, to Soft-Lite Lens Co., Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

91,979. LIME. Registered June 10, 1913. THE MOORES LIME COMPANY, Springfield, Ohio, a Corporation of Ohio. Renewed June 10, 1933.

92,161. A MAGAZINE. Registered June 24, 1913. THE AMERICAN HUMANE ASSOCIATION, Albany, N. Y., a Corporation of the District of Columbia. Renewed June 24, 1933.

92,234. ADHESIVE SIZING, ADHESIVE GUMS, AND ADHESIVE PASTES. Registered June 24, 1913. WALTER E. KRIEL, Baltimore, Md. Renewed June 24, 1933.

92,330. WHEAT-FLOUR. Registered July 1, 1913. FISHER FLOURING MILLS COMPANY, Seattle, Wash. Renewed July 1, 1933, to Fisher Flouring Mills Co., Harbor Island, Seattle, a Corporation of Washington.

92,338. WHEAT-FLOUR. Registered July 1, 1913. J. F. IMBS MILLING COMPANY, St. Louis, Mo., and Belleville, Ill. Renewed July 1, 1933, to J. F. Imbs Milling Company, Inc., St. Louis, Mo., a Corporation of Illinois, successor.

92,379. A CLOSET COMBINATION. Registered July 1, 1913. A. WEISKITTEL & SON COMPANY, Baltimore, Md., a Corporation of Delaware. Renewed July 1, 1933.

92,392. COMPOUND FOR POLISHING AND CLEANING. Registered July 8, 1913. E. W. BENNETT & COMPANY. Renewed July 8, 1933, to George E. Bennett, doing business as E. W. Bennett & Company, San Francisco, Calif.

92,487. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. Registered July 8, 1913. THE VITRO MANUFACTURING COMPANY, Pittsburgh, Pa., a Corporation of Pennsylvania. Renewed July 8, 1933.

92,497. TOILET-PAPER. Registered July 15, 1913. ALBANY PERFORATED WRAPPING PAPER COMPANY. Renewed July 15, 1933, to A. P. W. Paper Company, Inc., Albany, N. Y., a Corporation of New York, by change of name.

92,520. PAPER FOR WRITING AND PRINTING PURPOSES, ENVELOPS, AND BLANK BOOKS. Registered July 15, 1913. J. C. BLAIR COMPANY, Huntingdon, Pa. Renewed July 15, 1933, to Western Tablet & Stationery Corporation, Dayton, Ohio, a Corporation of Delaware, assignee.

92,522. PAPER FOR WRITING AND PRINTING PURPOSES, ENVELOPS, AND BLANK BOOKS. Registered July 15, 1913. J. C. BLAIR COMPANY, Huntingdon, Pa. Renewed July 15, 1933, to Western Tablet & Stationery Corporation, Dayton, Ohio, a Corporation of Delaware, assignee.

92,523. PAPER FOR WRITING AND PRINTING PURPOSES, ENVELOPS, AND BLANK BOOKS. Registered July 15, 1913. J. C. BLAIR COMPANY, Huntingdon, Pa. Renewed July 15, 1933, to Western Tablet & Stationery Corporation, Dayton, Ohio, a Corporation of Delaware, assignee.

92,532. CERTAIN NAMED FOODS. Registered July 15, 1913. CALIFORNIA FRUIT EXCHANGE, Sacramento, Calif., a Corporation of California. Renewed July 15, 1933.

92,560. CORDS, TWINES, ROPES, AND LINES. Registered July 15, 1913. HENRY C. KELLEY COMPANY. Renewed July 15, 1933, to The Grady-Travers Company, Incorporated, New York, N. Y., a Corporation of New York, assignee.

92,561. CORDS, TWINES, ROPES, AND LINES. Registered July 15, 1913. HENRY C. KELLEY COMPANY. Renewed July 15, 1933, to The Grady-Travers Company, Incorporated, New York, N. Y., a Corporation of New York, assignee.

92,597. A REMEDY FOR DISEASES OF THE LIVER AND STOMACH. Registered July 15, 1913. THE E. E. SUTHERLAND MEDICINE CO., Paducah, Ky. Renewed July 15, 1933, to Dr. Bell Medicine Co., Inc., New York, N. Y., a Corporation of Delaware, assignee.

92,626. CERTAIN PAPER AND STATIONERY. Registered July 22, 1913. J. C. BLAIR COMPANY, Huntingdon, Pa. Renewed July 22, 1933, to Western Tablet & Stationery Corporation, Dayton, Ohio, a Corporation of Delaware, assignee.

92,630. CALF, KID, AND GOAT SKINS. Registered July 22, 1913. BUSK BROTHERS, Philadelphia, Pa., a Corporation of Pennsylvania. Renewed July 22, 1933.

92,678. CERTAIN MEDICAL AND SURGICAL APPLIANCES. Registered July 22, 1913. JOHNSON & JOHNSON, New Brunswick, N. J., a Corporation of New Jersey. Renewed July 22, 1933.

LABELS

REGISTERED MARCH 7, 1933

41,805.—*Title:* DR. EMIL'S ADLA TABLETS. For Tablets Useful in Acidity, Sour Stomach, Indigestion, Heartburn, Etc. THE ADLERIKA COMPANY, St. Paul, Minn. Published December 6, 1932.

41,806.—*Title:* SUNNY SMILE MOUTH WASH. For Mouth Wash. CHAS. G. ALGASE, Philadelphia, Pa. Published December 2, 1932.

41,807.—*Title:* SERVISETTE. For Shoe Shine Service Sets. FRED A. ALSEN, doing business as Servisette, Chicago, Ill. Published December 22, 1932.

41,808.—*Title:* FLEERS BON BON GUM. For Gum. FRANK H. FLEER CORPORATION, Philadelphia, Pa. Published December 7, 1932.

41,809.—*Title:* FREIHOFER'S 24 HOUR COFFEE. For Coffee. CHAS. FREIHOFER BAKING CO. INC., Troy, N. Y. Published November 28, 1932.

41,810.—*Title:* TAR ZEMA. For Ointment. GANSZ LABORATORIES, Cincinnati, Ohio. Published November 1, 1932.

41,811.—*Title:* HELTHY FUT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 1, 1931.

41,812.—*Title:* SPECIAL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 15, 1932.

41,813.—*Title:* THE LA SALLE SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 10, 1933.

41,814.—*Title:* COMFORT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 6, 1933.

41,815.—*Title:* THE CHECKER SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published December 30, 1932.

41,816.—*Title:* ROLWYN. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 17, 1933.

41,817.—*Title:* TRI-PLEX. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 16, 1933.

41,818.—*Title:* EPICURE EXQUISITE. For Tea. JABURG BROTHERS, INC., New York, N. Y. Published December 9, 1932.

41,819.—*Title:* KOFMIX. For Cough Medicine. HAROLD A. KAHN, New Iberia, La. Published November 15, 1932.

41,820.—*Title:* MALTEX CEREAL. For Prepared Wheat and Malt with Salt. THE MALTED CEREALS COMPANY, Burlington, Vt. Published October 2, 1932.

41,821.—*Title:* FIVE BORO. For One Coat White Enamel. PEERLESS PAINT & VARNISH CORP., Brooklyn, N. Y. Published January 16, 1933.

41,822.—*Title:* PENN FIELD MOTOR OIL. For Motor Oil. PENN CITY-NATIONAL OIL CO., doing business as Penn Field Oil Corp. of Penn., Philadelphia, Pa. Published September 30, 1932.

41,823.—*Title:* BAKER GENUINE RUSSIAN MINERAL OIL. For Russian Mineral Oil. PENN CITY-NATIONAL OIL CO., doing business as Russian American Import Co., Philadelphia, Pa. Published November 9, 1932.

41,824.—*Title:* ROYAL ESTATE TEA (BLUE LABEL). For Tea. ROYAL ESTATES TEA CO., Jersey City, and Hoboken, N. J. Published December 1, 1932.

41,825.—*Title:* GOLD KUP COFFEE. For Coffee. SCHEYER-LOVELESS SERVICE, New York, N. Y. Published January 9, 1933.

41,826.—*Title:* SCHREIBER'S MANRU BARLEY MALT SYRUP. For Barley Malt Syrup. SCHREIBER PRODUCTS CORPORATION, Buffalo, N. Y. Published December 22, 1932.

41,827.—*Title:* "X" ODORLESS DRY CLEANER. For Dry Cleaning Composition. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published March 1, 1932.

41,828.—*Title:* "X" PENETRATING LUBRICANT. For Lubricants. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Published June 25, 1932.

41,829.—*Title:* DOUBLE PURPOSE DENTIFRICE. For Dentifrice. TRENT LABORATORIES, Cleveland, Ohio. Published December 31, 1932.

41,830.—*Title:* UNION METAL-TONE. For Liquid for Cleaning and Polishing Copper, Bronze, Brass, Zinc, Pewter, Nickel, Etc. UNION OIL COMPANY OF CALIFORNIA, Los Angeles, Calif. Published December 15, 1932.

PRINTS

REGISTERED MARCH 7, 1933

14,066.—*Title:* SOMETIME SOON . . . FACE THESE FACTS. For Cleansing Cream, Skin Tonic, Skin Cream, Anti-Brown Spot Ointment, Orange Skin Food, Etc. ELIZABETH ARDEN OF NEW YORK, LTD., doing business as Elizabeth Arden, New York, N. Y. Published January 1, 1933.

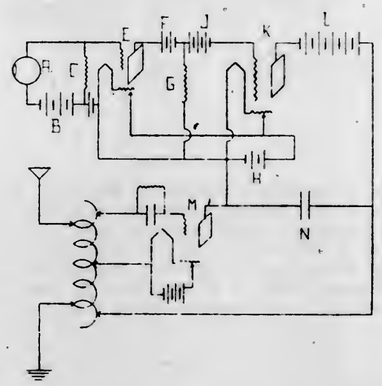
14,067.—*Title:* UNCLE JACK'S CLUB SCRAP BOOK. For Scrap Books. THE EVENING NEWS COMPANY, Baltimore, Md. Published January 1, 1933.

14,068.—*Title:* SKIPPY. For Milk of Magnesia, Milk of Magnesia Wafers, and Sodium Carbonate. E. R. SQUIBB & SONS, New York, N. Y. Published January 11, 1933.

REISSUES

MARCH 7, 1933

18,756. RESISTOR CELL CIRCUIT. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Washington, D. C., a Corporation of the District of Columbia. Original No. 1,693,509, dated Nov. 27, 1928, Serial No. 745,215, filed Oct. 22, 1924. Application for reissue filed May 7, 1930. Serial No. 450,530. 9 Claims. (Cl. 250—17.)



2. In combination a first electron discharge device, circuits for causing said device normally to generate sustained oscillations, another electron discharge amplifying device, means for applying an operating plate potential to said first electron discharge device through the conducting space between the anode-cathode of said amplifier device, a light sensitive cell controlling said second device, and means for biasing the grid of the second device to provide sharp off and on control of oscillations by said cell.

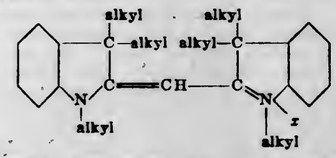
18,757. HOSIERY. EDWIN BRAND BRACHAM, Easton, Pa., assignor to Chipman Knitting Mills, Easton, Pa., a Corporation of Pennsylvania. Original No. 1,849,783, dated Mar. 15, 1932, Serial No. 405,545, filed Nov. 7, 1929. Application for reissue filed Nov. 19, 1932. Serial No. 643,329. 15 Claims. (Cl. 66—178.)



1. The method of manufacturing hosiery, intended to be worn with the reverse face of the fabric at the outside, which comprises knitting a stocking blank with a main or body yarn, and incidentally producing reinforced portions with auxiliary yarn fed so that in the fabric as used the loops formed from it underlie those formed from the main yarn on the outwardly exposed reverse face of the fabric.

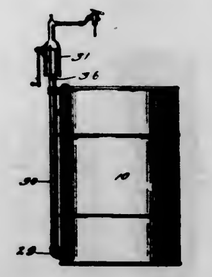
18,758. DYESTUFF DERIVED FROM INDOLINE BASES AND PROCESS OF PREPARING SAME. OTTMAR WAHL, Leverkusen, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,755,678, dated Apr. 22, 1930, Serial No. 186,829, filed Apr. 26, 1927. Application for reissue filed Feb. 20, 1932. Serial No. 594,383. 5 Claims. (Cl. 260—47.)

3. As new products dyestuffs corresponding probably to the general formula:



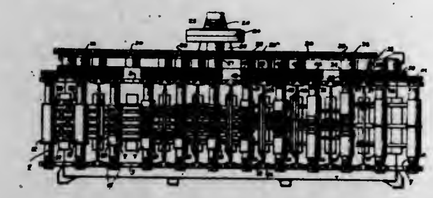
wherein the benzene nuclei may be substituted or not and x stands for an organic or inorganic acid radicle, which are in a dry state yellow to orange-red crystalline powders, soluble in water with light yellow to orange-red color, and which dye natural and artificial silk and cotton when using tannin or other mordants in beautiful greenish-yellow to reddish-yellow shades of good fastness to light.

18,759. NONSUBSTITUTING CONTAINER. HAROLD B. LLOYD, Sioux City, Iowa. Original No. 1,793,811, dated Feb. 24, 1931, Serial No. 428,071, filed Feb. 13, 1930. Application for reissue filed May 6, 1931. Serial No. 535,540. 8 Claims. (Cl. 220—85.)



1. In a non-substituting container having top and bottom walls and a side wall, a withdrawal pipe extending through the side wall near the bottom of the container and projecting into the container and thence bent downwardly to a position adjacent the bottom of the container, a member secured to the bottom of the container and secured to the inner end of said withdrawal pipe to hold the same rigidly in position and an outwardly opening check valve associated with the inner end of the withdrawal pipe, the outer end of the withdrawal pipe projecting beyond the side wall to form means for attachment of a pumping mechanism.

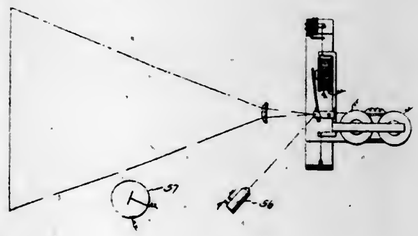
18,760. MACHINE FOR AND PROCESS OF FORMING METAL INTO SHAPES. CARL M. YODER, Lakewood, Ohio. Original No. 1,770,963, dated July 22, 1930, Serial No. 111,196, filed May 24, 1926. Application for reissue filed July 8, 1931. Serial No. 549,524. 17 Claims. (Cl. 153—28.)



11. The herein disclosed process which consists in passing a sheet of metal through and between sets of rolls, first forming therein a channel, then bending an adjacent portion of the metal out of the plane of the sheet and oppositely from the channel, forming a second channel laterally of the outer edge of the bent portion and finally flattening the bent portion back into the plane of the sheet.

12. In a machine of the class described, the combination of a frame, sets of rolls mounted thereon and arranged to receive between them a section of sheet metal, and means for driving said rolls, one set of rolls being shaped to form a longitudinal channel in the metal sheet and to bend the adjacent portions of the sheet out of the plane thereof, and succeeding sets of rolls being shaped to form a second longitudinal channel in the metal sheet and to bend the said portions of the sheet back into the original plane thereof.

18,761. TELEVISION APPARATUS. MELCHOR CENTENO V., New York, N. Y. Original No. 1,873,926, dated Aug. 23, 1932, Serial No. 430,375, filed Feb. 21, 1930. Application for reissue filed Jan. 4, 1933. Serial No. 650,192. 6 Claims. (Cl. 178—6.)

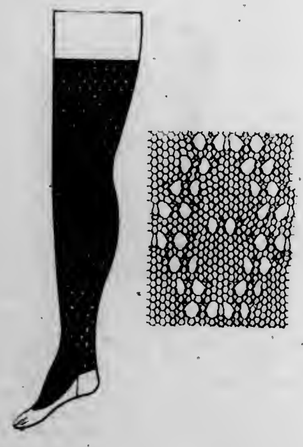


1. In a television apparatus, a stationary frame, a movable frame disposed within the stationary frame, flexible suspension means for supporting the movable frame in the stationary frame, the latter being provided with an armature, a low frequency magnet supported in the stationary frame so as to project its field through the armature of the movable frame, a mirror, a high frequency magnet carried by the movable frame, an armature for the last said magnet, said armature being flexibly mounted in the movable frame and carrying said mirror.

DESIGNS

MARCH 7, 1933

89,383. HOSIERY. EMIL J. BERGER, Hatfield, Pa., assignor to Dexdale Hosiery Mills, Lansdale, Pa., a Corporation of Pennsylvania. Filed Mar. 3, 1932. Serial No. 43,056. Term of patent 3½ years.



The ornamental design for hosiery, as shown and described.

89,384. SHOE. WALTER L. BRADY, Brockton, Mass., assignor to The Stetson Shoe Company, Inc., Weymouth, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1932. Serial No. 46,673. Term of patent 7 years.



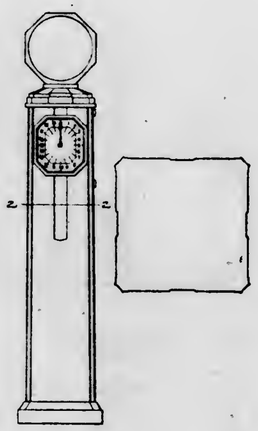
The ornamental design for a shoe, substantially as shown.

89,385. SHOE. WALTER L. BRADY, Brockton, Mass., assignor to The Stetson Shoe Company, Inc., Weymouth, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1932. Serial No. 46,672. Term of patent 7 years.



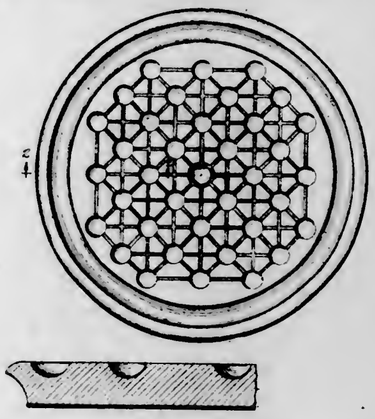
The ornamental design for a shoe, substantially as shown.

89,386. PUMP CABINET. WILLIAM H. CURTIS, Dayton, Ohio, assignor to National Pumps Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 3, 1933. Serial No. 46,687. Term of patent 7 years.



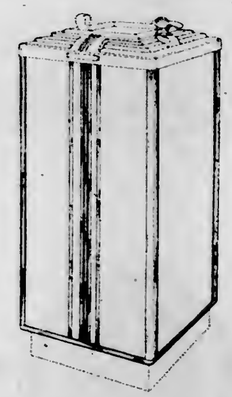
The ornamental design for a pump cabinet as shown.

89,387. GAME BOARD. REUBEN A. DAHLQUIST, Chicago, Ill. Filed Apr. 25, 1932. Serial No. 43,604. Term of patent 14 years.



The ornamental design for a game board as shown and described.

89,388. REFRIGERATOR CABINET OR SIMILAR ARTICLE. DONALD R. DOHNER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 12, 1932. Serial No. 42,838. Term of patent 7 years.



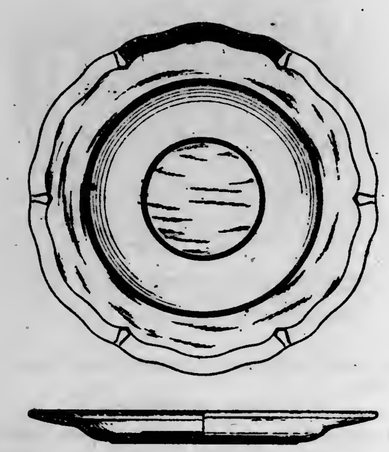
The ornamental design for a refrigerator cabinet or similar article, substantially as shown and described.

89,389. COVER OF A REFRIGERATOR CABINET OR SIMILAR ARTICLE. DONALD R. DOHNER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 12, 1932. Serial No. 42,839. Term of patent 7 years.



The ornamental design for a cover of a refrigerator cabinet or similar article, substantially as shown and described.

89,390. SAUCER. DAVID FISHER, Paden City, W. Va. Filed Jan. 5, 1933. Serial No. 46,737. Term of patent 3½ years.



The ornamental design for a saucer, as shown.

89,391. CUP. DAVID FISHER, Paden City, W. Va. Filed Jan. 5, 1933. Serial No. 46,738. Term of patent 3½ years.



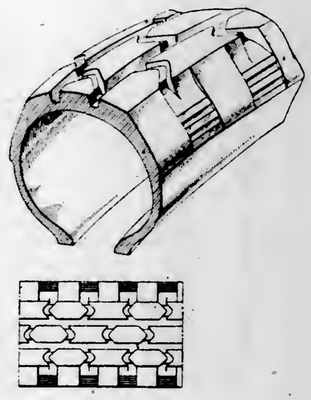
The ornamental design for a cup, as shown.

89,392. EMBROIDERED TEXTILE FABRIC OR A SIMILAR ARTICLE. ERNEST W. FREUDENBERG, Larchmont, N. Y. Filed Oct. 18, 1932. Serial No. 45,889. Term of patest 3½ years.



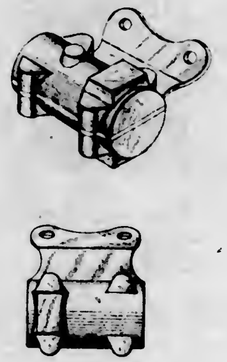
The ornamental design for an embroidered textile fabric or a similar article substantially as shown and described.

89,393. TIRE. WILLIAM S. GILBERT, Detroit, Mich., assignor to Morgan & Wright, a Corporation of Michigan. Filed Apr. 12, 1930. Serial No. 35,231. Term of patent 7 years.



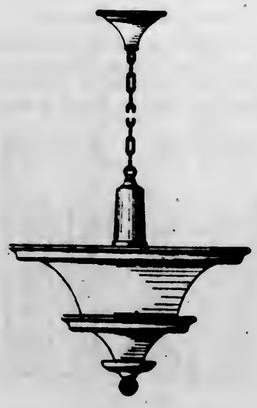
The ornamental design for a tire as shown.

89,394. COMBINED SWITCH CASING AND MOUNTING BRACKET OR SIMILAR ARTICLE. GEORGE A. GILLEN, Bronx, N. Y. Filed Nov. 3, 1932. Serial No. 45,720. Term of patent 14 years.



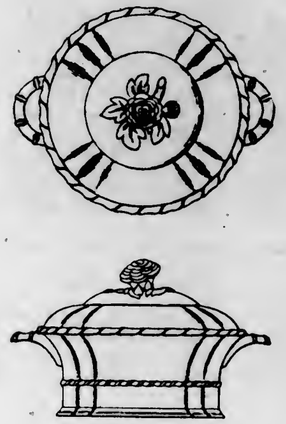
The ornamental design for a combined switch casing and mounting bracket or similar article, substantially as shown.

89,395. LIGHTING FIXTURE. GEORGE E. GLATTHAR, University Heights, and FREDERICK WENING, South Euclid, Ohio. Filed Dec. 3, 1932. Serial No. 46,305. Term of patent 7 years.



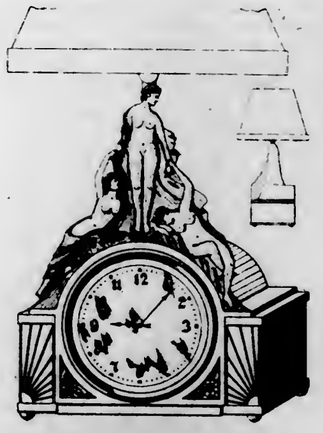
The ornamental design for a lighting fixture, as shown and described.

89,396. COVERED DISH OR SIMILAR ARTICLE. JOHN V. GODDARD, Trentham, England, assignor to Hugh C. Edmiston, New York, N. Y. Filed Jan. 6, 1933. Serial No. 46,744. Term of patent 7 years.



The ornamental design for a covered dish or similar article as shown.

89,397. COMBINED CLOCK CASE AND LAMP OR SIMILAR ARTICLE. JOSEPH GOTTLIEB, Jersey City, N. J. Filed Jan. 3, 1933. Serial No. 46,699. Term of patent 3½ years.



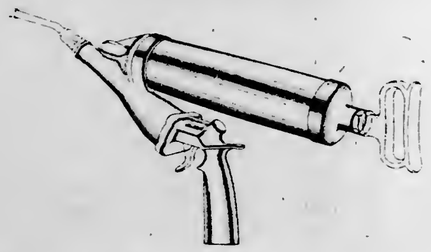
The ornamental design for a combined clock case and lamp or similar article, as shown and described.

89,398. TEXTILE FABRIC OR THE LIKE. ANTON GRULICH, Glen Ridge, N. J. Filed Jan. 21, 1933. Serial No. 46,911. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,399. GREASE GUN CASING. CLEO HARRIS, Cincinnati, Ohio, assignor to The Cincinnati Ball Crank Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 28, 1932. Serial No. 46,645. Term of patent 14 years.



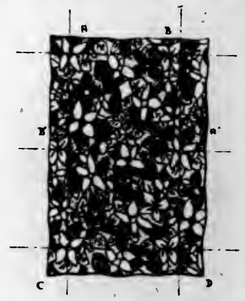
The ornamental design for a grease gun casing as shown.

89,400. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 18, 1932. Serial No. 45,400. Term of patent 3½ years.



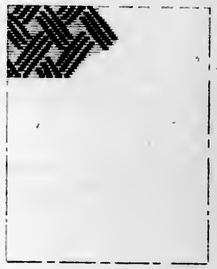
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

89,401. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willhelm Co., Inc., New York, N. Y. Filed Nov. 14, 1932. Serial No. 45,957. Term of patent 3½ years.



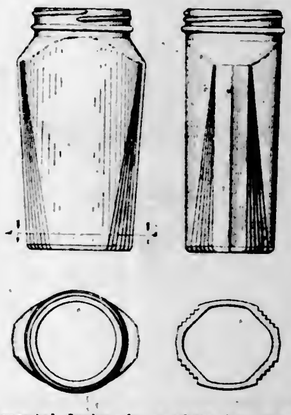
The ornamental design for a textile fabric or similar article as shown and described.

89,402. TEXTILE FABRIC OR SIMILAR ARTICLE. ISIDORE J. MARKS, New York, N. Y., assignor to E. S. Mendelson & Co., Inc., a Corporation of New York. Filed Nov. 1, 1932. Serial No. 45,696. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,403. GLASS JAR. HARRY R. MCDONALD, Dunkirk, Ind., assignor to Hart Glass Manufacturing Company, Dunkirk, Ind., a Corporation of Indiana. Filed Dec. 15, 1932. Serial No. 46,463. Term of patent 7 years.



The ornamental design for a glass jar, as shown.

89,404. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROS, Bronxville, N. Y. Filed Jan. 16, 1933. Serial No. 46,836. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

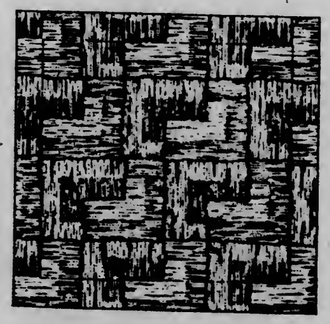
89,405. BUCKLE. ABRAHAM MENTKOW, Brooklyn, N. Y., assignor to B. Blumenthal & Co. Inc., New York, N. Y. Filed Jan. 3, 1933. Serial No. 46,701. Term of patent 3½ years.





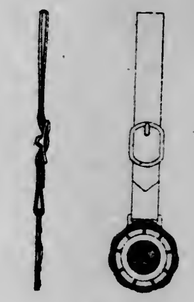
The ornamental design for a buckle, as shown.

89,406. CARPET. FRANCIS MURPHY, New York, N. Y., assignor to Bigelow Sanford Carpet Co., Inc., a Corporation of Massachusetts. Filed Oct. 5, 1932. Serial No. 45,216. Term of patent 7 years.



The ornamental design for a carpet substantially as shown and described.

89,407. WATCH-FOB. CHARLES OPPENHEIM, Chicago, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a Corporation of New York. Filed July 5, 1932. Serial No. 44,265. Term of patent 7 years.



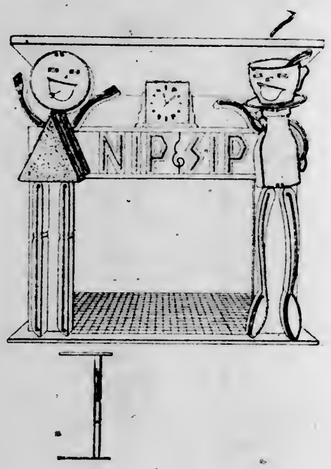
The ornamental design for a watch-fob, as shown and described.

89,408. HANDLE FOR COFFEE MAKERS. CHARLES B. PAGE, Los Angeles, Calif. Filed July 22, 1932. Serial No. 44,415. Term of patent 3½ years.



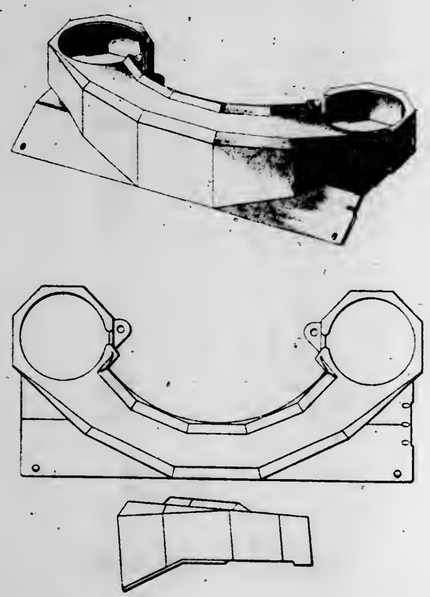
The ornamental design for a handle for coffee makers, as shown and described.

89,409. BUILDING FRONT. ALEXANDER W. PORTER, Atlantic City, N. J. Filed Nov. 25, 1932. Serial No. 46,153. Term of patent 14 years.



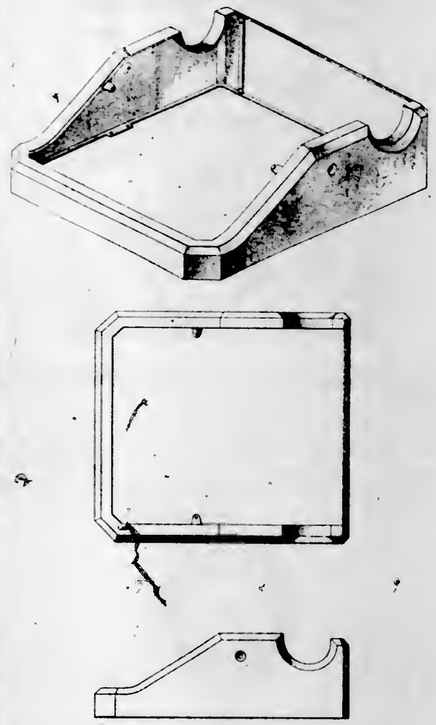
The ornamental design for a building front as shown.

89,410. TOP OR COVER PLATE FOR TYPEWRITING MACHINES. JAMES H. RAND, Jr., and JOHN A. ZELLERS, Buffalo, N. Y., assignors to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1932. Serial No. 46,654. Term of patent 3½ years.



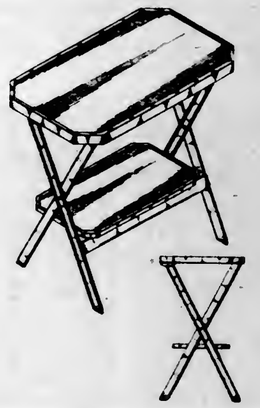
The ornamental design for a top or cover plate for a typewriting machine as shown.

89,411. FRAME FOR TYPEWRITING MACHINES. JAMES H. RAND, Jr., and JOHN A. ZELLERS, Buffalo, N. Y., assignors to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 29, 1932. Serial No. 46,655. Term of patent 3½ years.



The ornamental design for a frame for typewriting machines, as shown.

89,412. TABLE OR SIMILAR ARTICLE. RUDOLPH REDLICH, Jr., Chicago, Ill. Filed Jan. 9, 1933. Serial No. 46,768. Term of patent 7 years.



The ornamental design for a table or a similar article, as shown.

89,413. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,551. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,414. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,554. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,415. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,556. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,416. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,558. Term of patent 3½ years.



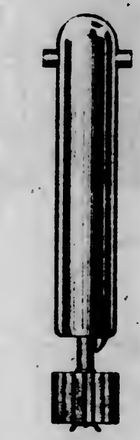
The ornamental design for a lamp shade, substantially as shown and described.

89,417. ARM SLING. KATHERINE E. UHRIG and ANNA K. UHRIG, Dayton, Ohio. Filed July 8, 1932. Serial No. 44,287. Term of patent 7 years.



The ornamental design for an arm sling, as shown.

89,418. ELECTRICAL DISCHARGE DEVICE. CLAYTON TRIDLE ULREY, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 26, 1932. Serial No. 42,632. Term of patent 14 years.



The ornamental design for an electrical discharge device, as shown and described.

89,419. SHOE SOLE. CLARENCE L. WHITE, Cuyahoga Falls, Ohio. Filed Dec. 19, 1932. Serial No. 46,581. Term of patent 7 years.



The ornamental design for a shoe sole, as shown.

89,420. JAR. FRASIER SMITH, Zanesville, Ohio, assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 9, 1933. Serial No. 46,763. Term of patent 14 years.



The ornamental design for a jar, as shown.

89,421. COMBINED FLASH-LIGHT CAP AND HANGER RING. GEORGE H. BARBER, New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed June 29, 1932. Serial No. 44,220. Term of patent 14 years.



The ornamental design for a combined flashlight cap and hanger ring, as shown and described.

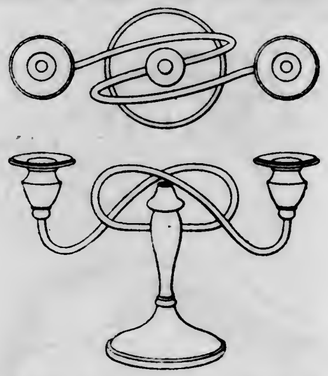
89,422. COMBINED CLOCK CASE AND LAMP. PAUL BUHRLE, Bronx, N. Y., assignor to United Metal Goods Mfg. Co. Inc., Brooklyn, N. Y. Filed Nov. 25, 1932. Serial No. 46,151. Term of patent 7 years.



The ornamental design for a combined clock case and lamp, as shown.

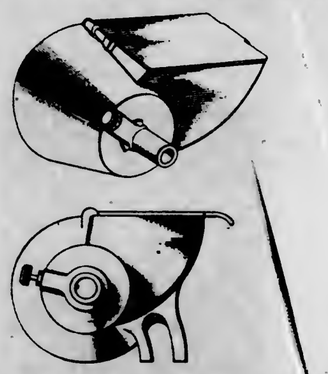
CARNEGIE LIBRARY OF ATLANTA

89,423. CANDELABRUM. IRVING COOPERSTEIN and ABRAHAM COOPERSTEIN, Brooklyn, and ABE LEVITT, New York, N. Y. Filed Nov. 17, 1932. Serial No. 46,017. Term of patent 8½ years.



The ornamental design for a candelabrum, as shown.

89,424. CASING FOR A ROTARY CUTTING IMPLEMENT. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Mfg. Company, Torrington, Conn., a Corporation of Connecticut. Filed Dec. 6, 1932. Serial No. 46,313. Term of patent 14 years.



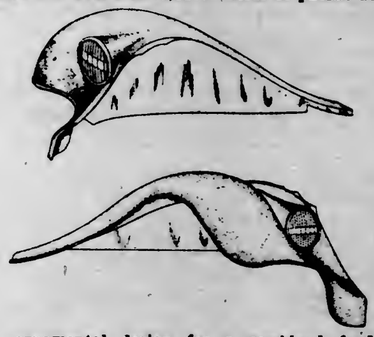
The ornamental design for a casing for a rotary cutting implement, as shown.

89,425. POWDER BOX. CLYDE H. HORNER, Palmyra, N. J. Filed June 11, 1932. Serial No. 44,057. Term of patent 14 years.



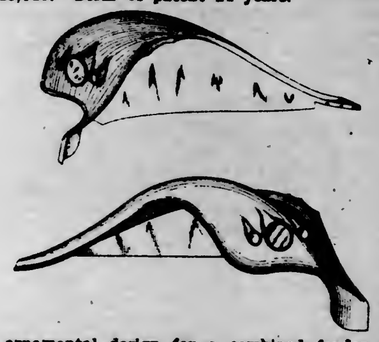
The ornamental design for a powder box substantially as shown and described.

89,426. COMBINED FENDER AND HEAD LAMP CASING FOR VEHICLES. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,639. Term of patent 14 years.



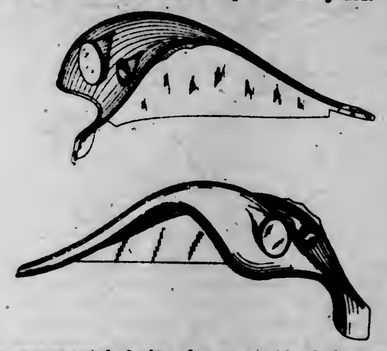
The ornamental design for a combined fender and headlamp casing for vehicles substantially as shown.

89,427. COMBINED FENDER, HEAD LAMP CASING, PARKING LAMP CASING, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,640. Term of patent 14 years.



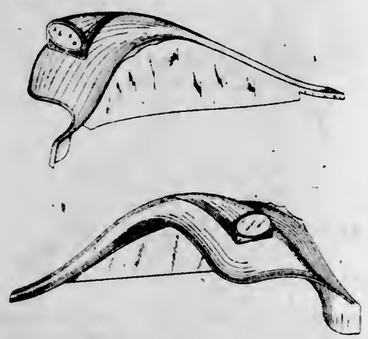
The ornamental design for a combined fender, headlamp casing, parking lamp casing, and horn casing substantially as shown.

89,428. COMBINED FENDER, HEAD LAMP CASING, AND COMBINED PARKING LAMP AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,641. Term of patent 14 years.



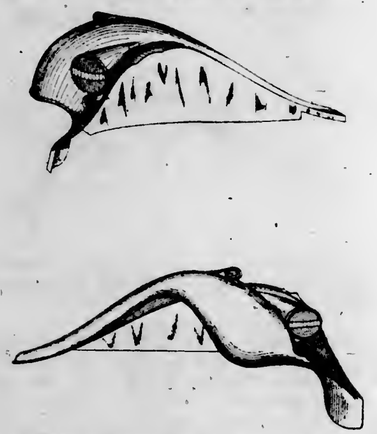
The ornamental design for a combined fender, headlamp casing, and combined parking lamp and horn casing substantially as shown.

89,429. COMBINED FENDER, HEAD LAMP, PARKING LAMP, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,642. Term of patent 14 years.



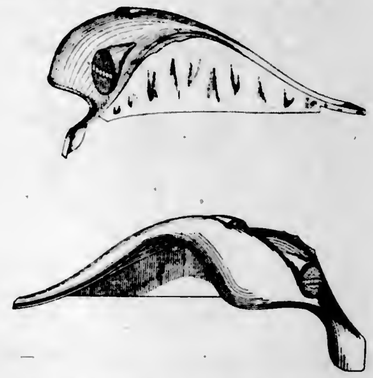
The ornamental design for a combined fender, headlamp, parking lamp, and horn casing substantially as shown.

89,430. COMBINED FENDER, HEAD LAMP CASING, PARKING LAMP CASING, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,647. Term of patent 14 years.



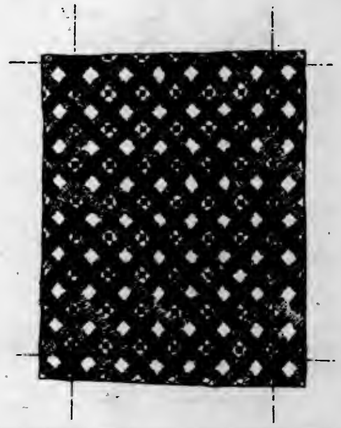
The ornamental design for a combined fender, headlamp casing, parking lamp casing, and horn casing substantially as shown.

89,431. COMBINED FENDER, HEAD LAMP CASING, AND PARKING LAMP CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,648. Term of patent 14 years.



The ornamental design for a combined fender, headlamp casing, and parking lamp casing substantially as shown.

89,432. EMBROIDERED TEXTILE FABRIC OR THE LIKE. WILLIAM G. MEIER, Mamaroneck, N. Y. Filed Jan. 25, 1933. Serial No. 46,971. Term of patent 3½ years.

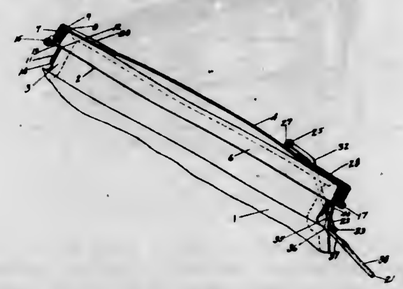


The ornamental design for an embroidered textile fabric or the like as shown and described.

PATENTS

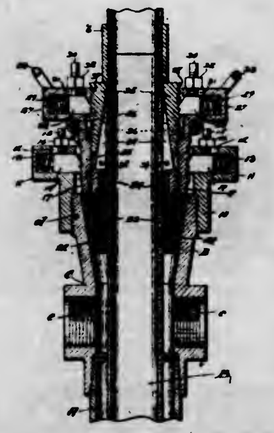
GRANTED MARCH 7, 1933

1,899,921. COVERED CONTAINER AND SEALING CLOSURE THEREFOR. CHARLES S. BARON, Tiffin, Ohio. Filed Aug. 14, 1928. Serial No. 299,498. 5 Claims. (Cl. 215—63.)



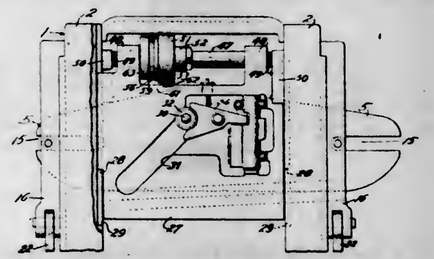
1. The combination with a container and its mouth-defining rim, of a peripherally flanged cover hinged at one side to the container and provided on its opposite side with a thumb-latch of the eccentric type provided with a bearing face adapted to engage with latching effect the bottom of the said rim, said thumb-latch comprising a resilient bail pivotally fastened to and downwardly deflected from the top of the cover and comprising a stiff body portion, a bend therein between the actuating lever and thumb-piece of the thumb-latch and means adjacent to said bend for pivotally connecting th thumb-latch and bail.

1,899,922. BLOW-OUT PREVENTING ATTACHMENT FOR CASING HEADS. LEE J. BLACK, Beaumont, Tex. Filed July 3, 1931. Serial No. 548,659. 8 Claims. (Cl. 166—14.)



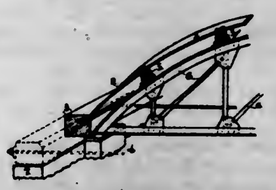
1. In a well drilling apparatus, a casing head having an upwardly extending bowl, a collar carried by the bowl, an annular packing member, the packing member being insertible into the casing head bowl around an inner string of pipe, a plurality of spring projected latches carried by said collar and having means whereby they may be manually retracted, the packing member having upwardly inclined teeth with which said latches are adapted to engage to prevent upward movement of the packing member, but permitting free downward movement of the packing member under the action of gravity and means engaged by the collar against upward movement, said means preventing upward movement of the string of pipe passing through the casing head and collar.

1,899,923. PAPER CUTTING AND TRIMMING MACHINE AND CLAMPING AND SHOCK-ABSORBING MECHANISM THEREFOR. EDWARD M. BRACKETT and DIETRICH DANEKE, Topeka, Kans., assignors to The Brackett Stripping Machine Company, Topeka, Kans., a Copartnership consisting of Edward M. Brackett and Fred M. Brackett. Filed Apr. 8, 1931, Serial No. 528,591, and in Canada July 30, 1930. 10 Claims. (Cl. 164—54.)



1. In a cutting machine having a movable knife and knife-supporting bar, the combination of knife-operating means, a material-engaging clamping member mounted adjacent to and in movable relation to the knife and provided with an inclined slot in said clamping member, clamp-operating means in operative engagement with said clamping member for moving the same into and out of engagement with the material to be operated upon, locking means comprising means for locking said paper engaging clamping member against movement in one direction and in clamping engagement with the material to be operated upon, and shock-absorbing means comprising a rocking lever mounted on said clamping member and having a lever arm adapted to operatively engage said clamp-operating means a piston operably connected with said rocking lever and adapted to be operated thereby, and means for yieldingly resisting movement of the piston for yieldingly resisting and stopping the upward movement of said clamping member.

1,899,924. ARCHED ROOF. JAN BRODA, Torun, Poland. Filed Mar. 23, 1931, Serial No. 524,698, and in Germany Mar. 30, 1930. 5 Claims. (Cl. 108—78.)



1. An arched roof, comprising in combination: an arched roof cover constructed as a substantially continuous arch; longitudinal abutments for supporting said arched roof cover; means for holding said longitudinal abutments at a constant distance, said arched roof cover being at its longitudinal edges firmly supported by the said longitudinal abutments, whereby said arched roof cover acts as an

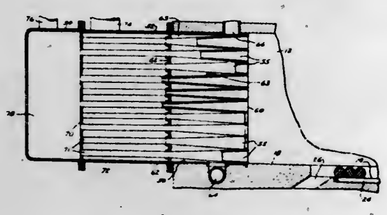
arch capable of transmitting longitudinal stresses directly to the longitudinal abutments; transverse trusses supporting said arched roof cover at numerous points intermediate of the longitudinal abutments; and means for supporting said transverse trusses, substantially as described.

1,899,925. WADDING FOR WHALE GUNS. GUSTAV EMANUEL BROFELTH, Halmstad, Sweden, assignor to Aktiebolaget Malcus Holmquist, Halmstad, Sweden. Filed Apr. 28, 1932, Serial No. 608,080, and in Norway Apr. 13, 1931. 5 Claims. (Cl. 102—42.)



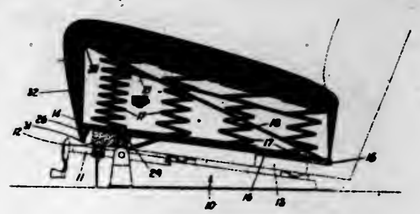
1. A wadding for whale guns comprising a plurality of round plates upon each other and kept together as a unit, the plates being alternately of different diameter and the larger plates consisting of a soft and elastic material while the smaller plates consist of harder material, the soft plates being plane and the hard plates being conical and arranged in pairs with the bases against each other.

1,899,926. FURNACE. STEPHEN P. BURKE, Morgantown, W. Va., assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Original application filed Jan. 29, 1930, Serial No. 424,280. Divided and this application filed June 13, 1932. Serial No. 616,874. 9 Claims. (Cl. 263—6.)



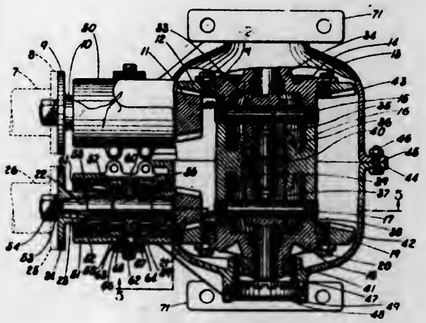
9. A furnace comprising in combination an elongate heating chamber substantially free of abrupt changes in shape and size, a burner disposed at one end of the chamber and being of substantially the same size as the said end, the said burner comprising a group of superposed ducts, means for connecting alternate ducts with a source of air, and means for connecting the remaining ducts with a source of combustible gas, the said ducts being so shaped as to permit streamline flow into the chamber of the gas and air.

1,899,927. VEHICLE SEAT. ALBERT H. ACKERMAN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Mar. 28, 1930, Serial No. 439,744. 13 Claims. (Cl. 155—180.)



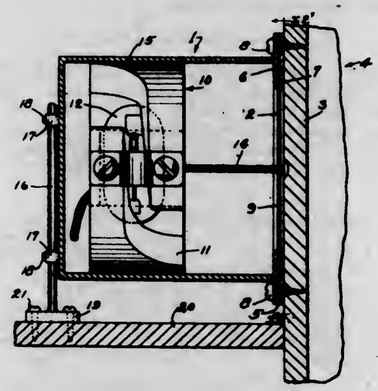
1. In a spring seat structure, a lower border frame, spring supporting bars extending substantially perpendicular to a portion thereof, an upholstery receiving member extending below and parallel to a portion of said border frame, a bent wire brace member secured at its ends to said spring supporting bars and intermediate its length to said border frame and said upholstery receiving member, and an offset in said brace adapted to bear against a seat supporting member to retain said seat in place.

1,899,928. TRANSMISSION. HERBERT D. ALLEE, Detroit, Mich., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Nov. 17, 1930. Serial No. 496,189. 2 Claims. (Cl. 74—7.)



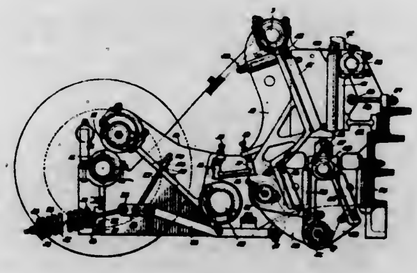
1. A transmission assembly comprising, a casing, a driving gear, a ring gear meshing with said driving gear, an axial boss on said ring gear for supporting said ring gear at its outer end for rotation relative to said casing, a second ring gear, an axial boss on said second ring gear for supporting said second ring gear at its outer end for rotation relative to said casing, a tubular member positioned between said ring gears, aligned members extending through said tubular member and through the bosses on said ring gears, removable means carried by said aligned members interposed between said ring gears and said tubular member to drivably connect said ring gears, and a driven gear meshing with said second ring gear.

1,899,929. SOUND AMPLIFYING DEVICE. CYRUS N. ANDREWS, Yucaipa, Calif. Filed Mar. 3, 1928. Serial No. 258,889. 14 Claims. (Cl. 181—31.)



1. The combination with a sounding board and a drive pin; of a diaphragm centrally spaced from and fixed around its rim, to the sound board, and centrally connected to the drive pin to vibrate with the same.

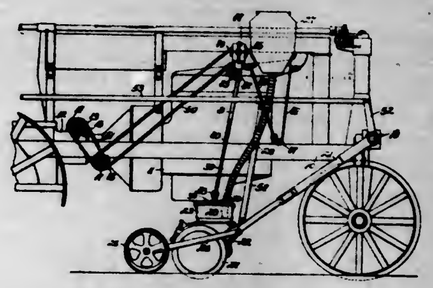
1,899,930. CRUSHER. JOHAN R. BAKSTAD, Chicago, Ill., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Apr. 10, 1929. Serial No. 354,021. 12 Claims. (Cl. 83—53.)



1. In a crusher, primary crushing means comprising relatively movable jaws, auxiliary crushing means comprising a double set of relatively movable jaws, means for operating all three sets of jaws from a common power shaft, means for directing the material discharging from said primary crushing jaws to said auxiliary crushing jaws, the total area of discharge from the auxiliary crushing jaws being substantially equal to the area of discharge from said primary crushing jaws, means for simultaneously adjusting said primary discharge area and said auxiliary discharge area and independent means for adjusting said primary discharge area.

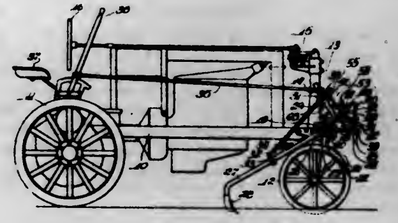
1,899,931. TRACTOR PLANTER. BERT R. BENJAMIN, Oak Park, and WILLIAM S. GRAHAM, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Jan. 19, 1931. Serial No. 509,691. 11 Claims. (Cl. 111—63.)

3. A tractor mounted and operated planter comprising, in combination with a tractor, a soil engaging unit floatingly attached to the tractor, a seed hopper mounted on the planter unit, seeding mechanism mounted beneath the hopper, a shaft extending upwardly through the hopper



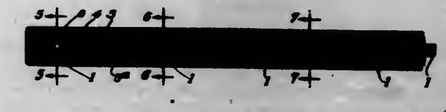
for driving said mechanism, and means mounted on the tractor driven from the tractor engine for operating said shaft.

1,899,932. TRACTOR CULTIVATOR. BERT R. BENJAMIN, Oak Park, and SHERMAN W. CADY, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed May 6, 1932. Serial No. 609,624. 6 Claims. (Cl. 97—47.)



1. The combination with a tractor having a dirigible wheeled support at its forward end, of implement supporting means secured to the forward portion of the tractor to project outwardly at each side thereof, a coupling member mounted on the projecting portion of said supporting means at each side of the tractor for angular movement about an axis transverse to said projecting portion, earth working means connected to each coupling member to move therewith, and means for transmitting angular movement of the dirigible support to the coupling members.

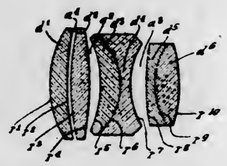
1,899,933. ELECTRIC HEATER. IRVING T. BENNETT, Brooklyn, N. Y., assignor to Thomas E. Murray, Brooklyn, N. Y.; Joseph Bradley Murray, Thomas E. Murray, jr., and John F. Murray executors of said Thomas E. Murray, deceased. Original application filed Jan. 30, 1928, Serial No. 250 350, Patent No. 1,796,317, dated Mar. 17, 1931. Divided and this application filed Apr. 25, 1928. Serial No. 272,584. 6 Claims. (Cl. 219—38.)



1. An electric heater comprising a casing containing insulating material in the form of removable molded blocks

and a resistance element enclosed thereby, the mating blocks being interlocked with one another in a direction transverse to the line of withdrawal so that the withdrawal of one causes the withdrawal of its mate.

1,899,934. ULTRALIGHT INTENSIVE OBJECTIVE. MAX BEREK, Wetzlar, Germany, assignor to Ernst Leitz, Optische Werke, G. m. b. H., Wetzlar, Germany. Filed July 20, 1932, Serial No. 623,554, and in Germany June 6, 1931. 1 Claim. (Cl. 88—57.)

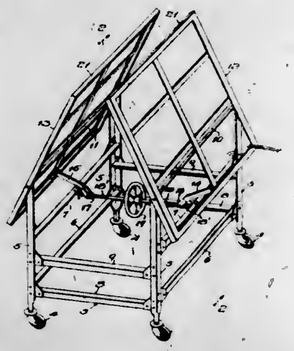


An objective of ultralight intensity with light surfaces exposed to air comprising two positive members in consecutive order separated by an air space, a following negative member and a positive rear member, the negative member consisting of a positive and a negative element which are cemented together, and present collective cement faces, so that the n_D difference at the cement face in the negative member is at least 0.05, and at this cement face the value is

$$\frac{n'-n}{r}f,$$

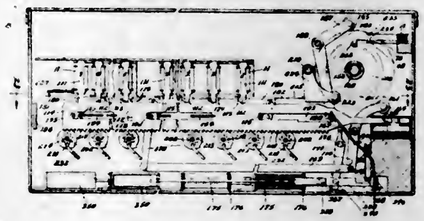
where n'—n represent the difference of the numbers of refraction, r the curvature radius of the cement face and f the focal distance of the entire system, larger than 0.1 and characterized by the fact that the second air space is at least ⅔ of the air space between the negative member and the rear member, while the total amount of all air spaces is at best equal to ⅓ of the entire length of the system construction.

1,899,935. DISPLAY RACK. HARRY SUMNER BEST, Galva, Ill., assignor to John H. Best & Sons, Galva, Ill., a Firm composed of Charlotte Sumner Best, Don Jewell Best, Leon Henson Best, and Harry Sumner Best, Galva, Ill. Filed June 15, 1931. Serial No. 544,347. 6 Claims. (Cl. 211—45.)



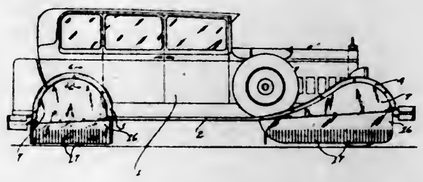
1. A display device for rugs and the like comprising a pair of oppositely disposed supports providing outwardly disposed supporting areas adapted to receive articles to be displayed and having cooperating clamping edges, said supports having corresponding ends thereof rested on a supporting member, a frame, means pivotally connecting the supports to the frame, and means for uniformly adjusting said supports on said supporting member and relative to each other to clamp articles rested on said supporting areas and having portions arranged between the clamping edges of said supports.

1,899,936. TYPEWRITING AND CALCULATING MACHINE. JOHN BRICKEN, now by judicial change of name John George Beaver, East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed May 4, 1931. Serial No. 534,925. 6 Claims. (Cl. 235—60.)



1. Register mechanism comprising a plurality of multiple order totalizers, a typewriter control unit, including a shiftable platen carriage, connections between said typewriter and said totalizers including settable control elements connected each with a selective unit comprising a plurality of totalizers, stationary control elements, control elements mounted upon said carriage and cooperating with said stationary elements to select a single totalizer of any selected unit, and means for operating the selected totalizer.

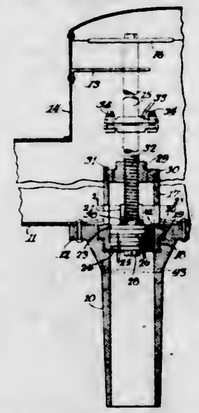
1,899,937. SPLASH GUARD FOR MOTOR VEHICLES. CRESTON L. BROWN, The Dalles, Oreg. Filed Mar. 2, 1931. Serial No. 519,528. 1 Claim. (Cl. 280—152.)



A device to be used in connection with the fenders of an automobile body comprising a tubular frame shaped to the contour of the side wall of the fenders, a flexible shield formed about the frame, a plurality of pins securing the frame to the inside wall of the fenders, fasteners secured to the lower end of the shield, and a skirt removably secured to the shield, said shield being adapted for protecting the sides of the automobile and for carrying indicia.

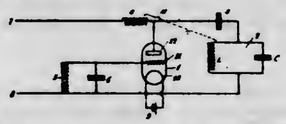
1,899,938. TANK CAR OUTLET VALVE. CLARENCE O. BUENGER, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill. a Corporation of Illinois. Filed Sept. 23, 1929. Serial No. 394,412. 7 Claims. (Cl. 137—21.)

1. In a tank car outlet valve the combination with a depending outlet leg, of a valve casing secured to and extending within the upper portion of said leg said casing having ports in its side walls adjacent and above the upper end of said leg and having its bore below said port forming a substantially cylindrical valve seat, a sliding piston valve comprising an imperforate, substantially cylindrical body portion having a flange at its upper end, freely slidable within said seat and provided with soft packing and a follower ring mounted thereon below said flange, said casing having an inwardly projecting shoul-



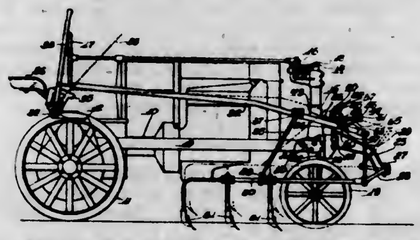
der below said valve seat for engaging the follower ring to axially compress and radially expand the soft packing as the valve is closed, and a threaded valve stem rotatably connected to the upper portion of said valve body, substantially as described.

1,899,939. ARRANGEMENT FOR RADIO CIRCUITS. WERNER BUSCHBECK, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Dec. 28, 1928, Serial No. 328,876, and in Germany Dec. 31, 1927. 4 Claims. (Cl. 250—17.)



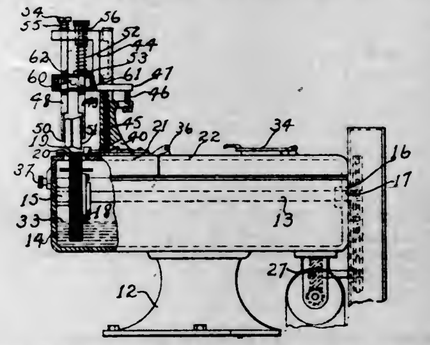
1. In an electrical system, means for preventing high frequency energy from passing into any desired branch thereof, comprising a choke coil connected in series with the desired branch and means for coupling said choke coil with another coil connected to any other part of the system passed by the high frequency energy and means controlled thereby for setting up in said choke coil an electromotive force of such a value that the electromotive force caused by any alternating current energy in said choke coil is neutralized.

1,899,940. TRACTOR CULTIVATOR. SHERMAN W. CADY, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed June 15, 1932. Serial No. 617,825. 8 Claims. (Cl. 97—47.)



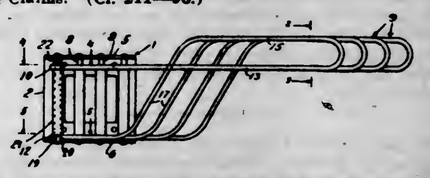
1. The combination with a tractor having dirigible supporting means at its front end and means for steering same, of a cultivator attachment comprising a fixed bar extending across the forward end of the tractor and projecting beyond each side thereof, a pair of spaced hanger members pivoted on each projecting portion of the bar for movement laterally and extending downwardly therefrom, earth working means having beams trailing from the lower ends of said hanger members, and means actuated through the steering means for swinging the hanger members thereby shifting the earth working means laterally.

1,899,941. SOLE CEMENTING MACHINE. WILLIAM C. CARD, Jr., Winthrop, Mass., assignor to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1930. Serial No. 496,420. 19 Claims. (Cl. 91—51.)



1. A sole cementing machine for operating on a sole of varying thickness, including a cementing surface, means for pressing those portions of the sole which are to be cemented against the cementing surface, and means associated with said pressing means and responsive to variations in sole thickness for bodily tilting the sole in a manner always to present said sole portions in flat surface contact with the cementing surface.

1,899,942. TROUSER HANGER. WILLIAM B. CLAFLIN, Jr., New Canaan, Conn., assignor to Claflin Products Incorporated, New Canaan, Conn., a Corporation of Connecticut. Filed Jan. 12, 1932. Serial No. 586,150. 4 Claims. (Cl. 211—96.)

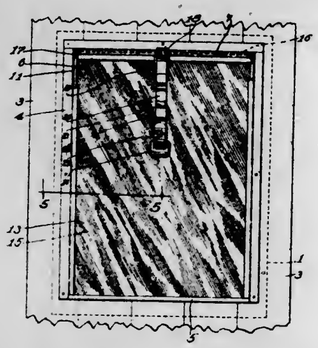


1. A garment hanger comprising a support, a plurality of garment holders mounted on said support to swing in a common plane, means associated with one of said holders and with said support for locking all of said holders against swinging in said common plane and in at least partial contact with each other, said locking means comprising a projection carried by said support for engaging one of said holders, and resilient means for engaging the last mentioned holder and maintaining it in engagement with said projection.

1,899,943. WINDOW DEVICE. JOSEPH BURLEIGH CLAY, Cedar Heights, and LANCELOT ROYCE WILSON, Waterloo, Iowa, assignors to Clay Equipment Corporation, Cedar Falls, Iowa. Filed May 26, 1930. Serial No. 455,694. 7 Claims. (Cl. 98—88.)

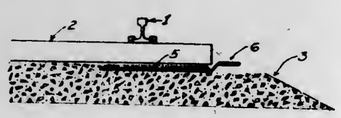
1. A window device, comprising in combination, an apertured wall, an apertured window frame, the said

frame fitting said aperture with outer flanges contacting sealingly the outer face of the wall therearound, an imperforate window fitting in said frame to swing from the bottom away from the frame, means movably connected to said frame engageable with the window releasably



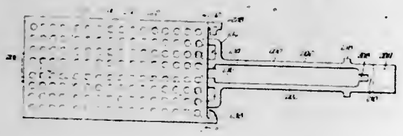
to hold it in differently adjusted open positions, side wings detachably mounted on the sides of the frame slidingly at opposite sides of the window and side and top bars secured on said wall as stops thereon for said wings and said frame respectively.

1,899,944. END BALLAST TAMPER. CHARLES C. COOK, Baltimore, Md. Filed July 22, 1932. Serial No. 623,956. 3 Claims. (Cl. 104—13.)



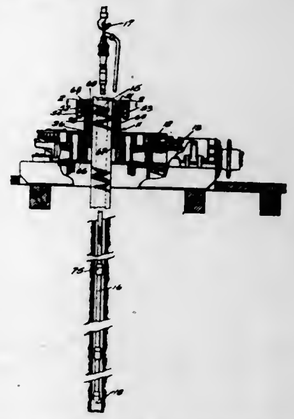
1. In an end ballast tamper for rail road ties, a substantially rectangular resiliently flexible ballast holding blade, the resilient flexibility of said blade allowing bending in being inserted and withdrawn from under a tie, said blade having a handle attached to one end thereof an removed from the face of the blade, said blade being longer than the distance from the end of a standard length wooden tie to a point inside of the inner edge of the base of the rail.

1,899,945. GRATE. ROBERT F. DARBY, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 11, 1929. Serial No. 338,950. 4 Claims. (Cl. 126—180.)



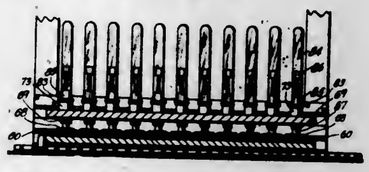
1. In an assembly of the character described, in combination with a grate bar and a supporting frame, locking and positioning means including a shoulder on said supporting frame, a hooked lug formed on the underside of said grate bar and engageable with said shoulder, two horizontally projecting apertured lugs provided on said supporting frame, downwardly projecting apertured lugs on the under side of said grate bar engaging with said supporting frame lugs, and fastening means positioned in said apertures of said projecting grate member lugs.

1,899,946. KELLY BUSHING. WILLIAM D. DAVIDSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed Mar. 28, 1932. Serial No. 601,558. 10 Claims. (Cl. 255—23.)



1. In a kelly bushing for use in establishing a driving connection between a rotary table and a drill stem, the combination of: a body having a block portion for engagement with said rotary table, there being an opening therethrough; a plurality of slips disposed in said opening; retaining means at the lower end of said slips; and a cover secured to the upper end of said body for immovably securing the upper ends of said slips to said body.

1,899,947. BEAD FORMING MACHINE. WILBUR J. DEAN, Kansas City, Mo. Filed Dec. 6, 1930. Serial No. 500,562. 14 Claims. (Cl. 18—2.)



12. In a machine of the character described, bead forming means, molds, and means for operatively engaging said molds with said bead forming means and rotating said molds during such engagement, comprising a rack, a conveyor extending alongside said rack, a conveyor engaging base member detachably mounted on said conveyor, driving members on said base member, gears on said driving members engaging said rack to rotate said driving members, a mold carrier having said molds rotatably mounted thereon, clutch members on said driving members and cooperating clutch members on said molds engaging the clutch members on said driving members to rotate said molds upon rotation of said driving members.

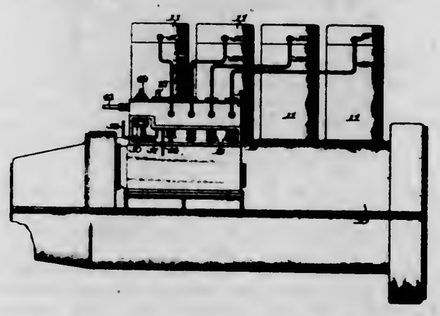
1,899,948. CHAIN LINK AND INTEGRAL HEAD ARTICULATING PINTLE. FRANK A. FAHRENWALD, Chicago, Ill. Filed Jan. 16, 1931. Serial No. 509,097. 5 Claims. (Cl. 59—5.)

1. In a chain conveyor for substantially the purpose described, link members and pintles articulating said link members; said pintles having integral end enlargements bearing laterally against links of the chain and prevent-



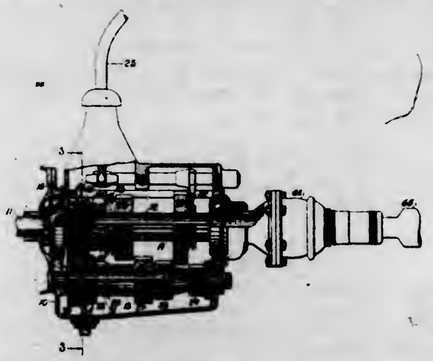
ing axial displacement of the pintles, certain of said links having trussing horns located beyond their bearings through which they receive the pintles.

1,899,949. LUBRICATING MEANS FOR HIGH PRESSURE PUMP PISTONS. EMMET H. FAHRNEY, Chicago, Ill. Filed Feb. 13, 1930. Serial No. 428,074. 8 Claims. (Cl. 123—196.)



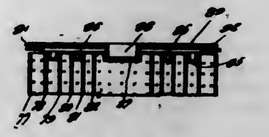
1. In combination, a chamber, means for supplying the chamber with a fluid to be compressed, a piston, means for reciprocating the piston to compress said fluid in said chamber, a hollow casing extending across and forming a portion of a wall of said chamber, and through which casing the piston moves, means for supplying a lubricant to the said casing under a pressure greater than the fuel oil pressure, and means for discharging the lubricant from the casing against the piston at points spaced in directions lengthwise of the piston as the latter reciprocates through the casing.

1,899,950. FREE WHEELING TRANSMISSION. CHESTER H. FEHLBERG, South Bend, Ind., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Feb. 8, 1932. Serial No. 591,598. 12 Claims. (Cl. 74—58.)



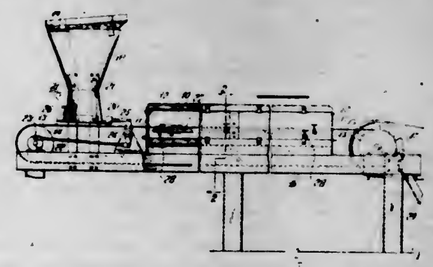
1. In a vehicle transmission, a drive shaft, a transmission shaft, a countershaft, driving means on said drive shaft, and means slidably but non-rotatably mounted on said countershaft engageable with said driving means, said slidable means being movable to one position to provide a one-way drive for the vehicle and movable to another position to provide a two-way drive for the vehicle.

1,899,951. BURNER. PAUL GERVASI, Waterbury, Conn. Filed May 9, 1931. Serial No. 536,272. 1 Claim. (Cl. 158—89.)



A baffle for liquid fuel burners employing co-axial perforated spaced shells comprising a pair of superimposed serrated plates for disposition upon the shells, the upper plate being provided with a detachable connection to the lower plate, and a dependency on the lower plate for snug removable disposition between the shells.

1,899,952. APPARATUS FOR MAKING GELATINIZED STARCH PRODUCTS. FRED O. GIESECKE, Evanston, Ill., assignor to International Patents Development Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 19, 1929. Serial No. 333,659. 3 Claims. (Cl. 87—17.)



1. Apparatus for making gelatinized starch comprising in combination an oven substantially closed so as to retain water vapor, means for introducing the starch in a relatively thin layer into the oven, means for applying heat to the oven and means for introducing water vapor into the oven.

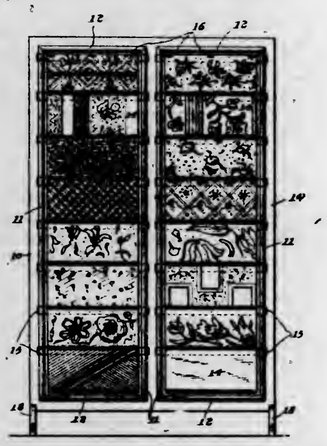
1,899,953. ROTARY DRAW WORKS WITH ADJUSTABLE JACK SHAFT. EDWIN W. GOESER, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed May 14, 1928. Serial No. 277,544. 3 Claims. (Cl. 74—21.)



1. In a rotary draw works the combination of: a plurality of upright frame members; a line shaft rotatably mounted on upper portions of said members; a jack shaft; a drive sprocket on said jack shaft adapted to be connected by a sprocket chain with a rotary table for driving the same; means for driving said drive sprocket

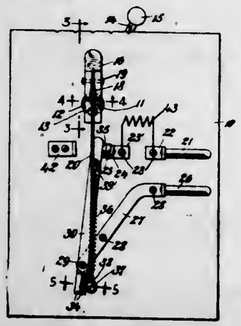
from said line shaft; brackets provided upon lower portions of said uprights and adapted to support said jack shaft, each of said brackets having an upwardly opening recess across which an end of said jack shaft extends; positioning means applicable to said jack shaft ends and fitting into said recesses of said brackets in a plurality of positions to vary the distance between said jack shaft and said rotary table, the distance between said jack shaft and said line shaft, or both of said distances; and means for securing said positioning means to said brackets.

1,899,954. DISPLAY STAND. LEWIS GOTTSTEIN, Chicago, Ill., assignor of one-half to Carson Pirie Scott & Company, Chicago, Ill., a Corporation of Illinois. Filed July 11, 1931. Serial No. 550,135. 2 Claims. (Cl. 206—82.)



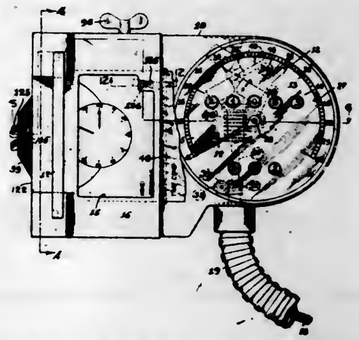
1. A display stand comprising a supporting member; parallel supporting strips on the face of said supporting member, there being transversely registering notches in the inner faces of said strips; flexible retaining strips traversing the space between said supporting strips and having their ends inserted in said notches; and display articles folded upon themselves and having their upper edges secured to said display strips, said articles depending from said retaining strips to constitute stops to limit insertion of the ends of said retaining strips in said notches.

1,899,955. THERMOSTAT SWITCH. ALBERT E. GRANT, New York, and SAMUEL W. VANDERBEEK, Manhasset, N. Y. Filed May 7, 1930. Serial No. 450,344. 8 Claims. (Cl. 200—138.)



1. A switch of the character described, comprising a base-plate, a thermostat having a normally straight portion one end of which is free to move, a lever having its fulcrum near one end thereof and carrying a contact-point at its opposite end, a spring connected at one end with the free end of the thermostat, and its other end connected with the opposite end of the lever adjacent said contact-point; the ends of said lever being movable laterally to break the circuit and said thermostat being movable into engagement with the lever to move the same upwardly whereby one contact slides relative to the other contact to prevent the contact points from sticking together.

1,899,956. SPEED AND TIME RECORDER. JAY HIRAM GREENLEY, Buffalo, N. Y. Filed Mar. 29, 1929. Serial No. 351,065. 3 Claims. (Cl. 234—30.)

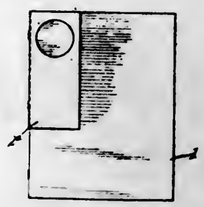


1. In a device of the character described adapted to be driven by a vehicle and having connected indicating and recording hands for simultaneous and equal operation under speed changes of the vehicle, a clock having a recording dial and recording hands cooperating therewith and manually controlled recording means cooperating with said recording hands of both the speedometer and the clock and the clock dial to make a record of the time and speed of the vehicle at the time at which the recording operation is performed.

1,899,957. PROCESS FOR PREPARING ANTHRAQUINONE SULPHONIC ACIDS. IVAN GUBELMAN, South Milwaukee, and WILLIAM L. RINTELMAN, Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Dec. 14, 1928. Serial No. 326,148. 11 Claims. (Cl. 260—51.)

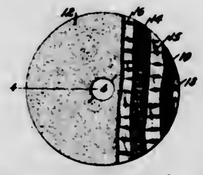
1. The process of preparing a mixture of anthraquinone beta disulphonic acids which comprises heating a p'-sulpho-benzoyl-orthobenzoic acid body in concentrated sulphuric acid and subsequently sulphonating.

1,899,958. BOOK. RAYMOND M. GUNNISON, Scarsdale, N. Y. Filed Oct. 20, 1932. Serial No. 638,685. 3 Claims. (Cl. 281—32.)



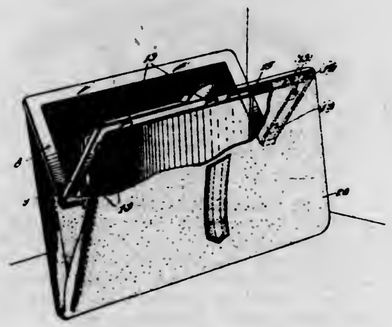
1. The combination of a periodical comprising a plurality of sheets bound along their rear edges to open in book form, and a hanger for the periodical composed of a folded sheet bound along the fold therein to the rear edge of the periodical and having a hole in each side adapted to register with the companion hole to receive a projection support.

1,899,959. ABRASIVE DISK. WILLARD C. HAPP, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Dec. 10, 1928. Serial No. 324,913. 11 Claims. (Cl. 51—195.)



1. An abrading disk comprising a woven metallic base, and abrasive material adhesively secured thereto, the composite structure being sufficiently pliable to permit distortion adjacent the free edge thereof without disrupting the same.

1,899,960. HAND BAG. PAUL E. HARTMANN, Hillside Township, Union County, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 592,934. 3 Claims. (Cl. 150—29.)



1. In a hand bag, a frame member having an inner side wall provided with top and bottom flanges, an inlay having substantially the same shape as the frame members, means on the inlay for attaching bag covering material thereto, and spaced tabs integral with the bottom flange, said tabs being adapted to be bent up to clinch the inlay in the frame member between the top and bottom flanges.

2. In a hand bag, a substantially U-shaped inlay having a plurality of spaced tabs along its inner edge, each tab having an apertured protuberance, said tabs being bendable upwardly parallel with the inlay, said inlay having spaced apertures registering with the protuberances when the tabs are bent upwardly.

1,899,961. HYDROGENATED ROSIN PRODUCT. CLYDE O. HENKE, South Milwaukee, Wis., assignor, by mesne assignments, to Newport Industries, Inc., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,748. 10 Claims. (Cl. 202—52.)

1. The process of preparing improved resinous products of low color content from abietic acid containing material which comprises hydrogenating the abietic acid containing material in the presence of a catalyst, separating the catalyst from the hydrogenated product, vacuum distilling the hydrogenated product and isolating an intermediate fraction of the distillate.

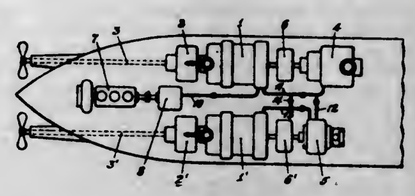
1,899,962. ILLUMINATED CHANGEABLE DISPLAY DEVICE AND METHOD OF PRODUCING THE SAME. LUTHER J. HIGGINBOTHAM, Dallas, Tex. Filed Mar. 2, 1931. Serial No. 519,671. 8 Claims. (Cl. 95—5.)



1. The method of producing transparencies for alternate display of a pair of different images, which consists in photographically printing on the sensitized sides of a pair of transparent plates two images to be displayed, and after one of the plates is photographically printed with its image to be displayed coating the printed emulsion side of the plate with a translucent substance, and securing said plates together with the printed sides next to each other and separated only by the coating.

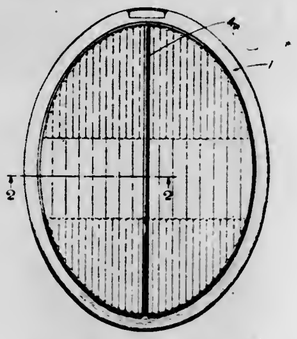
5. A transparency for the alternate display of a pair of different images, comprising a pair of transparent plates having adjacent emulsion sides, each bearing a printed photographic image, one of said sides having a thin coating of translucent material thereon, and means for securing said plates together with the printed images separated only by the said translucent coating.

1,899,963. EXPLOSION TURBINE PLANT FOR SHIPS. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Jan. 30, 1929, Serial No. 336,275, and in Germany Feb. 29, 1928. 6 Claims. (Cl. 60—97.)



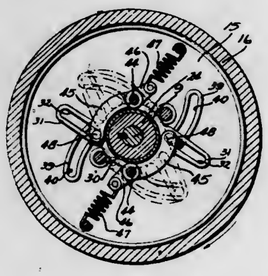
1. In an explosion turbine power plant, in combination, an explosion turbine having a plurality of explosion chambers, a conduit for conducting air to one or more of said chambers to start said turbine, a low pressure air compressor arranged to be driven by the latter, a second explosion turbine having a plurality of explosion chambers, a high pressure air compressor arranged to be driven by said second turbine, said compressors being adapted to compress air for charging the explosion chambers of both said turbines, and air conduits between each of said compressors and the chambers of each of said turbines.

1,899,964. HEAD LAMP LENS. JAMES R. HUGHES, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Nov. 17, 1930. Serial No. 496,182. 8 Claims. (Cl. 240—41.4.)



1. A transparent closure for an automobile lamp having a vertical axial portion thereof provided with a highly reflective surface and having a cylindrical lens formation on the side opposite said reflective surface to cause said reflective surface to appear larger than it actually is when viewed from a position in front of the lamp.

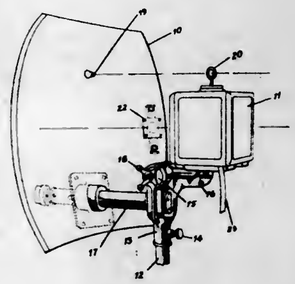
1,899,965. IGNITION TIMER BREAKER MECHANISM. FINN T. IRGENS, Wauwatosa, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed May 20, 1931. Serial No. 538,726. 13 Claims. (Cl. 200—31.)



1. In a timer, the combination with relatively movable contacts and a cam follower provided with connections for the operation of said contacts, of a compound cam having relatively movable portions and angularly spaced effective contact closing and opening surfaces subject to variation in spacing upon the relative movement of the portions of said cam, and means for varying the relative positions of said cam portions during the operation of the cam whereby to vary the closed contact interval in terms of the angular interval between said surfaces, said means being effective upon both the cam closing and cam opening surfaces to advance them at different relative rates in the direction of cam rotation and said means including a single element providing a common connection with said surfaces.

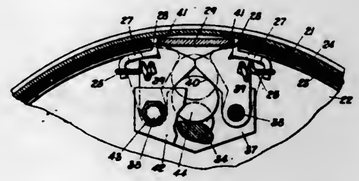
1,899,966. SOUND PICK-UP DEVICE. PAUL E. G. JENSEN, Grantwood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 14, 1931. Serial No. 557,045. 7 Claims. (Cl. 179—1.)

1. A sound pick-up device including a concentrator and a support therefor, a microphone arranged within said concentrator to receive the concentrated sound, means mounted on said support for determining the distance



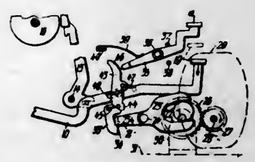
between said device and the point of sound origin, and means for adjusting the spacing between said microphone and said concentrator in accordance with said distance.

1,899,967. BRAKE. ROBERT F. KOHR, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Original application filed June 23, 1927, Serial No. 200,944. Divided and this application filed May 3, 1929. Serial No. 360,123. 12 Claims. (Cl. 188—78.)



1. In a brake mechanism, a rotatable drum, braking means movable to engage said drum, an actuating means therefor comprising a pair of pivoted levers engaging the ends of said braking means substantially in the circular path thereof, a free floating cylinder positioned between said levers and contacting therewith, and a rotatable cam for moving said cylinder outwardly to pivot one or both of said levers for engaging said braking means with said drum.

1,899,968. TYPEWRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed July 22, 1926, Serial No. 124,147. Divided and this application filed Aug. 13, 1928. Serial No. 299,205. 8 Claims. (Cl. Claims. (Cl. 196—13.)

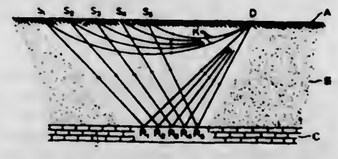


2. In a typewriting machine, the combination with actuating levers, of a reciprocating bar underlying said levers, a swingable interponent mounted on each of said levers to cooperate with said bar for depressing said levers, a cam adjacent each interponent and also mounted on its lever, for moving said interponent into engagement with said reciprocating bar, and key means for operating said cams.

1,899,969. REFINING HYDROCARBON OIL. STEWART S. KURTZ, Jr., Merion, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 23, 1931. Serial No. 510,847. 18 Claims. (Cl. 196—13.)

1. In the art of refining mineral oils containing paraffinic and naphthenic hydrocarbons, the process which comprises bringing the oil into contact with benzonitrile, thereby effecting solution of a portion of the oil richer in naphthenic hydrocarbons in the benzonitrile, separating the benzonitrile solution of oil from the oil so treated, and removing the benzonitrile from each of the fractions so obtained, thereby to obtain fractions of the oil respectively richer in paraffinic and naphthenic hydrocarbons.

1,899,970. SEISMIC EXPLORATION OF GEOLOGIC FORMATIONS. BURTON MCCOLLUM, Houston, Tex., assignor to McCollum Geological Explorations, Inc., Houston, Tex., a Corporation of Delaware. Filed July 14, 1931. Serial No. 550,680. 8 Claims. (Cl. 181—0.5.)



1. In the art of profiling geological formations, the step in the method which consists in originating a plurality of seismic waves above said formation at spaced points and at times to enable the individual waves to be reflected from said formation to arrive simultaneously at a common detecting point.

1,899,971. METHOD OF MAKING COLORED SIGNS. JOHN P. MEEHAN, Los Angeles, Calif. Filed Aug. 12, 1932. Serial No. 628,476. 3 Claims. (Cl. 41—24.)

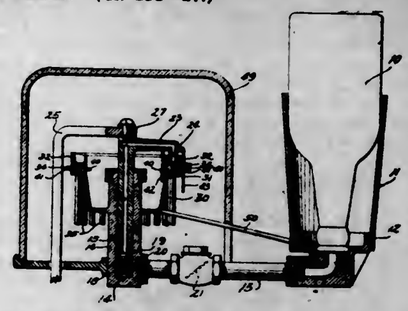


3. A method of making a colored sign plate, which consists in forming raised characters and a raised field in the same plane on the plate, forming sunken characters in the field, applying a color pigment to the plate, permitting the color to dry, and then applying a color-coating roller carrying a contrasting color to apply the contrasting color simultaneously to the characters and to the field.

1,899,972. PROCESS FOR TONING SILVER PICTURES. HANS MENGELE, Wiesbaden, Germany, assignor to Byk-Guldenwerke Chemische Fabrik Aktiengesellschaft, Berlin, Germany, a Corporation of Germany. Filed June 4, 1931, Serial No. 542,108, and in Germany June 5, 1930. 6 Claims. (Cl. 95—88.)

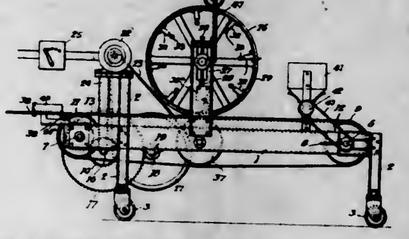
1. A composition of matter for toning photographic pictures comprising a solution containing selenious acid and a water soluble salt of sulphocyanic acid.

1,899,973. OIL FEED MECHANISM. GEORGE J. MEYER, Cudahy, Wis. Filed Jan. 18, 1930. Serial No. 420,864. 11 Claims. (Cl. 184—27.)



1. An oil distributing mechanism including the combination of an annular table, an annular series of cups on said table, and provided with outlet ports, oil ducts, each connected with the outlet port of one cup, an axially disposed reciprocatory pump plunger having an outlet nozzle adapted for registry with the respective cups successively, and means for rotating the plunger to bring said nozzle into such successive registry with the cups on the table during the retractive movements of the plunger.

1,899,974. MACHINE FOR MANUFACTURING CERAMIC OBJECTS. THOMAS FRED MOONEY, New Lexington, Ohio, assignor to Ludowici-Celadon Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 17, 1930. Serial No. 444,896. 9 Claims. (Cl. 25—42.)



1. In a machine for forming clay products, a conveyor for receiving and supporting a column of clay, means for positively moving said conveyor, a drum mounted for rotation over said conveyor and having molds in the outer surface thereof and a table for receiving the molded articles from said conveyor, said table having means thereon for trimming the edges of said molded articles.

1,899,975. DYEING PROCESS. WILLIAM R. MOORHOUSE, New York, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 21, 1928. Serial No. 294,586. 33 Claims. (Cl. 8—5.)

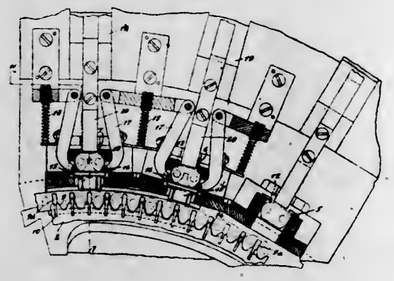
1. In the process of dyeing with a vat dyestuff by the pad and jig method, the improvement which comprises padding the material to be dyed with a padding liquor which contains the vat dyestuff substantially entirely in the unreduced form and a soluble sulfide.

15. A padding liquor comprising water, a vat dyestuff in the unreduced form, a soluble sulfide and an adhesive.

20. A composition comprising a vat dyestuff substantially completely in the unreduced form and a soluble sulfide.

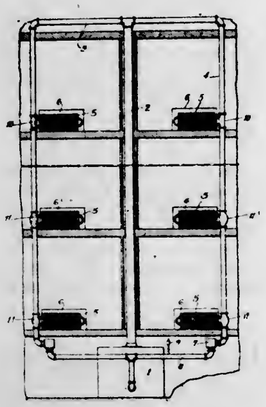
27. A composition comprising water, a vat dyestuff of the indigoid series substantially completely in the unreduced form, and sodium sulfide.

1,899,976. AUTOMATIC CHAIN ASSEMBLING MEANS. FRIEDERICH MÜLLER, Elizabeth, N. J., assignor to The Whitney Mfg. Co., Hartford, Conn., a Corporation of Connecticut. Filed Aug. 1, 1929. Serial No. 382,748. 48 Claims. (Cl. 59—7.)



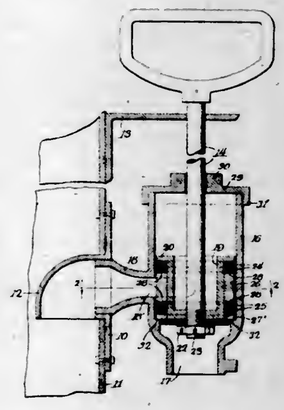
1. In a chain assembling machine, an assembling member, means for feeding chain elements forming successive pitches to said member in overlapping relation to each other, means on the member for receiving said elements in said overlapping relation to each other to form a chain, and means for intermittently moving said member in one direction to bring successive parts thereof into position to receive other chain elements.

1,899,977. HEATING SYSTEM. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., and GEORGE H. PHELPS, Warehouse Point, Conn., assignors, by direct and mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Feb. 14, 1930. Serial No. 428,265. 3 Claims. (Cl. 237—67.)



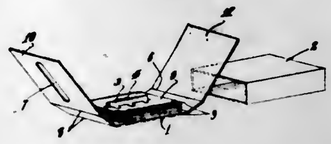
1. A steam heating system including in combination a vertical line of radiators of the convection type in which the greater portion of the heat is transmitted to air which is circulated over the heating surfaces, means for regulating separately the flow of air over each radiator and thereby the consumption of steam, a riser carrying the steam supply and connected to the inlet and outlet respectively of each of said radiators, means in the riser between the inlet and outlet of each of the radiators for maintaining a higher pressure of steam at the inlet of the radiator than at its outlet and means in the lower part of the riser for limiting the difference between the pressures at the inlet and the outlet respectively of each radiator to a predetermined maximum so that the required differential pressure is maintained for all the radiators in the line independently of any differences in their consumption of steam.

1,899,978. TANK OUTLET VALVE. ALBERT H. NOYES, Chicago, Ill., assignor to Hills-McCanna Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 20, 1929. Serial No. 394,063. 9 Claims. (Cl. 137—21.)



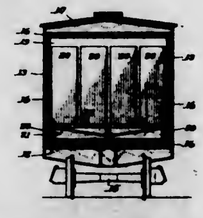
1. A tank discharge valve comprising a valve casing having an outlet at its lower end and a lateral extension adapted to be connected to the tank outlet and provided with an inlet port, and a piston valve slidable in said casing and comprising a cylindrical body having a flange at its upper end, upper and lower packing rings, an intermediate sleeve and a follower ring mounted on the cylindrical valve body and a plate secured to the lower end of the valve body and engaging the follower ring to axially compress and radially expand the packing rings, said casing having a stop shoulder for engaging the follower ring to arrest the closing movement of the valve with the packing rings above and below said inlet port, substantially as described.

1,899,979. RAZOR BLADE PACKAGE. HAZLEHURST R. NOYES, Los Angeles, Calif., assignor to William G. McAdoo, Los Angeles, Calif. Filed Nov. 20, 1931. Serial No. 576,245. 1 Claim. (Cl. 206—46.)



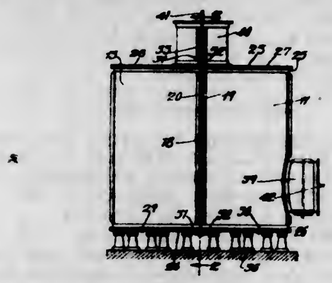
A container for slotted razor blades comprising a base element of sheet material of width greater than the blades to be packaged, a tab of sheet material extending perpendicularly from said base portion to engage with slots in blades to be packaged and retain them in position, one of the ends of said base element being extended to fold back flat against blades positioned on said tab and having a slot therein for receiving the upper edge of said tab and the other end of said base element being extended to fold back flat on top of said first end, said other end being substantially imperforate whereby it rests against the top edge of said tab projecting through said slot in said first end, and outer enclosing means for maintaining said ends flat against each other and against blades in the package.

1,899,980. SUPPORT CONSTRUCTION. ARTHUR F. O'CONNOR, Chicago, Ill., assignor to Equipment Specialties Company, Chicago, Ill., a Corporation of Illinois. Filed July 25, 1931. Serial No. 553,234. 10 Claims. (Cl. 62—169.1.)



1. The combination, with a refrigerator compartment having brine tanks and a drip pan, of a support structure for said brine tanks in said drip pan, and blocks of relatively soft, easy-wearing material disposed in the drip pan under the opposite ends of the support.

1,899,981. PROTECTIVE INCLOSURE FOR REACTORS AND SIMILAR APPARATUS. SANDOR I. OBERREICHER, Brooklyn, N. Y., assignor to Metropolitan Device Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 9, 1930. Serial No. 501,047. 11 Claims. (Cl. 175—361.)



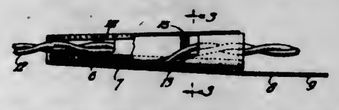
1. Electric apparatus comprising a reactance coil and an inclosure therefor, comprising a metallic shield and intercepting strips of insulating material in the path of secondary induced currents in said inclosure.

1,899,982. CLAMP CLOTHESPIN. AXEL E. OLSON, Brainerd, Minn. Filed July 11, 1932. Serial No. 621,887. 2 Claims. (Cl. 24—137.)



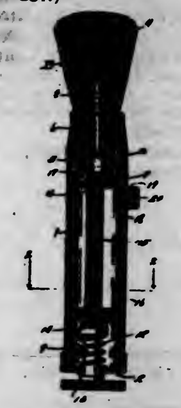
1. In a device of the kind described, two elongated jaws hingedly connected at aligned medial points, the intended upper ends of the jaws being slotted through in alignment in a common plane, the inner faces of the upper extremities of the jaws being grooved through longitudinally in the said plane of the said slots, thereby forming a hanger slideway, and also giving additional range to the opening and closing of jaw ends without resorting to increasing the angle of wedge to obtain a greater opening and closing, and a hanger having a head and a wedge shaped depending portion slidably seated at its margins within said slideway, the opposite end of the hanger having means for engaging a clothes line, there being a hole formed thru the head of the device for engaging a nail or the like.

1,899,983. WIRE CLAMP. HORACE W. PERRY, Oak Park, Ill., assignor to Reliable Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 8, 1931. Serial No. 542,876. 4 Claims. (Cl. 24—126.)



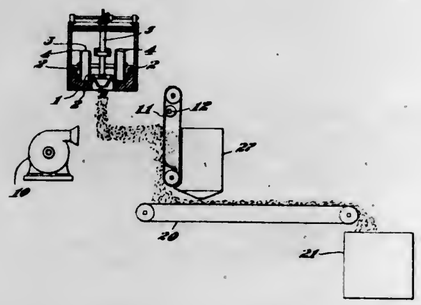
1. A clamp comprising an elongated transversely U-shaped clamping member having a groove extending around the back of said member and opening through the opposite side walls thereof to the space between said walls and means for mounting said member on a support.

1,899,984. SHAVING BRUSH. JAMES D. POWELL, Stoyestown, Pa. Filed Apr. 28, 1932. Serial No. 608,057. 3 Claims. (Cl. 15—137.)



1. A device of the character described consisting of an elongated tubular member, a brush extending within one end portion of the member, said inserted portion of the brush having an opening to permit delivery therethrough to the fibres of the brush, the inner portion of such opening constituting a valve seat, a rod freely disposed through the opposite end portion of the member, the inserted end of the rod constituting a valve for coaction with the valve seat, an expansible member within the tubular member and coacting with the rod and a wall of the tubular member for normally maintaining the valve end of the rod in closing engagement with the valve seat, and a follower threaded upon the rod and moving therealong upon rotation of the rod, the pressure created by the follower upon the content of the tubular member upon rotation of the rod in one direction bodily moving the rod and follower against the tension of the expansible member to allow the valve at the inserted end portion of the rod to move away from its seat, said rod and follower bodily moving in the opposite direction under the action of the expansible member as the pressure on the content of the tubular member decreases to return the valve of the rod to its seat.

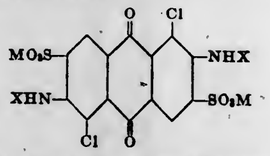
1,899,985. FIBROUS PRODUCT AND MANUFACTURE OF SAME. ROLAND B. RESPESS, Wickford, R. I., assignor to Respats Inc., Cranston, R. I., a Corporation of Rhode Island. Filed July 8, 1930. Serial No. 466,465. 18 Claims. (Cl. 106—24.)



2. Method of making a fiber-cement, comprising the subjection of wood chips to the abrasive and splitting action of sand mixed therewith, and mixing the reduced chips and the sand with cementitious material.

1,899,986. 1 5-DICHLORO-2,6-DIAMINO-ANTHRAQUINONE-3,7-DISULPHONIC ACID AND PROCESS OF PRODUCING SAME. WILLIAM L. RINTELMAN, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,631. 8 Claims. (Cl. 260—60.)

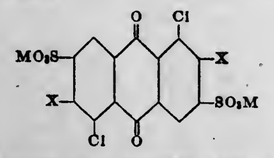
1. As a new product of manufacture, a compound of the following general formula:



in which X is hydrogen or an acidyl group, and M is a hydrogen atom or a metallic radical.

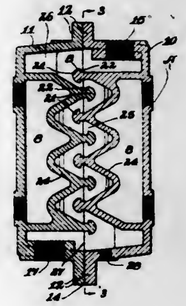
1,899,987. PROCESS OF PREPARING 1,5-DICHLORO-2,6-DIAMINO-ANTHRAQUINONE. WILLIAM L. RINTELMAN, Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Apr. 20, 1931. Serial No. 531,632. 6 Claims. (Cl. 260—60.)

1. The process of producing 1,5-dichloro-2,6-diamino-anthraquinone which comprises hydrolyzing a compound of the general formula:



in which M stands for a hydrogen atom, an ammonium group, or a metallic radical, and X stands for an amino group, either primary or substituted by a readily hydrolyzable protective group.

1,899,988. AIR DRIER. RICHARD RUEMELIN, Milwaukee, Wis. Filed Nov. 8, 1929. Serial No. 405,764. 17 Claims. (Cl. 183—79.)



1. An air drier including, a pair of members secured together, and a series of interrupting baffles and horizontal moisture conducting grooves carried by said members forming an air passage through said drier to carry compressed air from an inlet at the top to an outlet at the bottom whereby the major part of the moisture is collected out of the air passing through said drier.

1,899,989. PROCESS OF TREATING CELLULOSE FIBER PULP. HELLMUTH C. SCHWALBE, Philadelphia, Pa., assignor to Dill & Collins Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1931. Serial No. 527,664. 9 Claims. (Cl. 92—15.)

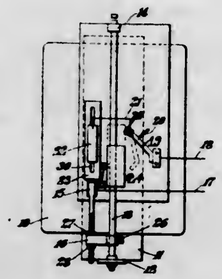
4. The process of treating sulphite pulp which comprises as steps therein the prebeating of the same, thereafter subjecting it to a prebleaching treatment and subsequently to a digesting treatment.

1,899,990. MANUFACTURE OF PILE FABRICS. HOWARD L. SHUTTLEWORTH, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Feb. 8, 1932. Serial No. 591,546. 4 Claims. (Cl. 2—278.)



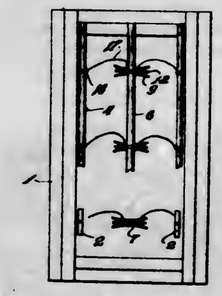
1. A pile fabric having a heading without pile tufts at at least one end of the fabric, the heading being folded back upon itself with the free edge underneath and with no portion of the heading lying beneath that portion of the fabric provided with pile tufts, a strip of fringe having a portion lying on top of the doubled portion of the heading, and means for securing the fringe and the two plies of the heading together.

1,899,991. ELECTRIC WELDING APPARATUS. ALBERT A. SMITH, Riverdale, N. J., assignor to Metropolitan Engineering Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 7, 1929. Serial No. 397,843. 9 Claims. (Cl. 219—4.)



1. In a welding apparatus including a movable pressure application element and a welding current control circuit cooperating therewith, a switch for controlling the application of welding current, means actuated by said movable pressure element to close and open said switch at definite independent points in its path of travel and means to adjust the points at which said switch is closed and opened.

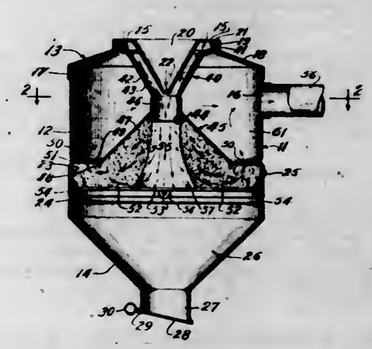
1,899,992. RACK FOR ELECTROPLATING. EDWIN SOHN, Oak Park, Ill. Filed Dec. 30, 1926. Serial No. 157,919. 6 Claims. (Cl. 204—5.)



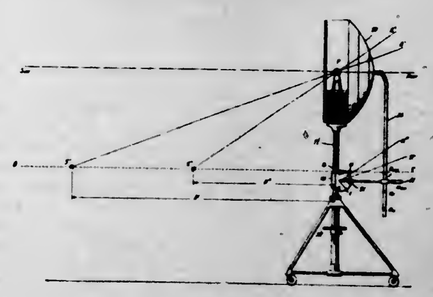
1. As a new article of manufacture, a rack for use in plating articles comprising a bar, resilient means secured at intervals thereto and adapted to be inserted into the articles to be plated to maintain said articles thereon, auxiliary anodes in said bar adapted to project into the articles to be plated, means for insulating the anodes from said resilient means and means for partially insulating said anodes from an electroplating solution.

1,899,993. FLUID CLEANER. GEORGE M. SPENCER, Chicago, Ill. Filed June 18, 1930. Serial No. 461,906. 5 Claims. (Cl. 183—48.)

1. An air cleaner comprising, a body having inlet and outlet openings, a member mounted in said body to receive fluid from the inlet opening and being substantially of the form of an inverted frustrated cone terminating in a depending cylindrical channel portion, a second member of similar form mounted in said body and embracing the depending cylindrical channel portion of said first mentioned member and spaced from the body, said members forming a central fluid channel and an outer outlet chamber communicating with the outlet in said body, a mass filter positioned in said second member, and between said central channel and said outlet chamber having a central opening therein, and a bottom closure for said body arranged to provide a quiescent chamber and to receive and store materials separated from fluid.



1,899,994. CONVERSION OF SOUND INTO ELECTRICAL IMPULSES. RALPH K. SPOTTS, Los Angeles, Calif., assignor to Radio-Keith-Orpheum Corporation, a Corporation of Maryland. Filed Aug. 28, 1931. Serial No. 559,878. 4 Claims. (Cl. 179—1.)

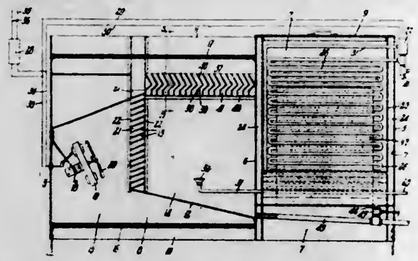


1. A sound pick-up device including a concentrator, a microphone arranged within said concentrator to receive the concentrated sound, a support for said concentrator, a control member pivoted to said support, coupling means extending between said control member and concentrator for adjusting the angular position of said concentrator, and means for predetermining the angular adjustment of said concentrator.

1,899,995. AIR CONDITIONING APPARATUS. PEHR W. STROMBERG, Somerville, Mass., assignor of one-half to Willsie M. Mattison, Ogdensburg, N. Y. Filed July 26, 1932. Serial No. 624,673. 4 Claims. (Cl. 261—115.)

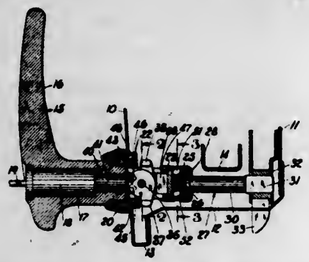
1. An air conditioning apparatus having, in combination, a casing embodying therein a humidifying compartment, a blower adapted to create a current of air to be purified through said compartment, means to create a spray in the humidifying compartment, means to temper

said spray, a plurality of baffle plates interposed between the blower and spray adapted to diffuse air passing therebetween, a plurality of other baffle plates adapted to in-



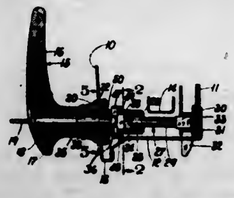
tercept the saturated air and arrest the impurities entrained therein, and means to automatically control the supply of cooling fluid and the actuation of the blower.

1,899,996. DOORLOCK HANDLE. PERRY W. SULLIVAN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed July 8, 1931. Serial No. 549,392. 2 Claims. (Cl. 70—91.)



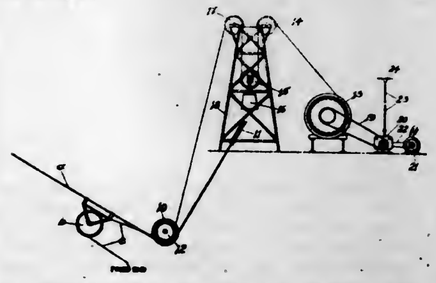
1. In a vehicle door lock, a lock handle having a slot therein, a separate latch operating spindle having a slot therein corresponding to the slot in said handle, a pair of rotatable levers mounted in the slot in said handle rotatable into the slot in said spindle, a key controlled rotatable member in said handle, extensions on said member engageable in recesses in said levers whereby said levers may be rotated into said slot in said spindle to connect said handle to said spindle, and a pair of spring pressed balls carried by said spindle engageable with said handle to resiliently define the position in the rotation of said handle relative to said spindle wherein the locking means in said handle may be engaged with said spindle.

1,899,997. DOORLOCK HANDLE. PERRY W. SULLIVAN, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed July 8, 1931. Serial No. 549,393. 3 Claims. (Cl. 70—91.)



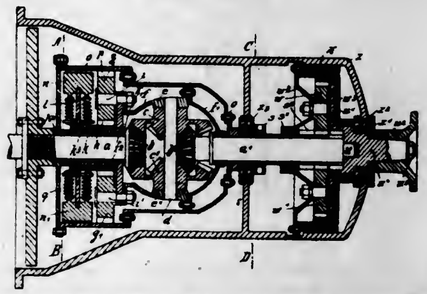
1. In a vehicle door lock, a lock handle and a separate latch operating spindle telescopically associated against axial separation, means preventing axial movement of said spindle, means carried by said lock handle engageable with said spindle for operatively connecting said handle and said spindle for unitary rotation, a leaf spring surrounding said handle for urging said second means into spindle engaging position, and key operated means for moving said second means to render said handle freely rotatable relative to said spindle.

1,899,998. METHOD AND APPARATUS FOR SPINNING BRIDGE CABLES. CHARLES C. SUNDERLAND, New Brunswick, N. J., assignor to John A. Roebling's Sons Company, Trenton, N. J., a Corporation of New Jersey. Filed Jan. 9, 1931. Serial No. 507,742. 5 Claims. (Cl. 14—23.)



4. The combination with the spinning wheel and traction rope of a cable spinning apparatus, of a supply reel carrying the cable wire, variable speed driving means for rotating said reel to supply the wire to the spinning wheel in the travel of the latter, and a floating tension roll on the cable wire between the supply reel and spinning wheel.

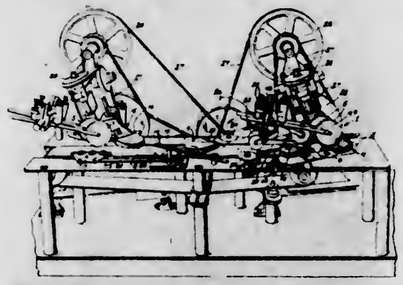
1,899,999. SUN AND PLANET WHEEL GEAR. ERICH UHLICH and WALTER BALLENTIN, GENANNT MIELKE, Berlin-Hirschgarten, Germany. Filed Mar. 28, 1930, Serial No. 439,632, and in Germany Mar. 28, 1929. 9 Claims. (Cl. 74—34.)



1. A sun and planet wheel gear, especially for motor-driven vehicles, comprising a motor-driven shaft, a sun wheel driven by said shaft, a pair of stepped wheels co-operative with said sun wheel, a second pair of planet wheels, a carrier common to both of said pairs of planet wheels, a wheel rim having internal teeth in mesh with said second pair of planet wheels, and a clutch geared to one of the planet wheels of said first pair.

1,900,000. TRIMMING APPARATUS. THOMAS W. MORRIS, Chicago, Ill. Filed July 22, 1929. Serial No. 380,185. 18 Claims. (Cl. 164—68.)

1. Apparatus for trimming the overflow from a rubber heel comprising a trimmer having rotating cutting edges which draw the work toward the cutters, a spring pressure roller for engaging the upper surface of the heel to hold the heel down as it is being trimmed, yieldable pivotally mounted means for guiding said heel as said cutters are acting on it so that the entire outline of the heel with the exception of the breast will be trimmed, said guide means comprising a roller for engaging the untrimmed side of the heel opposite the side on which the cutter initially acts, an abutment member engaged by the breast of the heel forming a spring fulcrum about which the heel turns as the rear of the heel is being trimmed, and a second abutment member engaged by the trimmed side of the heel as the opposite side of the heel is being trimmed, a turntable for supporting the heel as it is being acted on by said trimmer, a conveyor for carrying said heel from said guide and trimming means, a second conveyor running alongside said first conveyor, guiding and

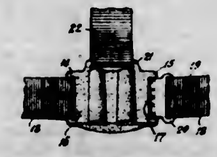


deflecting means above said first conveyor for deflecting the heel from said first conveyor to said second conveyor and causing the heel to be turned to present the breast portion in position for trimming, said deflector comprising a frictional abutment engaged by the heel extending obliquely to the first conveyor, a second trimmer for trimming the breast of the heel, adjustable guide means above the second conveyor for engaging the breast of the heel and steering it to the trimmer, a spring pressure roller for engaging the upper surface of the heel as it is being trimmed to hold the heel down on the conveyor, and a spring-pressure roller for engaging the end of the heel opposite the breast for holding the breast of the heel in proper relation to the trimmer.

1,900,001. METHOD OF PURIFYING AN ANTHRAQUINONE BODY. LYNNE ULICH, Racine, and ROBERT J. GOODRICH, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Feb. 6, 1930. Serial No. 426,435. 5 Claims. (Cl. 260—60.)

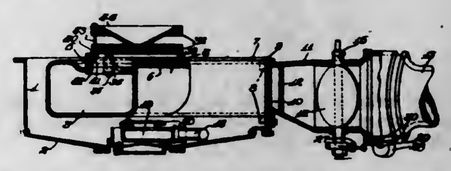
4. The process of purifying crude beta-amino-anthraquinone, which comprises sulphonating the impurities by treating the impure beta-amino-anthraquinone with sulphonating agents under conditions milder than those leading to substantial amounts of beta-amino-anthraquinone sulfonic acid and precipitating the beta-amino-anthraquinone in the form of its free base by diluting the reaction mass with water.

1,900,002. WRINKLE ERADICATOR. ANNA D. VARELL, New York, N. Y. Filed Mar. 5, 1930. Serial No. 433,261. 1 Claim. (Cl. 128—163.)



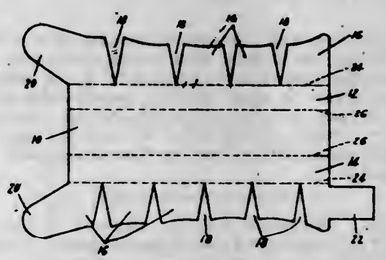
A device of the character described comprising a soft rubber pressure pad of substantially oblong rectangular form having upon one face a plurality of transversely extending fixed bars of hard rubber and having rounded surfaces adapted to be brought into contact with the portion of the lower forehead intermediate the eyebrows, and a band secured at one end to an end portion of said pad and adapted to encircle the head to hold said pad in position, the free end of said band being adapted to be detachably secured to the other end portion of said pad.

1,900,003. BURNER. EARL C. WALKER, Chicago, and GUSTAF W. ENGSTROM, Riverside, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed May 31, 1930. Serial No. 457,947. 7 Claims. (Cl. 158—69.)



1. A burner comprising a burner grating, a base plate for said grating having a pair of substantially semi-cylindrical openings therethrough positioned adjacent each other, an air supply conduit, and a pair of curved hollow vaporising members communicating with the openings in the base plate and with the air supply.

1,900,004. METHOD OF FORMING BRAKE SHOES AND BLANKS THEREFOR. STANLEY WHITWORTH, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Dec. 15, 1927. Serial No. 240,175. 19 Claims. (Cl. 29—152.)

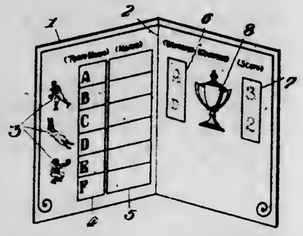


18. That method which comprises forming a blank with a central rectangular portion and with two rectangular portions of half the width along opposite sides of the central portion and with two series of tongues along the sides of the said two portions, folding the said two portions under opposite sides of the central portion and folding the tongues at right angles to the double-thickness part so formed, the tongues forming stiffening means for the double-thickness part, and bending the entire blank on an arc, the tongues being trapezoidal in form and the tongues of one series being staggered with respect to those of the other series so that the bending brings them together to form a substantially continuous web, with the joint between successive tongues of the one series being bridged by one of the tongues of the other series.

1,900,005. PLAYBOARD. SHIICHI YASUDA, Osaka-Fu, Japan. Filed Nov. 13, 1931. Serial No. 574,767. 2 Claims. (Cl. 273—138.)

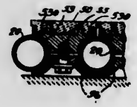
1. A play board comprising a board proper, a column of indicia on said board, a column of blank spaces in juxtaposition with said indicia, adapted to have inscribed therein the names of the participants of the game played on said board, characters applied in "invisible" ink on

said board, adapted to indicate the supposed winners, other characters in "invisible" ink indicating the "supposed scores" of the winners, respectively, and means



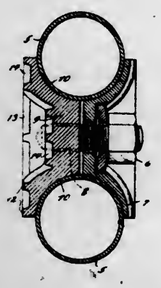
on said board when applied to the characters for causing said characters in "invisible" ink to become visible by a chemical reaction therewith.

1,900,006. FURNACE. ERVIN G. BAILEY, Cleveland Heights, Ohio, assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Mar. 20, 1925. Serial No. 17,054. 24 Claims. (Cl. 122—235.)



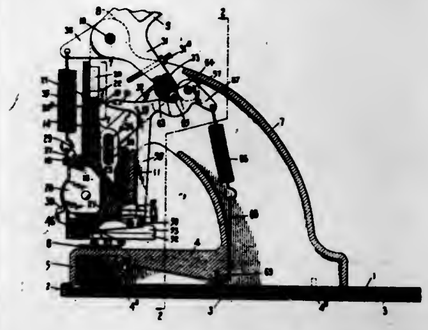
1. A furnace wall composed of parallel tubes combined with tiles or blocks, each block having at the ends of its rear portion concave seats adapted to fit the outer surfaces of a pair of tubes, and each having conductive cement material between the tubes and tile affording a gas-tight heat-conducting union between the tubes and tile, and means for securing the tiles to the tubes under pressure.

1,900,007. FURNACE BLOCK. ERVIN G. BAILEY, Easton, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed July 30, 1927. Serial No. 209,583. 9 Claims. (Cl. 122—6.)



1. In combination, a combustion chamber having a wall comprising a row of cooling tubes, a plurality of metallic blocks, means to clamp each of said blocks to said tubes with the inner surface of a block forming part of the inner face of the wall and with each block having extended thermal contact with at least one of said tubes, means to burn slag-forming fuel in the chamber, and projections on said inner surface to cause residue from said burning fuel to adhere thereto.

1,900,008. STAMPING PRESS. EMANUEL BAUMGARTEN, CHARLES W. GOSNELL, and NOEL J. DEISCH, Washington, D. C., assignors to The Baumgarten Company of Washington, Washington, D. C., a Corporation of The District of Columbia. Filed Apr. 19, 1929. Serial No. 356,552. 4 Claims. (Cl. 101—320.)



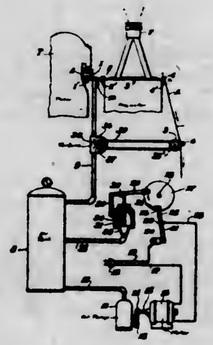
1. In a stamp press, the combination of a movable die and a stationary die, means for inking said movable die normally disposed between the latter and said stationary die, a hand operated lever positively connected to said movable die for actuating the latter, and cam-controlled means in turn controlled by said hand lever for moving said inking means out of position between said dies and across the impression surface of said movable die while the latter is stationary, continued movement of said hand lever forcing said movable die into contact with said stationary die.

1,900,009. AUTOMATIC DOOR, WINDOW, OR GATE OPERATING DEVICE. JOHN LUDVIK CHRISTENSON, Edmonton, Alberta, Canada, assignor of one-half to Earl M. Boughtin and C. Wagenius, Edmonton, Alberta, Canada. Filed Dec. 20, 1930. Serial No. 503,831. 3 Claims. (Cl. 268—53.)



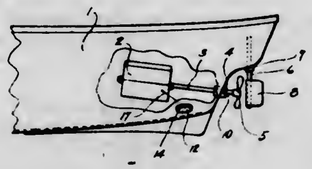
1. A device of the character set forth including a supporting structure and a slidable closure therefor, a rotatable drive shaft carried by the supporting structure and having oppositely extending feed grooves, an electric motor for rotating the shaft and in circuit with an electrical source, a housing carried by the closure and slidably receiving the shaft, actuating members located in the housing and mounted on the shaft for sliding movement relative thereto, lugs on said members and engaging the grooves, a control means carried by the housing and when in one position adapted to lock one of the actuating members to the housing for causing the door to move in one direction by the rotation of the shaft and when shifted to another position to lock the other actuating member to the housing for causing the closure to move in an opposite direction by the rotation of the shaft, stops carried by the supporting structure for actuating said last means when the closure reaches the limit of its movement, means in circuit with the motor to set the latter in operation, and means for interrupting the circuit to the motor when the closure reaches the limit of its movement.

1,900,010. STOCK QUOTATION PROJECTING MACHINE. JAMES W. DECKER, New York, N. Y. Filed May 19, 1928, Serial No. 278,982. Renewed May 24, 1932. 8 Claims. (Cl. 274—2.4.)



1. The combination with a ticker tape, of a tape drawing device for drawing the tape across the light aperture of a projecting machine, pneumatic means cooperating with the tape before it enters the light aperture for dissipating the vibrations transmitted to the tape before the tape passes to the light aperture, and an air motor for actuating said tape drawing device, said pneumatic means supplying pressure normally to actuate said air motor.

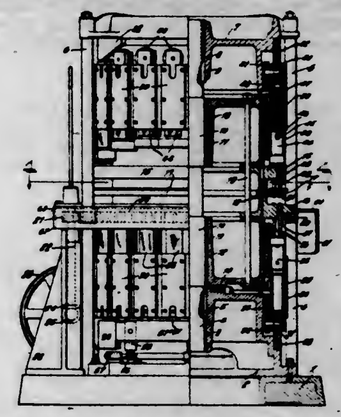
1,900,011. CORROSION PREVENTING ATTACHMENT FOR BOATS. HAROLD L. DURHAM, Everett, Wash. Filed June 23, 1931. Serial No. 546,285. 4 Claims. (Cl. 114—65.)



1. In a boat designed for operation in salt water and having a stern bearing and propeller shaft extending therethrough, a zinc plate attached to the hull of the boat and in contact with the water in which it floats and having a circuit connection with the propeller shaft at a point within the stern bearing.

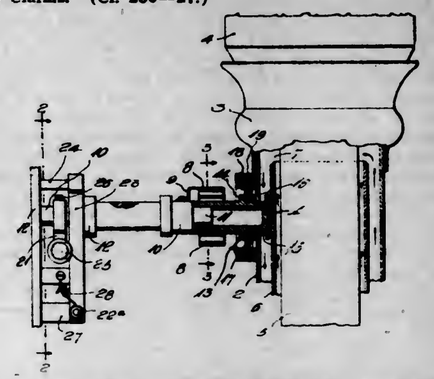
1,900,012. PROCESS OF AND APPARATUS FOR MAKING WADS. HANS ERNST, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of Delaware. Filed Sept. 4, 1925. Serial No. 54,486. 16 Claims. (Cl. 18—16.)

4. A machine for making gun wads, comprising, a die, opposed punches, means for feeding material to said die, means for moving one of said punches into said die while the opposed punch recedes in order to pack the material,



and means for moving the receded punch in said die to condense the material.

1,900,013. PROTECTIVE SYSTEM FOR FLUID COOLED TUBES. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 12, 1930. Serial No. 427,985. 9 Claims. (Cl. 250—27.)

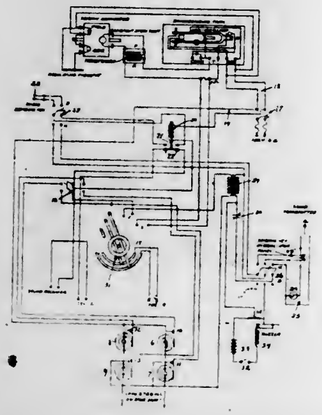


1. A high power tube system including a high power electron tube including an electrode having an exposed surface, a jacket enclosing said electron tube and arranged for the circulation of a cooling fluid around said electrode, a thermally conductive element extending through said jacket, an angularly shiftable shaft member journaled in said thermally conductive element, a thermostatic member extending between said thermally conductive element and said angularly movable shaft, a switch controlled by said angularly movable shaft, said switch operating to interrupt the power supply circuits to said electron tube under conditions of excessive temperature within the jacket surrounding said electron tube.

1,900,014. ANTIFREEZE COMPOSITION. GEORGE D. GRAVES, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,318. 7 Claims. (Cl. 252—5.)

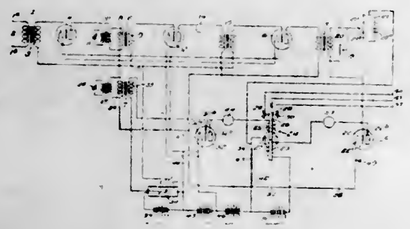
1. A liquid anti-freeze composition which is substantially non-volatile and capable of remaining liquid at low temperatures, comprising water, sorbitol and a glycol, the sorbitol being present in an amount which is at least .5% of the mixture

1,900,015. METHOD AND APPARATUS FOR SOUND RANGING. HARVEY C. HAYES, Washington, D. C. Filed Jan. 4, 1927. Serial No. 158,953. 7 Claims. (Cl. 177—386.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



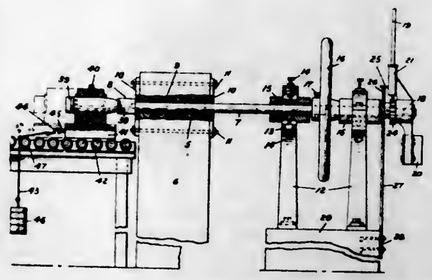
2. In a device for measuring distance consisting of means for generating one periodic series of sonic signals, means for generating a second periodic series of sonic signals so spaced in time relation to the first series that the signals of the second series are generated only in the periods between the signals of the first series and in which said periods are divided by signals of the second series in a fixed ratio at all times independent of the frequency of occurrence of said signals, means for transmitting said first series of signals to an object, the distance of which it is desired to know, means for receiving the sonic signals reflected from said object and conveying them to a point of audition, means for conveying the second series to the point of audition and means for correspondingly varying the frequency of occurrence of the two series of signals and maintaining said time relation whereby the echoes of the signals of the first series reach said point of audition at the same time as the direct signals of the second series.

1,900,016. SIGNALING SYSTEM. JAMES M. KANE, Berkeley, Calif. Filed Mar. 13, 1931. Serial No. 522,483. 2 Claims. (Cl. 178—88.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a signal receiving system, an input circuit, a pair of branch circuits extending from said input circuit, one of said branch circuits having means discriminating against the desired signaling energy while transmittng undesred signaling energy and interference and the other of said paths having means discriminating against interference and undesired signaling energy while transmitting the desired signaling energy, a pair of control tubes each having input and output circuits with the input circuits thereof individually connected to each of said paths, a relay system including a movable armature and a pair of actuating windings, means interconnecting the output circuit of each control tube with a selected winding, a resistance element included in the output circuit of one of said control tubes and connections across said resistance element with the input circuit of the other of said control tubes for differentially energizing said control tubes for effecting a balancing operation of said actuating windings with respect to the undesired signaling energy and interference while controlling the movement of said armature under control of the signaling energy.

1,900,017. APPARATUS FOR DISCONNECTING THREADED MEMBERS. GRAFTON S. KENNEDY, Dayton, Ohio. Filed Jan. 31, 1931. Serial No. 512,716. 3 Claims. (Cl. 21—88.2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



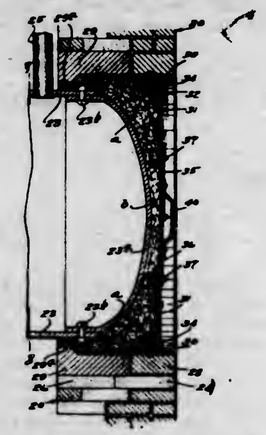
1. In apparatus of the class described, a wall, a shaft passing through the wall, a hand wheel on one end of the shaft, a wrench head on the other end of the shaft and including spaced jaws parallel to the shaft, an adapter securable to the wrench head and having means for externally engaging a member to be unthreaded, a holder confined between the adapted and wrench head and having means for internally engaging a member to be unthreaded, a work-holding carriage, a series of rollers forming a support for the carriage, and a gravity actuator including a flexible cable passing over one of the rollers and a hook carried by the cable for detachably engaging the carriage.

1,900,018. DEVICE FOR CONTROLLING ELECTRIC CURRENT. JULIUS EDGAR LILIENFELD, Brooklyn, N. Y. Filed Mar. 28, 1928. Serial No. 265,372. 28 Claims. (Cl. 179—171.)



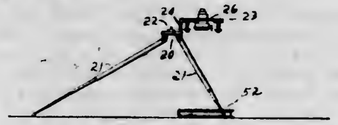
1. An electrical device comprising a conducting solid material having on one surface an insulating layer of a thickness of the order of magnitude of 10^{-4} mm., and a superposed stratum of solid material integral therewith, of substantially greater conductivity and insulated from the conducting solid material by the said insulating layer.

1,900,019. MUD DRUM SEAL. MICHAEL LIPTAK, St. Paul, Min. Filed Nov. 30, 1931. Serial No. 578,010. 18 Claims. (Cl. 110—97.)



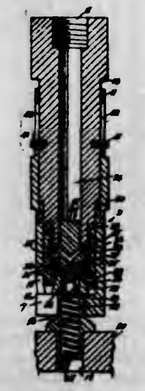
1. In a mud drum seal, a tubular casing adapted to be embedded in a furnace wall concentric to and in the vicinity of the head of the mud drum, a diaphragm removably secured to said casing, and an insulating packing adapted to be packed within said casing and against the mud drum and to be held in place by said diaphragm.

1,900 020. PORTABLE CAMERA APPARATUS. BYRON MCCANDLESS, U. S. Navy. Filed Aug. 31, 1931. Serial No. 560,252. 11 Claims. (Cl. 88—24.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



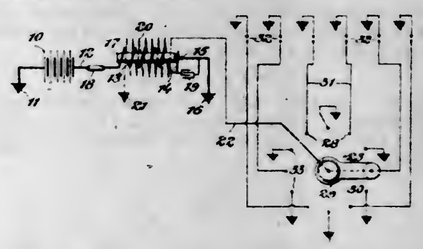
2. A portable camera apparatus comprising a portable support, a plate swivelly affixed to said support, an adjustable camera lens in said plate, and a focusing glass whereby to adjust said lens.

1,900,021. LUBRICATING DEVICE. MORRIS NEWMARK, New York, N. Y. Filed Dec. 9, 1931. Serial No. 579,959. 8 Claims. (Cl. 285—143.)



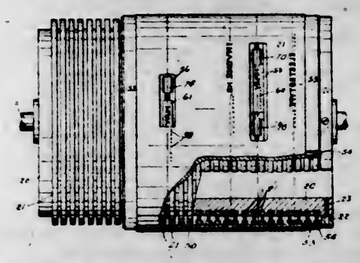
1. A nozzle adapted to be secured to a pressure lubricating device, comprising a barrel, a plunger rotatably and depressibly mounted therein and having a bore in communication with the pressure device, means for releasably locking the plunger in depressed position, a perforated pilot operatively mounted in the said bore, and a casing for maintaining the pilot in the said bore.

1,900,022. HIGH TENSION IGNITION SYSTEM. FRED D. NUTTALL, Richmond, Va., assignor of one-fourth to Laurence M. Mathieu, Richmond, Va. Filed July 12, 1930, Serial No. 467,561. Renewed June 4, 1932. 4 Claims. (Cl. 123—148.)



1. In a high tension ignition system, a distributor mechanism comprising a housing of insulating material, spaced contacts carried thereby, a movable distributor member carrying a conductor for successive cooperation with said contacts, a source of high tension current, means whereby said high tension current is supplied to said distributor member during its cooperation with said contacts and also during its entire movement between adjacent pairs of said contacts, and means between each adjacent pair of contacts for grounding said conductor during a portion of the movement thereof between each adjacent pair of said contacts.

1,900,023. PRINTING FORM. HENRY C. OSBORN, Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,893. 20 Claims. (Cl. 101—374.)

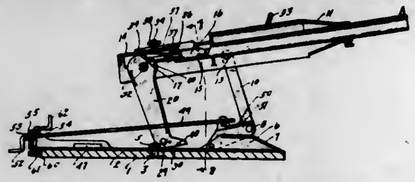


18. The combination of a rotary printing drum having circumferentially extending rails, a curved printing plate resting on the rails, a stop on the drum engaged by one arcuate end of the plate, means for tightening the plate arcuately about the drum, an arcuate printing slug T-shaped in cross section, having its head portion resting on a pair of the rails and its web portion extending between them, said slug having its printing face registering with that of the plate, and a platen coacting with both the plate and the slug.

1,900,024. TOY COAST DEFENSE GUN. FRANK J. PETERS, Portland, Oreg., assignor of one-half to Irving J. Boyce, Portland, Oreg. Filed Mar. 2, 1932. Serial No. 596,267. 6 Claims. (Cl. 124—14.)

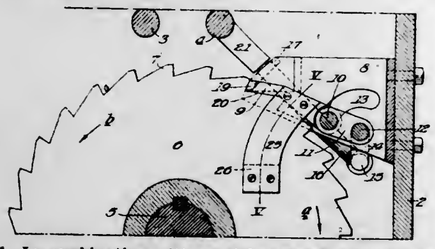
5. In a device of the class described, the combination of a gun barrel and breeching, manually manipulative means for loading the gun, means for raising then firing

and finally returning the gun to normal lowered position as a sequence in each firing cycle, means for settably limiting the length of projectile that may be placed within



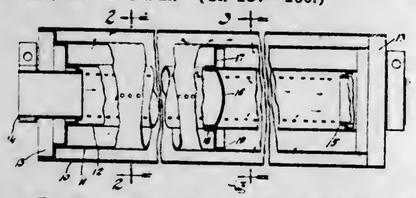
the breeching and settable means for predetermining the angle of elevation of the barrel assembly and the distance that the projectile may be thrown.

1,900,025. MEANS FOR PREVENTING REVERSE MOVEMENT. SIDNEY C. PORTER, East Liverpool, Ohio. Filed Jan. 7, 1929. Serial No. 330,696. 29 Claims. (Cl. 192—4.)



1. In combination with a ratchet-wheel, a locking pawl therefor, a shifting lever having pivotal connection with the pawl, means for actuating the lever, and an arm on the pawl frictionally engaging the ratchet wheel.

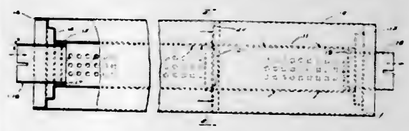
1,900,026. MUFFLER FOR INTERNAL COMBUSTION ENGINES. EDWARD H. RADECKY, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed May 18, 1929. Serial No. 364,136. 1 Claim. (Cl. 137—160.)



A muffler for an internal combustion engine comprising three tubes arranged in spaced concentric relation to each other, a pair of head pieces supporting the ends of said tubes and having central openings leading to each end of the inner tube, baffle plates secured intermediate the ends of the inner and intermediate tubes and dividing each of them into two chambers of substantially equal capacity, said inner and intermediate tubes having lateral passages therethrough on the inlet side of said baffle plates, and said intermediate tube having lateral passages on the outlet side of said baffle plates of lesser area than on the inlet side, and said inner tube having lateral passages on the outlet side of lesser total area than the corresponding passages in said intermediate tube.

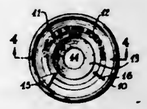
1,900,027. MUFFLER FOR INTERNAL COMBUSTION ENGINES. EDWARD H. RADECKY, Detroit, Mich., assignor to The Murray Corporation of America, a Corporation of Delaware. Filed Aug. 5, 1929. Serial No. 383,464. 1 Claim. (Cl. 137—160.)

A muffler for an internal combustion engine consisting of two tubes arranged in spaced concentric relation to each other, one of said tubes serving as the outer housing of the muffler, a pair of head pieces supporting the opposite ends of said tubes and forming closures for the ends of said outer tube and having central openings registering with the ends of said inner tube, a baffle plate secured in and intermediate the ends of said inner tube and separating the same into two unequal compartments, a second aperture baffle plate secured in and intermediate the ends of said outer tube and around said inner tube



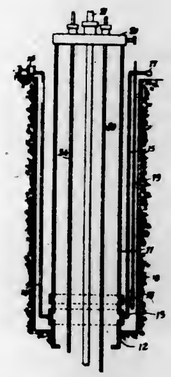
at a point adjacent the location of said first baffle plate, the inlet portion of said inner tube which is the longer portion having a group of lateral gas passages therein adjacent the entrance thereto and another group adjacent said baffle plate, and the outlet portion of said tube which is the shorter portion having lateral gas passages therein, the total area of such lateral gas passages in the inlet portion of said inner tube being greater than the total area of the lateral passages in the outlet portion thereof.

1,900,028. MANICURING METHOD AND MEANS. HERBERT B. SNIDER, Ellensburg, Wash. Filed Apr. 18, 1932. Serial No. 605,947. 6 Claims. (Cl. 132—78.)



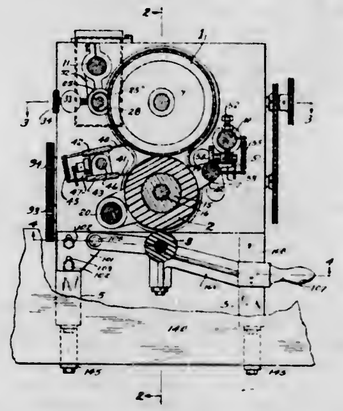
2. As a new article of manufacture, a manicuring device including a continuous cone-shaped abrasive surface for grinding the nails, in combination with a set of polishing bristles and a cleaning point, both of which project from the surface opposite the cone-shaped grinding surface.

1,900,029. WELL DRILLING APPARATUS. THOMAS G. TAYLOR, Roswell, N. Mex. Filed Nov. 24, 1931. Serial No. 577,075. 4 Claims. (Cl. 255—4.)



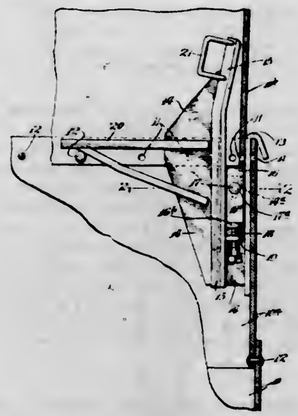
1. In a well drilling apparatus having a rotary drilling bit and a motor for rotating it, means for holding the motor support from rotating to permit rotation of the bit, means for supplying and maintaining pressure in the well, said means serving also to operate said motor holding means.

1,900,030. SURFACE DECORATING MACHINE. GUIDO VON WEBEREN and EDWARD W. HAMANT, Dayton, Ohio, assignors to Oxford Varnish Corporation, Detroit, Mich., a Corporation of Michigan. Filed May 28, 1930. Serial No. 456,337. 8 Claims. (Cl. 101—154.)



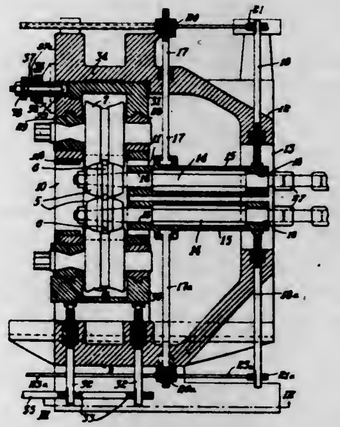
1. In a surface decorating machine, a frame, a pattern transferring member rotatably mounted on the frame, an arm pivotally mounted to the frame, a pressure member rotatably mounted on said arm, means acting on the arm to bring the members toward each other to effect an imprint on an article interposed between them, and a guide adapted to engage such article, the guide being arranged to maintain the position of the article while the same moves entirely about one of said members, whereby articles with variously deviating surfaces may be decorated on such surfaces in one continuous operation.

1,900,031. WRECKING DEVICE. DJALMA D. WILLIAMS, Dallas, Tex., assignor to Chicago Bridge and Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1931. Serial No. 573,211. 4 Claims. (Cl. 29—89.)



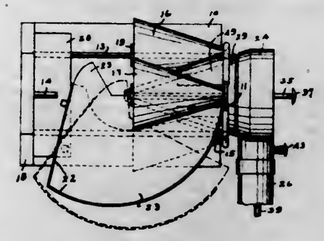
1. A device of the character described, including; a hook; a brace back of the hook and carried thereby, said brace being spaced from the hook and extending in a direction generally parallel to and above the hook; and a support between the hook and the brace.

1,900,032. BAR MILL. WARREN WORTHINGTON, Pittsburgh, Pa. Filed Oct. 25, 1930, Serial No. 491,217. Renewed May 18, 1932. 30 Claims. (Cl. 80—38.)



30. In combination in a rolling mill, a frame, a roll spindle journalled in said frame, means for adjusting the angular position of said spindle, a reducing roll mounted on the overhanging end of said spindle, and capable of endwise movement, a backing roll for said reducing roll, the contacting surfaces of said rolls being such as to oppose relative endwise motion between said rolls, means for adjusting the endwise position of said backing roll to adjust the endwise position of said reducing roll, a second reducing roll journalled in said frame, means for adjusting the operating position of one reducing roll toward and away from the other, and means for opposing endwise movement of said rolls during their rotation.

1,900,033. APPARATUS FOR FORMING REMOVABLE ICE CREAM WRAPPERS. RAY ANDERS, Indianapolis, Ind. Filed Apr. 22, 1931. Serial No. 531,910. 12 Claims. (Cl. 93—36.)

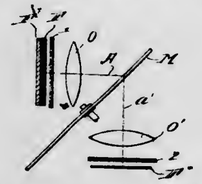


1. For forming conical wrappers, conical blocks, a table adapted to feed a wrapper to between the blocks, and a cone adapted to be inserted between the blocks, said cone having perforated walls, means for creating a partial vacuum in the cone to cause the cone to engage said wrapper and carry it around the cone.

1,900,034. COLOR CINEMATOGRAPHIC APPARATUS. JOSEPH A. BALL, Los Angeles, Calif., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 15, 1929. Serial No. 399,742. 3 Claims. (Cl. 88—16.4.)

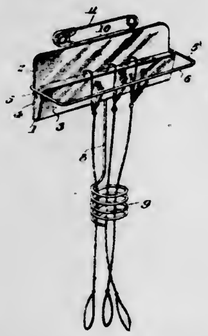
1. Apparatus for making three-color cinematographic pictures comprising means for simultaneously exposing, from the same point of view and along the same optical

path, parallel juxtaposed records of series of complemental images representing two color aspects, means for shuttering light along said path between successive ex-



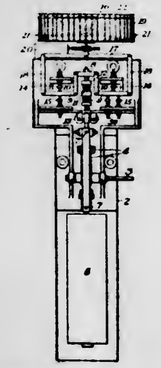
posures, and means for exposing, during the intervals when said path is shuttered, records of a third series representing a different color aspect.

1,900,035. FLY HOLDER. HENRY M. BECK, Wilkes-Barre, Pa. Filed Oct. 3, 1932. Serial No. 636,059. 4 Claims. (Cl. 43—32.)



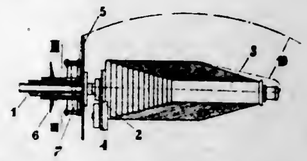
1. A holder comprising an elongated body including connected plates, a strip of soft porous material secured between the plates for receiving the hooks of flies or the like, means extending forwardly from the body and arranged in a plane across the front thereof to protect the flies, means connected to the body and arranged below the same to receive the snells of the hooks and attaching means carried by the body.

1,900,036. FURNACE CONTROL. MERRILL G. BENJAMIN, Lakewood, Ohio, assignor, by mesne assignments, to Bailey Meter Company, a Corporation of Delaware. Filed Mar. 31, 1924. Serial No. 703,324. 61 Claims. (Cl. 236—14.)



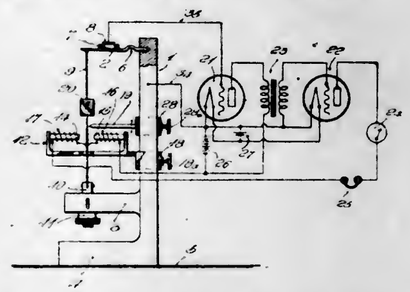
1. A steam regulator including time-controlled means for establishing a normal pressure, said means being effective for adjusting such normal pressure at various desired times, and means for maintaining substantially constant the pressure imposed by the timed-controlled means.

1,900,037. DEVICE FOR EQUALIZING THE THREAD TENSIONS FOR TWISTING DEVICES. OTTO BOCHMANN and WILHELM LENK, Remscheid-Lennep, Germany, assignors to Barmer Maschinenfabrik A.-G., Wuppertal-Oberbarmen, Germany. Filed Apr. 4, 1931, Serial No. 527,750, and in Germany Apr. 12, 1930. 8 Claims. (Cl. 117—23.)



1. A device for equalizing the thread tension for twisting devices, in which during each spindle revolution several twists are imparted to the thread, comprising in combination with the hollow spindle, a whirl on said spindle, a twisting disc, and a thread storing ring arranged between the thread delivery point of said hollow spindle and said twisting disc rigidly connected to said whirl with the thread receiving face of the thread storing ring radially positioned intermediate the thread delivery point of the hollow spindle and the peripheral edge of the twisting disc adapted to accommodate a thread reserve.

1,900,038. OSCILLATION GENERATOR. WARD E. BOWER, Washington, D. C. Filed Apr. 15, 1930. Serial No. 444,481. 2 Claims. (Cl. 250—36.)

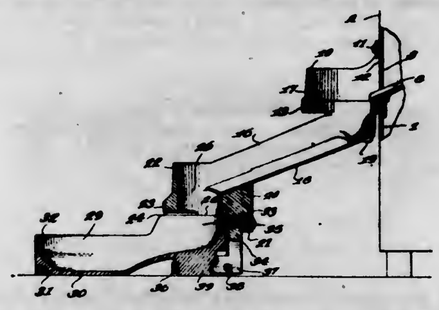


1. In a generator of oscillations of controlled frequency, a support, a resilient strip projecting from said support, a piezoelectric crystal carried by said strip, a tensioned magnetic wire held between said strip and a portion of said support, electromagnetic means mounted upon said support for operating upon the wire and being adjustable in position upon the support along the length of said wire, a fret to engage said wire mounted upon said support and being adjustable upon the support to a desired point along the length of said wire whereby the resonant frequency of the oscillator is controlled, and an electron tube amplifier having its input connected to said crystal and its output connected to said electromagnetic means.

1,900,039. MONEY HANDLING MACHINE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis., a Corporation of Wisconsin. Filed Aug. 22, 1929. Serial No. 387,695. 6 Claims. (Cl. 133—12.)

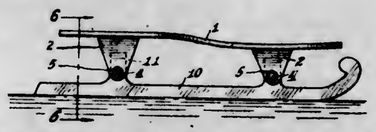
1. The combination with an inclined coin spout formed at one end for operative association with coin delivery means of a relatively shallow coin receiver

adapted to be associated with the other end of the spout, said receiver having an open forward or toe portion accessible to the hand of the user and an elevated heel portion registering at its top with a discharge opening



from the spout, the heel and toe portions of the coin receiver being merged at the bottom through an inclined bottom wall, the bottom of the toe portion being formed into a distinct recess for the reception of the coins.

1,900,040. SKATE. JOSEPH ROCH BRIEN, Montreal, Quebec, Canada, assignor of one-half to Camille Lapierre, Montreal, Quebec, Canada. Filed Sept. 3, 1931, Serial No. 561,018, and in Canada July 25, 1931. 1 Claim. (Cl. 208—166.)



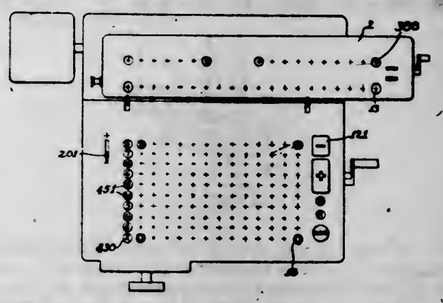
A skate comprising a sole plate pairs of spaced brackets depending from the toe and heel portions thereof, removable bolts passed through said pairs of brackets, removable blocks inserted between the members of each pair of brackets, said blocks being formed with slots, and a runner having upstanding lugs inserted in said slots, said bolts passing through said brackets, blocks and lugs received therein.

1,900,041. CABLE. CARL P. BRODHUN, Wilkes-Barre, Pa., assignor to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed Sept. 20, 1928. Serial No. 307,171. 4 Claims. (Cl. 173—267.)



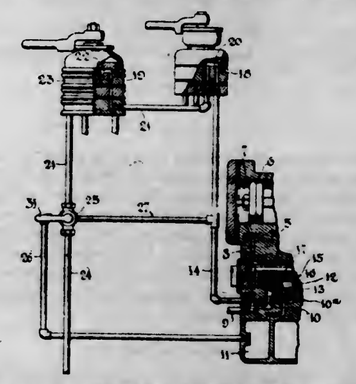
1. An electric cable comprising a conductor, a layer of rubber compound around the conductor, a layer of fabric strips around the layer of rubber compound, a layer of jute cord around the layer of fabric strips and a protective layer of rubber wound in strip form around the layer of jute cord.

1,900,042. CALCULATING MACHINE. LES R. BROWN, East Orange, N. J., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Aug. 1, 1929. Serial No. 382,792. 6 Claims. (Cl. 235—68.)



1. In a calculating machine having numeral wheels, an item keyboard, and means for repeatedly registering on said numeral wheels selected amounts set in said keyboard; means for setting an amount in the keyboard, and means for initiating and differentially controlling the extent of a plural cycle operation of the registering means, including an operating member common to the setting and the operation initiating and controlling means.

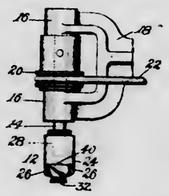
1,900,043. AIR BRAKE. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Aug. 28, 1931. Serial No. 559,995. 4 Claims. (Cl. 303—41.)



1. In a fluid pressure brake, the combination with a distributing valve mechanism including an application cylinder and piston operated by fluid pressure in said cylinder to control the brakes, and an equalizing valve device having a slide valve adapted to connect said application cylinder with an application chamber in effecting an application of the brakes, said distributing valve mechanism having a distributing valve release connection, of an engineer's brake valve and an independent brake valve each having a port connected in series with the corresponding port in the other, said valves conjointly controlling flow from the distributing valve release connection to atmosphere, said engineer's brake valve having a brake pipe connection; a shunt connection from said application chamber to the distributing valve release connection at a point such that the flow through said shunt connection is controlled by said engineer's brake valve and said

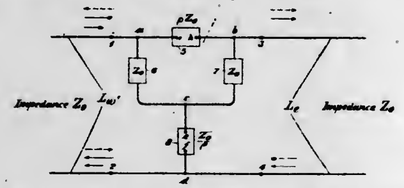
independent brake valve conjointly; and a double-heading cock controlling said shunt connection and said brake pipe connection, and serving to open and close said connections simultaneously.

1,900,044. LIP TURNING MACHINE. HERBERT L. CHAPIN, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 16, 1931. Serial No. 522,983. 24 Claims. (Cl. 12—30.)



1. In a lip turning machine, a rotary lip turning tool comprising a member constructed and arranged to engage the lip of a channeled sole held against and fed past the tool and to exert wiping pressure upon the lip in directions lengthwise of the lip and flatwise of the sole to open the channel and turn the lip over toward the face of the sole and to exert edgewise pressure yieldingly to form a shoulder at the base of the lip.

1,900,045. TWO-WAY NEGATIVE RESISTANCE REPEATER. GEORGE CRISSON, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed May 13, 1931. Serial No. 537,146. 8 Claims. (Cl. 178—44.)



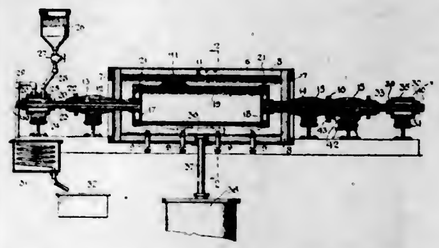
1. The combination with a line of a repeater connected between sections thereof, each of which sections has the characteristic impedance Z_0, the said line sections and said repeater forming a Wheatstone bridge network, one of said line sections forming one arm, an impedance Z_0 forming the opposite arm, and negative impedances ρZ_0 and Z_0/ρ forming the other arms, the other section of said line forming one diagonal and an impedance Z_0 forming the other diagonal.

1,900,046. TYPE PAD FOR TYPEWRITERS. LUDWIG DENZER, Hamburg, Germany. Filed Nov. 23, 1931, Serial No. 576,814, and in Germany Mar. 14, 1931. 5 Claims. (Cl. 197—42.)



1. A type pad for typewriters, comprising a strip of elastic material having in its outer surface a groove for catching the dust and in its inner surface a recess of trapezate cross section leaving projections forming with said recess a dove-tailed shaped groove for clamping the pad on the bow of the typewriter.

1,900,047. METHOD OF DISTILLING FLUENT MATERIALS AND PRODUCING COKE. IRA H. DERBY, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Mar. 6, 1929. Serial No. 344,796. 2 Claims. (Cl. 202—32.)



1. The method of distilling and coking a fluent carbonizable material contained in a retort which is subjected externally to the heat of a furnace, and accelerating the transfer of heat from the furnace to the carbonisable material, which comprises continuously rotating the retort at a speed materially in excess of that necessary to distribute the fluent material by centrifugal force in a layer over the interior of the retort whereby foaming of the material is prevented and a dense, fine-grained coke is produced therefrom.

1,900,048. DECALCOMANIA TRANSFER. FREDERICK A. EDGHILL, Chicago, Ill., assignor to Rayner Decalcomania Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1932. Serial No. 585,207. 3 Claims. (Cl. 41—33.)



2. In a decalcomania transfer, the combination of a vehicle on which is releasably carried a cellulose base lacquer coating supporting successive applications of printing having a thin aluminum leaf backing over which is laid an ink coating, the lacquer coating being clear and of substantial thickness so as to afford to the transfer protection against elements of weather while exposing to view the associated printing.

3. A base to which decalcomania transfers have been applied upon release from their respective vehicles, each transfer having a constituent coating of cellulose base lacquer of substantial thickness extending slightly beyond the edges of the remaining transfer components, and a further coating of cellulose base lacquer applied over the base and transfers and uniting with the lacquer coatings on the transfers to produce a clear protective coating which extends around, along and partly under the edges of each of the transfers.

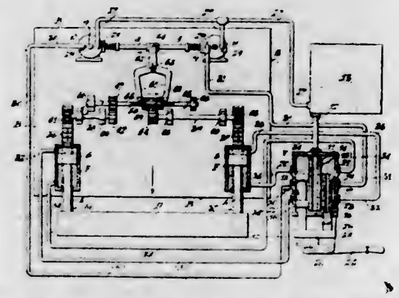
1,900,049. U-BOLT AND METHOD OF MAKING THE SAME. HARRY C. ELLISON, Lakewood, Ohio, assignor, by mesne assignments, to Republic Steel Corporation, a Corporation of New Jersey. Filed Mar. 19, 1930. Serial No. 437,007. 9 Claims. (Cl. 29—152.)



1. The method of producing U-bolts comprising upsetting a bar of stock of predetermined length at two spaced points intermediate the ends thereof, thereby increasing the cross sectional area at said points, forming the bar

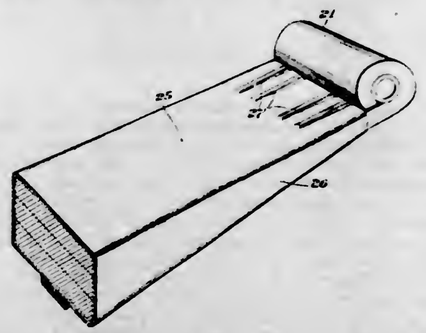
to provide two cylindrical end portions, a flat intermediate portion and connecting portions between the cylindrical end portions and the flat intermediate portion at said points of greater cross sectional area, bending the bar at the points of greater cross sectional area to form a U so that the corners between the bight portion and the legs will be of greater cross sectional area than the bight portion or legs.

1,900,050. HYDRAULIC PRESS PLATEN TRAVEL EQUALIZER. WALTER ERNST, Mount Gilead, Ohio, assignor to The Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed Feb. 24, 1931. Serial No. 517,989. 13 Claims. (Cl. 138—10.)



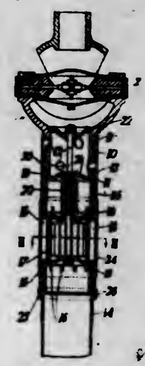
1. In a hydraulic press, a platen, a ram disposed at each side of the center of the platen, a pump for supplying hydraulic pressure to each ram, one said pump being a variable output pump, a rack travelling with each end of the platen, a countershaft associated with each rack and having a driven pinion meshing with the rack and a driving pinion, a driven shaft having a driving pinion fixed thereon and meshing with one driven pinion, a second like diameter pinion having a screw mounting on said driven shaft whereby it will rotate with the driven shaft when the platen ends are travelling synchronously but will move longitudinally on said driven shaft in response to uneven platen end travel, and means actuated by the longitudinal movement of the screw mounted pinion to vary the output of the variable output pump to correct the uneven travel of the platen.

1,900,051. METAL SPRING COVER. WARREN T. FERGUSON, Brookline, Mass., assignor to Ajax Spring Stabilizer Company, Cambridge, Mass., a Corporation of Illinois. Filed May 31, 1930. Serial No. 458,679. 3 Claims. (Cl. 267—37.)



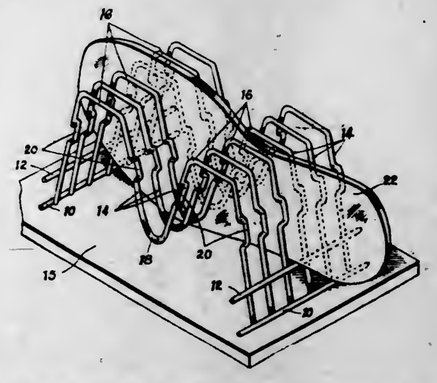
2. A metal spring cover, comprising a tapering hollow body for enclosing a spring, the small end of the body having a plurality of relatively spaced thickening ribs integral with the top plate of the body and extending from the edge thereof longitudinally of the body, said ribs being thickest at said edge to form abrupt outwardly facing shoulders and tapering in height to merge into the metal of the top plate.

1,900,052. CARDAN SHAFT. FRANCIS ALBERT GARRETT, Ipswich, England, assignor to Ransomes, Sims & Jefferies, Limited, Ipswich, England. Filed July 30, 1930, Serial No. 471,780, and in Great Britain Aug. 29, 1929. 4 Claims. (Cl. 64—29.)



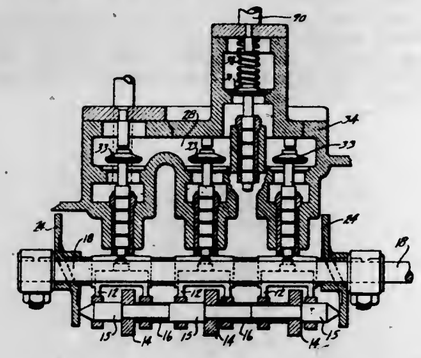
1. A Cardan shaft having a universal joint at each end and two intermediate tubular portions of shaft telescoping into one another, said tubular portions having a plurality of corresponding longitudinal slots, driving keys in said slots, and a carrier within the shaft for supporting said keys; substantially as and for the purpose hereinbefore set forth.

1,900,053. RACK. HARVEY L. GLIDDEN, Lexington, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 22, 1928. Serial No. 321,197. 3 Claims. (Cl. 211—34.)



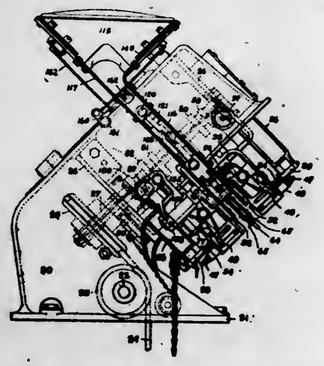
1. A rack for shoe parts comprising a frame, a plurality of loops of wire extending from the frame and having body portions located substantially in parallel plapes, and a plurality of integral projections extending from one of the body portions for engaging one surface of a shoe part inserted between two of the adjacent loops to space said surface of the shoe part from an adjacently carried shoe part, the projections being arranged along said body portion to engage and support a shoe part at a plurality of spaced points.

1,900,054. REVERSING AND CONTROL MECHANISM FOR INTERNAL COMBUSTION ENGINES. MORRIS J. GOLDBERG and FRANS CARL TEUFL, Beloit, Wis., assignors to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 1, 1927. Serial No. 180,294. 15 Claims. (Cl. 60—16.)



1. In an internal combustion engine, a reversing means therefor comprising a timed admission valve for starting air, a cam shaft, a pair of cams carried by said shaft, a tappet common to said cams, and a control shaft adapted to be selectively manually rotated, and means, including cam members on opposite sides of the tappet, for utilizing the rotation of said control shaft to effect a movement of said tappet to cause an operative relation between either of said cams and said tappet.

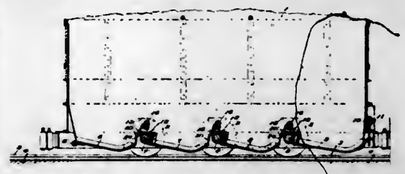
1,900,055. FASTENER SUPPLYING APPARATUS. SYLVESTER LEO. GOOKIN, Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed July 21, 1930, Serial No. 469,432. Divided and this application filed July 28, 1931. Serial No. 552,698. 16 Claims. (Cl. 218—151.)



1. In a duplex eyeleting machine, an eyelet-hopper having two oppositely inclined bottom walls and upstanding walls in which outlet ports are formed and arranged to emit eyelets, and only those eyelets, that stand on said bottom walls respectively in one certain relation thereto, means arranged to feed eyelets through said ports, and a duplex raceway the divisions of which are arranged to conduct into parallel opposed relationship the eyelets so emitted.

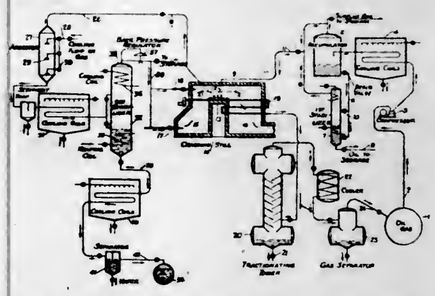
16. In a fastener-inserting machine having a frame and fastener-inserting mechanism arranged therein, a detachable raceway for supplying fasteners to said mechanism, said raceway and said frame being provided with cooperative dowels and sockets by which to mount the raceway in cooperative relation to said mechanism, and a plurality of retaining devices movably attached to said frame and interconnected with each other to partake in common of operating movement, said devices being arranged to fasten spaced portions of the raceway in certain predetermined positions.

1,900,056. DROP BOTTOM CAR. CHARLES A. GRIFFITH, Knoxville, Tenn. Filed Apr. 12, 1930. Serial No. 443,854. 8 Claims. (Cl. 105—253.)



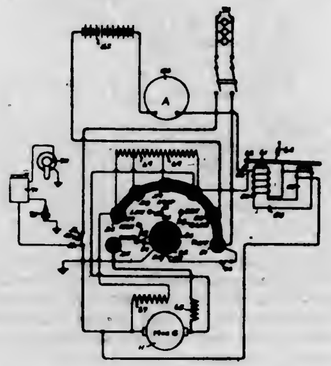
1. In a drop bottom car, the combination of a plurality of drop bottom doors hinged to axes extending transversely of the body of the car by bending the metal of the door around said axes, drop bottom plates or wings hinged to axes extending transversely of the car above the axes of said doors by bending the metal of said drop bottom plates around their respective axes, said drop bottom plates extending transversely across the car, and a plate secured to the hinged portion of the door and extending transversely across the car and adapted to move the free edges of the drop bottom plates to engage with the free edge of the adjacent door to support said doors in upper or closed position, said plates being movable with the doors through slight angles to release the plates from the doors and to permit them to swing downwardly.

1,900,057. PROCESS FOR TREATING AN OIL-GAS. AUDLEY E. HARNSBERGER, Chicago, Ill., assignor to The Pure Oil Company, Chicago, Ill., a Corporation of Ohio. Filed May 8, 1929. Serial No. 361,447. 6 Claims. (Cl. 196—10.)



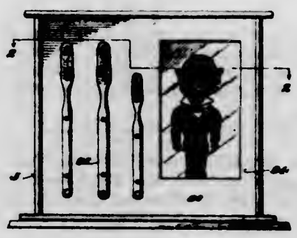
1. The method of converting hydrocarbons, which consists in passing vaporized hydrocarbons of high boiling range through a heated converting zone possessing relatively high and low temperature regions, heating said hydrocarbons during their passage through said zone to desired converting temperatures to effect molecular decomposition of such hydrocarbons while in the vapor phase and at temperatures of the order of 1000° F. into hydrocarbons of lower boiling range, removing the converted hydrocarbons from said zone and condensing the lighter compounds thereof, removing from the oils comprising such lighter compounds the normally incondensible gases formed in the converting zone, returning a portion, at least, of said gases for re-passage through the high temperature region only of the aforesaid converting zone, whereby to subject said gases to converting temperatures requisite to produce therefrom reaction products consisting of compounds of higher boiling range than said gases and accompanying quantities of lighter gases, separating said lighter gases from the high boiling compounds, and separately collecting and condensing the high boiling compounds.

1,900,058. POWER PLANT. WILLIAM H. HARSTICK, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed May 15, 1930. Serial No. 452,660. 12 Claims. (Cl. 290—35.)



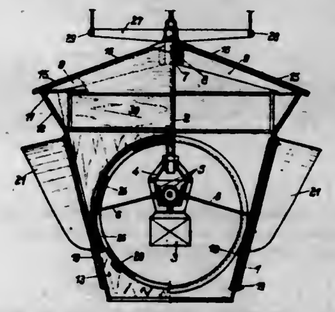
1. In a dynamo electric power plant employing a secondary battery, a switch having a rotary contact disc for selectively effecting a plurality of circuit relations between the battery and plant, a reverse-current relay in circuit with the battery, and mechanical means for actuating the relay responsively to a predetermined position of the contact disc, said means including a cam carried by the disc, and a lever in operative relation to the relay, and disposed in the path of movement of said cam.

1,900,059. CHANGEABLE EXHIBITOR. BERNIE SUMMY HAYTER, Waco, Tex. Filed Feb. 11, 1932. Serial No. 592,401. 4 Claims. (Cl. 472—13.)



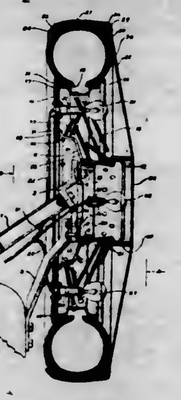
1. In a changeable exhibitor, a casing having partitions arranged approximately at right angles to each other and joined at the inner edges thereof to cooperate in the formation of diagonally opposite figure-receiving compartments, an illuminating compartment and a panel-receiving compartment diagonally opposite the illuminating compartment, said partitions being provided with light passages, figures in said figure-receiving compartments, a single source of light in said illuminating compartment and having means associated therewith to direct a flow of light alternately through said passages into said figure-receiving compartments and to alternately cut off the supply of light to said figure receiving compartments, said figure-receiving compartments being opened into said panel-receiving compartment, and a combined reflecting and transparent panel in said panel-receiving compartment and extending diagonally therein.

1,900,060. TRAFFIC SIGNAL APPARATUS. JOSEF HEUMS, Gruna, Germany. Filed Nov. 17, 1931, Serial No. 575,670, and in Germany Sept. 28, 1931. 6 Claims. (Cl. 116—63.)



1. A traffic signal apparatus, comprising a plurality of discs; a double-armed pointer for each disc pivotally mounted from its center point to the center of its disc; and means for slowly rotating the pointers in the same direction, each disc having differently colored sectors corresponding to different traffic periods whereby each period is represented with two diametrically opposite sectors of the same size and color.

1,900,061. ADVERTISING DEVICE. FRANS HUND, Cleveland, Ohio. Filed Oct. 29, 1931. Serial No. 571,837. 6 Claims. (Cl. 40—130.)

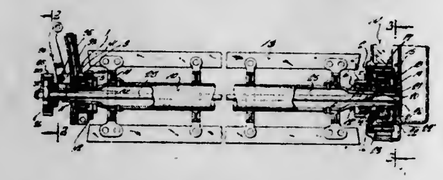


1. In combination with a wheel of the hollow hub type, a cover therefor, comprising an annular tread covering portion, a generally circular side portion of light transmitting material covering the side of the wheel and the tire thereon and joined at its periphery to the tread covering portion, the wheel being provided with means to support lamps externally and internally of the hub behind the side covering portion, and the side covering portion being spaced axially from the hub to prevent casting of shadows thereon by the hub.

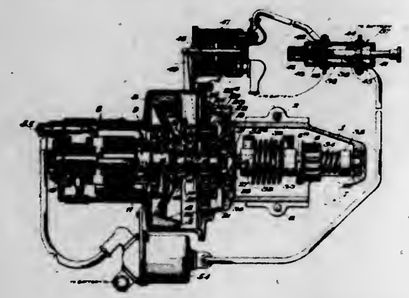
1,900,062. POWER MOWER. WILLIAM F. KRENKEL, Racine, Wis., assignor to Jacobsen Manufacturing Co., Racine, Wis., a Corporation of Wisconsin. Filed Aug. 24, 1931. Serial No. 558,883. 5 Claims. (Cl. 56—249.)

1. In a mower having side frame members, anti-friction bearing assemblies carried by said side frame member, a hollow cutting reel shaft journaled in said bearing assemblies, a cutting reel carried by said shaft, a drive

for the cutting reel, a clutch between the drive and one end of the cutting reel shaft, and means for controlling the engagement and disengagement of the clutch and including a shifter rod extending through the hollow shaft, a connection between one end of the shifting rod and the clutch, and a lever for shifting said rod.

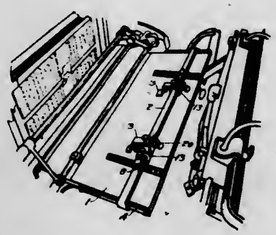


1,900,063. ENGINE STARTING MECHANISM. RAYMOND P. LANSING, Montclair, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Sept. 17, 1929. Serial No. 393,272. 24 Claims. (Cl. 290—38.)



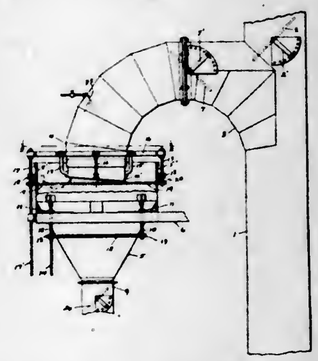
9. In combination, a pinion adapted to engage and crank an engine member, a flywheel, means for rotating said flywheel to store energy therein, and means including a resilient torque transmission member for drivably connecting said flywheel and pinion after the flywheel has reached a desired speed.

1,900,064. TRANSFER TABLE REAR GUIDE. ISIDOR MAARSEN, New York, N. Y. Filed Feb. 10, 1931. Serial No. 514,782. 6 Claims. (Cl. 271—60.)



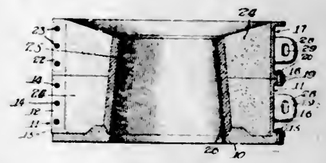
1. In a transfer table rear guide, a plurality of spring guide members adapted to engage the rear edge of material placed upon said table, a common member upon which said guide members are mounted, means for adjusting the position of said guide members upon said common member, means for adjusting the distance of the working face of said guide members from said common member, and means for adjusting the position of said common member upon said table.

1,900,065. DRAFT CONTROL AND DUST SEPARATOR. IRA T. MARTIN, San Francisco, Calif. Filed Mar. 9, 1931. Serial No. 521,057. 16 Claims. (Cl. 110—147.)



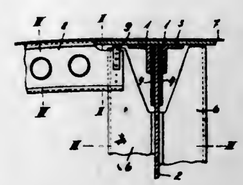
1. Draft control apparatus comprising a main stack provided with a side outlet fitted with a downwardly extending return bend open at its lower end, a receptacle into which the lower end of said return bend extends, and means for varying the effective extension of the return bend into said receptacle.

1,900,066. HOT TOP FOR INGOT MOLDS. WALTHER MATHESIUS, Chicago, Ill. Filed Mar. 9, 1929. Serial No. 345,785. 3 Claims. (Cl. 22—147.)



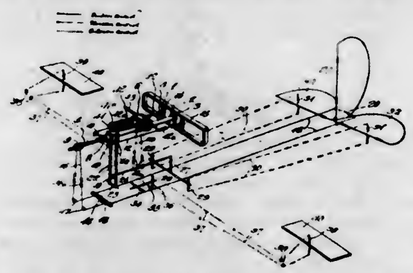
1. A hot top for ingot molds comprising in combination, a shell, a refractory lining therefor, a frusto-conical shaped collar removably secured in spaced relation to said lining, and a refractory packing in the space between said collar and lining.

1,900,067. SPAR FOR AIRPLANES. WILLY MESSERSCHMITT, Augsburg, Germany. Filed Sept. 21, 1929, Serial No. 394,202, and in Germany Sept. 25, 1928. 5 Claims. (Cl. 244—31.)



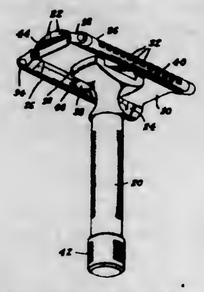
1. A structure for aircraft, comprising a single spar having a single web, reinforcing means therefor composed of angle members extending longitudinally of its edges, vertical and horizontal sheet metal strips also extending therealong, and a non-buckling cover plate for said structure to which said spar is connected by said angle members.

1,900,068. CONTROL MECHANISM FOR AIRCRAFT. RICHARD P. MUELLER, New York, N. Y. Filed Mar. 20, 1931. Serial No. 524,184. 11 Claims. (Cl. 244—29.)



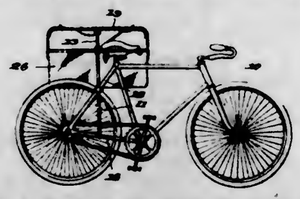
1. Control mechanism for adjusting the angular position of the rudder, elevator planes and ailerons of an aircraft, comprising a frame structure, a pair of telescopic shafts journaled in said frame structure, one of said shafts having translatory movement with respect to the other of said shafts, a hand grip device connected to said transitory movable shaft, rotary means controlled by the rotation of said translatory movable shaft, independent rotatable means on the other of said shafts controlled by oscillatory movement of said hand grip device, and independent cable connectors extending from said rotary means and connected with said rudder and said ailerons for controlling the operation of the aircraft.

1,900 069. SAFETY RAZOR. JOSEPH MUROS, Belmont, Mass., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed June 22, 1932. Serial No. 618,731. 8 Claims. (Cl. 30—12.)



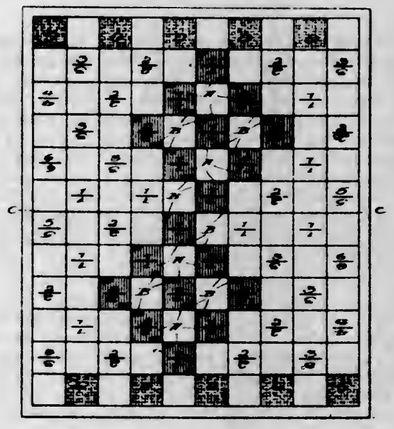
1. A safety razor comprising a blade-supporting member, cap sections pivotally mounted at both longitudinal edges thereof and provided with one element of a quick-swinging and slow-locking mechanism, and a rotatable handle member which supplies the co-operating element of said mechanism.

1,900,070. BICYCLE NEWSPAPER BAG RACK. EDWARD D. MURPHY, Louisville, Ky. Filed Sept. 24, 1931. Serial No. 564,939. 3 Claims. (Cl. 224—39.)



1. A combined newspaper bag rack and frame, means to connect said frame to either side of a bicycle frame, the upper portion of said frame being offset whereby said upper portion may be disposed on the other side of the bicycle frame from said connecting means, said rack being movably mounted on said rack frame, means to hold said rack in either of a plurality of positions on said rack frame, and a newspaper holding bag depending from said rack.

1,900,071. GAME. WILLIAM T. O'NEILL, Pittsburgh, Pa. Filed Aug. 21, 1930. Serial No. 476,871. 2 Claims. (Cl. 273—131.)

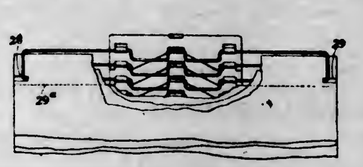


1. In a game-board marked off in alternately arranged areas, these areas having numbers of the value of ten or less, and which areas when occupied by the final move of one player determine the number of moves allowed to the opposing player.

1,900,072. COFFEE ROASTING PROCESS. JOSEPH F. QUINN, Burlingame, Calif., assignor to Geo. W. Caswell Co., San Francisco, Calif., a Corporation of California. Original application filed Jan. 16, 1929, Serial No. 332,829. Divided and this application filed Apr. 12, 1930. Serial No. 443,924. 2 Claims. (Cl. 99—11.)

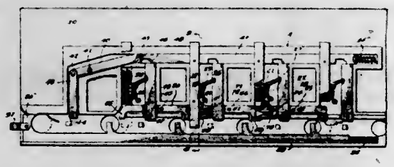
1. The method of roasting coffee which comprises continually passing a flat layer of coffee beans of substantially one bean in depth along under a downwardly directed heat radiating surface only for a time period to effect roasting while continually turning the beans over and over and under conditions permitting free escape of hot vapors.

1,900,073. INDEXING DEVICE. ARTHUR PEEL, London, England. Filed Aug. 7, 1930, Serial No. 473,669, and in Great Britain Nov. 1, 1929. 13 Claims. (Cl. 129—16.)



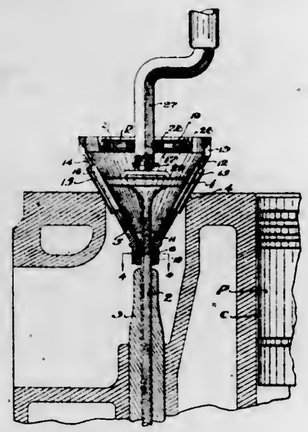
1. In a paper-filing device, a backing having means for detachable engagement to a similar backing, and further means adapted when two similar backings are engaged to co-operate to provide means to hingedly mount a paper-holding device.

1,900,074. VENDING MACHINE. IRA W. PENNY, Phoenix, Ariz. Filed Mar. 2, 1931. Serial No. 519,580. 6 Claims. (Cl. 194—58.)



6. A coin controlled vending machine comprising a plurality of dispensing chutes, an ejecting plunger for movement through each chute, means independently locking each plunger against movement, a master operating means, a master locking means, means for operating the master locking means from said master operating means through the placing of a coin between said master locking and master operating means, and means carried by said operating means for engaging a second coin for causing the second coin to engage a selected independent plunger locking means for releasing the locking means of the desired ejecting plunger.

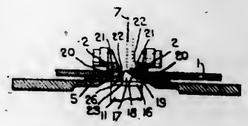
1,900,075. VALVE AND VALVE-SEAT REFINISHING TOOL. ALTON A. RADLEY, Jr., Whitefish, Mont., assignor of one-fourth to John G. Hogan, Whitefish, Mont. Filed Dec. 16, 1931. Serial No. 581,307. 2 Claims. (Cl. 29—76.)



1. The combination in a tool as described with a hollow, inverted, conical, head having an upper cylindrical flange and notches in said flange, said head having slots therein extending into said flange, and tongues on the opposite side walls of the slots in the head, of complementary files having lateral grooves in sliding engagement with the tongues, a removable rotary driving head, and radially disposed arms on said driving head in engagement in the notches of the flange.

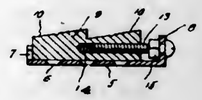
1,900,076. BUTTONHOLE SEWING MACHINE. FRANKLIN A. REECE, Brookline, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Oct. 1, 1931. Serial No. 566,284. 9 Claims. (Cl. 112—71.)

1. In a buttonhole sewing machine, the combination with work-holding means, of stitch-forming mechanism including a reciprocating needle, the alternate thrusts of which extend through the work, and means for progressively maintaining a relation between said needle and the



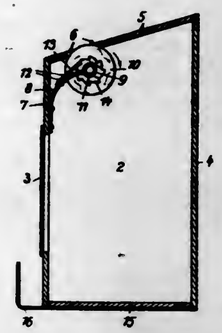
portion of the work through which it passes at any stitch, whereby the needle extends through the work at an angle to the surface thereof other than a right angle.

1,900,077. ADJUSTABLE DOOR CATCH. RAYMOND F. RIFFLE, Greensburg, Pa. Filed Jan. 22, 1932. Serial No. 588,206. 1 Claim. (Cl. 292—340.)



In a door catch, a bolt keeper comprising a substantially broad flat plate having on one side thereof spaced parallel side flanges and an end flange connecting the side flanges at one end thereof said side flanges having upper edge portions disposed at right angles to the bodies of said side flanges, a double wedge keeper constrained to shift longitudinally of said plate and provided on opposite sides thereof with longitudinal grooves receiving the aforementioned edge portions of said side flanges, said keeper having an axial threaded socket extending inwardly from one end thereof, an adjusting screw rotatably supported on said end flange and having threaded engagement with said socket; and said keeper having two inclined faces each of which is provided with intersecting diagonal lubricant grooves.

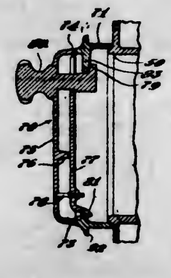
1,900,078. LETTER BOX. FRIEDRICH SAUTER, Weingarten, Germany. Filed Apr. 4, 1931. Serial No. 527,781. 1 Claim. (Cl. 232—45.)



A letter box, comprising in combination with the box having an insertion slot, a cylinder in said box adapted to engage in said slot, two resilient supporting bars mounted on the inner side of one of the walls of said box rotatably carrying said cylinder adapted to press said cylinder into and close said slot, a ratchet wheel on one end

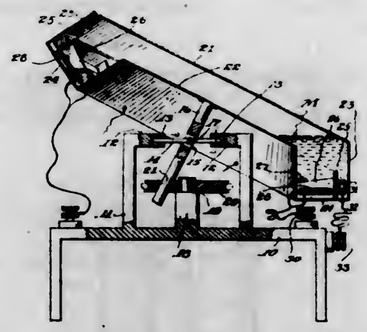
of said cylinder, and a resilient steel strip rigidly fixed at one end on one of said bars engaging with its free end said ratchet wheel, adapted to cooperate with said ratchet wheel to allow said cylinder to turn in the direction necessary for inserting a letter in said slot and to lock said cylinder against rotation in the opposite direction.

1,900,079. DOOR CONSTRUCTION. STANLEY K. SMITH, Westfield, Mass., assignor to The H. B. Smith Company, Westfield, Mass., a Corporation of Massachusetts. Original application filed May 24, 1929, Serial No. 365,629. Divided and this application filed Jan. 21, 1930. Serial No. 422,381. 7 Claims. (Cl. 110—173.)



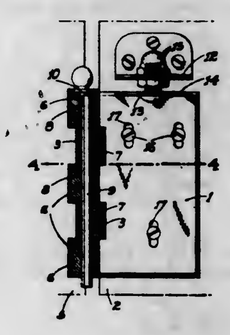
1. Apparatus of the class described comprising a housing, an opening therein, a closure member for said opening, a shield upon said member, a frame about the opening, said closure being engageable with said frame, said shield having a projection engaging the inside of said frame, and a pivoted locking member extending through said closure and shield and having a lug movable into engagement with another part of the frame.

1,900,080. MERCURY SWITCH. EARL RUSSELL SNAVELY, Roselle, N. J., assignor to The Fire King Co., Inc., Union, N. J. Filed Apr. 10, 1929, Serial No. 354,159. Renewed July 20, 1932. 6 Claims. (Cl. 200—152.)



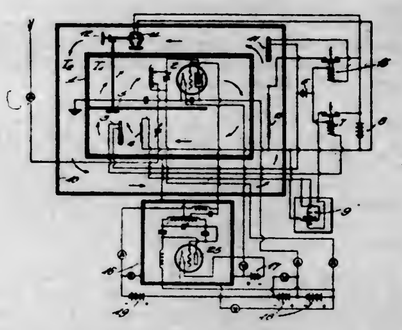
1. In a mercury switch, a body having an annular channel adjacent its periphery and containing mercury, a partition in said channel between its walls and extending upwardly from the bottom of the channel, radial walls extending from the partition to the inner wall and dividing the inner part of the channel into cells, an electrode in each cell, an electrode extending around the channel between the partition and the outer wall, and means to support the body for gyratory movement.

1,900,081. ADJUSTABLE DOOR HINGE. MILLARD F. SWERER, Jamestown, Calif. Filed Mar. 11, 1932. Serial No. 598,153. 4 Claims. (Cl. 16—131.)



1. In a hinge, separate knuckles for the leaves of the hinge, bushings in the knuckles, the bushings in the knuckles of one leaf being turnable therein, and means connecting all the bushings for disposing them in eccentric or concentric and non-turning relationship with each other selectively.

1,900,082. HIGH FREQUENCY MEASURING APPARATUS. JAMES D. WALLACE, Washington, D. C. Filed Mar. 13, 1931. Serial No. 522,487. 15 Claims. (Cl. 250—17.)

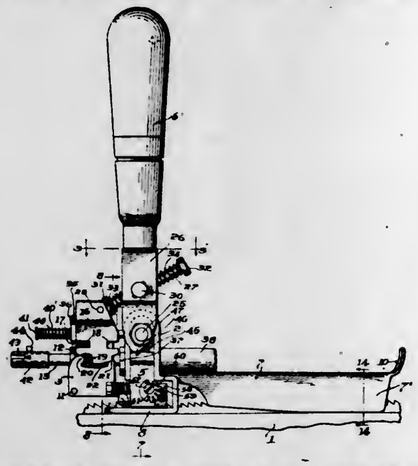


1. The method of measuring power in a reactive antenna circuit which consists in operating a power amplifier into the antenna circuit, determining the power required to maintain the parts of the power amplifier at constant operating temperature, measuring the heat loss and determining therefrom the power transferred from said amplifier to the antenna circuit.

1,900,083. SAW SETTING DEVICE. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed Nov. 7, 1929. Serial No. 405,289. 7 Claims. (Cl. 76—61.)

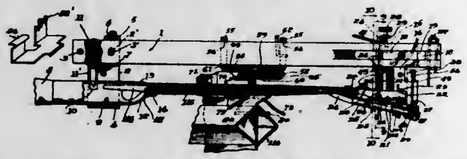
1. A saw setting device comprising a body, guide means carried by said body and extending in the direction of movement of the body, a pawl carrier mounted to slide longitudinally along said guide means, a pawl member pivotally mounted on said pawl carrier and adapted to engage the teeth of the saw, an operating member movably

operated on said pawl carrier, said operating member and pawl member being provided with interengaging portions adapted to lift the pawl member off the saw teeth when the operating member is moved to advanced position on the pawl carrier, a handle member pivotally mounted on said body, a connection between said handle member and



said operating member to move the said operating member so as to operate the pawl member by operation of the handle member, jaw means mounted on said body and provided with saw tooth setting projections and means for operation of said jaw means by operation of said handle member.

1,900,084. SAW FILING DEVICE. JOHN A. WALLER, Beverly Hills, Calif., assignor to Waller Manufacturing Corporation, Ltd., Los Angeles, Calif., a Corporation of Nevada. Filed Dec. 24, 1930. Serial No. 504,466. 7 Claims. (Cl. 76—31.)



1. A saw filing device comprising a file carrier consisting of a longitudinal member and file clamps mounted on said longitudinal member and adapted to engage and hold the file, guiding means in which said longitudinal member is slidably mounted, a member pivotally mounted on one of said clamp members so as to swing transversely to said longitudinal member and provided with means for engaging the teeth of the saw and with a spring for moving it to effect advance of the file carrier upon such engagement, and a control member mounted adjacent said advance effecting means and provided with inclined faces for moving said advance effecting member inwardly against the action of said spring and provided with an inclined member adapted to be engaged and operated by the aforesaid guiding means for the longitudinal member of the file carrier, to effect the operation of said controlling member at the end of a complete stroke of the longitudinal member on the guiding means.

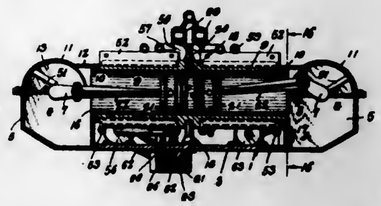
3. In a saw filing device, a file carrier, a guide member on which said carrier is slidably mounted, a supporting member on which said guide member is pivotally mounted, and a positioning element mounted on said supporting member and provided with corrugated lower edge portions adapted to engage the teeth of the saw to position the file carrier support longitudinally and laterally with respect to the saw tooth.

1,900,085. OIL FRACTIONATION. JOHN SAMUEL WALLIS, New York, N. Y., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1930. Serial No. 420,680. 16 Claims. (Cl. 196—139.)



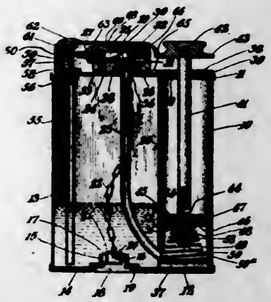
1. A fractionating tower comprising a shell, means to supply oil vapor to the shell, means for producing downward flow of condensate in the shell, a plurality of bubble trays in the shell for flow of liquid thereover and for contact of the liquid with vapor, means for withdrawing fraction products at different levels and means on the trays for equalizing the rate of liquid flow on the trays.

1,900,086. ENGINE. WILLIAM F. WEIR, Holden, W. Va., assignor to Ralph Thompson and Lawson Thompson, Holden, W. Va. Filed July 24, 1931. Serial No. 552,960. 5 Claims. (Cl. 123—51.)



1. In an internal combustion engine, a base having a crank case at each side thereof, a cylinder having its ends communicating with the cases, clamps for holding the ends of the cylinder in the cases, a key at each end of the cylinder engaging a keyway in each case, a dowel on the case engaging a socket on the under side of the cylinder at the center thereof, inlet and exhause means and ignition means at the center of the cylinder, a crank shaft in each case, a pair of pistons in the cylinder and means for so connecting the pistons with the crank shafts that one piston will be on dead center while the other is beyond center.

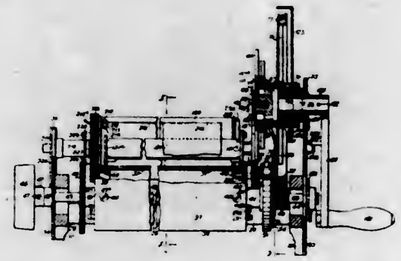
1,900,087. ATOMIZER. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Oct. 23, 1928. Serial No. 314,457. 8 Claims. (Cl. 299—88.)



1. An atomizer comprising a casing, liquid and vent nozzles projecting from the casing in spaced relation, a cover for said nozzles, and spaced, flexible stoppers on the cover to engage the nozzles when the cover is in its closed position to prevent the evaporation of the liquid and the ingress of dirt.

3. An atomizer comprising a casing, a nozzle projecting from said casing, a cover for said nozzle on said casing, a pump plunger head projecting from said casing, a projection on said cover, and means on the plunger head adapted to lie under said projection when the head is in a depressed position irrespective of the position of the head due to its having been rotated, said projection being disengageable from said head in response to further depression of the latter.

1,900,088. TYPEWRITING MACHINE. EDWIN E. BARNEY, New Rochelle, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Original application filed Apr. 13, 1927, Serial No. 183,466. Divided and this application filed June 16, 1928. Serial No. 285,884. 42 Claims. (Cl. 197—126.)



1. The combination of a cylindrical platen, a cylindrical carbon holder of the same diameter as the platen which receives within it a roll of transfer material and has wound around the outer surface thereof a strip of such material projecting from the roll sufficient only for use in the work being produced, a hand actuated driving gear wheel, connections between said platen and said driving gear wheel, and yielding connections between said carbon holder and said gear wheel.

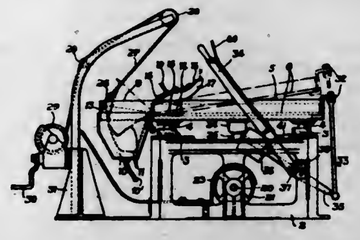
1,900,089. VANITY CASE. HAROLD BATCHELOR, Jersey City, N. J. Filed Oct. 2, 1931. Serial No. 566,426. 16 Claims. (Cl. 132—83.)



1. In a vanity case, a container for cosmetic, a puff in the container adapted to receive cosmetic, and means movably mounted within the container constituting a scraper movable to scrape off a portion of the cosmetic from the surface of the puff.

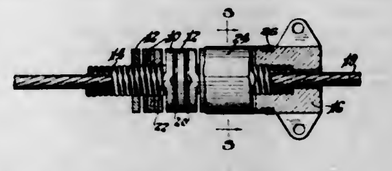
1,900,090. MACHINE FOR GRAINING LITHOGRAPHIC PLATES. CHARLES ARTHUR BECKETT, Hull, England. Filed Apr. 16, 1931, Serial No. 530,527, and in Great Britain Apr. 25, 1930. 4 Claims. (Cl. 51—6.)

1. A machine for graining lithographic plates comprising a trough mounted on a framing and adapted to be subjected to a circular shaking movement, a tiltable false bottom to the trough to which the plates are adapted to be secured, at least one tiltable container for graining elements carried in the trough, said tiltable false bottom and container being tiltable independently of and towards one another for the transference of graining elements from one to the other, means for retaining graining elements operatively in the trough, means for operating the trough and means for mechanically tilting the false bottom inde-



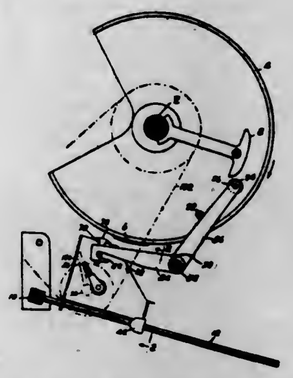
pendently of the tiltable container and of the trough so as to effect discharge of graining elements therefrom into such tiltable container.

1,900,091. CONDUIT. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 8, 1929. Serial No. 376,829. 3 Claims. (Cl. 64—12.)



1. Power transmission mechanism comprising a flexible and substantially incompressible conduit including a plurality of disk members each having diametrically extending embossments, one embossment extending from each side face thereof, plain faced washer members between said embossed members, both plain and embossed members being provided with openings at their centers, and a tubular support member within said openings.

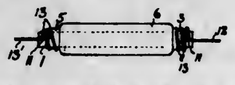
1,900,092. INKING DEVICE. HORACE D. BLACK, Uxbridge, England, assignor to Bell Punch Company, Ltd., London, England. Filed May 2, 1929. Serial No. 359,889. 8 Claims. (Cl. 101—351.)



1. An inking device for a printing mechanism comprising an inking assembly, a fixed sloping supporting track on which the inking assembly is slidable with a horisontal component of motion either to a position in which it is

in operative relationship to the printing mechanism or to a position where it is accessible to an operator, and a latch carried by the inking assembly and arranged to engage the track when the assembly is in the former position.

1,900,093. FIXED CONDENSER AND METHOD OF MAKING THE SAME. OCTAVE BLAKE and HAIM BEYER, New York, N. Y., assignors to Cornell Electric Manufacturing Co., Inc., Long Island City, N. Y., a Corporation of New York. Filed Dec. 30, 1930. Serial No. 505,502. 2 Claims. (Cl. 175—41.)

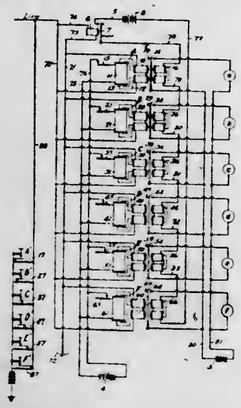


2. A condenser comprising a pair of conducting foils and a pair of insulating strips interleaved with the conductor strips to insulate them from each other, a supporting member therefor, the foils projecting beyond the edges of the insulating strips, wire leads coiled at the ends, the coils being conductively connected to the foils, and means for securing the leads to said supporting member.

1,900,094. WHEAT FLOUR DILUENT. RALPH M. BOHN, Evanston, Ill. Filed May 14, 1928. Serial No. 277,800. 3 Claims. (Cl. 99—10.)

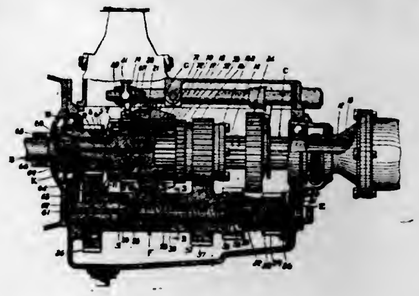
1. A non-fermenting wheat flour compound of reduced and relatively low protein content essential for the production of pastry dough and other soft flour products, said compound consisting of an intimate mixture containing a preponderance of relatively hard wheat flour of undesirably high protein content, a less proportion of gelatinized starch to dilute and reduce the protein content of the mixture to substantially that of soft flour and impart water absorbing properties, a still smaller proportion of degradation products of starch including dextrose and dextrin to impart color-producing properties and flavor to the baked product and a further relatively smaller proportion of corn starch to prevent lumping of the gelatinized starch in water, whereby the easily obtainable hard flour of intermediate and undesirable protein content may be utilized for the production of soft flour.

1,900,095. ONE-WIRE ELECTRICAL SELECTING APPARATUS. LOUIS BROWNSTEIN, Brooklyn, N. Y., assignor to Monopulse Teletype Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 11, 1929. Serial No. 346,036. 14 Claims. (Cl. 177—353.)



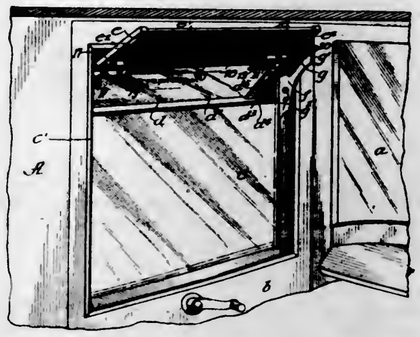
1. In an electrical system in which any one of any number of selecting devices is responsible to a single impulse of given current value delivered thereto over a single wire, and the other devices are each responsive respectively to impulses of different current value, a series of selecting magnets receiving said impulses, means for neutralising the magnetic field of only one of said magnets by said impulse, an armature for each of said magnets normally biased toward its selecting magnet, a series of auxiliary magnets each arranged to operate upon one of said armatures, and means responsive to the impulse for energising said auxiliary magnets for operating the armature of the neutralized magnet only.

1,900,096. TRANSMISSION. HARRY F. BUSHONG, South Bend, Ind., assignor, by mesne assignments, to Free Wheeling Patents Corporation, South Bend, Ind., a Corporation of Delaware. Filed Apr. 8, 1931. Serial No. 528,586. 9 Claims. (Cl. 192—113.)



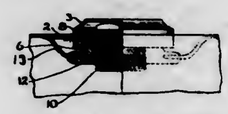
1. In a vehicle transmission, a drive shaft, a driven shaft, and a countershaft, speed changing mechanisms including an overrunning clutch mounted on said drive and driven shafts, a countershaft sleeve rotatably mounted on said countershaft, and means operative upon rotation of said sleeve relative to said countershaft to force lubricant to said speed changing mechanisms.

1,900,097. RAIN AND SUN SHIELD FOR VEHICLES. WILLIAM T. CLARK, Boston, Mass. Filed Aug. 19, 1929. Serial No. 386,768. 8 Claims. (Cl. 296—44.)



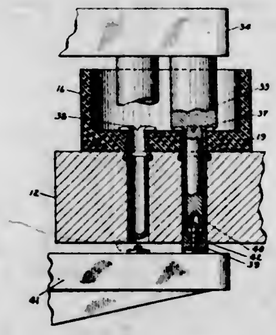
1. The combination with the vertically sliding glass of a vehicle window, of a shield plate pivoted inside the vehicle proximate the top of the window frame and adapted to be swung outward through the window opening with provision of a vent regulatable by adjustment of the sliding glass, and windbreak means on the shield plate coacting with the sliding glass for holding said shield plate in different positions

1,900,098. PROTECTING CAP. EARL B. COOPER, Decatur, Ill., assignor to Chambers, Bering, Quinlan Company, Decatur, Ill., a Corporation. Filed Dec. 29, 1930. Serial No. 505,852. 1 Claim. (Cl. 220—39.)



In combination with a container closure plug rotatably engageable with a container wall, a protecting cap completely covering the exposed portions of the plug and freely rotatable thereon, an integral skirt on said cap having a lower terminal retaining ledge, a band of resilient material fixedly flanked and secured within said skirt portion of said protecting cap and provided with integral flexible barb members sprung at an angle with the band and inclined upwardly, an exterior circular shoulder of the plug provided with an annular recess on the lower side thereof; said shoulder engaged by said barb members in a manner exerting a longitudinal thrust up against said shoulder in resisting removal of the cap from the plug while freely rotatable thereon.

1,900,099. METHOD OF SECURING CONTACT PINS IN RADIOTUBE BASES. JOHN E. FERGUSON, Edgewood, R. I., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed May 25, 1929. Serial No. 365,845. 2 Claims. (Cl. 218—29.)



2. The method of shaping and securing a tubular metallic member in an aperture provided in a wall of a base which comprises positioning a base with one end of a tubular member extending through said aperture, applying force in the direction of the longitudinal axis of said member to engage an opposite end thereof with a forming surface to partly close the said end, continuing the application of said force to form a shoulder intermediate the ends of said tubular member and in deforming the said first mentioned end to secure said member to said wall.

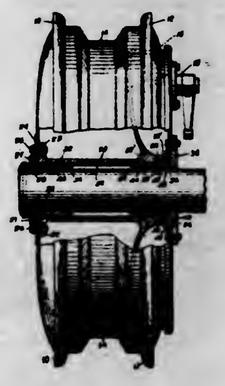
1,900,100. METHOD OF WELDING METALS. JOHN BERNARD FITZPATRICK, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed July 17, 1929. Serial No. 378,876. 8 Claims. (Cl. 219—10.)

1. The method of welding wrought tungsten bodies to nickel which comprises contacting the tungsten and nickel bodies over a relatively large area, welding the two metals together at one point on said contacting surfaces, simultaneously effecting a substantial fusing of the lesser refractory metal along the contacting surface of the tungsten away from the welded union until the bonded union



of the two metals has extended beyond the area of grain recrystallization of the said tungsten produced as a result of the application of the welding heat thereto.

1,900,101. WHEEL. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Feb. 11, 1929. Serial No. 339,105. 2 Claims. (Cl. 301—1.)

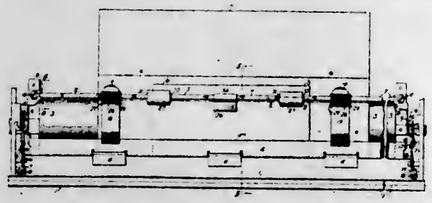


1. A wheel comprising a hub, a member sleeved in the hub, a washer secured to one end of the hub extending beyond the outer and inner peripheries of the hub and engaging one end of the member sleeved in the hub, a radial shouldered flange on the other end of the hub, a disk secured to the flange and resting on the shoulder to present an unbroken outer surface with the hub, and a washer secured to the flange overlapping the junction of the disk with the shoulder and extending beyond the flange to reinforce the disk and beyond the inner periphery of the hub to engage the other end of the member sleeved in the hub to effectively retain the member in the hub.

1,900,102. TYPEWRITING MACHINE. GEORGE G. GOING, Middletown, Conn., assignor, by mesne assignments, to Remington Typewriter Company, a Corporation of New York. Filed June 25, 1927. Serial No. 201,429. 7 Claims. (Cl. 197—138.)

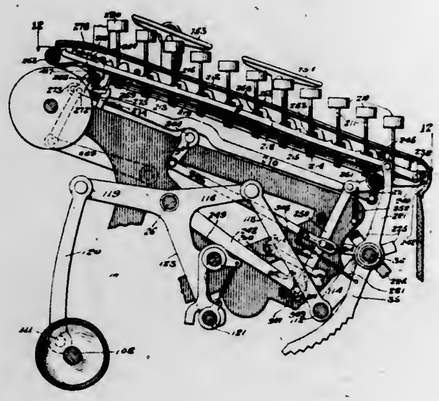
7. The combination of a cylindrical platen, a supporting rod arranged above the platen, means for mounting said rod for movement into and out of parallelism with the surface of the platen but for holding it against turning movement around its longitudinal axis, means for spring impelling the rod towards the platen, paper fingers depending from said rod across the printing line and individually and adjustable along said rod, individually adjustable paper feed rollers separate from and intermediate said paper fingers, said feed rollers being coaxial

with said rod, and a paper deflector mounted for adjustment along said rod intermediate said feed rollers but fixed against turning movement on said rod, said



deflector at all times standing away from and out of contact with the platen to coact with work sheets and direct them beneath said feed rollers and rod.

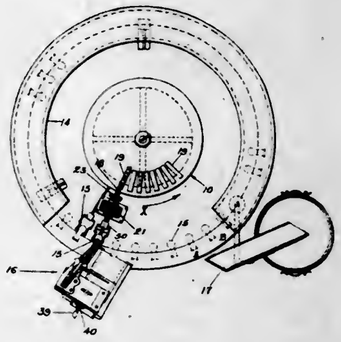
1,900,103. CALCULATING MACHINE. WILLIAM S. GUBELMANN, Buffalo, N. Y. Original application filed Sept. 19, 1912, Serial No. 721,141. Divided and this application filed Mar. 30, 1927. Serial No. 179,525. 92 Claims. (Cl. 235—27.)



1. In a calculating machine, the combination of a plurality of rows of keys, each provided with a stem, upper and lower guide plates through which the stems of the keys pass, means for yieldingly holding the keys in an elevated position consisting of a rod arranged on the underside of the lower plate between adjacent rows of key stems, and springs arranged on said rod and each having its ends connected with the lower ends of two key stems.

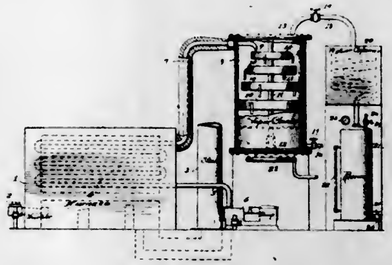
1,900,104. METHOD AND APPARATUS FOR COATING THE INTERIOR WALL OF HOLLOW BODIES. AARON M. HAGEMAN, Bloomfield, and ALBERT F. LINDSTROM, Nutley, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,784. 6 Claims. (Cl. 91—45.)

1. An apparatus for depositing a layer of a light diffusing material upon the inner surface of a lamp bulb which comprises mechanism having a spray discharge orifice for light diffusing material, means for moving said



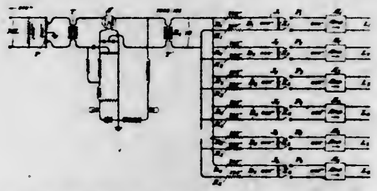
mechanism into and out from said bulb and means for preventing an accumulation of spray material adjacent to said orifice.

1,900,105. PROCESS AND APPARATUS FOR TREATING HYDROCARBONS. HIRAM J. HALLE, New York, N. Y., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 410,917, filed Sept. 17, 1920. This application filed Feb. 6, 1926, Serial No. 86,676. Renewed Nov. 18, 1929. 4 Claims. (Cl. 196—58.)



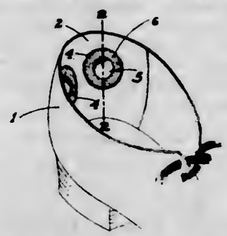
1. A continuous process for cracking hydrocarbon oil, consisting in passing the oil in a stream through a heating zone wherein it is raised to a cracking temperature, in delivering the highly heated oil from said stream to an enlarged vapor chamber, collecting the oil in a plurality of vertically spaced pools in said enlarged vapor chamber, said pools being of successively lower temperature and larger volume from the top to the bottom of said enlarged chamber, in permitting the oil to overflow successively from the pool of highest temperature to the pool of lowest temperature, in continuously withdrawing unvaporised oil from the bottom of said enlarged vapor chamber without again admitting the same to said stream, in taking off vapors from the top of said vapor chamber, in condensing such vapors, in collecting the resulting distillate and in maintaining a superatmospheric pressure on the oil undergoing treatment in the process.

1,900,106. BRIDGING CONNECTION FOR PROGRAM CIRCUITS. HAROLD S. HAMILTON, White Plains, N. Y., and GEORGE CRISSON, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 27, 1931. Serial No. 571,450. 2 Claims. (Cl. 178—44.)



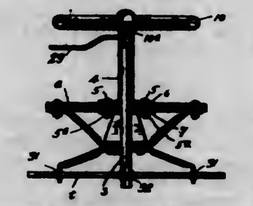
1. In a transmission system, a main line including an amplifier, a plurality of branch lines, a bridging circuit interposed between said amplifier and said branch lines, said bridging circuit having multiple bridge connections for said branch lines, impedances in each bridge connection between the bridging line and the junction point of the bridge connections, said impedances having such values that the impedance looking into the bridging circuit from any branch line will be equal to the impedance of the branch line itself and the impedance looking into the bridging circuit will be less than the impedance of a branch line, and a transformer associating said bridging circuit with the output of said amplifier and equalising the impedance looking into the amplifier with respect to the bridging circuit.

1,900,107. CUSHION PAD FOR SHOE COUNTERS. HARRIS L. HANDLER, Vallejo, Calif. Filed Dec. 10, 1931. Serial No. 580,028. 1 Claim. (Cl. 36—58.5.)



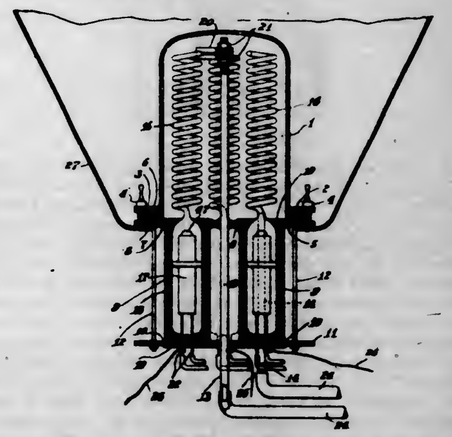
A pad for shoe heels comprising the combination with a shoe counter and lining therefor, of a resilient pad interposed between the lining and the counter, such pad being relatively thick in the center and tapering thence to a feather edge about the periphery of the pad, and a pair of projecting cup shaped elements on the pad one on each side of the vertical center line of the counter and projecting through the lining.

1,900,108. COASTER WAGON. ARTHUR HEDERN, JOHN G. HOLLIES and VICTOR S. LANDESS, Portland, Oreg., assignors to Barry Cerf, Portland, Oreg., trustee. Filed Apr. 7, 1931. Serial No. 528,318. 4 Claims. (Cl. 280—87.5.)



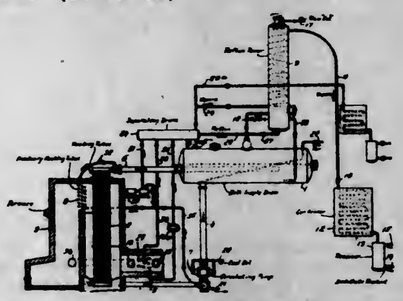
4. In a coaster wagon the combination of a tubular steering post mounted on the wagon bed, a steering shaft rotatable in said post, a steering wheel carried by said shaft, the latter extending below the wagon bed, a steering axle rigidly carried by the lower end of the steering shaft, complementary angular bolster plates arranged normal to each other, supporting the wagon bed on the axle, the extremities of one of said bolster plates bearing on and secured to the extremities of the axle.

1,900,109. HIGH INTENSITY GASEOUS DISCHARGE TUBE. WILLIAM F. HENDRY, Ossining, N. Y., assignor, by mesne assignments, to Manhattan Electrical Supply Company, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 3, 1928. Serial No. 244,229. 8 Claims. (Cl. 176—122.)



1. In a high intensity lamp unit, a base plate, a glass bowl secured to said base plate in water tight fashion, a coiled gas filled tube positioned within said bowl, electrodes for said tube, and means for circulating a cooling fluid through said bowl.

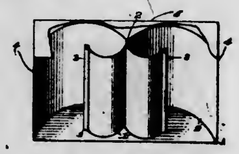
1,900,110. ART OF CRACKING HYDROCARBONS. EUGENE C. HERTHEL, Chicago, Ill., assignor to Sinclair Refining Company, New York, N. Y., a Corporation of Maine. Filed Sept. 29, 1927. Serial No. 222,912. 8 Claims. (Cl. 196—59.)



1. The improvement in the cracking of hydrocarbon oils, which comprises heating a body of oil to a cracking temperature by circulating the oil over heating surfaces externally in contact with heating gases and taking off vapors therefrom under pressure, subjecting these vapors to a refluxing operation and taking off from the refluxing operation vapors including vapors of the desired distillate product, separating components of the reflux condensate suitable as components of the desired distillate product by vaporization from the reflux condensate after discharge from the refluxing operation, thereafter passing the re-

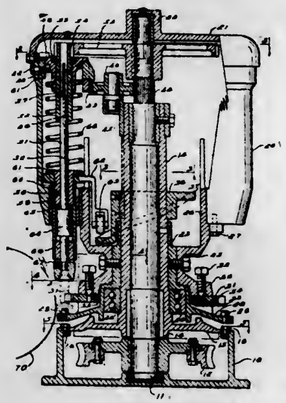
flux condensate stripped of such components over separate heating surfaces externally in contact with heating gases, and passing heating gases for supplying heat to the operation first over the last mentioned separate heating surfaces and then over the first mentioned heating surfaces whereby the oil circulating over the last mentioned heating surfaces is heated to a higher temperature than the oil circulating over the first mentioned heating surfaces.

1,900,111. SOUND AMPLIFIER. CHESTER W. HICKS, Hampton, Va. Filed Aug. 9, 1927. Serial No. 211,755. 4 Claims. (Cl. 181—31.)



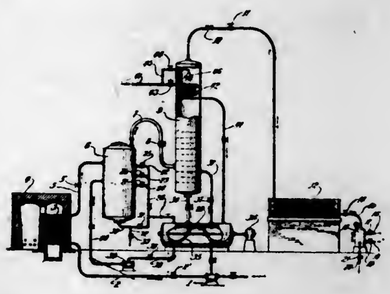
1. A device of the character described including a deflecting partition having curved faces meeting each other to form a point and a curved fibrous diaphragm having a stiffening member at each of its extremities, the said deflecting partition when taken in connection with the curvature of the diaphragm forming substantially two opposed spiral structures each of substantially a single convolution, and having one of the said diaphragm stiffening members for a center, and an actuating unit connected to said diaphragm, the whole arranged in such manner that substantially one half of each spiral convolution vibrates under the influence of the actuating unit, while the other half of each spiral convolution deflects and amplifies the sound waves produced by the vibrations of the first mentioned half of the spiral convolution, substantially as described.

1,900,112. GRINDING MACHINE. JOSEPH H. HOBAN, Saginaw, Mich., assignor to Wilcox-Rich Corporation, a Corporation of Michigan. Filed Aug. 31, 1929. Serial No. 389,662. 8 Claims. (Cl. 51—108.)



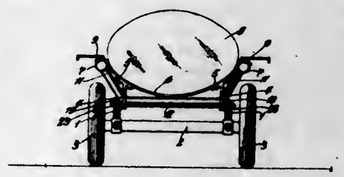
3. In a machine of the class described, the combination of a rotatable turret, reciprocating rotatable spring-urged chucks carried by said turret adjacent its periphery, work seats eccentrically located with reference to said chucks and cooperating therewith for supporting cylindrical articles, steady rests for centering said articles during their rotation, and means for rotating said turret at a relatively low speed and said chucks at a relatively high speed.

1,900,113. TREATMENT OF HYDROCARBONS. WILLIAM R. HOWARD, Washington, D. C., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Feb. 21, 1927, Serial No. 169,774. Renewed Feb. 4, 1931. 12 Claims. (Cl. 196—59.)



1. A process of hydrocarbon oil conversion comprising subjecting oil to cracking conditions of temperature and superatmospheric pressure in a heating zone to cause substantial vaporization, passing the heated oil to a vapor separating zone and there separating the vapors, subjecting the vapors to reflux condensation, separately condensing and collecting the uncondensed vapors subsequent to reflux condensation, removing from the vapor separating zone regulated portion of non-vaporized residue and passing same to an enlarged mixing zone wherein a substantial body accumulates, removing from the reflux condensing zone regulated portions of reflux condensate and passing same to said mixing zone wherein a substantial body thereof accumulates and mixes with said substantial body of non-vaporized residue, and removing from said mixing zone regulated portions of said mixture and directing same directly and without passage through said heating zone to said vapor separating zone where said mixture mixes with the non-vaporized residue accumulated in said vapor separating zone.

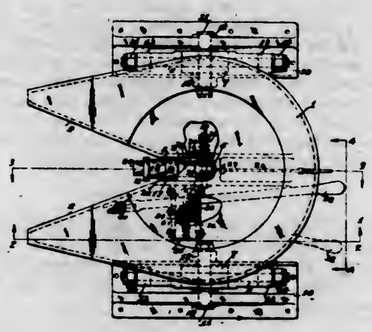
1,900,114. VEHICLE TRAILER TANK. FRANK ALLISON JONES, University City, Mo., assignor to Shell Petroleum Corporation, a Corporation of Virginia. Filed June 17, 1929. Serial No. 371,485. 4 Claims. (Cl. 280—5.)



1. A trailer device comprising a downwardly curved plate forming a saddle, a pair of transverse frame members supporting the intermediate portion of said saddle between the sides thereof, a pair of lateral plates supporting portions of said saddle laterally from said intermediate portion, a pair of longitudinal tubes supporting the marginal edges of said saddle, and means for supporting said tubes.

1,900,115. FIFTH WHEEL FOR CONNECTING TRACTORS TO DIFFERENT TYPES OF TRAILERS. CHARLES H. LAND, Grosse Pointe, and WILLIAM H. WILSON, Detroit, Mich. Filed Mar. 8, 1932. Serial No. 596,518. 11 Claims. (Cl. 280—33.1.)

1. In combination with a rigidly secured fifth wheel of a tractor adapted for connecting the tractor to different types of semitrailers equipped with supporting legs; a folding king-pin pivoted to the rigidly secured fifth wheel, adapted to engage a coordinating coupling means carried



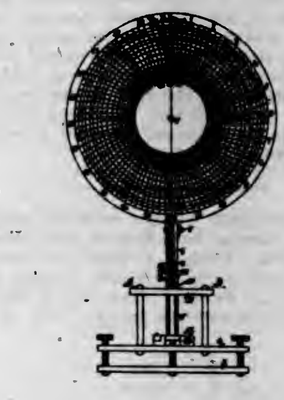
by the trailer; a lock carried by the fifth wheel for supporting said king-pin in operative position to effect a coupling relation with the coupling means of a trailer.

1,900,116. PROCESS AND APPARATUS FOR CRACKING OIL. NATHANIEL E. LOOMIS, Westfield, and ALBERT H. TOMLINSON, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 1, 1926. Serial No. 138,840. 6 Claims. (Cl. 196—51.)

1. Process of cracking hydrocarbon oil in an elongated vertical soaking drum insulated against loss of heat, comprising heating a stream of oil to a vaporising and cracking temperature, dividing the resulting stream of hot oil vapor, passing a portion of the stream into an upper part of the drum, passing another portion of the stream into a lower part of the drum, and withdrawing all vaporous and liquid products of conversion together from an intermediate point in the drum.

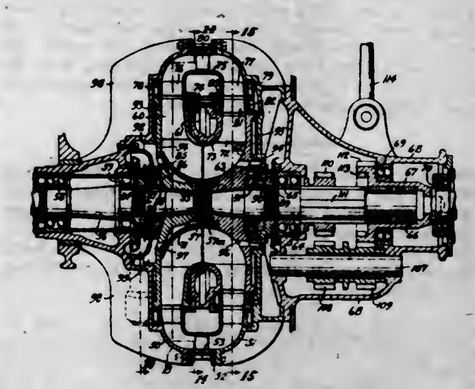
1,900,117. SUNDIAL. FRANCESCO LORIA, Rome, Italy. Filed Mar. 13, 1928, Serial No. 261,335, and in Italy Jan. 14, 1928. 3 Claims. (Cl. 33—62.)

1. In an instrument of the class described, a supporting member, an upright bearer upon said member, an arm mounted for tilting adjustment upon the bearer, two cup-shaped discs mounted upon the arm at their axes and in opposition to each other, the relatively remote faces of the discs bearing indicia indicating hours and fractions of hours, the angular adjustment of the arm permitting either disc to be positioned to receive rays from the sun, a style at the axes of the discs projecting at its end portions beyond the faces of the disc whereby to provide for the casting of its shadow, under the sunlight rays, onto the respective face of the respective disc,



the bearer being rotatable for adjustment of the discs in accordance with the adopted meridian, and means for holding the bearer in its positions of adjustment.

1,900,118. HYDRAULIC VARIABLE SPEED POWER TRANSMISSION. ALF JAMES RUDOLF LYSHOLM, Stockholm, Sweden, assignor to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Corporation of Sweden. Filed Nov. 28, 1932, Serial No. 644,082, and in Sweden Nov. 22, 1926. 20 Claims. (Cl. 60—54.)

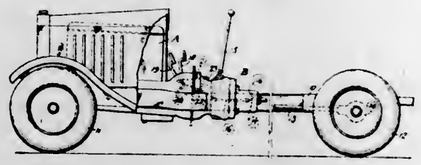


3. In a variable-speed power transmission including a casing enclosing co-axially mounted interfitting driving and driven members, a ring of turbine blades concentric with the axis of rotation, said blades having bluntly rounded inlet edges and relatively sharp outlet edges and having outlet angles within a range of which the lower limit is substantially 20° and the upper limit of which is substantially 45° and said blades being so thick adjacent to inlet edge of the ring as to form passages between adjacent blades wherein the length of the projection normal to the median line of the passage from the median line to the surface of the blade varies rapidly for a short distance along the median line from the inlet edge of the ring toward the outlet edge thereof and then relatively slowly to said outlet edge and wherein

the length of such normal projection at said inlet edge is one and one half times such normal projection at a relatively short distance from said inlet edge.

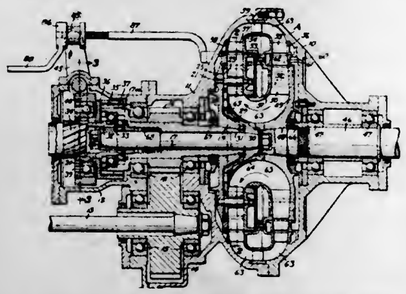
11. In a power plant, a motor of the type requiring a cooling fluid, a fluid operated variable-speed transmission driven by the motor, a conduit for conducting fluid from the transmission for cooling, a cooler receiving fluid from said conduit, a conduit for conducting cooled fluid from the cooler to the transmission, a pump in said last named conduit, means providing a restriction in said first named conduit for maintaining the fluid in the transmission under pressure, a conduit for conducting cooling fluid from the pump to the motor and a conduit for conducting fluid from the motor to the cooler.

1,900,119. VARIABLE SPEED POWER TRANSMISSION. ALF LYSHOLM, FRED HORNEY, and GÖSTA WAHLSTEN, Stockholm, Sweden, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Jan. 8, 1932, Serial No. 585,440, and in Germany Jan. 14, 1931. 85 Claims. (Cl. 74—59.)



1. A variable speed power transmission comprising a driving shaft, a driven shaft, means forming mechanical power transmitting connection between said shafts to provide drive therebetween, hydraulic variable speed power transmitting mechanism for transmitting power from the driving shaft to the driven shaft to provide a synchronous drive between said shafts, means for selectively engaging said first named means to transmit power from the driving shaft to the driven shaft, means for selectively transmitting power through the hydraulic mechanism, and means for automatically disconnecting the entire hydraulic mechanism from operative relationship with the remaining parts of the transmission upon transmission of power through said first named means.

1,900,120. VARIABLE SPEED POWER TRANSMISSION. ALF LYSHOLM, FRED HORNEY, and GÖSTA WAHLSTEN, Stockholm, Sweden, assignors to Aktiebolaget Ljungstroms Angturbin, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Mar. 26, 1932, Serial No. 601,330, and in Germany May 7, 1931. 11 Claims. (Cl. 60—54.)



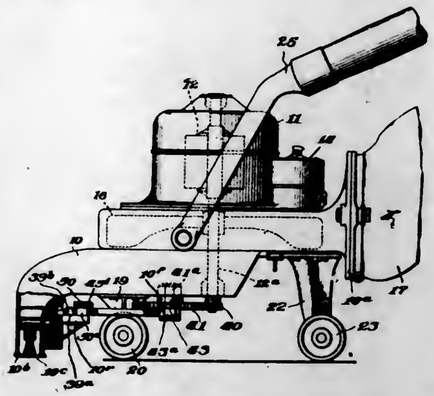
1. A hydraulic variable-speed power transmission comprising a non-rotatably mounted casing providing a chamber for operating fluid, a primary member comprising a shaft part rotatably mounted in the casing and an impeller part in said chamber, a secondary member having a shaft part rotatably mounted in said casing in axial alignment with the first mentioned shaft part and a turbine part in said chamber, said impeller part and said turbine part having a plurality of rings of blades arranged for circulation of operating fluid in a closed path of flow in said chamber outwardly through a ring of impeller blades and through a ring of turbine blades situated outwardly of said impeller blades and inwardly through a second ring of turbine blades, said rings of turbine blades comprising blades fixed on said turbine part to provide fixed channels for flow of operating fluid therebetween, said ring of impeller blades comprising blades pivotally mounted on said impeller part and mechanism operable from the exterior of the casing for turning the pivotally mounted blades to alter the free area of the passages for flow of operating fluid therebetween.

1,900,121. TAPE MOISTENING AND AFFIXING DEVICE. EDWIN H. MANVELL, Brooklyn, N. Y., assignor to Edwin H. Manvell and Louis Casper, Brooklyn, N. Y. Filed Apr. 23, 1929. Serial No. 357,874. 5 Claims. (Cl. 91—14.5.)



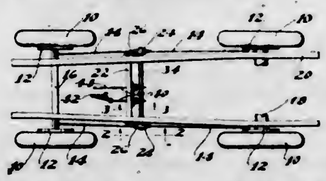
1. In a tape moistening and affixing device having a head attached to a liquid holding receptacle, a well incorporated in said head, a moistening or gumming wheel revoluble in said well, means for feeding liquid from said holding receptacle into said well, said means coacting with the movement of said wheel, a tape groove, a spring pressed curved pressure shoe resting normally upon the gummed paper tape that rests in said groove preparatory to being moistened; a tape guide embracing the tape and integral with the lower face of said shoe, and a finger lever integral with said shoe for lifting the tape clear of the gumming or moistening wheel aforesaid.

1,900,122. APPARATUS FOR CLEANING. FRANCIS C. MASON, Chicago, Ill., assignor to Sears, Roebuck & Company, Chicago, Ill., a Corporation of New York. Filed Aug. 8, 1929. Serial No. 384,258. 16 Claims. (Cl. 15—10.)



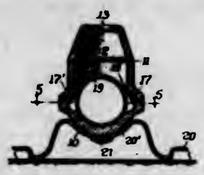
1. Apparatus of the class described including a casing having an elongated opening therein, a plurality of brushes oscillatably mounted and projecting into said opening, said brushes being arranged with their axes of oscillation transverse to the major axis of said opening, and means to oscillate said brushes about said axes in substantial parallelism with said major axis and across the surface underlying said opening.

1,900,123. BRAKE OPERATING CONNECTION. EUGENE G. MCDONALD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 26, 1931. Serial No. 511,233. 15 Claims. (Cl. 188—204.)



1. Brake operating means comprising, in combination with a chassis, a plurality of levers, pivotal connections between said levers and said chassis, connections between said levers and said brakes, and a transverse substantially rigid shaft connected to said levers some distance from their bearings and which has a combined turning and bodily movement in operating the levers.

1,900,124. SPRINKLER HEAD. HARRY E. MENG, Oak Park, Ill., assignor to The W. D. Allen Manufacturing Company, Chicago, Ill., a Corporation. Filed July 11, 1932. Serial No. 621,783. 5 Claims. (Cl. 299—105.)



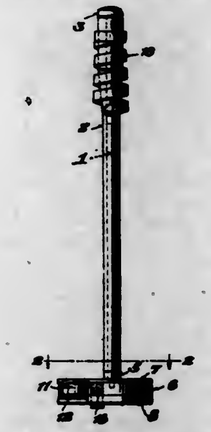
1. A sprinkler head comprising a horizontal tubular body, a nozzle on the upper side of said body having a spray chamber therein, and a tube section snugly fitting the bore of the tubular body and forming the floor of the spray chamber, the sprinkler head having a port or ports opening into the lower portion of the spray chamber exteriorly of and partly defined by said tube section.

1,900,125. GRAY IRON ALLOY. PAUL D. MERICA, Westfield, JAMES S. VANICK, Elizabeth, and THOMAS H. WICKENDEN, Roselle, N. J., assignors, by mesne assignments, to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 21, 1926. Serial No. 143,294. 5 Claims. (Cl. 75—1.)

8. A hard gray iron casting containing about 2.5% to about 3.7% of carbon, about 0.30% to about 3.0% silicon, about 1.0% to about 10.0% nickel, and about 0.15% to about 2.0% chromium in the ratio of from about 2 and upwards of nickel to 1 of chromium, said nickel being present in excess of chromium, said casting as cast in a mold without heat treatment consisting practically wholly of graphite and martensite or troostite, and to a minor degree of free iron carbine and having a Brinell hardness in excess of about 200.

1,900,126. HAIR WAVING OR CURLING ROD. VINCENT N. NICOSIA, Houston, Tex. Filed Nov. 16, 1932. Serial No. 642,951. 11 Claims. (Cl. 132—33.)

1. In a hair waver or curler, or rod having a threaded end, a sleeve rotatable on the rod, and formed to have hair wrapped thereover, a coil spring slidable on the sleeve for engagement throughout a substantial part of its length with and over the free end of the wrapped hair to hold same on the sleeve, and means to hold the hair adjacent the scalp having a threaded portion for removable engagement with said threaded end of the rod.



1,900,127. MILK BOTTLE HOOD. WILLIAM H. OERM, Baltimore, Md. Filed June 25, 1932. Serial No. 619,345. 2 Claims. (Cl. 226—83.)

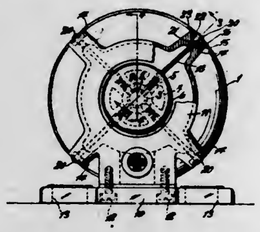


1. The method of forming a bottle-mouth-hood, consisting in, first providing a molded cup having a substantially cylindrical wall which includes fibrous and fusible materials; second, applying moisture to the cup for softening it; third, placing the cup of softened material with its wall around the bead of the bottle-mouth; and fourth, simultaneously applying centripetal pressure and heat sufficient to complete the molding of the hood around and under the bead and to evaporate the moisture and thus render the finished molded hood brittle so it cannot be removed from the head without breaking the fibres of the material which composes the hood.

1,900,128. RESILIENT SUPPORT FOR ELECTRIC MOTORS. LAWRENCE M. PERRONE, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed Apr. 9, 1930. Serial No. 442,828. 3 Claims. (Cl. 248—16.)

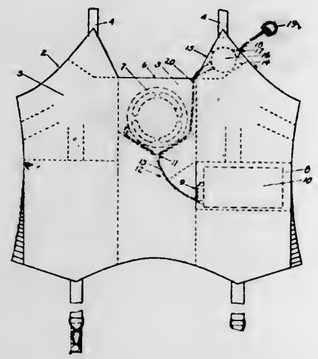
2. A motor having a frame, a support having a series of holes and sockets concentric with said holes, a series

of spokes of substantially less diameter than said holes passing through the holes respectively and engaging in



the frame, a resilient washer seated in each of said sockets and about the spoke, and a head on the spoke engaging said resilient washer.

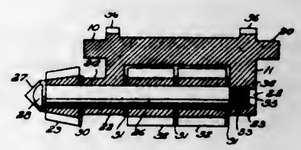
1,900,129. WOMAN'S UNDERGARMENT. FRED RING, New York, N. Y., assignor to Dictograph Products Co., Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 25, 1931. Serial No. 565,055. 3 Claims. (Cl. 2—250.)



1. A woman's undergarment comprising a front adapted to cover the chest of a wearer having two layers of material in the central portion, a relatively large article supporting pocket positioned centrally on said front within the region to be disposed adjacent the hollow of the chest formed by stitching together the two above mentioned layers of material, a second article supporting pocket positioned to one side on said front below the region adapted to cover the fullness of the chest and formed by stitching together the two layers of material, a passage formed between said pockets by the two layers of material, and a third relatively small article supporting pocket disposed on said front adjacent the shoulder support above the last mentioned region and formed by stitching together the two layers of material.

1,900,130. TUBE CLEANER. JAMES P. RODGERS, Pittsburgh, Pa., assignor to Elliott Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1930. Serial No. 421,256. 6 Claims. (Cl. 15—104.14.)

1. In a tube cleaner, a head having a body portion, a cleaning element carrier having spaced projections thereon having openings therein receiving a pin for supporting a cleaning element, means on the head for supporting one end of the carrier for swinging movement, a demountable keeper, means on the head for receiving and positioning the keeper, means in the keeper for supporting the other end of the carrier for swinging movement, a threaded section on one end of the head, means on the threaded sec-



tion for holding the keeper in place and engaging the driving means, and spaced shoulders on the head for limiting the distance through which the carrier swings.

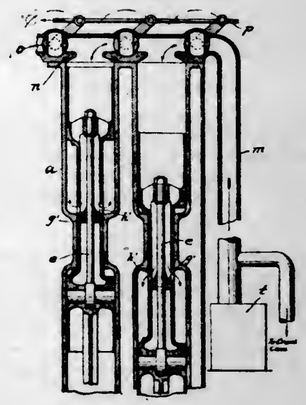
1,900,131. RUGOUS COATING COMPOSITION AND PROCESS OF MAKING SAME. FRANK B. ROOT, East Orange, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of Virginia. Filed Nov. 20, 1929. Serial No. 408,662. 14 Claims. (Cl. 91—68.)

1. A liquid coating composition containing palpable ground wood of substantially soft wood origin and of spray-projecting fineness; said coating composition rapidly drying on exposure at room temperature to form a textured rugous surface.

1,900,132. PROCESSS OF REFINING. LUDWIG ROSENSTEIN, San Francisco, Calif. Filed Apr. 20, 1931. Serial No. 531,650. 8 Claims. (Cl. 87—12.)

1. In a process of purifying a substance of the class consisting of oils, fats, waxes and resins of animal or vegetable origin, the step which comprises treating a mass of said substance with liquid ammonia.

1,900,133. INTERNAL COMBUSTION ENGINE. JOSEPH SCHAEFFERS, Philadelphia, Pa. Filed Mar. 13, 1931, Serial No. 522,193, and in Germany October, 1930. 15 Claims. (Cl. 123—57.)



3. A two-cycle internal combustion engine comprising a cylinder having an extension of reduced bore, a piston arranged to reciprocate within the cylinder and having a tubular extension reciprocable in the cylinder extension, said parts forming an annular combustion chamber about the tubular extension, the piston having a shoulder formed on a portion of its annular working face adapted to closely approach the end of the cylinder, said tubular extension

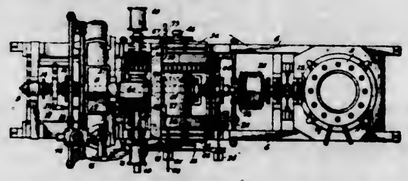
being provided with a plurality of ports providing a passage for air into the combustion chamber, the ports being directed angularly relatively to the radii to initiate rotary movements of the charges passing therethrough.

1,900,134. RAILWAY CAR. ELMER E. SCHLOTZ, Denver, Colo. Filed Feb. 4, 1929. Serial No. 337,251. 7 Claims. (Cl. 105—171.)



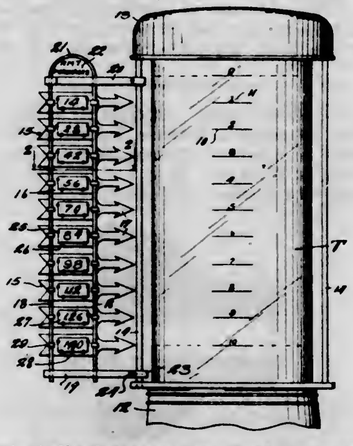
2. In a railway car, a car body, and a truck for the body, having relative rotary movements in horizontal and vertical planes, and having a sliding movement laterally of the body.

1,900,135. WELL DRILLING APPARATUS. WALDO SHELDON, South Norwalk, Conn., assignor to Sheldon Machinery Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 11, 1928. Serial No. 298,950. 10 Claims. (Cl. 254—187.)



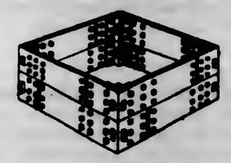
5. In apparatus of the character disclosed, a main drive shaft, a cross-shaft driven thereby, a drum, drive gearing from said cross shaft to said drum, a cathead shaft, drive gearing from said cathead shaft to the drum and drive gearing from the cross shaft to said cathead shaft.

1,900,136. PRICE MARKER. ROSCOE V. SHELDON, Riverside, Calif. Filed Sept. 10, 1932. Serial No. 632,619. 3 Claims. (Cl. 116—135.)



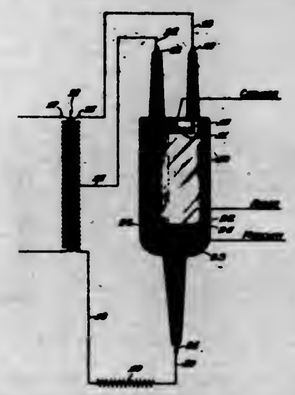
1. A price indicating means comprising a pointer, means for mounting the pointer at one side of a liquid dispensing means, said pointer comprising a body, a reduced head formed with the body, lugs struck from the body and engaging about the mounting means, a placard and means for removably mounting the placard on the body.

1,900,137. FOUNDRY FLASK. WALTER O. SHELLING, Allentown, Pa. Filed Sept. 24, 1931. Serial No. 564,838. 3 Claims. (Cl. 22—96.)



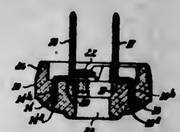
1. A foundry flask section comprising four structurally rigid composite L-shaped members each having a central L-shaped portion of double thickness and two legs each of single thickness, assembled so that the portions of single thickness overlap to form a frame of substantially double thickness throughout its entire periphery.

1,900,138. THERAPEUTIC LAMP. SAMUEL S. TOBIAS, Philadelphia, Pa., assignor to The Burdick Corporation, Milton, Wis., a Corporation of Delaware. Filed July 12, 1928. Serial No. 292,140. 5 Claims. (Cl. 250—35.)



5. A therapeutic lamp comprising a transparent envelope, a filamentary cathode in the envelope, a vaporisable medium in the envelope, a solid anode in the envelope in thermal contact with said medium and between said medium and the cathode, the anode serving as a shield to prevent the arc striking said medium.

1,900,139. ATTACHMENT PLUG CAP AND METHOD OF MAKING THE SAME. WILLIAM C. TERGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 19, 1929. Serial No. 400,881. 11 Claims. (Cl. 173—361.)



1. The method of making an attachment plug cap, which comprises cold molding a mass of insulating material to form an article of the desired shape, then pressing into the molded article an integral portion of a combined contact and terminal member, and thereafter subjecting the article to the usual heat treatment for curing, whereby said combined contact and terminal member is rigidly and permanently secured in position through shrinkage of the insulating material.

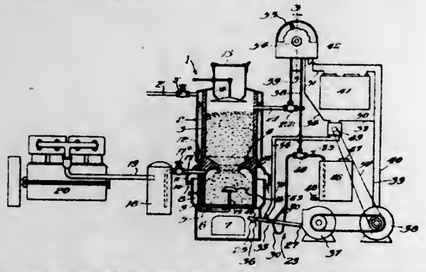
9. An attachment plug cap comprising an insulating body molded free from inserts of any kind, said body hav-

ing a plurality of recesses formed therein by the molding operation, and a plurality of one-piece combined contact and terminal members having integral projections inserted within said recesses and permanently retained therein by shrinkage of the material of said body.

1,900,140. METHOD OF IMBIBITION PRINTING WITH PURE PRIMARY COLORS AND PRODUCT. BERTHA SUODEN TUTTLE, Boston, Mass., assignor, by mesne assignments, to Technicolor, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929. Serial No. 345,903. 8 Claims. (Cl. 101—149.)

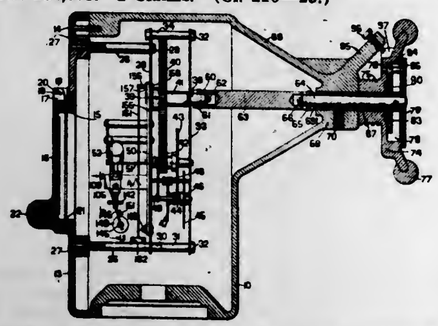
5. A colored motion picture film, characterised by having fixed superposed images thereon of pure yellow, red and blue dye solutions, respectively, and free from insoluble matter, whether of dye or other substance.

1,900,141. METHOD FOR MAKING PRODUCER GAS. ARTHUR P. VAN HEEDEN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed May 31, 1927. Serial No. 195,193. 1 Claim. (Cl. 48—203.)



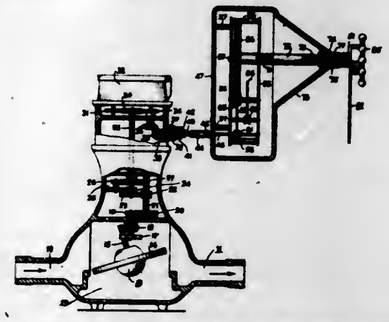
A process of making producer gas in a gas producer having a solid fuel bed supported by a grate; which comprises spraying oil and air into the fuel bed below the grate, igniting the oil and air mixture and thereby heating the solid fuel bed above the grate, then discontinuing the heating with oil, admitting air to the lower portion of the heated fuel bed. and thereby generating producer gas, and withdrawing producer gas from the top of the solid fuel bed.

1,900,142. APPARATUS FOR FEEDING SOLUTIONS. CHARLES F. WALLACE, Westfield, N. J., assignor to Wallace & Tiernan Products, Inc., Belleville, N. J., a Corporation of New Jersey. Filed May 31, 1928. Serial No. 282,005. 2 Claims. (Cl. 210—29.)



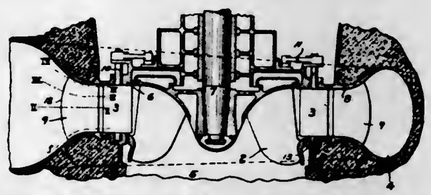
1. An apparatus for feeding solutions comprising a clock gear train, a weight connected to drive the gear train by the gravitational movement of the weight, a container for solution into which the weight descends to displace solution from the container, and a pendulum and escapement mechanism for the gear train controlling the descent of the weight and displacement of the solution.

1,900,143. APPARATUS FOR FEEDING SOLUTIONS. CHARLES F. WALLACE, Westfield, N. J., assignor to Wallace & Tiernan Products, Inc., Belleville, N. J., a Corporation of New Jersey. Filed May 31, 1928. Serial No. 282,006. 4 Claims. (Cl. 210—29.)



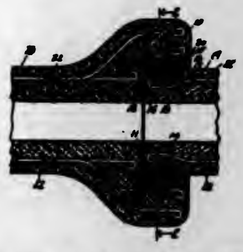
1. An apparatus for feeding or dispensing solutions comprising a water meter, a train of gears actuated by the meter, a weight lowered by the meter through connections including said train of gears at a rate proportional to the flow through the water meter, a container for the solution, a suction device including a venturi for producing the suction, and a flexible connection between the suction device and the container comprising an intake for the solution moving with the aforesaid weight.

1,900,144. HYDRAULIC MACHINE. WILLIAM M. WHITE, Milwaukee, Wis. Filed Sept. 2, 1930. Serial No. 479,226. 5 Claims. (Cl. 253—118.)



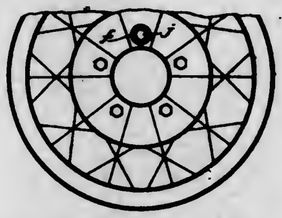
1. In a hydraulic machine, a spiral fluid conducting casing having an annular fluid exit portion and a plurality of vanes mounted in said fluid exit portion, the entrance angles of which vary progressively from the top and bottom to a point intermediate the top and the bottom.

1,900,145. PRECALKED EXTENSIBLE JOINT FOR PIPES. WILLIAM A. WHITING, Huntington Park, Calif., assignor to American Concrete Pipe Company, a Corporation of Delaware. Filed Apr. 1, 1930. Serial No. 440,715. 10 Claims. (Cl. 285—112.)



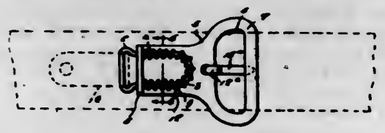
1. In a pipe joint of the character described: a pair of concentric rings mounted upon a pipe section; a flexible gasket interposed between said rings; and means on said rings for effecting a bond between said rings and said pipe section.

1,900,146. LOCK FOR SCREW FASTENING MEMBERS. BRUNO ERNEST WINKLER, Detroit, Mich. Filed June 25, 1931. Serial No. 546,781. 1 Claim. (Cl. 70—122.)



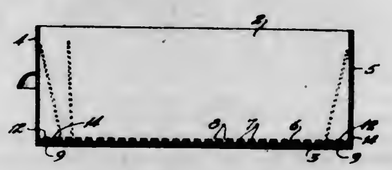
In a device of the character described, the combination, with a fixed member having screw threads, and a removable member provided with co-acting screw threads and with external tool-engaging means, of a sleeve having smooth, unbroken internal and external cylindrical surfaces and rotatable and reciprocable upon said removable member and adapted to enclose the said tool-engaging means, a recess within said removable member having an internal annular groove and a slot communicating therewith from the outside, a barrel fitting within said recess having a projection adapted to pass through said slot and to engage said annular groove, key operated retractable tumbler means upon said barrel non-coincident with said projection for engaging said slot and preventing rotation of said barrel to remove the same, and a flange on said barrel for retaining the said sleeve in place longitudinally.

1,900,147. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed Aug. 27, 1931. Serial No. 559,695. 2 Claims. (Cl. 24—163.)



1. In a belt buckle comprising a plate provided at one end with means for engaging the adjustable end of the belt, said plate being provided at its opposite end with a laterally disposed formation having an opening therein, a slidable member disposed through the opening and provided with a transversely extending straight portion at its outer end and a spring interposed between the inner end of the slidable member and the inner side of the laterally disposed formation the other end of the belt being secured to the straight portion.

1,900,148. DEVICE FOR STABILIZING CARDS, FILES, ETC., IN FILING DRAWERS OR BOXES. RICHARD V. WOOD, Louisville, Ky. Filed Oct. 20, 1931. Serial No. 570,018. 6 Claims. (Cl. 129—16.)



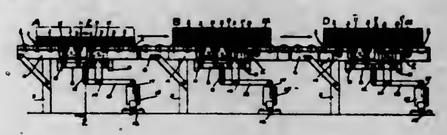
1. A stabilizing device for files adapted to be placed in the bottom of a file drawer to rest thereon and restrained against movement longitudinally and transversely of the drawer and consisting of a pair of strips having flat ends and having the portions between the ends corrugated to provide alternate ribs and depressions, cross bars respectively connecting the front and rear ends of said strips in spaced relation and resting on top of the flat ends of the strips, and means for detachably securing the bars to the strips.

1,900,149. BRAKE MECHANISM FOR CONVEYERS. MARTIN J. ANDERSON, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1930. Serial No. 487,229. 2 Claims. (Cl. 193—32.)



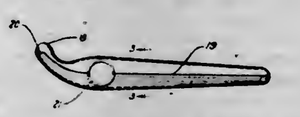
1. The combination with a gravity conveyer comprising a plurality of anti-friction rollers, of a series of brake devices arranged at intervals along said conveyer and each having means adapted to frictionally engage certain of the rollers of said conveyer to retard their rotation, an actuator for each brake device, and a control means for said actuators whereby said devices may be operated independently of one another, or simultaneously, to control the movement of articles over said conveyer.

1,900,150. CONVEYING SYSTEM. MARTIN J. ANDERSON, Ellwood City, Pa., assignor to Mathews Conveyer Company, Ellwood City, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1930. Serial No. 487,230. 20 Claims. (Cl. 193—32.)



1. In a conveying system, a loading station having means whereby a commodity may be retained thereon, means for causing the release of a commodity from said loading station and permitting it to advance along the system, an unloading station connected with said loading station, an electrically controlled stop means adapted to interrupt the travel of a commodity between said stations, if the unloading station is loaded, and means made operable by removal of a commodity from said unloading station to render said stop means inoperative and cause the release of a commodity being held between said stations and permitting it to advance to the unloading station.

1,900,151. LEVER. WILLIAM J. ANDRES and CLARENCE E. WARD, South Bend, Ind., assignors to Bendix Aviation Corporation, South Bend, Ind. a Corporation of Delaware. Filed May 31, 1930. Serial No. 458,484. 2 Claims. (Cl. 74—5.)



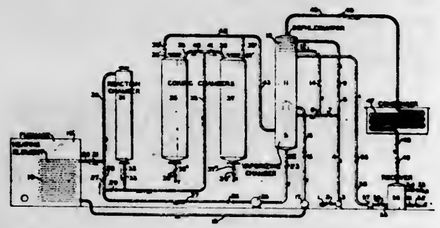
1. A lever comprising two longitudinally extending generally channel-shaped parts permanently secured concave face to concave face, and each forming one side of the lever and said lever being formed with at least one of its ends out of line with the lever body and with one of said parts extending across the end of the other at said end of the lever to provide an unbroken ball shaped thrust surface.

1,900,152. SAFETY REMOVABLE FASTENER. ABRAHAM BEBEL, New York, N. Y. Filed Mar. 19, 1932. Serial No. 599,889. 8 Claims. (Cl. 24—205.)



6. A safety hook fastener, comprising upper and lower spaced trapezoidal guide plates, a separation post between said guide plates rigidly connected therewith, a strap across the top guide plate, a handle with prongs extending beneath opposite edges of the strap, pegs projecting from said handle and positioned thereon to engage against one edge of one of the guide plates to hold the handle against free moving, and resilient means for causing the pegs to engage the edge of the guide plate.

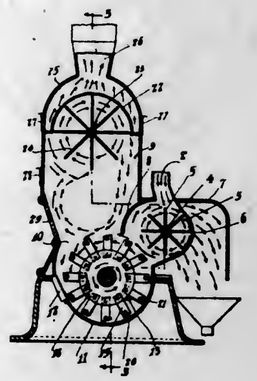
1,900,153. TREATMENT OF HYDROCARBON OILS. DONALD J. BERGMAN, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Aug. 11, 1930. Serial No. 474,428. 1 Claim. (Cl. 196—58.)



A hydrocarbon oil cracking process which comprises passing the raw charging oil for the process countercurrent to and in direct contact with flashed vapors in a contacting zone to vaporize a substantial portion of the charging oil by the heat of said vapors, dephlegmating the resultant commingled vapors out of direct contact with raw charging oil thereby forming a relatively clean cracking stock, passing said stock, unadmixed with raw charging oil, in a restricted stream through a heating zone and heating the same therein to cracking temperature under pressure, removing the unvaporized portion of said charging oil from the contacting zone and commingling the same, without prior heating to cracking temperature, with the heated cracking stock in an unheated zone maintained under pressure, withdrawing unvaporized oil from the last mentioned zone and flash distilling the same by pressure reduction in a flashing zone, separately removing vapors and residue from the flashing zone and isolating the latter from the process, and supplying the last mentioned vapors to said contacting zone to constitute said flashed vapors.

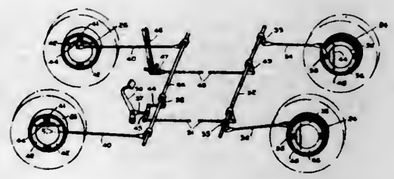
1,900,154. METHOD AND APPARATUS FOR DEFIBRATING COTTONSEED HULLS. GEORGE L. BLANCHARD, Calexico, Calif. Filed Feb. 19, 1930. Serial No. 429,541. 8 Claims. (Cl. 19—44.)

1. A process of defibrating cottonseed hulls which comprises, first passing the hulls to a hull beating zone, therein beating the hulls while discharging delinted hulls therefrom passing the incompletely delinted hulls and substantially hull-free fibers into a separation zone, therein separating by an uprising current of air the substantially hull-free fibers from incompletely delinted hulls, and passing the incompletely delinted hulls to an independent hull



scraping zone, scraping the fibers from the hulls in said zone, and ejecting the hulls back into the hull beating and discharge zone, and passing the fibers separately from the scraping zone to said separation chamber.

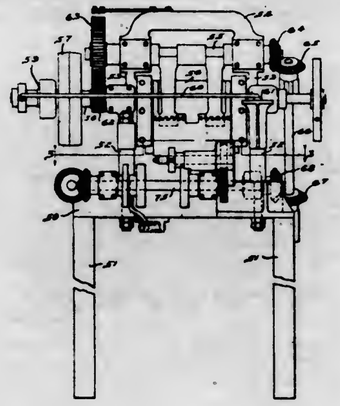
1,900,155. BRAKE MECHANISM. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Original application filed Feb. 1, 1929, Serial No. 336,720. Divided and this application filed Dec. 30, 1929. Serial No. 417,296. 1 Claim. (Cl. 188—10.)



In an automotive vehicle, front brakes and rear brakes, said brakes adapted to be operated by a common means providing a predetermined distribution of brake operating forces to each brake, said front brakes being so constructed that parts thereof deform when heated during the operation of the brakes to thereby reduce the braking efficiency of said front brakes, and said rear brakes being so constructed that parts thereof resist deformation during the braking operation to thereby automatically increase the braking efficiency of said rear wheel brakes.

1,900,156. METHOD AND APPARATUS FOR MAKING BELT LACING HOOKS. ORVILLE B. BRIGGS and GRANT M. RICHARD, Toledo, Ohio, assignors to Safety Belt Lacer Company, Toledo, Ohio, a Corporation of Delaware. Filed Mar. 3, 1930. Serial No. 432,820. 21 Claims. (Cl. 140—71.)

1. In the method of manufacturing a strip of belt lacing hooks, those steps which consist in perforating a lacing bar to provide open end recesses engaging belt hook forming members in said recesses to unite said bar and



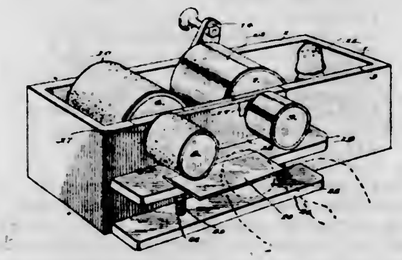
members and bending said members longitudinally thereof to form belt hooks.

1,900,157. AMMUNITION. JAMES E. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,628. 12 Claims. (Cl. 52—4.)

1. A priming mixture for ammunition containing basic lead picrate in admixture with guanylnitrosaminoguanyltetracene.

8. A priming mixture for ammunition containing basic lead picrate admixed with mercury fulminate.

1,900,158. RAZOR BLADE SHARPENER. JOHN D. BUTLER, Washington, D. C. Filed Apr. 4, 1930. Serial No. 441,573. 3 Claims. (Cl. 51—72.)



1. A razor blade sharpener comprising a box having a rigid shelf extending from one of the side walls in the plane of the bottom thus to extend the bearing surface of the box, a pair of shafts journaled on the side walls of the box, each having a pair of dissimilarly sized rolls arranged in sets respectively inside and outside of the box, means correspondingly surfacing the rolls of each pair but constituting dissimilar surfacings as to the sets of rolls, means by which one of the shafts is turned and means by which both shafts are turned in unison, a presser plate hinged to one of the side walls in a position above the rigid shelf for limited movement respecting an adjoining set of rolls, and resilient means situated between the shelf and presser plate to urge the latter against said set of rolls.

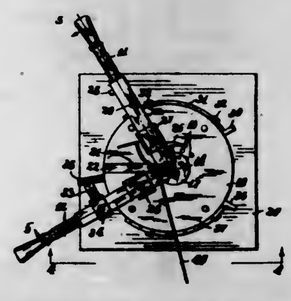
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1,900,159. AMMUNITION. ALLAN CAMPBELL, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed May 23, 1931. Serial No. 539,515. 3 Claims. (Cl. 102—17.)



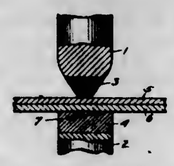
1. An anvil comprising an exteriorly cylindrical base, a conical body above said base, a projection at the apex of said conical body, and spaced ridges extending laterally from said projection.

1,900,160. WIRE SHAPING MACHINE. JOSEPH CIPKO, New York, N. Y. Filed Jan. 20, 1932. Serial No. 587,628. 9 Claims. (Cl. 153—46.)



1. A wire shaping machine, comprising a base member, a pair of levers swivelly mounted on the base member upon a common axis, a bending disc eccentrically swivelly mounted on said axis, means for holding said bending disc in various adjusted positions, a starting blade radially adjustable on said base member relative to the axis of said levers, a bending blade adjustably mounted on one of said levers for acting against the edge of the bending disc, a second bending blade adjustably mounted on the other lever for operating against the first bending blade to bend a wire away from the bending disc, and means for limiting pivoting of said lever.

1,900,161. SPOT WELDING. MORRIS J. COHAN, Brooklyn, N. Y. Filed Feb. 15, 1930. Serial No. 428,716. 2 Claims. (Cl. 219—10.)

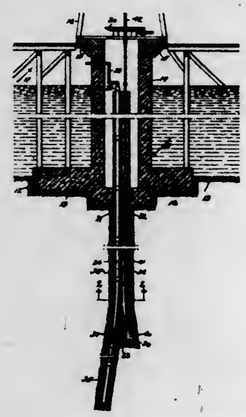


1. That process of spot welding a pair of superposed contacting work pieces by pressing the work sheets together at a definite locality and passing through the locality from one piece to the other an electrical current of sufficient amperage and for a sufficient time to weld the contacting portions together at the spot, which is characterised by the step of forming, simultaneous with the welding, a protrusion on one of the work pieces of such dimensions that contraction during cooling will render the surface of the metal protruded coplanar with the surrounding metal.

1,900,162. ZINC-META-ARSENITE. LEO P. CURTIN, Cranbury, N. J., assignor to Curtin-Howe Corporation, New York, N. Y., a Corporation of New York. Filed June 21, 1930. Serial No. 462,941. 5 Claims. (Cl. 92—21.)

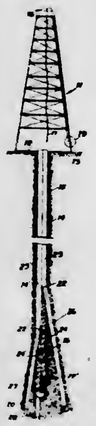
1. Method of making wallboard or like article comprising precipitating zinc-meta-arsenite in the presence of a plant fiber, and shaping and drying the fiber.

1,900,163. METHOD AND APPARATUS FOR DRILLING OIL WELLS. DREXLER DANA, Santa Barbara, and FRANK A. MORGAN, Beverly Hills, Calif. Filed May 2, 1931. Serial No. 534,481. 13 Claims. (Cl. 255—1.)



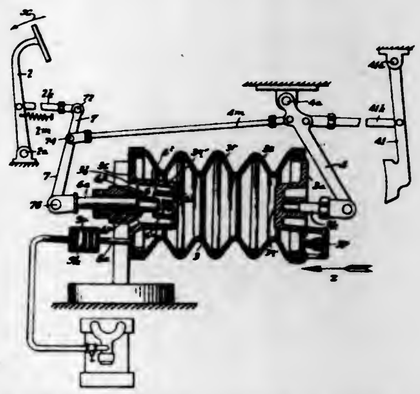
1. A well drilling method which comprises: drilling a comparatively shallow large diameter bore hole; placing a partitioned conductor pipe in said bore hole; and drilling a plurality of small diameter bore holes in the compartments formed by the partition in said conductor pipe.

1,900,164. METHOD AND APPARATUS FOR DRILLING OIL WELLS. DREXLER DANA, Santa Barbara, and FRANK A. MORGAN, Beverly Hills, Calif. Filed July 5, 1932. Serial No. 620,826. 15 Claims. (Cl. 255—1.)



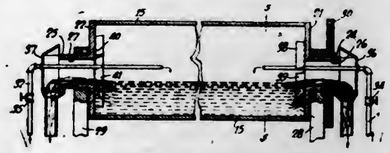
1. A well drilling method which comprises: drilling a large diameter bore hole; partitioning said hole to form a plurality of longitudinal chambers; and drilling small diameter bore holes at different elevations from said chambers.

1,900,165. POWER TRANSMISSION MECHANISM. GÉRARD DE MONGE, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli, Societa Anonima, Milan, Italy. Filed Dec. 23, 1927, Serial No. 242,178, and in Belgium Dec. 30, 1926. 1 Claim. (Cl. 121—41.)



The transmission system comprising an actuated member, an actuating member, a direct connection between said members, means enclosing a chamber of variable volume having a movable end connected to the actuated member, means providing a conduit from said chamber to the intake of an internal combustion engine, said chamber also having communication with the atmosphere, a device for controlling said communication and connected to the actuating member, said device including a needle valve, a spring maintaining the valve normally open, a floating lever for actuating said valve against the spring, said lever forming part of the connection between said members, means in said conduit for influencing the suction of the engine therethrough and an automatic independently operating valve to vent said chamber.

1,900,166. DRIER HEAD. LAWTON A. DIX, New York, N. Y. Filed May 10, 1930. Serial No. 451,437. 12 Claims. (Cl. 34—4.)



1. In a paper making machine, a revolving roll having relatively large side journals on each end thereof, said journals having openings extending to the interior of the said roll, means, for introducing a cooling medium into said roll through said journals, and means extending part way from a journal to the circumference of the roll for extracting a quantity of said medium through one of said journals, the quantity of said medium passing into and out of said roll being sufficient to at all times create a predetermined amount of moisture on the exterior surface of said roll.

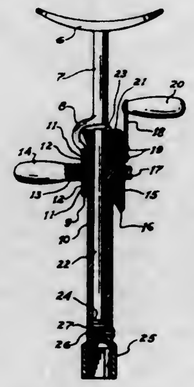
1,900,167. DIFFERENTIALLY COLORING FABRIC AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and GEORGE RIVAT, Paterson, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 13, 1929. Serial No. 354,982. 6 Claims. (Cl. 8—5.)

1. Method of producing differential colored effects on fabrics containing organic derivatives of cellulose which comprises applying locally to said fabric a paste comprising a reducing agent, an alkali, a swelling agent for the cellulose derivative and a pigment and subsequently treating the fabric with a paste containing an aniline black base and an oxidizing agent and then steaming the fabric.

1,900,168. DYEING OF TEXTILE MATERIAL WITH VAT DYES. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 2, 1929. Serial No. 375,571. 7 Claims. (Cl. 8—5.)

1. Process of dyeing textile materials which comprises treating said material in a dye bath containing a vat dye, comparatively large amounts of hydrosulphite and small amounts of soda ash.

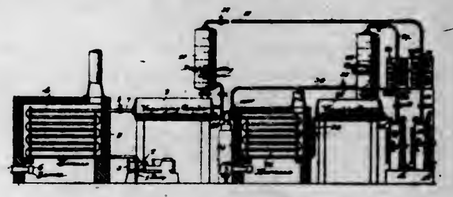
1,900,169. BREAST WRENCH. JOHN DUDULETZ, Tregarva, Saskatchewan, Canada, assignor of one-half to Stephen Dudulets, Tregarva, Canada. Filed Feb. 24, 1930, Serial No. 430,761. Renewed May 20, 1932. 1 Claim. (Cl. 81—57.)



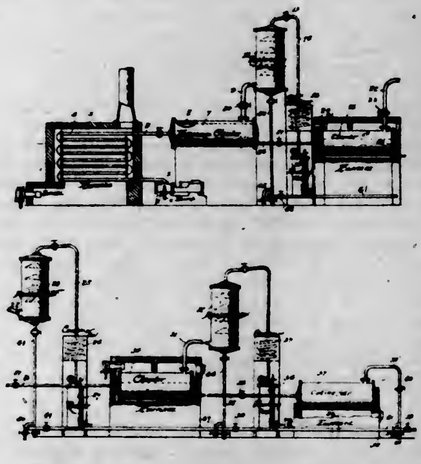
As a new product of manufacture, a breast wrench, including a tube having a pair of diametrically opposed studs extending radially therefrom; a stem carrying an arcuate breast engaging member on one end and having its oposite end curved outwardly and then continued in a parallel plane to the main portion of said stem and mounted on one of said studs; a handgrip secured on said last mentioned stud; auxiliary lugs extended from said tube and into said continued offset end of said stem to prevent turning and twisting of the same on said tube; a driving gear rotatably mounted on the other of said studs; an actuating handle for said driving gear; a shaft rotatable in said tube and having a gear keyed on its upper end within the curved portion of said stem and engaged with said driving gear to be driven by the latter; and a socket member carried on the projecting opposite end of said shaft.

1,900,170. PROCESS AND APPARATUS FOR CONVERTING OILS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 31, 1921, Serial No. 511,713. Renewed June 9, 1926. 7 Claims. (Cl. 196—49.)

1. A process of converting hydrocarbon oils, consisting in passing the oil in a restricted stream through an initial heating zone, thence to a vapor chamber while under a substantial pressure, refluxing and condensing the generated vapors; passing the unvaporized products and reflux condensate in a restricted stream through a secondary heating zone to a separate vapor chamber, and maintaining higher temperature and pressure conditions in said secondary heating zone and separate vapor chamber adapted to produce further conversion of the unvaporized products and reflux condensate, refluxing and condensing the generated vapors from said separate vapor chamber and returning the reflux condensate to the restricted stream of said secondary heating zone.



1,900,171. PROCESS AND APPARATUS FOR CONVERTING OILS. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 31, 1921, Serial No. 511,902. Renewed Dec. 15, 1928. 8 Claims. (Cl. 196—49.)



1. A process for converting hydrocarbon oils, consisting in passing the oil in a small stream through a furnace heated to a cracking temperature and thence through a series of vaporizing chambers serially connected and of progressively decreasing pressures, while maintaining a pressure in excess of 500 pounds throughout said chambers, removing, dephlegmating and condensing the generated vapors from each of said chambers, isolating the reflux condensate formed by dephlegmation from the separate vapor chambers, finally reducing the unvaporized product to coke in a coking still.

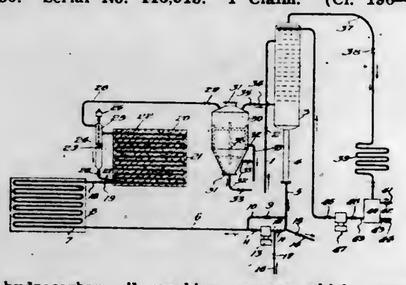
1,900,172. TREATMENT OF TEXTILE AND OTHER MATERIALS. GEORGE HOLLAND ELLIS, HENRY CHARLES OLPIN, and RALPH CHARLES STORRY, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 7, 1930, Serial No. 459,828, and in Great Britain July 4, 1929. 23 Claims. (Cl. 8—5.)

1. Process for the coloration of textile and other materials containing organic derivatives of cellulose comprising applying thereto free leuco compounds of vat dyestuffs.

1,900,173. BRIQUETTE AND PROCESS OF MANUFACTURE. ALBERT A. EPSTEIN, New York, N. Y. Filed Mar. 25, 1931. Serial No. 525,837. 12 Claims. (Cl. 44—15.)

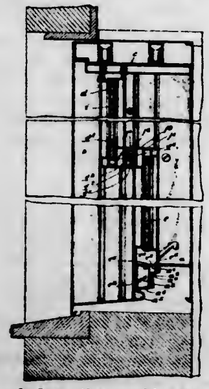
1. A method of producing fuel briquettes which consists in mixing coffee residue with an inflammable binding fluid and pressing into briquette shape.

1,900,174. HYDROCARBON OIL CONVERSION. OSCAR H. FAIRCHILD, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 191,676, filed May 16, 1927. This application filed Apr. 24, 1930. Serial No. 446,915. 1 Claim. (Cl. 196—51.)



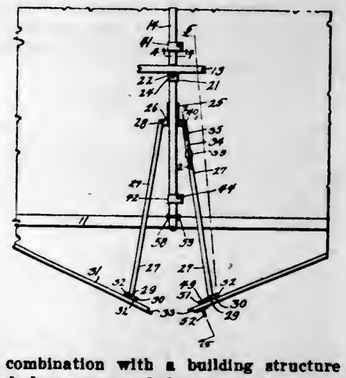
A hydrocarbon oil cracking process which comprises flowing the oil in an elongated stream of restricted cross-sectional area through a heating zone and heating the same therein to cracking temperature under pressure, thence circulating the thus heated oil, substantially without further application of heat thereto, through a soaking zone in a heat insulated stream of restricted cross-sectional area at a temperature near that at which the heated oil left the heating zone, effecting substantial conversion of the oil during such circulation thereof through the soaking zone, then removing the converted oil from the soaking zone and splitting the same into two sections, injecting one of said sections into the hot oil stream passing from the heating zone to the soaking zone in the direction of flow of the heated oil and under sufficient velocity to substantially prevent carbon precipitation from the oil while circulating through the soaking zone, introducing the other of said sections of converted oil into a separating zone and separating the same therein into vapors and residue, and dephlegmating and condensing the separated vapors.

1,900,175. METAL WINDOW. ALPHONSUS FINN, New York, N. Y., assignor to S. H. Pomeroy Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 18, 1931. Serial No. 531,173. 4 Claims. (Cl. 189—72.)



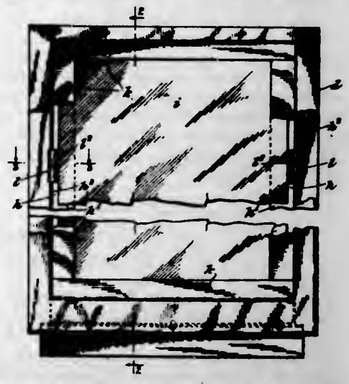
1. In a metal window, the combination of an upper sash of sheet metal having one edge portion of its meeting rail member turned inward at the bottom and then turned upward obliquely and having the other free edge portion carried inward beyond the first named portion and then turned upward, and a lower sash of sheet metal having one edge portion of its meeting rail member turned outward at the top and then turned downward obliquely and having the other free edge portion carried outward beyond the first named portion and then turned downward.

1,900,176. DUAL DOOR CONTROL. WALTER H. FLEWELL, Sioux City, Iowa. Filed Nov. 3, 1930. Serial No. 493,006. 4 Claims. (Cl. 268—62.)



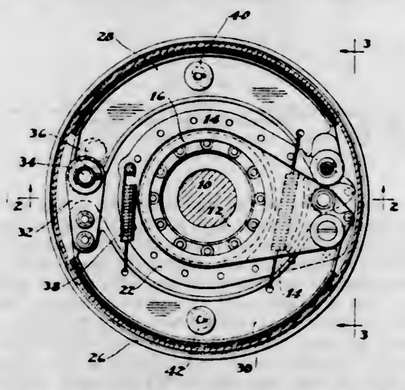
1. In combination with a building structure provided with dual doors mounted for opening movement in opposite directions, a rail attached to the building structure and supported in a position parallel to and near the horizontal plane of the upper edges of the door, and perpendicular to the plane of the doors when closed, a knuckle slidably attached to the rail, a pair of bars each pivoted at one end to the knuckle and at its other end to a respective door whereby one door when moved will transmit similar movement to the other, and latch devices attached to one of the bars and to the rail respectively for securing the doors in certain positions, the latch element on the bar including an engaging portion which is co-axial with the pivot between its bar and the knuckle.

1,900,177. METAL WINDOW. ALPHONSUS FINN, New York, N. Y., assignor to S. H. Pomeroy Company, Inc., New York, N. Y., a Corporation of New York. Original application filed Apr. 18, 1931, Serial No. 531,173. Divided and this application filed Oct. 17, 1931. Serial No. 569,414. 2 Claims. (Cl. 189—78.)



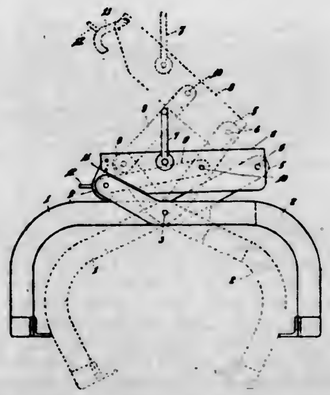
1. In a metal window, the combination of a sash, a glazing angle formed with a bend between the edge of the glass and the sash member and with a portion to overlap the glass and a spring clip engaged with the sash member and having a bent portion also interposed between the edge of the glass and the bent portion of the glazing angle, such bent portion of the spring clip forming a seat for the edge of the glass and cooperating with the glazing angle to retain both in place.

1,900,178. BRAKE. FREDERICK C. FRANK, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 13, 1930. Serial No. 488,224. 4 Claims. Cl. 188—78.)



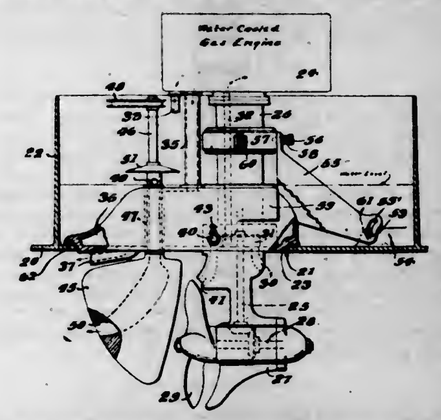
1. A brake structure comprising an annular support having a torque reaction projecting portion at one side thereof, an outboard bearing support on the projecting portion, a backing plate secured to and supported by said support and forming a subassembly therewith, and a friction element supported by the torque reaction member.

1,900,179. GRAB. JOSEPH GEIST, Kraiburg-on-the-Inn, Germany. Filed Aug. 19, 1931, Serial No. 558,085, and in Germany Dec. 3, 1930. 2 Claims. (Cl. 294—118.)



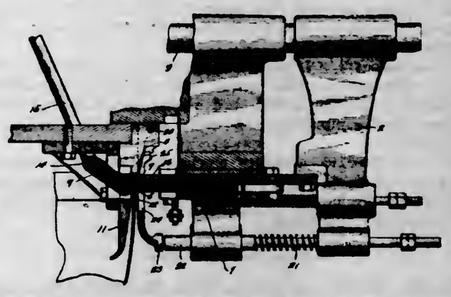
1. In a grapple of the character described, the combination of a pair of jaws pivotally connected together, each jaw having an upper arm projecting beyond the pivotal connection, the upper arm of one jaw being longer than the upper arm of the other jaw, a link pivotally connected to the free end of the longer arm, a second link pivotally mounted at one end on the free end of the shorter arm and at the opposite end to the first link at a point spaced from the pivoted end thereof approximately the length of the shorter arm, and a shackle mounted on the first link at a point beyond the pivotal connection thereof with the second link, whereby in any position of the jaws the pivotal points of the shackle and jaws will always fall along the longitudinal axis thereof and maintain the grapple in a true upright position.

1,900,180. MOTOR BOAT INSTALLATION. JAMES WILLARD HARVEY, Winthrop, Me. Filed Dec. 24, 1931. Serial No. 582,980. 20 Claims. (Cl. 115—41.)



1. A boat attachment comprising a casing to be secured in the bottom of the boat and having an opening in its bottom, a plate fitting this opening in the casing, a propeller carried by said plate, a rudder carried by said plate, means for turning said rudder for steering independently of the movement of the propeller and pivoted means for supporting said plate in the casing to permit the propeller and the rudder to be simultaneously tilted and retracted into said casing.

1,900,181. BASKET HANDLE MACHINE. LESLIE M. HILL, Benton Harbor, Mich. Filed Aug. 17, 1931. Serial No. 557,518. 18 Claims. (Cl. 140—93.)

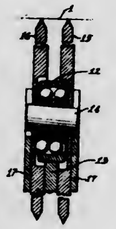


1. In a machine for inserting a wire handle in the rim of a basket, the combination of driving means for inserting the handle ends through the basket rim, clinching mechanism having clinchers for receiving the wire ends and bending and deflecting these ends back toward the upper edge of the basket and through the rim of the basket and against the driver, whereby to clinch the final ends of the wire handle against the side of the basket rim.

1,900,182. METALLIC ALLOY. DANIEL D. JACKSON, Brooklyn, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Nov. 28, 1930. Serial No. 498,755. 5 Claims. (Cl. 102—26.)

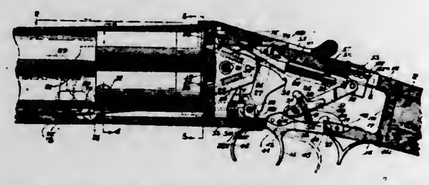
1. As an article of manufacture, lead shot which has been rendered non-poisonous to animals by the incorporation therein of phosphor tin.

1,900,183. SLITTING DEVICE. ROBERT MCC. JOHNSTONE, Short Hills, N. J., assignor to Cameron Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 14, 1932. Serial No. 605,144. 7 Claims. (Cl. 164—70.)



7. In a slitting device: backing means, two rotatable score-cut slitters, to engage the backing means, arranged side by side in spaced relation; side cheeks confining the outer sides of the slitters; a member extending intermediate the slitters; a self-alining anti-friction bearing the outer race of which is carried by the intermediate member; and a pintle, loosely supporting both slitters, secured in the inner race of the bearing and tiltable and rotatable in the side cheeks.

1,900,184. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Jan. 26, 1931. Serial No. 511,190. 19 Claims. (Cl. 42—41.)

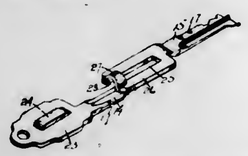


2. In a multiple chamber firearm, a pair of similar firing hammers pivoted on a common pivot shaft and a supporting bearing for said pivot shaft located between said hammers.

7. In a firearm, a frame plate, a bearing member secured in an aperture in said plate and extending inwardly therefrom, a trigger guard, and means for attaching said trigger guard comprising a threaded opening in said bearing member.

13. In a firearm, a safety mechanism having a "safe" position and a "firing" position, and means for setting said safety mechanism in firing position and preventing its movement therefrom.

1,900,185. LOCK. GEORGE A. LONG, Hartford, Conn., assignor to The Long Security Lock Company, Hartford, Conn., a Corporation of Connecticut. Original application filed Nov. 18, 1927, Serial No. 234,258. Divided and this application filed May 16, 1930. Serial No. 452,938. 2 Claims. (Cl. 70—72.)



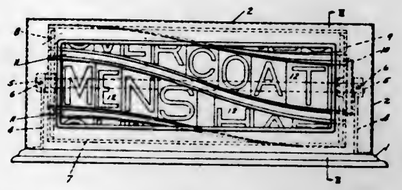
1. A lock including a key receiving controller member, locking elements therefor, a bolt and locking elements therefor, said parts being adapted to be operated by a two-part key having one part operable to release said controller member locking elements for movement of the controller to its advanced position and the other operable to release said locking bolt locking elements, said lock also including means to permit removal of one of said key parts with the controller member in its advanced position after it has been moved from its key entrance position.

1,900,186. LAWN MOWER SHARPENER. WILLIAM L. MARLING, Weimar, Calif. Filed Mar. 9, 1931. Serial No. 521,189. 1 Claim. (Cl. 76—82.1.)



In a tool holder of the kind described, a two piece assembly including a shaft rest and a file holding clip, the same being of relatively thin strip material and associated together and arranged for adjustment upon their longitudinal axes, the said shaft rest including a shaft engaging stirrup and a handle, and the said file holding clip including a handle at its outer end aligned with the handle of the shaft rest, a portion of the said clip inwardly of the handle portion thereof being raised to form a slotted cam seat, a lock cam operatively mounted within the said cam seat, and a handle extended from the lock cam out through the slot thereof, the said handle being arranged to lie flat to the file holding clip when in its locking position, whereby it may be readily held down to its locking position by the operator in the act of grasping the handle portion of the file holding clip.

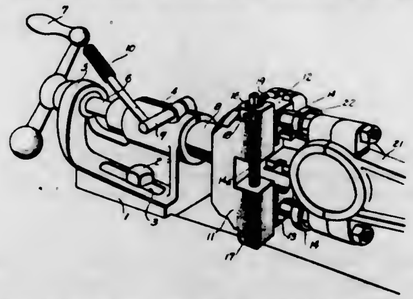
1,900,187. ADVERTISING DEVICE. GUSTAVE O. MATTER, Portland, Oreg. Filed July 10, 1931. Serial No. 549,869. 5 Claims. (Cl. 40—68.)



1. In a display device, a display drum continually rotating about its axis, a casing normally concealing said drum and provided with a view aperture whose major dimension from one end to the other parallels the axis of said drum, said drum having guides located upon its periphery, each guide being obliquely disposed with regard to an intersecting radial plane, including means for each adjacent pair of guides to hold a line of display matter therebetween, and the obliquity of the guides causing each display line to pass before the view aperture in the order that it is to be read, commencing with one end thereof and continuing to the other end.

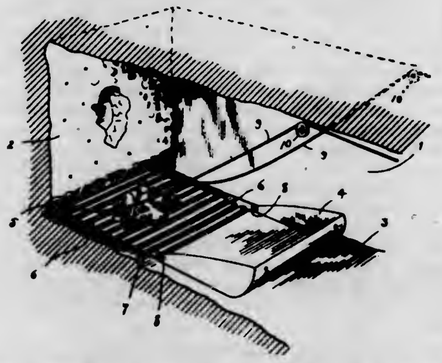
1,900,188. CHUCK. HERMAN T. MATTERN, Kansas City, Mo., assignor to Hempy-Cooper Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed Feb. 13, 1930. Serial No. 428,043. 2 Claims. (Cl. 77—62.)

1. In a chuck for holding the crank shaft end of a connecting rod during machining of the bearing, the combination including a support, a head rotatably mounted in said support, means for advancing and retracting said head along the axis of rotation, a plurality of carriers



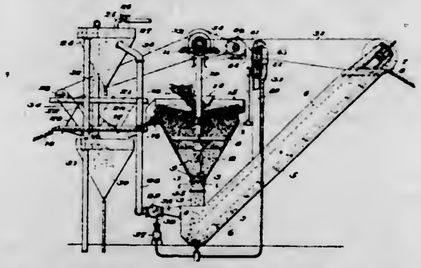
slidably mounted in said head, stops positioned in said carriers, and means to vary the distance between said stops.

1,900,189. SCRAPER. ROBERT J. MCGHEE, Virginia, Minn. Filed Aug. 28, 1931. Serial No. 559,841. 1 Claim. (Cl. 262—5.)



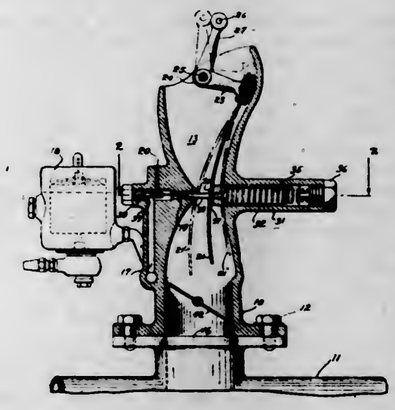
The combination with a mucking scraper, of a flexible apron for initially receiving the muck which is ultimately lodged in the scraper, means for attaching adjacent corners of the scraper and apron together, and means at the corners of the opposite end of the apron for rolling it backwardly towards the scraper.

1,900,190. METHOD OF AND APPARATUS FOR SEPARATING MATERIALS OF DIFFERENT SPECIFIC GRAVITIES. WILLIAM C. MENZIES, Scranton, Pa. Filed Aug. 22, 1931. Serial No. 558,812. 21 Claims. (Cl. 209—160.)



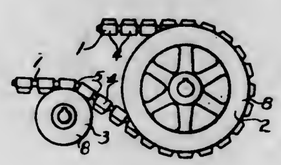
1. A method of separating materials of at least two different specific gravities from a mixture containing them which comprises feeding said mixture to a column of water, effecting such an hydraulic state of said column by movement of the water therein as to produce a hindered settling of the materials of the second lowest specific gravity in said column and a floating of the materials of the lowest specific gravity thereabove to a position of discharge, and so changing the hydraulic state of said column by reduction of the movement of the water therein as the density of the fluid mass in the column increases as to produce a sufficiently free settling to prevent the materials of said second lowest specific gravity from being discharged with the materials of the lowest specific gravity.

1,900,191. CHARGE FORMING DEVICE. FRANK C. MOCK, East Orange, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed July 28, 1930. Serial No. 471,342. 13 Claims. (Cl. 261—50.)



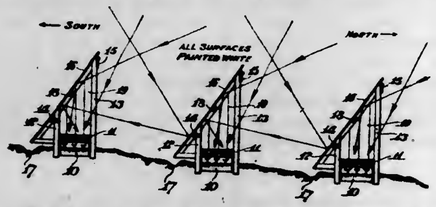
1. A carburetor comprising a casting having an air intake passage therethrough, a fuel supply within said carburetor, means for connecting said fuel supply with said air passage, a flexible member disposed within said passage and adapted to conform to one wall of the passage, the flexible member having one free end responsive to suction for automatically varying the cross-sectional area of said air passage in the plane of said connecting means, and manual means for actuating the said flexible member.

1,900,192. DUPLEX LINK BELT. FRANK L. MORSE, Ithaca, N. Y., assignor to Morse Chain Company, Ithaca, N. Y., a Corporation of New York. Filed Dec. 6, 1930. Serial No. 500,465. 8 Claims. (Cl. 74—64.)



1. In a link belt for power transmission, the combination of tension links, structural members, joints connecting the tension links and structural members, and an external metallic casing having a pair of V type driving faces converging in one direction and an inverted pair of V type driving faces converging in the other direction.

1,900,193. PROMOTING PLANT GROWTH. GEORGE G. NEARING, Chadds Ford, Pa. Filed Oct. 8, 1931. Serial No. 567,567. 9 Claims. (Cl. 47—26.)



1. Means for promoting plant growth comprising a structure arranged adjacent a plant bed adapted at all times to shield the plant bed from the direct rays of the sun and having surfaces arranged to reflect indirect rays of the sun toward the plant bed.

1,900,194. HOISTING BLOCK. MATTI NIEMI, Seattle, Wash. Filed Nov. 9, 1931. Serial No. 573,912. 10 Claims. (Cl. 294—83.)



1. In apparatus of the character described, a frame providing a chamber open at its lower end to form a throat the side walls of which are parallel, the end walls of said chamber converging downwardly toward said throat, a pair of fulcrum pins supported by said frame and located at opposite sides of a transverse vertical center line taken through said throat, a pair of lever arms fulcrumed approximately medially of their lengths on said pins, the lower ends of said lever arms providing companion jaws adapted to engage the work and the upper portions providing power arms for closing said jaws, said power arms arranged for normal engagement against said chamber end walls, a wedge member supported in said chamber for vertical movement in the space between said power arms, rollers supported by said wedge for tracking engagement with said power arms, a spring serving to depress said wedge for actuating said power arms outwardly to normally compress said jaws, a spring oppositionally arranged thereto for spreading said jaws responsive to retraction of said wedge, a bail secured to said frame for elevating the same, and a control line operatively engaging said wedge for retracting the same in opposition to said first named spring.

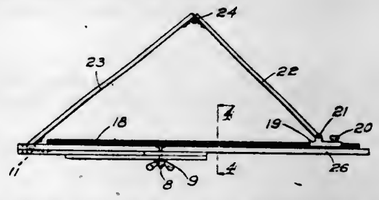
1,900,195. SCREW LOCKING ELEMENT. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed July 31, 1930. Serial No. 471,973. 1 Claim. (Cl. 173—269.)

A locking element formed from a single strip of wire stock including an outer annular section, an inner annular section, the outer periphery of the inner section being positioned adjacent the inner periphery of the outer annular section, work engaging teeth associated



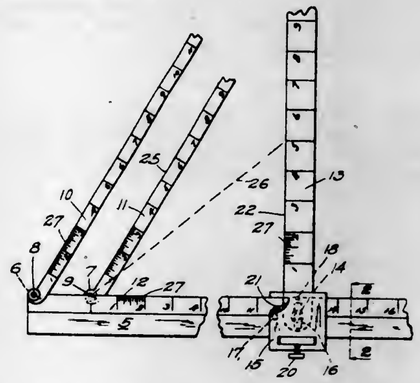
with said annular sections and projecting out of the plane thereof, and binding material interposed between the adjacent annular surface of said annular sections.

1,900,196. ROOFER'S GAUGE. WILLIAM E. PACK, Oakland, Calif. Filed July 28, 1930. Serial No. 471,229. 4 Claims. (Cl. 33—98.)



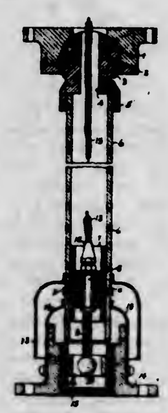
3. A gauge comprising a main straight-edge, a track extending longitudinally of and secured to the top surface thereof, a shoe slidable on said track, securing means for said shoe, a strut having one end pivoted to said shoe, a second straight-edge having one end pivoted to the other end of said strut, the other end of said second straight-edge being pivotally connected to one end of said main straight-edge and adapted to fold against the undersurface thereof, a pair of oppositely disposed arms each having one end pivotally secured to the undersurface of said main straight-edge adjacent one end and operating in a plane at right angles to said second straight-edge, and an adjustable strut for each of said arms.

1,900,197. PITCH GAUGE. WILLIAM E. PACK, Oakland, Calif. Filed Sept. 8, 1930. Serial No. 480,406. 6 Claims. (Cl. 33—97.)



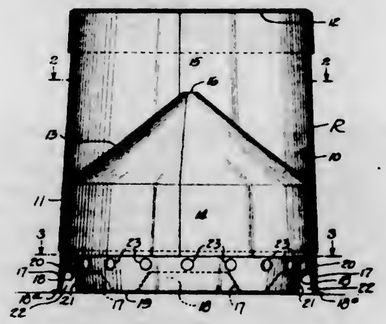
5. A pitch gauge comprising a run scale having a graduated edge, a carrier slidably mounted on said run scale, means for securing said carrier in adjusted position on said run scale, a rise scale secured at one end to said carrier perpendicular to said run scale, a hip scale pivotally mounted at one end of said run scale, a slope scale pivotally mounted intermediate said hip scale and said rise scale.

1,900,198. STANCHION SWITCH. ABRAM F. PAUL, Llanerch, Pa., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed July 29, 1931. Serial No. 553,757. 5 Claims. (Cl. 200—52.)



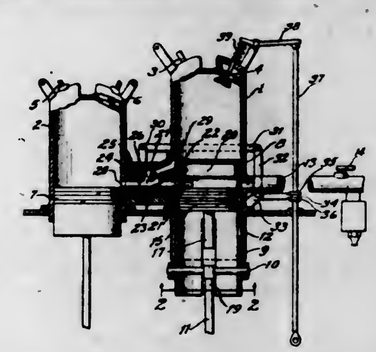
1. A combined stanchion and switch for vehicles, comprising a roof plate, a hand grasp tube, means for securing the upper end of the tube to the roof plate to permit transverse movement of the lower end of the tube in any direction, a resiliently mounted contact secured to the tube, a floor plate, a contact mounted on and insulated from the floor plate in a position to be engaged by the first contact when the tube is displaced, resilient means for normally holding the contacts out of engagement, and a protecting skirt enclosing the lower end of the tube and the upper end of the floor plate.

1,900,199. INSECT TRAP. ANGELO C. PICKETT, Riverside, Calif. Filed Nov. 10, 1930. Serial No. 494,722. 4 Claims. (Cl. 43—107.)



1. An insect trap comprising a receptacle including a frusto conical section closed at its smaller end and open at its larger end, a second frusto conical section frictionally fitting into the larger end of the first section and terminating at its smaller end in a conical portion constituting a partition for dividing the receptacle into a lower bait compartment and an upper trapping compartment, said conical portion having an aperture at its apex through which flies are free to enter the trapping compartment from the bait compartment, the larger end of the second section having feet providing spaces therebetween through which flies are free to pass, and a bait holder in the bait compartment closing the lower end of the latter and having entrance openings through which the flies are free to enter the bait compartment to feed.

1,900,200. SUPERCHARGER. GUY R. POYER, Wichita, Kans. Filed Feb. 21, 1930. Serial No. 430,265. 4 Claims. (Cl. 123—75.)



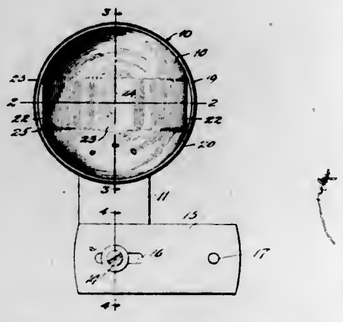
1. A four-cycle internal combustion engine comprising two cylinders, each having an inlet valve and an outlet valve at one end, pistons in the cylinders, the piston in one cylinder having an elongated skirt provided with port openings to register with port openings in the cylinder below the piston head, a stationary wall inside the piston skirt to form an auxiliary fluid chamber, means for admitting fluid into the auxiliary chamber, a valve body having a passage-way to communicate the auxiliary chamber in one cylinder with the combustion chamber of the other cylinder at the end thereof distant from the inlet valve and the outlet valve, said valve body having a branch passage-way communicating with the auxiliary chamber and with the combustion chamber of the first named cylinder at the end distant from the inlet valve and the outlet valve and a valve in the valve body for alternately establishing communication between the auxiliary chamber and the respective cylinders.

1,900,201. EYE CUP. SOLOMON M. SAGER, Evanston, Ill. Filed Jan. 10, 1930. Serial No. 419,772. 1 Claim. (Cl. 128—249.)



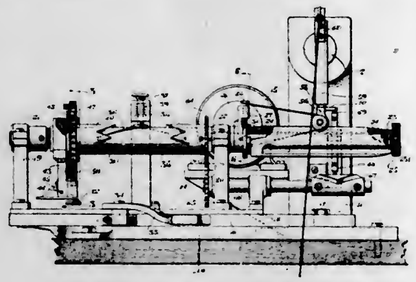
An eye treating device comprising a cup for carrying an eye treating solution, a check valve mechanism connected with the cup and opening to an upward stream of air and stopping any downward flow of the solution, and an air bulb connected with the check valve mechanism adapted to be compressed to open the check valve mechanism and cause air to pass upwardly through the solution to agitate the same.

1,900,202. REFLECTOR. ERNEST E. SCOTT, Denver, Colo., assignor to The Dangerlite Corporation of America, Denver, Colo., a Corporation of Colorado. Filed Mar. 14, 1931. Serial No. 522,611. 4 Claims. (Cl. 88—1.)



2. A reflector having a concave reflecting surface divided into three superposed zones of which the central zone is formed on an open curve in which any point lies in a vertical plane tangent to the surface of said zone at that point, the top and bottom zones merging with the central zone and constituting sectors of the frustum of a cone.

1,900,203. CHECKERING MACHINE. RICHARD J. SEILER, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Apr. 3, 1931. Serial No. 527,461. 15 Claims. (Cl. 144—138.)



1. In a machine of the character described, a fixed cutting tool support, a cutting tool carried by said support, a work supporting arbor adapted to hold a piece of work in cooperative relation to said cutting tool, work rotating and traversing means comprising a rotation controlling sleeve associated with said arbor, and work rotation and traverse limiting means comprising a pattern controlling sleeve associated with said rotation controlling sleeve.

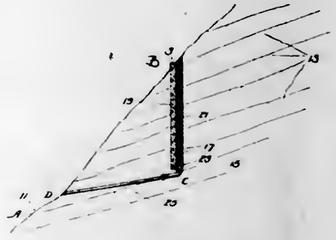
11. In a machine of the character described, a cutting tool, a work supporting arbor adapted to hold a piece of work in cooperative relation to said cutting tool, means for causing said tool to cut a pattern on said work comprising a rotation and traverse controlling sleeve associated with said arbor and comprising a guide groove, a pattern controlling sleeve surrounding said rotation controlling sleeve and comprising an aperture of a configuration corresponding to the desired pattern, movement limiting means comprising an element extending through the aperture in the pattern controlling sleeve and entering the guide groove in the rotation controlling sleeve, means normally effective to couple the rotation controlling sleeve and the pattern controlling sleeve together, and means for indexing said rotation controlling sleeve relative to said pattern controlling sleeve.

1,900,204. COUPLER FOR TOY RAILWAY CARS. JEFFERSON M. SHARP, Oil City, Pa. Filed July 10, 1931. Serial No. 549,877. 1 Claim. (Cl. 213—89.)



A coupler for toy cars which is a substantially unitary structure composed of sheet metal, structurally rigid throughout, for cooperation with a counterpart coupler upon another car, its engagement with said counterpart coupler being effected and maintained by the action of gravity, said structure comprising a head of bifurcate formation, one of the branches of which is a straight, horizontally-extending member the flat sides of which are vertically disposed and provided upon its lower edge adjacent its free end with a hook for engagement with an engageable member of such counterpart coupler, the other of said branches having its flat sides likewise vertically disposed, its rearward portion being parallel with and spaced laterally from said first branch with its forward free end portion diverging laterally from said first branch, a member extending across said spaced portion for engagement of the hook of said counterpart coupler, said bifurcate structure being formed into a rearwardly extending shank adapted for attachment to the center pin of the truck of a car.

1,900,205. EARTHWORK AND METHOD OF MAKING SAME. CLARENCE O. SHERRILL, Cincinnati, Ohio. Filed Nov. 1, 1930. Serial No. 492,681. 16 Claims. (Cl. 61—39.)



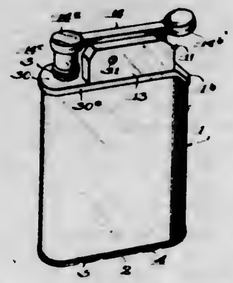
1. Earthwork construction for preventing landslides and the like comprising a trench formed in the hillside to isolate a prism of earth in front of the trench and means in the trench for preventing moisture from the upper hillside from saturating the isolated prism, said means including a wall substantially impervious to moisture for the purpose of backing up sub-surface moisture and directing same to the bottom of the trench, and means in said trench for carrying off the accumulated water therein.

1,900,206. ELECTRIC RESISTANCE. ISIDOR SILBERSTEIN, Berlin, Germany. Filed June 28, 1929, Serial No. 374,376, and in Germany June 30, 1928. 5 Claims. (Cl. 201—63.)



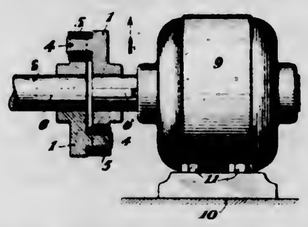
1. A resistance, comprising a rod, a metallic cap carried by said rod and in electrical connection therewith and formed with a groove, and a lead embedded in said groove and having the wall of the groove pressed into engagement therewith.

1,900,207. POCKET LIGHTER. HERBERT S. STRAUSSER, Chicago, and HENRY T. REYNOLDS, Lombard, Ill., assignors to Otis Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 27, 1929. Serial No. 410,028. 2 Claims. (Cl. 67—7.1.)



1. In a lighter, the combination of a casing having a wick standard extending beyond one end thereof, a pair of parallel webs projecting from said end of the casing, ignition mechanism mounted between said webs, a cover plate fitting over the end of said casing, and a pair of side plates secured to the outer faces of said webs and bearing at their lower edges upon said cover plate, the latter being initially bowed whereby upon the application of said side plates the same is placed under tension for the purpose described.

1,900,208. COUPLING. REHL W. SWANK, Sharpsville, Pa., assignor to Sharpsville Boiler Works Co., Sharpsville, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1930. Serial No. 489,603. 2 Claims. (Cl. 64—96.)

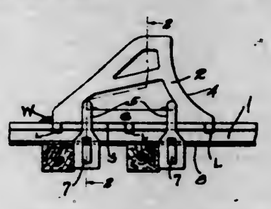


1. An article of manufacture comprising a coupling member having a head adapted to be mounted upon a shaft, said head being provided on one side with an open slot extending radially of said head relative to the axis on which said shaft is adapted to be mounted, a projection on said head and extending parallel to said shaft and diametrically opposed to said open slot, said projection and said slot being adapted to cooperate with the slot and a projection of an identical coupling member to transmit power through said projection and slot connection.

1,900,209. METHOD OF MANUFACTURING PURE PARA-HYDROXYCAMPHOR. KENZO TAMURA, Iriarai-Cho, GYOKUJO KIHARA, Suna-Machi, YASUHIKO ASAHINA, Tozuka-Cho, and MORIZO ISHIDATE, Suginami-Cho, Japan. Filed Apr. 10, 1931, Serial No. 529,288, and in Japan Apr. 25, 1930. 2 Claims. (Cl. 260—133.)

1. A method of manufacturing para-hydroxycamphor from a compound of campherol and glucuronic acid excreted in the urine of living bodies to which camphor has been given internally, characterised by the fact that the compound is transformed into a precipitate of a plumbic compound by the addition of lead acetate with ammonia, and the said precipitate is resolved with dilute acids into camphorol, which is treated with benzene in order to liberate and purify the desired substance.

1,900,210. WHEEL STOP. ARNOLD H. TOLD, Chicago, Ill. Filed July 30, 1932. Serial No. 626,885. 12 Claims. (Cl. 104—258.)



1. In a device of the class described, a body part constructed to sit on top of a rail and to engage a car wheel, and means for holding said part to the rail including a wedge structure disposed to underlie the rail.

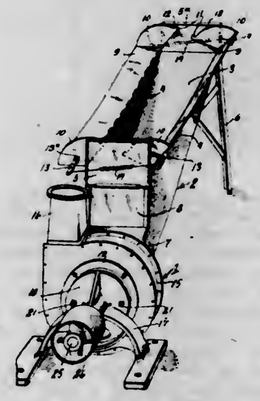
1,900,211. FIRE RESISTANT AND PRESERVATIVE COMPOSITION. JOSEPH RIGBY WATSON, San Francisco, Calif., assignor to Virginia Louise Watson, San Francisco, Calif. Filed July 18, 1928. Serial No. 293,784. 11 Claims. (Cl. 134—45.)

1. A fire resistant and preservative composition comprising a substance of the group consisting of cryolite and an alkali metal fluosilicate, an alkali metal silicate, and an oil vehicle.

1,900,212. FIRE RESISTANT AND PRESERVATIVE COMPOSITION AND PROCESS FOR MAKING SAME. JOSEPH RIGBY WATSON, San Francisco, Calif., assignor to Virginia Louise Watson, San Francisco, Calif. Filed July 18, 1928. Serial No. 293,785. 4 Claims. (Cl. 134—45.)

1. A fire resistant and preservative composition comprising the products resulting from the combination of a water soluble metal sulfate, water, an alkali metal silicate, and a substance of the group consisting of cryolite and an alkali metal fluosilicate.

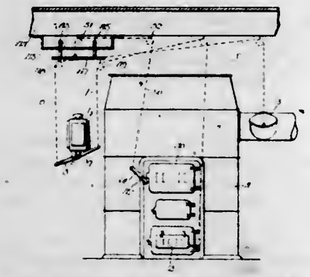
1,900,213. GRAIN HANDLING DEVICE. OSCAR A. WENBERG, Batavia, Ill., assignor to United States Wind Engine & Pump Company, Batavia, Ill., a Corporation of Illinois. Filed Aug. 2, 1930. Serial No. 472,730. 2 Claims. (Cl. 302—37.)



1. A grain handling device comprising a centrifugal blower fan, a blower casing for said fan, a discharge conduit leading from said casing, a shaft for the blower fan, a bearing bracket for said shaft having a swivel connection with one side of the fan casing, an open-top in-

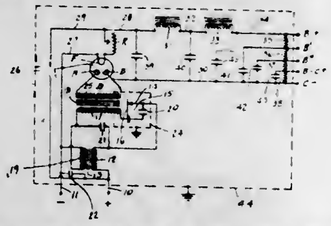
clined gravity inlet chute having a swivel connection with the other side of the fan casing, and a support secured to the chute for holding it in inclined position, whereby the bearing bracket supports one side of the fan casing and the chute supports the other side of the fan casing and whereby the fan casing is suspended by and swiveled between the supporting bracket and the supporting chute.

1,900,214. DRAFT CONTROLLER. ALBERT M. WILKINS, Chicago, Ill., assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 16, 1931. Serial No. 509,177. 4 Claims. (Cl. 236—16.)



1. An automatic control for operating the draft damper and check damper of a furnace comprising, in combination, a motor, a thermostat responsive to temperature variations for controlling the operation of the motor, a damper actuating member adapted to be operated by the motor to control the dampers, flexible connections between the damper actuating member and the dampers, a support mounted substantially above the motor and the dampers, a member mounted for reciprocal movement in said support, pulleys upon the reciprocal member over which the flexible connections extend from the dampers to the damper actuating member, and a flexible connection for holding the reciprocal member in the support adapted to raise and lower the same depending upon the position of the fire door of the furnace.

1,900,215. VOLTAGE TRANSFORMING APPARATUS FOR DIRECT CURRENT. CHESTER C. WILSON, Alexandria, Ind. Filed Apr. 25, 1930. Serial No. 447,404. 4 Claims. (Cl. 171—97.)



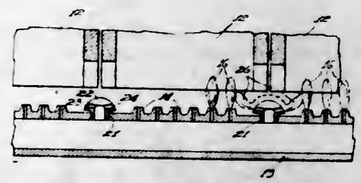
1. Transforming apparatus for producing a high voltage direct electromotive force from a relatively low voltage direct current supply including a transformer having primary and secondary windings, a source of low voltage direct current, a primary electrical circuit including said current source and said primary winding, means for repeatedly interrupting the current flow in said primary circuit for inducing an alternating electromotive force in said secondary winding, said electromotive force at the breaking of said circuit being unequal to that at the making thereof, whereby one terminal of said winding reaches a lower average potential than the other, a thermionic rectifier, a plate electrode in said rectifier connected to each of the terminals of said secondary winding, a heated filament in said rectifier for reducing the average potential of said plates by electronic flow from said filament to said plates, an electrical circuit connecting said filament to the secondary winding terminal having the lowest average potential and to its associated plate electrode, and resistance elements included in said circuit for resisting electronic flow therethrough whereby a relatively high direct electromotive force is established in said circuit.

4. Transforming apparatus including a thermionic rectifier, a pair of plate electrodes therein, a filament electrode therein adapted to be heated for electronic emission, a source of direct current for heating said filament, a resistance element interposed between said filament and the high potential terminal of said current supply source, apparatus actuable by a low voltage direct current to impress a relatively high alternating potential upon said plate electrodes, and an electrical circuit connecting one of said plate electrodes and the high potential terminal of said resistance unit.

1,900,216. COLORING MATERIAL. JOSHUA CHITWOOD WITT, Chicago, Ill. Filed Jan. 28, 1929. Serial No. 335,745. 3 Claims. (Cl. 106—24.)

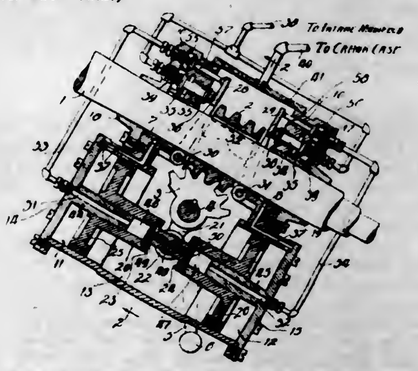
1. The method of preparing pigmented plastic material, which includes mixing a pigment with a stabilizing agent and with hydraulic cement, passing such mixture through a colloid mill, and thereby reducing such pigment, while mixed with the stabilizing agent, to colloidal fineness and adding said mixture to the plastic material.

1,900,217. GAS BURNER. EDWIN C. ADAMS, Pittsburgh, Pa. Filed Mar. 6, 1931. Serial No. 520,571. 5 Claims. (Cl. 158—104.)



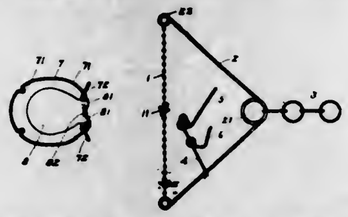
2. A gas burner comprising a gas manifold common to the whole burner having a plurality of spaced sections of main burner ports and flame-spreading ports on the surface thereof, said flame-spreading ports being provided in the space between said sections of main ports and so constructed as to carry the flame from one main port section adjacent thereto to the other.

1,900,218. STEERING DEVICE. BURTON S. AIKMAN, Milwaukee, Wis., assignor of one-half to R. P. Tell, Milwaukee, Wis. Original application filed Nov. 28, 1927, Serial No. 236 311. Divided and this application filed Oct. 11, 1928. Serial No. 311,788. 12 Claims. (Cl. 180—79.2.)



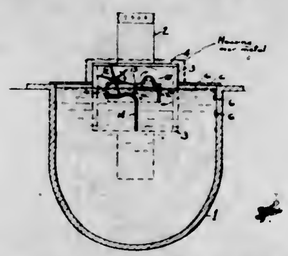
1. In a power operated steering mechanism, a worm shaft, a worm having limited axial motion thereupon, a gear sector engaged by the worm, steering means connected to the sector, a fluid pressure motor connected to said sector, a valve actuated by operation of said worm, and means for locking the steering mechanism to prevent actuation of said worm by the sector.

1,900,219. ANIMAL TRAP. VERNON BAILEY, Washington, D. C. Filed Apr. 11, 1932. Serial No. 604,395. 2 Claims. (Cl. 43—87.)



1. An animal trap consisting of a noose element and a pan element, adapted to be assembled and released and completely separated one from the other, the noose element including a noose and a noose-drawing spring, and the pan element including a rigid one-piece noose positioning frame and a pan hinged thereon, means controlled by the swinging of the pan upon the frame when the parts are assembled for holding the spring of the noose element under tension, and means borne by the frame for guiding the spring element upward when the spring is released.

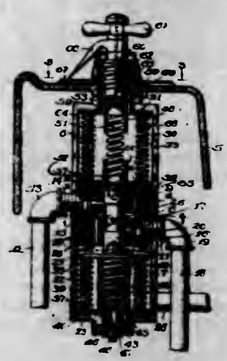
1,900,220. PRODUCTION OF LIGHT METALS, SUCH AS MAGNESIUM. EDWIN O. BARSTOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Dec. 20, 1929. Serial No. 415,456. 8 Claims. (Cl. 204—19.)



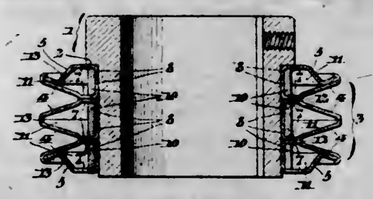
1. In a method of electrolysing a fused electrolyte for the production of a metal which will float thereon, the step which consists in elevating and transferring the floating metal so produced to a defined collecting well in the electrolyzer, wherein the so transferred metal may be retained and accumulate to a substantial depth while in contact with said electrolyte at the lower surface of the mass of metal so retained.

1,900,221. THERMOSTATICALLY CONTROLLED MIXING DEVICE. ELMER O. BEARDSLEY, Chicago, Ill., assignor to The Beardsley & Piper Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1930. Serial No. 496,639. 3 Claims. (Cl. 236—12.)

1. In a mixing device of the character described, the combination of a casing comprising a substantially cylindrical body having a bore extending longitudinally therethrough, a transverse hot fluid inlet port communicating with one end of the bore, a transverse cold fluid inlet port communicating with the other end of the bore, an annular chamber positioned between the ports and extending around and communicating with the central portion of the bore so as to receive fluid from the ports, an outlet-equipped jacket connected to one end of the casing and adapted to receive fluid from the annular chamber via a longitudinal duct in the body and between the chamber and the said one end of the body, and a second jacket connected to the other end of the body and having the interior thereof communicating with the annular chamber via a longitudinal duct in the body and between the chamber and the said other end of the body, a piston for varying the proportion of the fluids passing into the annular chamber, mounted slidably in the bore and having valve-forming ends for controlling the ports and a reduced or stem-like central portion around which the fluids pass to the annular chamber, a thermostatic element for automatically shifting the piston to maintain the mixed fluid at a predetermined temperature, disposed in the first mentioned jacket and embodying an expansible and contractible bellows connected to one end of the piston and in direct contact with the fluid in the interior of said first mentioned jacket, the means for counteracting the effect of the pressure of the fluid on the bellows consisting of a second expansible and contractible bellows disposed in the interior of the second mentioned jacket applied to the other end of the piston and surrounded by the fluid in the interior of said second mentioned jacket.



1,900,222. GROOVED PULLEY. RUSSELL H. BOWEN, Philadelphia, Pa., assignor to The American Pulley Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1930. Serial No. 494,639. 6 Claims. (Cl. 64—17.)

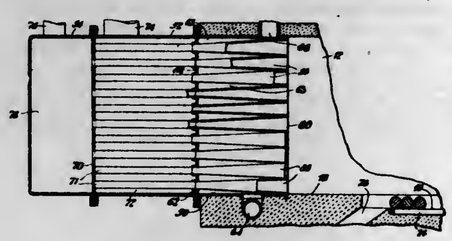


1. A multi-grooved pulley provided with air spaces between the walls of the grooves, and said walls having apertures connecting with each air space both in the region of the bottom of the groove and in the region of the perimeter of the pulley, whereby a continuous circulation of fresh air through the respective spaces is effected assisted by the centrifugal force created incident to rotation of said pulley.

1,900,223. METHOD OF FIRING REHEATING FURNACES. STEPHEN P. BURKE, Elizabeth, N. J., assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Jan. 29, 1930. Serial No. 424,280. 11 Claims. (Cl. 263—1.)

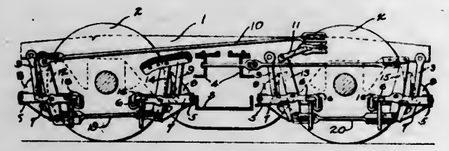
1. In a method of heating by the combustion of fuel gas, the steps comprising simultaneously discharging indi-

vidually non-turbulent streams of air and said gas, respectively, in a common direction, in contacting relation, at substantially equal velocities and in proportions for substantially complete combustion, and maintaining the



stream line flow of said streams after discharge as aforesaid, whereby combustion is substantially dependent upon the interdiffusion of the air and gas at their stream boundaries.

1,900,224. SAFETY GUARD FOR BRAKE RODS. EDWIN G. BUSSE and HERBERT W. EKHOLM, Chicago, Ill., assignors to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1931. Serial No. 522,874. 14 Claims. (Cl. 188—210.)



1. A safety guard for a railway brake bottom connection having a portion adapted to be applied to the front end of a brake beam fulcrum arm, and a portion shaped to extend beneath the connection to be safe guarded.

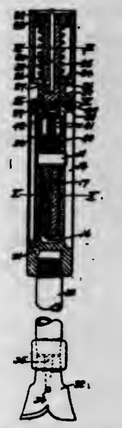
1,900,225. SPLASH GUARD HOLDER FOR VEHICLE FENDERS. WALTER R. CHESLEY, Somerville, Mass., assignor to Persons-Majestic Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 25, 1931. Serial No. 539,851. 3 Claims. (Cl. 280—152.)



3. The combination with a vehicle fender having spaced downwardly extending flanges, of a holder for supporting a guard or flaps from said fender, comprising a pair of clips each adapted to embrace a fender flange and each providing a projecting lever and a spring connected at its ends to said levers to maintain them in clamping engagement with said flanges.

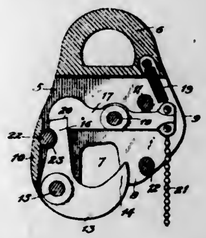
1,900,226. WELL REAMER. DAVID J. CONANT, Memphis, Tenn. Filed Jan. 2, 1932. Serial No. 584,383. 7 Claims. (Cl. 255—76.)

1. In a well reamer a tubular drill stem, a slotted head carried thereby a pair of reamer blades pivotally mounted in said slot, a cylinder chambered out in said head above said slot and in communication with said stem, a restricted bore connecting said cylinder and slot, a piston within said cylinder, a compression spring within said cylinder acting to hold said piston in raised position, a piston rod secured to said piston and extending downward therefrom,



through said bore, links pivotally secured to said piston rod and to said blades, fluid pressure means for depressing said piston, means for reducing said pressure on movement of said piston to depressed position, and means engaging said rod when fully depressed, to restrain return movement thereof.

1,900,227. LIFEBOAT HOOK. FRANK E. CRAIG, Astoria, Oreg., assignor of one-fourth to James W. Lovell, Astoria, Oreg. Filed Feb. 29, 1932. Serial No. 595,893. 3 Claims. (Cl. 294—84.)

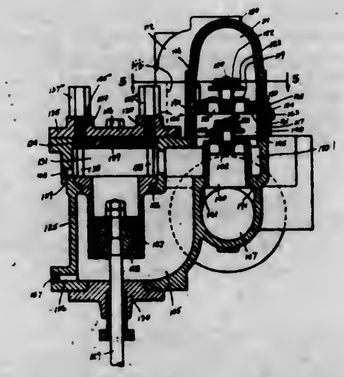


1. A lifeboat hook comprising a casing having a throat in its lower end, a load-supporting hook pivoted in said casing, said hook having a bill extending across said throat and being provided with an upwardly projecting shank at one side of said throat, latch means in the casing normally abutting said shank to prevent swinging of the hook to released position until said means is released, safety means for preventing pulling of the hook from the casing and for carrying the hook-supported load if the hook pivot should become broken or lost, and means fixedly carried by said casing to abut the hook and prevent swinging thereof to free said safety means until said latch means is released.

1,900,228. PUMP CONSTRUCTION. STUART DEAN, Indianapolis, Ind., assignor to Dean Brothers Co., Indianapolis, Ind., a Corporation. Filed Mar. 30, 1931. Serial No. 526,272. 2 Claims. (Cl. 103—203.)

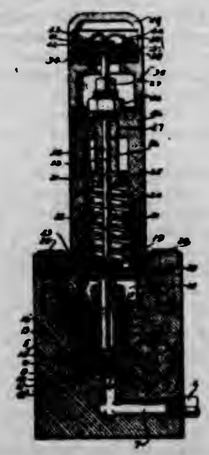
1. In a pump, the combination of an intake chamber having an intake port therein, an intake valve for the port, means detachably associated with the port for elevating the valve to the highest operative position in the chamber, a discharge deck forming the top of said chamber

and positioned above the body of the chamber, said deck including depending wall means forming a continuation of said chamber and into which the intake valve structure projects.



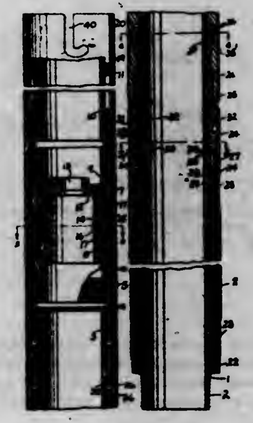
2. In a pump, an intake chamber, a discharge chamber, a discharge valve supporting partition therebetween, a passage leading downwardly from the discharge chamber, a passage leading outwardly from the intake chamber, said passages communicating with each other, one of said passages being extended for exterior exposure and the extension being threaded, and a threaded plug seatable in the extension for passage control purposes and removable for priming purposes.

1,900,229. SAFETY DEVICE FOR PRESSURE SYSTEMS. WILLIAM C. DENNIS, Milwaukee, Wis., assignor to Claybourn Process Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 27, 1929. Serial No. 366,482. 1 Claim. (Cl. 200—81.)



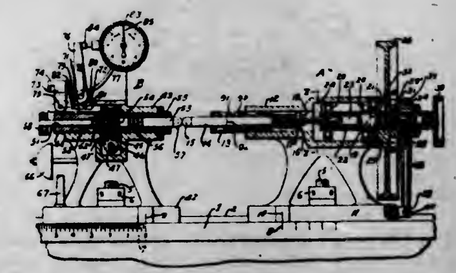
In a safety device for pressure systems, the combination with a pressure line, of a casing provided with a valve-controlled relief passage, a needle valve controlling said passage, a housing secured to said casing, a spring mounted in said housing, spring seat plugs engaged by said spring, one of said plugs engaging said valve, a tension-adjusting plug in threaded engagement with said casing and engaging said other spring seat plug, said last-named plug and tension adjusting plug having alined bores, a switch-operating rod passing through said bores and engaging said other spring seat plug, said rod also projecting beyond the casing.

1,900,230. RELEASABLE PACKER. JAMES C. DICKENS, Goose Creek, Tex., assignor of one-half to W. C. Thomas, Houston, Tex. Filed Nov. 28, 1930. Serial No. 498,537. 12 Claims. (Cl. 166—10.)



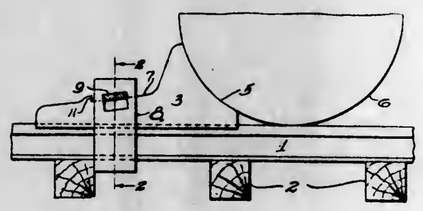
11. In a device of the character described a packing member, a mandrel on which said member is mounted, compression means connected to one end of said packing member and slidable upon the outer surface of said mandrel, and slips mounted in said compression means to grip said mandrel and retain said means in an adjusted position.

1,900,231. MEASURING DEVICE. GEORGE A. EDE, Cobden, Ill. Filed Mar. 24, 1927. Serial No. 177,876. 6 Claims. (Cl. 33—125.)



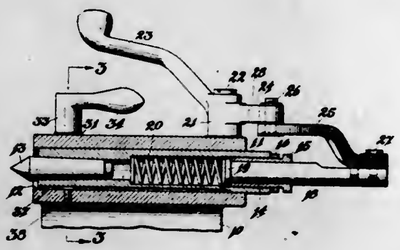
1. A measuring device comprising oppositely disposed measuring units, measuring elements associated with and supported by the respective measuring units, and means associated with one of said measuring units whereby the measuring element associated therewith may be adjusted with respect to the associated measuring unit, said means comprising means adapted to prevent rotation of said measuring element, a rotatable element including a screw-threaded portion adapted to receive a screw-threaded portion of said measuring element whereby rotation of said rotatable element will impart linear movement to said measuring element, means whereby said rotatable element may be manually rotated, and means whereby the last-mentioned means may be prevented from moving undesignedly with respect to said rotatable element, said means for preventing undesigned movement comprising a plurality of radially movable members carried by said rotatable element, and means whereby said radially movable members may be forced into firm contact with a portion of the means for rotating said rotatable element.

1,900,232. **WHEEL STOP.** HERBERT W. EKHOLM, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 1, 1932. Serial No. 631,373. 10 Claims. (Cl. 104—257.)



1. A wheel stop consisting of a wheel engaging element having a rearwardly and downwardly inclined wedge-like portion constructed to overlie the rail, and a loop member arranged to encircle the rail and said portion.

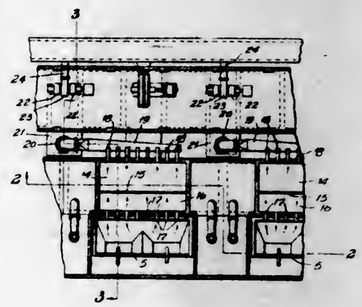
1,900,233. **TAILSTOCK FOR LATHES AND THE LIKE.** ARTHUR N. EMMONS, Syracuse, N. Y., assignor to The Porter-Cable Machine Company, Syracuse, N. Y., a Corporation of New York. Filed June 23, 1930. Serial No. 463,004. 3 Claims. (Cl. 82—31.)



1. A tail stock for lathes and the like having a horizontal bore, a work center spindle slidably mounted in said bore, said spindle being of substantially the same length as the bore and having a bore at one end for receiving a work center, a straight bore at the opposite end, and a shoulder located between the bores, a sleeve mounted in the straight bore and adjusted axially of the spindle, a plunger slidably mounted in the sleeve and having a head portion slidable in the straight bore of the spindle, a spring acting between the head of the plunger and the shoulder between the bores, a manually operable lever associated with the tail stock, and motion transmitting connections between the lever and the free end of the plunger, whereby the plunger and the spindle are moved axially of the tail stock and locked in operative position upon operation of the lever.

1,900,234. **METHOD OF COOLING SINTERED MATERIAL.** JOHN E. GREENAWALT, New York, N. Y. Filed Mar. 21, 1931. Serial No. 524,353. 7 Claims. (Cl. 266—20.)

1. The method of cooling sintered material which comprises dumping the freshly sintered material into a closed hopper, screening the finer particles therefrom and collecting the fines into a separate fines hopper, spraying



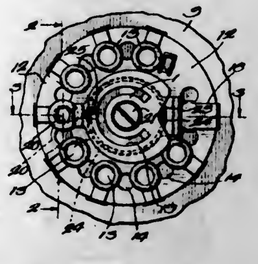
water onto the fines, causing air to traverse the closed hopper, and causing the steam generated in the fines hopper to traverse the closed hopper.

1,900,235. **MAGNESIUM CARBONATE AND MANUFACTURING PROCESS THEREOF.** HAROLD W. GREIDER, Plymouth Meeting, Pa., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Apr. 18, 1928. Serial No. 271,109. 22 Claims. (Cl. 23—67.)

17. The process of manufacturing light magnesia comprising precipitation of magnesia from raw magnesia liquor in which is dispersed a crystallization retarding agent.

18. Light magnesium carbonate precipitated from a solution containing magnesium bicarbonate and a crystallization retarding agent.

1,900,236. **ELECTRIC SWITCH.** ARTHUR HALL, Oak Park, Ill., assignor to Yaxley Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 21, 1929, Serial No. 333,815. Renewed July 27, 1932. 2 Claims. (Cl. 200—171.)



1. A movable contactor for electric switches stamped from a sheet of resilient metal to form a hub and a contact carrying switch arm whose contact is offset with respect to the hub, the latter having key lugs struck therefrom at its center to engage in recesses in a switch operating shaft.

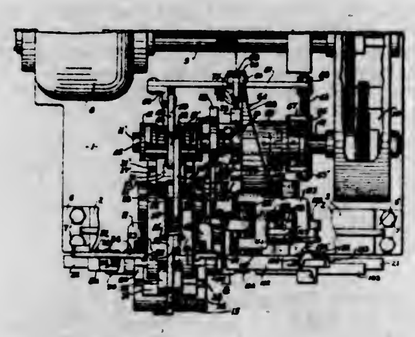
1,900,237. **DENTAL CEMENT AND PROCESS OF MAKING DENTAL CEMENT.** VERN S. HARSHMAN, Detroit, Mich. Filed July 22, 1929. Serial No. 380,268. 12 Claims. (Cl. 106—6.)

2. A dental cement comprising a powdered and a fluid constituent adapted when mixed to harden quickly into a

composition useful for a permanent tooth filling, said powdered constituent comprising a metallic oxide and said fluid constituent comprising a liquid capable of setting said metallic oxide and nitrocellulose dissolved in said liquid.

12. A dental cement comprising a powdered and a fluid constituent adapted when mixed to harden quickly into a composition useful for a permanent tooth filling, said powdered constituent comprising a preponderance of an alkaline earth oxide together with a smaller amount of zinc oxide and said fluid constituent comprising nitrocellulose, methyl salicylate, and oil of cassia.

1,900,238. **FLAT BAND TYING MACHINE.** LEO M. HARVEY, Los Angeles, Calif. Filed Feb. 4, 1931. Serial No. 513,347. 25 Claims. (Cl. 31—9.1.)



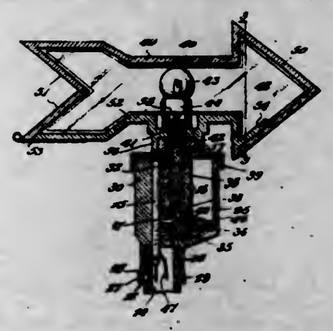
1. A flat band tying machine comprising the combination of means for forming a tie in the overlapped portions of a band, means for independently gripping said overlapped portions of the band and for supporting the same in tie forming position, and a tensioning device for gripping and holding one portion of the band during a tensioning operation and including a primary member and a secondary member differentially connected therewith, means for applying power to and for operating the primary member, means on the secondary member for gripping a portion of the band during a tensioning operation, and means for connecting said primary and said secondary members, whereby the secondary member will be operated by the primary member until the band is tensioned to a predetermined extent, and the primary member is thereafter operable to a greater extent than the secondary member, while the band is held in tension.

1,900,239. **PROCESS OF MANUFACTURING SO_3 GAS.** INGENUIN HECHENBLEIKNER, Charlotte, N. C., assignor to Chemical Construction Corporation, Charlotte, N. C., a Corporation of Delaware. Filed Jan. 27, 1932. Serial No. 589,099. 15 Claims. (Cl. 23—177.)

1. The method of treating acid sludge which consists in subjecting acid sludge to hot combustion gases whereby SO_2 gas is generated in re-circulating part of the generated SO_2 gas with the hot combustion gases.

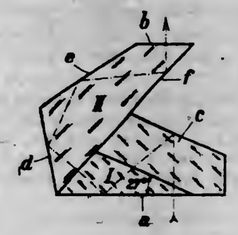
1,900,240. **DIRECTION SIGNAL.** THOMAS ASA KANE, McMinnville, Oreg. Original application filed Oct. 14, 1930, Serial No. 488,622. Patent No. 1,860,034. Divided and this application filed Feb. 29, 1932. Serial No. 595,929. 2 Claims. (Cl. 116—48.)

1. In a direction signal for motor vehicles, an indicator element comprising an open frame and a bottom plate having an outline corresponding to the outline of the frame whereby to complete a direction indicator partly formed by the frame and having a socket on its under side, longitudinal ribs on the inner surface of the frame, a tongue



carried by the bottom plate to engage between and interlock with the ribs on the frame, and means for locking said bottom plate in the open frame.

1,900,241. **REVERSING PRISM SYSTEM AFFORDING PARALLEL VISION.** ALBERT KÖNIG, Jena, Germany, assignor to Firm Carl Zeiss, Jena, Germany. Filed July 31, 1930, Serial No. 472,004, and in Germany Aug. 3, 1929. 1 Claim. (Cl. 88—1.)

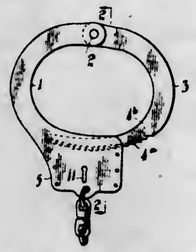


A reversing prism system comprising two prisms, each prism having four plane polished surfaces, the four polished surfaces of one of the two prisms being such that the first surface serves for ray traversion as well as for total reflexion, that the second and third surfaces, which form a roof, serve only for total reflexion, and that the fourth surface serves only for ray traversion, the four polished surfaces of the other of the two prisms being such that the first surface serves for ray traversion, that the second and third surfaces serve only for total reflexion, and that the fourth surface serves for ray traversion as well as for total reflexion, the eight polished surfaces of the said two prisms being so arranged relatively to each other that the said first surfaces of the two prisms are parallel to each other and that the totally reflecting surfaces are adapted to deflect in one and the same plane a ray entering one of the said two parallel surfaces of the prism system perpendicularly to these two surfaces, the said fourth surfaces of the two prisms being cemented together.

1,900,242. **LOCKING MECHANISM FOR HANDCUFFS.** WILLIAM L. LATOU, Toronto, Ontario, Canada, assignor of two-fifths to William Morgan Floyd, Toronto, Canada. Filed Apr. 1, 1932. Serial No. 602,514. 7 Claims. (Cl. 70—24.)

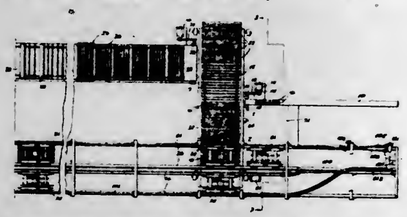
2. In a handcuff including a lock mounting arm and a lockable arm pivotally connected with each other, a set of

circumferentially arranged teeth on the lockable arm, and a lock on the lock mounting arm including a latch adapted for engagement and disengagement with the teeth on the lockable arm, said latch having a depression therein, locking mechanism comprising a cam engageable by a key and



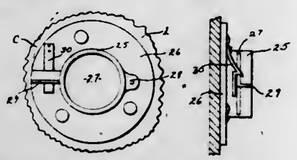
pivoted to the lock mounting arm and adapted to be turned to engage the latch to retain it in a locked or toothed engaging position or to enter the depression and permit the latch to withdraw from the tooth engaging position.

1,900,243. BRICK HACKING APPARATUS. FRANK C. LAYER, Algonquin, Ill. Filed May 20, 1931. Serial No. 538,768. 13 Claims. (Cl. 214—6.)



1. Brick hacking apparatus of the kind described, comprising a car loading station, a set of brick holding grouping frames of varying sizes and capacity, said set of frames representing the total volume of a car, and means to convey said frames to said car loading station in proper sequence.

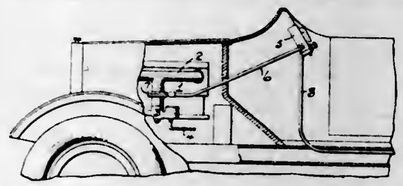
1,900,244. GRAIN DOOR. ALVA MAHANNAH, Sedgwick, Kans. Filed Feb. 26, 1931. Serial No. 518,357. 1 Claim. (Cl. 20—39.)



In a grain door valve of the class described, in combination with a removably arranged grain door for box cars, a valve carried by the door and consisting of a flange and spout integrally connected and outwardly extending and having a slot transversely positioned therein, a spring catch secured to the flange, a disc cut-off to slidably engage in the slot, the disc pivotally connected to the flange, and a lipped element integral with the disc as rocking means therefor, and adapted to engage with the catch as locking means for the closed position of the disc.

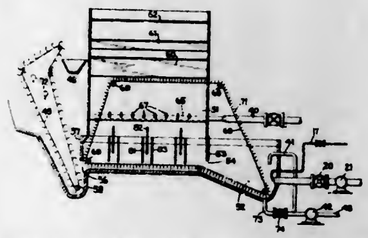
1,900,245. FUEL CONTROL APPARATUS FOR AUTOMOBILES. ASSAD M. MALLUK, New York, and FREDERICK W. ALLEN, Sea Cliff, N. Y. Filed Oct. 29, 1931. Serial No. 571,820. 15 Claims. (Cl. 123—198.)

1. Fuel controlling means for an automobile of a type including an internal combustion engine, an intake manifold and a fuel tank, comprising a control box adapted to be mounted on a dash board, a shutter adapted to be connected to the intake manifold and a locking device adapt-



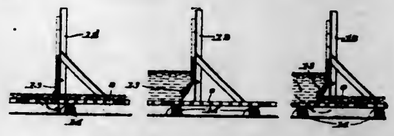
ed to be connected to the fuel tank for locking the cap thereof, and means connected to the control box for moving both the shutter and the tank cap locking means to three positions.

1,900,246. RECOVERY OF SALTS AND OTHER PRODUCTS FROM OIL FIELD BRINES. OTTO V. MARTIN, Sand Springs, Okla., assignor to The Texaco Salt Products Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1930. Serial No. 475,270. 14 Claims. (Cl. 23—43.)



1. In the herein described process of preparing salts from solutions the steps which comprise directing supersaturated solution in a finely dispersed state onto a salt growing bed over which salt crystals are thinly disposed, and slowly and continuously moving the salt crystals over the bed whereby the crystals are brought into intimate contact with the finely dispersed super-saturated solution to precipitate salt therefrom and effect growth of the crystals.

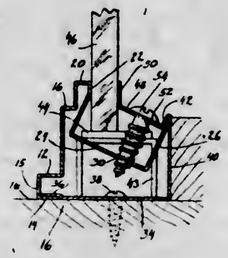
1,900,247. RECOVERY OF SALTS AND OTHER PRODUCTS FROM OIL FIELD BRINES. OTTO V. MARTIN, Tulsa, Okla., assignor to Texaco Salt Products Company, Tulsa, Okla., a Corporation of Delaware. Filed Apr. 6, 1932. Serial No. 603,515. 6 Claims. (Cl. 23—273.)



1. In the process of preparing salt of uniform particle size from solutions containing the salt, the steps comprising maintaining the solution in a flowing body from which the salt is precipitated forming a mass of coarse and fine particles, slowly and continuously moving the mass of precipitated salt countercurrently through the body of solution, successively obstructing and releasing the flow of solution over the particle mass, and thereby subjecting the mass to the intermittent sweeping action of suddenly moving bodies of liquid to sweep out the fine particles and maintain them suspended in the solution to effect further growth.

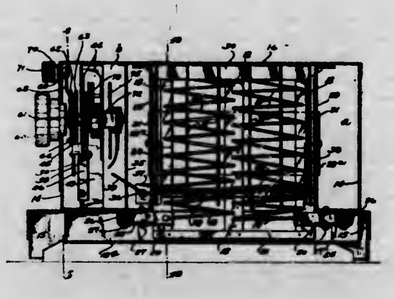
3. In apparatus for the recovery of salts from solutions a tank adapted to maintain a flowing body of solution from which particles of salt of non-uniform size are precipitated, means for slowly moving the precipitated particles over the floor of the tank countercurrently to the flowing solution, a plurality of baffles supported across the tank and interposed in the path of liquid flow adapted to intermittently obstruct said flow thereby subjecting the mass of particles to the sweeping action of sudden intermittent movements of the solution, to displace the relatively fine particles from the mass and maintain them suspended in the solution.

1,900,248. STORE FRONT SASH. ANGUS N. MCDONALD, Detroit, Mich., assignor to Detroit Show Case Company, a Corporation of Michigan. Filed Oct. 10, 1930. Serial No. 487,837. 22 Claims. (Cl. 20—56.4.)



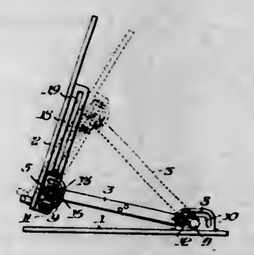
1. A glass pane supporting structure comprising, in combination; a face plate having a supporting base, a glass pane positioning surface at its upper extremity, and a channel shaped portion depending therefrom; and a set plate adapted to cooperate with said supporting base and channel shaped portion to secure the same in fixed position, said set plate including a positioning surface adapted to align in parallel spaced relation with the positioning surface of the face plate.

1,900,249. ELECTRIC TOASTER. PETER J. N. MILLER and VICTOR E. EXTROM, Minneapolis, Minn. Filed Nov. 7, 1928. Serial No. 317,702. 2 Claims. (Cl. 53—5.)



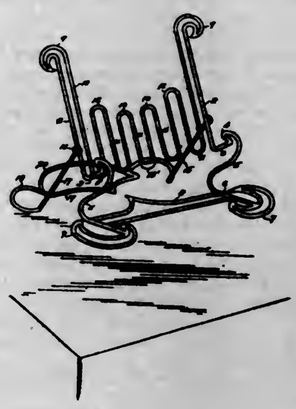
1. In an electric toaster, a casing, electric heating elements within said casing spaced to afford bread-receiving chambers therebetween, said casing including vertically extended end plates adjacent to vertical edges of said heating elements, and baffle plates secured to said end plates spaced from the bottom and top of said casing and extended adjacent the sides of said heating elements and regulating the flow of air upward through the bread-receiving chambers.

1,900,250. VERTICALLY AND HORIZONTALLY ADJUSTABLE TABLE. OSSIAN K. MITCHELL and LEONARD O. MITCHELL, Oak Park, Ill. Filed Apr. 28, 1928. Serial No. 273,513. 10 Claims. (Cl. 45—46.)



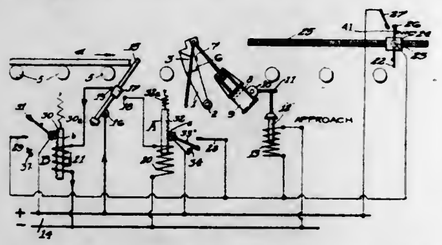
1. An angularly and vertically adjustable table, comprising a base member, a table member, supporting links extending from front to rear of the table in vertical planes spaced apart in the direction of the lateral dimension of the table, pivot mountings carried by the base member and table member to which the ends of the links are, respectively, pivoted, and stay means fixing the ends of the links against angular movement relatively to their pivot mountings; said stay means connecting the links with their pivot mountings at points removed from the pivots and moving longitudinally of the links, and having fixing means for releasably arresting said longitudinal movement and thereby resisting the angular adjustment of the links.

1,900,251. TABLE SUPPORT FOR READING MATTER. IDA L. MOORE, Long Beach, Calif. Filed June 15, 1932. Serial No. 617,385. 4 Claims. (Cl. 45—57.)



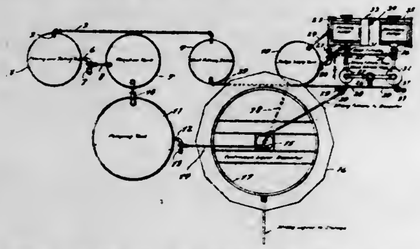
1. A device for holding printed matter, such as books, newspapers and magazines in readable position on a table or the like, comprising a frontal frame having side bars with forwardly extending bracket bends forming rests for applied reading matter, and a coplanar system of upstanding parts forming a back rest; said parts comprising wire loops spaced apart for insertion of magazines or newspapers, the side bars joining the system of loops by end loops of greater height than the intermediate system.

1,900,252. CONTROLLING THE SHEARING OF METAL BARS WHILE IN MOTION. MYLES MORGAN, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 16, 1929. Serial No. 363,453. 12 Claims. (Cl. 164—49.)



1. Apparatus for shearing material in motion, comprising a flying shear and means responsive to movement of the material to procure operations of said shear for cropping the front and rear ends of each piece of material, and severing it, intermediate said ends, into predetermined lengths.

1,900,253. PREPARATION OF CAUSTIC LIQUOR. MORRIS BLAKE MOUNT, Lynchburg, Va. Filed Nov. 11, 1930. Serial No. 494,915. 12 Claims. (Cl. 23—185.)

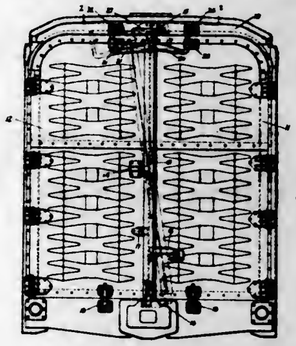


1. The process for the preparation of caustic liquor which consists in treating successive batches of liquor containing soda ash by slaking lime therein, causticizing the milk of lime mixture, delivering the successive batches of the causticized milk of lime mixture and sludge to a tank, continuously withdrawing the liquor and sludge from the tank and delivering it to a continuous decanter, and continuously decanting the clear caustic liquor.

9. The process for the preparation of caustic liquor which consists in treating successive batches of liquor containing soda ash by slaking lime therein, agitating the liquor during the slaking of the lime, causticizing the soda ash in the milk of lime-mixture formed by slaking the lime in the liquor containing the soda ash, continually agitating the milk of lime mixture during the causticization thereof, delivering the successive batches of caustic liquor and sludge to a tank, agitating the caustic liquor in the tank to maintain the sludge in suspension, continuously withdrawing the liquor and sludge from the tank and delivering it to a continuous decanter, continuously decanting the clear caustic liquor, continuously removing the sludge from the decanter, filtering the sludge removed from the decanter, returning the filtrate to the decanter, washing the sludge removed from the filter, filtering the washing water from the sludge, and mixing the washing water with the liquor containing the soda ash during the slaking of lime.

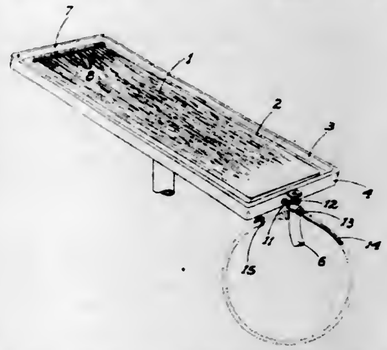
1,900,254. LATCH MECHANISM. KARL F. NYSTROM, Milwaukee, Wis., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,068. 18 Claims. (Cl. 292—218.)

1. A latch mechanism comprising a main swinging latch, auxiliary swinging latches on opposite sides of said main latch, connections between said main and auxiliary latches effecting simultaneous movement of said latches and keepers co-operable with said latches, said main latch engaging its keeper during moving of said latches to latching



position prior to the engagement of said auxiliary latches with their corresponding keepers, said main latch keeper having means adapted to impart movement to said latches substantially normally to the swinging movement thereof.

1,900,255. FLUSHING SYSTEM FOR OPERATING TABLES. ARNOLD L. ORMSBEE, Lodi, Calif. Filed June 26, 1931. Serial No. 547,052. 3 Claims. (Cl. 27—23.)



1. In combination with a mortuary operating table, a transversely extending water spray device mounted in connection with the table adjacent its upper end to discharge a spray onto the table in the direction of its lower end, a conduit connected to said device and extending to and beyond the lower end of the table for connection to a fixed source of water supply, and a control valve interposed in said conduit.

1,900,256. ELECTRICAL CONTACT AND THE MANUFACTURE THEREOF. JOSEPH ARTHUR PAYETTE, Attleboro, Mass., assignor to General Plate Company, Attleboro, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1932. Serial No. 595,265. 10 Claims. (Cl. 200—166.)



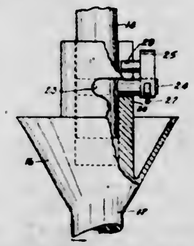
1. An electrical contact comprising a blade of relatively thin metal, said blade being turned over at one end forming a bead, and a metal contact of U-conformation, compressed around said bead.

1,900,257. METHOD OF MAKING ARTICLES OF PAPER. BENJAMIN F. PERKINS, Holyoke, Mass., assignor to American Tissue Mills, Holyoke, Mass., a Corporation of Massachusetts. Filed Oct. 1, 1931. Serial No. 566,196. 4 Claims. (Cl. 154—2.)



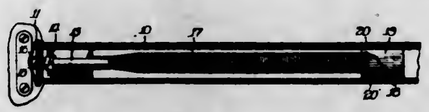
1. The method of producing handkerchiefs and the like from paper to simulate woven linen which consists in, subjecting superposed webs of crepe paper to the action of coacting pressure rolls which have the surfaces thereof provided with alternate grooves and ridges arranged to simulate woven linen and being provided with grooves so as to press the webs together outside said grooves to form a united composite web with substantial areas thereof joined together and having separated portions at spaced intervals.

1,900,258. LOCKING DEVICE FOR BAYONET SLOT CONSTRUCTIONS. SIGMUND SCHIFF, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 15, 1930. Serial No. 436,136. 8 Claims. (Cl. 287—103.)



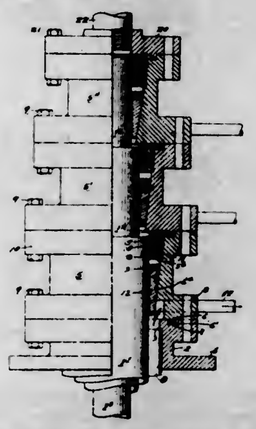
1. The combination with a drive shaft having a free end, of a laterally-projecting arm on said shaft adjacent the free end thereof, a removable connecting member adapted to receive the free end of the shaft, the receiving portion of said member being provided with a bayonet slot comprising a retaining and a release portion, said slot being adapted to receive said laterally-projecting arm, and a lug mounted for limited pivotal movement upon the end of said arm and having a stud thereon projecting into the bayonet slot upon insertion of the arm into said slot, said lug being adapted to assume a position substantially parallel with the retaining portion of the bayonet slot whereby said stud, upon movement of the arm toward the release portion of the slot, contacts the wall of said release portion, preventing movement of the arm into alignment with the release portion of the slot.

1,900,259. CURTAIN ROLLER CONSTRUCTION. HARRY D. SEVISON, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1932. Serial No. 632,568. 4 Claims. (Cl. 156—36.)



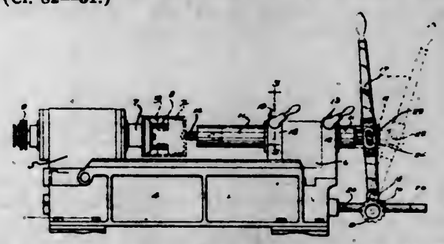
4. In curtain roller construction, a hollow sheet metal roller of generally circular cross section having an inwardly projecting seam formation on the inside thereof, a spindle journaled in one end of the roller, a spring connected at one of its ends to the spindle, and a sheet metal stamping connected to the other end of the spring, said stamping being provided with a plurality of longitudinally extending parallel supporting edges which are spaced apart far enough to engage against the inside of the roller and center the stamping within the same, and one of said supporting edges on the stamping being held in lateral abutment with the seam formation by the torsion of the spring.

1,900,260. MULTICAP CASING HEAD. WILLIAM D. SHAFFER, Brea, Calif. Filed June 6, 1930. Serial No. 459,436. 1 Claim. (Cl. 166—14.)



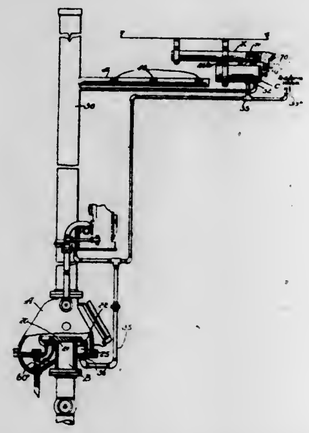
In a concentric casing head apparatus, a plurality of separable, connected, superimposed cap units, each with an internal conical bore in their lower ends and grip slips therein to hang a respective casing, each cap bore adapted to permit passing of coupling collars of relative casing, and each having a packer assembly disposed above the slips in the caps and including an adjustable follower ring threaded from end to end and wholly screwed in its respective cap below the top plane of respective caps, the bottom of each superposed cap wholly overhanging the packer assembly in and being substantially coplanar throughout and flush with the next lower cap; each packer being readily accessible from the top bore of its cap in the absence of higher caps in the apparatus.

1,900,261. LATHE DEAD CENTER ACTUATING DEVICE. ADOLPH STORM and THOR THORSEN, Minneapolis, Minn., assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 18, 1931. Serial No. 516,649. 2 Claims. (Cl. 82—31.)



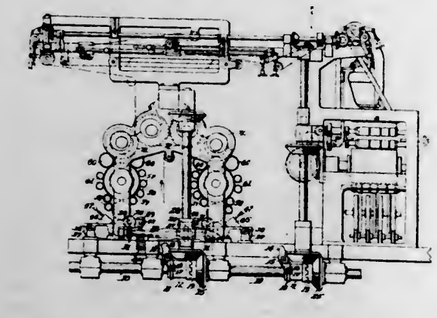
1. In a machine of the class described, a sleeve-like bearing, a round bar mounted in the bearing with freedom for axial sliding movement and for turning movement about its longitudinal axis, frictional clamping means for rigidly securing the bar to the bearing, a round rod rigidly secured to a relatively fixed support and extending parallel to the bar, a sliding collar mounted on the rod with freedom to turn about its axis, frictional clamping means for rigidly securing the collar to the rod, a hand-lever, one end of which is fulcrumed to the collar, and a slip connection between the lever and outer end of the bar.

1,900,262. PRESSURE VENTING DEVICE FOR DRY PIPE SPRINKLER SYSTEMS. EMIL TYDEN, Hastings, Mich. Filed Nov. 6, 1930. Serial No. 493,709. 4 Claims. (Cl. 169—17.)



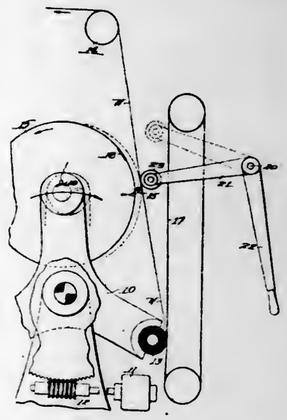
1. In combination with a dry pipe sprinkler system having a vent passage for the air pressure of the system, said passage being extended for discharge separately from the water discharge heads of the system, and a valve controlling said vent passage, and a temperature-responsive device independent of the water discharge heads of the sprinkler system arranged to operate the vent valve for opening upon predetermined temperature conditions in the apartment protected, said temperature-responsive device being arranged for so operating in advance of the operation of the discharge heads, means for preventing discharge of water following the air from the vent passage consisting of a chamber in the vent passage beyond the vent controlling valve, arranged to collect water passing said valve when open for venting the air pressure; a float in said chamber, and connections between the valve and float by which the float operates when buoyed by the water accumulated in the chamber to reseat the valve.

1,900,263. INKING MECHANISM FOR PRINTING PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 28, 1927, Serial No. 187,375. Renewed Feb. 8, 1932. 18 Claims. (Cl. 101—351.)



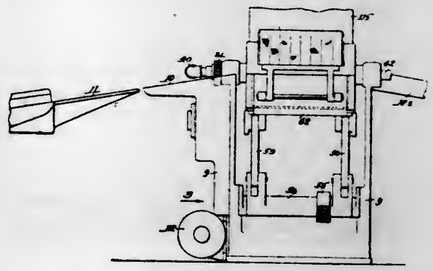
1. In a drive for a printing press inking mechanism, the combination with a main driving shaft, of a press drive shaft, a clutch for positively connecting the drive shaft with the main shaft at will, a gear on the press drive shaft, a shaft adapted to be operated by said gear constantly, and an ink fountain roll connected with the last-named shaft to be operated thereby constantly while the press drive shaft is operating.

1,900,264. WEB SPLICING APPARATUS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 27, 1927, Serial No. 215,933. Renewed May 9, 1932. 2 Claims. (Cl. 242—58.)



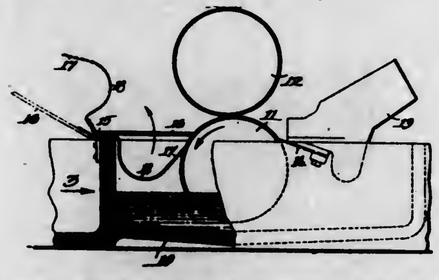
1. In a web splicing device, the combination with means for supporting a fresh web roll and the expiring web roll and means for guiding the running web from the expiring roll in a path adjacent to the fresh roll, of a soft roll beyond the web movable into and out of position for engaging the web on the side opposite the fresh web roll, while the web is running from the expiring roll, and means for moving the fresh roll into contact with the web in that position to make the paster.

1,900,265. MACHINE FOR CASTING STEREOTYPE PRINTING PLATES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 27, 1929, Serial No. 388,843. Renewed July 29, 1932. 58 Claims. (Cl. 22—2.)



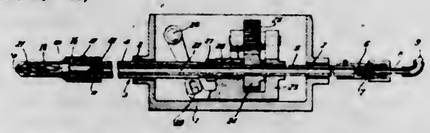
1. In a stereotype plate casting machine, the combination with a cylinder and back, of a shaft, cranks rotatable on said shaft for moving the back toward and from the cylinder, and a projection extending from the back and having a cam slot surrounding said shaft, said shaft having a finished surface thereon entering said slot and constituting a guide for fixing the direction of movement of the back.

1,900,266. FOUNTAIN ROLL CLEANER. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 16, 1931. Serial No. 516,015. 5 Claims. (Cl. 101—364.)



1. The combination with an ink fountain and its roll, of a scraper on the return side of the roll comprising a series of fingers spaced apart for engaging the roll and removing foreign matter therefrom.

1,900,267. FISH AUGER. BURT C. YOUMAN, San Francisco, Calif., assignor to California Packing Corporation, San Francisco, Calif., a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,480. 3 Claims. (Cl. 17—3.)



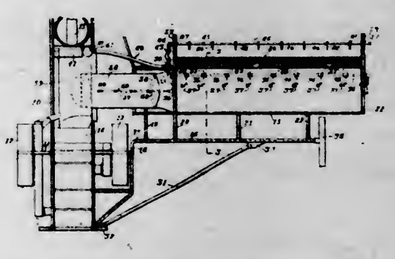
1. A fish auger for cleaning fish comprising in combination, a spindle adapted to be reciprocated longitudinally to enter the fish's body lengthwise and withdraw from the same, a rotary head carried at the end of the spindle, in the form of a screw having a helix with an inclined forward face and an abrupt rear face for engaging the viscera of the fish as the head rotates, and a relatively fixed cap-member having a plurality of bars extending longitudinally alongside of the rotary-head and cooperating with the same to entangle the viscera of the fish.

1,900,268. VALVE MECHANISM. PAUL F. YUNGLING, Los Angeles, Calif., assignor to Scott-Ross and Company, Los Angeles, Calif., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,025. 8 Claims. (Cl. 121—164.)



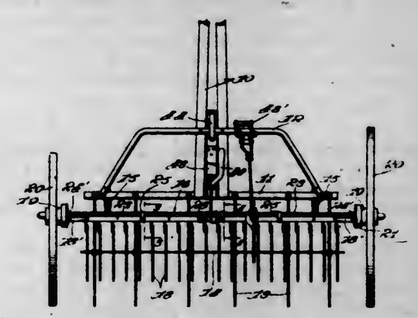
1. A valve mechanism comprising a body provided with ports, valves to control the ports and provided with stems, cams pivotally mounted in the body, one of the cams operably connected with two of the valve stems and the other cam operably connected with two other of the valve stems, a slide shiftably mounted in the body and operably connected with the cams to rock said cams, and a rod slidably mounted in the body and connected with the slide.

1,900,269. HARVESTER. HERMAN E. ALTGELT and RUDOLPH J. ALTGELT, South Bend, Ind., assignors to Oliver Farm Equipment Company, a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,219. 16 Claims. (Cl. 56—20.)



1. The combination with a harvester, of grain severing means located on one side of said harvester, a conveying trough located rearwardly of said severing means, and pneumatic means located in said trough for conveying the grain laterally in said trough to the harvester proper.

1,900,270. DUMP RAKE. HERMAN E. ALTGELT, South Bend, Ind., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed May 9, 1932. Serial No. 610,025. 5 Claims. (Cl. 56—392.)

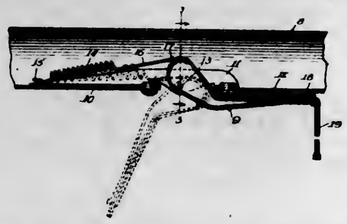


1. A self dump rake comprising a relatively stationary frame, a dump frame pivoted to said stationary frame, wheels for supporting said rake frame, clutch rods carried by said dump frame, and means connected to the inner ends of said clutch rods to move them eccentrically with respect to their outer ends for operatively connecting the wheels with said dump frame for actuating the same.

1,900,271. SUCTION CLEANER. HARRY R. BALLOU, Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Feb. 28, 1929. Serial No. 343,502. 12 Claims. (Cl. 15—257.)

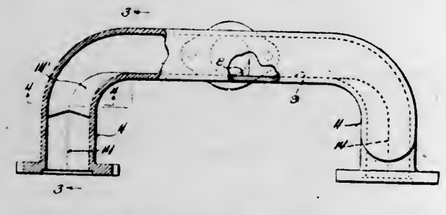
11. The combination of a hand propelled tool, a handle pivotally mounted on said tool, a container attached to said tool at a point removed from the pivotal axis of said handle and extending along said handle, and yielding means connecting the upper portion of said container

and said handle comprising a spring mounted on said handle, a member connected to said container and operatively connected to said spring, and means for varying



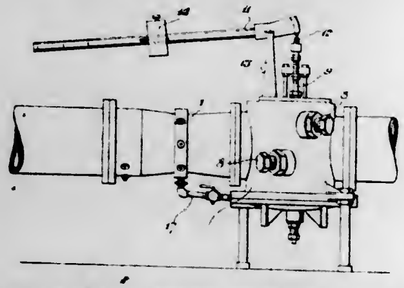
the application of the force of said spring to said member to maintain substantially the same tension on said container in various positions of said handle.

1,900,272. INTAKE MANIFOLD. WALTER J. BLIFFERT, Milwaukee, Wis. Filed Jan. 24, 1931. Serial No. 510,879. 2 Claims. (Cl. 123—52.)



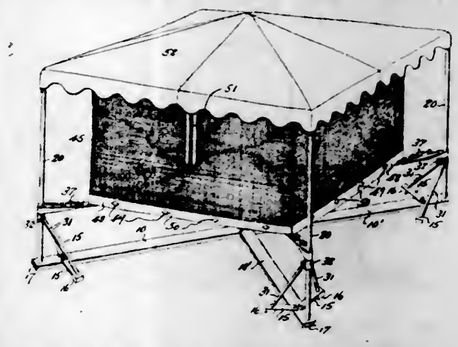
1. An intake manifold for an internal combustion engine comprising an elongated body portion having a pair of main branches extending in opposite directions from its center and having an inlet portion located at its center, a pair of short branches extending laterally from said main outlet portions towards the motor side of said manifold, said main branches each having a bottom wall and a top wall sloping downwardly towards the motor side, said main branches each having substantially vertical side walls.

1,900,273. FLOW CONTROLLER. MORO M. BORDEN, Collingswood, N. J., assignor to Simplex Valve & Meter Company, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 28, 1927. Serial No. 229,423. 7 Claims. (Cl. 137—78.)



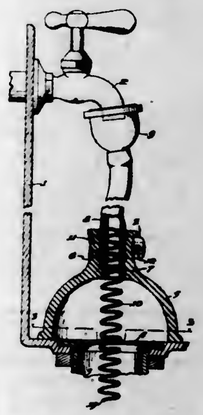
1. A rate of flow controller comprising a casing having therein a partition containing ports, valve mechanism operable by variations in the rate of flow for opening a port aforesaid as flow decreases and closing such port as flow increases, and thereby maintaining a substantially constant rate of flow and manually operable means projecting through said casing for controlling a port aforesaid uncontrolled by said valve.

1,900,274. COLLAPSIBLE PLAY PEN AND SUN BATH. HAROLD I. BROCKIE, Chatham, N. J. Filed Aug. 17, 1932. Serial No. 629,102. 18 Claims. (Cl. 135—5.)



15. A child's play pen, comprising a collapsible frame work, a pen body of flexible foldable material, and means to connect said pen body to and within said frame-work so as to be supported thereby in suspension therefrom.

1,900,275. DEVICE FOR CLEANING WASTE AND DRAIN PIPES. DANIEL G. CARTER and GUY G. CARTER, Highland Park, Mich. Filed June 10, 1930, Serial No. 460,237. Renewed July 27, 1932. 2 Claims. (Cl. 285—44.)

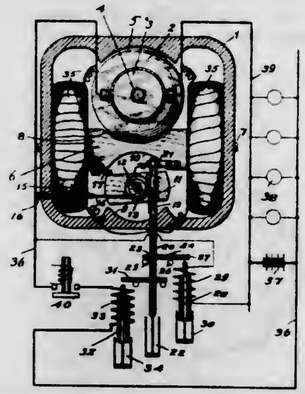


1. A drain pipe cleaner, comprising a dome-shaped member of flexible material having an opening in its top substantially concentric therewith, a hose having one of its ends connected to said opening, and a helix having its upper end secured against rotation in said opening and its lower end projecting beyond the lower end of said dome-shaped member for engagement with the drain screen of a sink, said helix being operative, when said dome-shaped cap is axially rotated to compress the open end of said dome-shaped member against the sink around the drain screen.

1,900,276. PROCESS FOR THE PREPARATION OF ETHYLIDENE CHLORIDE. GERALD H. COLEMAN, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 27, 1928. Serial No. 295,858. 9 Claims. (Cl. 260—166.)

1. In a process of making ethylidene chloride, the step which consists in reacting between vinyl chloride and hydrochloric acid in the presence of anhydrous aluminum chloride as catalyst.

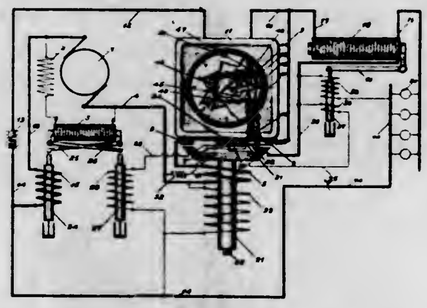
1,900,277. ELECTRIC REGULATION. JOHN L. CREVELING, White Plains, N. Y., assignor, by mesne assignments, to Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 7, 1917. Serial No. 153,133. 44 Claims. (Cl. 171—313.)



1. In a dynamo electric machine, regulating means comprehending a movable magnetic shunt combined with clutch mechanism for moving said shunt and responsive means for affecting said clutch mechanism.

28. In an electric system, in combination, a variably driven generator, a battery adapted to be charged thereby, a regulator to control the generator output, and means effective when said regulator is relatively ineffective to assist in the operation of said regulator in accordance with the charging capacity of said battery.

1,900,278. ELECTRIC SYSTEM. JOHN L. CREVELING, Tucson, Ariz., assignor, by mesne assignments, to The Simplex Equipment Company, Inc., New York, N. Y., a Corporation of Delaware. Filed May 24, 1920. Serial No. 383,750. 95 Claims. (Cl. 171—313.)



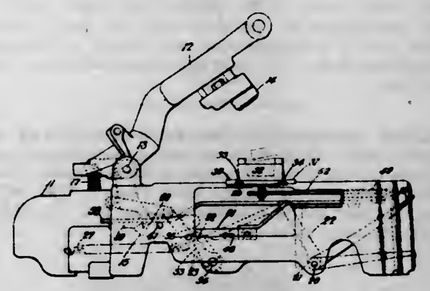
1. The combination with a source of electrical potential difference, a storage battery circuit and a translating circuit, of an automatic switch for connecting and disconnecting the source therewith comprehending means whereby said switch connects the source with the battery circuit under certain conditions and with the translating circuit under other conditions comprising means for determining which connection shall be made operated by current supplied to the battery.

23. The combination with a variable speed generator, a storage battery charged thereby, automatic means for stopping the charging thereof, current responsive means limiting the output of the generator, voltage responsive means controlling the generator to limit the voltage supplied thereby, and means for altering the operative relation of said voltage responsive means, operated by current supplied to the battery.

40. In a car lighting system, in combination, an axle-driven generator, a battery adapted to be charged thereby, a regulator to control the generator output, and means effective only when said regulator is relatively ineffective to govern the action of said regulator in accordance with the charging capacity of said battery.

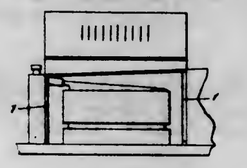
67. The combination with a variable speed generator, a storage battery charged thereby, current responsive means controlling the output of the generator, voltage responsive means for independently controlling the generator to limit the voltage supplied thereby, and means acting upon the voltage responsive means for altering the adjustment and shifting the point of operative connection of said voltage responsive means affected by the state of charge of the battery.

1,900,279. ADDRESSING MACHINE AND OTHER SIMILAR PRINTING MACHINES. ALONZO ELEY, Hendon, England, assignor to Addressograph Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 28, 1929, Serial No. 401,635, and in Great Britain Feb. 18, 1929. 12 Claims. (Cl. 101—65.)



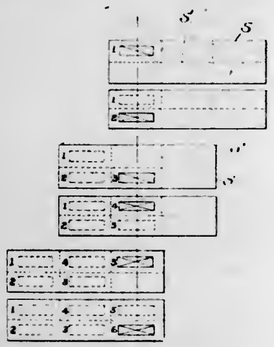
1. In a printing machine of the kind set forth, a reciprocable ink container, means for supplying ink from said container to a printing device, and means associated with said container for discharging a previously printed article from the printing position.

1,900,280. PAD OR PACKING WITH FASTENING MEANS. GEORGE WALKER GILMER, Tacony, Pa. Original application filed May 15, 1926, Serial No. 109,281. Divided and this application filed Nov. 8, 1930. Serial No. 494,435. 1 Claim. (Cl. 180—69.)



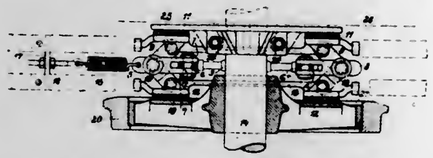
In an automobile engine hood support, a cowl or radiator member having a hood supporting ledge provided with a deflected portion, a metal reinforced buffer strip extending along said ledge and fastened at its ends to the ledge, and means intermediate the length of the strip between the fastened ends thereof for drawing the strip into the deflected portion of the ledge and securing the same thereto.

1,900,281. ADDRESSING MACHINE. WALTER T. GOLLWITZER, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 9, 1929. Serial No. 391,141. 18 Claims. (Cl. 101—47.)



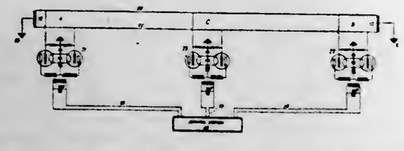
1. In an addressing machine the combination of a printing mechanism embodying changeable printing devices, means for moving a sheet step by step through said printing mechanism to print impressions in a row on said sheet from a printing device, and means for shifting the sheet transversely of the printing mechanism to print other impressions on the sheet from the same printing device and in transverse rows and means for changing the printing device after said impressions have been made therefrom.

1,900,282. MECHANICAL BRAKE FOR RAILWAY MOTOR CARS. PAUL HALBACH, Remscheid, Germany, assignor to the Firm Bergische Stahl-Industrie, Dusseldorf-Oberkassel, Germany. Filed June 9, 1926, Serial No. 114,751, and in Germany Feb. 4, 1926. 17 Claims. (Cl. 188—71.)



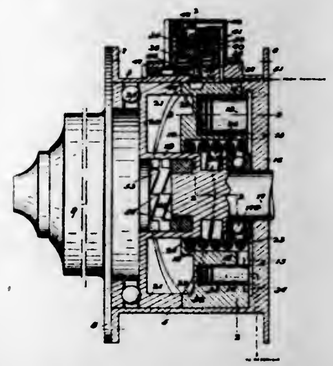
1. In a railway-vehicle, a rotating axle, a wheel at the end of the axle, a brake disk having a braking surface arranged normal to said axle, a disk fixed on the wheel, braking surfaces on the wheel disk and on the other disk spaced apart and opposite to one another, said other brake disk being mounted on the said axle, so that the distance of the braking surfaces from one another is smaller than the diameter of said wheel, and a brake shoe device within the space between the said surfaces, said device comprising brake shoes each movable in a direction parallel to the said axle.

1,900,283. SELECTIVE RADIO RECEPTION. JOHN HAYS HAMMOND, Jr., Gloucester, Mass. Filed Nov. 9, 1929. Serial No. 405,874. 14 Claims. (Cl. 250—20.)



1. The method of radio reception which includes producing a spacial distribution of the energy representative of a radio signal within a closed path, and combining the energy thus distributed along points of the path where the signal is in the proper phase when of the desired frequency, and not in phase when of an undesired frequency.

1,900,284. AIR COMPRESSOR. NICOLAS HERZMARK, Paris, France. Filed July 28, 1930, Serial No. 471,336, and in France Aug. 6, 1929. 20 Claims. (Cl. 230—174.)



1. An air compressor comprising a casing, a plurality of pistons secured to said casing, a cylinder block reciprocable within said casing and having a plurality of cylinders within which said pistons extend, a rotatable cam within said casing, a cam having a contour similar to that of said rotatable cam and formed integrally with said cylinder block, and resilient means tending to maintain said last named cam in contact with the rotatable cam whereby the rotary motion of the latter is converted into rectilinear reciprocating movement of the cylinder block.

1,900,285. SPHYGMOMANOMETER. WARD I. HUSER, Cleveland, Ohio, assignor to W. I. Huber, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed July 9, 1927. Serial No. 204,469. 5 Claims. (Cl. 73—44.)



2. A sphygmomanometer, comprising a transparent tube having measuring indicia lengthwise thereof, a collapsible device at the bottom of said tube including integral portions of sufficient stiffness to apply a constricting pressure to an artery, and integral portions of less stiffness than said first portions to transfer the pulsations of the artery while it is being constricted, and a fluid within said tube exposed to said device and adapted to be displaced by the movements of both portions thereof.

1,900,286. SPHYGMOMANOMETER. WARD I. HUBER and LOWELL B. CLOSE, Cleveland, Ohio, assignors to W. I. Huber, Inc., Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 12, 1929. Serial No. 413,567. 8 Claims. (Cl. 73—44.)

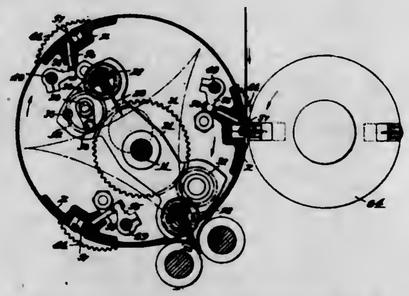


1. A sphygmomanometer, comprising a transparent tube having a mercury container connected therewith, the bottom of said container being yieldable to effect displacement and uplift of the mercury and the border edge of said container being yieldably resistant to thrust to effect compression of an artery in a circumscribed area, and a flexible air bag suspended above the top of the tube and sealing the same against the open atmosphere.

1,900,287. PROCESS OF PRODUCING ALUMINA AND PHOSPHORUS OR PHOSPHORIC ACID. ERLING JOHNSON, Odda, Norway, assignor to the Firm Odda Smelteverk A/S, Odda, Norway. Filed Apr. 28, 1930, Serial No. 448,182, and in Norway Mar. 13, 1927. 10 Claims. (Cl. 23—142.)

1. A process of producing alumina and phosphorus, comprising smelting phosphate material and bauxite under reducing conditions in presence of materials containing iron and sulphur, in order to volatilise phosphorus and to form a slag containing aluminium compounds and sulphides, treating said slag with a leaching liquor and precipitating alumina from the solution so obtained.

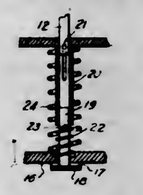
1,900,288. FOLDING CYLINDER. HANS C. JOHNSON, North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 21, 1930, Serial No. 476,763. Renewed July 29, 1932. 18 Claims. (Cl. 270—50.)



8. In a folding cylinder, the combination with a cylinder proper and studs on which the cylinder is mounted to rotate, means for rotating the cylinder, a folding blade arm shaft carried on stationary eccentric bearings inside the cylinder, two gears connecting the cylinder with the folding blade arm shaft for rotating said shaft as the cylinder rotates in a predetermined ratio, folding blade shafts carried by the folding blade arm shaft, a stationary gear concentric with the folding blade arm shaft, a gear on each folding blade shaft adapted to be driven by the stationary gear as the folding blade arm shaft rotates, and means for frictionally transmitting rotation from the stationary gear to said shafts frictionally, whereby the folding blades may stop rotating by overcoming the frictional resistance for the purpose of preventing damage in case of a jam,

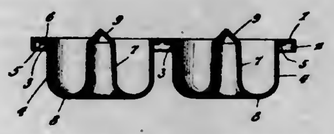
11. In a folding cylinder, the combination with the cylinder proper, of a plurality of pins each having a separate motion carried within the cylinder, individual closed-path cams inside the cylinder for operating the pin motions, and a change speed connection located within the cylinder for operating all of the cams.

1,900,289. LOST MOTION MECHANICAL LINKAGE. JOSEPH E. KELLY and JOHN A. ARABIM, Scranton, Pa. Filed Apr. 30, 1930. Serial No. 448,574. 1 Claim. (Cl. 267—1.)



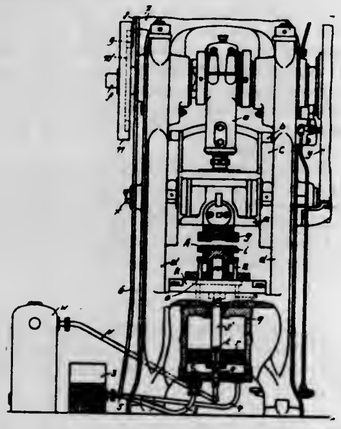
A device of the class described comprising upper and lower members, a rod passing through the lower member, a pin passing through an intermediate part of the rod, a spring encircling the rod and having one end bearing against the pin and its other end against the lower member, a sleeve having its lower end receiving the upper end of the rod with the spring holding the pin against the lower end of the sleeve, a second rod passing through the upper member with its lower end fitting in the upper end of the sleeve, a pin and slot connection between the second rod and the upper end of the sleeve and a second spring encircling the sleeve and the first rod having its lower end resting against the lower member and its upper end engaging the pin of the pin and slot connection whereby after the second rod has been moved to a certain extent the pin therein will engage the lower end of the slot in the sleeve to cause downward movement of the sleeve and this movement of the sleeve will move the first rod downwardly by the engagement of the lower end of the sleeve with the pin in the first rod.

1,900,290. DOUGHNUT PAN. HAROLD KUDO, Dubuque, Iowa. Filed Sept. 5, 1931. Serial No. 561,477. 3 Claims. (Cl. 53—6.)



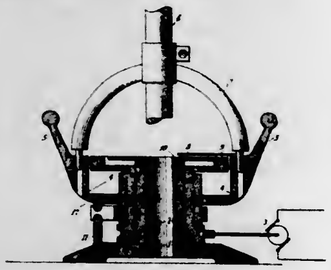
1. In a doughnut baking pan, a supporting plate, and a cup secured to and depending from the plate and having annular side walls, a bottom wall, and a column rising from the bottom centrally thereof, the bottom being arcuate transversely and merging into lower portions of the side walls and column, said column having a hollow upper end the walls of which are sharply upwardly inclined with the apex of the column projecting slightly above the plane of the supporting plate.

1,900,291. SHEET METAL DRAWING PRESS. OTTO KÜHNER, Goppingen, Germany. Filed Sept. 23, 1931, Serial No. 564,635, and in Germany Oct. 1, 1930. 5 Claims. (Cl. 267—1.)



1. In a sheet-metal drawing press, a cushioning device for the blank holder, comprising a piston and a cylinder closed at both ends and enclosing said piston, said piston and cylinder being one fixed and the other movable and means connecting the movable one of these members operatively with said blank holder; a source of fluid under pressure, a duct connecting one of the spaces in said cylinder with said source of a fluid under pressure; a receptacle containing a liquid; a duct connecting said liquid receptacle and the other space of the said cylinder; and a controlled valve in said liquid duct.

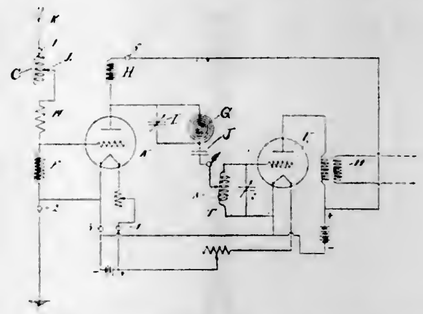
1,900,292. DIRECTION FINDER APPARATUS. AUGUST LEIB, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 20, 1929, Serial No. 356,652, and in Germany May 5, 1928. 4 Claims. (Cl. 250—111.)



1. Directional finding apparatus for marine and aircraft including, a radio compass, a magnetic compass, and means actuated by said magnetic compass for automatically imparting to said radio compass movements equal to the movements of said magnetic compass.

1,900,293. MEANS FOR INCREASING THE SELECTIVITY OF TUNED RADIO FREQUENCY SYSTEMS. CHARLES V. LOGWOOD, Providence, R. I., assignor to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1926, Serial No. 144,962. Renewed July 8, 1932. 15 Claims. (Cl. 250—20.)

1. Means for increasing the selectivity of tuned radio frequency systems comprising in combination an antenna, an adjustable inductance and a radio-frequency choke coil in series with said antenna, a three-electrode vacuum tube having a grid, a filament and a plate, connections from the terminals of the said choke coil, respectively, to said grid and filament, a second radio frequency choke coil



in the plate circuit of said tube, and a circuit connected between said second choke coil and said plate, said circuit including a fixed condenser and a parallel-branch circuit having in its respective branches a third choke coil and an adjustable condenser.

1,900,294. WAXED PAPER AND PROCESS OF MAKING THE SAME. GEORGE N. LOVATT, Holliston, Mass. Filed Nov. 4, 1929. Serial No. 404,793. 5 Claims. (Cl. 91—67.9.)



1. A method of making food wrappers consisting in first embossing the paper with a design and then providing the embossed paper with a coating of wax.

1,900,295. PROCESS OF TREATING FRUIT FOR THE MARKET. REX DE ORE MCDILL, Riverside, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Oct. 26, 1929. Serial No. 402,787. 8 Claims. (Cl. 99—1.)

8. A process of preserving fruit consisting of submerging the fruit in an aqueous preserving solution having enzyme arresting properties and contacting the fruit while submerged with a coating solution consisting of carbon tetrachloride, paraffin, said solution being of greater specific gravity than the aqueous preserving solution, and rubbing the fruit while submerged to spread the coating over the fruit, then brushing the surplus aqueous solution from the fruit by brushing the fruit out of contact with the aqueous solution, and finally drying the fruit.

1,900,296. PRINTING DEVICE FRAME BLANK. VALENTINE J. MOHLER, River Forest, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 4, 1929. Serial No. 411,416. 9 Claims. (Cl. 101—369.)

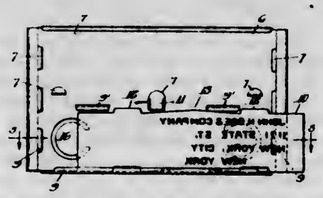
1. A standard blank for printing device frames having at each end a plurality of retaining devices of substantially equal length spaced apart in equal amounts from each other and from the top and bottom of the blank and arranged in alignment, the retaining devices at one end being disposed opposite the retaining devices at the other end of the blank.

5. A printing device frame blank comprising a body having its end portion bent to provide a spacing flange on the back of the blank, there being a shoulder on the front of the blank connecting the spacing flange with the body, the marginal edge of said end portion being bent inwardly from the outer edge of the spacing flange to form



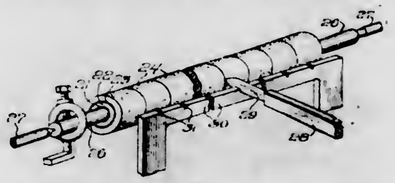
a facing section on the front of the blank disposed in the place of the face of the body with the free edge thereof abutting said shoulder.

1,900,297. PRINTING DEVICE. VALENTINE J. MOHLER, River Forest, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 4, 1929. Serial No. 411,417. 15 Claims. (Cl. 101—369.)



1. A printing device of the class described comprising a frame, a printing plate having type characters thereon, means for detachably retaining the plate on the frame, said means comprising a device on the frame engaging an end of the plate, and a yielding pressure section on the frame back of the plate adjacent said end thereof adapted to be operated to lift said end of the plate sufficiently to clear said retaining device and permit removal of the plate from the frame.

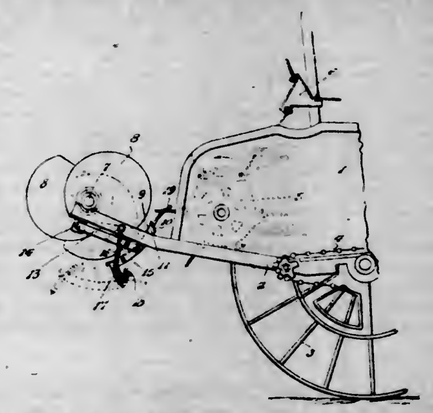
1,900,298. METHOD OF MAKING BUSHINGS. FRED C. MORRIS, San Francisco, Calif. Filed Apr. 22, 1929. Serial No. 357,155. 15 Claims. (Cl. 18—53.)



1. The method of making hard rubber articles comprising in first forming fabric and uncured hard rubber into stock approximately the desired section of the desired final product and in a length sufficient to form a plurality of said products, subjecting said length of stock to a semi-curing process, then completely severing said length of stock into lengths substantially corresponding with that of said desired final product, and then subjecting said severed lengths to a final curing process.

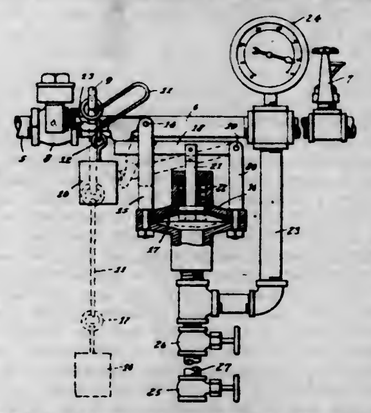
1,900,299. ATTACHMENT FOR FERTILIZER DISTRIBUTORS. THEODORE H. OPPENHEIM, Coldwater, Ohio, assignor to The New Idea Spreader Company, Coldwater, Ohio, a Corporation of Ohio. Filed Jan. 5, 1931. Serial No. 506,783. 10 Claims. (Cl. 275—6.)

1. An attachment for fertilizer distributors having a beater and a spreader, said attachment comprising a pan adapted to extend from side to side of the fertilizer distributor with its front end adjacent the beater and its



rear end adjacent the spreader, and means for yieldably mounting said pan between the spreader and beater of the fertilizer distributor.

1,900,300. VALVE CONTROL APPARATUS FOR DRY PIPE SPRINKLER SYSTEMS. MATTHEW W. PADEN and VERNICE G. OPDYKE, Rockford, Ill. Filed May 22, 1930. Serial No. 454,545. 9 Claims. (Cl. 169—17.)

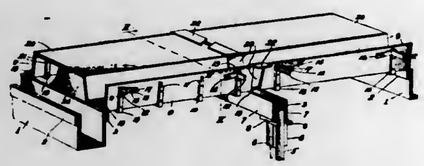


1. In a dry pipe sprinkler system, the combination with the water supply pipe containing water under pressure and the distribution pipe or pipes normally containing air under a predetermined pressure, of a valve connecting said pipes having a downwardly swingable operating member arranged to be raised manually or otherwise to closed position but arranged to be lowered abruptly to open position, a drop weight having direct connection with said member for operating the same, the said weight being arranged to be raised manually to operative position for subsequent operation of said member to open position, a trigger for holding the weight in raised position and preventing accidental movement of the valve operating member downwardly, said weight being releasably supported on said trigger, a diaphragm responsive to the air pressure existing in the distribution pipe, and a plunger movable with said diaphragm to directly release said trigger, said diaphragm being arranged upon a drop in said pressure past a predetermined point to move the plunger to release the trigger and cause the weight to drop and thereby operate the valve operating member to open said valve.

9. In a dry pipe sprinkler system, the combination with a distribution pipe or pipes normally containing air under

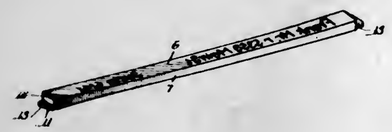
a predetermined pressure, of an air exhauster valve connected therewith and arranged to discharge air therefrom to the atmosphere, said valve having the operating member thereof arranged to be moved to closed position and arranged to be moved abruptly to open position, a drop weight having connection with said member for operating the same, the said weight being arranged to be raised at the time said member is moved to closed position, means for keeping the weight in raised position, means responsive to the air pressure existing in the distribution pipe and arranged upon a drop in said pressure past a predetermined point to operate the last mentioned means whereby to cause the weight to drop and thereby operate the valve operating member to open said valve, and means for limiting the movement of the valve operating member so as to allow the valve to open only part way, the means responsive to the air pressure being operable under the hydraulic pressure of the water filling the pipe upon the exhausting of the air therefrom whereby to operate the valve against the action of the weight to closed position.

1,900,301. CONCRETE FLOOR JOIST FORM CONSTRUCTION. HENRY READ, Tulsa, Okla. Filed July 29, 1929. Serial No. 381,719. 3 Claims. (Cl. 25—131.5.)



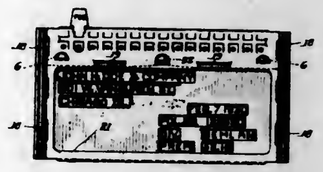
1. Spaced supports, a joist formwork resting at its ends on said supports and consisting of parallel sides, angle brackets secured to and underlying the sides and secured together in pairs, the arms of the brackets engaging the sides, having portions spaced from the latter and also having upwardly-facing shoulders, a horizontal spreader resting at one end on each shoulder and provided with a laterally-projecting tongue fitting in the said space between the respective formwork side and bracket, a locking device fitting against the joist side and endwise against the side of the corresponding spreader to hold the latter on the shoulder of the bracket and the tongue in the said space, and provided with a longitudinal slot terminating at its end remote from the spreader in an extension disposed in downwardly-converging relation to the engaged side of the spreader, and a pin pivotally and slidably engaged by the slot and secured to the adjacent joist formwork.

1,900,302. PRINTING DEVICE. ELMER F. RICHTER, Park Ridge, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed May 10, 1929. Serial No. 361,978. 4 Claims. (Cl. 101—396.)



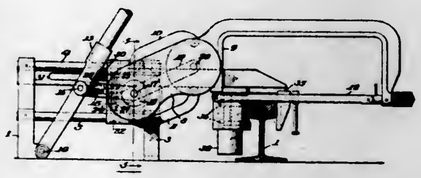
1. A printing form blank of oblong shape having oppositely disposed projections at its ends and of less width than the ends, the outer edges of said ends being reversely inclined.

1,900,303. PRINTING DEVICE. ELMER F. RICHTER, Park Ridge, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,483. 1 Claim. (Cl. 101—369.)



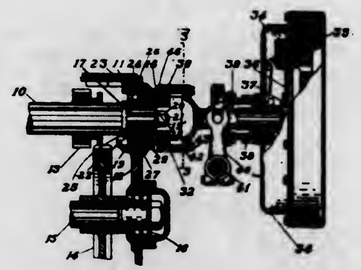
In a printing device which has a frame having a plurality of end stops spaced apart and stamped up from the frame in substantially vertical alinement adjacent the ends of the frame, a bead along the lower edge of the frame, retaining lips struck up from the frame and spaced from and disposed opposite said bead, and a holding device intermediate the retaining lips, said frame having an opening therein with the edges thereof spaced inwardly from said end stops, retaining lips, and bead and facilitating springing of the frame, the combination of a printing plate having printing characters embossed in relief on one face thereof and appearing in intaglio on the opposite face, and a wedge projection on one edge of said printing plate and adapted to be engaged with said holding device and said retaining lips when the other edges of said plate are engaged with said bead and said end stops, the opening in said frame disclosing the intaglio faces of said type characters to facilitate reading thereof and affording access to said plate whereby said plate may be grasped on opposite faces thereof to facilitate sliding of the plate along the frame when the frame is sprung to clear the end stops from an edge of the plate whereby the plate may be removed from the frame after limited movement of the plate disengaging the wedge projection thereon from the holding device and retaining lips.

1,900,304. SAW OPERATING MECHANISM. EMIL W. K. ROE, Chicago, Ill., assignor to The Aldon Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1928. Serial No. 281,728. 9 Claims. (Cl. 29—73.)



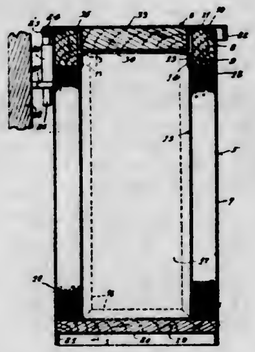
1. A saw operating mechanism comprising a frame, a cross-head slidable on said frame, a saw frame, means pivotally connecting the saw frame to the cross-head, means for maintaining said saw frame in horizontal position as it moves to and from the work, a lever for actuating said cross-head whereby a reciprocatory movement may be imparted to said saw frame, brake means and means for operating the brake means and movable with the saw frame to be operable in any position into which the saw frame is raised or lowered, said brake means including parts mounted on the cross-head and parts connected to the saw frame whereby when said brake means is operated to prevent movement thereof the saw frame is raised to lift a saw in the frame from engagement with the work.

1,900,305. CLUTCH COUPLING. OTTO R. SCHORNBOCK, Chicago, Ill., assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed Jan. 13, 1930. Serial No. 420,879. 5 Claims. (Cl. 287—130.)



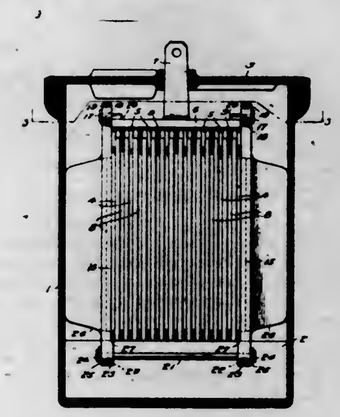
1. A clutch coupling for a transmission shaft comprising a clutch shaft having a disk like portion formed on one end thereof, a clutch ring secured to said disk-like portion, a clutch member secured to said transmission shaft and telescopically connected to said clutch ring, a clutch washer detachably mounted on said clutch member, and securing means extending through the disk-like portion of said clutch shaft, said clutch ring and said washer for securely fastening said clutch shaft to said transmission shaft.

1,900,306. DAIRY PRODUCTS REFRIGERATOR. ROSWELL R. SHIRLEY, Rockford, Ill. Filed July 16, 1928. Serial No. 293,178. 6 Claims. (Cl. 220—9.)



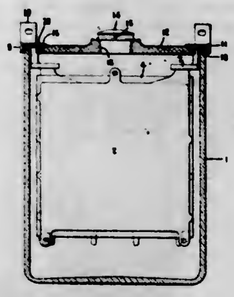
1. In a refrigerator generally of the character described, a box comprising an open-top sheet metal shell, the upper edges of said shell being bent inwardly to define shoulders, a top frame of wood or the equivalent heat insulating material fitting in said shell below and in abutment with the aforesaid shoulders, an open-top sheet metal container having the upper open end thereof fitting inside said frame and provided with outwardly projecting flanges bearing against the under side of said frame to support the latter and be held thereby in spaced relation to the shell, there being heat insulating material about the sides of said container within the shell and beneath said container, a bottom for said shell serving to retain the insulating material and to hold the aforesaid elements in their stated relation, and a lid for said box serving as a closure for the open top thereof.

1,900,307. STORAGE BATTERY. ALMOND H. SNYDER, Lancaster, N. Y., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Jan. 10, 1927. Serial No. 160,141. 9 Claims. (Cl. 136—81.)



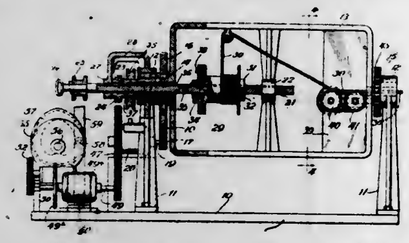
1. In an electric battery, the combination with a container, of a group of positive plates, of a group of negative plates, bus bars connecting the plates of each group, separators interposed between said plates and end pieces connected at the top to said bus bars and at the bottom by tie rods to each other, said end pieces having projecting portions adapted to form, when united with said plates and separators, an assembly unit of the desired dimensions, said projecting portions being engageable with the interior surface of the container to prevent lateral displacement of the unit.

1,900,308. STORAGE BATTERY CELL. ALMOND H. SNYDER, Lancaster, N. Y., assignor, by mesne assignments, to Gould Storage Battery Corporation, Depew, N. Y., a Corporation of Delaware. Filed Oct. 18, 1928. Serial No. 313,351. 5 Claims. (Cl. 136—80.)



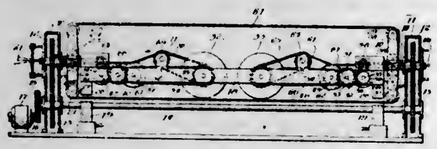
1. In a storage battery of the sealed type, a container, groups of plates therein, a metallic member connecting all the plates of each group and terminating in a projecting portion engaged upon the upper edge of the container, upstanding terminal lugs on said members, a cover sealed upon the container and having peripheral notches for the accommodation of the projecting portions of said metallic members, and sealing means within said openings, said projecting portions having upstanding flanges closing said notches.

1,900,309. TWISTING AND REELING MECHANISM FOR WIRE ROPE MAKING MACHINES. WILLIAM E. SOMERVILLE, Coal City, Ill. Filed Mar. 25, 1931. Serial No. 525,202. 6 Claims. (Cl. 117—16.)



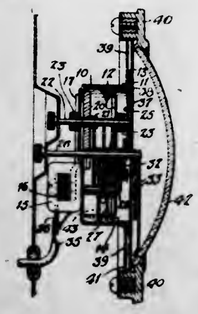
1. In a wire rope making machine embodying a rotary flier, a take up reel mounted upon the flier and a draw off mechanism also mounted upon the flier, said flier and take up reel being disconnected, said take up reel being rotated by the rope being wound thereupon from the draw off mechanism, and means separate from the flier and responsive in its operation to the said rotation of the take up reel for reciprocating said take up reel with respect to the flier.

1,900,310. TWISTER OR STRANDER. WILLIAM E. SOMERVILLE, Coal City, Ill. Filed Nov. 20, 1931. Serial No. 576,327. 3 Claims. (Cl. 117—49.)



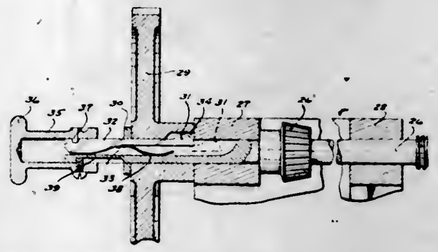
2. In a wire rope or cable making machine, a cradle, supporting means for the cradle, said cradle being maintained against rotation, oppositely disposed rotatable twisting arms constituting sets of arms arranged adjacent each end of the cradle, take up reels and haul off mechanisms mounted upon said cradle, individual to and intermediate the sets of arms at the ends of the cradle, a shaft separate from the cradle supporting means common to and connecting the arms at opposite ends of the cradle for rotating them independently with respect to the cradle, and constituting with said arms a unitary machine element.

1,900,311. CLOCK. WALTER A. SPEAR, Cincinnati, Ohio, assignor to Victor Electric Products, Inc., Cincinnati, Ohio. Filed July 22, 1930. Serial No. 469,852. 1 Claim. (Cl. 58—26.)



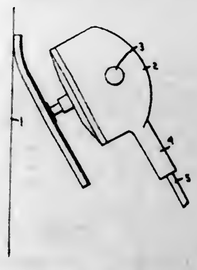
In a clock mechanism, a cup-shaped casing, a relatively shallow cup-shaped cover adapted to fit into the open end of the casing, said cover having a groove formed therein adjacent its periphery to render the cover compressible, shafts supported between the casing and cover, a gear train arranged on said shafts, and means to operate said gear train.

1,900,312. CLUTCH. ADOLPH STORM and THOR THORSEN, Minneapolis, Minn., assignors to Storm Manufacturing Co., Inc., Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 18, 1931. Serial No. 516,646. 1 Claim. (Cl. 192—71.)



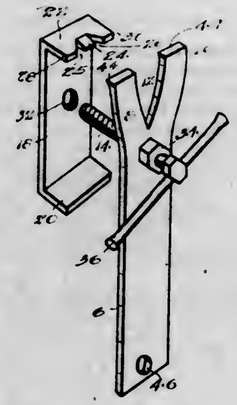
The combination with a shaft, a wheel loose on the shaft, one of which is driven, said wheel being axially spaced from the outer end of the shaft, and a member on the shaft at the inner end of the hub of the wheel, of a clutch for connecting the wheel to the shaft comprising an external keyway in the projecting end of the shaft and extending through the wheel and into the member, an internal keyway in the wheel, extending through the inner end of its hub and closed by the member, a tubular key shifter telescoped onto the projecting end of the shaft and having a key body the outer end portion of which extends into said shifter and is hingedly connected thereto and mounted in the keyway in the shaft, said key body having on its inner end an outwardly and radially projecting key, and a spring compressed between the shaft and key body and under strain to move the key body and project the key into the keyway in the wheel to connect the wheel to the shaft, said shifter being operable to move the key body endwise toward the member to cause the key to engage the member, be cammed thereby out of the keyway in the wheel, into the keyway in the shaft and into the member to release the wheel from the shaft and be held inoperative by the member.

1,900,313. METHOD OF SURFACING. HERBERT R. STRATFORD, Cleveland, Ohio, assignor to The Stratmore Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 15, 1926, Serial No. 81,565. Renewed Aug. 26, 1930. 2 Claims. (Cl. 51—278.)



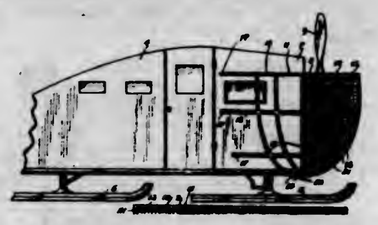
1. In a method of polishing lacquer, the steps which consist in moving a pad over a lacquer coated surface at high speed to first smooth by actually flowing the lacquer by the generated heat and then polish the coating thereon to a high lustre.

1,900,314. SHEET METAL CLAMP. WILLIAM S. STROM, Seattle, Wash. Filed Sept. 22, 1931. Serial No. 564,410. 3 Claims. (Cl. 7—1.)



1. In a clamp as described, the combination with a plate having flanged ends, one of said ends having a notch and a screw-driver head centered in the notch, of a second plate and a screw bar connecting said plates, said second plate having a bifurcated end complementary to the notched-flanged-end for the purpose described and either of said flange ends of the first named plate adapted to rest against the second plate and form a fulcrum for the screw bar to tighten against.

1,900,315. MOTOR SLED. JOSEPH E. VALIQUETTE, Webbwood, Ontario, Canada. Filed Mar. 19, 1932, Serial No. 599,879, and in Canada Mar. 25, 1931. 2 Claims. (Cl. 180—8.)



1. A guard or shield for a propeller of a motor sled having a nose of a substantially lesser width than the length of the propeller, said guard or shield consisting of a series of horizontal bars bellied in front of the propeller so as to curve laterally beyond the same to bights from which the bars are curved inwardly and rearwardly to meet the sides of the aforesaid nose of the sled body, a plurality of upwardly directed bars radiating outwardly and upwardly from the bottom of the said nose and joined to the said horizontal bars at the intersecting points, and a reticulate member covering the framework of the bars.

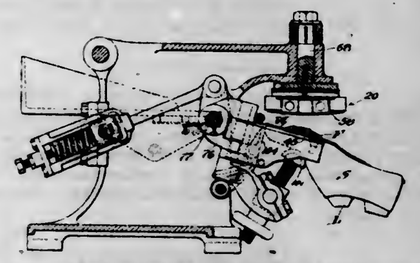
1,900,316. METHOD OF FILLING SHOES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 6, 1928. Serial No. 245,001. 1 Claim. (Cl. 106—8.)

The method of making spreadable shoe bottom filler which comprises coating the individual particles of comminuted, fibrous, absorbent body material with a fluid paste made of a suitable film-forming substance and an evaporable liquid, then drying the coated particles and driving off whatever evaporable liquid may be present both in the coating and in the coated particles, leaving each particle enclosed by a dry, protective film adapted



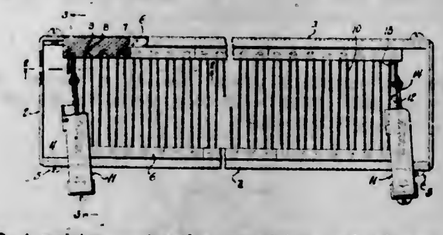
to prevent penetration and absorption by the particles of external binder and of external moisture, and adapted to be disrupted in use, and then mixing the dry film-coated particles with a sticky binder to form a homogeneous filler composition.

1,900,317. METHOD OF FILLING SHOES. ANDREW THOMA, Cambridge, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1931. Serial No. 517,236. 17 Claims. (Cl. 12—142.)



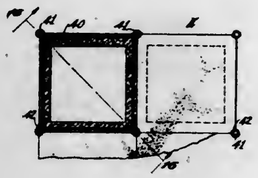
10. The method of filling welt shoes which comprises depositing in the bottom cavity defined by the welt seam a quantity of spreadable shoe filler, suitable when spread for filling the cavity but differing in shape from the shape of the cavity, spreading the filler laterally to the confines of the cavity and compressing the same by powerful pressure applied substantially flatwise of the cavity by a press surface in a direction substantially normal to the shoe bottom and at the same time flattening the welt seam by pressure, and simultaneously subjecting both the filler and the welt seam to a vibratory motion of the press surface in a plane transverse to the direction of pressure and applying heat to the filler and welt seam during the spreading and pressing operation.

1,900,318. RESISTOR CONSTRUCTION. HERMON L. VAN VALKENBURG, Wauwatosa, and FORREST C. McNICOL, Milwaukee, Wis., assignors to Square D Company, Detroit, Mich. Filed May 20, 1929. Serial No. 364,375. 7 Claims. (Cl. 201—74.)



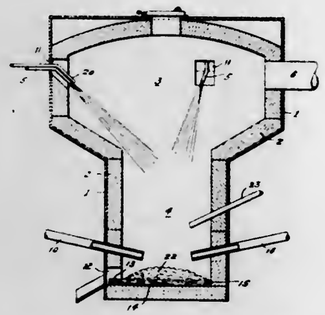
8. A resistor construction comprising a pair of opposed, spaced insulating members, each having spaced sockets therein, a resistance element having reversely formed, looped portions fitted within said sockets, and a terminal member having a pair of clamping portions adapted to clamp said resistance element at any point along its length and having oppositely projecting extensions adapted to seat in any of the said sockets, whereby said terminal member is supported by said insulating members.

1,900,319. STRUCTURAL DEVICE. AURÈLE VERMEULEN, Los Angeles, Calif. Filed Mar. 13, 1931. Serial No. 522,280. 2 Claims. (Cl. 61—48.)



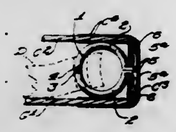
1. In a device of the character disclosed, a block, the upright corner edges of which are grooved, loop members secured to and extended in part outwardly from the grooves of said corners and whereby when said loop members are aligned with corresponding loop members of an adjoining block, said loop members may be interlocked in said grooves, the blocks being held in close abutting relationship, and means adapted to be passed through said loop members and within said grooves for interlocking the blocks.

1,900,320. METHOD OF RECOVERING CHEMICALS FROM WASTE LIQUORS. CHARLES L. WAGNER, Boonton, N. J., and HORACE FREEMAN, Shawinigan Falls, Quebec, Canada, assignors to J. O. Ross Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1928. Serial No. 259,891. 10 Claims. (Cl. 23—48.)



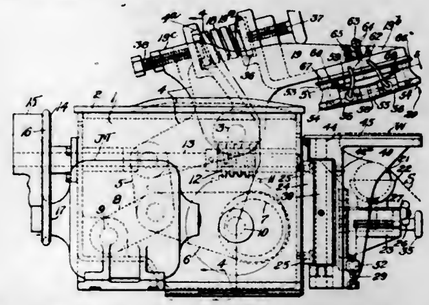
3. The method of recovering chemicals from waste liquor which comprises destructively distilling the liquor, consuming the combustible products of such distillation, forming a pool of the non-combustible portions in a fused mass and retaining said fused mass in a pool until reduction is substantially complete.

1,900,321. BINDER RING. GEORGE E. WHITE, San Diego, Calif. Filed Dec. 3, 1930. Serial No. 499,707. 5 Claims. (Cl. 281—25.)



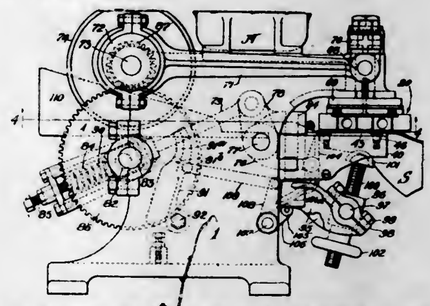
4. In a device of the class described, a binder ring comprising a pair of complementary semi-circular members, hinge means at one end of each semi-circular member joining the same together, a radially extending arm at the opposite end of each semi-circular member, said binder ring arranged to receive a sheaf of perforated paper by insertion over one of said arms and a retaining means for receiving said arms when close together for holding said binder ring in closed position.

1,900,322. SHOE-FILLING MACHINE. ALFRED H. AVERY, Malden, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 19, 1931. Serial No. 516,862. 14 Claims. (Cl. 18—1.)



4. A shoe bottom filling machine comprising a shoe support, a pressing and spreading member having a flexible working face of outwardly bowed spring sheet metal, a number of relatively movable blocks behind said sheet metal, a second bowed sheet metal spring adapted yieldingly to press the movable blocks toward the sheet metal facing, and means to impart relative movement between the shoe support and the pressing and spreading member toward and from each other.

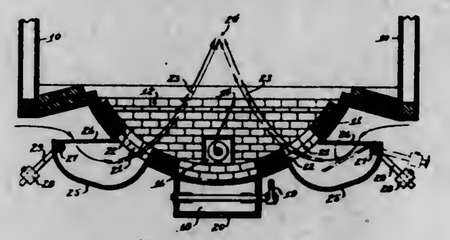
1,900,323. SHOE-FILLING MACHINE. ALFRED H. AVERY, Malden, Mass., assignor to North American Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Feb. 20, 1931. Serial No. 517,237. 12 Claims. (Cl. 18—1.)



3. A shoe bottom filling machine comprising a pressing and spreading member, a shoe support, means to impart relative movement between the pressing and spreading member and the shoe support toward and from each other, and means to impart to the pressing and spreading member a vibration of partial rotation on an axis substantially parallel to the direction of pressure, thereby to vibrate the working face of said member in a plane transverse to the direction of pressure during its operation on the shoe bottom.

1,900,324. LOCOMOTIVE FIRE-BOX. GEORGE L. BAXTER and FREDERICK W. STRACHAUER, Sacramento, and RALPH S. TWOGOOD, Berkeley, Calif. Filed Oct. 18, 1930. Serial No. 489,566. 3 Claims. (Cl. 158—3.)

1. In a fire-box having a flash wall at one end and a pair of laterally spaced air inlets in its lower portion adjacent the face of said flash wall, a burner adapted to direct a stream of fuel substantially horizontally against the lower central portion of said flash wall, said fuel stream then rising along the face thereof, means for



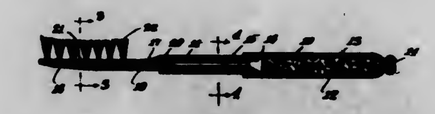
directing the air streams entering through said inlets upwardly over the face of said flash wall and convergingly to a common intersection with the rising fuel stream; and automatic dampers responsive to draft conditions in the fire-box for controlling said air inlets.

1,900,325. AUTOMOBILE TABLE. FRED BAYMAN and RICHARD C. BRENNENHOLTZ, Seattle, Wash. Filed July 25, 1931. Serial No. 553,104. 6 Claims. (Cl. 45—51.)



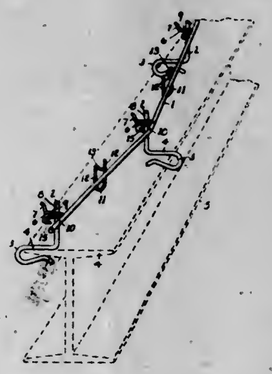
3. An automobile table consisting of a fixed table portion; a second table member hingedly secured to the fixed portion; a guide way fixedly secured to the fixed portion; a support member, having a standard adapted to engage the guide way and a T shaped support bar adapted to support the table; a supporting arm secured to the support member having a pivot pin disposed at its outer-end and a supporting pin adjacent thereto; a pivot member having a slot engaging the pivot pin and a plurality of U shaped openings adapted to engage the supporting pin; and a bracket disposed to pivotably support the pivot member and provide an anchorage for the table.

1,900,326. FOUNTAIN TOOTHBRUSH. JOSEPH W. BERESFORD, Clifton, N. J. Filed Apr. 1, 1931. Serial No. 526,798. 2 Claims. (Cl. 15—187.)



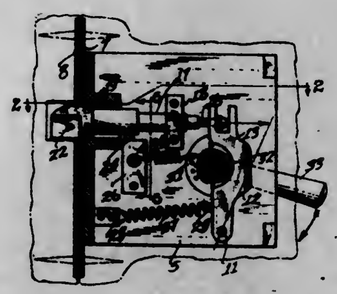
1. A tooth brush comprising an elongated head of semi-elliptical cross section having a cylindrical shank provided with an external thread and containing a duct, a bristle carrying plate secured on the flat side of said head having a central opening communicating with the duct, a tubular paste container handle having a cap at its outer end and provided with an internal thread, and a connector element of hexagonal cross section provided with a bore, an internal thread to engage the shank of said head, an enlarged externally threaded opposite end to engage said handle and a conical cavity within the enlarged end open to its bore.

1,900,327. STRUCTURAL UNIT. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Jan. 11, 1932. Serial No. 585,824. 10 Claims. (Cl. 72—109.)



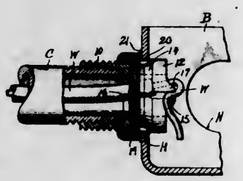
3. A structural unit comprising a longitudinal rod of springable material, a plurality of support engaging members fixedly secured to said rod in spaced relation to project at each side thereof and having hooks at one end engageable with the flange of a beam or like structural element, the hooks of adjacent support engaging members being disposed to engage opposite edges of the supporting element, reinforce holders fixedly secured to the other ends of said support members and having spring arms disposed in spaced relation to the rod and terminating in inturned reinforce engaging hooks, and U-shaped clips disposed transversely of said longitudinal rod intermediate its said upper members, one arm thereof being fixedly secured to the rod, the other arm being free and springable to receive a reinforcing element and having its end directed inwardly to provide a reinforce engaging member.

1,900,328. AUTOMATIC DOOR TIGHTENER. ROBERT BOGGS, Daly City, Calif. Filed Mar. 8, 1932. Serial No. 597,583. 3 Claims. (Cl. 292—242.)



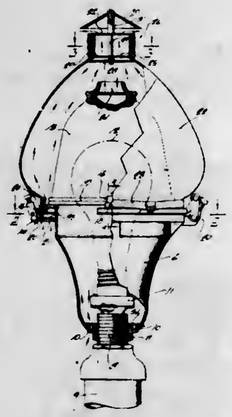
1. In a latch, a housing, a keeper, said keeper having an opening formed therein, a bolt slidable in said housing, said bolt having a spiral groove formed therein, a stationary pin positioned in said housing and engaging said groove to cause rotation of said bolt when said bolt is moved with respect to said pin, said bolt being equipped with means for engaging and causing a camming action in the opening of said keeper to cause lateral displacement between said keeper and said housing.

1,900,329. GROUND WIRE COUPLER. STEPHEN N. BUCHANAN, New York, N. Y., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed June 25, 1927. Serial No. 201,518. 20 Claims. (Cl. 247—1.)



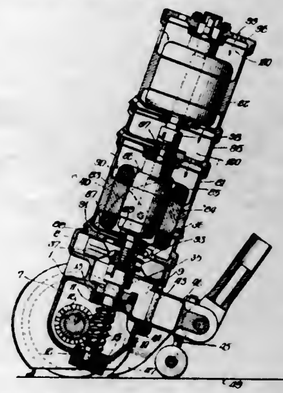
1. In combination with an outlet box provided with an outlet hole, a coupler sleeve disposed in the hole, means upon the sleeve to which a cable protective covering is connected, box hole anchorage means carried with the coupler sleeve, ground wire receiving jaws carried with the coupler sleeve, and a single operating means carried on the sleeve to clamp the box wall between the operating means and the box hole anchorage means and to simultaneously pinch the jaws together.

1,900,330. LIGHTING FIXTURE. JOHN B. CHARTRAND, Cleveland, Ohio, assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 21, 1931. Serial No. 558,451. 10 Claims. (Cl. 240—25.)



1. In a lighting fixture, a substantially cup shaped body member open at its top and provided with an air inlet opening in its closed bottom, lamp supporting means within the body member adjacent its closed bottom adapted to receive the base of an incandescent lamp, whereby the base of the lamp is near the air inlet opening, an inverted glass bowl having an air outlet opening in its closed top and positioned over the open top of the body member whereby air entering the inlet opening at the bottom of the body member and becoming heated by a lamp therein rises through the fixture to be exhausted through the air outlet opening, and means for supporting the inverted glass bowl from the open top portion of the body member so as to provide a second air inlet opening adjacent the bottom of the glass bowl, whereby cool air is drawn into the fixture to pass upwardly along the inner wall of the glass bowl.

1,900,331. WOOD SURFACING MACHINE. ALEX A. CLARKE, Chicago, Ill., assignor to Thomas B. Bennett, Muskegon, Mich., and himself, jointly. Filed July 13, 1928. Serial No. 292,393. 3 Claims. (Cl. 51—176.)



1. In a floor surfacing machine, a motor unit, a downwardly extending driving shaft in said unit, a driving mechanism on the lower end of said shaft, a driven shaft extending from said driving mechanism transversely to said driving shaft and freely projecting therefrom, a pair of abrading drums mounted on the opposite ends of said shaft, a fan mounted on said driving shaft between said driving mechanism and said motor unit, a casing forming a chamber enclosing said driving mechanism and a chamber enclosing said fan, a pair of intake ducts extending from said fan chamber in the rear of said drums, said intake ducts terminating in elongated nozzles constituting at their ends chambers enclosing said drums, and rolling means mounted on said intake ducts rearwardly of said drum chambers.

1,900,332. TRACING DEVICE FOR INSTRUMENTS SUCH AS INTEGRAPHS AND THE LIKE. OSWALD CORADI, Zurich, and WALTER LEEMANN, Ruschlikon near Zurich, Switzerland. Filed Mar. 25, 1931, Serial No. 525,216, and in Switzerland Apr. 4, 1930. 8 Claims. (Cl. 88—1.)

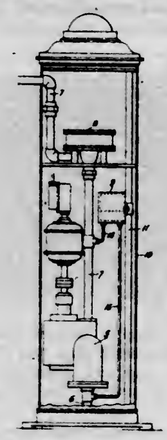


1. In an instrument of the class described, a guide member, a transparent plate slidable longitudinally on the guide member and having an index line parallel with a side of the guide member, an arm at right angles to the guide member, and a cylindrical glass body carried by the arm and movable longitudinally of the guide member, said body forming a lens and having a curved upper face, and being provided at the lower end with an index mark for coaction with the index line of said transparent plate.

1,900,333. PRESSURE CONTROLLING DEVICE FOR A LIQUID DISPENSING APPARATUS. WILLIAM H. CURTIS, Dayton, Ohio, assignor to National Pumps Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 12, 1932. Serial No. 632,693. 7 Claims. (Cl. 221—95.)

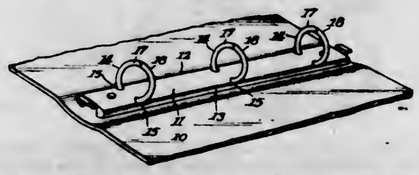
1. A controlling device for a dispensing apparatus having a suction line and a pressure line, comprising an expansion chamber adapted to contain liquid and air under pressure, and means for establishing a continuously open

connection between said expansion chamber and said pressure line and said suction line and for so controlling the flow of liquid through said connecting means as to main-



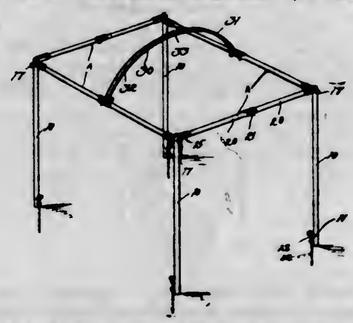
tain in said expansion chamber at all times a quantity of liquid sufficient to substantially compress the air in said expansion chamber.

1,900,334. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Filed Mar. 4, 1931. Serial No. 519,945. 10 Claims. (Cl. 129—24.)



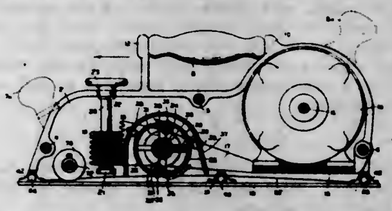
6. In a loose leaf binder, a plurality of conventional paper holding rings, a plurality of longitudinal members rigidly affixed to the rings, means for resisting lateral movement of the longitudinal members, said rings forming the toggle elements of the device together with the longitudinal members.

1,900,335. COLLAPSIBLE TENT AND FRAME. AMBROGIO DEL VECCHIO, Hawthorne, N. Y. Filed June 4, 1931. Serial No. 542,134. 6 Claims. (Cl. 135—4.)



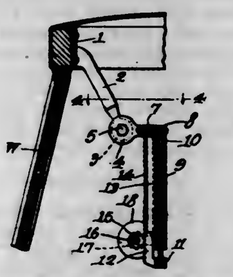
1. A folding tent frame, comprising uprights, U-shaped clips removably carried by said uprights, horisontally extending members pivotally mounted in said clips, and means for connecting together, the horisontal members of adjacent uprights.

1,900,336. WOODWORKING MACHINERY. JOHN J. EGAN, San Francisco, Calif. Filed Feb. 28, 1931. Serial No. 518,920. 1 Claim. (Cl. 144—117.)



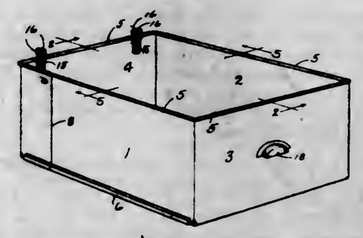
A power plane comprising a pair of interspaced plates; rods rigidly connecting said plates and located above the bottom plane thereof; a frame between said plates having one end pivoted on one of said cross rods; a rotatable cutter journaled in the opposite end of said frame; means to raise and lower said frame and cutter with respect to said plates; a motor mounted on said frame intermediate said pivot and cutter; power transmission means driven by said motor and operatively engaging said cutter; a flexible horizontal guide attached to the bottom of each of said plates; and means for curving said guides.

1,900,337. GLARE SHIELD. LEO FUCHS, Cameron, Tex. Filed Mar. 27, 1931. Serial No. 525,813. 1 Claim. (Cl. 296—97.)



The combination with an attaching bracket, of a frame supported thereby for angular adjustment, said frame having opposed channels, a transparent panel slidable in the channels, a reinforcing strip along the bottom edge of the panel, a guide on the frame, a rack secured to the strip and extending upwardly above the panel, said rack movably engaging the guide, a transverse shaft supported by the frame, means for rotating the shaft, and a gear on the shaft engaging the rack.

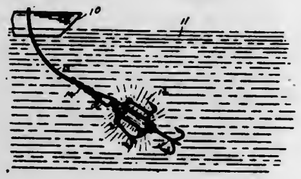
1,900,338. DRAWER CONSTRUCTION. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Sept. 25, 1931. Serial No. 565,100. 2 Claims. (Cl. 45—7.)



1. In a sheet metal cabinet having oppositely disposed parallel drawer guides, a sheet metal drawer therefor comprising sides and ends of a single strip of sheet metal, the

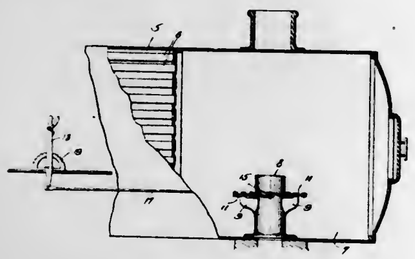
lower corners of which are blanked out, outwardly pressed ribs adjacent each longitudinal bottom edge of each of the sides above the said blanked out portions adapted to slidingly fit within said drawer guides of the cabinet, said ribs terminating short of the drawer ends, the blanked out portion below said ribs being bent inwardly to form a flange which substantially surrounds the said sides and ends, and a sheet metal bottom supported on and secured to the said flange.

1,900,339. FIREFLY. BILLINGTON C. HARRELL, San Antonio, Tex. Filed Mar. 28, 1932. Serial No. 601,623. 1 Claim. (Cl. 43—44.)



A fire fly comprising a body bolt, a glass tubing, a pair of cork washers within said tubing spacing said tubing from said body bolt, phosphorescent paint on the inside of said glass tubing, means for sealing the inside of said glass tubing water tight, washer means on the outer sides of said cork washers, a nut on the outside of each washer means for holding the same assembled, fish hook supporting arms integrally projecting from one of said washers, a propeller on said body bolt, a second nut holding said propeller securely thereon, means in said body bolt for attaching the same to a swivel line, and means in said body bolt for receiving another fish hook.

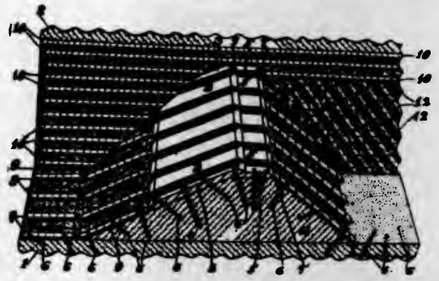
1,900,340. DRAFT REGULATOR. ERNEST S. HAYNE, Birmingham, Ala., assignor of one-third to John T. Large and one-third to C. C. Hayne, Birmingham, Ala. Filed Dec. 21, 1931. Serial No. 582,403. 1 Claim. (Cl. 230—100.)



The combination with the exhaust nozzle of a locomotive, said nozzle having circular openings formed in opposite sides thereof, of a draft regulator comprising bars circular in cross section, operating through the openings in opposite directions and in alignment with each other adjusting the area of the nozzle, and means for operating the bars simultaneously.

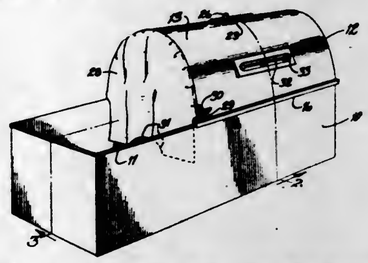
1,900,341. MEANS FOR PROTECTING EARTHEN DAMS, RIVER LEVEES, ETC. SKELTON D. HENRY, Houston, Tex. Filed Aug. 31, 1931. Serial No. 560,403. 2 Claims. (Cl. 61—37.)

1. A water-retaining earthen dam having a series of beams overlying its crest and the upper part of its water face, the said beams being in a combination with metallic gutters, the said beams having their upper longitudinal corners chamfered and two narrow vertical grooves (one adjacent to each chamfered corner) extending the length of the face of the beam, the metallic gutters being con-



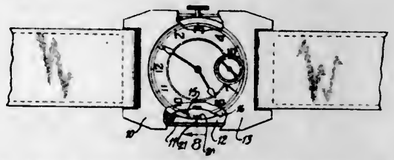
caved and their margins flanged downward, the flanges fitting into the aforesaid grooves, the gutters covering the gaps between any two adjacent beams and secured thereto by nails to prevent the leakage of water therethrough.

1,900,342. INFANT INCUBATOR. JULIUS H. HESS, Chicago, Ill. Filed Aug. 3, 1929. Serial No. 383,403. 1 Claim. (Cl. 128—1.)



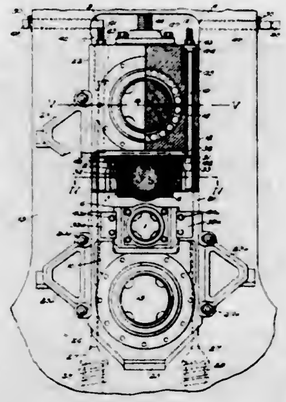
An infant incubator comprising a crib having connected vertical imperforate metal walls defining a box-like structure, a canopy having imperforate metal side walls of less length than the side walls of the crib and one end wall each flanged at their lower edge for sealing and interlocking engagement with the corresponding upper edge portions of the crib walls, a flexible partition extending from the other end of the canopy into the crib between the vertical side walls thereof, whereby to form a removable enclosure with said walls at the foot end of the crib, and means for heating and ventilating said crib carried by said canopy.

1,900,343. WATCH. EDWARD HOWARD, Elgin, Ill., assignor, by mesne assignments, to Elgin National Watch Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1930. Serial No. 462,505. 1 Claim. (Cl. 58—88.)



In a watch, the combination of a movment ring provided with an opening, a movement located within the opening, the movement having a flange adapted to rest upon the surface of the ring around the opening therein, which flange is provided with a recess, and a rigid tongue carried by the ring and bent upwardly above the surface thereof to enter the recess.

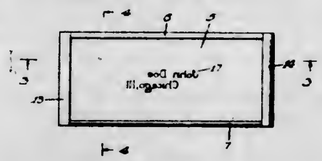
1,900,344. ROLL MOUNTING. LORENZ IVERSEN, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 29, 1929. Serial No. 367,032. 24 Claims. (Cl. 80—38.)



1. In a mill, a backing roll, a chuck therefor, a working roll carried by said chuck, a rigid supporting surface in said chuck in one horizontal plane, and a resilient supporting surface in said chuck in a different horizontal plane, said surfaces being successively effective for supporting the working roll upon relative vertical movement between the chuck and working roll.

7. In a rolling mill, a housing, bearing chucks mounted therein for adjustment in a plurality of directions, antifriction bearings in said chucks, a backing roll journaled in said bearings, additional bearing chucks having antifriction bearings suspended from the backing roll bearing chucks out of contact with said housing, and a working roll journaled in the bearings of said last mentioned chucks.

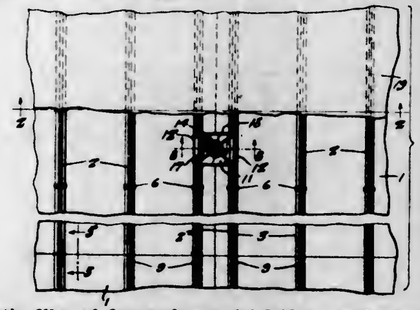
1,900,345. PRINTING DEVICE. JAMES P. JACKSON, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Original application filed Oct. 17, 1930, Serial No. 489,278. Divided and this application filed Jan. 2, 1932. Serial No. 584,381. 9 Claims. (Cl. 101—369.)



1. A printing device having marginal sections along opposite edges thereof and folded onto one face thereof, said device having other marginal sections along other opposite edges thereof folded to provide abutment surfaces, the edges of the last-named marginal sections engaging the ends of said first-named marginal sections, all of said marginal sections providing a raised border on one face of said printing device.

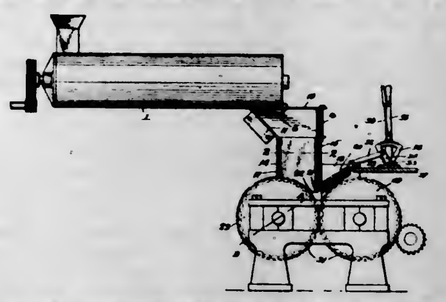
1,900,346. ROOF AND FLOOR STRUCTURE. WALTER D. JARVIS, Pittsburgh, Pa., assignor of one-half to Frank W. Jarvis, Pittsburgh, Pa. Filed July 1, 1931. Serial No. 548,204. 9 Claims. (Cl. 72—66.)

1. In a structure as described sections of fireproof material having abutting edges, rails laid upon said sections in parallel relation, means for clinching the rails to the sections, a bridging plate disposed over the seam between the sections and provided at opposite edges with flanges disposed over the adjacent rails, said bridging plate having at its intervening edges upstanding flanges, and a



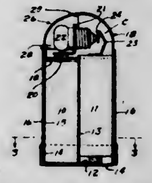
plastic filler of fireproof material laid upon the sections between the rails and having an upper surface troweled to a level above the upper edges of the rails.

1,900,347. COAL BRIQUETTING EQUIPMENT. EMORY E. JONES, Bluefield, W. Va., assignor to Winding Gulf Collieries, Bluefield, W. Va. Filed Dec. 15, 1931. Serial No. 581,228. 3 Claims. (Cl. 44—12.)



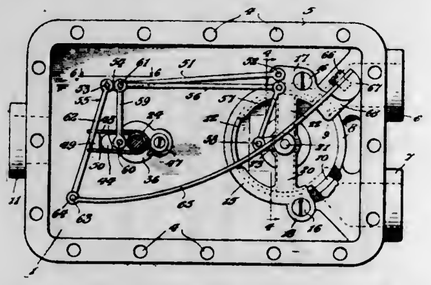
1. A coal briquetting press embodying cooperating rolls journaled for rotation, a hopper above and discharging between the rolls, and a gate slidable at the lower end of the hopper, at an acute angle to the line of flow through the hopper, the inner corners of the gate being cut away, adjacent to one roll, and at the sides of the hopper.

1,900,348. FLASH LIGHT. HOMER W. JONES, Williamsville, N. Y., and HERMAN G. GRAUBNER, Lakewood, Ohio, assignors to National Carbon Company, Inc., a Corporation of New York. Filed July 3, 1930. Serial No. 465,669. 4 Claims. (Cl. 240—10.67.)



1. In a flashlight; a battery having the electric poles thereof in contiguous relation; a hood covering said poles and having an opening therein; a lamp bulb carried by one pole of said battery; a movable visor closing said opening in one position thereof and exposing said lamp bulb in another position thereof; a flexible conductor carried by the other pole of said battery in a position opposite one terminal of said lamp bulb and also in the path of said visor by which it is moved into contact with said lamp bulb to complete the electric circuit through said battery and bulb.

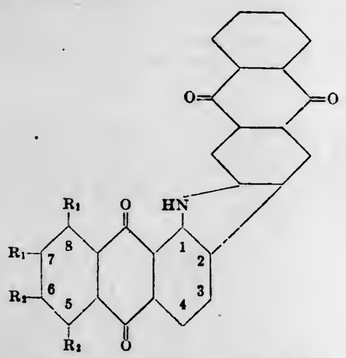
1,900,349. THERMOSTATIC MIXING VALVE. WALTER G. KLINGBEIL, Portland, Oreg. Filed Aug. 22, 1931. Serial No. 558,793. 4 Claims. (Cl. 236—12.)



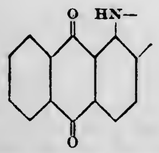
1. In a thermostatic mixing valve, a casing having inlets for hot and cold water and an outlet, a valve to control flow through the inlets, a stem for said valve, a crank fixed to said stem, a shaft rotatably mounted in the casing and projecting therefrom, a crank carried by and turning with the shaft, an arm loose upon the shaft above and normally alined with said crank, a spring carried by the crank and engaging opposite sides of the arm whereby the shaft and arm may move together when the shaft is rotated and the arm may move about the shaft when the shaft is stationary, a thermostatic strip anchored at one end in the casing, and connections between the opposite end of said strip and said arm and the crank on the valve stem.

1,900,350. VAT DYESTUFFS OF THE ANTHRACENE SERIES. GEORG KRÄNZLEIN and PAUL OCHWAT, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 21, 1928, Serial No. 301,166, and in Germany Sept. 7, 1927. 2 Claims. (Cl. 260—46.)

1. As new products, dyestuffs substantially identical with those obtainable by treating a dyestuff of the following probable constitution:



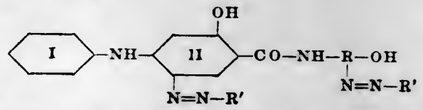
wherein either the two R_1's or the two R_2's are substituted by the group



the imino group occupying the 8-position or the 5-position in the central anthraquinone molecule, with concentrated sulfuric acid, while cooling, diluting the reaction product with water and after-treating the precipitate with a solution of hypochlorite, the said products being when dried orange powders, sparingly soluble in organic solvents, of a high melting point over 360° C. and yielding yellow to orange dyeings of excellent fastness to light and washing.

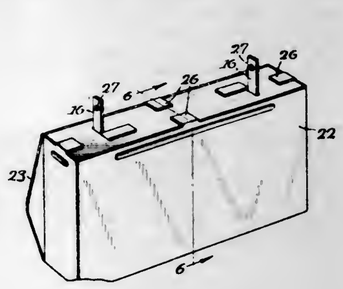
1,900,351. NEW AZODYESTUFFS. LEOPOLD LASKA and ARTHUR ZITSCHER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 29, 1930, Serial No. 492,080, and in Germany Nov. 5, 1929. 10 Claims. (Cl. 260—70.)

1. As new compounds the azo-dyestuffs of the probable general formula:



wherein the benzene nucleus I may be substituted by alkyl, alkoxy or halogen, R means an aromatic radical of the benzene or naphthalene series and R' means a radical of the benzene, naphthalene or anthracene series which may contain an alkyl, alkoxy, phenoxy, phenylazo or nitro-group or halogen, which compounds yield when produced on a substratum brown to black shades.

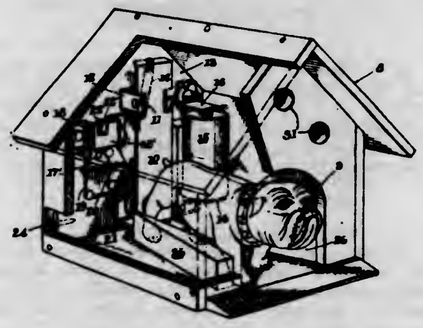
1,900,352. CONDENSER AND METHOD OF MAKING THE SAME. ROBERT O. LEWIS, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed July 13, 1929. Serial No. 378,100. 12 Claims. (Cl. 175—41.)



1. A condenser comprising a pair of spaced metallic ribbons wound into a coil, dielectric material between said metallic ribbons, said metallic ribbons being laterally displaced whereby the edge of one ribbon projects from one end of the coil and the opposite edge of the other ribbon projects from the other end of the coil, a strip terminal member for the projecting edge of each metallic ribbon, the portion of the terminal member contacting with the end of the coil being cupped to hold a limited quantity of solder, and the cupped portion being filled with solder for securing the terminal to the coil.

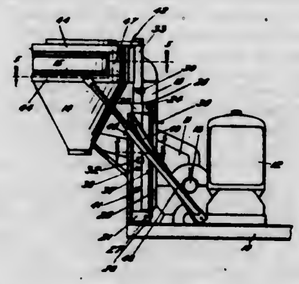
1,900,353. TOY. CHRISTOPH MARCHETTI, Chicago, Ill. Filed Nov. 10, 1932. Serial No. 641,976. 3 Claims. (Cl. 46—49.)

1. A toy comprising a dog house having a door opening in its front and a movable rear wall, a spring-operated ejector and a magnet mounted on said rear wall, a vibration sensitive switch, an electric circuit including said ejector, battery, magnet and switch, said ejector adapted to be set for operation in said circuit when a toy dog is pushed through the door opening into the house and against said ejector, said switch adapted to be operated by sound close to the door opening to open the circuit and release the ejector, and said rear wall adapted to be moved



to permit replacement of the battery, and guides for guiding the dog when it is pushed into the house to set the ejector and when it is ejected from the house.

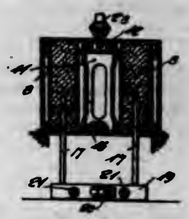
1,900,354. MEANS FOR SUPPORTING A SEPARATING HOPPER AS APPLIED TO PORTABLE MILLS. EARL L. MARTIN, Des Moines, Iowa. Filed Jan. 26, 1931. Serial No. 511,241. 6 Claims. (Cl. 248—2.)



3. The combination of a rectangular frame, an angle iron supported vertically from one corner of said frame, a brace member connected to the outer surface of each flange of said angle near its upper end, one of said braces being connected to one of the side members of said frame and the other to one of the end members of said frame, a second angle slidably mounted longitudinally of the first angle, guides carried by the first angle for slidably supporting the second angle, a laterally projecting supporting bracket fixed to the upper end of the slidable angle, a telescopic brace member having one end pivotally connected to one side member of said bracket and its opposite end to the corresponding side member of said supporting bracket to prevent swinging movement of said supporting frame about the longitudinal axis of said supports.

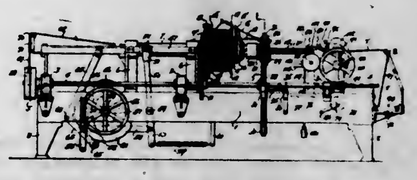
1,900,355. METHOD AND APPARATUS FOR MAKING ICE CREAM BARS, STICKS, OR THE LIKE. WILLIAM MAURER, Queens Village, N. Y. Filed Apr. 4, 1932. Serial No. 603,140. 17 Claims. (Cl. 107—19.)

8. A method of producing coated ice cream bars comprising the mixing of cream to a semi-frozen state, applying a plunger-like mold to a quantity of said cream to fill predetermined portions of the mold, freezing the cream in said mold to a full frozen state to form masses of frozen cream, supporting the masses of frozen cream in the mold on means impaled within the cream, removing the mold to permit the masses of frozen cream to remain on said supporting means, coating the cream while on the supporting means with a chocolate mixture, depositing the



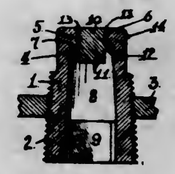
masses of frozen cream in wrappers and applying a stick to each mass of frozen cream to facilitate the handling thereof.

1,900,356. MACHINE FOR FABRICATING SCOURING DEVICES, MOP HEADS, AND SIMILAR ARTICLES. DANIEL J. MAYER, Belleville, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a Corporation of Delaware. Filed July 8, 1931. Serial No. 549,345. 22 Claims. (Cl. 300—16.)



1. An automatic machine of the kind described, comprising a mandrel, power actuated means to wind flexible material in convolutions about said mandrel to form looped ends, timed means to discharge a segregated quantity of the wound convolutions from the mandrel, means to receive the discharged convolutions adapted to bunch together the portions thereof intermediate their oppositely extending loop ends, and power actuated means to apply a tie-wire about said bunched portions.

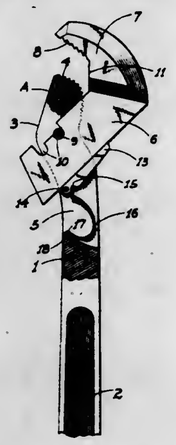
1,900,357. BOILER DROP-PLUG. GEORGE MCCORMICK, Redwood City, and FRANK E. RUSSELL, Alameda, Calif. Filed Feb. 23, 1932. Serial No. 594,566. 3 Claims. (Cl. 122—504.3.)



1. A boiler drop-plug comprising a body-member having upon its exterior surface near one end a relatively easily disfigurable chased section, said body member having also a through bore, which for a distance inwardly from the end within said chased section, is cylindrical and of a diameter less than the diameter of the remainder of the bore, whereby an internal annular shoulder is formed; a drop-plug member having at one end a cylindrical portion adapted to fit within the reduced end of the body-bore and having also a flange of greater diameter than said reduced end, said flange being seated against the

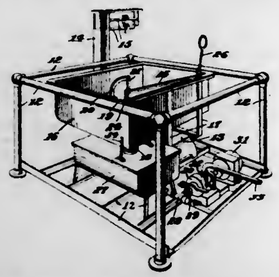
internal shoulder of the bore, with peripheral clearance from the side wall of said bore; and a cylindrical fusible cementing member between the opposing surfaces of the reduced end of the body-bore and the portion of the drop-plug member fitting therein.

1,900,358. ADJUSTABLE JAW WRENCH. HOMER A. MEAD, Turlock, Calif., assignor to Masterench Corporation, Turlock, Calif., a Corporation. Filed Apr. 9, 1931. Serial No. 528,713. 1 Claim. (Cl. 81—110.)



A wrench comprising a straight shank terminating in an elbow offset to one side of the longitudinal center line of the shank, the outer end of the elbow forming the fixed jaw of the wrench, the elbow and the adjacent portion of the shank having a slot therethrough, a pin in the bend of the elbow extending across the slot, a movable jaw to cooperate with the fixed jaw and having a shank mounted for movement through the slot below the pin, the upper edge of said last named shank having spaced notches to engage the pin, and yieldable means engaging said last named shank to exert turning pressure on the same to move the jaw thereof to a closed position.

1,900,359. MILK WEIGHING APPARATUS. HARRY L. MILLER, Chester, Pa. Filed Aug. 11, 1931. Serial No. 556,444. 5 Claims. (Cl. 265—27.)



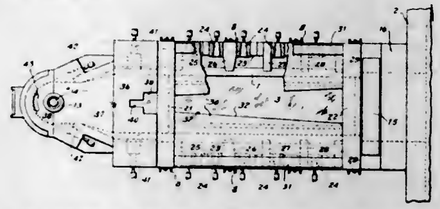
1. A milk weighing apparatus comprising a scale, a weighing tank carried thereby and provided at its bottom with an outlet tube having valve seats at its top and bottom, a manually-controlled valve fitting the upper valve seat on said tube and which, when resting on said valve seat, will close the outlet from said tank, a stationary receiving tank located below said weighing tank, a float in said receiving tank and a valve on said float fitting the lower valve seat on said tube.

1,900,360. HAIR CURLER. JOHN MUELLER, Chicago, Ill. Filed June 11, 1932. Serial No. 616,602. 15 Claims. (Cl. 132—33.)



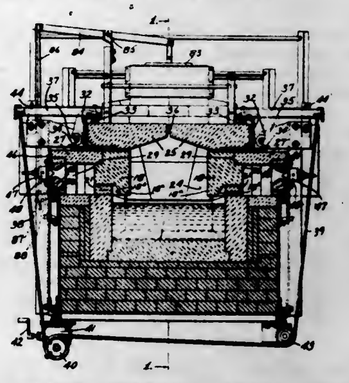
1. In a curler of the character described, the combination of a spindle-like member adapted to have the inner half of a lock of hair wrapped therearound, a second spindle-like member adapted to have the outer half of the lock of hair wrapped therearound, and means for connecting the two members in end-to-end relation.

1,900,361. FOREHEARTH FOR MOLTEN GLASS. VERGIL MULHOLLAND, West Hartford, and ALFRED R. HUNTER, Hartford, Conn., assignors to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,831. 12 Claims. (Cl. 49—55.)



1. A forehearth having a channel for conducting molten glass from a melting furnace or other source of supply to a place at which glass is to be removed, means providing a cover structure for the channel, said cover structure having a longitudinally extending opening above the middle portion of the glass in said channel, said longitudinal opening being of different widths at the opposite ends thereof.

1,900,362. FOREHEARTH FOR MOLTEN GLASS. VERGIL MULHOLLAND, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 14, 1930. Serial No. 461,132. 9 Claims. (Cl. 49—55.)



9. In a forehearth structure, a refractory channel for receiving molten glass from a source of supply and along which such glass may flow in a stream, a cover structure for the channel and cooperating therewith to provide a conditioning chamber for the glass in a portion of the channel, a combustion space adjacent to the channel and communicating with the space above the glass of a side portion of a stream through a narrow passage extending along the side of said conditioning chamber for the greater part of the length of the chamber, a baffle lip at the inner side of said passage for deflecting heated gases downwardly onto the glass at the adjacent side of said channel, a burner arranged to discharge laterally inward through the outer wall of said combustion chamber, said burner being located approximately intermediate the length of the combustion chamber, baffle means extending parallel with said chamber for preventing direct projection of flame from said burner into said communicating passage between the combustion chamber and the space above the forehearth channel and for distributing flame from the burner longitudinally of said communicating passage, and means for admitting air adjacent to said burner tip to support combustion and to aid in effecting practically complete combustion at a relatively short distance from said burner tip.

1,900,363. HEAT EXCHANGE APPARATUS. EMILE J. PARENT, Hartford, Conn., assignor to The Whitlock Coil Pipe Company. West Hartford. Conn.. a Corporation of Connecticut. Filed May 15, 1931. Serial No. 537,645. 15 Claims. (Cl. 257—206.)



2. In a heat exchange apparatus of the character described, structure defining a waste water pit and having in its floor a longitudinally extending narrow groove, a preheater apparatus positioned in said pit and comprising a unitary structure having a plurality of stages, partition means dividing said pit into a plurality of waste water chambers and including a longitudinally extending metal partition member positioned between the stages of said preheater and having its lower edge engaged in said groove, said chambers being connected in series and each having an inlet at one end and adjacent the top, and an outlet at the other end adjacent the bottom.

1,900,364. GUN PORT FOR BULLET-RESISTING STRUCTURES. SYLVAN R. POPP, Minneapolis, Minn., assignor to O. B. McClintock Company, Minneapolis. Minn.. a Corporation of Minnesota. Filed Jan. 15. 1932. Serial No. 586,916. 11 Claims. (Cl. 89—36.)

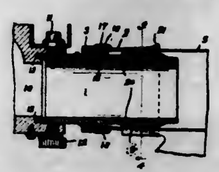


1. A panel having a gun port, a self-closing closure for the gun port, an automatic latch for holding the closure closed, and common means by which the latch may be released and the closure opened.

1,900,365. CONDENSATION PRODUCT FROM ALIPHATIC ALDEHYDES AND BASES OF THE NAPHTHALENE SERIES. ERICH RIETZ and WILHELM HOFFMANN, Elberfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 9, 1929. Serial No. 361,840. 13 Claims. (Cl. 260—130.)

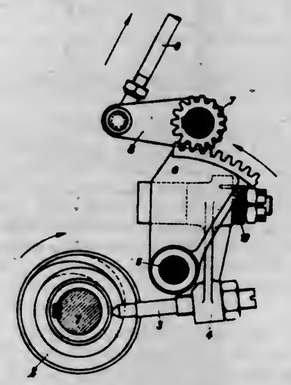
1. In the process of preparing new anti-oxidants, the step which comprises heating alpha-naphthylamine with an aldehyde of the group consisting of acetaldehyde, crotonaldehyde and aldol in the presence of an acid and of a water-soluble alcohol until the reaction product has separated.

1,900,366. BAG COUPLING. FREDERICK RIEBEL, Jr., and DEWEY M. DOW, Toledo, Ohio, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed May 28, 1931. Serial No. 540,525. 7 Claims. (Cl. 285—71.)



1. A suction cleaner bag coupling comprising a tube forming a continuation of the fan casing outlet of said cleaner, an annular enlargement formed on said tube toward its projecting end, a sleeve encircling said tube between the fan casing and said projecting end, said sleeve being tapered outwardly toward said end and slidable axially on said tube, an intermediate region of the interior tapered surface thereof being adapted to contact the exterior surface of said enlargement, and means located between the fan casing and projecting end of said tube, to axially advance and securely hold said sleeve in engagement with a bag neck received between said sleeve and said enlargement.

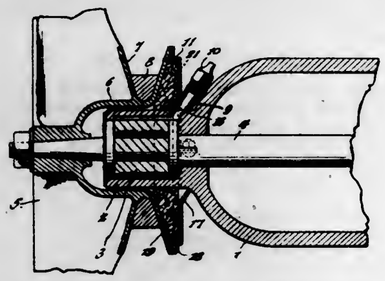
1,900,367. MEANS FOR STARTING INTERNAL COMBUSTION ENGINES. LAZAR SCHARGORODSKY, Hanover, Germany, assignor to the Firm Hannoversche Maschinenbau-Actien-Gesellschaft vormals Georg Egestorff Hanomag, Hanover-Linden, Germany. Filed Aug. 15, 1930, Serial No. 475,610, and in Germany Nov. 7, 1929. 4 Claims. (Cl. 123—182.)



1. Mechanism for closing the exhaust when starting internal combustion engines comprising a rotary shaft formed with a worm portion, a second shaft, a toothed segment rotating about the second shaft, a lever arm pivotally associated with said segment, a pin carried by said

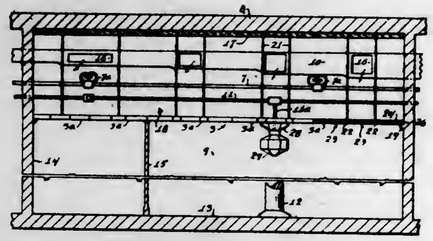
arm for engagement with said worm whereby on the worm shaft being rotated, the toothed segment rotates in one plane and the pin oscillates in a plane at right angles to the aforementioned plane in engagement with the worm.

1,900,368. LUBRICANT RETAINER. HARRY R. SHIFFER, Brownstown, Pa. Filed Aug. 3, 1931. Serial No. 554,854. 3 Claims. (Cl. 286—5.)



3. A grease-retaining device for the purposes stated comprising an absorbent washer, a backing disk consisting of two semi-circular members having recesses in their inner peripheries to fit around a bearing each provided with elements to penetrate the washer and prevent relative rotation of the same, mating lugs on the members of the disk, and fastening devices engaged through said lugs, one member of the disk having an inset portion at its inner periphery, and the other member of the disk having a similar outset portion at its inner periphery adapted to engage parts supporting a bearing about which the disk is fitted to prevent relative rotation and sidewise movement of the disk.

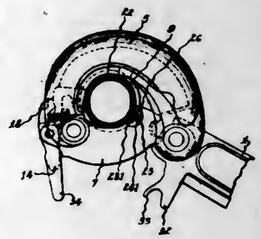
1,900,369. BUILDING CONSTRUCTION. HERBERT C. SMITH, Los Angeles, Calif. Filed Jan. 16, 1932. Serial No. 587,080. 5 Claims. (Cl. 20—4.)



1. In a structure having a ceiling, a plurality of inverted T metal frame members angularly intersecting one another to provide a skeletonized false ceiling spaced below the ceiling proper and defining a multiplicity of openings each bounded by an encompassing ledge, foraminous ceiling obscuring inserts one for each opening and resting on the corresponding ledge; said false ceiling and inserts obscuring the space between the false ceiling and the ceiling proper.

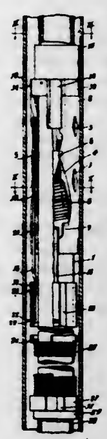
1,900,370. TONGS. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron Jackson Co., West Berkeley, Calif., a Corporation of Delaware. Filed Dec. 3, 1927, Serial No. 237,509. Renewed June 12, 1931. 7 Claims. (Cl. 81—66.)

7. In a pipe tong, a handle having associated therewith a plurality of arcuate pipe gripping jaws substantially forming a circle around a pipe to be engaged thereby, a pivot means interconnecting adjacent jaws for inward movement relative to each other to reduce the circle and for outward movement relative to each other to open the circle, a stop formed upon the exterior face of one jaw, a keeper comprising a bar pivoted to the exterior face of the adjacent jaw and extending across said pivot inter-



connecting said jaws for movement in a plane at right angles to the axis of said circle, a spring normally urging said bar toward the face of said adjacent jaw to abut the said stop for limiting outward movement of the jaws to prevent opening of the circle sufficient for the pipe to pass laterally out of the tong.

1,900,371. TUBING CATCHER. NELSON K. SMITH, Los Angeles, Calif., assignor to Byron-Jackson Co., Los Angeles, Calif., a Corporation of Delaware. Filed Mar. 4, 1932. Serial No. 596,728. 5 Claims. (Cl. 103—219.)



2. In a tubing catcher, a head adapted for connection to a string of tubing and having a bore therethrough in concentric alignment with the bore of the tubing, the wall of the head being thicker on one side than on the opposite side, a slip in the thicker wall of said head, and means for actuating said slip.

1,900,372. CORE FOR MOLDS. WESTERN UNDERWOOD, Santa Monica, Calif., assignor to La Lux Manufacturing Company, Los Angeles, Calif., a Corporation of California. Original application filed Dec. 14, 1927, Serial No. 239,915. Divided and this application filed Mar. 22, 1930. Serial No. 437,995. 2 Claims. (Cl. 25—118.)

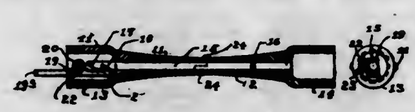
1. In combination, a tubular rotary post mold, an insert for the mold including a plate for attachment to one end of the mold, and a unitary tubular core fixed to the

plate to project through the mold to its other end, the plate projecting radially beyond the core to contact with an end of the mold and having an opening in the pro-



jecting part to admit material into the mold and a mounting member to connect said end of the mold with a rotating device, said member closing said opening.

1,900,373. HAIR CURLER OR HAIR WAVE WINDER. FRANK SEHRING, Brooklyn, N. Y. Filed Oct. 8, 1932. Serial No. 636,800. 9 Claims. (Cl. 132—33.)



1. A hair curler or hair wave winder comprising multiple sections, pawl and rack engaging means, for detachably connecting said sections to each other, and a pawl disengaging means for readily disconnecting said sections from each other, whereby the sections of said hair curler or hair wave winder may be removed from a curl when the latter is completed and the curler employed to successively wind a number of curls.

1,900,374. BLADE SHARPENER AND THE LIKE. HOMER D. TRACY, Ridgewood, N. J. Filed Jan. 18, 1930. Serial No. 421,717. 3 Claims. (Cl. 51—195.)



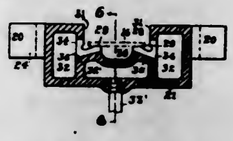
1. A device for sharpening the edge of a flat blade comprising a pair of members adapted to clamp between them the blade to be sharpened and one of which is slidable on the clamping surface of the other, each member having its clamping surface an attrition surface and yieldable to the interposed blade.

1,900,375. EASEL. JOHN WATSON, Passaic, N. J., assignor to Sweeney Lithograph Co., Inc., Belleville, N. J., a Corporation of New York. Filed Oct. 21, 1932. Serial No. 638,889. 17 Claims. (Cl. 40—125.)



4. An easel for flexible posters, comprising an intermediate member, an end member hingedly connected with one end of said intermediate member and having limited hinging movement thereon in one direction, and end member having a hinging and sliding connection with the opposite ed of said intermediate member and having restricted hinging movement in one direction, said end members having free end portions engageable with the edge strips of a flexible poster.

1,900,376. APPARATUS FOR WELDING TUBES. FRED W. WEIR, Pittsburgh, Pa. Original application filed July 14, 1931, Serial No. 550,657. Divided and this application filed Jan. 9, 1932. Serial No. 585,720. 3 Claims. (Cl. 205—9.)



1. In an apparatus for welding together the heated edges of a metallic strip, a blower-head having a channel through which the strip is fed, lateral ports in the head opposite the edges of the strip, a chamber in the blower-head with which the ports communicate, and means to supply highly heated air under pressure to the chamber, the bottom of the channel having transverse ribs on which the strip rests, there being transverse passages between the ribs to conduct the said air from the ports into contact with the lower face of the strip near its edges.

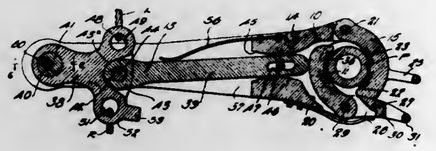
1,900,377. ORNAMENTAL CHAIN. KARL C. AUGENSTEIN, Cranston, R. I., assignor to Edwin F. M. Speidel, Edgewood, R. I. Filed Jan. 28, 1930. Serial No. 424,117. 4 Claims. (Cl. 59—80.)



1. An ornamental chain comprising a plurality of links, each having a pivot bar portion disposed at right angles to the length of the chain, and side sections spaced from

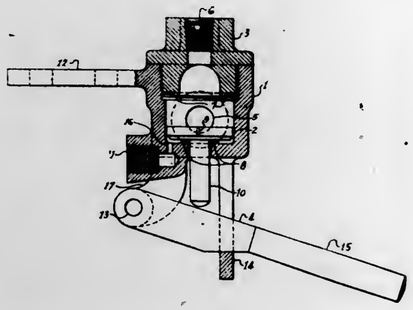
said pivot bar portion and connected thereto by offset arms, the ends of each side section being each lapped over the pivot bar portion of the next link and over each other to hingedly lock the links in parallel relationship.

1,900,378. TONGS. LAWRENCE F. BAASH, Los Angeles, and WILLIAM H. MAXWELL, Beverly Hills, Calif. Filed Aug. 25, 1930. Serial No. 477,586. 11 Claims. (Cl. 81—53.)



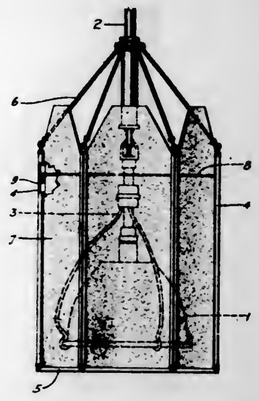
1. A tool of the character described including, a pipe encircling means including an inner part having an opening adapted to receive an object, and a gate adapted to retain an object in the opening, a gripping jaw pivotally carried by the means, a handle on the inner part and means on the handle for operating the jaw into engagement with the object including two pivotally connected toggle links, one of the links being pivoted to the handle adjacent its outer end, the other being adapted to directly engage the jaw, means in the handle for slidably guiding the said other link, and means for adjusting the links longitudinally relative to the jaw to adapt the tool for handling pipe of different diameters.

1,900,379. CONTROL VALVE FOR LOW WATER ALARMS. HARRY W. CODDINGTON, Roanoke, Va. Filed Feb. 13, 1932. Serial No. 592,708. 9 Claims. (Cl. 251—118.)



1. A fluid-pressure control valve for low water alarms, including a body having an inlet opening for admitting fluid pressure from the alarm valve and an outlet opening adapted for fluid connection with the alarm element, and valve means inside said body, said valve means being arranged to lie normally in a position to permit free passage of pressure fluid from the alarm valve to the alarm element through said control valve and to be held in said position by the presence of fluid pressure inside the body thereof, and an orifice of reduced size around said valve means whereby a small predetermined amound of fluid may escape past said valve means to the atmosphere when said valve means is in the first mentioned position.

1,900,380. LIGHTING FIXTURE. REUBEN B. HALM, San Francisco, Calif. Filed Apr. 4, 1932. Serial No. 602,932. 4 Claims. (Cl. 240—78.)

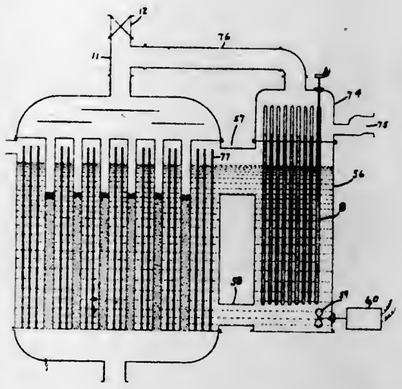


1. In a lighting fixture, a source of light, means associated therewith for giving off a diffused beam and a reflected beam, and a casing for said means having an aperture in the path of said reflected beam and diffusing means in the path of said diffused beam.

1,900,381. SYSTEM FOR PRODUCING GYPSUM. WALDEMAR C. HANSEN, Westfield, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed June 9, 1931. Serial No. 543,241. 15 Claims. (Cl. 222—6.)

1. A process of treating acidulous by-product gypsum which comprises subjecting the same to a calcining operation in the presence of a neutralizing agent.

1,900,382. CATALYTIC APPARATUS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 23, 1928. Serial No. 256,189. 6 Claims. (Cl. 23—288.)

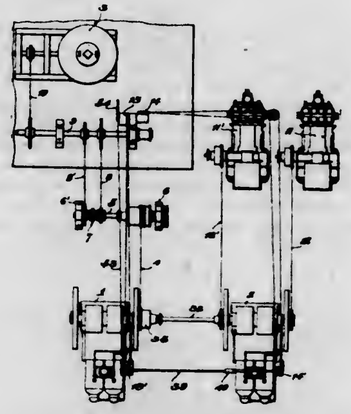


6. A converter comprising in combination a plurality of catalyst containing compartments, a normally non-boiling bath liquid at normal operating temperatures surrounding said compartments, a portion of the converter separated from the catalyst containing compartments by baffling means but provided with connecting means with the top and bottom of the portion of the converter containing the catalyst compartments, the lowest part of the top connection being below the level of the non-boiling bath, heat exchange elements in said remote portions, said heat exchange elements having a portion in heat exchange relation with the non-boiling bath and a portion out of heat exchange relation therewith.

1,900,383. CONTACT SULPHURIC ACID PROCESS. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 1, 1931. Serial No. 541,328. 8 Claims. (Cl. 23—175.)

1. A process of oxidizing sulphur dioxide to sulphur trioxide, which comprises bringing about reaction between sulphur dioxide and oxygen containing gases in the presence of a catalyst containing diatomite brick fragments with which are associated silver in chemical combination, vanadium in chemical combination and an alkali-forming metal in chemical combination.

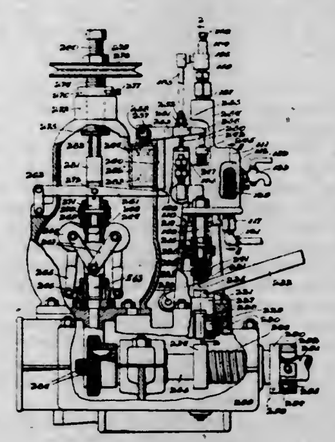
1,900,384. POWER PLANT FOR DRILLING APPARATUS. MARTIN KAHR, Franklin, Pa., assignor to Franklin Valveless Engine Company, Franklin, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1926. Serial No. 97,417. 9 Claims. (Cl. 255—19.)



5. In rotary drilling apparatus including drilling mechanism and pumping mechanism, an engine for operating each of said mechanisms, and means for combining said engines to operate either of said mechanisms conjointly.

1,900,385. FUEL FEEDING MEANS. MARTIN KAHR, Franklin, Pa., assignor to Franklin Valveless Engine Company, Franklin, Pa., a Corporation of Pennsylvania. Original application filed Mar. 5, 1926, Serial No. 92,573. Divided and this application filed May 19, 1927. Serial No. 192,674. 8 Claims. (Cl. 123—140.)

1. In an internal combustion engine including an engine cylinder and an injection device for injecting liquid fuel thereinto, a pump including a plunger for forcing fuel through said injection device, a by-pass for the fuel, a valve controlling said by-pass and adapted to be moved to open position only during the fuel forcing stroke of said plunger, and means for operating said by-pass valve including a lever cooperating with the stem of said by-pass valve, means for continuously maintaining said lever in pivotal contact with said stem, a fulcrum device for said lever, means responsive to the speed of the engine for variously positioning said fulcrum device, and means positively movable by the plunger of said pump during its

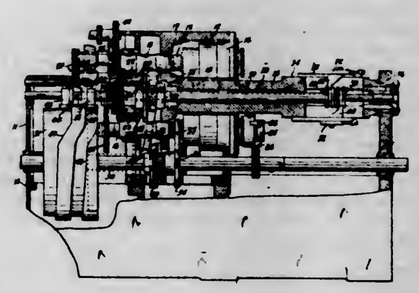


forcing stroke only for moving said lever about said fulcrum and thereby actuating the valve stem through the pivotal contact therewith of said lever.

1,900,386. ABRASIVE PRODUCT AND METHOD OF MAKING THE SAME. JOSEPH NESTOR KUZMICK, Passaic, N. J., assignor of one-half to The Manhattan Rubber Manufacturing Division of Raybestos-Manhattan, Inc., Passaic, N. J., a Corporation of New Jersey, and one-half to John Stogdell Stokes, Spring Valley Farms, Pa. Filed June 24, 1929. Serial No. 373,492. 4 Claims. (Cl. 51—280.)

1. An abrasive composition comprising, abrasive granules and synthetic resin wetted with benzaldebyde, the proportion of the benzaldebyde being low and of the order of 1½% by weight of the composition when using a fine grain of abrasive.

1,900,387. CHUCKING MACHINE. ARTHUR J. LEWIS, Stratford, Conn., assignor to The Baird Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 25, 1930. Serial No. 484,357. 25 Claims. (Cl. 29—38.)



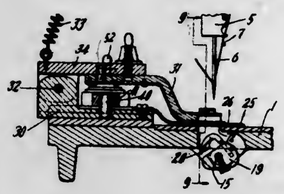
1. In a machine of the character described, a rotary turret, a plurality of work carrying spindles in said tur-

ret providing a plurality of loading stations adjacent each other on the same side of the turret and a plurality of working stations, means for driving the spindles at the working stations, and means for automatically indexing the turret in timed relation with the operation of the spindles to move each spindle the distance between alternate stations after the completion of each working cycle.

12. In a machine of the character described, a rotatable turret, a plurality of work spindles in said turret providing a plurality of loading stations and a plurality of working stations, chucks on the spindle at one loading station and alternate work stations to grip inwardly on the work, chucks on the spindle at the other loading station and the remaining working stations to grip outwardly on the same work, means at the work stations for driving the spindles, means for disconnecting the driving means from the spindles to permit indexing of the turret, tools at the work stations for performing machining operations on the work at these stations, means for feeding the tools, means for indexing the turret to shift each spindle a distance equal to twice the distance between adjacent spindles, and means for operating the spindle driving means, the tool feeding means and the indexing means in certain timed relation.

25. A method of machining a part comprising holding the part by gripping it on certain surfaces, partly machining the part in alternate stations while so held, then holding the partly machined part by gripping it on other surfaces, performing different machining operations at other alternate stations between the first stations while the part is so gripped, and shifting the part between successive operations to the next alternate station.

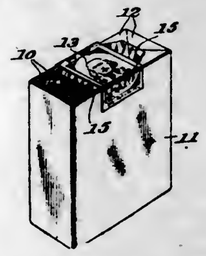
1,900,388. BUTTON SEWING MACHINE. ROBERT L. LYONS, Waltham, Mass. Filed May 17, 1930. Serial No. 453,214. 10 Claims. (Cl. 112—112.)



1. In a machine of the class described, sewing instrumentalities including a pair of needles, a shaft, and a pair of loopers carried by said shaft, a work table, means for supporting an article in position to be attached to work on said table by said instrumentalities, means for moving said article support laterally of the looper shaft alternately in opposite directions between successive sewing strokes of the needles, and means for engaging the threads between the needles and loopers whenever said support is in one of said positions and holding the thread loops in substantially the same relation thereto for cooperation with the needles as when the article support is in the other of said positions.

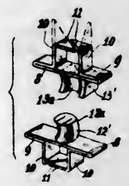
1,900,389. PACKAGE. JAMES H. REED, Marblehead, Mass. Filed Sept. 22, 1931. Serial No. 564,303. 2 Claims. (Cl. 206—56.)

1. A package of cigarettes or the like, comprising a wrapper having superimposed end closure flaps sealed together, a stamp affixed to said flaps, said flaps being cut away to provide a permanent removal opening adjacent said stamp, and a transparent closure member extending beneath the stamp and between said stamp and



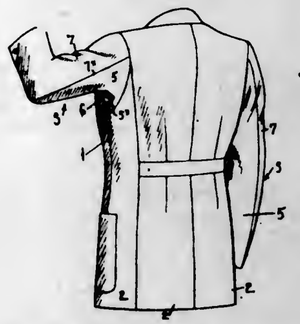
the sealed flaps, said member having a free end beyond the stamp adapted to be lifted to open the package and simultaneously rupture the stamp.

1,900,390. SEPARABLE FASTENER. JOHN A. H. SIMS, Jersey City, N. J. Filed June 29, 1931. Serial No. 547,590. 12 Claims. (Cl. 24—205.)



12. In a separable fastener, flexible supporting parts, a series of spaced fastener elements attached to one side face of each of said supporting parts, said elements in each series having interlocking lugs, said lugs on the opposing series of elements projecting in reverse directions and at oblique angles relative to the planes of the respective supporting parts and having co-acting means directly interlocking the opposed lugs with each other.

1,900,391. SLEEVE CONSTRUCTION. LEOPOLD SLANGER, Brooklyn, N. Y. Filed Apr. 6, 1931. Serial No. 527,911. 1 Claim. (Cl. 2—93.)

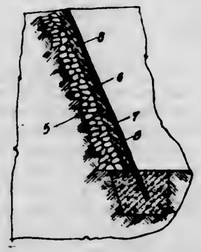


As a new and improved article of manufacture, a sleeve having a top section sewed at its edges to two bottom sections, the said bottom sections having projections of substantially triangular shape at their inner ends to form a tapered and depending projection, the combined widths of said bottom sections being less than the width of said top section, the adjacent edges of said bottom sections being sewed to each other.

1,900,392. PROCESS OF OBTAINING MAGNESIUM SULPHATE. HORACE E. STUMP, Lakeville, Conn., assignor to New England Lime Co., Pittsfield, Mass., a Corporation of Delaware. Filed June 16, 1931. Serial No. 544,921. 2 Claims. (Cl. 23—128.)

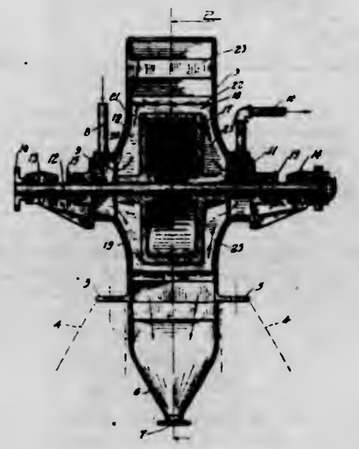
1. In the method of separating magnesium and calcium from a mixture of magnesium oxide and calcium carbonate, such as may be obtained by the partial calcining of magnesium limestone, the step which consists in subjecting such mixture to the action of sulphur dioxide and oxygen in the presence of water to form magnesium sulphate, the calcium carbonate remaining substantially unchanged.

1,900,393. DAM CONSTRUCTION. WILLIAM H. BAILEY, Pueblo, Colo., assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filed Feb. 9, 1931. Serial No. 514,492. 6 Claims. (Cl. 61—30.)



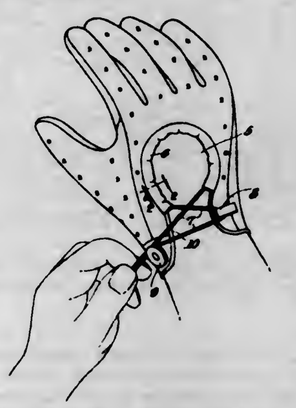
1. A metallic facing for a dam having a flat upstream face consisting of a series of channels each having a flat web and outwardly flared flanges, said channels being arranged to lie side by side with the edges of the flanges of adjacent channels in contact whereby to leave expansion spaces substantially triangular in cross section, said channels having their webs lying throughout against said upstream face and extending vertically thereof.

1,900,394. CENTRIFUGAL THICKENER. ROY H. CORTRELL, Ogden, Utah. Filed Dec. 28, 1931. Serial No. 583,595. 8 Claims. (Cl. 210—51.)



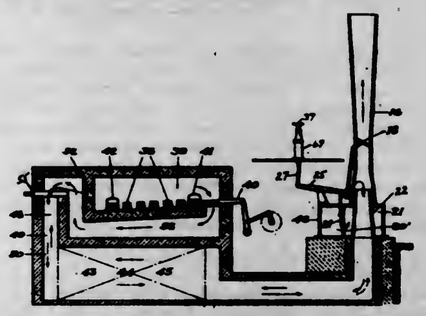
1. A centrifugal thickener comprising a stationary housing, and a rotor in the housing having a radial passage of uniform cross-sectional area, the housing having an inlet and an outlet disposed to cause material to traverse said passages in passing from the inlet to the outlet.

1,900,395. HAND BALL GLOVE. HARRY N. GITT, 2d, Hanover, Pa. Filed July 8, 1932. Serial No. 621,287. 7 Claims. (Cl. 2—19.)



1. A glove for hand ball or the like, said glove having an open back with guide tubing about the edges of such opening and a draw cord extending through said guide tubing and secured across the separated wrist portions at the back of the glove.

1,900,396. FURNACE CONSTRUCTION AND OPERATION. GEORGE H. ISLEY and GUSTAV A. MERET, Worcester, Mass., assignors to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 2, 1930. Serial No. 417,981. 4 Claims. (Cl. 263—15.)

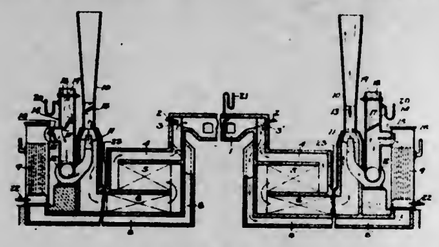


1. In a regenerative heating furnace, a heating chamber, two sets of fuel supply devices arranged at one end of said chamber and adapted to be rendered alternately active and inactive as the furnace in operation is periodically reversed, an air regenerator associated with each fuel supply device for the delivery of heated combustion-supporting air to said chamber when the associated fuel supply device is active, and a passage at all times maintaining each regenerator in unrestricted communication with the other end of said chamber, for the delivery of combustion products to said regenerator, when its associated fuel supply device is inactive.

1,900,397. OPERATION OF REGENERATIVE FURNACES. GEORGE H. ISLEY, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1931. Serial No. 521,974. 14 Claims. (Cl. 263—15.)

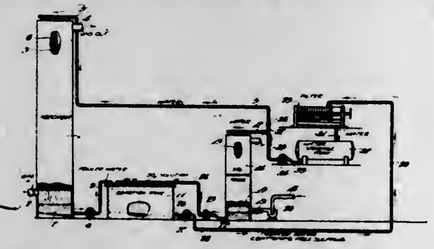
2. In the operation of a regenerative furnace, the improvement which consists in passing a portion of the combustion products of said furnace through a regenerator, to provide for heating of the air supply to said furnace

when the latter is reversed, passing another portion of said combustion products through a waste heat boiler, subjecting said second mentioned portion to the discharge action



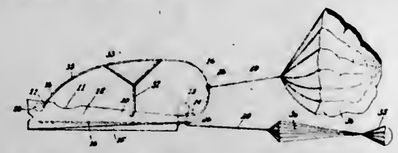
of a blower, and causing the entrainment and discharge of said first portion by the gases exhausted from said blower.

1,900,398. PROCESS FOR THE REMOVAL OF HYDROGEN SULPHIDE FROM GASES. DAVID L. JACOBSON, Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed May 14, 1930. Serial No. 452,380. 3 Claims. (Cl. 23—225.)



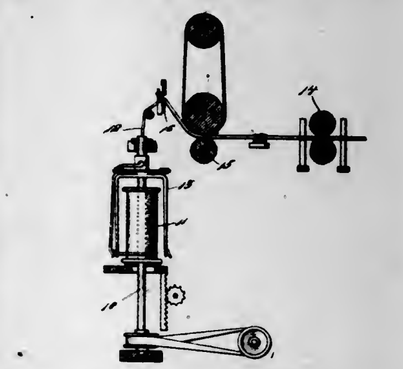
1. The process of removing hydrogen sulphide from a gas which comprises washing the gas with a liquid for the absorption of hydrogen sulphide therefrom, removing said liquid after contact with the gas and commingling it with a further quantity of liquid containing sulphur dioxide in solution, whereby the absorbed hydrogen sulphide is decomposed and free sulphur is liberated, removing sulphur from the liquid, separating a portion of the liquid, treating it to effect a substantial neutralization thereof, and recirculating it for further treatment of gas.

1,900,399. PARACHUTE PROJECTING DEVICE FOR AIRPLANES. ALBERT LAKEHURST, Brooklyn, N. Y., assignor to Lakewood Comet Aero Advertising Company, Lakewood, N. J. Filed Dec. 8, 1931. Serial No. 579,699. 3 Claims. (Cl. 244—21.)



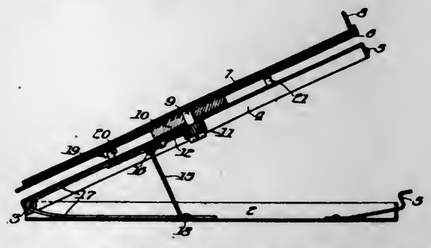
1. In combination with an airplane and a parachute, means for storing the parachute comprising a tube extending lengthwise of the plane, said tube being open at the rear end of the plane, a tubular guide secured within said tube and extending outward, upward, and forward above the plane, the forward end of said guide being secured to the plane ajacent the cockpit, a cable passing through said guide, a winding drum having said cable wound thereon, a sleeve surrounding said guide and having the parachute secured thereto, said cable upon being wound on said drum withdrawing the parachute from said tube along said guide.

1,900,400. STOP MOTION FOR GILL BOXES. WALTER J. SCOTT, Woonsocket, R. I. Filed May 29, 1930. Serial No. 458,291. 7 Claims. (Cl. 19—165.)



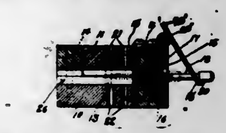
1. In a gill box, draft rolls acting upon the sliver as fed therethrough, means for receiving the treated sliver, stop mechanism intermediate said rolls and receiving means, said stop mechanism including a plurality of flexible feeler members rigidly secured at one end with their free ends independently movable and extending to a position adjacent the traveling sliver, a contact member normally spaced from said feeler members, whereby an abnormally thickened portion in the sliver will engage and move the free end of one of said feeler member into engagement with said contact member to complete an electric circuit snd stop the machine.

1,900,401. SCORING DEVICE. REES T. SCULLY, Pittsburgh, Pa. Filed Nov. 14, 1931. Serial No. 575,053. 13 Claims. (Cl. 281—44.)



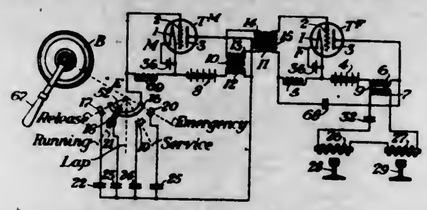
1. A scoring device including a base member, a spring-pressed movable plate-member hingedly connected to the base, a revoluble score-pad carrier mounted on the plate-member, and automatically operable means for revolving the carrier upon a movement of the plate member.

1,900,402. APPARATUS FOR MAKING A BELT SPLICE. WILLIAM J. SCULLEY, Palmyra, N. J. Filed Feb. 9, 1932. Serial No. 591,917. 6 Claims. (Cl. 69—20.)



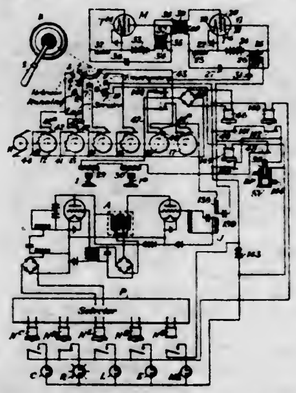
1. An apparatus for use in making belt splices comprising a clamping member, a knife positioned to be driven into the end of a belt clamped by the clamping member, and guides for directing tools for forming transverse perforations through the belt.

1,900,403. APPARATUS FOR THE CONTROL OF TRAIN BRAKES. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,593. 19 Claims. (Cl. 246—63.)



1. Apparatus for the control of train brakes comprising, in combination with the usual engineer's valve on the locomotive, a source of carrier current on the locomotive, means for modulating the output of said source at different frequencies for different positions of said engineer's valve, auxiliary brake controlling mechanism at another point on the train capable of reproducing the functions of the engineer's valve, and controlling means associated with said auxiliary mechanism and selectively responsive to the several modulations of said carrier current for causing the condition of the auxiliary mechanism to register with the position of the engineer's valve.

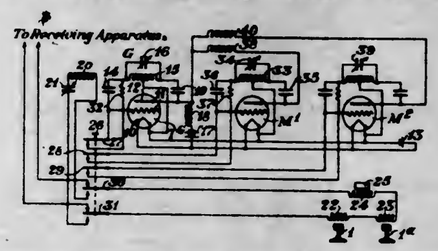
1,900,404. APPARATUS FOR THE CONTROL OF VEHICLE BRAKES. LARS O. GRONDAHL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Mar. 21, 1931. Serial No. 524,805. 21 Claims. (Cl. 246—63.)



1. Apparatus for the control of the brakes of a vehicle including, a brake controlling mechanism capable of producing the release, running, lap, service and emergency functions of the vehicle brakes, electroresponsive means associated with the brake controlling mechanism selectively responsive to different codes of current for causing the brake controlling mechanism to produce the several different brake functions, a current source adapted to supply the different codes of current to said electroresponsive means, and means to select the code to be supplied by said source and thereby determine the brake function produced.

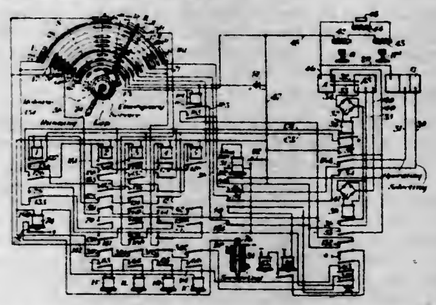
1,900,405. ELECTRIC TRAIN SIGNALING SYSTEM. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1931. Serial No. 527,124. 18 Claims. (Cl. 246—63.)

1. In combination, a railway train, a brake controlling mechanism having a plurality of operating functions, a transmitting means capable of supplying a carrier frequency current simultaneously modulated by different groups of low frequency currents, means for establishing the frequency of the carrier current and the frequencies of each of the modulating currents of the transmitting means of the train, a manually operated device adapted to select a different group of the modulating currents for each of the different operating functions of the brake



mechanism, a receiving means responsive to the modulated carrier current supplied by the transmitting means for causing the operating function of the brake mechanism to register with that selected by the manually operated means, and selecting means to adjust said receiving means to respond to the current supplied by the transmitting means of that train and none other.

1,900,406. ELECTRIC CONTROL SYSTEM. LEE DEVOL, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1931. Serial No. 530,573. 23 Claims. (Cl. 246—63.)

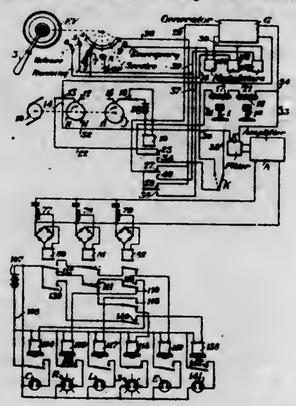


1. A control system including, a control station, a remote station, an operating mechanism at the remote station having a plurality of operating conditions, means including a source of current adapted to supply a selecting current impulse and an operating current impulse with said impulses having distinctive characteristics, coding means to produce a different code group of selecting impulses for each operating condition of said operating mechanism, a transmitting means at said control station to transmit any one of the different code groups of selecting impulses and an operating impulse, a receiving means at the remote station selectively responsive to the different code groups of selecting impulses and to said operating impulse for causing the operating mechanism to establish any desired operating condition, and means to continue to transmit and to receive operating impulses only to retain the operating mechanism in the condition established.

1,900,407. ELECTRIC CONTROL SYSTEM. LARS O. GRONDAHL and ANDREW J. SORENSEN, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1931. Serial No. 530,580. 14 Claims. (Cl. 246—63.)

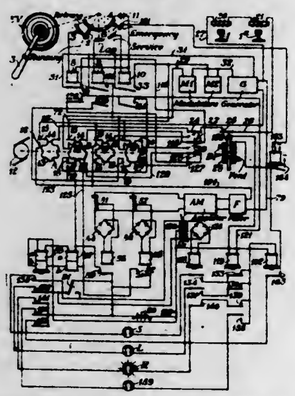
1. A control system including, a generator of carrier frequency current, means to supply a plurality of low fre-

quency currents of different frequencies, manually controlled means to modulate the carrier current with different combinations of the low frequency currents, automatic means to periodically close the output circuit of said generator of carrier current, a receiving circuit influenced by said output circuit, a plurality of electro-responsive



devices controlled by said receiving circuit selectively responsive to the different modulating frequencies and operated in step with the periodic closing of said output circuit, and control circuits selectively controlled by the different combinations of operated electroresponsive devices.

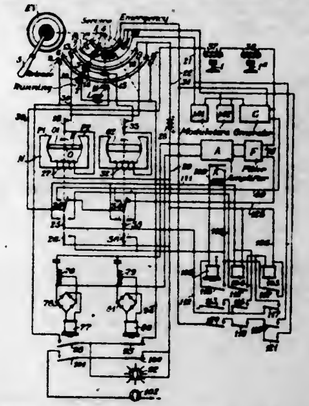
1,900,408. ELECTRIC CONTROL SYSTEM. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 11, 1931. Serial No. 536,390. 24 Claims. (Cl. 246—63.)



1. A control system including, a source of periodic impulses of current, means to modulate a plurality of successive impulses each with a distinctive characteristic in cyclic order, and a control means effectively influenced by the cyclic order of said successive impulses.

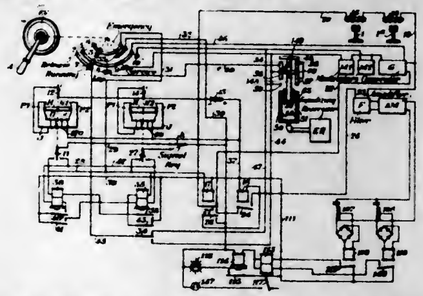
1,900,409. ELECTRIC CONTROL SYSTEM. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 27, 1931. Serial No. 540,351. 16 Claims. (Cl. 246—63.)

1. A control system including, a transmitting circuit, means to supply to the transmitting circuit a plurality of different codes each consisting of periodic impulses of current simultaneously affected by a distinctive rate of occurrence and modulation, a first receiving means controlled by said transmitting circuit selectively responsive to the rate of occurrence of the impulses of the different codes, a second receiving means controlled by the trans-



mitting circuit selectively responsive to the modulation of the impulses of the different codes, and an operating mechanism jointly controlled by said two receiving means.

1,900,410. ELECTRIC CONTROL SYSTEM. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1931. Serial No. 567,549. 15 Claims. (Cl. 246—63.)

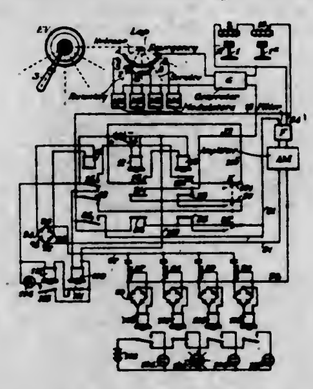


1. Apparatus for the control of the brakes of a railway train including; a manually operated brake controlling mechanism capable of producing a running, a lap and a brake applying condition of the train brakes; a signaling device adapted to display a different signal for each condition of the train brakes, an electroresponsive means selectively responsive to different codes of current to select the different signals and thereby determine the condition to be established by the operator of said brake controlling mechanism, means located at a remote point on the train capable of transmitting different current codes to said electroresponsive means, and a manually operated device at said remote point to select the different current codes.

1,900,411. ELECTRIC CONTROL SYSTEM. LARS O. GRONDAHL and ANDREW J. SORENSEN, Pittsburgh, Pa., assignors to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1931. Serial No. 574,093. 11 Claims. (Cl. 246—63.)

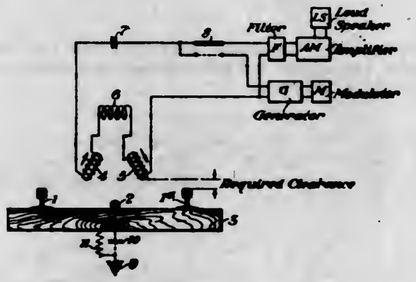
1. A control system for the brakes of a railway train including; a brake controlling mechanism at one location on a train adapted to establish different functional conditions of the train brakes, an indicating mechanism at another location on the train capable of establishing a different indication for each condition of the brake control-

ling mechanism, a source of carrier current, means at each location to impress a different modulating frequency for each functional condition of the train brakes on said carrier current, transmitting means associated with each location to alternately exchange between the two locations periodic impulses of modulated carrier current, receiving means at each location responsive to modulated



carrier current impulses, a plurality of multiple circuits at each location receiving current from the receiving means tuned respectively to the different modulating frequencies and each including a slow-release electromagnet for maintaining a steady condition of the associated mechanism corresponding to the modulation in response to the periodic impulses.

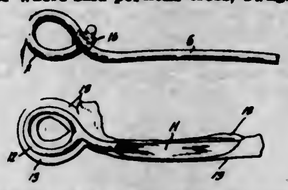
1,900,412. ELECTRIC TRAIN SIGNALING SYSTEM. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1931. Serial No. 578,645. 13 Claims. (Cl. 246—63.)



1. Train signaling apparatus including, three windings mounted on a train disposed in inductive relation with a single trackway conductor characterized by the fact that two of said windings add their inductive effects created by current flowing in said conductor while the third winding opposes, said third winding so positioned and proportioned as to cause but a relatively small cancelling of the induction by current in the conductor while balancing out the induction of said first two windings due to any space-uniform magnetic field.

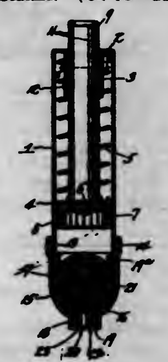
1,900,413. METHOD OF MAKING SHEARS. EDWARD W. CARPENTER, Fairfield, Conn., assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 6, 1931. Serial No. 548,740. 6 Claims. (Cl. 76—104.)

1. The method of making a shear blade and loop consisting in doubling an end portion of a wire upon and across itself to form a loop, welding the portions of the wire together where said portions cross, swaging the wire



in forming dies to form a solid blade and loop, and finishing the formed blade and loop.

1,900,414. FLUID PRESSURE GAUGE. JOHN ELLERBE, New York, and MAGNUS CRONWALL, Brooklyn, N. Y., assignors to A. Schrader's Son, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,786. 6 Claims. (Cl. 73—111.)



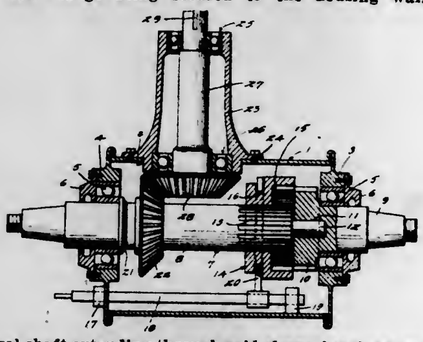
8. In a fluid pressure gauge, the combination with a cylinder provided at one end with a rounded housing having an elongated slot therein, of a piston movable in said cylinder, a stem reciprocable by said piston, a pressure resistance interposed between said piston and the other end of said housing, said pressure resistance being adapted to react with a pressure proportional to the displacement of said piston, and a member slidably contacting with the inner wall of said rounded housing and provided with a port-opening connection presented through and adjustable along said elongated slot.

6. A fluid pressure gauge comprising a receptacle provided with fluid pressure measuring means and having a cylindrical portion, a rounded housing connected to the open end of said cylindrical portion, a ball articulated in said rounded housing, a press-on foot connected to said ball said ball being provided with a port-opening communicating with the interior of the cylindrical portion and with the press-on foot in all articulated positions of the ball and means for limiting the articulation of the ball so that the press-on foot may be disposed in any position between coaxial alinement with, and normal to the cylindrical axis.

1,900,415. POWER TAKE-OFF FOR MOTOR VEHICLES. GEORGE A. FULLERTON, Clarendon, Pa. Filed Oct. 13, 1931. Serial No. 568,593. 1 Claim. (Cl. 71—1.)

A power take-off device for a motor vehicle, comprising an elongated housing having a head at each end, a bearing mounted in each head, said housing having an opening through the side wall thereof, a shaft mounted in one bearing and extending longitudinally into the housing and terminating at its inner end in a central longitudinally extending pin, a stub shaft mounted in the other of said bearings and formed at its inner end within the housing to provide an integral gear, an internal gear slidable on said first shaft to mesh with said gear when moved to one position, the said pin being rotatably mounted in the adjacent end of the stub shaft, a guide element mounted upon the inner wall of the housing, a bearing guide formed

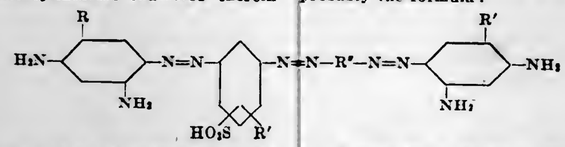
through one of said heads, a bar slidably mounted in said bearing guide and said guide element and extending to the exterior of the housing, a fork carried by said bar and engaging said internal gear, a sleeve having a flange thereabout inwardly of one end and having the said one end extended through the opening in the housing wall, the said flange being secured to the housing wall, a



lateral shaft extending through said sleeve, bearings mounted in the ends of said sleeve and supporting said lateral shaft, a beveled gear upon said lateral shaft within said housing and a beveled gear upon the first mentioned shaft and permanently in mesh with the other beveled gear, the said first shaft and stub shaft being formed at their outer ends to facilitate their connection in the drive shaft of a motor vehicle.

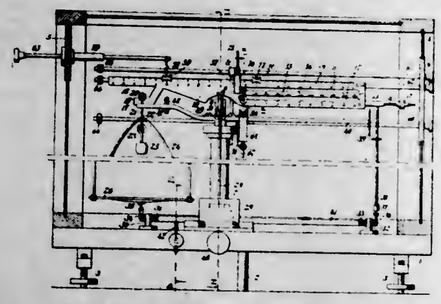
1,900,416. ROTARY PUMP. ADOLPH IZBICKI, Cambridge, Mass. Filed Dec. 5, 1929. Serial No. 411,780. 5 Claims. (Cl. 103—132.)

1. In a rotary pump, the combination of a casing having two approximately parallel cylindrical chambers therein

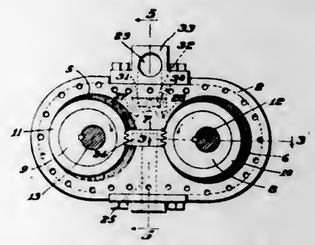


in which R and R' each denotes a hydrogen atom or an alkyl group, and R'' denotes a benzene or naphthalene nucleus which may contain alkyl and/or alkoxy groups as substituents in the nucleus but is otherwise free from substituents; said dyestuffs in the form of their sodium salts and in the dry and pulverised state being brown powders soluble in water, and which from a neutral or alkaline bath dye cotton various shades of brown which may be developed on the fibre by diazotization and treatment with a diamine of the benzene series.

1,900,418. BEAM SCALE. JACOB EMIL SEEDERER, Jersey City, N. J., assignor to Seederer-Kohlbusch, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed May 9, 1929. Serial No. 361,574. 15 Claims. (Cl. 265—49.)



1. A beam scale comprising a case, a beam pivoted therein having a longitudinal slot and notches in said slot, located side by side and closely adjacent to each other with a guideway connecting them at their points of closest approach to each other, two eccentrics mounted, respectively, in said chambers, sleeves encircling the respective eccentrics, driving means for rotating said eccentrics in a fixed relationship to each other, a rigid slide fitting snugly in said guideway for reciprocating movement there-



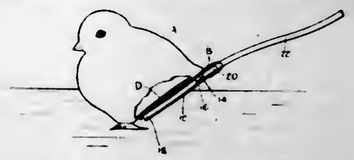
through in a fixed path, the opposite end faces of said slide each being provided with a plurality of teeth, and said sleeve each having a plurality of similar teeth fitting between the teeth on the ends of said slide, whereby the sleeves can move up and down relatively to said slide while their engagement with the slide remains uninterrupted, and intake and exhaust ports for said chambers.

1,900,417. PRODUCTION OF AZO DYE. RALPH B. PAYNE, Elma, N. Y., assignor to National Aniline & Chemical Co. Inc., New York, N. Y., a Corporation of New York. Filed July 18, 1929. Serial No. 379,331. 4 Claims. (Cl. 260—72.)

1. The trisazo dyestuffs having in the free state most probably the formula:

a rolling poise in said slot cooperating with the notches therein, and means for manipulating said rolling poise exteriorly of said case.

1,900,419. TOY. LEO RANNEY, New York, and HARCOURT F. GADE, Brooklyn, N. Y.; said Gade assignor to said Ranney. Filed Dec. 12, 1930. Serial No. 501,818. 8 Claims. (Cl. 46—40.)

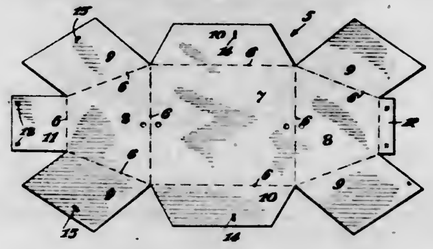


1. A swimming and whistling toy adapted to float on the surface of a body of water, said toy including an inclined submerged trough-like surface, and a whistle so mounted on the toy that the discharge end of the same releases air bubbles beneath the lower end of said surface, which bubbles rise and expand in contact with the surface and thereby propel the toy over the surface of the water.

1,900,420. HAT BOX. WILLIAM T. SHRADER, Norwalk, Conn., assignor to The American Hat Co. Inc., Norwalk, Conn., a Corporation of Connecticut. Filed Dec. 11, 1929. Serial No. 413,168. 1 Claim. (Cl. 229—22.)

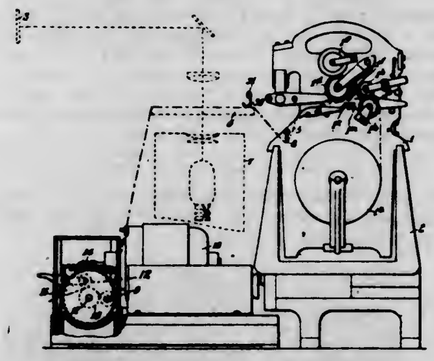
A collapsible box or container formed from a single blank of cardboard material scored to provide relatively foldable parts, including a rectangular bottom wall, one

piece tapering side walls connected at their wider ends with opposite edges of the bottom wall, one of said side walls at its free end having a foldable flap and the other of said side walls at its free end having a top for the box hingedly connected therewith, relatively foldable sections hingedly connected with opposite edges of each of said side walls, the said sections at corresponding edges of the side walls being foldable inwardly with respect thereto to extend in overlapping relation upon each other along the other edges of the bottom wall, relatively narrow flaps



hingedly connected with the edges of the bottom wall and foldable upon said overlapping side wall sections, bendable fastener elements fixed to the underlying side wall sections engageable through openings in the other side wall sections and in said flaps and bendable upon the latter to releasably retain said wall sections and flaps in superimposed relation, said top section for the box overlapping upon said flap on the first named side wall of the box, and additional means for releasably fastening the free end of said top wall section to said flap.

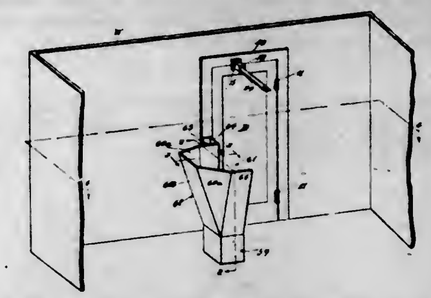
1,900,421. TAPE PULLER. EDWARD H. UNKLES, Weehawken, N. J., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 15, 1928, Serial No. 261,990. Renewed May 20, 1932. 9 Claims. (Cl. 271—2.4.)



1. In a tape feeding mechanism, means to stop the movement of the tape independent of the feeding means, said means comprising a pivoted member having one arm thereof controlled by the variations in a loop of the tape whereby the other arm is caused to impede movement of the tape.

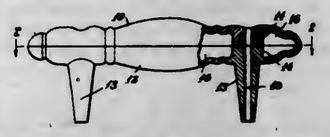
1,900,422. ENTRANCE CONTROL. DONALD J. WALLACE, Long Beach, Calif., assignor of one-half to Roland H. Mulford, Long Beach, Calif. Filed Nov. 13, 1928. Serial No. 319,115. 7 Claims. (Cl. 20—16.)

7. In enclosure for controlling the passage of individuals through a predetermined path a wall structure having an entrance way, the lower part of the wall structure defining a relatively restricted foot-receiving space, and



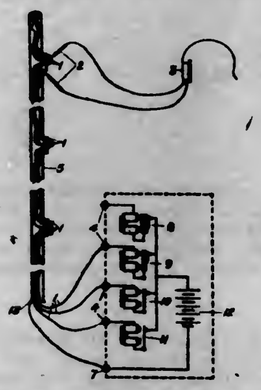
the wall structure above said lower part flaring upwardly and outwardly from the foot-receiving space to define a space of relatively large size.

1,900,423. HANDLE. LLEWELLYN MARSH WILLEY, Hoosick Falls, N. Y., assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y., a Corporation of New York. Filed Nov. 7, 1928. Serial No. 317,781. 3 Claims. (Cl. 16—116.)



1. A handle, comprising two hollow shell sections, comprising molded heat-insulating composition material of organic origin, adapted to fit together and combined with screw means, penetrating both sections to hold them together; each of these shell sections having two interior medial bosses, one of which is located near each end of the handle, and each of which bosses stands opposed to a boss on the other section; and there being an orifice for a screw to pass through each said pair of bosses and across the cleavage between shell sections with the boss material closely surrounding the screw, each of which screws secures the sections together and to the device on which the handle is to serve.

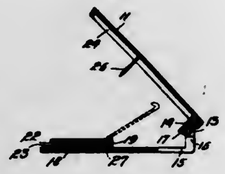
1,900,424. ELECTRICAL TESTING. EUGENE WOODBURY, Lincoln Park, N. J. Filed Sept. 27, 1927. Serial No. 222,380. 7 Claims. (Cl. 175—183.)



1. The method of identifying a plurality of electrical conductors at different points along their length which comprises applying a current which varies in magnitude

at a definite time rate to one conductor and applying currents which vary at different time rates to the other conductors and causing said currents to produce different, distinctive indications at said different points along their length, whereby they may be identified.

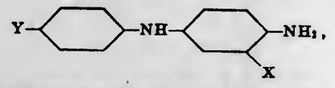
1,900,425. ARTICLE OF JEWELRY. PHILIP BENJAMIN, New York, N. Y. Filed Nov. 24, 1930. Serial No. 497,720. 3 Claims. (Cl. 63—20.)



1. An article of jewelry such as a clasp or brooch, including a back plate having a flat inner surface throughout, an ornamental front plate, a hinge connecting the plates at corresponding edges, a relatively small receptacle rigidly mounted on the inner surface of the back plate and adjacent its opposite edge, and considerably removed from the other edge, the receptacle being bordered by and entirely set back from projecting edge portions of the back plate, a cover plate for the receptacle and similarly back from the projecting edge portions, a hinge connecting the cover plate with the inner end of the receptacle, a snap fastening for securing the cover plate in closed position on the receptacle, and an inner flange on the face plate having such width and length as to oppose said projecting edge portions and surround the receptacle when the plates are closed, the plates being sufficiently separated, when closed together, to receive and be engaged over the material on which the clasp is to be worn so as to leave the front plate visible, and the back plate and small receptacle concealed, and means for securing the clasp to such material.

1,900,426. SUBSTITUTED AMINO-DIPHENYLAMINE. JOHANN BÜSDORF and FRITZ LÖFLUND, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 16, 1929, Serial No. 393,111, and in Germany Oct. 9, 1928. 5 Claims. (Cl. 26—128.)

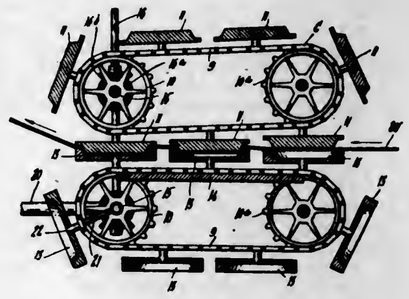
1. As new compounds the substituted amino-diphenylamine derivatives corresponding to the general formula:



wherein X' means chlorine, methyl or methoxy and Y means hydrogen, chlorine or methyl, which compounds are when dry colored crystallized substances, insoluble in water, having a definite melting point, capable of being diazotized whereby a nitrosodiazo-compound may be formed.

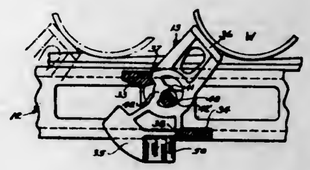
1,900,427. MANUFACTURE OF FIBROUS ARTICLES. ALBERT L. CLAPP, Danvers, Mass. Filed Dec. 20, 1927. Serial No. 241,436. 5 Claims. (Cl. 92—54.)

1. Steps in the manufacture of pulp articles, which comprise preparing an aqueous pulp suspension containing sufficient non-hydratable material to form a non-warping composition, interfelting the pulp into a web on a paper machine, removing the web while wet from the machine,



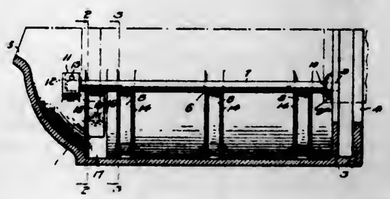
forming articles of the desired shape from the wet web, impregnating the articles with sodium silicate solution, and drying the treated articles.

1,900,428. CONVEYER FOR FURNACES. RALF S. COCHRAN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Mar. 21, 1931. Serial No. 524,290. 4 Claims. (Cl. 198—219.)



1. In apparatus for pushing work along a support, the combination of a reciprocable member, a trip dog carried by said member for engaging the work, a knife-edge bearing for rotatably supporting said dog, and means independent of said bearing for taking the thrust of the work against the dog, said knife-edge bearing comprising a pin secured to said member and an anvil on said dog overlying said pin.

1,900,429. LUBRICATING DEVICE. HARRY F. CUNNING, Roanoke, Va. Filed Oct. 7, 1929. Serial No. 397,967. 15 Claims. (Cl. 308—88.)

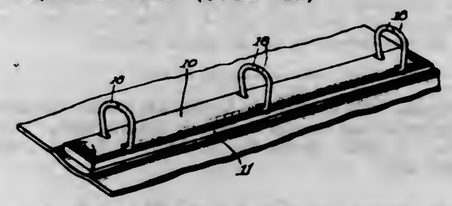


1. In a journal box adapted to receive a body of oil waste in a single mass in contact with the journal and the bottom of the box, means for maintaining the waste in contact with the journal, said means including a pivotally mounted member provided with a plurality of fingers movable upwardly toward the journal for elevating portions of the body of waste, said fingers being arranged to permit portions of the body of waste between them to sag downwardly so as to maintain a thread connection between the bottom of the box and the journal when the fingers are moved toward the latter.

1,900,430. WATER REPELLENT ABRASIVE. RUPERT S. DANIELS, Newark, N. J., assignor to Bakelite Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 15, 1928. Serial No. 306,292. 2 Claims. (Cl. 51—278.)

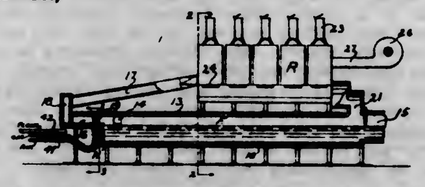
1. An abrasive implement for wet grinding having a porous structure prepared from abrasive particles bonded with a resinoid and impregnated with chlorinated naphthalene which is substantially free from mono- and dichlornaphthalenes.

1,900,431. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo. Filed Aug. 25, 1931. Serial No. 559,189. 2 Claims. (Cl. 129—24.)



2. In a loose leaf binder, a plate having marginal flanges, a pair of wire arch frames, each frame having bent portions, each engaging the corresponding portion of the other frame and carrying mating paper holding prongs and assembled between the flanges of the plate to form a toggle, whereby the prongs are held in open or closed position, a second pair of similar wire arch frames assembled in like manner between the flanges of the plate in end to end relation with the first pair, the prongs at the adjacent end of the second pair of frames being cut away to form stub portions too short for holding engagement with the paper to be bound, and means for binding one of the stub portions to the adjacent prong of the corresponding frame of said first pair whereby they are constrained to move in unison when the prongs are opened and closed.

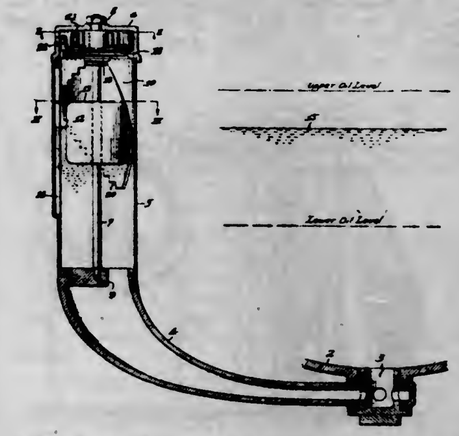
1,900,432. GLASS MELTING APPARATUS. ERNEST G. DE CORIOLIS, Toledo, and PERCY Q. WILLIAMS, Ottawa Hills, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Nov. 12, 1931. Serial No. 574,574. 10 Claims. (Cl. 49—54.)



1. In a glass melting furnace, the combination of an elongate melting tank, a roof overlying the tank in spaced relation and forming therewith an elongate combustion chamber, means for discharging fuel gas lengthwise of the chamber in spaced parallel streams without substantial turbulence and for supplying air without substantial turbulence between said streams for parallel flow therewith, said means being positioned at that end of said chamber adjacent to the charging end of the tank and being substantially as wide and high as the chamber at said end.

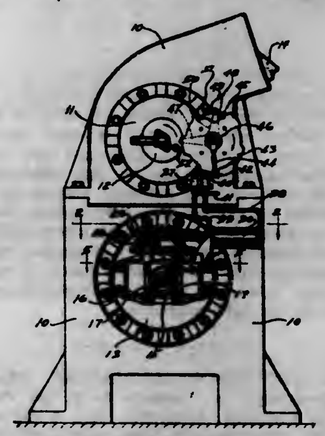
10. A method of producing molten glass in an elongate melting tank having an overlying roof forming with said tank an elongate heating chamber, comprising liberating heat within said chamber substantially uniformly crosswise of the tank and at a gradually increasing rate for a substantial distance lengthwise of the chamber, and feeding the raw material into that portion of the tank where the rate of heat liberation is increasing.

1,900,433. LIQUID LEVEL INDICATOR. STEPHEN DE ORLOW, Lansing, Mich. Filed Oct. 16, 1926. Serial No. 142,035. 5 Claims. (Cl. 73—82.)



5. In an indicator for determining the liquid level in a receptacle, a stepped gauge member supported within the receptacle and rotatable to move the steps in circular paths, a non-rotatable floatable member mounted to move in accordance with the rise and fall of the liquid level in a predetermined path, said members being relatively positioned so that rotation of the gauge member will cause engagement of a step thereof with the floatable member, the step engaged being determined by the position of the floatable member provided by the liquid level.

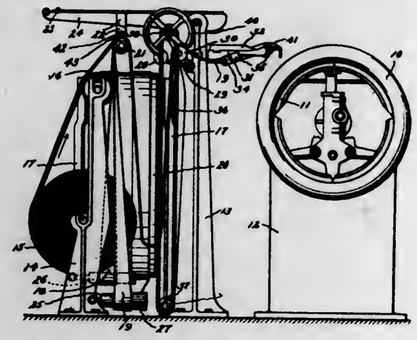
1,900,434. CUTTER FOR EXTRUDING MACHINES. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Apr. 15, 1929. Serial No. 355,168. 3 Claims. (Cl. 18—12.)



2. The combination comprising a rubber extruding machine, a pair of rotatably mounted double-edged cutters adjacent the extruding die of the machine and so posi-

tioned that the product passes between them and means operable to rotate the knives in the direction of the feed of the product to engage their cutting edges in the product and to present the back surface of the knives to the advancing product to be engaged thereby to aid in the rotating of the knives.

1,900,435. TIRE BUILDING METHOD. CHARLES H. DESAUTELS, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Original application filed Mar. 30, 1928, Serial No. 265,836. Divided and this application filed Aug. 8, 1929. Serial No. 384,419. 1 Claim. (Cl. 154—14.)



The method of preparing material for tire building purposes which comprises drawing a length of the material from a roll into loop form, allowing the material to stretch as it is thus drawn, and then allowing said loop of the material to remain stationary and contract free of tension before it is used.

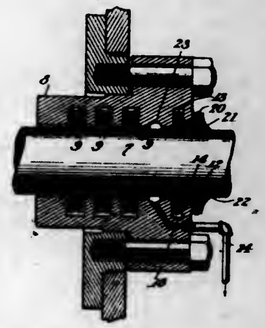
1,900,436. SYSTEM OF INDIRECT LIGHTING OF ALL SPACES. JEAN TIGRANE DOURGNON, Paris, France. Filed Apr. 18, 1929, Serial No. 356,150, and in France Apr. 25, 1928. 5 Claims. (Cl. 240—9.)



1. A system for indirect illumination of a localized space, comprising a diffusing surface forming a secondary light source, a primary source of light adjacent said diffusing surface and an optical dioptric, exclusively refractive; device to direct the light rays from the primary light source exclusively against said diffusing surface at a slight angle to said diffusing surface and substantially parallel to one another said optical device being obtained by rotation about an axis substantially normal to the said diffusing surface of a lenticular stepped contour, furnishing rays which define cones or segments of cones, whose bases are on the said surface and whose apices are at the light projector.

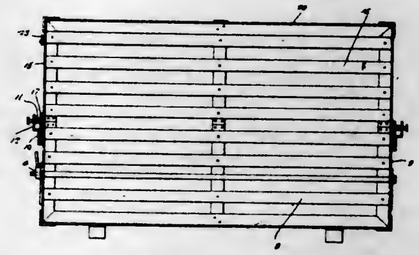
1,900,437. ROD WIPING MECHANISM. FRED D. DURHAM, Louisville, Ky., assignor to C. Lee Cook Manufacturing Company, Louisville, Ky., a Corporation of Kentucky. Filed Mar. 31, 1930. Serial No. 440,604. 3 Claims. (Cl. 286—24.)

3. In combination with a gland member and a rod slidably passing therethrough, and a wiping ring surrounding the rod and having its inner end interlocked with the internal portion of the gland member, said



ring projecting from one end of the gland member and having on its projecting end a wiping edge that acts on the rod externally of the gland member.

1,900,438. COLLAPSIBLE LUGGAGE RACK. EVERETT ERICKSON and GEORGE J. HOODY, Omaha, Nebr. Filed Mar. 6, 1931. Serial No. 520,692. 3 Claims. (Cl. 224—29.)

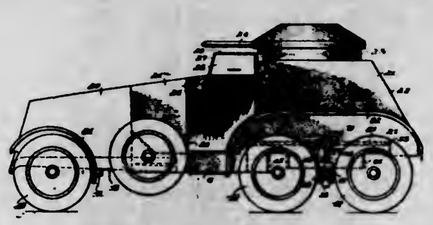


1. A collapsible luggage rack for motor vehicles and the like including brackets fixed to the vehicle; a pair of hingedly connected rack sections adapted to be folded one upon the other, one of said sections being pivoted intermediate its front and rear edges to said brackets to swing from a substantially horizontal position to a substantially vertical folded position between said brackets; stop members fixed to the rear edge of said one section to engage the body of the vehicle when the said one section is swung from the said vertical folded position to a substantially horizontal position; spring pressed pins slidably mounted on the said one section at relatively opposite sides thereof, extensions on corresponding sides of the other of said rack sections and having apertures to receive said pins to thereby retain the sections substantially horizontal and in extended alinement; and inter-engaging means on said other rack section and on one of said brackets to retain the sections in substantially vertical folded positions.

1,900,439. MOTOR VEHICLE. DAVID FERGUSSON, Rochester, N. Y., assignor to James Cunningham, Son & Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 8, 1931. Serial No. 561,589. 17 Claims. (Cl. 180—89.)

1. In a motor vehicle, a body including a compartment, an engine supporting frame extending forwardly of and connected with the walls of said compartment, wheels having axles for supporting said body, a longitudinally extending drive shaft operatively associated with the axles, springs extending longitudinally between

the axles and body, a floor for said compartment disposed in a plane above which portions of the axles are movable upon relative movement between the axles and body one toward another within the limits of movement of the spring suspension, said floor having side tunnels alined with the springs and transverse tunnels overlying



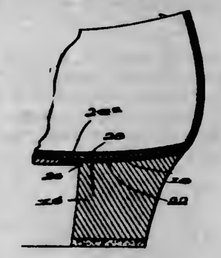
the axles and arranged to receive the latter when moved above the floor level and also having a tunnel overlying said shaft and arranged to receive the latter, arms extending upwardly from the axles, and radius rods connected with said arms and extending within the side tunnels and connected with the side walls of the body.

1,900,440. CULTIVATOR. HARRY FERGUSON, Belfast, Northern Ireland. Filed Sept. 15, 1930, Serial No. 482,058, and in Great Britain Sept. 20, 1929. 6 Claims. (Cl. 97—47.)

1. An agricultural tine device, comprising a tine, a support for carrying said tine, a pivot connecting said tine to said support, toggle links one of which is anchored to said tine support and the other is connected to said tine, spring means anchored to said tine support and connected to the inter-connecting pivot of said toggle links, and stop means whereby said tine is normally maintained with its point and pivot in or about vertical alignment and whereby said spring means exerts maximum pull during the initial period of displacement of said tine by an obstruction and in the later period exerts a pull which gradually decreases.

1,900,441. ART AND METHOD OF MAKING SHOES. BENJAMIN W. FREEMAN, Cincinnati, Ohio. Filed Oct. 5, 1931. Serial No. 567,060. 9 Claims. (Cl. 12—142.)

1. The method of fitting heel seats of shoes which comprises splitting the sole across the back to form a pair of flaps, applying the sole to a shoe, removing that portion of the flap adjacent the shoe, back of the breast line, trimming the edge of the other flap, and applying a heel



to the shoe with the trimmed flap therebeneath and the edge of the first mentioned flap flush with the heel breast.

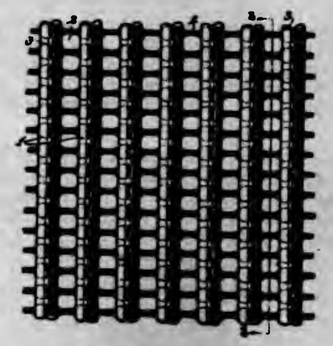
1,900,442. ACYL DERIVATIVES OF 4,4'-DIAMINO DIPHENYL OXIDE. ERNEST F. GEUTHER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Jan. 15, 1930. Serial No. 421,061. 8 Claims. (Cl. 260—124.)

1. As a new product, a compound having the following formula

(4) acyl—NH—C_6H_4—O—C_6H_4—NH—X(4')

wherein X may be H or the same acyl group.

1,900,443. FURNACE WALL. ISAAC HARTER, New York, N. Y., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed July 8, 1928, Serial No. 290,117. Renewed Sept. 8, 1932. 12 Claims. (Cl. 122—6.)



1. In a furnace wall, a row of vertically disposed water tubes spaced apart, and metal bars of substantially uniform width and thickness from one end to the other exposed to the radiant heat of the furnace and extending from one tube to another having substantially horizontal portions extending toward the inside of the furnace approximately in the plane of the row of tubes.

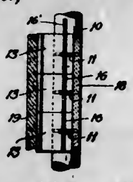
1,900,444. PRESERVED EGG AND PROCESS OF MAKING SAME. HERMAN HEUSER, Evanston, Ill. Filed Mar. 27, 1929. Serial No. 350,442. 12 Claims. (Cl. 99—11.)

1. The process of preserving egg in the absence of applied heat which consists in incorporating into the egg a preserving quantity of sugar to form an emulsion, and subjecting the emulsion to centrifugal action of sufficient

force to convert the emulsion into a raw egg syrup substantially free of emulsion air.

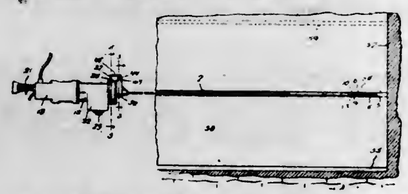
11. A preserved raw egg syrup containing a preserving quantity of sugar and a nontoxic reducing agent and being free from emulsion air and occluded air.

1,900,445. WATER COOLED FURNACE WALL. DAVID S. JACOBUS, Montclair, and HOWARD J. KERR, Westfield, N. J., assignors, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Aug. 27, 1926, Serial No. 131,872. Renewed Apr. 6, 1931. 22 Claims. (Cl. 122—6.)



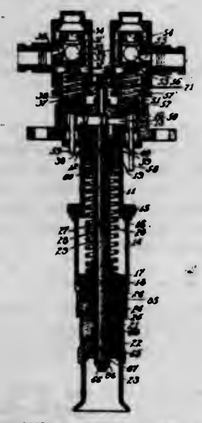
1. A furnace wall comprising parallel water tubes, and supports for insulating material between said tubes, each support comprising a horizontal and a vertical plate, one extending at right angles to the tubes and the other parallel thereto and spaced therefrom.

1,900,446. DEVICE FOR BREAKING DOWN COAL. JOSEPH F. JOY, Marion, Ohio, assignor to Joy Bros., Inc., Marion, Ohio, a Corporation. Filed Oct. 13, 1931. Serial No. 568,626. 7 Claims. (Cl. 262—12.)



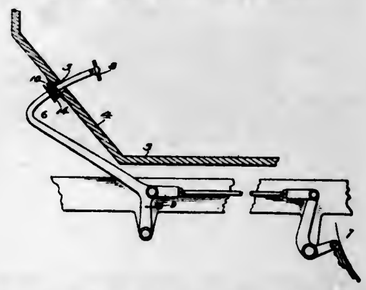
1. A device for breaking down coal comprising a flat hollow coal breaking member having opposed flexible walls, and means operable at will to expand or collapse said coal breaking member including power operated means for pumping fluid into or from said coal breaking member.

1,900,447. FILLER VALVE FOR BOTTLE FILLERS. JAMES KANTOR, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed May 11, 1929. Serial No. 362,237. 7 Claims. (Cl. 226—111.)



1. In a bottle filling machine, the combination with a relatively stationary filling tube, of a sleeve telescoping said tube and movable with the bottle when the same is moved into and out of filling position, a valve operated by said sleeve for controlling the admission of fluid to said tube and a second valve normally cooperating with the discharge end of said tube to close the same, and operated by said sleeve to open and close with said first valve.

1,900,448. AUTOMOBILE ACCESSORY. HAROLD A. KING, Birmingham, Mich. Filed Sept. 1, 1928. Serial No. 303,390. 14 Claims. (Cl. 180—90.6.)



1. In or for an automobile, the combination of a footboard having a lever opening therethrough, a lever extending through said opening, a cover fixed to said footboard about said opening, and a member arranged on said lever to contact with the free edge of said cover, whereby a substantially airtight seal is established between said cover and the footboard and lever.

1,900,449. PHARMACEUTICAL PREPARATION. FRIEDRICH KROLLPFEIFFER, Marburg-on-the-Lahn, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 12, 1930. Serial No. 427,946. 7 Claims. (Cl. 167—58.)

1. Composition of matter comprising 100 parts by weight of 7-iodo-18-hydroxyquinoline-5-sulfonic acid, 2–10 parts by weight of 8-hydroxyquinoline-5-sulfonic acid and about 80 parts by weight of sodium bicarbonate, said composition of matter being a yellow powder soluble in water which solutions show a great stability when heated and are valuable for pharmaceutical purposes.

1,900,450. METHOD OF APPLYING COVERING MATERIAL TO TIRE PATCHES. ROLAND A. LABINE, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 3, 1930. Serial No. 432,592. 4 Claims. (Cl. 154—2.)



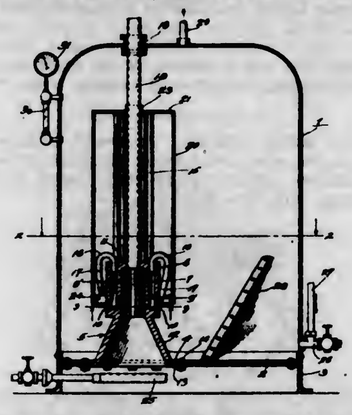
2. A method of applying covering material to a double-curved repair patch which comprises straightening one of the curves in the patch during the applying operation, positioning the dome portion of the patch on a sheet of material, progressively pressing the material around the patch at either side of the dome portion, and slitting the material at a plurality of opposed portions of the patch, said slits extending from near the dome of the patch to the edges.

1,900,451. WATER HEATER. MARTIN I. LARSEN, Chicago, Ill. Filed June 4, 1932. Serial No. 615,447. 11 Claims. (Cl. 122—159.)

1. A water heater, comprising a tank, a chambered heating unit mounted within said tank upon the bottom

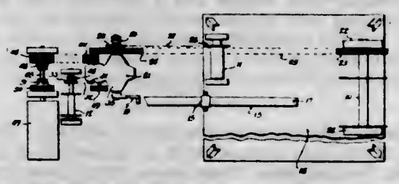
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and opening through the bottom thereof, flue means for removing gases from the said heating unit, water passages formed vertically in the wall of said unit and opening at their lower ends laterally into the tank, water circulating tubes extending vertically from the upper ends of



certain of said passages, means for conducting water from the upper ends of certain others of the passages back to the said lateral ports leading into the first mentioned passages, a heating element disposed in the lower end of said unit, and water inlet and outlet means for the tank.

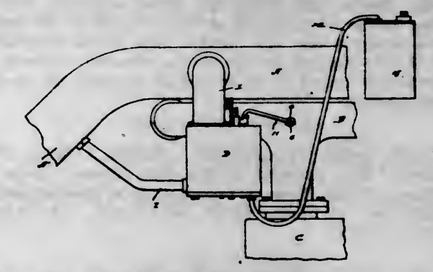
1,900,452. DRIVING MEANS FOR OIL WELL EQUIPMENT. HYMAN LEDEEN, Los Angeles, Calif., assignor to The Falk Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 18, 1931. Serial No. 557,841. 3 Claims. (Cl. 255—11.)



1. In oilwell equipment the combination of a bull wheel, a calf wheel, a walking beam, a sand reel, a speed reducer comprising a casing, a high speed shaft journalled in said casing, an intermediate speed shaft journalled in said casing, a low speed shaft journalled in said casing, and a train of gears within said casing operatively connecting said shafts, a crank on one end of said low speed shaft for driving said walking beam, means on the other end of said low speed shaft for driving said bull wheel and said calf wheel, means on said high speed shaft for driving said sand reel, a unidirectional drive shaft, a releasable driving connection between said drive shaft and said high speed shaft, a releasable driving connection between said drive shaft and said intermediate speed shaft, and means operable to render either of said driving connections effective, selectively, to thereby drive said speed reducer in either direction.

1,900,453. HUMIDIFIER. RONALD C. LUPLOW, Seligman, Ariz. Filed Aug. 26, 1931. Serial No. 559,554. 1 Claim. (Cl. 123—25.)

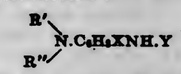
In combination with an internal combustion engine including its inlet and exhaust manifolds, a casing, a pipe connecting the top of the casing with the exhaust manifold, an exhaust pipe connected with the lower part of the casing, a damper in the first pipe, a second casing in the first casing, a thermostat therein, a rod connected with the thermostat and passing through the two casings, one end of the rod engaging the arm of the damper, a coil in the first casing and surrounding the second casing, a pipe connecting the upper end of the coil to the intake manifold, a valve for controlling the flow of vapor through said last-mentioned pipe, means for adjustably connecting said valve to the rod, whereby said valve will be operated



by a movement of the rod from the thermostat, a tank, a pipe connecting the upper end of the tank with the lower end of the coil, a pipe passing through the top of the tank to a point adjacent the lower end thereof and having a port in its upper end opening to the atmosphere, and a valve for controlling said port.

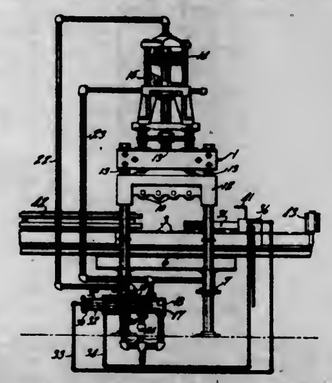
1,900,454. DYEING FURS, HAIRS, FEATHERS, AND SIMILAR ARTICLES. KARL MARX, Dessau in Anhalt, and ERICH LEHMANN, Wolfen, near Bitterfeld, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1931, Serial No. 530,138, and in Germany Apr. 30, 1930. 7 Claims. (Cl. 8—5.)

1. The process for dyeing furs, hairs, feathers and similar articles which comprises treating the said material in a bath containing an oxidising agent and a compound of the following constitution:



wherein R' stands for a cyclohexyl radicle, R'' for hydrogen or an alkyl, aryl aralkyl or cyclohexyl group, X stands for hydrogen, halogen or an alkyl, oxyalkyl or nitro group and Y is H or H.HCl.

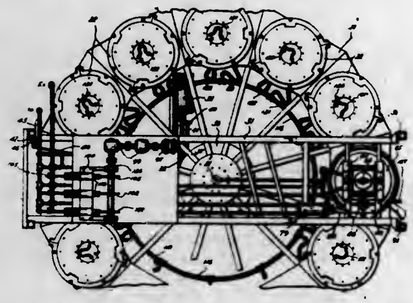
1,900,455. AUTOMATIC MOLD CLOSING APPARATUS. CHARLES EDGAR MAYNARD, Northampton, Mass., assignor to Roland W. Boyden and Charles A. Dana, as receivers of The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1931. Serial No. 568,362. 6 Claims. (Cl. 18—4.)



1. A device for closing molds which comprises, a continuously moving flat surfaced mold conveyor forming

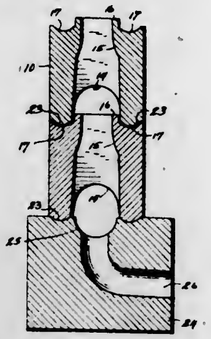
one member of a press, a vertically reciprocable platen positioned over the conveyor and forming the other member of the press, means to move the platen into mold closing contact with a mold on the conveyor, and actuating means positioned to be engaged by the mold, as the latter is advanced by the conveyor, to actuate the platen moving means, said actuating means and said platen moving means being so timed with respect to the speed of the conveyor that the forward edge of the advancing mold is first engaged by the platen, whereby the mold is progressively closed as it is carried beneath the platen by the conveyor.

1,900,456. TIRE VULCANIZER. GEORGE J. MEAD, Milwaukee, Wis., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Mar. 22, 1930. Serial No. 438,109. 12 Claims. (Cl. 18—20.)



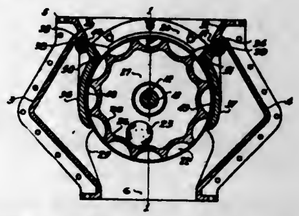
11. In a vulcanizing apparatus, the combination of a rotatable support, a plurality of vulcanizing mold units mounted thereon, each of said mold units having a rotatable locking ring, means including a pressure cylinder for intermittently rotating said support to bring the mold units successively to a definite station where vulcanized articles can be removed from and unvulcanized articles inserted in the molds, means for continuously supplying heating fluid and pressure fluid to the molds as they are carried by the support through a complete circuit, fluid-pressure actuating means for rotating the locking rings as their respective molds arrive at said station, and means for controlling the operation of said locking ring actuating means and said support rotating means.

1,900,457. BUILDING BLOCK. WALTER R. MILLER, Mansfield, Ohio. Filed Sept. 27, 1930. Serial No. 484,900. 4 Claims. (Cl. 72—41.)



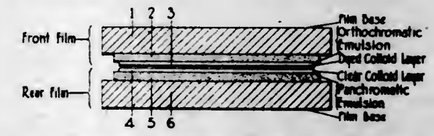
1. In a building, building blocks arranged in courses in vertically staggered relation, the blocks of each course being formed to provide a longitudinally extending drainage and ventilating passage, and the blocks having vertical voids intersecting said passages, and a base upon which the blocks rest formed to provide a gutter registering with the longitudinal voids of the lowermost blocks and having a drainage outlet, the abutting faces of the blocks in each course having medially disposed vertical voids opening into the longitudinal voids, each block of each course having interlocking connection with a superadjacent block, and the end faces of each block being formed with vertically disposed recessed lateral faces extending from top to bottom of the block and bonding material disposed between said recessed faces.

1,900,458. ROLL FEEDER. JOSEPH H. MORROW, Hokendauqua, Pa., assignor to Fuller Company, a Corporation of Delaware. Filed June 18, 1931. Serial No. 544,121. 5 Claims. (Cl. 83—44.)



1. A feeder for handling fine materials at a uniform rate, comprising the combination of a casing having an inlet and an outlet, a hollow roll arranged for rotation between the inlet and the outlet, the surface of the roll being provided with pockets of uniform size to receive the material, a follower plate closing one side of the inlet movably mounted near one side thereof having a portion of its inner surface conforming to the curvature of the roll, and of a depth sufficient to cover at least two pockets, means normally maintaining the follower plate in an inward position near the surface of the roll, the roll having an irregular inner surface and a relatively thin section and provided with circumferential channels at the ends of the roll, the ends of the roll being closed by thin discs, and balls freely movable in said channels within the roll to engage and vibrate both the latter and the discs.

1,900,459. MULTIPACK NEGATIVE SYSTEM. HOLLIS W. MOYSE, New Brunswick, N. J., assignor to Du Pont Film Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 20, 1930. Serial No. 462,471. 3 Claims. (Cl. 95—2.)



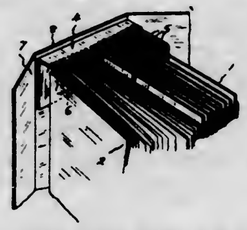
1. In a multi-pack negative system; a front light sensitive emulsion having coalescently coated thereon a relatively thin, transparent, water-permeable, dyed colloid, to minimize the scattering of light, and a rear emulsion having a like coating thereon that is undyed.

1,900,460. JOINT CONSTRUCTION. MATTHYS NUBERG, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Mar. 12, 1931. Serial No. 521,984. 6 Claims. (Cl. 20—92.)



1. In a construction of the class described, a non-metal member provided with a bore and a slit extending therefrom to the outer surface of said member, a metal member having a series of raised semi-spherical portions, said raised portions conforming to the shape of the bore but of slightly greater overall width than that of the bore, said raised portions being adapted to be forcibly slid into said bore to form a metal-non-metal joint.

1,900,461. INDEX TO BE USED WITH TELEPHONE DIRECTORIES AND OTHER BOOKS. FRANCIS JOHN OSUCH, Detroit, Mich. Filed Oct. 12, 1931. Serial No. 568,442. 7 Claims. (Cl. 116—119.)



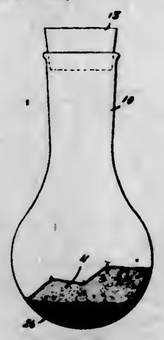
1. An index for bound books comprising a back section adapted to fit against and cover the bound edge of the book, members at the opposite ends of the back section and detachably secured thereto, and a plurality of separate index leaves hingedly connected to said members, the latter and the leaves being applicable to and removable from the bound book as a unit with the index leaves interspersed among the indexed leaves of the book.

1,900,462. INDEX FOR BOUND VOLUMES. FRANCIS JOHN OSUCH, Detroit, Mich. Filed Sept. 12, 1932. Serial No. 632,671. 14 Claims. (Cl. 116—119.)



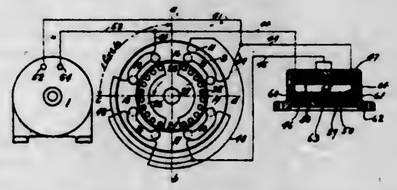
1. An index for a bound book comprising a backing member, rods secured thereto, fastening elements carried by said backing member and rigidly attaching said rod to said member and index cards having apertured ends adapted to receive said rods.

1,900,463. BULB AND METHOD OF COLORING THE SAME. MARVIN PIPKIN, Cleveland Heights, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1927. Serial No. 231,541. 4 Claims. (Cl. 176—16.)



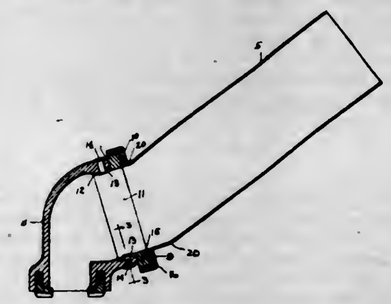
1. The method of coloring electric lamp bulbs which consists in frosting said bulb on the inside and then introducing a dry powdered pigment material comprising tungstic oxide and causing some of it to settle in the depressions of the frosted surface.

1,900,464. ELECTROMAGNETIC RECIPROCATING DEVICE. GEORGE HENRY POTH, Cincinnati, Ohio. Filed June 11, 1927. Serial No. 198,187. 11 Claims. (Cl. 172—240.)



1. The combination with an electro-magnetic reciprocating mechanism, and a supply circuit therefor, of a distributor comprising relatively movable members, means for relatively moving said members, one of said members being provided with windings connected to said supply circuit and to the operating means of said mechanism, another of said members being provided with a plurality of short circuited conductors disposed in inductive relation to said windings of said first mentioned member.

1,900,465. VACUUM CLEANER. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 9, 1929. Serial No. 391,124. 4 Claims. (Cl. 285—120.)

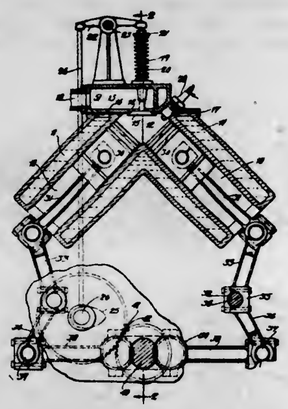


1. For a vacuum cleaner, a tubular suction member provided at one end with an outwardly extending annular flange, a tubular element including an axially projecting flange and a radially inwardly projecting shoulder in fixed relation to said axially projecting flange, a retaining collar threaded upon said element, said collar including a radially inwardly projecting flange spaced from said shoulder to form an annular recess, said outwardly extending flange being freely rotatable in said recess, and a substantially Z shaped securing element having a portion detachably secured flatly against the cylindrical face of the tubular element, a portion extending radially outwardly therefrom, and a portion projecting parallel to said first mentioned portion, the collar being provided with a recess to receive said last mentioned portion.

1,900,466. INTERNAL COMBUSTION MOTOR. HENRY R. SCHROEDER, Omaha, Nebr. Filed July 19, 1930. Serial No. 469,240. 1 Claim. (Cl. 123—53.)

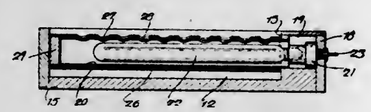
In an internal combustion motor, a plurality of cylinders arranged in communicating pairs in inverted V-relation, means for supplying fuel to said cylinders, a piston in each cylinder, a crank shaft, a connecting rod pivoted

to each piston, a shaft extending lengthwise of the motor on each side thereof below said cylinders and arranged parallel with the crank shaft, a crank for each cylinder mounted on its respective shaft and having a pair of



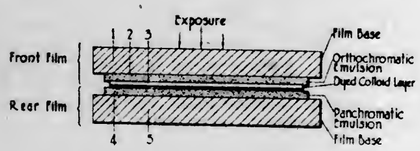
arms disposed angularly with respect to each other, one of said arms being connected to said connecting rod, and a driving link connecting the other arm of each of said cranks with said crank shaft.

1,900,467. JEWELRY DISPLAY DEVICE. CLARENCE H. SCRUGGS, Brooklyn, N. Y. Filed June 7, 1932. Serial No. 615,989. 5 Claims. (Cl. 240—6.)



1. A jewelry display device comprising a base, spaced tubes fixedly mounted upon said base, and having openings therein, illuminating means within said tube, tubular holder members slidably telescoping said tubes and having openings therein in register with the openings in said tube, and over which the jewels to be displayed are positioned.

1,900,468. MULTIPACK NEGATIVE SYSTEM. VIRGIL B. SEASE, Parlin, N. J., assignor to Du Pont Film Manufacturing Corporation, Wilmington, Del., a Corporation of Delaware. Filed June 19, 1930. Serial No. 462,197. 5 Claims. (Cl. 95—2.)



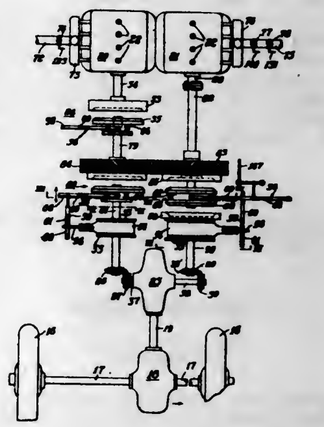
4. A color separation negative material suitable for use in a multipack system, said negative material comprising a transparent support, a light sensitive emulsion upon said support, said emulsion having coalescently coated thereon a relatively thin transparent, water permeable gelatinous coating, said gelatinous coating having a light filtering dye mordanted therein.

1,900,469. BOWLING BALL RACK. PAUL SKELBC and JOHN BUDNIK, Hamtramck, Mich. Filed Aug. 6, 1932. Serial No. 627,766. 2 Claims. (Cl. 273—47.)



1. A bowling ball rack comprising a pair of spaced, parallel bars, noses mounted on the ball receiving end portions of the bars, ribs on the upper faces of the noses, and tracks mounted longitudinally on the bars and aligned with the ribs.

1,900,470. AUTOMOTIVE SYSTEM. HUBERT P. SMITH, Emsworth, Pa. Filed Feb. 27, 1931. Serial No. 518,776. 20 Claims. (Cl. 180—54.)



10. In a motor driven vehicle having wheels driven by a torque shaft, the combination of a plurality of driving units and means for coupling said driving units to said torque shaft differentially and accumulatively.

1,900,471. ROD AND PIPE GRAPPLE. FRED M. TIBS, Brodhead, Wis. Filed Aug. 15, 1931. Serial No. 557,363. 5 Claims. (Cl. 294—104.)

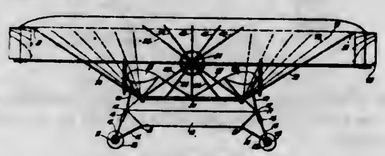


1. A grapple device of the character described, comprising a short cylindrical body having the edge at one end sharpened, a rod member connected with the other end of the body and extending axially thereof, a plate member disposed transversely of and within the body, pivotal supporting means for said plate permitting its oscillation longitudinally thereof and a flexible member connected with said plate to facilitate the movement of the plate from a point remote therefrom.

1,900,472. COATING ON ALUMINUM. MARTIN TOSTRUD, Arnold, Pa., assignor, by mesne assignments, to Aluminum Colors Incorporated, Indianapolis, Ind., a Corporation of Delaware. Filed Sept. 9, 1931. Serial No. 561,991. 4 Claims. (Cl. 204—1.)

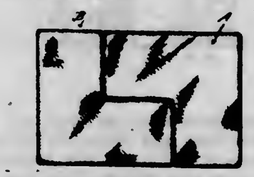
1. A process of producing on aluminum surfaces a thick, compact and pervious oxide coating of emery-like and uniform hardness and of uniform color and thickness, comprising making the aluminum to be coated an anode in an electrolyte containing about 5 to about 12 per cent by weight of sulphuric acid.

1,900,473. AIRPLANE. HUGH C. TULLY, New York, N. Y. Filed Feb. 3, 1932. Serial No. 590,683. 10 Claims. (Cl. 244—29.)



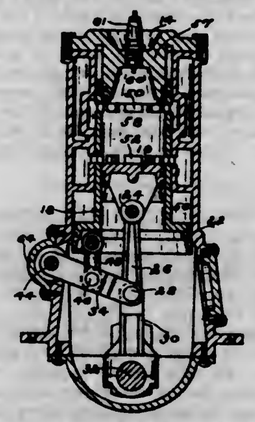
1. In an airplane, a main supporting wing arranged with its longitudinal axis extending fore and aft of the plane, and a plurality of control rudders mounted at each end of the wing said control rudders at each end of the wing overlapping each other in contacting relation when moved to either limits of their movement.

1,900,474. TWO PART COUCH. LAWRENCE B. WILSON, Tucson, Ariz. Filed Apr. 21, 1932. Serial No. 606,676. 1 Claim. (Cl. 155—130.)



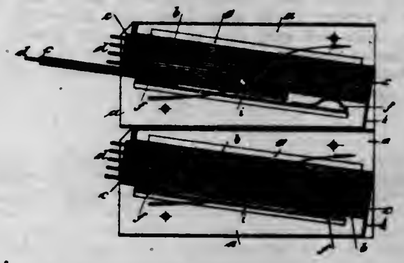
A couch of the class described comprising a pair of separate interfitting sections, each of L-shape in a horizontal plane, the lengths of certain corresponding limbs of each section being the same and their widths being the same as the lengths of the adjacent other limbs.

1,900,475. SLEEVE VALVE TWO CYCLE ENGINE. VICTOR H. WINQUIST, Seattle, Wash. Filed Sept. 22, 1930. Serial No. 483,480. 5 Claims. (Cl. 123—59.)



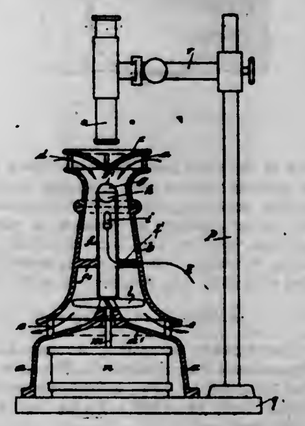
1. A two cycle, multiple cylinder, internal combustion engine consisting of compound cylinders each including a main cylinder and an auxiliary, larger cylinder; sleeves mounted in said main cylinders and having piston portions cooperating with said auxiliary cylinders to initially compress the charge; main cylinder pistons fitting within said sleeves; a multiple throw crankshaft; an oscillating piston rod for each main piston; a walking beam pivotally secured to said piston rod; an arm operatively connecting the walking beam to the sleeve; a connecting rod operatively connecting the walking beam and piston rod to the crankshaft; said sleeves and cylinders having cooperating ports to control the flow of gases; said engine having ports for leading the compressed charge from the larger cylinder of one pair to the smaller cylinder of the other pair.

1,900,476. FILTERING APPARATUS. HANS WITTEMEIER, Berlin-Grunewald, Germany, assignor to Midwest Manufacturing Company, Inc., Louisville, Ky., a Corporation of New York. Filed Sept. 9, 1929, Serial No. 391,416, and in Germany Oct. 27, 1928. 2 Claims. (Cl. 183—69.)



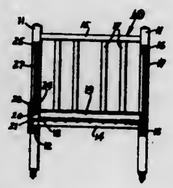
1. A filtering apparatus comprising a frame, filtering units in said frame, each unit including a set of filters and a holder surrounding said set, said holders being adapted to slide, and to fit tightly, in said frame and on each other, and means for exerting an upward pressure on the lowest holder.

1,900,477. OPTICAL GAS TESTER. HANS WITTEMEIER, Berlin-Grunewald, Germany, assignor to Midwest Manufacturing Company, Inc., Louisville, Ky., a Corporation of New York. Filed Aug. 13, 1930, Serial No. 474,947, and in Germany July 5, 1930. 5 Claims. (Cl. 88—14.)



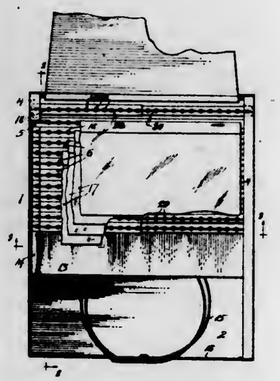
1. An optical gas tester comprising a substantially hemispherical dust collector of transparent material with its pole flattened, means for generating a flow of gas about said collector, and means for illuminating said collector.

1,900,478. COVER GRIPPING DEVICE. MAX E. ZIMMERMANN, Los Angeles, Calif., assignor of one-half to Karl Schumacher, Los Angeles, Calif. Filed Jan. 14, 1931. Serial No. 508,696. 6 Claims. (Cl. 5—100.)



1. In combination with a crib including end portions and side portions, one of said side portions including a panel, a closure gate adjacent to said panel, and pivot means arranged above said panel and connecting said end portions and said gate to mount said closure gate for swinging movement with the lower part thereof moveable outwardly against said panel to thereby hold bed covers against said panel.

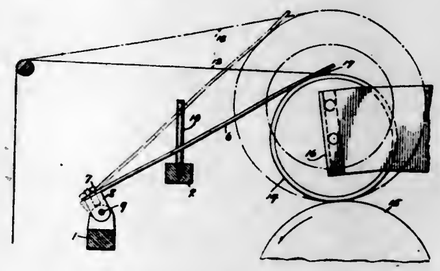
1,900,479. FILING OR RECORDING DEVICE. ZEMACH AUERBACH, New York, N. Y. Filed May 15, 1928, Serial No. 277,813. Renewed July 27, 1932. 7 Claims. (Cl. 129—16.)



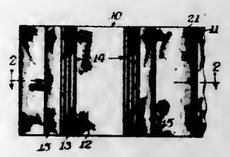
4. A device of the class described comprising a tray having opposed pockets, sliders each engaging in said pockets and having side members, said sliders composed of members adapted to be adjusted in relation to each other to vary the distance between said side members, and a plurality of cards or sheets having hinge members adapted to be engaged with said side members on said sliders.

1,900,480. TRAVERSE MOTION. ROBERT J. BARTHOLOMEW, Germantown, Pa., assignor to Fletcher Works, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 15, 1930. Serial No. 488,801. 4 Claims. (Cl. 242—43.)

1. A traverse motion comprising in combination a pair of traverse bars, a cam operated lever for reciprocating said bars, said bars being attached to said lever at different distances from the fulcrum thereof, a thread guide arm mounted for rotary and pivotal motion on one of said bars, and a pin carried by the other of said bars and extending through a slot in said guide arm for imparting rotary motion to said arm, the position of the pin in the guide arm shifting with increase in the diameter of the bobbin.



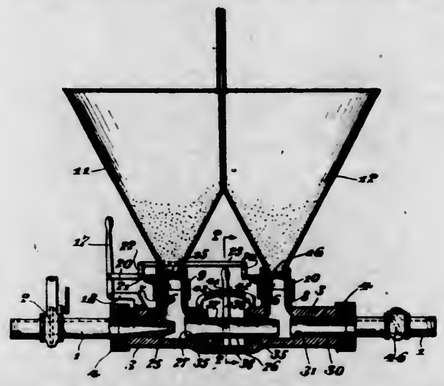
1,900,481. DECORATIVE BOW FOR HAT BANDS OR THE LIKE. SERAPHINE F. BAUWENS, Chicago, Ill. Filed Nov. 20, 1929. Serial No. 408,438. 16 Claims. (Cl. 2—179.)



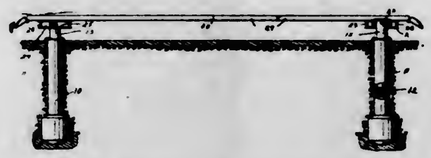
1. In a ribbon adapted for use as a hat band or the like, a bow formed from said ribbon and having a strip of hair cloth positioned along the back thereof, said strip being narrower than said ribbon and having the hair extending transversely thereof, said ribbon and said strip having a flat section extending longitudinally thereof and forming the central section of the bow, and a plurality of small transverse folds in said ribbon and said strip at each end of said section to provide a contrasting border for said section, a larger transverse fold formed in the ribbon and the strip at the outer side of each of said borders, a plurality of wires extending behind said section and through said folds, the ends of said wires being reversely bent along the back of the folds to prevent displacement of the folds toward the ends of the wires, means between said wires and said ribbon to prevent displacement of said folds toward the center of said wires, said strip extending beyond one end of said wires and being attached to said ribbon to form another outwardly extending fold, the reversely bent portions of one of the wires at the other end of the bow being in the form of a hook for engaging the ribbon to form a circular band.

1,900,482. APPARATUS FOR PRODUCING FIRE EXTINGUISHING FOAM. FISHER L. BOYD, Haverford, Pa., assignor, by mesne assignments, to National Foam System, Inc., Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 2, 1927. Serial No. 171,989. 2 Claims. (Cl. 169—15.)

1. In apparatus for producing fire extinguishing foam, the combination of a pipe through which a stream of water may flow, the said pipe having laterally and upwardly extending openings therein, containers supported above the said openings and being in communication therewith, the said containers being adapted to hold separately chemical substances which when combined in the presence of water react to produce fire extinguishing foam, means for simultaneously opening and closing the passageways from said containers into the said openings, means including a combining tube within the said pipe for creating partial vacuums therein opposite the said lateral openings, and means for adjusting the said tube to different positions.

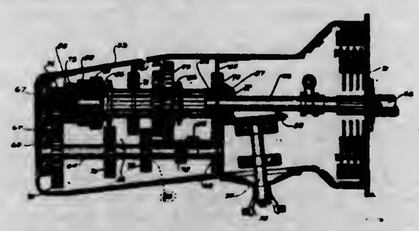


1,900,483. HYDRAULIC LIFT FOR VEHICLES. CYRUS J. BRISTOL, Des Moines, Iowa, assignor to Globe Machinery & Supply Company, Des Moines, Iowa, a Corporation of Iowa. Filed Dec. 15, 1930. Serial No. 502,436. 1 Claim. (Cl. 254—89.)



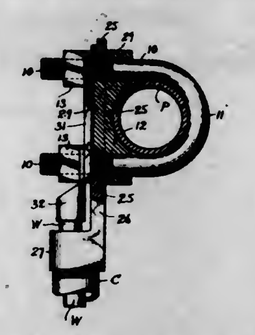
A lift device comprising two track members spaced apart, two lift devices one under each end portion of the track members, each lift device including a vertically movable rod, a head rigidly secured to each rod, a shaft fixed to each head with its ends projecting beyond the head, means for connecting said shafts to the said track members, said means comprising two spaced apart beams one on each side of the head, said beams being rigidly secured to the track members, and two spaced apart bars fixed to said beams formed with longitudinal slots through which the ends of the said shafts are extended, for the purposes stated.

1,900,484. HEAVY DUTY AUTOMOBILE CONSTRUCTION. HAROLD D. CHURCH, Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 20, 1929. Serial No. 356,686. 4 Claims. (Cl. 180—70.)



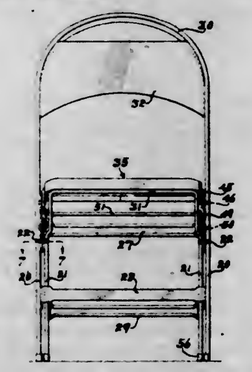
1. In a motor vehicle, a prime mover including a crankshaft arranged transversely of the vehicle, a transmission shaft aligned with said crankshaft, a clutch between said shafts, a speed change gear including a countershaft parallel to said transmission shaft and a sleeve surrounding said transmission shaft but rotatable independently thereof, gear connections between said shafts and said sleeve, and a propeller shaft extending longitudinally of the vehicle driven from said sleeve at approximately a right angle thereto.

1,900,485. GROUNDING FITTING. LEWIS H. CHURCH, Westfield, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed July 25, 1929. Serial No. 380,790. 11 Claims. (Cl. 247—1.)



1. In a grounding fitting, a pipe clamp including a pipe seat, and a yoke having threaded legs extending through the seat, a boss formed on the pipe seat, a ring mounted on the boss and rotatable around the pipe seat, said boss being shorter than the depth of the ring in which it seats and hence providing clearance between the face of the boss and the outer edge of the ring, operating means on the threaded legs of the yoke engaging the ring over the clearance to clamp the ring upon the boss and to actuate the pipe clamp, and means carried on the ring by which a ground wire protective covering is attached thereto.

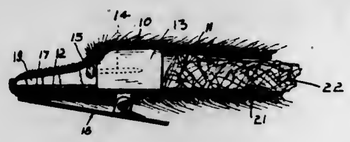
1,900,486. FOLDING CHAIR. WERNER E. CLARIN, Chicago, Ill. Filed May 28, 1931. Serial No. 540,577. 2 Claims. (Cl. 155—143.)



1. A metal folding chair comprising a pair of front legs and a pair of rear legs, pivotally connected at their intermediate parts, the legs of each pair having a top member thereon which is integral and continuous with the top ends of said legs and is of the same stock of material as the legs, said top ends of the rear legs being offset inwardly from the front legs, two links between said offset ends and said front legs, said links being pivoted to the front legs and carrying a rod which is slidable in slots in the offset ends, and a seat pivotally mounted between the front legs, and having its forward

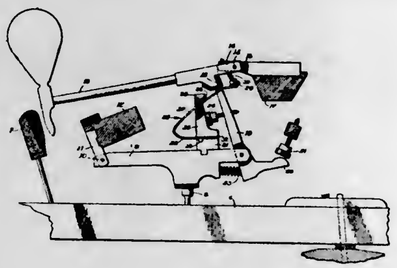
portion detachably resting on the top member on the rear legs, to be readily swung upwardly therefrom without folding the legs, and also to be moved by said member to the folded position when the chair is thrown backwards on the floor.

1,900,487. FOUNDATION FOR ANIMAL HEAD AND BODY. BENJAMIN COHEN, Brooklyn, N. Y. Filed Apr. 30, 1932. Serial No. 608,409. 8 Claims. (Cl. 2—65.)



1. A foundation for an animal head and body comprising a fur skin head and body portion, a foundation over which said head is fashioned, and a spring jaw having upper and lower members, said foundation comprising a sponge like skull portion, a flat base member upon which the skull portion is mounted, having a snout portion projecting forward of the skull, an upright rib piece mounted on the snout portion and projected at one end into the skull, a projecting piece extending rearwardly of the skull to carry the filler into the body of the skin, and means on the snout portion to receive and hold the upper member of the spring jaw.

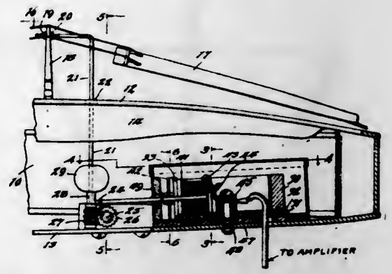
1,900,488. PIANO ACTION. CHARLES H. DASENBROOK, Rockford, Ill., assignor to Thayer Action Company, Rockford, Ill., a Corporation of Illinois. Filed Oct. 26, 1931. Serial No. 570,995. 11 Claims. (Cl. 84—289.)



4. In a piano action, the combination of a pivotally mounted hammer having a butt knuckle, a pivotally mounted whip adapted to be actuated by depression of a key, a jack pivoted on the free end of said whip and adapted to engage at its free end with said knuckle, a post rigid with and upstanding from said whip adjacent the jack pivot, an elongated piece of wire bent at its center to form a spring of the hair-pin type having open and closed end portions with the former anchored in said post, said closed end portion being inclined upwardly and adapted for engagement with said knuckle during recovery of said jack, and shoulders formed at the upper end of said post for engaging both sides of said closed portion.

1,900,489. MUSICAL INSTRUMENT OF THE VIOLIN TYPE. GEORGE EISENBERG, Brooklyn, N. Y. Filed Apr. 2, 1929. Serial No. 351,874. 6 Claims. (Cl. 84—294.)

1. A musical instrument of the violin type having a string and a bridge connected thereto, a magnetic unit mounted on the instrument, pole pieces on said unit having a plurality of gaps of different span, a vibratory



armature extending between one gap and lying closely adjacent a smaller gap at its outer end, and means connecting the armature to the bridge.

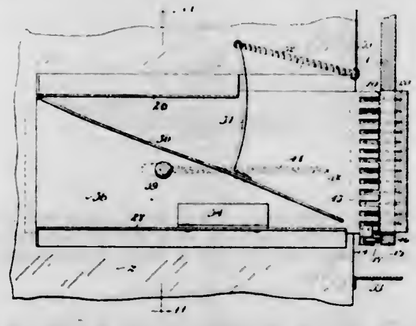
1,900,490. REVERSIBLE NECKTIE. EARL M. FAMOUS, Upper Darby, Pa. Filed Oct. 18, 1930. Serial No. 489,595. 3 Claims. (Cl. 2—146.)



1. A reversible necktie comprising superposed face fabrics having their sides folded inwardly with the edges in abutment approximately at a median line, said edges being united throughout separate longitudinal sections by seams similarly displayed upon both faces.

1,900,491. VEGETABLE SLICING MECHANISM. LEONARD FRANK, St. Paul, Minn. Filed Dec. 17, 1930. Serial No. 502,962. 5 Claims. (Cl. 146—78.)

1. A vegetable cutting mechanism of the character described, comprising a supporting frame, a disk rotatably mounted thereon, a plurality of laterally aligned, equally spaced slitting blades mounted to extend above the surface of said disk, a slicing blade mounted on said disk and spaced outwardly from the face thereof a distance not greater than the length of said slitting blades above the face of said disk, a feedway mounted laterally adjacent said disk, a slidable bottom plate mounted in said feedway, said bottom plate having a toothed forward edge, the teeth thereof being disposed to lie normally between the paths of the slitting blades, and cam means operatively



connected to said disk to slidably move said bottom plate rearwardly beyond the path of said slicing blade as said slicing blade passes said feedway.

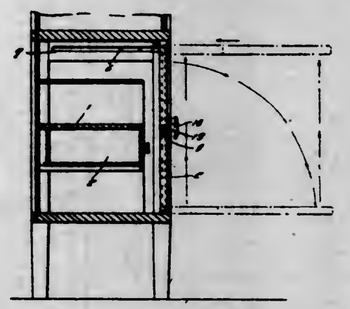
1,900,492. ARMORED CABLE. OTTO A. FREDERICKSON, Ben Avon, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 1, 1930. Serial No. 440,682. 5 Claims. (Cl. 173—267.)



4. An insulated wire comprising a central conductor, a vulcanized rubber covering therefor, separate individual servings of fibrous fabric therearound immediately adjacent and directly abutting the vulcanized rubber covering, asphaltic material impregnating said fibrous servings and also sticking the said individual servings to the rubber covering thereunder, and an outer stearin pitch-like coating over the asphaltic coating for the purpose described.

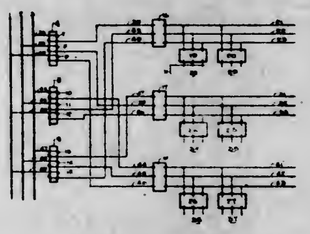
1,900,493. RADIO SECRETARY. FREDERICK M. FRIEDRICHS, Summerville, S. C. Filed Apr. 6, 1932. Serial No. 603,645. 1 Claim. (Cl. 312—189.)

A cabinet having a compartment therein, with an opening at the front of the compartment, the side walls of the opening having vertical guideways therein and the side walls of the compartment having horizontally arranged guideways therein adjacent the top of the compartment, the outer ends of which are in communication with the upper ends of the first-mentioned guideways, a door having pins in its side edges adjacent the lower end of the door for fitting in the guideways, whereby the door can be swung downwardly and outwardly and then moved upwardly to cause the pins to pass upwardly through the vertical guideways until they come into alignment with the horizontal guideways, after which the door can be moved inwardly to cause the pins to



enter the horizontal guideways and bolt means carried by the door and engaging the horizontal guideways, when projected to support the door in a horizontal position with a part projecting forwardly from the cabinet to form a shelf or desk, the said bolt means, when projected, with the door in vertical position for closing the opening, engaging the vertical guideways for holding the door in closing position.

1,900,494. POWER TRANSMISSION SYSTEM. FRAZER W. GAY, Newark, N. J. Filed Dec. 16, 1930. Serial No. 502,734. 3 Claims. (Cl. 171—97.)

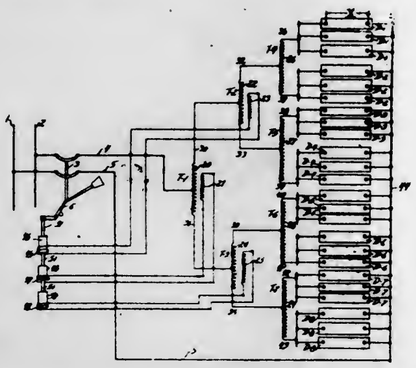


2. In a power transmission system, in combination, a three phase station bus having three bus conductors, three three phase lines, each of said lines having three conductors, three reactor-transformer means having a core provided with an air gap and three separately insulated windings on said core, the said windings of each reactor-transformer means being respectively connected in series between a respective one of said station bus conductors and a line conductor of corresponding phase of a respective one of said lines, whereby, upon the occurrence of a fault on the three conductors of one of said lines, a relatively heavy magnetizing current will flow in one winding of each of said reactor-transformer means, thereby building up the voltage on the remaining lines.

1,900,495. CAPACITOR PROTECTOR. FRAZER W. GAY, Newark, N. J. Filed July 18, 1931. Serial No. 551,670. 5 Claims. (Cl. 171—97.)

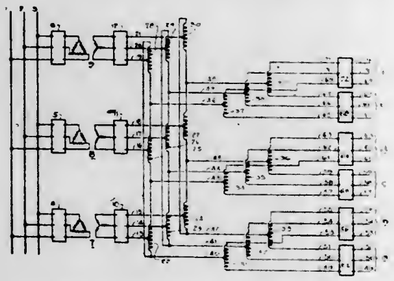
1. In a power transmission system, a power transmission line, a plurality of capacitor groups, each of said capacitor groups comprising, a plurality of interconnected capacitor units and a plurality of fuse means, each of said fuse means being respectively connected in series with a respective one of said capacitor units, a plurality of reactor elements each of said capacitor groups being inde-

pendently connected to a terminal of a respective one of said reactor elements, the remaining terminal of each of said reactor elements being connected to receive power from said transmission line, so that the failure of one capacitor unit of any one of said capacitor groups causes the remaining capacitor units of said capacitor group to



be discharged through said defective capacitor unit and effect the rupture of the fuse means connected in series with said defective capacitor unit, said reactor elements serving to retard the flow of current from said remaining capacitor groups to said capacitor group having the defective capacitor, whereby the recovery of voltage across the blown fuse means is built up relatively slowly.

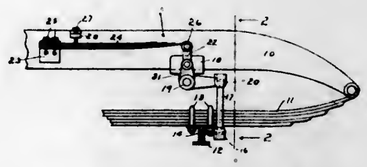
1,900,496. NETWORK OF MID TAPPED TRANSFORMERS. FRAZER W. GAY, Newark, N. J. Filed Dec. 16, 1930. Serial No. 502,735. 5 Claims. (Cl. 171—97.)



3. In a distribution system, in combination, a three phase source of power having three phase conductors, a plurality of three phase feeder circuits, a network of mid-tapped auto-transformers interconnecting said phase conductors to said feeder circuits, each of said auto-transformers having its mid-tap connected to a respective one of said phase conductors for receiving power and its end terminals connected to said feeder circuits, said auto-transformers offering relatively little impedance to the passage of power uniformly distributed among said feeder circuits but offering relatively great impedance to the passage of currents to a fault on one of said feeder circuits whereby voltage is maintained on the non-faulty feeder circuits.

1,900,497. SHOCK ABSORBER. FRED GITZENDANNER, New York, N. Y. Filed Nov. 3, 1930. Serial No. 492,911. 4 Claims. (Cl. 267—19.)

1. In combination with a chassis frame having a spring supported axle, a cantilever spring attached to said chassis frame, a link connected with and actuated by said axle, a series of levers connecting said link with the free end of the cantilever and normally locking it in a neutral



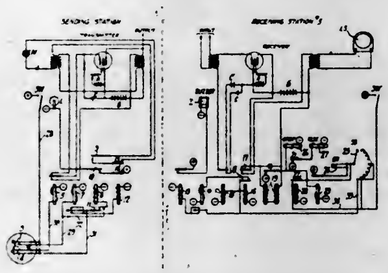
position, the construction of the levers being such as to free the end of the cantilever when the distance between the chassis frame and the axle is varied from normal.

1,900,498. EARTH ANCHOR. WALTER A. HEINRICH, St. Louis, Mo. Filed Feb. 2, 1931. Serial No. 512,932. 14 Claims. (Cl. 189—91.)



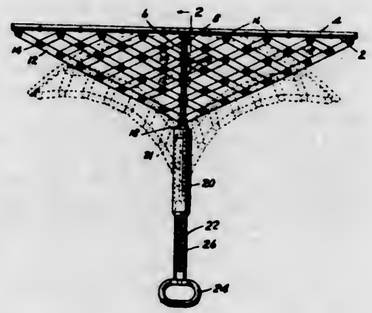
1. A screw-type earth anchor including a blade, a driving point, a torsion and tension shaft and means carried within the body of the blade and about a portion of the shaft, said means being adapted to prevent relative rotation of the blade and shaft.

1,900,499. SELECTIVE SIGNALING SYSTEM. HARRY E. HERSHEY, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 7, 1930. Serial No. 459,626. 18 Claims. (Cl. 250—6.)



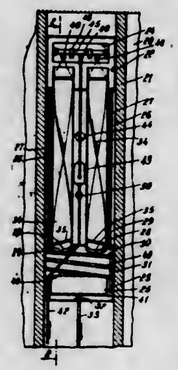
1. In a selective signaling system, a sending station, a plurality of receiving stations, means at the sending station for transmitting coded radio impulses to said receiving stations, a receiving device at each receiving station for receiving said radio impulses and repeating them, and means at each receiving station responsive to the repeated impulses for altering said receiving means for reception of a different character.

1,900,500. ADJUSTABLE ARC. WERNER HINCKELMANN, Philadelphia, Pa. Filed Apr. 14, 1931. Serial No. 529,925. 5 Claims. (Cl. 33—177.)



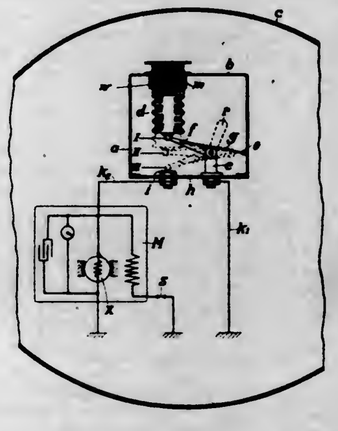
1. An adjustable arc comprising a flexible ruling edge, a guiding member connected thereto, a member movable along the guiding member, and a linkage connecting the ruling edge and movable member, whereby movement of the movable member effects flexure of the ruling edge, said linkage including links forming a reticulated array of quadrilaterals joined to the ruling edge at a plurality of points.

1,900,501. AIR CONDITIONING APPARATUS. EDWARD MCKINNEY HUNT, Montclair, and EDWARD L. FONSECA, Newark, N. J., assignors to The Wilcolator Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 12, 1929. Serial No. 346,285. 16 Claims. (Cl. 261—116.)



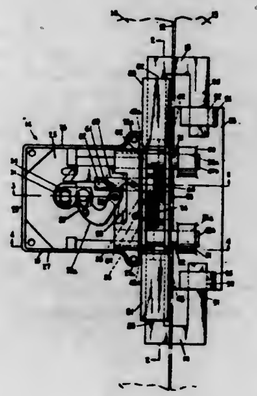
1. In an air conditioning device the combination of at least one vertically extending straight tube, two housings, one communicating with each end of said tube, the upper housing having an air intake opening and the lower housing having an air discharge opening, a liquid spray device introduced into said tube adjacent the upper end thereof for creating suction therethrough, a plurality of baffles in said lower housing extending in alternate directions into the air stream for precipitating surplus water therefrom, and a gutter on at least one of said baffles for conducting away the liquid deposited thereon.

1,900,502. AIRCRAFT. HUGO JUNKERS, Dessau, Germany. Filed Oct. 21, 1931, Serial No. 570,080, and in Germany Oct. 28, 1930. 8 Claims. (Cl. 244—80.)



1. An aircraft comprising an altitude chamber, a pressure-sensitive element in said altitude chamber, and means operatively connected to said element for cutting out the motive power of said craft.

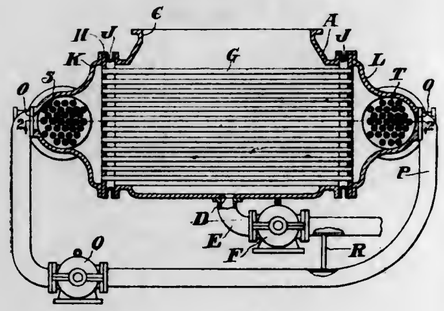
1,900,503. IRVING KEMP, New York, N. Y., assignor, by mesne assignments, to Kemp Lock Inc., New York, N. Y., a Corporation of New York. Filed Aug. 9, 1930. Serial No. 474,110. 13 Claims. (Cl. 292—33.)



1. A lock comprising a casing, a member formed with a helical thread rotatably and non-slidably mounted within said casing, and a bolt slidably mounted within said casing adapted to be protected from said casing, having means coacting with the thread of said member for causing rotation thereof upon slidably moving said bolt, and a second bolt slidably mounted on said casing for move-

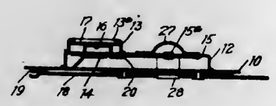
ment in a direction transverse to the direction of movement of said bolt, and means on said member operatively engaging said second bolt for moving the same upon causing sliding movement of said first bolt.

1,900,504. CONDENSING APPARATUS. JOHN KIRGAN, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 25, 1930. Serial No. 498,037. 14 Claims. (Cl. 257—44.)



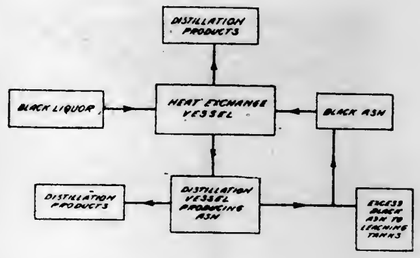
8. Condensing apparatus, comprising a condenser having a casing provided with an inlet opening for steam and an outlet opening for condensate, a condensate removal pump connected to the outlet opening, a circulatory system for the condenser including tubes in the casing and connection means for conveying water from one end of the tubes to the other end, a pump for circulating the water in the circulatory system, a conduit connecting the connection means with the discharge output of the condensate removal pump, and means for cooling the water supplied to the tubes.

1,900,505. FLASH LIGHT. HARRY KORETZKY, Jersey City, N. J., MAX HOROWITZ, Brooklyn, N. Y., and ANTHONY J. DESIMONE, Lyndhurst, N. J., assignors to Bright Star Battery Company, Hoboken, N. J., a Corporation of New York. Filed Mar. 27, 1931. Serial No. 525,804. 11 Claims. (Cl. 200—60.)



1. Switch mechanism comprising a casing, a contact member within said casing and fixed thereto at one end and having an offset portion at its other end, a tubular housing slidably mounted on said casing and enclosing said offset portion, a disk resting on said offset portion, an annular shoulder in said housing engageable by said disk, and means movable with said housing to engage said contact member for holding it in circuit closed position after having been moved into such position.

1,900,506. PROCESS OF DESTRUCTIVELY DISTILLING BLACK LIQUOR. RALPH W. KUMLER, Wilmington, Del. Filed Nov. 7, 1930. Serial No. 494,005. 12 Claims. (Cl. 202—3.)



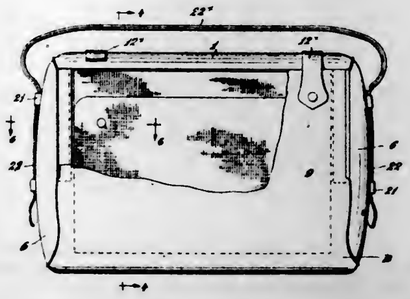
1. A process of treating black liquor, which includes the step of mixing black liquor with hot black ash to remove moisture from the black liquor.

5. A process for the recovery of values from black liquor, which includes the step of mixing black liquor with hot black ash to assist in the removal of moisture from the black liquor, and thereafter removing the volatile values from the substantially dried mixture by distillation.

1,900,507. CELLULOSE ETHER COMPOSITION. WILLIAM W. LEWERS, Flint, Mich., and GEORGE L. SCHWARTZ, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 12, 1929. Serial No. 370,457. 8 Claims. (Cl. 134—79.)

5. A coating composition comprising 10 parts by weight of cellulose ether and from 0.4 to 4.0 parts by weight of a composite softener therefor, said composite softener comprising petrolatum having a boiling range above 200° C. and a melting range below 80° C. and a solvent softener from the group consisting of dibutyl phthalate, benzophenone, and acetyl laurin.

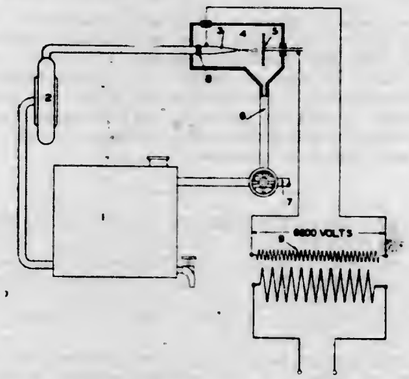
1,900,508. FITTED TRAVELING BAG. FLORENCE N. LEWIS, New York, N. Y. Filed Dec. 16, 1930. Serial No. 502,632. 3 Claims. (Cl. 190—52.)



1. A traveling and motor bag comprising a stiffened top member, a vertical division wall secured to and suspended by said top member, end members secured to the top member, a base closing member secured to each end member at the base thereof and thence extending upwardly

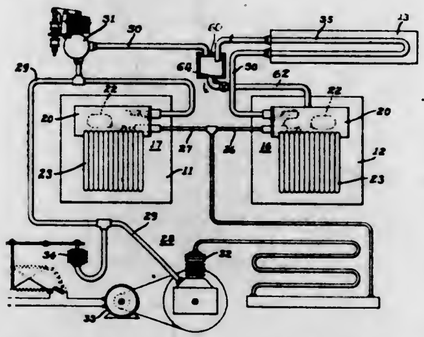
opposite each face of the division wall and continuing until each of the opposite ends of said base covering member lies adjacent one marginal edge of the top member to form a cover section for a compartment inwardly bounded by said division wall, and bounded at the top by the overhanging top member and bounded at the bottom by said base closing member, an upper portion of the cover section at each side of the bag being unattached to the end members so that the unattached portion may be folded down to expose the said compartment, and means for removably securing each of said unattached portions to the top member.

1,900,509. PROCESS FOR STERILIZATION OF LIQUIDS. EARL A. LOUDER, Greenville, Ill., assignor to Pet Milk Company, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 30, 1930. Serial No. 492,209. 8 Claims. (Cl. 204—24.)



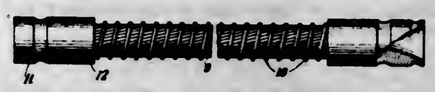
1. The method of sterilizing a liquid which comprises continuously projecting a stream of the liquid against a surface and maintaining sufficient difference of potential between said stream and said surface to maintain electric sparking in the zone of initial contact of the liquid with said surface.

1,900,510. REFRIGERATING APPARATUS. DAVID E. MACCABEE, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Oct. 30, 1928. Serial No. 316,005. 11 Claims. (Cl. 62—115.)



5. Refrigerating apparatus comprising a refrigerating element including a reservoir for liquid refrigerant, a second refrigerating element connected in series with the reservoir and disposed above the level of liquid therein, the connection being arranged to deliver both liquid and gaseous refrigerant to the second element, and a drain from the outlet of the second refrigerating element to the first element.

1,900,511. BRAKE OPERATING TUBE. EDWARD J. MADDEN, Bridgeport, Conn. Filed Feb. 14, 1929. Serial No. 339,878. 3 Claims. (Cl. 64—12.)



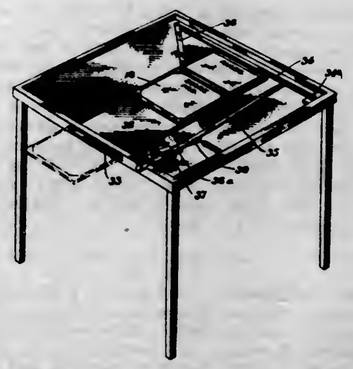
1. An operating tube for brake connections, comprising an inner helical wire coil, wire layers overlaid in reversely twisted relation about said inner coil, a helical wire coil about said reversely laid wire layers, the end of said inner coil being fastened to and supported by the end portion of the overlying wire layers, an end ferrule socketed to fit over the entire end portion of the tubing structure, said ferrule having a portion compressed upon the outer coil and binding said outer coil upon the overlying layers and the secured end portion of the inner coil, the end of the inner coil being secured by having its end portion drawn out and expanded to a larger diameter over the end of the overlying wire layers and said expanded portion of the inner coil being held by the socket in the ferrule solidly against the end of the overlying wire layers.

1,900,512. BRAKE CABLE TUBE. EDWARD J. MADDEN, Bridgeport, Conn. Filed Mar. 14, 1929. Serial No. 346,910. 7 Claims. (Cl. 64—12.)



1. A flexible brake operating tube of substantially constant axial length, comprising a spirally interlocked strip of preformed transverse shape having edge portions of greater and lesser diameters connected by an inwardly dished web and an outwardly extending rib of greater diameter than the larger diameter portion of the strip and the portion of lesser diameter having an outwardly extending edge flange forming by engagement inside the larger diameter portion of an adjoining coil, a sliding interlocking connection between adjacent convolutions of the two.

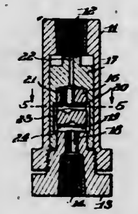
1,900,513. SCORE PAD DISPLAYING AND SUPPORTING DEVICE FOR CARD TABLES. LUCIEN A. MARSH, Mill Valley, Calif. Filed July 1, 1929. Serial No. 375,002. 7 Claims. (Cl. 273—136.)



6. In combination with a table having a sight opening formed in its top, a trackway formed on an incline with relation to the top and extending from a position

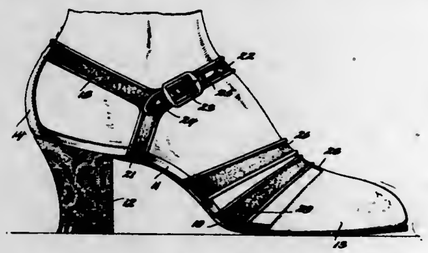
beneath the sight opening downwardly toward one edge of the top, a data bearing pad mounted for movement along said trackway, and means for latching said pad in a position at the upper end of the trackway and in registry with said sight opening.

1,900,514. AUTOMATIC VALVE. WILLIAM A. MCLEAN, Rochester, N. Y., assignor to C. Schnackel's Son, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 25, 1932. Serial No. 601,196. 6 Claims. (Cl. 50—84.)



1. In an automatic valve of the character described, the combination with a shell having inlet and outlet openings, of a fixed piston within the shell having a lateral port communicating with the inlet opening and a discharge port in its head, and a vibratory cylinder confined within the shell and fitted over the piston, said cylinder being provided with a feed port communicating with the outlet opening of the shell and with the piston head discharge; with a by-pass normally connecting the piston head discharge with the lateral port, and with a cut-off for such lateral port effective upon an outward stroke of the cylinder.

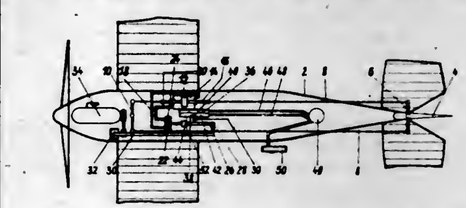
1,900,515. SHOE. CHARLES MILLER, Long Island City, N. Y. Filed Mar. 18, 1931. Serial No. 523,397. 2 Claims. (Cl. 36—2.5.)



1. A sandal comprising an inner sole, an outer sole, a heel, a narrow self-sustaining upstanding rear upper section positioned entirely at the rear of said heel, and a strap attached to the top portion of said rear upper section, said strap having integral longitudinally and downwardly extending portions at both sides of the shoe having their ends secured in position in advance of the heel breast and separable instep strap portions integral with said longitudinally extending portions, the edges of said inner sole at both sides thereof being exposed between said rear upper section and the downwardly extending portions of said strap.

1,900,516. STEERING APPARATUS FOR AIRCRAFT. WALDEMAR MÖLLER, Berlin-Charlottenburg, Germany, assignor to Askania-Werke Aktiengesellschaft, Berlin-Friedenau, Germany, a Corporation of Germany. Filed June 18, 1931, Serial No. 545,229, and in Great Britain July 1, 1930. 17 Claims. (Cl. 244—29.)

1. Steering apparatus for aircraft comprising, in combination, lateral steering means; pressure fluid driven operating mechanism therefor comprising a cylinder, a piston in said cylinder, passages communicating with said cylinder on opposite sides of said piston respectively, and a nozzle to supply pressure fluid to said passage; pressure fluid operated mechanism to move said nozzle relatively to said passages to supply pressure fluid to said passages in varying ratio, and comprising a diaphragm chamber having a diaphragm connected by a resilient connection to said nozzle, and passages communicating with said diaphragm chamber at opposite sides respectively of said diaphragm; a compass having a relatively movable magnet system and casing; and means, controlled by relative movement of the magnet system and casing, to direct the pressure fluid in varying ratio into said last-named passages.

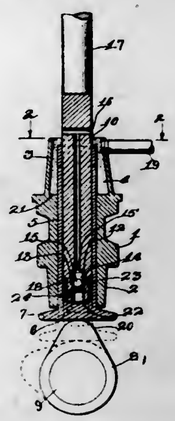


1,900,517. HIGHLY SOLUBLE CALCIUM GLUCONATE AND PROCESS OF MAKING SAME. RICHARD PASTERNACK, Brooklyn, and WILLIAM RALPH GILES, Richmond Hill, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed July 6, 1931. Serial No. 549,101. 10 Claims. (Cl. 260—112.)

1. As a new product, highly soluble calcium gluconate, capable of forming a cold aqueous solution of up to 40% concentration.

6. Process for the preparation of highly soluble calcium gluconate which comprises spray-drying a hot solution of calcium gluconate at elevated temperatures.

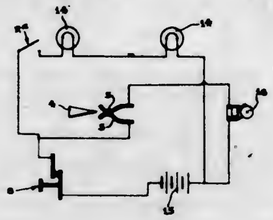
1,900,518. SELF-ADJUSTING VALVE LIFTER, OR TAPPET. AMEL L. PEARSON and JACOB J. GERHARDT, Madison, Wis. Filed Apr. 2, 1931. Serial No. 527,180. 1 Claim. (Cl. 123—90.)



In a device of the character described, a guide having an oil reservoir on the upper end thereof, a cylinder slidably mounted in the guide having its lower end provided with a head and its upper and open and extending into the oil reservoir, a cam for engaging said head and operating said cylinder, a plunger slidably mounted in

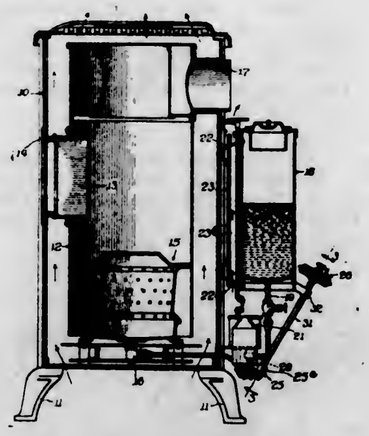
the cylinder having a longitudinal bore and a chamber opening out of its lower end and communicating with the bore, said plunger also having lateral ports adapted to extend into the oil reservoir at certain times, the chamber defining a valve seat at its upper end, a valve in the chamber, the lower end of the plunger being reduced to define a shoulder, and an expansion coil spring fitted around the reduced portion of the plunger and confined between the shoulder and the head of the cylinder.

1,900,519. ALARMED CASH REGISTER. FRED PIANI, New York, N. Y. Filed Feb. 9, 1931. Serial No. 514,626. 1 Claim. (Cl. 235—22.)



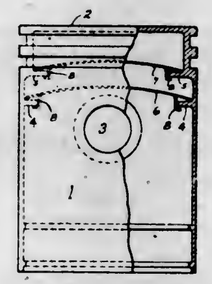
In combination with a cash register having a plurality of keys and a drawer, an electrical circuit, a switch in said circuit operable by any one of said keys, an electrically operated signal in said circuit, a second electrical circuit, an alarm in said second circuit, a switch in said second circuit operable by the opening of the drawer in said cash register to cause the sounding of said alarm, a switch the operation of which makes both circuits inoperable and a special key for operating said last named switch.

1,900,520. CABINET TYPE OIL BURNING HEATER. GEORGE E. PICKUP, Newark, Ohio, assignor to The Wehrle Company, Newark, Ohio, a Corporation of Ohio. Filed Dec. 24, 1931. Serial No. 582,952. 6 Claims. (Cl. 126—90.)



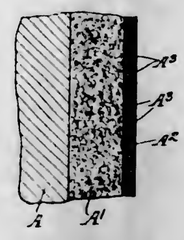
1. A unitary heater of the character described comprising an oil burner, a combustion chamber for said burner, an air circulating casing surrounding and supporting said combustion chamber, an oil supply tank carried by a side wall of said casing, heat-insulating means on one side of said tank between said tank and said casing, a fuel supply connection between said tank and said burner, a valve in said connection, a thermally responsive element supported on the other side of said tank in spaced relation to the top, bottom and side edges of the tank, and means forming a direct operating connection between said thermal element and said valve.

1,900,521. PISTON HEAD GUARD. JAMES H. PRICE, Grand Rapids, Mich. Filed Feb. 6, 1931. Serial No. 513,867. 4 Claims. (Cl. 74—108.)



1. In a perforated splash disc having a pair of oppositely disposed peripheral depending hooks, said disc being adapted to be supported on the upper sides of a pair of oppositely disposed laterally projecting shelves of a hollow piston and said hooks being adapted to engage the under sides of said shelves, said disc when inserted being upwardly bowed for tensional retention by said shelves.

1,900,522. SOUND ABSORBENT MATERIAL AND PROCESS OF PRODUCING IT. PAUL E. SABINE, Geneva, Ill., assignor of one-half to Riverbank Laboratories, Geneva, Ill., a Corporation of Illinois. Filed Apr. 6, 1931. Serial No. 528,045. 5 Claims. (Cl. 72—17.)

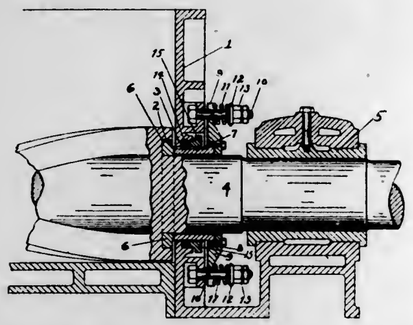


1. The method of rendering walls, ceilings and the like sound absorbent which includes applying to the surface to be treated a sound absorbent layer, applying to the sound absorbent layer a layer of plastic material, and forming a plurality of apertures in said plastic material.

1,900,523. PACKING GLAND. EUGENE SCHMIEDER, Saginaw, Mich., assignor to Baker Perkins Company, Inc., Saginaw, Mich., a Corporation of New York. Filed Feb. 14, 1930. Serial No. 428,322. 2 Claims. (Cl. 286—7.)

2. A packing gland for rubber and other tenacious material working machines comprising a seal member secured to a shaft at the point where said shaft passes through a wall and revolvable therewith, a gland loosely surrounding said shaft and consisting of a sleeve portion and a flange portion, said sleeve portion adapted to contact in sealing relation with said seal member, tightening bolts passing through enlarged openings in said flange portion to secure the said gland against rotation, springs surrounding said tightening bolts, whereby the sleeve portion is permitted to follow the eccentric motion of

the seal ring, due to shaft deflection and irregular rotation and thereby hold the sleeve portion and seal member in tight contact with each other, a resilient packing surrounding said sleeve portion adjacent said wall, a compression gland loosely surrounding said sleeve por-



tion and having independent means adapted to compress said resilient packing against said sleeve portion and the portion of the wall through which said shaft passes, whereby the compression of the resilient packing may be adjusted independently of the pressure applied to the seal joint for the purposes set forth.

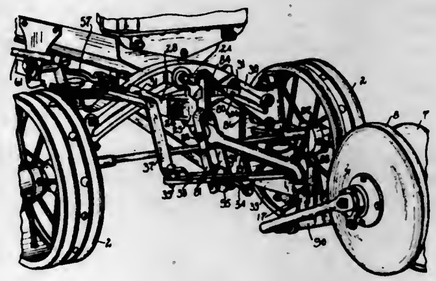
1,900,524. PILE SHELL. FREDERICK A. SCHROEDER, Rochelle Park, and ALBERT E. TWIST, Rutherford, N. J., assignors to Raymond Concrete Pile Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 15, 1932. Serial No. 586,800. 8 Claims. (Cl. 61—78.)



1. As an article of manufacture, a permanent pile shell for driving and subsequent filling, comprising in combination, an outer casing of thin material, an inner lining of corrugated material, and a filler of nonmetallic reinforcing material between said casing and said lining.

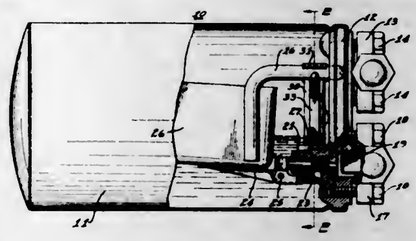
1,900,525. TRACTOR GUIDE. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 22, 1930. Serial No. 483,501. 26 Claims. (Cl. 97—49.)

1. The combination with a tractor having dirigible wheels and a manually controlled steering means for said wheels on the tractor, of a steering device for automatically controlling the position of said wheels, both of said steering means being simultaneously operable to steer said dirigible wheels, said steering device being movable



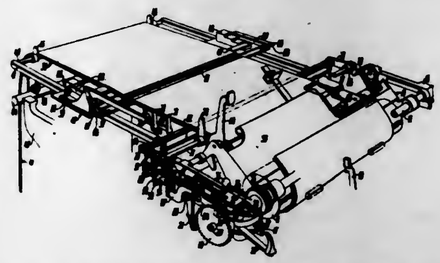
vertically to inoperative position, and means for preventing lateral movement of the device when in inoperative position.

1,900,526. CONTROL MECHANISM FOR EVAPORATORS. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed May 29, 1930, Serial No. 457,448. Renewed Jan. 10, 1933. 4 Claims. (Cl. 62—126.)



1. In a refrigerating system, an evaporator, means for automatically admitting refrigerant and oil in solution into the evaporator to maintain a substantially constant liquid body therein, a suction outlet conduit leading from the vapor space in the evaporator to the exterior, a cup in the evaporator, a wick depending into the liquid body and extending into the cup, and means establishing a conduit connection between the cup and the suction outlet.

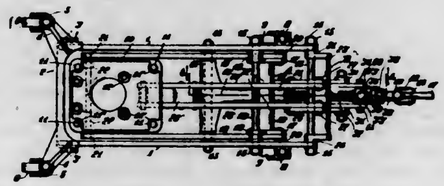
1,900,527. TYPEWRITING MACHINE. JESSE A. B. SMITH, Stamford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed June 27, 1930. Serial No. 464,180. 7 Claims. (Cl. 197—133.)



1. In a web-manifolding typewriting machine having a platen around which may be fed from a source of supply a multiple-ply work-web interleaved with carbons,

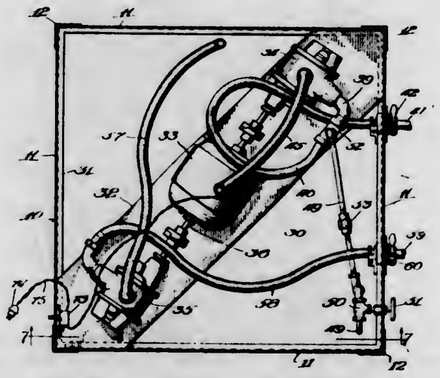
the combination with mechanism for line-spacing said platen, of devices operatively connected to said line-spacing mechanism to be effective at the initial portion of the line-spacing stroke thereof for producing a loop in said web, means for thereupon immediately disconnecting said loop-producing devices from said line-spacing mechanism, the remaining portion of the line-spacing stroke of said mechanism being effective to rotate said platen, and means for releasing said loop-producing devices from said web, so that said loop may cause a slack in the web before said platen is rotated by said line-spacing mechanism.

1,900,528. JACK. ROBERT STATZ, Racine, Wis., assignor to Walker Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 28, 1932. Serial No. 589,418. 17 Claims. (Cl. 254—7.)



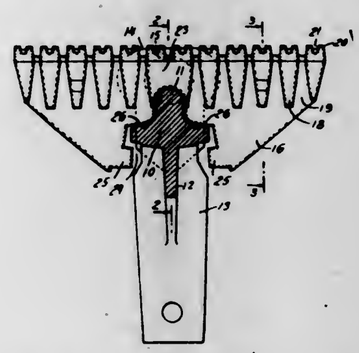
1. A jack comprising a carriage, a load-supporting member, a lever mechanism fulcrumed on the carriage and comprising long and short arms, the longer arm supporting the member, a swinging frame pivoted to the shorter arm of the lever mechanism, a nut pivotally supported in the carriage, a screw shaft threaded in the nut, a thrust-collar mechanism connecting the screw shaft with the frame so that the frame will move longitudinally with the screw, and means for rotating the screw-shaft.

1,900,529. DISHWASHER. ROBERT L. TATHAM, Chicago, Ill. Filed June 29, 1929. Serial No. 374,890. 4 Claims. (Cl. 141—9.)



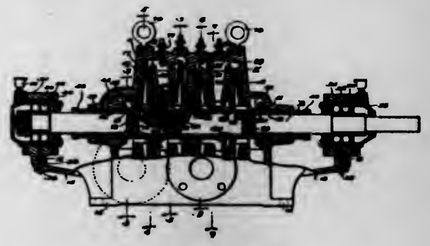
1. In a dish washer, the combination of a case having a lower compartment, pumping apparatus therein embodying a pump having its intake end connected to a water supply conduit, a dish holding tank removably secured in said case above said compartment, a dish spraying device in said tank, a soap reservoir contained in said tank, a water conduit leading from the discharge end of said pump and connected releasably to the dish spraying device, and a conduit leading from said soap reservoir and connected releasably to the intake end of said pump, whereby the tank and soap reservoir may be disconnected from the pumping apparatus.

1,900,530. GRATE. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed Aug. 19, 1930. Serial No. 476,265. 16 Claims. (Cl. 126—180.)



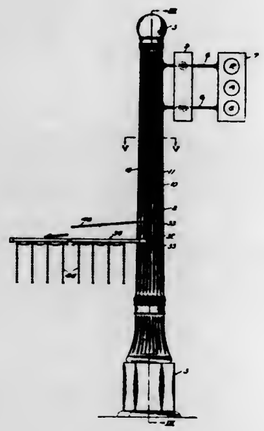
1. A grate bar comprising a longitudinal member provided with supporting means at its ends and a plurality of hollow fuel supporting units extending beyond the lateral edges of said member, each unit consisting of a pair of plates of sheet stock having portions remote from their edges distorted out of the plane thereof and serving to prevent cumulative expansion effects.

1,900,531. MULTISTAGE CENTRIFUGAL PUMP. JAMES E. VITU, Chicago, Ill., assignor to Well Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1929. Serial No. 393,603. 4 Claims. (Cl. 103—112.)



1. In a centrifugal pump, the combination with a casing having two adjacent impeller chambers; of an impeller rotatably mounted in each of said chambers, the pressure developed in one of said chambers being in excess of that developed in the other; and means providing a seal between said chambers adjacent the shaft of the impellers, said means including a fixed sealing ring and a loose floating ring cooperable therewith, said fixed sealing ring having an annular flange with a plane surface projecting toward said shaft, and said floating ring loosely surrounding said shaft and having an outstanding annular flange with a plane surface overlapping the plane surface of said flange of the fixed sealing ring and disposed on that side of the sealing ring facing the chamber having the higher pressure, whereby the flange of the floating ring is pressed against the flange of the fixed ring by the pressure developed in said chamber having the higher pressure and the floating ring may shift relatively to the fixed ring in a plane perpendicular to the axis of the shaft.

1,900,532. TRAFFIC REGULATOR. EZRA C. WELSH, Grimsby, Ontario, Canada. Filed Oct. 6, 1928, Serial No. 310,747. Renewed June 24, 1932. 15 Claims. (Cl. 116—63.)



1. In a traffic regulator, a hollow standard formed with a vertical slot, a pedestrian control means, supporting means for the control means movable vertically along the slot and mechanism within the standard for positively driving the supporting means in different directions for effecting up or down movement of said supporting means.

1,900,533. AUTOMATIC PRESSURE RELEASE GAUGE. LELAND JAY WILCOX, Adel, Iowa. Filed June 10, 1931. Serial No. 543,292. 2 Claims. (Cl. 137—53.)



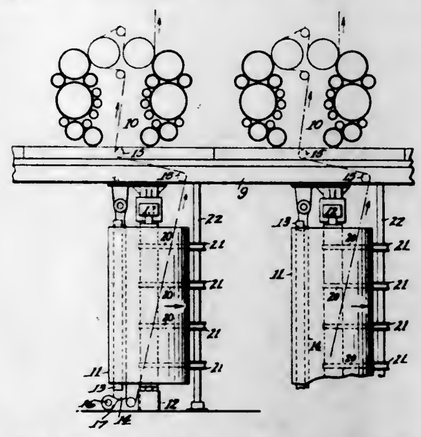
1. In a device of the class described, a hollow member having an opening and a flat bottom flush with its side walls, a hollow stem secured to the center of said bottom and communicating with the inside of said hollow member, said stem having an outer end portion; said bottom having a plurality of air escape ports arranged around said stem, a washer slidably mounted on said stem, a resilient member on said washer capable of closing said ports when said washer is moved toward said hollow member, a nut threaded onto the outer end portion of said stem, and a coil spring embracing said stem having one end engaging said washer and its other end engaging said nut.

1,900,534. ELECTROLYTIC APPARATUS. RICHARD A. WILKINS, Beverly Farms, Mass., assignor to Industrial Development Corporation, Salem, Mass., a Corporation of Maine. Filed Aug. 21, 1928. Serial No. 301,120. 4 Claims. (Cl. 204—5.)



1. Apparatus for electro-depositing zinc comprising in combination, a cathode, an anode containing soluble zinc in proximity to said cathode; said anode so proportioned and so located as primarily electrolytically to supply zinc to the electrolyte at a rate less than zinc is deposited upon the cathode under the desired electrolyte and current conditions; supplemental zinc bearing material relatively remote from said cathode and having the capacity for supplying to the electrolyte, primarily by chemical reaction, more than sufficient zinc to compensate for the excess of zinc deposited over that supplied by said anode; means for circulating said electrolyte in contact with said cathode and anode and in contact with said supplemental zinc bearing material, and means for varying the extent to which the capacity of said supplementl material is used, thereby to increase or decrease the zinc content of the electrolyte.

1,900,535. METHOD OF AND APPARATUS FOR FEEDING PAPER TO PRINTING PRESSES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 13, 1930, Serial No. 451,965. Renewed July 29, 1932. 7 Claims. (Cl. 101—225.)



3. The combination with a printing press, of supports for a web roll located below and at one side of the press one over the other, so that the axis of the web roll is located in a vertical position and a vertical guide roll in position for guiding the web from the web roll into the press.

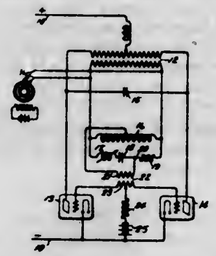
1,900,536. LAMINATED GLASS. JOHN C. ZOLA, Tarentum, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Mar. 3, 1931. Serial No. 519,897. 15 Claims. (Cl. 49—81.)

1. A laminated plate comprising a pair of glass sheets, an interposed sheet of cellulose ester plastic and a joining layer of material between each of the glass sheets and the sheet of plastic comprising the condensation product produced by heating a polyhydric alcohol with a dibasic aliphatic acid containing six or more carbon atoms in a normal straight chain.

1,900,537. CEMENTING COMPOSITION. LESTER V. ADAMS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 9, 1929. Serial No. 384,807. 6 Claims. (Cl. 87—17.)

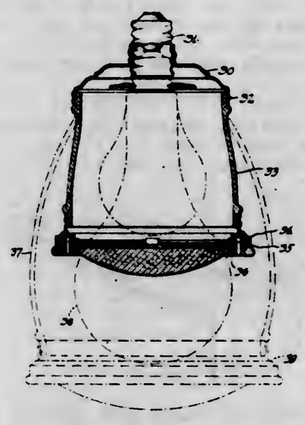
1. A cementing composition consisting of an alkyd resin and a degelled oil homogeneously blended but uncombined with said resin.

1,900,538. PHASE SHIFTING CIRCUITS. BURNICE D. BEDFORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,165. 8 Claims. (Cl. 172—238.)



1. In combination with a source of alternating potential, means for obtaining a potential variable in phase with respect thereto over a range of more than 180 electrical degrees comprising means for establishing a point of intermediate potential of said source, a two-part series circuit connected across said source comprising respectively a resistance and an inductance and capacitance one of which is variable, and an output circuit connected between said intermediate point and the junction of said two-part circuit.

1,900,539. READING LAMP. CHARLES T. BRADY, Detroit, Mich. Filed Nov. 27, 1929. Serial No. 410,018. 4 Claims. (Cl. 240—92.)



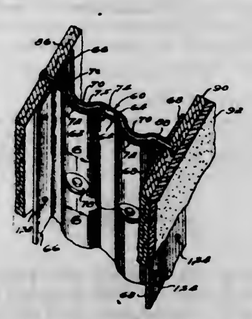
1. A lamp comprising a housing having an open end and a closed end, an adapter mounted in and passing through said closed end, said adapter having one end adapted for insertion in a lamp socket and the other end adapted to receive a lamp plug, a lens frame mounted in said open end, said frame having an inner flange, a lens mounted in said frame and resting on said flange, and a spring ring holding said lens against said flange.

1,900,540. ICE-REMOVER FOR WINDSHIELDS. JOHN H. BRODERICK, Clinton, Mass. Filed Feb. 8, 1930. Serial No. 427,007. 2 Claims. (Cl. 15—255.)



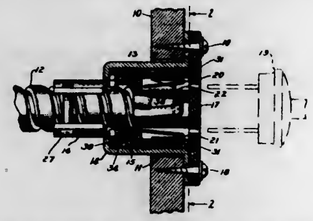
1. As an article of manufacture, a block adapted to be rubbed over a surface for the purpose of removing ice and sleet consisting of common salt and a pyroxylin cement and containing about 20 percent as much cement as salt by volume.

1,900,541. STRUCTURAL ELEMENT. HENRY W. BUELOW, Royal Oak, and GEORGE BUELOW, Detroit, Mich. Filed July 1, 1931. Serial No. 548,134. 9 Claims. (Cl. 189—34.)



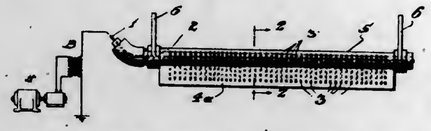
1. In a metallic structural frame element adapted to receive and hold fastening elements, a pair of metallic channel members rigidly secured together in back-to-back relation with the corresponding sides of said channels in co-planar relation and with the webs spaced from each other for reception of said fastening elements, said webs being corrugated longitudinally thereof in complementary relation, with the ridge of one corrugation extending toward the valley of the complementary corrugation whereby to form between them a curved slot to receive said fastening elements, the shape of the slot defined by the corrugations, the spacing of the webs, and the rigidity of the metallic channel members being such as to cause said fastening elements to bend and thereby be held in position by contact with the sides of said corrugations when driven in between the same transversely thereof.

1,900,542. WIRING DEVICE. GEORGE CARLSON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 28, 1931. Serial No. 540,671. 4 Claims. (Cl. 247—15.)



1. In a wiring system, an outlet box adapted to receive a wiring device and having an opening through which a cable may pass, a cable clamp having shoulders to engage the base of said outlet box, a wiring device to which a cable may be connected provided with a stop for the cable armor, and a face plate cooperating with said outlet box to hold the wiring device in position in said box when the outlet box is secured in an opening in a wall.

1,900,543. COMBINED INK DRYING AND NEUTRALIZING DEVICE. CHARLES HENRY COCHRANE, New York, N. Y. Filed Nov. 26, 1930. Serial No. 498,399. 6 Claims. (Cl. 175—264.)



1. In a device of the character described the combination of a suitable electrical conductor, said electrical conductor being charged with high potential alternating electrical energy, a suitable insulating covering embracing said electrical conductor, and a plurality of suitably shaped inductive electrical members positioned and held upon said insulating covering for the purpose of creating electrical breezes, and insulating means to completely cover and protect said plurality of inductive electrical members.

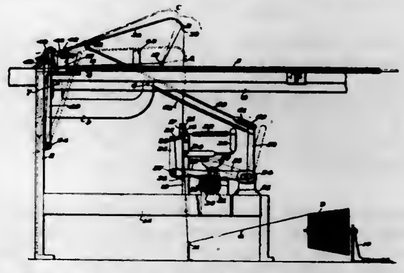
1,900,544. PLAYING BALL. WILLIAM D. CRAIG, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Apr. 10, 1930. Serial No. 443,120. 2 Claims. (Cl. 273—65.)



1. In a playing ball, a leather cover having a slit therein, a slide fastener having tape stringers arranged on the inner side of said cover adjacent said slit, metal fastener elements attached to the edges of said tape stringers and a slider movable along said elements to engage and release the same, reinforcing and facing strips arranged over said tape stringers on the inner side thereof and spaced apart sufficiently to allow free movement of the slider, a flap attached along one side to said cover and having its free edge extending over said metal elements and slider, and an inflatable bag inside said cover.

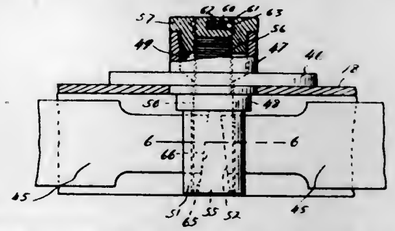
1,900,545. FILLING STOP MOTION FOR LOOMS. ANTHONY DARIENZO, Amsterdam, N. Y., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Aug. 3, 1932. Serial No. 627,331. 10 Claims. (Cl. 139—370.)

1. In a filling stop motion for looms, the combination of a needle for passing the filling through the shed, a whip for taking up slack in and tensioning the filling, a main tensioning mechanism for the filling, means for rendering the whip and the main tensioning mechanism ineffectual during the travel of the needle into the shed to permit the needle to draw filling from the supply until



the needle reaches the selvage shuttle side of the loom and thereupon freeing the whip and main tensioning mechanism to take up slack and tension the filling as the needle is withdrawn from the shed, and means controlled by the whip to effect loom stoppage should the filling break or become too slack as the needle is being withdrawn from the shed.

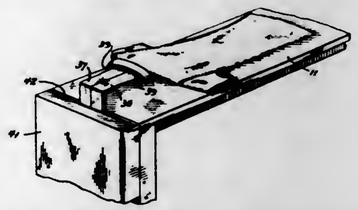
1,900,546. BRAKE CONSTRUCTION. EDWIN R. EVANS, Detroit, Mich. Filed Mar. 30, 1928. Serial No. 265,884. 24 Claims. (Cl. 188—79.5.)



1. A vehicle brake including in combination, a brake drum, a plurality of brake shoes, and means for adjusting said brake shoes relative to said brake drum, said means including a grooved member, and means for axially moving said grooved member.

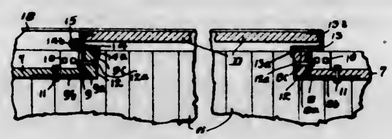
5. A vehicle brake including in combination, a brake drum, a pair of brake shoes, each being provided with a tapered end, a member provided with tapered grooves adapted to receive the tapered ends of said shoes, said member being movable to force said shoes into engagement with said drum and means for effecting a measured withdrawal of said shoes from engagement with said drum.

1,900,547. COLLAR SHAPER. PATRICK FARRELLY, San Francisco, Calif. Filed Feb. 11, 1931. Serial No. 515,000. 10 Claims. (Cl. 223—15.)



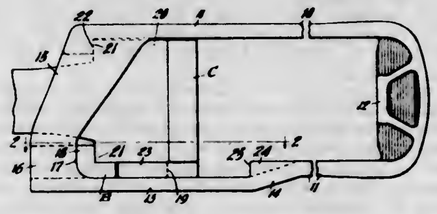
1. In a device for shaping shirt collars, a pair of flat fingers adapted to overlie a folding table in a plane parallel to the top thereof, means normally urging said fingers downwardly and apart, and means for causing said fingers to move upwardly and toward each other.

1,900,548. BOX CAR CONSTRUCTION. OTIS W. GALLOWAY, Minneapolis, Minn. Filed Oct. 27, 1930. Serial No. 491,352. 4 Claims. (Cl. 20—26.)



1. In combination with the lintel and sill and siding of a box car, door post construction comprising a pair of metallic posts interposed between said lintel and sill and rigidly secured thereto and cooperating therewith to define a doorway, said posts being of approximately Z-shape in cross section and having relatively wide protective flanges at their inner surfaces, said flanges overlying and protecting the inner surfaces of the ends of the siding members adjacent the doorway, means for rigidly securing said siding ends to said flanges, removable filler members extending longitudinal of said post and secured to the web portions of said Z-bars, said posts having inturned protective flanges covering the outermost edges of said filler members.

1,900,549. COUPLER AND YOKE CONNECTION. WILLIAM A. GEIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Nov. 2, 1931. Serial No. 572,615. 8 Claims. (Cl. 213—70.)



1. In a coupler and yoke connection including a coupler having a shank provided with a shouldered butt, the combination with a yoke having top and bottom spaced arms connected at their inner ends by a vertical end section, and connected at their outer ends by spaced vertical side walls, the bottom arm of the yoke having a transverse abutment shoulder; of a locking block seated on said bottom arm and having its front end abutting said shoulder of the arm, said block having a transverse shoulder adapted to engage the lower shoulder of the coupler butt, said top arm having an interior shoulder engaging the top shoulder of the coupler butt; and a front follower within the yoke, said front follower and locking block having interengaging means thereon holding said block against lateral displacement with respect to said follower.

1,900,550. HANGER FOR FUR. MAX GRAY, Minneapolis, Minn. Filed May 24, 1930. Serial No. 455,258. 1 Claim. (Cl. 223—61.)

A hanger for animal headed furs having spring lever clips on the fur heads, which hanger consists of a single piece of resilient wire having a shank portion and a pair of vertically spaced, laterally projecting, reversely bent, portions joining the lower end of said shank portion and forming therebetween an open mouthed, resilient loop en-



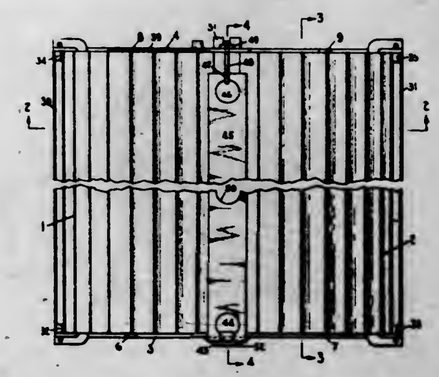
gageable with the pivot lugs of the spring clip, the outer ends of said reversely bent portions being more closely vertically spaced than the inner ends thereof.

1,900,551. LIGHTING UNIT FOR REFLECTED ILLUMINATION. EDWIN F. GUTH, Webster Groves, Mo. Filed Feb. 28, 1931. Serial No. 518,976. 2 Claims. (Cl. 240—103.)



1. A frame, a reflector mounted therein, a central member on said frame, a plurality of electric lamps at the junction of said wings and extending longitudinally thereof and behind said central member, said reflector having two concave wings, a plurality of longitudinal corrugations on each of said wings.

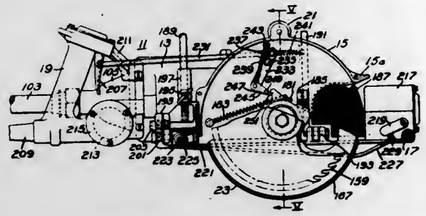
1,900,552. LIGHTING FIXTURE. EDWIN F. GUTH, Webster Groves, Mo. Filed Nov. 7, 1931. Serial No. 573,561. 6 Claims. (Cl. 240—103.)



1. The combination, with a pair of corrugated reflectors, of end plates therefor, inwardly extending flanges on said

plates having scallops which are fitted to said corrugations, a plurality of lugs on said plates, the edges of said reflectors being bent to form sockets for said lugs and means to hold said plates and reflectors securely together.

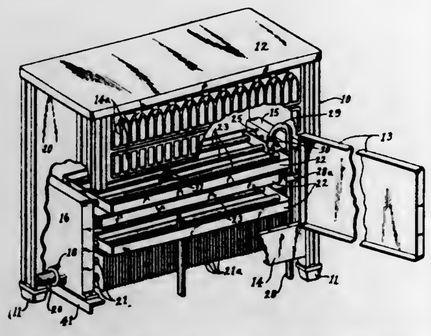
1,900,553. PORTABLE MOTOR DRIVEN SAW. GEORGE E. HAMPTON, Pittsburgh, Pa., assignor to The Syntron Company, a Corporation of Delaware. Filed Feb. 4, 1931. Serial No. 513,268. 14 Claims. (Cl. 143—43.)



1. In a portable motor driven tool assembly including a handle for the assembly and a driving motor, a motor-circuit-controlling switch located adjacent to the handle to be grasped by the operator in holding and guiding the tool by said handle, a second motor-circuit-controlling switch in series circuit with said first switch, and means for closing said second switch upon pressing said tool and material to be operated on thereby into close operating engagement.

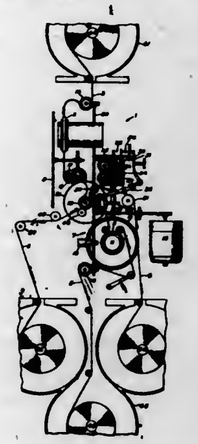
14. Portable cutting apparatus comprising a unitary assembly including a driving member, a cutting element driven thereby, a movable guard for said element, means normally maintaining the guard in advanced position to shield a given portion of the cutting element and in advance of the part of said element which must engage the work, so that it may not engage the work until the guard is shifted, and means actuable to move said guard toward retracted position where at least a part of the cutting element will be exposed, and into a position that it may engage the work so that the guard may be forced back by the work as the tool advances, said means providing a clear path for return movement of the guard to its advanced position when the cutting element has been removed from the material.

1,900,554. COMBINED RADIATOR AND HUMIDIFIER. THEODORE S. HART, New Britain, and PHILIP M. BUSH, Bloomfield, Conn., assignors to The Hart & Hutchinson Company, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 27, 1931. Serial No. 559,686. 9 Claims. (Cl. 257—138.)



1. In a humidifier for the air in a room, a cabinet adapted to rest upon the floor of said room, said cabinet having top and bottom openings, a pair of inlet and outlet headers supported by the end walls of said cabinet, a plurality of tiers of horizontal tubes connecting said headers, the lower tiers of tubes being provided with fins and comprising a radiator section, the upper tiers being immersed in a plurality of water pans and comprising humidifying units, means for supplying heating fluid to said inlet header, the heated air from said radiator section being caused to absorb the moisture rising from the humidifying units.

1,900,555. COMBINED MOTION PICTURE-SOUND REPRODUCER. CHARLES L. HEISLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 26, 1928. Serial No. 273,126. 3 Claims. (Cl. 88—16.2.)



2. In apparatus of the character described, a structure adapted to support a plurality of film reels, said structure forming a pair of spaced reel housings and a third housing arranged opposite the space between the pair of housings, the adjacent walls of which form a film channel leading to said third housing.

3. A combined picture projecting and sound reproducing apparatus comprising means for supporting a first pair of reels, means for supporting a second pair of reels, separate picture projecting and sound reproducing elements having a common driving motor for the synchronous operation thereof, means arranged to guide a single record film between the reels of said first pair operatively through both of said elements serially, means arranged to guide a single record film between a reel of said first pair and a reel of said second pair inoperatively past one of said elements and means arranged to guide a single record film between a reel of said first pair and the other reel of said second pair inoperatively past the other of said elements.

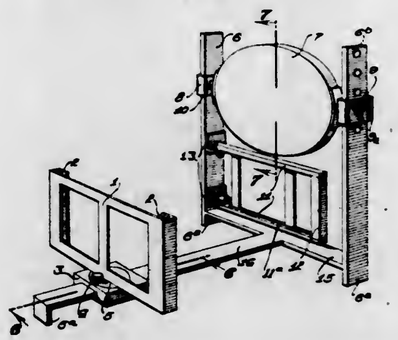
1,900,556. ROLL FOR MOLTEN GLASS AND THE PROCESS OF COOLING THE SAME. HALBERT K. HITCHCOCK, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Jan. 17, 1928. Serial No. 247,368. 8 Claims. (Cl. 257—95.)



1. In glass rolling apparatus, the combination with a cylindrical casing adapted to contact with molten glass, of a spray pipe extending longitudinally of the casing with

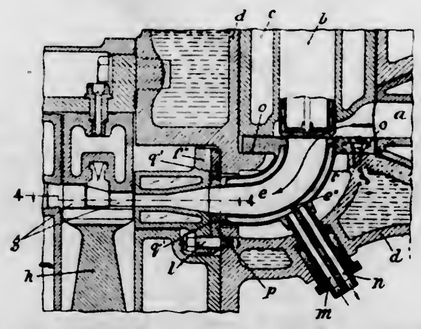
spray openings leading laterally therefrom, a pump driven by an electric motor for supplying water under pressure through said pipe, outlet means at the end of the casing for withdrawing therefrom the steam formed in the casing, means for condensing the steam and returning the water of condensation to the pump, and means regulated by the temperature of said steam for governing the speed of the electric motor driving said pump.

1,900,557. EXHIBITING APPARATUS. GEORGE A. HOLCOMBE, San Diego, Calif. Filed Oct. 7, 1929. Serial No. 397,761. 6 Claims. (Cl. 88—1.)



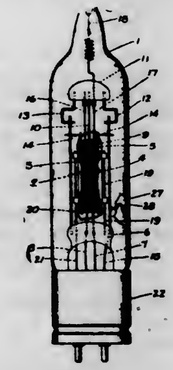
1. In an exhibiting apparatus, a frame including a pair of spaced apart uprights, a concave mirror pivotally supported on a horizontal axis positioned intermediate its upper and lower sides between said uprights, a plane mirror receiving-frame supported on said frame relative to, and facing, said concave mirror, at a distance from said concave mirror less than its focal length, and another frame, or picture holder, pivotally supported on said frame slightly below said concave mirror with its front facing the front of said plane mirror frame.

1,900,558. NOZZLE CHANNEL CONSTRUCTION FOR EXPLOSION TURBINES. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 25, 1929, Serial No. 342,639, and in Germany Mar. 13, 1928. Renewed Oct. 1, 1932. 4 Claims. (Cl. 60—41.)



1. In an explosion turbine, in combination, a frame, a combustion chamber supported by said frame and mechanism for periodically charging said combustion chamber with an explosive mixture to be exploded therein, a nozzle valve adapted to be opened at predetermined instants to permit discharge of the combustion gases from the combustion chamber, a rotor, a nozzle supported by and within said frame and arranged to discharge the combustion gases against said rotor, a connecting channel member insert disposed between the outlet end of said combustion chamber and said nozzle to conduct the hot, rapidly flowing gases to the latter, and positioned within said frame and separate therefrom so as to protect the same against the direct heat of the gases, said channel member insert consisting of two walls enclosing a cooling chamber and being fixed at its inlet end to said frame, a conduit for conducting a cooling medium to, and a conduit for withdrawing the same from said cooling chamber, whereby the inner gas-swept wall of said channel member insert may be made relatively thin so that during the operation of the turbine such a small temperature differential exists between the inner and outer surfaces of such wall that no excessive stresses arise therein.

1,900,559. ELECTRON DISCHARGE DEVICE. ALBERT W. HULL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Mar. 3, 1924, Serial No. 696,665. Divided and this application filed Aug. 22, 1928. Serial No. 301,336. Renewed Aug. 3, 1931. 7 Claims. (Cl. 250—27.5.)



7. The combination in an electron discharge device of an electron emitting cathode, an anode and a control grid, and shielding means for intercepting the electrostatic lines of force extending between the electrodes comprising a shielding element interposed between the anode and control grid and an additional shielding element surrounding the anode, and connected to the first shielding element.

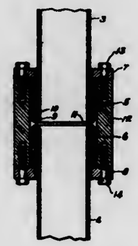
1,900,560. ANCHORING MEANS. ANDRE JANER, Flushing, N. Y., assignor to The A. J. & K. Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 6, 1932. Serial No. 615,591. 2 Claims. (Cl. 24—73.)



2. An anchoring device adapted to anchor a chain to a member having a recess, comprising a member formed of a single piece of wire and having a loop with a pair of crossed arms at one end, one of said arms being disposed at an angle to the general length of the device and having

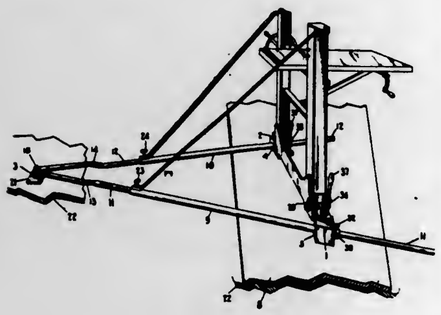
an edge at its free end adapted to bite into the wall of the recess in which the device is placed, the other of said arms extending beyond the first one and being provided with a hook adapted to be connected to a chain or the like.

1,900,561. CONDUIT CONNECTION. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 5, 1931. Serial No. 535,198. 2 Claims. (Cl. 285—131.)



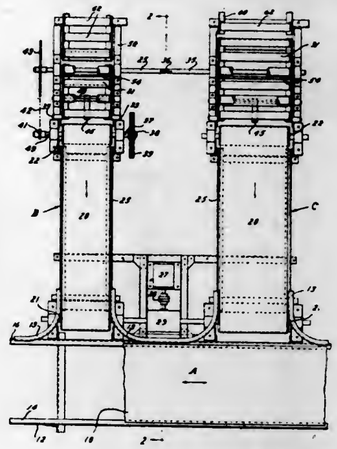
1. A conduit having two adjacent parts defining a clearance between them for permitting axial expansion and means for connecting said parts, comprising a tubular member around each of said parts and defining an annular space with said part, one end of each of said tubular members being welded to the end of the corresponding conduit part, the other end of each of said tubular members having a flanged portion, another tubular member surrounding said first mentioned tubular members, and means for connecting said flanged portions to said other tubular member.

1,900,562. DEPTHOGRAPH CAMERA STAND. CLARENCE W. KANOLT, New York, N. Y. Filed May 23, 1930. Serial No. 454,863. 14 Claims. (Cl. 248—41.)



1. In a stand for a camera for the taking of depthograph pictures, a pair of boxes, wheels mounted therein, anti-friction ball bearings on which said wheels turn, a pair of tubes mounted in said boxes, which tubes converge toward a common center, rods slidably mounted inside of said tubes, bars secured to said rods, the ends of said bars being pivotally secured to a post at said common center, adjustable means to secure the position of said rods in said tubes, a hub on one of said wheels, a bevel gear secured thereto, a bevel pinion in mesh with said gear, a driven shaft to which said pinion is secured, a smooth plane surface on which said wheels run, and manually operable means to space said wheels from said surface.

1,900,563. CONVEYER. HENRY C. KELLER, Syracuse, N. Y., and MAYNARD VAN BILLIARD, Philadelphia, Pa., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Apr. 22, 1930. Serial No. 446,231. 12 Claims. (Cl. 198—20.)



1. The combination with a main conveyer of a pair of branch conveyers by which load units are fed onto the main conveyer, means independent of the main conveyer for operating the branch conveyers and means actuated seriatim by said first named means for regulating the feeding operations of the branch conveyers which means includes a movable section of each branch conveyer, and means for shifting said sections alternately out of position and thereby stopping the feeding operations.

1,900,564. SLIDE FASTENER TAPE. MAX KIESSLING, Waterbury, Conn. Filed May 4, 1932. Serial No. 609,117. 4 Claims. (Cl. 24—205.)

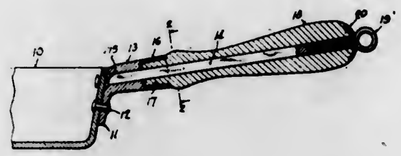


1. In a slide fastener, a longitudinal strip of fabric tape, a plurality of fastener elements secured along one edge thereof, said strip being folded over into two unconnected intermediate plies and having hems folded over one or more times along both edges of said plies, said hems being stitched together to form a head thick flexible edge for receiving said fastener elements.

1,900,565. COOKING UTENSIL HANDLE. RALPH N. KIRCHER, West Bend, Wis., assignor to West Bend Aluminum Company, West Bend, Wis., a Corporation of Wisconsin. Filed Jan. 25, 1930. Serial No. 423,354. 1 Claim. (Cl. 16—116.)

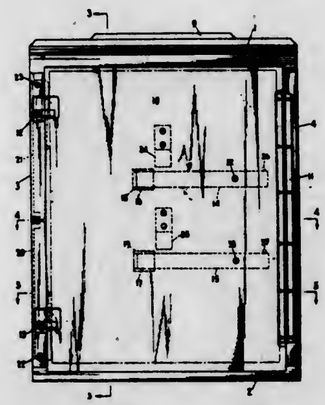
A cooking utensil handle of insulating material provided with a squared bore, combined with means for connecting the handle to the utensil, the said means comprising a

plate adapted to be secured upon the utensil and having a radially extending projection provided with a squared longitudinal bore with a flare at its inner end and a socket at its outer end, a squared shaft anchored in the said bore and extending outwardly of the socket, and having its



inner end expanded to fill the flare and prevent withdrawal of the shaft, the said handle arranged upon the said shaft and having one end entered in the said socket, and means engaged with the shaft for securing the handle upon the shaft.

1,900,566. DEPHTHOGRAPH PLATE HOLDER. CLARENCE W. KANOLT. New York, N. Y. Filed May 23, 1930. Serial No. 454,862. 8 Claims. (Cl. 95—37.)



1. In a plate holder having a top, bottom and sides, one side of said holder being made of unyielding material, an opaque closure for its front, an opaque closure for its rear, a lined screen fixedly mounted in said holder, a photographic plate adjacent to said screen, a pair of swinging levers pivotally secured to said unyielding side of said holder, protuberances on said levers which abut the edge of said plate, and a screw, mounted in said unyielding side of said holder, which engages the inner ends of said levers, whereby the rotating of said screw swings said levers and moves said plate.

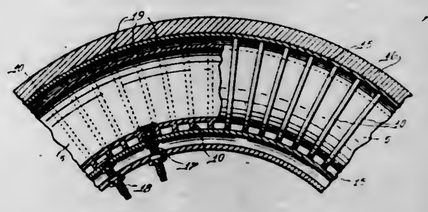
1,900,567. STADIA TRANSIT. EUGENE W. KRAFT, Chicago, Ill., assignor to Keuffel & Esser Co., Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 24, 1931. Serial No. 576,998. 8 Claims. (Cl. 33—69.)

1. An instrument of the class described comprising a support, a telescope carried thereby provided with stadia wires, means mounting the telescope for angular adjustment, cooperating members including a circular ring in which one member is carried by the support and the other member is carried and angularly adjustable with the telescope, a scale of angular displacement throughout an entire circumference upon one edge of the circular ring, two scales upon the other edge of the circular ring one of which is



graduated in terms of horizontal constants and the other in terms of vertical constants varying with each angle of inclination of the telescope, and an index for each of the scales on the other member.

1,900,568. PNEUMATIC TUBE. HAROLD F. KRUG, Grosse Pointe Park, Mich. Filed Nov. 27, 1931. Serial No. 577,487. 1 Claim. (Cl. 152—22.)

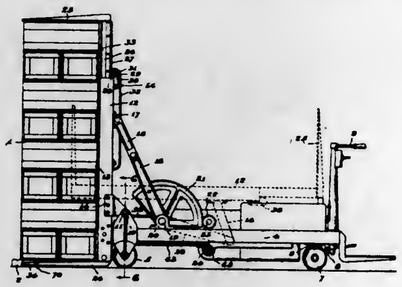


A pneumatic tire comprising an outer casing forming a tire shoe, an outer pneumatic tube within said shoe in contact with the wall thereof, an inner pneumatic tube within said outer tube and formed with integral external annular ribs extending transversely of said inner tube completely around the same and across said space between said tubes, said ribs being spaced apart and secured at their outer side edges to said outer tube to form annular air chambers between said inner and outer tubes, said ribs being apertured to place said chambers in communication with each other and separate means for inflating each of said tubes.

1,900,569. APPARATUS FOR HANDLING MERCHANDISE. HERBERT H. LEDERER, Cleveland, Ohio. Filed Nov. 21, 1930. Serial No. 497,141. 5 Claims. (Cl. 214—66.)

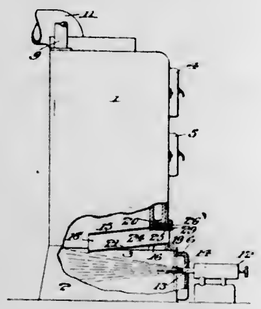
1. Apparatus for transferring stacked merchandise comprising a movable horizontal frame, a body tiltably mounted on said frame for movement from a vertical to a tilted position and vice versa, said body having means at one end thereof for supporting a stack of merchandise when

said body is in a vertical position, mechanical means for moving said body relative to said frame, and means for withdrawing said first mentioned means from underneath



the merchandise longitudinally of said frame and transversely of said body, whereby the merchandise may be deposited in its original stacked condition.

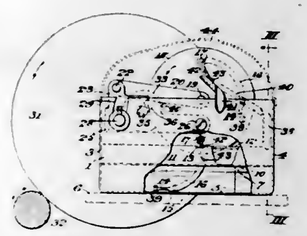
1,900,570. FURNACE. GUSTAVE LEIMAN, New York, N. Y., assignor to Leiman Bros. Inc., Newark, N. J., a Corporation of New Jersey. Filed Nov. 2, 1929. Serial No. 404,284. 8 Claims. (Cl. 158—1.5.)



1. An air admission attachment for vertical tubular boilers including a firebox, a base therefor and an oil burning device in the base, said attachment comprising a straight open ended tubular member having the inner end of one of its walls cut away to form a longitudinal opening therein and secured to the boiler in position to project into the firebox for admitting air thereinto, and a gravity operated shutter pivoted adjacent the outer end of said member and adapted to be moved toward and away from said longitudinal opening in the wall of the member by the draught in the boiler to control the amount of air passing through the member to the firebox.

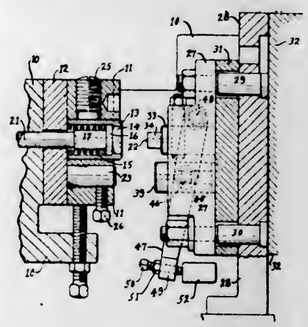
1,900,571. LIQUID FEEDING DEVICE. GEORGE W. LEIMAN, Newark, N. J., assignor to Leiman Bros. Inc., Newark, N. J., a Corporation of New Jersey. Filed Jan. 29, 1930. Serial No. 424,231. 6 Claims. (Cl. 184—63.)

1. The combination with a rotating shaft of a machine, of a liquid feeding device comprising, a main reservoir, an auxiliary reservoir disposed above said main reservoir, means for transmitting motion from said rotating shaft to the device, a disc having its periphery in contact with said means for actuating it, at least one element pivoted on said disc and arranged to be passed into and out of the liquid in the main reservoir for removing therefrom a small quantity of liquid, a duct connected to said auxiliary reservoir and having its upper end horizontally disposed in the vertical plane of travel of said element to receive the element and liquid therefrom, at least one second element pivoted on the disc and arranged to be moved



into and out of the liquid in the auxiliary reservoir, and a conduit having its upper end horizontally disposed in the vertical plane of travel of said second element to receive the element and liquid carried thereby from the auxiliary reservoir.

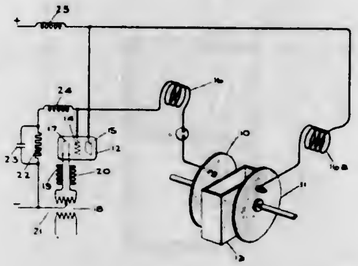
1,900,572. TUBULAR RIVET MACHINE. CHARLES E. LYMAN, Waterbury, Conn. Filed Sept. 15, 1931. Serial No. 562,890. 14 Claims. (Cl. 10—12.)



1. In a machine for producing a tubular headed rivet, a reciprocating gate member carrying an extruding punch and a heading punch, a stationary die bed having a recess for holding a blank while the shank is being extruded around said extruding punch, means for stripping said extruding punch from said blank leaving said blank within said recess, means for raising said punches to bring said heading punch into alinement with said blank, said die-bed having a lower heading socket, means on said heading punch for receiving said tubular blank from said recess, and serving to hold said blank while the punches are lowered to bring it down into alinement with said heading socket, and means to eject said finished rivet from said heading punch.

1,900,573. ELECTRIC HEATING APPARATUS. ELMER D. MCARTHUR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 19, 1930. Serial No. 496,741. 8 Claims. (Cl. 219—47.)

1. Electric heating apparatus comprising a plurality of pairs of electrodes, a separate source of high frequency supply for each of said pairs of electrodes, one of the electrodes of each pair giving a greater heating effect than the other, and means for passing the material to be heated between said pairs of electrodes in succession in such man-



ner that different portions of said material are adjacent the electrode giving the greater heating effect whereby said material is heated uniformly.

1,900,574. FASTENING DEVICE FOR INHERENTLY RESILIENT ARTICLES. RUSSELL G. MEADER, Detroit, Mich., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 15, 1931. Serial No. 550,992. 8 Claims. (Cl. 24—214.)



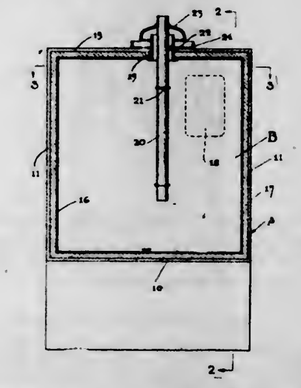
2. A fastener assembly, including an inherently resilient article provided with a preformed opening, a separable fastener element carried by said article and having a part extending through said opening, said fastener element being held in predetermined position relatively to said article by frictional engagement of the wall of said opening with said part due to the inherent resiliency of said article.

1,900,575. METHOD OF MAKING CUP BRUSHES. ROBERT G. MERTES, Catonsville, Md., assignor to The Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1931. Serial No. 529,731. 10 Claims. (Cl. 300—21.)



1. The method of constructing a cup brush which consists in disposing a plate upon a cylindrical sleeve, mounting a plurality of radially extending bristle bodies upon the cylindrical sleeve, one of said bristle bodies being of lesser diameter than the other of said bristle bodies, and then directing the bristles at an angle to produce a working face in a plane at right angles to the center line of the sleeve by bending and securing the plate thereover.

1,900,576. REFRIGERATOR. CHARLES A. MOORE, Edina, Minn. Filed Jan. 26, 1931. Serial No. 511,285. 2 Claims. (Cl. 62—89.)



1. In a refrigerator, a cabinet enclosing a provision chamber, a refrigerating medium within said chamber, an upright conduit within the chamber leading downwardly thereinto from the outside, for the gravitating ingress of air therethrough to the chamber, said cabinet having an egress opening in the upper portion thereof through which air from the corresponding portion of the chamber is compressed to the outside.

1,900,577. GASEOUS CONDUCTION LAMP. DANIEL MCFARLAN MOORE, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed July 12, 1928. Serial No. 292,223. 15 Claims. (Cl. 176—122.)

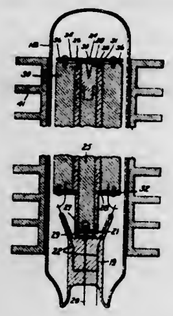


1. A gaseous conduction lamp comprising a sealed vessel containing a gas at cathode glow pressure, a hollow cathode the interior walls of which are inclined to the longitudinal axis thereof and having an opening through which the active surface of the cathode is exposed, an anode encircling said cathode but out of registry with said opening, and a layer of insulation between said cathode and said anode of about 1/100ths of an inch in thickness, said electrodes and insulation being fitted to support one another as a compact structure.

1,900,578. GASEOUS DISCHARGE DEVICE. DANIEL MCFARLAN MOORE, East Orange, N. J., assignor to General Electric Company, a Corporation of New York. Filed Mar. 31, 1930. Serial No. 440,178. 12 Claims. (Cl. 176—122.)

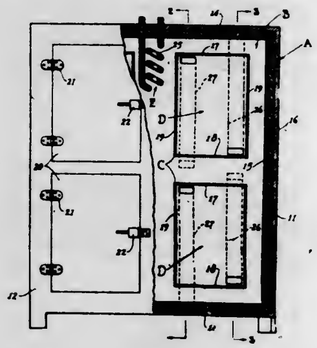
1. A gaseous conduction lamp comprising a sealed vessel containing a gas at cathode glow pressure, a thick walled

cup-shaped anode having a partially closed end, a layer of insulation lining said anode, and a cathode fitted into said cup-shaped anode with one end adjacent the partially



closed end thereof and having in said end a conical cavity with a depth greater than its maximum diameter said cavity being in registry with the opening in the partially closed end of said cup-shaped anode.

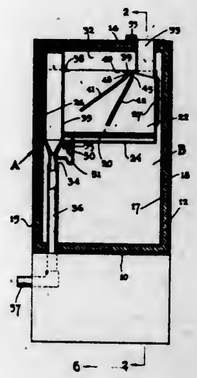
1,900,579. REFRIGERATOR. CHARLES A. MOORE, Edina, Minn. Filed Mar. 19, 1930. Serial No. 437,010. 3 Claims. (Cl. 62—89.)



2. In a refrigerator, a cabinet providing a chamber, a casing within the chamber spaced from inner walls thereof and providing a provision compartment interiorally isolated from the interior of the cabinet, said cabinet including a door forming a side wall of the casing and affording access to the compartment therein, means in said door for the ingress of air to the compartment from the atmosphere outside of the cabinet, means also in said door for the egress of air from said compartment to the outer atmosphere, and an element within the chamber for refrigerating and circulating the air therein, about said casing, and for effecting the ventilation of said chamber, by gravity, through said means.

1,900,580. VENTILATED REFRIGERATOR. CHARLES A. MOORE, Edina, Minn. Filed Feb. 2, 1931. Serial No. 512,842. 16 Claims. (Cl. 62—89.)

6. In a refrigerator, a cabinet enclosing a chamber for provisions, a partitioning structure within said chamber providing a refrigerant compartment communicating at its upper portion with the upper portion of the provision chamber and at its lower portion with a lower portion of said chamber, said partitioning structure comprising spaced walls forming an air passageway therebetween opening at the lower portion of said structure for the egress of air therefrom into the provision chamber, means for the ingress of outer air into said passageway at the upper portion of said structure, said passageway being



open at the upper portion of said structure for the ingress of air thereto from the upper portion of the chamber, and means for the egress of air from said chamber.

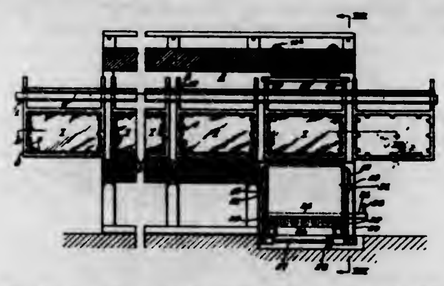
1,900,581. BRAKE TESTING INSTRUMENTALITY. CAMPBELL H. OLIVER, Hibbing, Minn. Filed Oct. 10, 1931. Serial No. 568,011. 1 Claim. (Cl. 265—1.)



A stress indicating lever having a laterally extending web upon one side thereof terminating materially short of the free end of said lever, a geared quadrant upon the free end of the lever, a yieldable spring member fixed to the outermost end of said web forming an extension thereof, a circular dial having an inwardly extending hub portion beneath and to which the upper end of the spring member is fixed forming a support for the dial, a shaft extending through said hub member and carrying a gear in constant mesh with said quadrant, a handle like extension above the quadrant for yieldable operation of the lever, and a pointer carried by said shaft for indicating upon the dial the stress upon the handle before movement of the lever occurs.

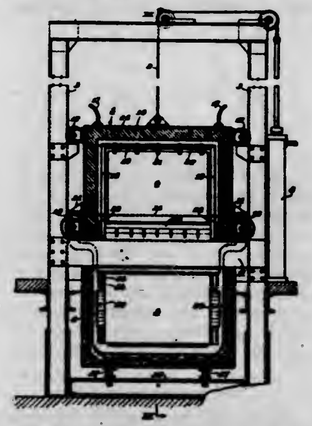
1,900,582. APPARATUS FOR CASE HARDENING GLASS SHEETS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Mar. 18, 1932. Serial No. 599,740. 11 Claims. (Cl. 49—45.)

1. In apparatus for case hardening glass sheets, a heating furnace with a track extending therethrough, a sheet glass carrier mounted for movement along the track arranged to support the glass sheet from beneath and opening downwardly to permit the discharge by gravity



from the carrier of such sheet, and a receiver located beneath the track and adapted to cool the sheet which drops into it when the carrier is opened.

1,900,583. APPARATUS FOR CASE HARDENING GLASS SHEETS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Mar. 18, 1932. Serial No. 599,741. 12 Claims. (Cl. 49—45.)

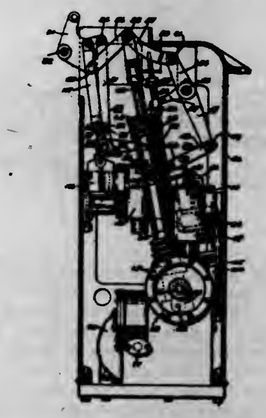


1. In apparatus for case hardening glass sheets, a bridge provided with a frame for supporting a glass sheet in vertical position, a heating furnace open at the bottom mounted to move vertically and arranged in its lower position to fit over said frame, a pair of cooling platens suspended in parallelism below the furnace so as to move up and down therewith and in upper position to lie on opposite sides of said frame, means for raising and lowering the furnace and platens, and means for moving the platens toward and from each other.

9. Means for chilling glass sheets comprising a pair of metal platens mounted for movement toward each other in parallelism, and means for regulating the temperature of the platens comprising a bath of liquid positioned beneath the platens so that the platens may be immersed by a relative vertical movement of the platens and the bath.

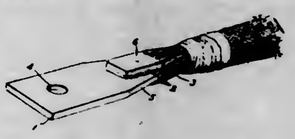
1,900,584. SWITCH OPERATOR. JAMES C. REA, Oakland, Calif. Filed Jan. 8, 1928. Serial No. 244,129. 11 Claims. (Cl. 200—82.)

1. In a switch operator, two mechanisms adapted to be tripped for controlling switch operations, means biasing said switch toward one of two positions, linkage means interconnecting both said mechanisms, spring means adapted to apply opposed forces to two points, one of said points being located on said linkage means and movable for operations of said switch to either of said positions, the other of said points being relatively fixed, and means cooperably associating said mechanisms and said linkage means with said switch for effecting the other one of said



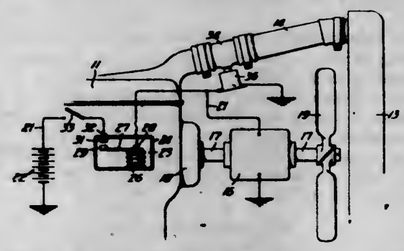
switching operations in response to tripping of one of said mechanisms, said stationary point of spring application being positioned so that said bias may move the switch to said one position without affecting the condition of said spring.

1,900,585. TERMINAL FOR ELECTRICAL CONDUCTORS. WALTER C. REED, Dalton, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 21, 1930. Serial No. 469,458. 4 Claims. (Cl. 173—353.)



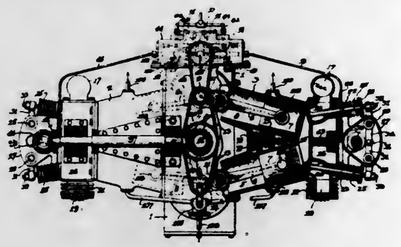
1. A terminal comprising a plurality of end strands of a conductor, and a metallic plate having a portion thereof inserted between said strands and integrally united thereto and a portion thereof protruding from said conductor and constituting the tang of said terminal.

1,900,586. COOLING SYSTEM. JOHN R. RIPPS, Fresno, Calif. Filed Nov. 7, 1930. Serial No. 494,085. 4 Claims. (Cl. 123—171.)



1. A cooling system for use in an internal combustion engine comprising a fan for directing currents of air about said engine, a pump for circulating cooling water through the engine, an electric motor for driving said fan and said pump, and thermoresponsive means on the engine for regulating the operation of said motor.

1,900,587. DIESEL ENGINE. EWALD SCHUTZNIEDRIG, Detroit, Mich., assignor to Victor Koch, Detroit, Mich. Filed Dec. 12, 1930. Serial No. 501,776. 2 Claims. (Cl. 123—53.)



1. In a Diesel engine, upper opposed banks of cylinders, lower opposed banks of cylinders, heads applied to the outer ends of said cylinders and forming combustion chambers common to each pair of vertically spaced cylinders and in communication therewith, means for supplying air and fuel to said chambers, counter shafts between the upper banks and between the lower banks of cylinders, pistons in said cylinders and connected to said shaft, and a take-off shaft between said counter shafts and geared thereto.

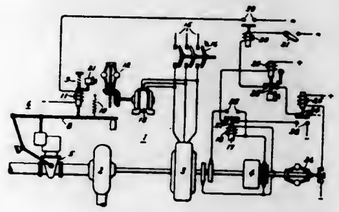
1,900,588. LIQUID COUNTER-BALANCED PUMPING SYSTEM. BERNARD H. SCOTT, Glendale, Calif. Filed June 2, 1930. Serial No. 458,973. 15 Claims. (Cl. 103—179.)



1. A liquid-balanced pumping system comprising a working barrel, a standing valve for the working barrel, a valved plunger having a hollow head in the working barrel, a means forming a reservoir in a well for liquid, a means to apply the hydrostatic head of the liquid in the reservoir to the plunger in the direction of motion of the plunger on its pumping stroke, and a string of sucker rods mechanically connected with the plunger for actuating the latter.

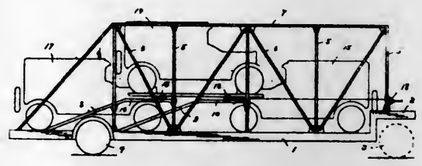
1,900,589. CONTROL SYSTEM. HAROLD T. SEELEY, Yeadon, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 26, 1931. Serial No. 565,310. 5 Claims. (Cl. 175—294.)

1. In combination, a generator, a prime mover driving said generator, an exciter for said generator, means including a magnet for effecting the operation of said prime mover when said magnet is energized and for shutting down said prime mover when said magnet is deenergized, control means for normally effecting the energization and deenergization of said magnet, and means controlled by the speed of said prime mover and the voltage of said



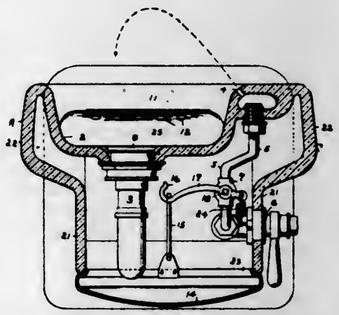
exciter for effecting the deenergization of said magnet and for removing it from the control of said control means when the speed of said prime mover exceeds a predetermined value while the exciter voltage is below a predetermined value.

1,900,590. VEHICLE. ROY B. SIMNING, Duluth, Minn., assignor of one-fourth to Rollo G. Lacy, Duluth, Minn. Filed July 20, 1928. Serial No. 294,240. 8 Claims. (Cl. 280—33.1.)



3. A transport for vehicles comprising a structure supported upon wheels, open at one end for the reception of the vehicles, means at the opposite end for manipulation of the vehicles, and means intermediate of the ends of the structure for elevating and supporting one of the vehicles.

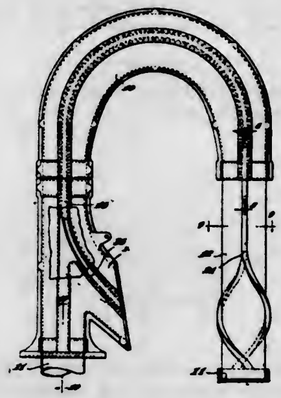
1,900,591. DRINKING FOUNTAIN. HALSEY W. TAYLOR, Warren, Ohio. Filed Jan. 26, 1931. Serial No. 511,181. 3 Claims. (Cl. 4—191.)



2. A basin having a drain opening at its bottom and an overflow passage at one side, and including a stream-projecting device located within said basin in a higher plane than said overflow passage, in combination with a water supply pipe connected to said stream-projecting

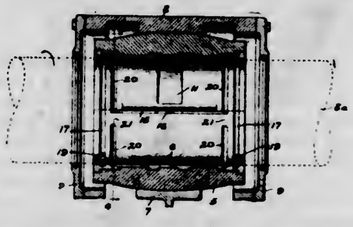
device, a rotatable valve for controlling the flow of water through said pipe, a water receiving vessel, and spring actuated means rigidly connected with the rotatable part of said valve for holding the valve open and for yieldingly suspending the said vessel in position to rotate and close said valve when water overflows into the vessel.

1,900,592. PNEUMATIC DISPATCH SYSTEM. WILLIAM J. TAYLOR and CLARK T. CUTTING, Syracuse, N. Y., assignors to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Mar. 8, 1932. Serial No. 597,441. 14 Claims. (Cl. 243—16.)



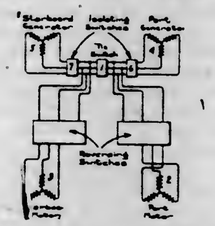
1. In a pneumatic dispatch system, a main carrier transmission tube, a branch transmission tube leading therefrom, a switching section in the main tube at the juncture of the branch and main tubes, means in said section for deflecting certain carriers to the branch tube and an orientating section through which the carriers pass in transit to the switching section and by which the carriers are shifted into such position that those to be deflected are acted upon by such means.

1,900,593. SHAFT BEARING. RAYMOND B. WADE, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 16, 1929. Serial No. 392,929. 6 Claims. (Cl. 308—131.)



1. A shaft bearing having a centrally arranged, circumferentially extending oil receiving recess opening into the bearing surface in its upper half, a horizontal channel which supplies oil to the recess, a conduit for supplying oil under pressure to the channel, a pair of annular grooves in the working surface of the bearing each of which is provided with a dam at one end, a second horizontal channel in the bearing surface to which the other ends of the grooves are connected and deliver oil under pressure above that of the atmosphere due to the source of supply and to the rotation of the shaft, and a conduit by which oil from the second channel is continuously discharged under pressure.

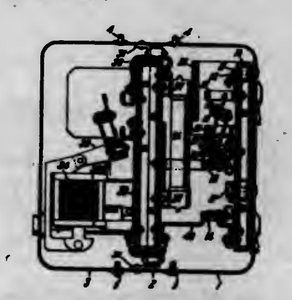
1,900,594. ELECTRIC SHIP PROPULSION. GEORGE O. WATSON, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1929, Serial No. 391,090, and in Great Britain Sept. 7, 1928. 5 Claims. (Cl. 172—8.)



2. In an electric system, a plurality of motors, a plurality of generators, isolating switches for connecting each motor to its generator, tie switches for connecting a plurality of motors to a single generator, field control means for said generators and motors, means for reversing said motors, key-operated locking mechanism for said isolating switches and for said tie switches from which the key cannot be withdrawn unless said switches are locked open or closed, key-operated locking mechanism for said field control means and for said reversing means from which the key cannot be withdrawn unless said field control means is locked in the "off" position and said reversing means is locked in the "ahead", "astern" or "off" position and a common key for operating both of said key-operated locking mechanisms to ensure that the isolating and tie switch mechanisms cannot be unlocked simultaneously with the reversing means and field control means.

4. In an electric ship propulsion system, a motor, a generator, a prime mover for said generator, a field control member for said generator and motor arranged to control also the speed of said prime mover throughout its complete range of speed, a reversing member for said motor, a low speed control member for said prime mover and interlocking mechanism for preventing movement of said reversing lever until said field control member is in its "off" position, movement of said field control member until said reversing member is in the "ahead", "astern" or "off" position, movement of said low speed lever until said field control member is in a position which will give its minimum speed setting and movement of said field control member beyond its minimum speed position until said low speed control member is in a position to give its maximum speed.

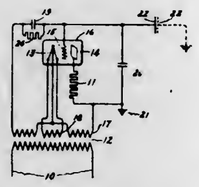
1,900,595. CIRCUIT CONTROLLING AND PROTECTIVE DEVICE. LOUIS J. WEBER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,869. 5 Claims. (Cl. 247—9.)



1. An enclosed safety circuit control and protective device including in combination an enclosing casing formed by a back section, a middle section, and a cover, said sec-

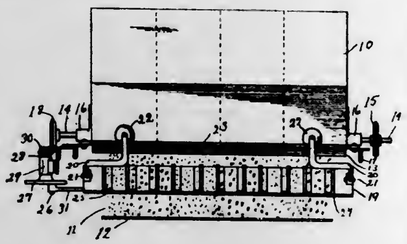
tions and said cover being arranged to be removably assembled to each other in the relation specified, a panel mounted in the middle section of said casing so as to have one side adjacent said cover and its other side adjacent said back section, an electro-magnetically operated circuit breaker and a cooperating overload circuit protective means mounted on the side of said panel adjacent said cover, circuit protective fuses mounted on the other side of said panel adjacent said back section, a circuit disconnecting switch including cooperating stationary and movable contacts, supporting means mounting said switch in said back section, a plurality of contacts on said supporting means, a plurality of contacts on said panel arranged to cooperate with said first contacts when said middle section is in said predetermined assembled relation to complete circuits from said disconnecting switch to said fuses, operating means for said disconnecting switch carried by said back section, and interlocking means associated with said operating means for preventing the mounting or dismounting of said middle section with said back section when said disconnecting switch is closed.

1,900,596. ELECTRIC CONTROL SYSTEM. CHANCY F. WHITNEY, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 4, 1930. Serial No. 479,759. 4 Claims. (Cl. 171—97.)



1. In a system for controlling an electric circuit in response to the change of position of a body with respect to some portion of said circuit, the combination of a source of current, a load device, a vapor electric valve provided with a control grid, interconnecting said source and said load, an impedance bridge connected across said source, an intermediate point of said bridge being connected to said grid to render said discharge device normally nonconducting, said impedance bridge including a capacitance the magnitude of which is dependent upon the position of said body, by means of which said valve is rendered substantially fully conductive by relatively small changes in said capacitance.

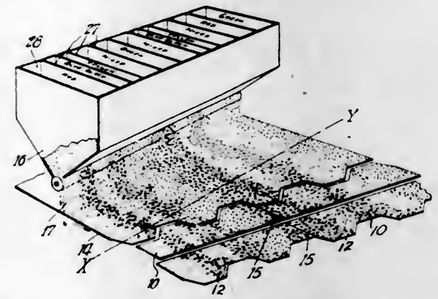
1,900,597. ROOFING. EDWARD C. OTIS, Chicago, Ill., assignor, by mesne assignments, to Certain-teed Products Corporation, a Corporation of Maryland. Filed Apr. 28, 1926, Serial No. 105,132. Renewed Jan. 21, 1932. 29 Claims. (Cl. 91—68.)



6. In a machine for surfacing sheet roofing, means for supplying different kinds of surfacing material to a sheet of roofing, and means intermediate said supply means and the sheet of roofing upon which the different kinds of said material are delivered and movable laterally of said delivery whereby said materials are positively transported laterally of said delivery for causing varying intermingling of the different kinds of material and deposition thereof on the roofing sheet.

12. The method of producing cyclical mixtone effects in roofing surfaced with contrasting granules which comprises laterally intermixing the granules as they are supplied to a run of the roofing, and in cyclically varying proportions.

1,900,598. ROOFING MANUFACTURE. EUGENE T. DOYON, Chicago, Ill., assignor, by mesne assignments, to Certain-teed Products Corporation, a Corporation of Maryland. Filed Nov. 23, 1923, Serial No. 676,541. Renewed Oct. 27, 1930. 20 Claims. (Cl. 91—68.)



4. The method of making vari-colored roofing units which is characterised by cutting the units on the bias from a sheet of vari-colored roofing material, whereby a roof when laid with overlapping courses of units will present a different vari-colored appearance from that of the sheet of roofing material.

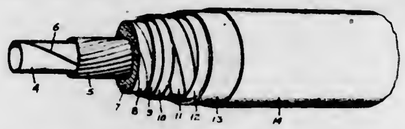
10. In a machine for making vari-colored roofing, the combination comprising a delivery hopper having a discharge opening for delivering an uninterrupted stream of vari-colored surfacing material to a roofing sheet; and partitions within said hopper dividing the same transversely into compartments to receive vari-colored materials, and terminating a distance above the hopper bottom to provide a communicating space between compartments at the hopper bottom for materials about to be discharged from the hopper; said partition constructed and arranged to be separated various distances to provide various sizes of compartments and to be terminated at various distances from the hopper bottom, thereby permitting a control and variation for the vari-colored effects produced upon the roofing sheet.

1,900,599. PROCESS FOR THE PRODUCTION OF CELLULOSE FORMATES. EGON ELÖD, Karlsruhe, Germany. Filed Aug. 5, 1927, Serial No. 211,004, and in Germany Aug. 9, 1926. 5 Claims. (Cl. 260—101.)

1. The process of preparing cellulose formates which comprises reacting cellulose with substantially anhydrous formic acid in the presence of hydrochloric acid gas as a formylating catalyst and in the presence of zinc chloride in quantities of at least 50% of the initial cellulose, the reaction being discontinued before any substantial degradation of the cellulose occurs.

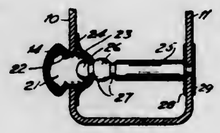
1,900,600. HIGH TENSION ELECTRIC CABLE. LUIGI EMANUELI, Milan, Italy, assignor to Società Italiana Pirelli, a Company of Italy. Filed Sept. 17, 1929. Serial No. 393,232, and in Great Britain May 11, 1929. 6 Claims. (Cl. 173—266.)

1. In a high tension cable, the combination of a centrally disposed member of low electrical resistance which is adapted to carry a substantial portion of the current transmitted by the cable and defines a smooth walled internal channel for fluid insulation, said member comprising a strip of good conducting metal twisted in the direction of its length with a long lay and having a narrow slot



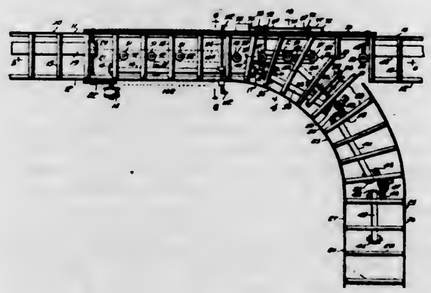
between the adjacent edges to form an outlet for the fluid, a surrounding body of insulation which is permeated with fluid from the channel, and an enclosing metal sheath.

1,900,601. LOOSE LEAF BOOK. ABRAHAM FELDER, New York, N. Y. Filed May 19, 1932. Serial No. 612,317. 4 Claims. (Cl. 129—23.)



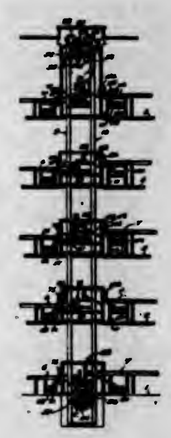
2. In a device of the kind described, the combination with a pair of book covers, of snap button sockets carried by one of said covers, and coacting button members having elongated shanks carried by the other cover, said shanks being of sufficient length to extend through and hold a package of loose leaves, each of said shanks being provided at one end with a plurality of heads defined from each other and the shank by grooves and the socket being elongated to accommodate the plurality of heads whereby a selected number of said heads may be engaged in the socket.

1,900,602. SWITCHING CONVEYER. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed May 21, 1931. Serial No. 539,082. 16 Claims. (Cl. 198—38.)



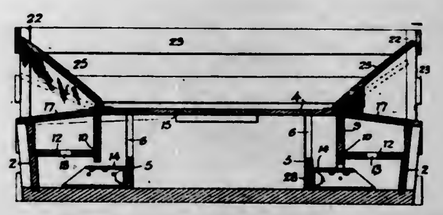
1. A switching conveyer comprising a supply conveyer, a pair of receiving conveyers associated therewith to receive articles therefrom, means constantly operating to tend to move articles from said supply conveyer to one of the receiving conveyers, normally operative laterally immovable means vertically movable to operative position to engage the bottoms of articles for preventing movement of articles to said last named receiving conveyer and guiding them to the other receiving conveyer, and means for rendering said last named means inoperative.

1,900,603. AUTOMATIC CONVEYING APPARATUS. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co. Inc., Louisville, Ky., a Corporation of Kentucky. Filed Mar. 12, 1932. Serial No. 598,486. 8 Claims. (Cl. 214—11.)



1. A conveyor comprising endless conveying means, a plurality of loading stations and a plurality of unloading stations, a carrier connected to said conveying means to be moved thereby past said stations, manually operable means at each loading station adapted to be set in accordance with the desired destination of an article to be conveyed from such station, means for supporting an article adjacent each loading station, a gate operable when in one position for preventing movement of an article from said supporting means into position to be picked up by said carrier, said gate being movable to a second position to permit movement of the articles into a position to be picked up by the carrier, means operable when the gate is in said first named position for preventing the functioning of said manually operable means, means connected to the carrier and operable in accordance with the setting of said manually operable means for determining the destination of the article, and means at the selected discharge station operable by said last named means for removing the article from the carrier when the latter reaches such discharge station.

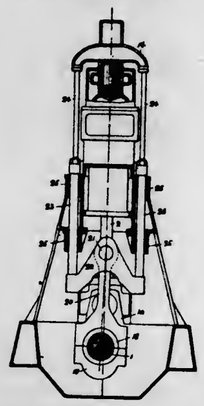
1,900,604. STOCK WATERING APPARATUS. ANDREW FREDERICK GUSTAFSON, Clarinda, Iowa. Filed Sept. 4, 1928. Serial No. 303,916. 5 Claims. (Cl. 119—78.)



1. A stock watering apparatus comprising, in combination, a water supply compartment, a drinking compartment communicating with the water supply compartment, means for maintaining a substantially constant level of water in the compartments, a partition between the said compartments which partition is substantially impervious to sediment and has its top slightly below the normal water level in the apparatus, and another partition between the water supply compartment and the drinking compart-

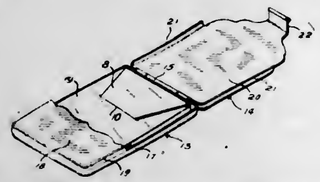
ment, said latter partition having a lower portion substantially impervious to sediment and being positioned with its lower edge below the normal water level in the apparatus but above the bottom of the compartments.

1,900,605. CONTROLLING DEVICE FOR CONTROLLING PISTONS OF INTERNAL COMBUSTION ENGINES. TORKILD VALDEMAR HEMMINGSEN, Copenhagen, Denmark. Filed June 29, 1929, Serial No. 374,709, and in Denmark July 14, 1928. 2 Claims. (Cl. 123—188.)



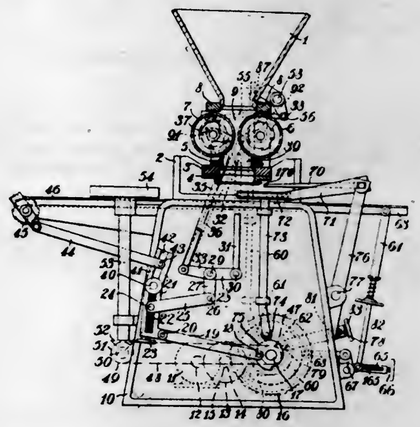
1. In an internal combustion engine, a cylinder, oppositely moving working and controlling pistons mounted in said cylinder, the head surface of the controlling piston forming part of the combustion chamber in the cylinder, a crank shaft including a crank pin connected with the working piston, bearings for the crank shaft, a single eccentric element on the crank shaft located intermediate the crank pin and one of the crank shaft bearings, and means connecting the eccentric element with the controlling piston for imparting reciprocatory movements thereto, said means including two rods disposed in a plane at right angles to the axis of the crank shaft and parallel with the central vertical plane passing through the main connecting rod, and inclined rods connecting the first mentioned rods with a cross head connected with the controlling piston.

1,900,606. MEDICINE PACKAGE. EWALD KIPPER, Brackwede, Germany. Filed Feb. 17, 1932. Serial No. 593,489. 2 Claims. (Cl. 206—42.)



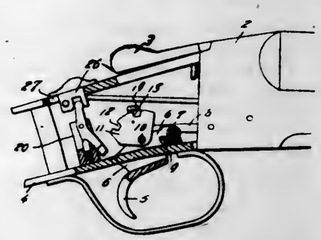
1. A package for medicine tablets, comprising a substantially rectangular flat box, the top of said box being comprised of a relatively long open portion and a relatively short closed portion, said box being provided with a hinged lid substantially covering said top portion and being provided with a snap fastening element for engaging the end of the box opposite the hinge of the lid, and a rectangular sanitary sheath having a flap substantially fitting within the box, located there in such fashion that the flap closure is adjacent to the hinge and exposed for immediate manipulation of the said flap after the main cover is open.

1,900,607. MACHINE FOR FEEDING PLASTIC MATERIAL SUCH AS DOUGH THROUGH DIES OR LIKE APERTURES. ADELBERT KREMMLING, Hamersleben, near Oschersleben, Germany. Filed Nov. 19, 1932, Serial No. 643,486, and in Germany May 11, 1931. 7 Claims. (Cl. 107—29.)



1. Machine for feeding and depositing plastic material such as dough, comprising a supply hopper, an extrusion chamber terminating in a die aperture, a conduit element intermediate the hopper and extrusion chamber and mounted for movement relatively thereto, and feed rolls supported by the conduit element for feeding dough from the hopper to the extrusion chamber.

1,900,608. TRIGGER MECHANISM. ROY A. LESTER, El Paso, Tex. Filed Sept. 16, 1930, Serial No. 482,888. Renewed Jan. 14, 1933. 4 Claims. (Cl. 42—42.)

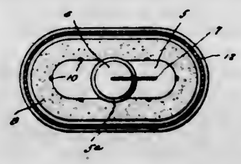


1. A single trigger mechanism for double barrel firearms comprising in combination with hammer sears and a trigger, a rockable pin carried by the trigger and cams on the pin, one of which is normally engaged with the hammer sear to be tripped thereby and the other of which is normally disengaged with that hammer sear to be tripped thereby and adapted to move into engagement with its hammer sear subsequent to the tripping of the first named hammer sear.

1,900,609. TOILET ARTICLE. MARTIN V. MCDONOUGH, Brooklyn, N. Y. Filed Mar. 7, 1932. Serial No. 597,369. 8 Claims. (Cl. 87—23.)

8. A substantially elongated cake or piece of soap, substantially rectangular in cross section provided with an opening extending lengthwise thereof and also substantially rectangular in cross section, a bottle substantially rectangular in cross section fitted within said opening and having means penetrating the material of the soap

about said opening to form an interlocking connection between said soap and said bottle, said bottle being also provided at one end with a filling neck projecting beyond



the corresponding end of said soap, and a protective casing for the soap consisting of two telescoping sections each of which is substantially rectangular in cross section and is closed at one end.

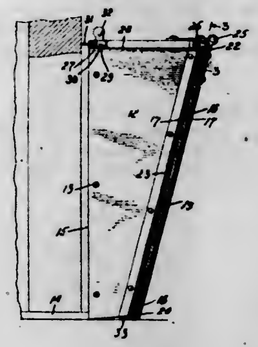
1,900,610. ADJUSTABLE DISPLAY STAND. WILLIAM H. MULLINS, South Boston, Va. Filed Sept. 8, 1930. Serial No. 480,540. 2 Claims. (Cl. 211—148.)



1. A display device comprising a base, a standard secured to the base and having its upper end threaded, primary and secondary tubular sections of different lengths slidably fitted upon the standard and provided with diagonally disposed contact faces, article supporting trays interposed between the primary and secondary sections, the secondary sections and certain of the primary sections being each provided at one end thereof with a flat horizontal contact face, washers disposed beneath the trays and bearing against the flat contacting faces of the secondary sections and against the bottoms of said trays, said sections being interchangeable to support the trays at different angular positions with respect to the standard, and a nut engaging the threaded upper end of the standard and bearing against the adjacent section to force all of said sections in engagement with each other and certain of said sections against the trays to hold said trays in adjusted position.

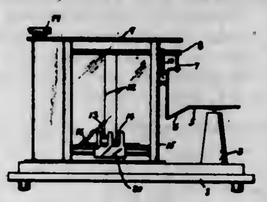
1,900,611. WINDOW VENTILATOR. EUGENE J. NEY, New York, N. Y. Filed Mar. 8, 1931. Serial No. 519,719. 2 Claims. (Cl. 98—99.)

1. In combination with a window casing and a vertically sliding sash therein, of a pair of brackets secured to the vertical members of said casing immediately above the sill portion thereof so as to project into the room, a pair of channels formed in said brackets in alignment with one another, a deflecting frame slidable in said channels and resting upon said sill, said frame comprising two rails adapted to be disposed in said channels and connected by a rail adapted to rest upon the window sill, a window pane slidably arranged in said deflecting frame, horizontal flanges formed upon said brackets in alignment with the free ends of those deflecting frame rails which are disposed in said channels, a screen frame hingedly secured to those rails of said deflecting frame which are disposed in said bracket channels and adapted to rest upon the



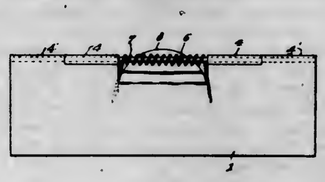
flanges of said brackets, the free longitudinal edge of said screen frame abutting against the lower rail of said sash when the latter is raised to permit access of air into the room through said screen frame.

1,900,612. APPARATUS FOR TESTING WATCHES. TOKUJIRO OWADA, Sukegawa-Cho, Japan, assignor of one-half to Koji Konishi, Tokyo, Japan. Filed Sept. 8, 1932. Serial No. 632,268. 2 Claims. (Cl. 181—0.5.)



1. An apparatus for testing a watch, which comprises means for supporting the watch under test in such a manner that it is freely oscillatable around an axis parallel to the axis of oscillation of the balance wheel of the watch, a plurality of resonators of different natural frequencies, and means to transmit the oscillatory impulses of the watch to the resonators.

1,900,613. CLAMP FOR HOLDING DRESSING IN FOWLS AND THE LIKE. CHESTER JAMES PARKER, Carson City, Nev. Filed Apr. 1, 1932. Serial No. 602,572. 1 Claim. (Cl. 24—253.)



A device for holding dressing in fowls and the like comprising a pair of elongated plates having their lower edges bent inwardly beyond a right angular position, said edges being notched to provide teeth, the teeth of one member crossing the teeth of the other member when the jaw members formed by the plates are in closed position, the upper edge of each plate having projections which are

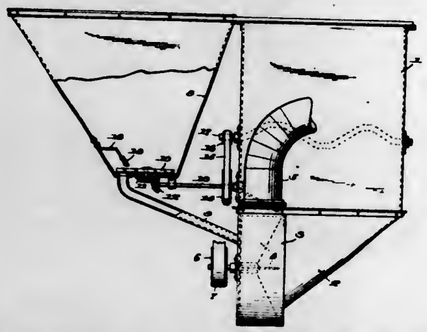
rolled to form barrels, a rod passing through the barrels for hingedly connecting the two plates together, the central portion of the upper edge of each plate being extended and bent outwardly to form handles with the hinged rod passing between the handles and a spring encircling the central part of the rod and having its ends engaging the outer faces of the plates for normally holding the teeth in overlapping relation.

1,900,614. METHOD OF PREPARING ARTIFICIAL MANURES. EUGENE M. POIROT, Poirot Farms, Mo., assignor to Arthur Capper, trustee, of Kansas. Filed Oct. 25, 1929. Serial No. 402,530. 6 Claims. (Cl. 71—6.)



1. In a method of preparing artificial manure from straw at the time of threshing, which comprises conveying the straw from the thresher by means of a pneumatic stacker, feeding into the stream of straw passing in an air current through such stacker a chemical reagent tending to promote bacterial development, and depositing the mixture in a pile.

1,900,615. MACHINE FOR PREPARING ARTIFICIAL MANURES. EUGENE M. POIROT, Poirot Farms, Mo., assignor to Arthur Capper, trustee, of Kansas. Original application filed Oct. 25, 1929, Serial No. 402,530. Divided and this application filed Nov. 4, 1930. Serial No. 493,424. 4 Claims. (Cl. 71—1.)

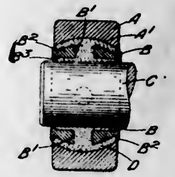


4. The combination with a threshing machine, of a pneumatic straw stacker having a fan housing, reservoir means for receiving and holding a supply of powdered material to be introduced into the straw, said reservoir means having two main openings, one constituting a receiving opening and the other constituting a discharge opening, said receiving opening being accessible only to the exterior of the threshing machine and said stacker, and a pipe leading from said discharge opening to said fan housing and providing ported communication between said reservoir and said fan housing.

1,900,616. ELECTRIC ACCUMULATOR. ADOLFO POUCHAIN, Turin, Italy. Filed May 1, 1928, Serial No. 274,363, and in Germany May 19, 1927. 1 Claim. (Cl. 136—31.)

A zinc-lead electric accumulator, comprising lead electrodes, electrodes for deposition of zinc thereon, and an electrolyte formed of an aqueous solution, containing 80–150 grams of free H_2SO_4 and 450–650 grams $ZnSO_4$ for about 1,000 cc. of water at the beginning of an accumulator charge after a complete discharge, the amount of said electrolyte in the accumulator being at least 800 cc. for each 75 ampere-hours of accumulator capacity.

1,900,617. SELF-ALIGNING SPHERICAL JOINT OR BEARING. HARRY RALPH RICARDO, London, England. Filed Feb. 20, 1930, Serial No. 430,098, and in Great Britain Mar. 18, 1929. 5 Claims. (Cl. 308—239.)



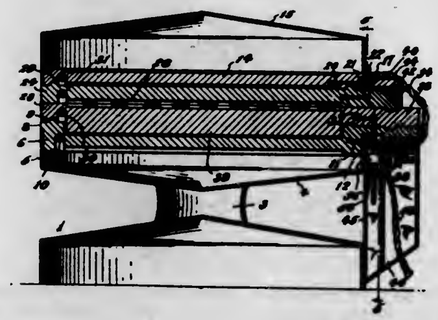
1. A spherical joint or bearing including in combination an outer one-piece member and a pin, both of which are formed of metal fusible at a relatively high temperature, and an intermediate member comprising an annular skeleton formed of a metal fusible at a relatively high temperature having cast thereon metal fusible at a relatively low temperature, and flanges on the ends of the skeleton extending radially so as to close in at least partially the ends of the space between the skeleton and the outer member in which the fusible metal lies and thus prevent this metal being forced in the axial direction out of such space when under load, diametrically opposite parts of each flange being cut away to permit the entry of the skeleton into the outer member prior to the casting of the fusible metal around the skeleton.

1,900,618. SAMPLE TAKING DEVICE. SOSTHENE ROBICHAUX, Saratoga, Tex. Filed Aug. 27, 1929. Serial No. 388,682. 7 Claims. (Cl. 255—72.)



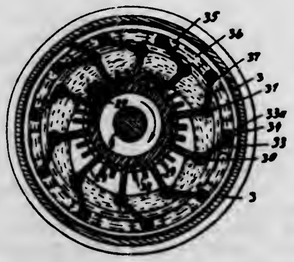
1. A sample taking device including a drilling apparatus and a sample barrel therein which is removable while said apparatus is in the well bore, said drilling apparatus including a tubular stem and a drilling tool attached thereto and having an inlet passageway for a sample, said apparatus having an outlet passageway for fluid above said inlet passageway, packing means around the barrel and in contact with the surrounding wall of the drilling apparatus, between the passageways for forming a substantially fluid tight seal between the barrel and drilling apparatus.

1,900,619. COOKING UTENSIL. HENRY C. SNYDER, Kis-Lyn, Pa. Filed Nov. 18, 1930. Serial No. 496,444. 7 Claims. (Cl. 219—19.)



7. In a device of the character described, upper and lower grids, upper and lower irons engageable between the grids, resistance coils in the several irons and grids, means whereby when the upper grid is imposed on the upper iron the coil in the grid will be cut out and the coil in the iron will be rendered operative, terminal pins connected to the coil in the lower iron and projecting downwardly therefrom to extend through the lower grid, and a feed switch bar supplying current to the several coils and engaged by said depending pins whereby to be moved from the terminals of the coil in the lower grid when the irons are fitted thereon.

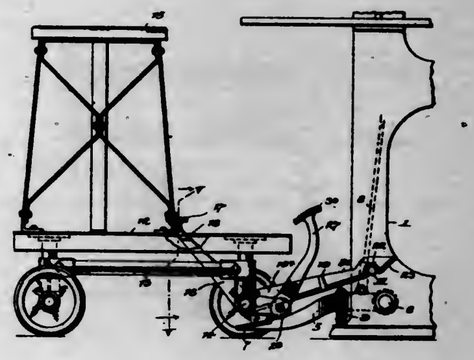
1,900,620. ROTARY MECHANICAL APPARATUS. GEORG STAUBER, Berlin, Germany. Filed Apr. 24, 1931, Serial No. 532,620, and in Germany Jan. 23, 1931. 9 Claims. (Cl. 230—79.)



1. An engine or machine driven by or delivering gases comprising a cylindrical casing, a liquid charge therein, an eccentrically situated rotor with rotating flaps, the flaps being fitted with flat and radial ribs forming part of said rotating flaps, the surface of the liquid being adapted to oscillate between these ribs.

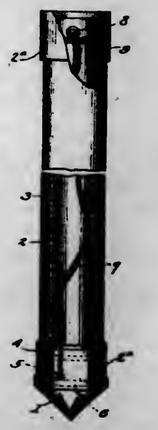
1,900,621. OPERATOR'S BENCH. WILLIAM STROBRIDGE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 7, 1931. Serial No. 521,029. 15 Claims. (Cl. 68—9.)

1. In combination with an operator's bench, means carried thereby for locking the same in working relation with a machine having at least one operator operated device for initiating or effectuating an operation; and means also carried by the bench and adapted to extend into operative



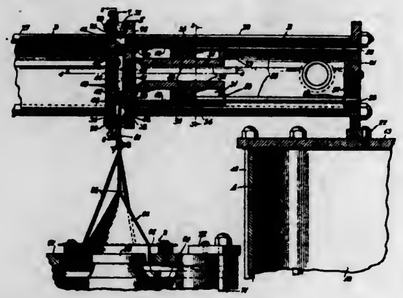
relation to said device and likewise to such position that it may be actuated by the operator for moving the operator operated device.

1,900,622. APPARATUS FOR FORMING CONCRETE PILES. RENZO TADA, Tokyo-Fu, Japan. Filed Feb. 2, 1931, Serial No. 513,173, and in Japan Oct. 18, 1930. 1 Claim. (Cl. 61—57.)



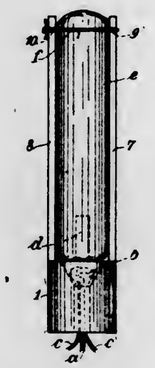
Apparatus for forming a concrete pile having superimposed radial enlargements and an enlarged footing, comprising an outer tube adapted to be raised alternatively through fractions of the height of the pile under construction, said outer tube having a detachable shoe at its lower end, an inner tube of less diameter than the outer tube and adapted to be rammed, a valve plate pivotally mounted at the lower end of the inner tube, an operating cord passing into the inner tube and attached to the said valve plate, and a conical tamping shoe detachably connected to the lower end of the inner tube, said tamping shoe being removed after the formation of the enlarged footing so that the pile is formed continuously afterwards without withdrawing the inner tube out of the outer tube.

1,900,623. METHOD AND APPARATUS FOR PRODUCING SOUND WAVES. ALLEN M. TOWKSBURY, Skowhegan, Me., assignor of one-third to Blin W. Page, Skowhegan, Me. Filed Dec. 17, 1931. Serial No. 581,555. 36 Claims. (Cl. 181—27.)



1. In a device for producing sound waves, a sound chamber, a source of pressure, a source of vacuum, and means for successively connecting said separate sources with said chamber.

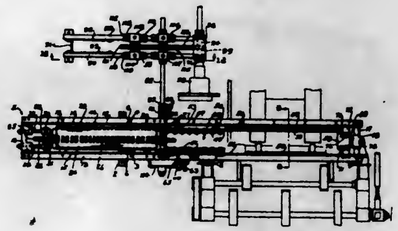
1,900,624. SAFETY DEVICE FOR BLASTING CHARGES EMPLOYED IN MINING AND SIMILAR WORK. WALTER VOORTMANN, Dortmund, Germany. Filed Jan. 16, 1931, Serial No. 509,247, and in Germany Mar. 5, 1930. 6 Claims. (Cl. 102—6.)



1. A safety device for blasting charges employed in mining and similar operations, consisting in the combination of a cylindrical plug of incombustible material provided with a central passage, and a pulling member anchored axially of the passage in the plug, the pulling member being marked at definite distances.

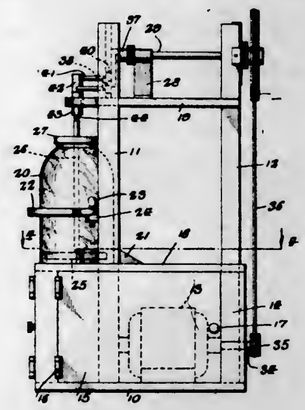
1,900,625. PALLET FEEDING DEVICE. CHARLES E. WALKER, Catskill, N. Y., assignor to Lancaster Iron Works, Lancaster, Pa., a Corporation of Pennsylvania. Filed Nov. 6, 1930. Serial No. 493,843. 12 Claims. (Cl. 25—1.)

1. The combination with an automatic brick machine having brick molds movable intermittently in a fixed direction to a predetermined position of rest in said machine, of a guideway extending across said machine and transversely of the direction of movement of said mold, means in said guideway for moving a pallet from one end thereof to a predetermined position in said guideway,



and means for releasing a pallet from said predetermined position in the guideway on to a mold immediately beneath it in the position of rest.

1,900,626. ELECTRIC BUTTER CHURN. GLADYS R. T. WILLIAMS, Cleveland, Ohio. Filed Dec. 9, 1931. Serial No. 579,941. 1 Claim. (Cl. 259—113.)

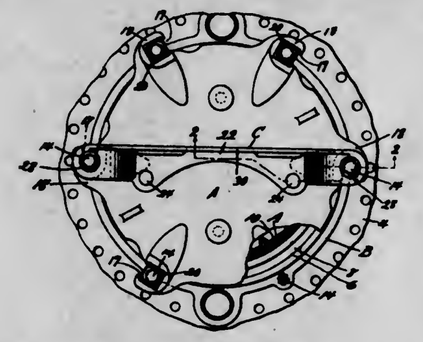


A churn of the character described comprising a stationary bracket, a clamping arm pivotally supported and cooperating with the bracket for clamping a receptacle therebetween, uprights at opposite sides of the bracket and having grooves in their upper portions, a crosshead between the uprights and slidably fitted in the grooves therein and having a slot, a projection on the crosshead and extended outwardly therefrom, a dasher reciprocatingly mounted in the receptacle and having a stem, a coupling on the projection for detachable connection with the stem, and a power shaft mounted midway between the uprights and having a crank engaged in the slot in the crosshead.

1,900,627. TANK DOME CLOSURE. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 27, 1931. Serial No. 559,633. 15 Claims. (Cl. 220—55.)

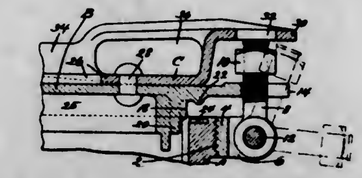
1. The combination with a tank dome cover of the character described, of fastening means for said cover brought into operative position by rotation of said cover,

and means secured to the cover and normally cooperating with the fastening means for preventing rotation of the



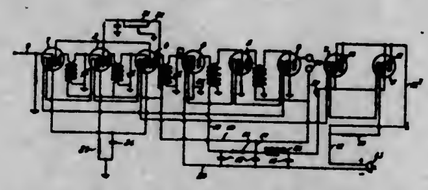
cover, said means necessitating raising of the cover to a partially open position to allow rotation and complete removal of said cover.

1,900,628. TANK DOME CLOSURE. VICTOR WILLOUGHBY, Ridgewood, N. J., assignor to American Car and Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 27, 1931. Serial No. 559,634. 17 Claims. (Cl. 220—55.)



1. The combination with a tank dome cover of the character described, of fastening means normally holding said cover in closed position, and means fixedly mounted on said cover in cooperative relation to certain of said fastenings as to prevent disengagement of the latter from said cover until said cover is raised to a predetermined partly open position.

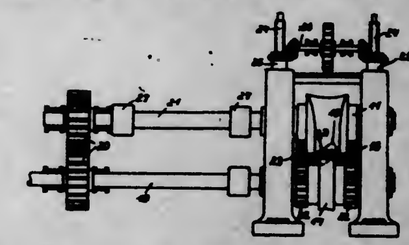
1,900,629. RADIO CIRCUIT. ROBERT P. WUNDERLE, Ann Arbor, Mich. Filed Oct. 19, 1932. Serial No. 638,849. 8 Claims. (Cl. 250—27.)



1. In a radio circuit of the type described, the combination comprising a plurality of coupled multi-electrode vacuum tubes including indirectly heated cathodes and anodes, said cathodes being provided with heater means insulatingly spaced therefrom, a rectifier having a heatable filament and an anode, a circuit including all of said heater means and said filament adapted to be energized by direct or alternating current, a filter connected in the output of said rectifier, and connections from the filter and the anodes of said vacuum tubes whereby a substantially constant potential is supplied thereto either from a direct or alternating current source.

6. In a radio circuit of the type described, the combination comprising a plurality of vacuum tubes coupled together to form a combined detector and amplifier, indirectly heated cathodes in all of said vacuum tubes, heaters for said cathodes, anodes in all of said vacuum tubes, a thermionic rectifier having indirectly heated cathodes, heaters for said cathodes and anodes, connections including all of said heaters including a resistance whereby alternating current or direct current may be directly supplied thereto, a filter system in the output of said rectifier, connections between all of the anodes of said multi-electrode vacuum tubes and said filter, and connections for the anodes of said rectifier whereby either direct or alternating current may be supplied directly thereto.

1,900,630. ROLLING MILL. JOHANN ZAGORSKI, Frankfort-on-the-Main, and ERWIN WERNICK, Berlin, Germany. Filed Jan. 25, 1929, Serial No. 335,090, and in Germany Dec. 17, 1927. 8 Claims. (Cl. 80—34.)



8. A rolling mill for rolling molded propellers, comprising, in combination, a roll table having a longitudinal slot, an upper roll arranged above said table, a lower roll arranged below said table, means for supporting said table so as to be slidable tangentially to said rolls, and propeller forming dies on said rolls and said table, said lower roll being so arranged as to project through said slot and form a part of the lower die.

1,900,631. AIR BRAKE FOR AIRPLANES. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Nov. 8, 1930. Serial No. 494,862. 1 Claim. (Cl. 244—29.)

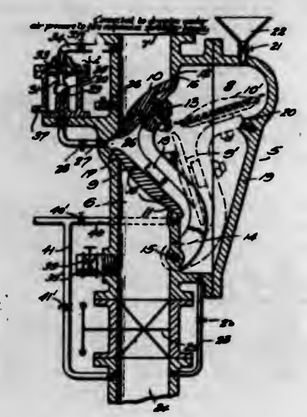


An airplane comprising lift struts, said lift struts being divided into two portions, a rod extending through the lift struts and rotatably mounted within the lower portion and fixedly mounted to and within the upper portion, means to move the rod to produce rotation of the upper portion with respect to the lower portion to retard the speed of the airplane.

1,900,632. FIRE EXTINGUISHING SPRINKLER VALVE. ALFRED H. BOARDMAN, Seattle, Wash. Filed May 1, 1929. Serial No. 359,801. 11 Claims. (Cl. 169—17.)

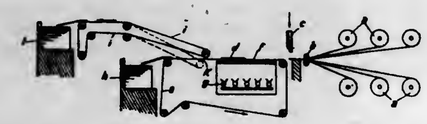
4. In an automatic valve for a dry-pipe fire extinguishing system, a valve casing providing a chamber adapted to contain water, said casing having an inlet to and an outlet from the chamber with the inlet being adapted for connection with the pressure pipe from a water main for supplying said water to the chamber and the outlet being adapted for connection with the supply

pipe of a dry-pipe system, said supply pipe being of a character containing air under pressure and carrying sprinkler heads adapted to open responsive to fire conditions, valves of a swing-check character normally maintained in seating engagement by the water in said chamber over said inlet and outlet openings, means for maintaining a normal pressure equalization between the water in said chamber and that of the supply pipe to maintain said valves in seated dispositions, and means acting as a result of a drop in the air pressure of said dry-pipe for releasing the water in said chamber to allow said valves to open under the pressure of the water from the main on said inlet valve.



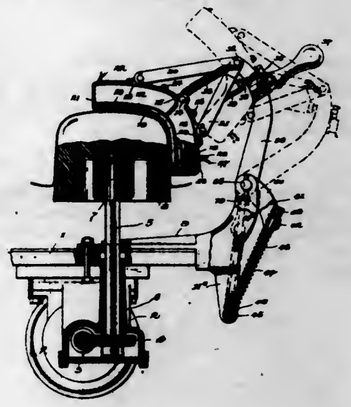
8. The combination of a valve device for use in either a dry-pipe or a wet-pipe sprinkler system characterized by the provision of a chamber adapted to contain water under pressure and having passages leading to and from the same, and an arm supported in said chamber provided with a valve arranged for seating engagement with the inlet to the chamber for either a dry-pipe or a wet-pipe system, said arm further provided with means by which another valve may be so attached to said arm that it will be engaged with the outlet from said chamber when the first mentioned valve is seated and the device is used in a dry-pipe system.

1,900,633. APPARATUS FOR SORTING TRANSPARENT OR TRANSLUCENT PAPERS, FILM FOILS, AND THE LIKE. CARL BÜCHNER, Mannheim-Waldhof, Germany, assignor of one-half to Papyrus A.-G., Mannheim-Waldhof, Germany. Filed Dec. 21, 1928, Serial No. 327,725, and in Germany Dec. 23, 1927. 1 Claim. (Cl. 88—14.)



An apparatus of the class described, comprising the combination with a light transmitting device and sheet conveying means for moving sheets across the light transmitting device, so as to enable the sheets to be illuminated by light transmitted from the light-transmitting device for inspection, of a plurality of rollers having webs capable of transmitting light wound thereon and aligned with respect to one another so as to enable the webs on being unwound from the rollers to be brought into superposed relation, means for simultaneously unwinding the webs from the rollers, grouping them in superposed relation and delivering the superposed webs to the said sheet conveying means, severing means interposed between said web grouping and delivering means and said sheet conveying means for dividing the superposed webs into groups of superposed sheets and means for separating the groups of sheets after passing from the light transmitting device.

1,900,634. HAT LUHRING MACHINE. JOHN L. CARD, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 1, 1930. Serial No. 499,375. 10 Claims. (Cl. 223—30.)



1. In a machine of the character described, the combination of a rotatable hat support; an articulated luhring pad; means acting to swing the elements of said articulated pad toward each other at all times; and means for supporting the pad.

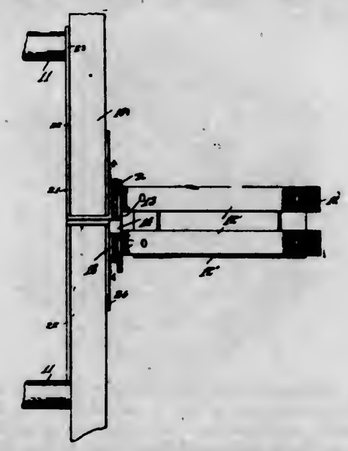
1,900,635. PROCESS FOR PRINTING TRANSFERS. CARLO ALBINI COLOMBO, Milan, Italy, assignor to Soc. Ital. Transfers Albini, S. I. T. A., Milan, Italy. Filed Apr. 27, 1931, Serial No. 533,366, and in Italy Apr. 29, 1930. 1 Claim. (Cl. 41—33.)



Process for preparing transfers adapted to be placed upon porous material, consisting in melting together tallow and colophony in equal parts, in adding to the mass resulting therefrom wax and glucose in order to obtain the desired density, in adding said mass to a lithographic colour in the desired proportions for obtaining the desired colour density and in printing the inscriptions and designs to be transferred on a sheet of paper by means of the ink prepared as above.

1,900,636. ATTACHMENT FOR LADDERS. CHARLES H. DAVIS, Hawkins, Wis. Filed May 7, 1932. Serial No. 609,954. 1 Claim. (Cl. 248—30.)

A rotatably adjustable bracket including a peripherally toothed disk having a central pivot, a second disk having a diametrically arranged slot receiving said central pivot whereby to rotate and slide with respect to the first disk, lugs on the periphery of the second disk embracing the toothed periphery of the first disk, and a tongue intermediate the lugs and arranged to engage between adjacent teeth of the first disk upon gravitational movement of the second disk.



1,900,637. CAPPING MACHINE. ROLLIN L. DRAKE, Port Arthur, Tex., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 13, 1924, Serial No. 731,730. Now Patent No. 1,823,889. Divided and this application filed Apr. 30, 1929. Serial No. 359,196. 17 Claims. (Cl. 113—29.)



1. In a can sealing apparatus, a rotary element, a slidable element carried by said rotary element, co-acting capping rollers mounted on the slidable element and comprising opposed rollers, a cam for actuating said slidable element so as to move the capping element to and from operating position, means adapted to move the capping rollers toward each other and a cam for actuating said means.

1,900,638. COMPOSITION CONTAINING A RESINOUS COMPLEX. CARLETON ELLIS, Montclair, N. J. Filed Dec. 17, 1927. Serial No. 240,941. 12 Claims. (Cl. 134—36.)

2. As new compounds, the aliphatic ether-alcohol esters of stearic acid.

1,900,639. GARMENT SAFETY POCKET. JOHN LLOYD FOSTER, New York, N. Y. Filed Jan. 17, 1931. Serial No. 509,318. 1 Claim. (Cl. 2—254.)



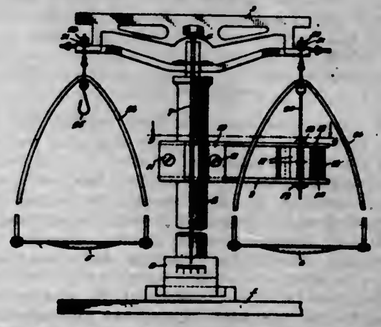
In combination with a garment having a pocket opening and a pocket member connecting with said opening, of a sheet-like flexible guard member secured to the inner wall of the garment below the pocket opening, and a tongue member of greater length than the depth of the pocket and substantially the width of the pocket, the tongue member being secured to the garment immediately below the pocket opening and adapted by its said length to extend under the contents of the pocket, said tongue member being adapted for withdrawal to permit access to the contents of the pocket.

1,900,640. YIELDING JOINT FOR EXTENSION RULES. HERMAN M. GABSTRON, Mount Vernon, N. Y. Filed Apr. 8, 1929. Serial No. 352,180. 6 Claims. (Cl. 33—120.)



2. In a folding rule, the combination with the members and the joint plates therebetween, of a pivot passing thru said members and plates, and elements widthwise superlying the outer faces of the members and anchored against displacement relatively thereto, the extremities of said elements yieldably engaging the said members, the elements being hingedly engaged by said pivot.

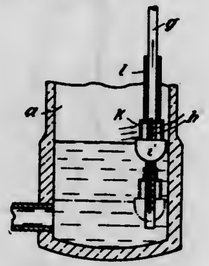
1,900,641. MAGNETIC DAMPER FOR PRECISION BALANCE. JOHN GATTONI, Union City, N. J., assignor to Seederer-Kohlbusch, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed May 21, 1932. Serial No. 612,742. 16 Claims. (Cl. 188—104.)



1. In a balance, a support, a beam pivoted thereon, a yoke frame pivotally mounted on said beam, a double hook

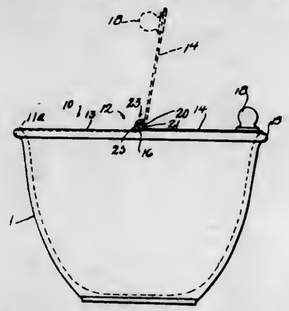
carried by said yoke frame, a scale pan carried by one of said hooks, a magnet, means securing said magnet to said support, and a damping plate carried by the other of said hooks and adapted to move in the field of said magnet.

1,900,642. VENTILATING DEVICE FOR SUBTERRANEAN SPACES. FRITZ GERLACH, Berlin-Tempelhof, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 17, 1929, Serial No. 378,924, and in Germany Nov. 9, 1928. 1 Claim. (Cl. 98—1.)



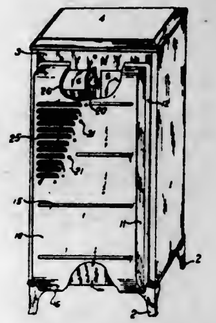
Ventilation device for subterranean spaces, such as sewers, their connecting conduits and inspection shafts, comprising an air-pump, a driving motor for said air-pump, a stationary pipe mounted in said inspection shaft terminating at its lower end at about the lowest level of the sewage and connected at its upper end with said pump, said pipe being perforated from a point adjacent the lower end to a point above the maximum level of the sewage, a pipe section slidably mounted upon the lower end of said stationary pipe, a float, means supporting said pipe section on said float so that the lower end of said pipe section is above said float, said float being adapted to hold said pipe section in position to cover the perforations in said stationary pipe except those a short distance above the surface of the sewage and those below the sewage.

1,900,643. SELF-CLOSING SUGAR BOWL MOUNTING. HARRY C. GESSLER, Brooklyn, N. Y. Filed Oct. 19, 1931. Serial No. 569,624. 3 Claims. (Cl. 65—60.)



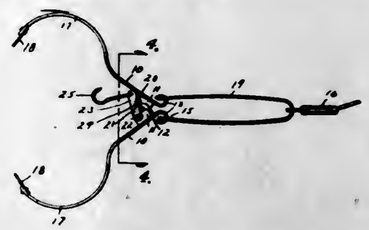
3. A sugar bowl having a bowl portion, top closure means split along a substantially diametral line to provide a plurality of segmental members, one of said members being permanently secured to the bowl portion, hinge means connecting the other member to the first member along said line, the hinge means including a pintle and a plurality of knuckles, and a resilient element between the knuckles, said element extending around the pintle and having a plurality of shoulders outside of the bowl portion, said shoulders lying in the plane of the element between the knuckles and terminating in close proximity thereto, said shoulders bearing on the members for resiliently limiting the opening of the hinged member.

1,900,644. REFRIGERATION APPARATUS. RAYMOND C. HAIMBAUGH, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1931. Serial No. 542,560. 4 Claims. (Cl. 62—116.)



1. A refrigerator cabinet having a chamber in the top portion thereof into which is adapted to be disposed a mechanical refrigerating unit requiring a circulation of cooling air, said chamber being closed at the top thereof, a side of said chamber having apertures therethrough whereby air may be sucked in and driven out from said apparatus chamber, a flue disposed over one side of said cabinet and covering said apertures, a partition dividing said flue into separate conduits, said flue being provided with an inlet mouth at the bottom thereof and with an exhaust at the upper portion thereof.

1,900,645. ANIMAL TRAP. JOSEPH HARTSHORN, Fort Des Moines, Iowa. Filed June 30, 1930. Serial No. 464,928. 2 Claims. (Cl. 43—94.)

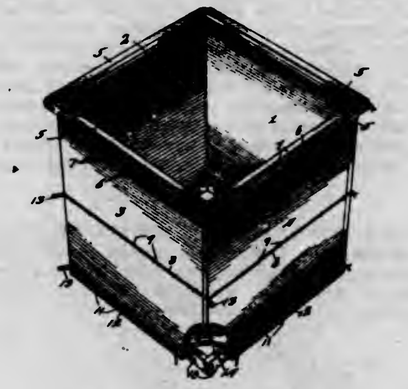


1. A trap comprising a pair of bars, each having a pair of inwardly projecting lugs, means for pivoting the lugs of one bar to the lugs of the opposite bar, one set of corresponding ends of said bars being provided with loop portions, a substantially U-shaped spring having its free ends connected to said loops, the opposite end of said bars being provided with outwardly curved portions, a jaw bar supported perpendicularly to the free ends of said bars, the inner edges of said jaw bars being provided with inwardly projecting teeth, one of said jaw bars being adapted to overlap the other when in a closed position, a latch bar pivotally connected between one set of said inwardly projecting lugs, a pin carried by the other set of inwardly projecting lugs designed to be engaged by said latch bar, and a bait hook carried by the free end of said latch bar.

1,900,646. METHOD FOR MAKING A DOWNWARDLY TAPERED CONTAINER. LESLIE M. HILL, Benton Harbor, Mich. Filed July 26, 1930. Serial No. 470,920. 5 Claims. (Cl. 140—71.)

1. The method of making a downwardly tapered, rectangular basket or container, comprising the fabricating of a straight wire-bound flexible blank, having straight parallel continuous binding wires projecting at the opposite ends

of the straight flat blank thus formed, with spaces between the flat sections of the blank, folding the blank into container or basket form, taking up slack in one or more of



the wires at said spaces, while maintaining another wire without slack and under tension at the upper corners of the container, causing the container to taper downwardly with flat sides inclined outwardly.

1,900,647. ELECTRIC SWITCH. ERNEST A. HOOPES, Des Moines, Iowa. Filed Aug. 17, 1931. Serial No. 557,557. 10 Claims. (Cl. 200—83.)



1. In an electric switch, the combination of a spring formed concavo-convex in cross section, means for supporting said spring at one end portion, a contact carrier on the free end portion of said spring, means for applying pressure to the concave side of said spring, and a supplemental spring interposed between the first mentioned spring and the said means for applying pressure.

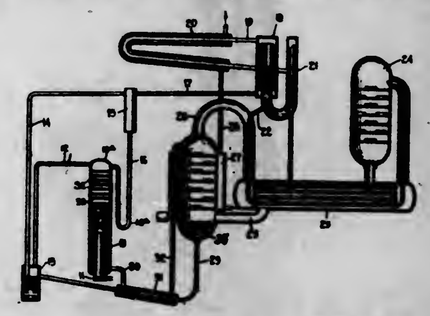
1,900,648. CATALYTIC SIDE CHAIN OXIDATION OF AROMATIC COMPOUNDS. ALPHONS O. JAEGER, Crafton, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Original application filed June 3, 1927, Serial No. 196,393. Divided and this application filed Mar. 28, 1928. Serial No. 265,521. 20 Claims. (Cl. 260—108.)

1. A method of oxidising the side chains of side chain aromatic compounds, which comprises causing the compounds to react with an oxidising gas in the presence of an oxidation catalyst having associated therewith at least one active compound of a metal included within the group of alkali metals, alkaline earth metals.

1,900,649. PURIFICATION OF CRUDE DICARBOXYLIC ACIDS. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 20, 1931. Serial No. 552,077. 15 Claims. (Cl. 260—122.)

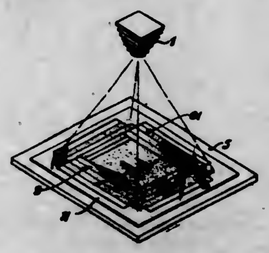
1. A method of purifying crude polycarboxylic acids obtained from vapor phase catalytic reactions, which comprises recrystallising the acid from a solvent included in the group esters of the polycarboxylic acid being treated, hydrogenated polynuclear aromatic hydrocarbon mixtures of the esters and hydrogenated polynuclear aromatic hydrocarbons.

1,900,650. ABSORPTION REFRIGERATING APPARATUS. DONALD BRANCH KNIGHT, Brooklyn, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,816. 12 Claims. (Cl. 62—119.5.)



6. An absorption refrigerating system of the pressure equalized type including a generator, an analyser above said generator and in open communication with the vapor space in the latter, an absorber located such that the normal liquid level therein is below the normal liquid level in the generator, a separating chamber above said analyser, a vapor liquid lift connected between said absorber and said separating chamber, a conduit for supplying vapor from said analyser to said liquid lift, and a conduit having a liquid trap from said separating chamber to said analyser.

1,900,651. MASK. LLOYD R. KOSMIC, Webster Groves, and FREDERICK B. WOLF, Clayton, Mo. Filed Oct. 19, 1931. Serial No. 569,570. 8 Claims. (Cl. 88—24.)



1. A mask comprising at least one envelope adapted to hold a sheet which is to be masked, the edges of the envelope substantially accurately positioning the edges of said sheet, said envelope having an opening, and means associated with said envelope for varying the size of said opening, said last-named means comprising flaps adjacent to said opening and means on said flaps whereby their marginal effects may be adjusted.

1,900,652. LIQUID DISPENSING APPARATUS. JOSEPH A. LOGAN, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 2, 1932. Serial No. 596,270. 10 Claims. (Cl. 221—95.)

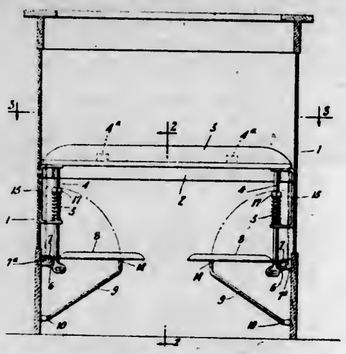
1. In combination, a pipe line, means for forcing liquid therethrough, a member affording an expansion chamber connected with said line and normally containing a body of air trapped therein, a control member

for said liquid forcing means movable from one position to another to start and stop the same, and means movable with the control member for varying the volume of



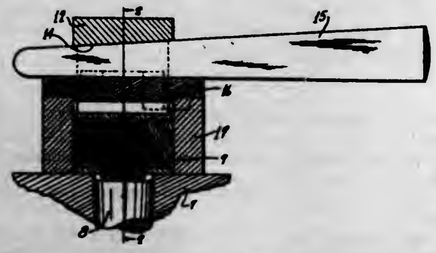
said chamber and decreasing or increasing the same accordingly as said control member is moved to start or stop liquid forcing means.

1,900,653. SHOE BOOTH FOOT REST. VINCENZO MARCHISELLA, New York, N. Y. Filed Oct. 23, 1931. Serial No. 570,652. 5 Claims. (Cl. 155—165.)



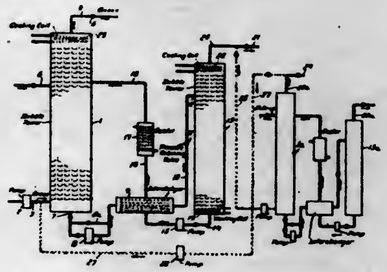
1. In a shoe booth, rear and side walls, foot rests pivotally supported by said side walls, a seat pivotally connected to said rear wall, means operated by said seat to rock said foot rests into the horisontal and vertical positions.

1,900,654. DEVICE FOR EXTRACTING METAL MEMBERS. MILTON MATHEWS, Sedalia, Mo. Filed Oct. 30, 1931. Serial No. 572,032. 4 Claims. (Cl. 29—85.)



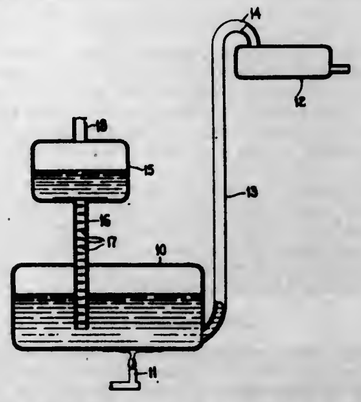
1. In a device for pulling threaded studs and the like, a tension member adapted for engagement with the stud to be extracted, and having a transverse passage therethrough adapted to receive a wedge, a compression member substantially surrounding the tension member having pairs of diametrally opposed wedge-engaging surfaces formed inwardly of one of its ends, the surfaces being arranged in two series of contiguous steps, a wedge extending transversely of the tension and compression members, disposed in bearing engagement with a said pair of said surfaces, the wedge and members being arranged, as the wedge is driven, to cause a movement of the tension member, outwardly of the compression member, said wedge being adapted to be transferred from one pair of said surfaces to any other pair thereof without removing the wedge from the compression member.

1,900,655. SEPARATION OF ACETYLENE. FLOYD J. METZGER, New York, N. Y., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 11, 1932. Serial No. 592,304. 7 Claims. (Cl. 260—170.)



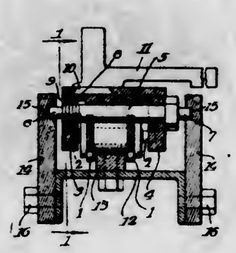
1. The method of effecting the selective separation and recovery of acetylene from gaseous mixtures containing it in admixture with other hydrocarbons which comprises bringing the gases into intimate contact with an alkyl carbonate and thereby effecting selective absorption of the acetylene from the gases, and subsequently heating the resulting liquid to expel absorbed acetylene therefrom.

1,900,656. HEAT PUMP. CARL GEORG MUNTERS, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 5, 1931, Serial No. 535,105, and in Germany Sept. 27, 1930. 13 Claims. (Cl. 103—255.)



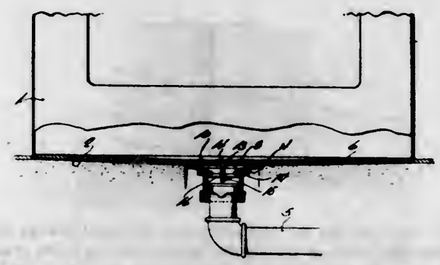
1. A liquid pump comprising a fluid tight vessel, means for heating said vessel, a container above said vessel, a pipe connected to the bottom of said container and terminating within and adjacent the bottom of said vessel, baffling means within said pipe, and a rising pump pipe connected at one end to the lower part of said vessel and terminating at its other end in a gooseneck.

1,900,657. FEED BELT GUIDE CONSTRUCTION. WALTER F. NEWHOUSE, Benton Harbor, Mich. Filed Apr. 30, 1932. Serial No. 608,439. 7 Claims. (Cl. 198—176.)



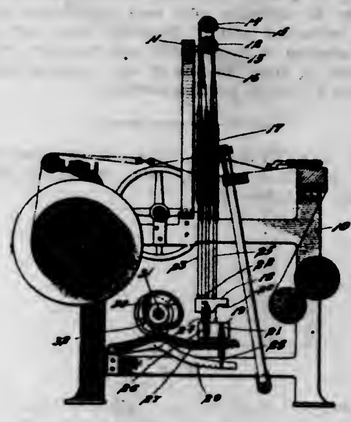
1. In work-feeding or controlling instrumentalities, the combination of a feed chain or link belt, feed dogs held thereon by transverse clamping bolts, and a guide for said chain or link belt, said guide having means for engaging the end portions of said clamping bolts, preventing either lateral or vertical displacement of the feed belt.

1,900,658. SHOWER STALL. EDWARD F. NIEDECKEN, Milwaukee, Wis. Filed Mar. 11, 1931. Serial No. 521,679. 1 Claim. (Cl. 285—37.)



In a metallic shower stall including a bottom and having an outlet opening therein provided with a drain connection secured therearound, said connection forming with the floor a substantially plane surface, an asphalt tile covering for the floor of the stall, at least one of the asphalt tiles of the covering having a beveled outlet opening lying above and registering with the outlet opening of the stall, a rigid perforated plate having a beveled marginal edge and having its upper surface lying in or below the main plane of the asphalt tile covering in the region of the outlet openings, with the beveled periphery of the plate overlapping the beveled marginal portion of the asphalt tile around its outlet opening, and cooperable means between the plate and the drain connection for forcing the plate into clamping engagement with said marginal portion of the asphalt tile to exert downward and lateral pressure on the marginal beveled edge of said tile for preventing passage of water between the tile and perforated plate.

1,900,659. HARNESS MECHANISM FOR A LOOM. DANIEL N. O'BRIEN, Ashton, R. I., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Apr. 15, 1930. Serial No. 444,404. 8 Claims. (Cl. 139—62.)

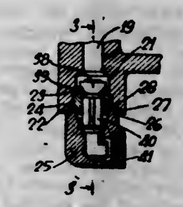


1. In a loom, two sets of oppositely reciprocating thread-guiding harnesses, sets of rollers of different diameters connected to the different harnesses of the different sets, a jack to which the lower portion of each set of harnesses is connected, means for mounting said jack to rock, and means including said rollers for operating said harnesses and jacks to cause the thread engaging portions of said harnesses of the different sets to pass each other successively during the changing of the shed.

1,900,660. MATRIX BOARD FOR STEREOTYPING. ANTON RUDOLPH PAWLITSCHKO, Little Ferry, N. J., assignor to Western Newspaper Union, a Corporation of Delaware. Filed Oct. 13, 1930. Serial No. 488,543. 8 Claims. (Cl. 91—68.)

1. The process of preparing matrix boards of the type used in stereotyping, which comprises the step of impregnating the surface of matrix paper with a suspension in water of graphite and a resinous material which is hard at normal temperatures.

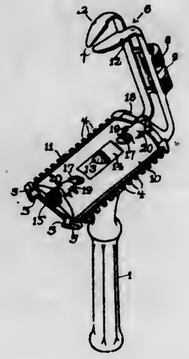
1,900,661. CONDUIT CONNECTION FOR COMPRESSORS. FRANK D. PELTIER, Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 18, 1930. Serial No. 429,280. 1 Claim. (Cl. 137—69.)



In a connecting device of the character described, the combination with a securing wall formed with a return passage therein having a receiving chamber and a pair

of grooves in stepped relation about the outer end of said chamber, of a valve member comprising a flanged sleeve having a collar disposed to fit into the innermost of said grooves and a fluid-actuated valve disposed therein, a packing member disposed in the outermost of said grooves and disposed to close the joint between said collar and its groove, an elbow coupling having a boss adapted to fit slidingly over said sleeve and provided with lugs extending laterally from the elbow, and tension members adapted to engage with said lugs and with said wall member to draw the boss of said coupling into tight engagement with said packing member.

1,900,662. SAFETY RAZOR. OSCAR R. PETERSON, Brooklyn, N. Y. Filed Jan. 16, 1932. Serial No. 587,062. 6 Claims. (Cl. 30—12.)



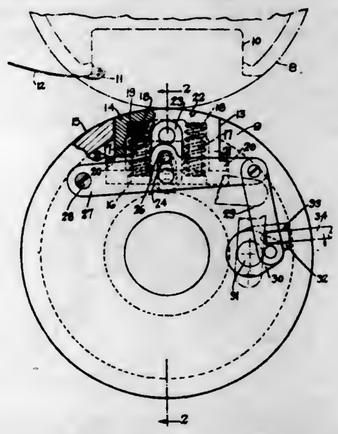
1. A safety razor including the combination, with a handle, of a frame having guards thereon and a pair of opposite gibs, a blade assembly unit having a plate fitting between said gibs and slidable along the same, a bridge overlying said assembly which is removably attached to said frame and which has means mounted thereon for reciprocating said blade assembly, and a projection upon said handle extending up into said plate in order to limit movement thereof and retain the same and said unit against loss when said bridge is removed, there being a slot in said plate forming a limited clearance for said handle projection.

1,900,663. MANUFACTURE OF CAOUTCHOUC LACQUERS OR VARNISHES. HERMANN PLAUSON, Darmstadt, Germany, assignor, by mesne assignments, to Radiochemisches Forschungs-Institut, G. m. b. H., Darmstadt, Germany, a Limited Company of Germany. Filed June 16, 1930, Serial No. 461,649, and in Germany Jan. 20, 1930. 4 Claims. (Cl. 134—17.)

1. The process of producing rubber lacquers and varnishes, comprising heating rubber in the presence of trinitro phenol together with a volatile hydrocarbon thereby causing the dispersion of the liquefied vulcanized rubber.

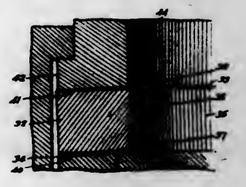
3. The process of producing rubber lacquers and varnishes, comprising heating rubber, a vinyl compound and acetic acid in the presence of tri-nitro-phenol together with a volatile hydrocarbon thereby causing the dispersion of the liquefied vulcanized rubber.

1,900,664. PRINTING PRESS. CARL G. PRITCHARD, Hiram, Ohio, assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Oct. 31, 1930. Serial No. 492,891. 18 Claims. (Cl. 101—415.1.)



1. In combination, a printing cylinder, a tubular plate fitted over said cylinder and spring-pressed, radially movable means within the cylinder to tension the plate thereon.

1,900,665. DIE FOR EXTRUDING COLLAPSIBLE TUBES. WALTER PRUSSING, Brooklyn, N. Y., assignor to Victor Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 4, 1931. Serial No. 513,293. 20 Claims. (Cl. 207—17.)

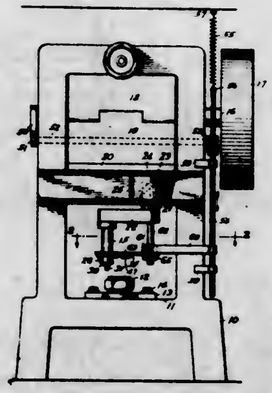


1. In a die set for the extrusion of metal blanks into collapsible tubes, a female die comprising an outer resisting ring of unhardened metal having an inner conical surface surrounding an aperture in the ring, and a hardened metal member having a conical forming recess therein, and provided with an outer conical surface forced into engagement with the inner conical surface of the outer ring, the upper surface of said ring and of said member being inclined downwardly and outwardly, and a male die reciprocating to enter the conical recess to squeese a blank against the conical recess of the member and to force the metal of the blank in the direction of the reciprocation of the male die and thereby to form a tubular wall about the male die.

1,900,666. STRIPPER FOR COLLAPSIBLE TUBE FORMING MACHINES. WALTER PRUSSING, Brooklyn, N. Y., assignor to Victor Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 514,985. 10 Claims. (Cl. 207—9.)

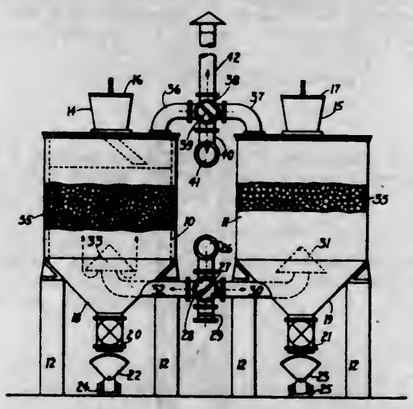
1. In combination with the male die of a collapsible tube extruding machine, means for extruding a tube on to and

around the die, a plate having an opening through which the die is passed, and means for reciprocating the plate relatively to the die to carry said plate into engagement with the open end of the tube carried by the die and to



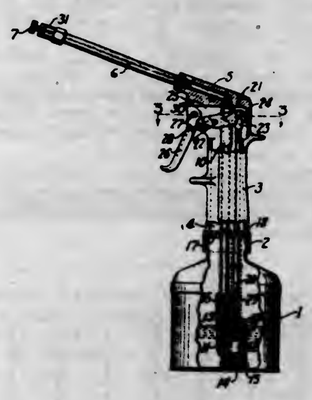
push the tube past the point of engagement thereof with the die to strip the tube from the die, said reciprocating means comprising a reciprocating spring-pulled rod, a member connecting the rod and the plate and a guide for the member.

1,900,667. METHOD FOR DESULPHURIZING GASES. EMIL RAVELOMB, Duisburg, Germany, assignor to Charlotte Chemical Laboratories, Inc., Charlotte, N. C., a Corporation of North Carolina. Filed Aug. 19, 1932, Serial No. 629,407, and in Germany May 19, 1931. 6 Claims. (Cl. 23—3.)



5. That process of removing sulphur from gas which comprises forming a purification mass into porous lumps whose ingredients comprise ferric oxide, cement and a suitable filler and having sufficient mechanical strength to withstand a distillation process without disintegrating, providing a plurality of separated batches of the mass and alternately passing gas and atmosphere thru said batches of mass, then placing the mass in a distillation apparatus, when it has absorbed sulphur beyond a given point and subjecting it to the distilling action of a neutral gas at a temperature below 500 degrees Fahrenheit and excluding oxygen from contact with the mass during distillation whereby the mass is freed of sulphur and ready for reuse in its original form for removing sulphureted hydrogen from gas.

1,900,668. LIQUID GUN. HAROLD A. ROSELUND, Toledo, Ohio, assignor to The De Vilbiss Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 19, 1932. Serial No. 599,898. 3 Claims. (Cl. 221—51.)



1. In a device of the class described, a receptacle, a hollow handle member mounted on the top of the receptacle, a tube depending from the interior of the handle down into the receptacle, a pump body carried thereby and having a cylinder in inwardly opening valve-controlled communication with the interior of the receptacle and in outwardly opening valve-controlled communication with said tube, a discharge tube carried by the handle and in communication with said first tube, a plunger operating in said cylinder, a rod extending from the plunger up into the hollow of said handle, an operating lever for the rod mounted in the handle, a control trigger carried by the upper end portion of the handle in operating connection with said lever, whereby an inward movement of the trigger will impart a downward movement of the plunger, and means normally retaining the plunger in raised position.

1,900,669. PENCIL. CRAIG R. SHEAFFER and WILLIAM R. CUTHBERT, Fort Madison, Iowa, assignors to W. A. Sheaffer Pen Co., Fort Madison, Iowa, a Corporation of Delaware. Filed Apr. 1, 1929. Serial No. 351,502. 5 Claims. (Cl. 120—18.)



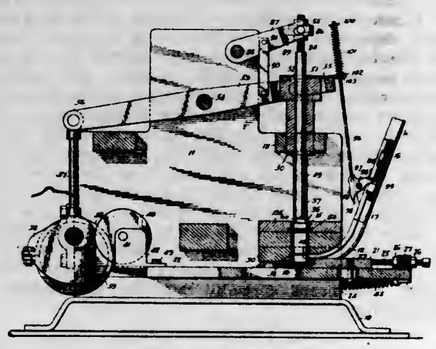
1. A pencil comprising a two-part casing and a lead operating mechanism housed therein, said mechanism comprising relatively movable portions, one of said por-

tions including an anchoring block fixed in one of said parts and the other of said portions including an elongated stem extending a substantial distance beyond said last mentioned part and longitudinally slidable but frictionally held against rotation in the other of said parts over the entire extending area thereof, said parts meeting substantially centrally of the overall length of said pencil.

1,900,670. CEMENT OR MATERIALS CONTAINING CEMENT. OTTO STÄLHANE, Stockholm, Sweden. Filed Apr. 23, 1930, Serial No. 446,797, and in Sweden Apr. 27, 1929. 2 Claims. (Cl. 106—27.)

1. A hydraulic binding material consisting of common cement and containing arsenious acid in a proportion of about 50% by weight of arsenious acid calculated on the weight of the cement.

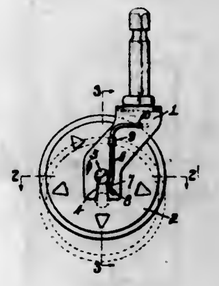
1,900,671. MACHINE FOR INSERTING CORKS INTO CAPS FOR COLLAPSIBLE TUBES. JOHN J. TEMPLE, New York, N. Y., assignor to Victor Metal Products Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 28, 1931. Serial No. 525,958. 18 Claims. (Cl. 113—80.)



1. In a machine for inserting corks into collapsible tube caps, means for coating the under face of a cork strip with cementitious material, intermittently rotatable means for engaging the leading end of said strip for tensioning said strip and for advancing the strip step by step through the machine, means for shearing a cork from said strip and for advancing the sheared cork into cork-inserting position, a cap chute, a stationary cap stop open at the bottom and having an opening communicating with said chute, a slide for engaging the cap and for advancing said cap from the chute into a position wherein the cap engages the wall of the opening and is aligned coaxially of the cork-inserting means, a projection on said slide for supporting the cap in said position, and means for withdrawing said projection preparatory to the advance of the succeeding cap and thereby removing the bottom support for said cap whereby the corked cap is discharged by gravity from the machine.

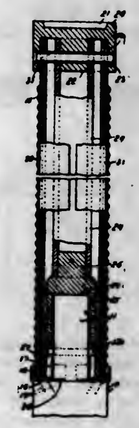
18. In a machine of the character described, a cap chute, means for releasing a single cap at a time from said chute to permit the released cap to drop to the bottom of the chute, means for advancing the released cap into, and for aligning the cap in, cork-inserting position, and means for inserting a disc into the cap comprising a stationary die having an opening therein for the passage of a cork strip, means reciprocating in the die for shearing a disc from the strip and for pressing the sheared disc into the cap, a pair of oscillatory levers for operating the reciprocating means, and means for operatively connecting the levers for simultaneous movement in the same direction but at different speeds.

1,900,672. CASTER. CLEMENT R. UHL, Toledo, Ohio, assignor to The Toledo Metal Furniture Company, Toledo, Ohio, a Corporation of Ohio. Filed July 8, 1931. Serial No. 549,458. 2 Claims. (Cl. 16—18.)



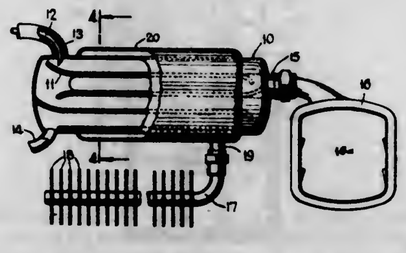
1. In a caster, a fork having upwardly extending bearing notches in the lower ends of its legs, a bearing pin mounted at its ends in said notches and removable therefrom lengthwise of the notches and transversely of the pin axis, said pin projecting at its ends beyond the outer sides of the fork legs, a wheel rotatably mounted on the pin within the fork, and a spring finger fixed at one end to the outer side of each leg and having its free end projecting downwardly at a side of the respective projecting end of the pin and bearing laterally thereagainst, each of said fingers having a hump near its free end engaging under the respective side of the pin to yieldingly resist a removal of the pin from or insertion of the same in bearing position in the fork notches.

1,900,673. COMPOSITE PILE. RICHARD E. TALMADGE, Nutley, N. J., assignor to MacArthur Concrete Pile Corporation, New York, N. Y., a Corporation of New York. Filed May 9, 1931. Serial No. 536,094. 6 Claims. (Cl. 61—53.)



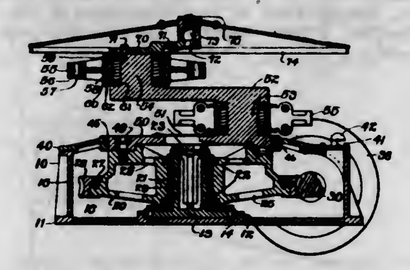
1. A device for bracing and reinforcing a shell disposed on top of a pile section and for driving said section comprising a head adapted to be driven by a pile hammer, members connected thereto and movable laterally to grip the shell, and a rigid member connected to said head and having a socket at its lower end for receiving the tenon of the pile section and for transmitting the driving force directly to said section.

1,900,674. TWO-TEMPERATURE EVAPORATOR. ROBERT S. TAYLOR, Evansville, Ind., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 7, 1931. Serial No. 514,154. 13 Claims. (Cl. 62—95.)



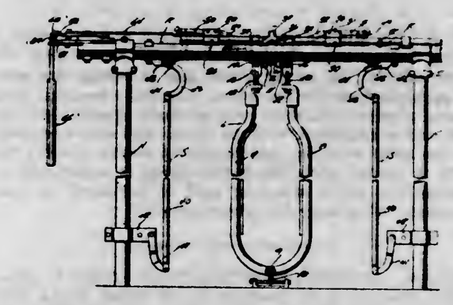
5. A cooling element comprising a casing enclosing an evaporating chamber, connections for the circulation of gas through said chamber, an inlet for cooling liquid, two substantially thermally independent liquid spreading members in said chamber arranged to receive liquid from said inlet and located serially with respect to the gas circulation, and independent means for transmitting heat from without said casing to each of said members.

1,900,675. PUMPING POWER. WALTER C. TROUT, Lufkin, Tex. Filed Oct. 22, 1928. Serial No. 314,117. 9 Claims. (Cl. 74—56.)



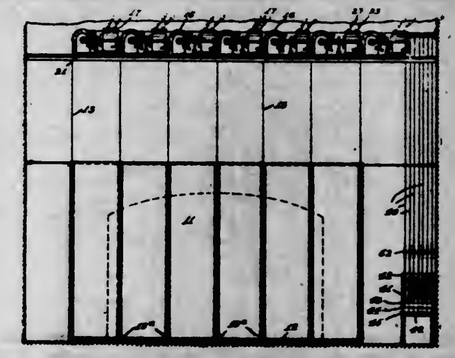
2. A pumping power including a crank arm, completely enclosed driving gear for said arm and a protecting canopy carried by said arm.

1,900,676. ANIMAL STANCHION. JOSEPH WAKSMONCKI, Mosinee, Wis. Filed Apr. 16, 1931. Serial No. 530,488. 11 Claims. (Cl. 119—148.)



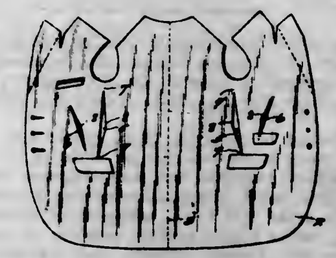
1. In an animal stall, a supporting rail structure, a stanchion including a pair of stanchion members, a separate bracket plate for each stanchion member, each bracket plate having means whereby it is adjustably mounted on the supporting rail structure, a pair of operating rods, latches between the operating rods and the brackets and means for shifting the operating rods in opposite directions.

1,900,677. CURTAIN AND CONTROLLING MEANS THEREFOR. GUSTAV A. WEIDHAAS, Bronxville, PETER CLARK, Great Neck, and HOWARD V. HARDING, New York, N. Y.; said Clark and said Harding assignors to said Weidhaas. Filed Dec. 4, 1929. Serial No. 411,489. 13 Claims. (Cl. 272—22.)



1. In a stage curtain controlling device a curtain, lines connected thereto, means for hoisting and lowering said lines, motion indicating members and a means for reducing the motion from said lines to said members.

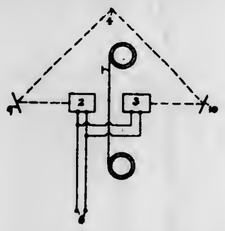
1,900,678. ONE-PIECE COAT. STEFAN WEBER, Easton, Pa. Filed Sept. 11, 1931. Serial No. 562,835. 1 Claim. (Cl. 2—93.)



A one piece coat garment blank having arm openings and integral front and rear panels, a portion of the blank between each of the front and rear panels having darts extending from points immediately adjacent and just below arm openings downwardly on a substantial angle to the center of the back panel and terminating relatively close to lower pockets of the blank, said darts being located substantially where the front panels connect with the back panel, said blank having additional darts in the front panels substantially shorter than and at substantial acute angles to the first darts, the second darts extending from lower pockets of the blank toward and through the front panels and being located between the first darts and the edges of the front panels, both sets of darts being closed at their opposite ends and similarly constructed with certain of their edges substantially straight facing nearest the front panels, and certain other of their edges concaved toward the back panel, the concavities of the concaved edges being not so great as would prevent the concaved edges from matching with the straight edges when said edges are stitched together and the garment

thoroughly pressed, the acute angle arrangement of each pair of darts causing pulling strains on the material from a point adjacent the edge of the front panel on varying angles transversely through the darts toward the back panel, thereby rendering a proper fitting of the coat garment to the curvatures of the body above the hips and under the armholes.

1,900,679. SOUND RECORDING SYSTEM. ALFRED WHITAKER, West Drayton, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Oct. 25, 1928, Serial No. 315,046, and in Great Britain Oct. 28, 1927. 9 Claims. (Cl. 274—1.)

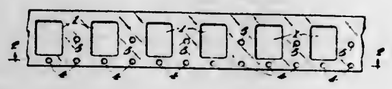


2. In a sound recording system of the type wherein a beam of light the intensity of which is controlled in accordance with sounds to be recorded is caused to produce an image on a photo-sensitive surface, means for directing at least two beams of light on said surface to produce superposed images thereon, and separate means for controlling the intensity of each of said beams in accordance with the sounds to be recorded, one of said controlling means having maximum response at high frequencies and another at low frequencies within the band to be recorded, whereby a substantially uniform characteristic is obtained over the band.

1,900,680. PURIFICATION OF CRUDE MALEIC ACIDS. HEINRICH W. WITZEL, Ingram, Pa., assignor to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 21, 1931. Serial No. 552,194. 3 Claims. (Cl. 260—122.)

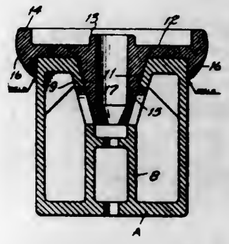
1. A method of purifying crude maleic acid obtained as a by-product in the catalytic air-oxidation of naphthalene to phthalic anhydride and containing iron compounds as impurities, which comprises subjecting a water solution of the crude acid to the action of an amount of an inorgantic, water soluble cyanide sufficient to react with all of the iron present, filtering and crystallizing out the purified acid from the filtrate.

1,900,681. METHOD OF REENFORCING CINEMATOGRAPH FILMS. ARTHUR H. ADAMS, Yonkers, N. Y., assignor to F. Leo Crilly, London, England. Filed Nov. 25, 1929. Serial No. 409,737. 14 Claims. (Cl. 88—19.5.)



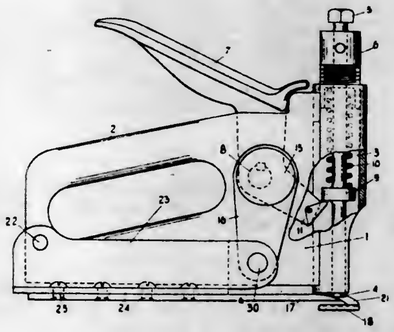
2. A cinematographic film strip comprising, a film strip and a reenforcing strip secured thereto by a plurality of tubular burrs formed of the reenforcing strip bradded upon the film strip, said burrs being located near but not associated with the sprocket holes of the strips.

1,900,682. METHOD OF RECLAIMING CAR BOLSTERS. JAMES R. ALCOTT, Madison, Ill., assignor of one-half to Steadman O. Taylor, Richmond Heights, Mo. Filed Nov. 13, 1929. Serial No. 406,778. 4 Claims. (Cl. 29—164.)



1. The method of reclaiming cast metal car bolsters having mutilated center bearings provided with annular bearing members formed integral with and projecting from the cast bolsters, which comprises destroying the annular projecting portions of the mutilated center bearing to provide a seat for a center plate, and then securing a separate center plate on said seat.

1,900,683. HAND STITCHING TOOL. HOWARD G. ALLEN, Niagara Falls, N. Y., assignor to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Nov. 7, 1930. Serial No. 494,088. 3 Claims. (Cl. 1—50.)

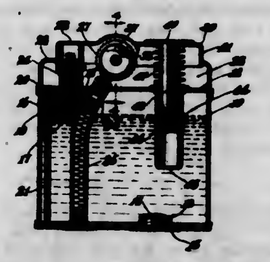


1. A hand stitching tool comprising a body, a driver, a spring acting upon the driver, means for raising the driver against the spring action and to release the same for spring-actuated driver action, a pivotally mounted anvil having a stitch clinching part normally spaced from the body and in alignment with the driver, and means connecting the anvil with the first mentioned means whereby the anvil is rocked when the driver spring is compressed to position the stitch clinching part of the anvil in close proximity to the body for driver action.

1,900,684. LIGHTER CONSTRUCTION. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,551. 12 Claims. (Cl. 67—7.1.)

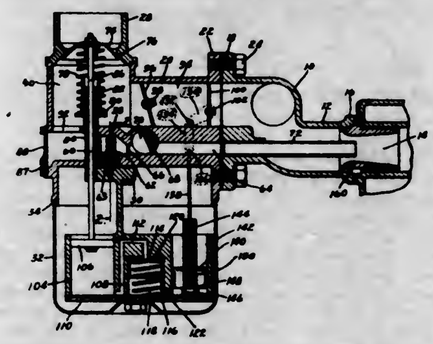
9. In a pyrophoric lighter, spark-producing means, operating means therefor comprising a reciprocatory member,

a plural-chamber casing, a wick in one of the chambers, another of the chambers adapted to contain a body of



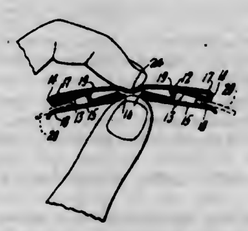
fuel, and reciprocatory means actuated by said reciprocatory member for forcing fuel from said first named chamber into said second named chamber.

1,900,685. CHARGE FORMING DEVICE. FRED E. ABELTINS, Dayton, Ohio, assignor to Delco Products Corporation, Anderson, Ind., a Corporation of Delaware. Filed Sept. 7, 1929. Serial No. 391,059. 7 Claims. (Cl. 261—55.)



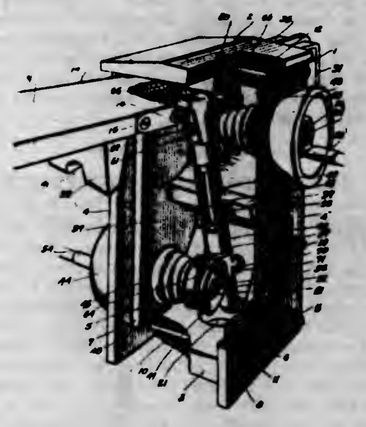
1. A charge forming device for internal combustion engines comprising a mixing chamber, fuel and air inlets therefor, a throttle controlling the flow of mixture therefrom, main and auxiliary air valves controlling the admission of air to the mixing chamber, a plurality of means for retarding the opening movements of these air valves and pressure operated means for regulating the effect of all said retarding devices.

1,900,686. CLASP FOR COLLARS, ETC. WILLIAM H. AVERILL, Boston, Mass., assignor of one-half to Joseph Pollak, Boston, Mass. Filed June 9, 1932. Serial No. 616,420. 3 Claims. (Cl. 24—81.)



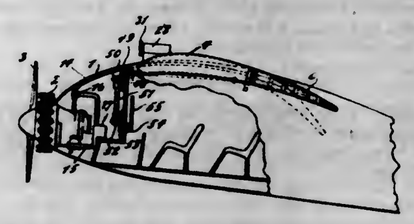
1. A clasp of the character stated comprising an oblong bar, inwardly facing outer jaws at the ends of said bar, resilient connecting portions fixed to said outer jaws and extending in opposite directions behind the bar, and end portions fixed to the inner ends of the connecting portions, the outer extremities of the end portions constituting inner jaws, said connecting portions including resilient struts bearing on the bar and on the mid length of the end portions, so that said end portions constitute levers whose fulcrums, formed by said struts, normally maintain the inner jaws pressed against the outer jaws, and permit displacement of the inner jaws to permit unopposed insertion of collar parts, or the like, between said jaws.

1,900,687. SWITCH. THOMAS B. BASH, Kansas City, Mo. Filed Mar. 16, 1925. Serial No. 15,788. 18 Claims. (Cl. 200—127.)



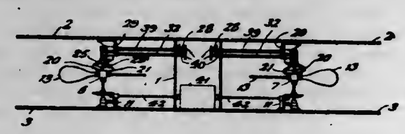
3. In a switch, a box of insulating material, comprising a unitary element constituting back, top and bottom, detachable reversible sides, means connecting the sides to the unitary element, a hinged door suspended from the top of the box, a terminal at the lower portion of one side and a terminal at the upper portion of the other side, a removable fusible conductor connecting the terminals, and means on the inside of the door for holding the conductor in engagement with the terminals when the door is closed.

1,900,688. AIRPLANE WING. FRANK G. BAUM, San Francisco, Calif. Filed Mar. 6, 1930. Serial No. 433,555. 6 Claims. (Cl. 244—29.)



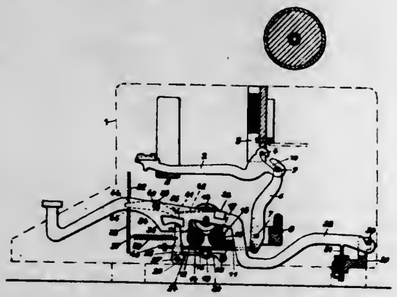
1. In an airplane, in combination with the fuselage and the main wings extending laterally therefrom, auxiliary wings adapted to have their trailing ends raised and lowered consisting of a plurality of independent sections secured to the trailing edges of the main wings for rotation about their longitudinal axis, means to control the disposition of the trailing edges of the auxiliary wings, and means for rotating the sections of the auxiliary wings about their longitudinal axis.

1,900,689. AIRPLANE. FRANK G. BAUM, San Francisco, Calif. Filed Mar. 6, 1930. Serial No. 435,556. 10 Claims. (Cl. 244—15.)



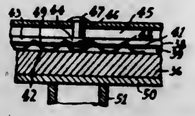
2. In an airplane, in combination, a propeller adapted to exert a lifting and a propelling force comprising a hub, a plurality of propeller blades mounted in the hub to oscillate about their longitudinal axes, means for oscillating the propeller blades to impart a feathering action thereto to render the blades successively ineffective during one half of each rotation of the propeller, means for rotating the propeller, and means controlling the feathering action of the propeller blades for varying the direction of application of the propelling force exerted on the airplane by the propeller blades.

1,900,690. POWER DRIVEN TYPEWRITER. HUGO BENZING, Dresden, Germany. Filed Sept. 8, 1931, Serial No. 561,706, and in Germany Jan. 5, 1929. 5 Claims. (Cl. 197—17.)



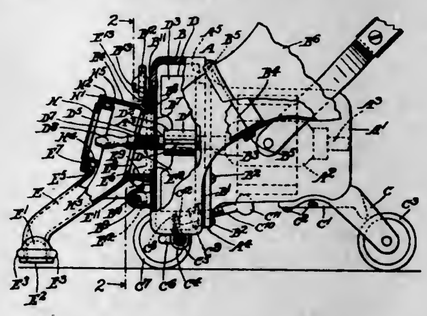
1. In a device of the character described, in combination, a continuously rotating roller, a plurality of keys, a stop connected with one of said keys, a lever adapted to come in contact with said stop, a spring connected with said lever, a cam rigidly connected with said lever, another lever associated with said cam, means for adjusting the position of the second-mentioned lever, a roll connected with the second-mentioned lever and movable therewith, a friction rod adapted to be pressed by said roll against said rotating roller, a type bar, and means connecting said type bar with said friction rod.

1,900,691. ADJUSTABLE MILK BOTTLE HOLDER FOR CRIBS AND THE LIKE. ERNEST J. CARLSON, Reading, Pa. Filed Aug. 31, 1932. Serial No. 631,200. 4 Claims. (Cl. 248—65.)



2. A device of the class described comprising an arm adapted to be mounted between opposite walls of a crib or the like, a sleeve slidably mounted on said arm and having a bottle-holding bracket attached thereto, said arm having a longitudinal slot extending throughout the length of said arm adjacent the axis thereof, said arm having a second longitudinal slot extending from the surface of said arm into said first slot and communicating therewith throughout its length, a cam slidably mounted in said first slot and having a stem extending through said second slot, means on said stem for preventing rotation of said stem, and resilient means mounted in said first slot for releasably retaining said cam in any longitudinal position in said first slot.

1,900,692. VACUUM CLEANER. WILLIAM J. CLEMENTS, Chicago, Ill., assignor to Clements Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 26, 1930. Serial No. 447,579. 4 Claims. (Cl. 15—9.)



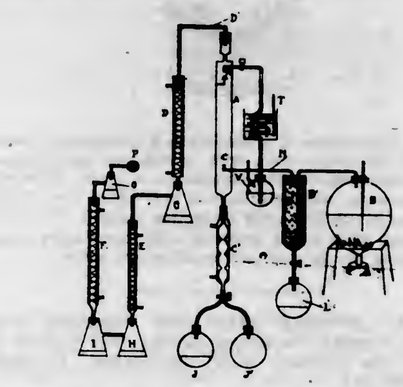
1. In a suction cleaner, a pump chamber, having integral front and rear walls, the front wall of said chamber being formed with an air inlet passage therethrough, a nozzle and means for removably securing it in operative relation with said air passage, said nozzle including an inlet portion adapted to be opposed to a surface being cleaned and a connecting portion extending thence for operative connection with the air passage, said connecting portion having aligned openings receiving a connecting inlet tube, one of said openings being in the line of flow of air from the inlet portion to the air passage of the pump chamber, whereby a connection of the tube closes the opening to the inlet portion of the nozzle.

1,900,693. METAL SALTS OF HALF ACID ESTERS OF FATTY HYDROXYLATED OIL AND PROCESS OF MAKING THEM. COLE COOLIDGE, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 7, 1930. Serial No. 487,022. 13 Claims. (Cl. 260—11.)

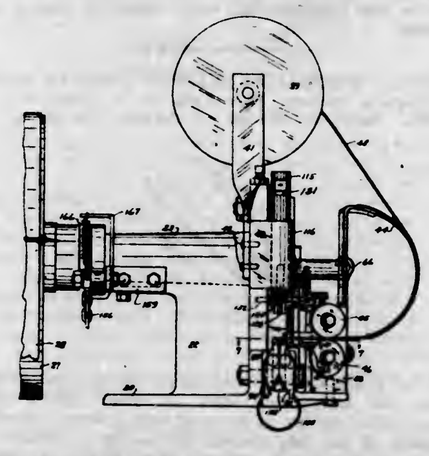
1. A process which comprises forming an acid ester from a fatty hydroxylated oil and a polybasic acid, and replacing the hydrogens of the free carboxyl groups of the partially esterified polybasic acid with a metal.

1,900,694. APPARATUS FOR THE REMOVAL OF ALCOHOL FROM WINE, CIDER, BEER, AND OTHER ALCOHOLIC PRODUCTS. MARC COUPEAU, Paris, and MAURICE DELAVILLE, St. Maurice, France, assignors of one-third to André Cornillac, Paris, France. Original application filed July 23, 1930, Serial No. 469,982, and in France June 25, 1930. Divided and this application filed Aug. 7, 1931. Serial No. 555,666. 1 Claim. (Cl. 202—79.)

An apparatus for the treatment of wines or other alcoholic liquids for the removal of alcohol therefrom, comprising a still provided with a chamber having a distilling space which is substantially clear and unobstructed throughout the total height of said chamber, a vacuum pump communicating therewith, a sprayer mounted at the upper part of said chamber together with means for supplying the same with the liquid to be treated, an injector mounted at the lower part of said chamber and means for supplying steam to the same, a conduit at the top of said chamber for the exit of the said steam charged with alcohol vapors, the lower part of the chamber being connected with a vessel adapted to collect the liquid which has been freed from alcohol.



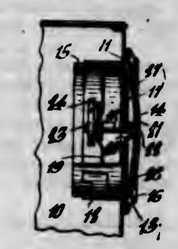
1,900,695. METHOD OF AND MACHINE FOR BINDING CABLES. ARTHUR R. CURTIS, Cleveland, Ohio, assignor to Superior Carbon Products, Incorporated, Cleveland, Ohio, a Corporation of New York. Filed Mar. 11, 1930. Serial No. 434,996. 10 Claims. (Cl. 140—93.)



1. A method of binding the insulation of electric conductors which includes the steps of directing a length of binding wire to a position adjacent a conductor and obliquely to the axis thereof, initially forming a loop of wire around the conductor by forcing the conductor and the wire into a pair of clamping jaws, completing the loop by clamping the jaws together, and clinching the loop by forcing the ends of the wire into engagement with the conductor.

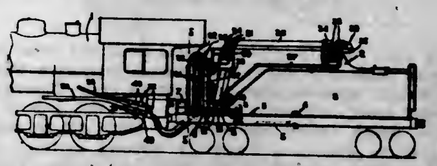
2. In a cable binding machine, the combination of a frame, a shaft mounted on the frame, a driving pulley associated with the shaft, a single rotation clutch adapted to drivingly connect said pulley and shaft, a pair of fingers pivotally mounted on said frame, said fingers having jaws adapted to clamp a cable therein, means for feeding wire over said jaws obliquely to the axis of a cable positioned over said jaws, means for cutting off a length of the wire, means for forcing the cable and said length of wire into said jaws, thereby partially forming a loop of wire around the cable, means for actuating said jaws to clamp the cable, thereby completing the loop, means for bending the ends of the wire into engagement with the cable, means for ejecting the cable from the jaws, and cams mounted on said shaft and adapted to actuate each of the above named means in proper timed relation.

1,900,696. OVEN THERMOMETER. GEORGE J. DAY, Buffalo, N. Y. Filed Jan. 5, 1932. Serial No. 584,823. 3 Claims. (Cl. 73—119.)



3. An oven thermometer, comprising a casing having a substantially conical bearing projecting forwardly from its front side, a face plate applied to the front of the casing in spaced relation to its conical bearing and having oppositely disposed sight openings therein disposed about an axis coextensive with that of said bearing, a thermostatic element applied to the casing and including a revolvable post projecting axially through the conical bearing, and a dial plate fixed on the front end of said post in the space between said face plate and said bearing and in axial contact with the latter, the dial having an arcuate row of temperature indicia at one side of its center and a like row of oven-condition indicia at the opposite side thereof for registering, respectively, with the sight openings in said face plate.

1,900,697. FEED WATER HEATER FOR LOCOMOTIVES. MYRON W. DOLE, Belmont, and MORTIMER SILVERMAN, Brookline, Mass. Filed Nov. 6, 1929. Serial No. 405,225. 17 Claims. (Cl. 122—434.)



1. In a feed water heater for locomotives, the combination with a locomotive tender having a main water compartment, a feed-water heating compartment and a combined passage and preheating compartment interposed between the water compartment and feed-water heating compartment and communicating with both, said compartment being arranged to permit gravitational flow from the water compartment to the feed-water heating compartment through the passage compartment, non-return valves controlling said communications which permit such flow but prevent counter flow said feed-water heating compartment having an upwardly-directed extension provided with a steam dome above the maximum water level in the main compartment, of means to deliver exhaust steam into the feed-water heating compartment to heat the water therein, and a hot water return for delivering any water carried into or steam condensed in the steam dome back to the passage and preheating compartment thereby to preheat the water in said compartment.

1,900,698. INSULATING BODY. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Aug. 10, 1929. Serial No. 385,082. 8 Claims. (Cl. 92—21.)

1. A process for making thick heat insulating bodies which consists in fiberizing wood to produce a coarse fiber too long and too coarse for the coarsest grade of paper, hydrolizing the pulp, forming the pulp into a thick felted sheet, drying, and then simultaneously pressing and heating the felted product while dry.

1,900,699. WATERPROOF INSULATING BODY. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 15, 1929. Serial No. 407,580. 8 Claims. (Cl. 92—21.)

1. A process for producing hard wood-like bodies which consists in preparing raw wood pulp and mixing therewith pulverized asphalt, manipulating the batch to form a felted sheet, drying, and then submitting to a pressure within the range of from one hundred fifty to two hundred pounds per square inch at a temperature of approximately three hundred fifty degrees Fahrenheit for from fifteen to thirty minutes.

1,900,700. CELLULOSE NITRATE LACQUER. HANS FINKELSTEIN, Uerdingen (Niederrhein), Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 13, 1928, Serial No. 292,596, and in Germany Dec. 22, 1924. 3 Claims. (Cl. 134—79.)

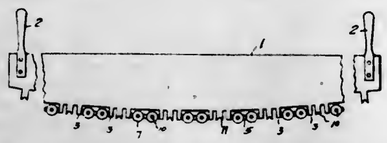
1. A composition of matter comprising cellulose nitrate, an artificial resin prepared from cyclohexanone, formaldehyde and phenol, and a solvent therefor containing a substantial proportion of a butylene glycol monoalkyl ether corresponding to the general formula $HO—C_4H_8—OR$ (in which R indicates an alkyl group with from 1 to 4 carbon atoms).

1,900,701. PLOW. GUY B. FISHER, Blandlake, Tex. Filed Feb. 16, 1931. Serial No. 515,992. 1 Claim. (Cl. 97—52.)



A plow comprising a cylindrical drum like roller having an outer shell and a filler therein forming a weight, outwardly extending forwardly curved arms thereon and spaced apart, lengthwise blades on the outer ends of the arms, which extend approximately from end to end of the drum, and have forwardly directed cutting edges and brackets secured to the drum and resting against the rear sides of said arms.

1,900,702. SAW. GUY B. FISHER, Blandlake, Tex. Filed May 4, 1931. Serial No. 534,823. 4 Claims. (Cl. 143—133.)



1. In a saw having a blade and anchors at the operative edge thereof; drag teeth pivoted at their upper ends to the blade and lying alongside the opposite margins of the anchor.

1,900,703. SNOWPLOW. CARL H. FRINK, Clayton, N. Y. Filed May 6, 1932. Serial No. 609,679. 6 Claims. (Cl. 37—44.)



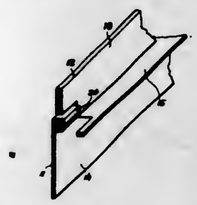
1. In a snow plow, a moldboard and a supporting frame therefore, in combination with a deflector plate hinged to the upper edge of the moldboard to swing forwardly and rearwardly relatively thereto, and means for holding said plate in its forwardly projecting position, the moldboard and plate being provided with cooperative stops for limiting the forward movement of the plate.

1,900,704. DIVIDING STRIP FOR TERRAZZO AND LIKE FLOORS. PASQUALE GALASSI, New York, N. Y. Filed July 2, 1930. Serial No. 465,825. 4 Claims. (Cl. 94—17.)



1. A floor pattern and guide strip comprising a metallic strip having an upper portion provided with an uninterrupted edge, a lower portion comprising spaced lugs and intervening notches, the bottom edges of said lugs having substantially the same thickness as the body portions thereof, and spaced laterally projecting rib-members in said upper portion spaced from the top of said notches.

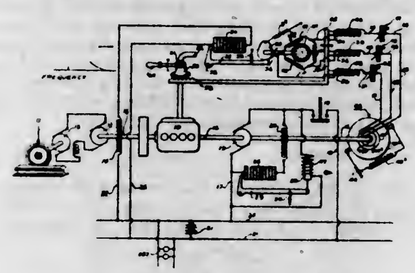
1,900,705. BIMETALLIC FLANGED DIVIDING STRIP. PASQUALE GALASSI, New York, N. Y. Filed Nov. 6, 1931. Serial No. 573,444. 7 Claims. (Cl. 94—17.)



1. In a bimetallic divider strip for terrazzo or like floors, the combination, with an upper section, of a lower section having at its inner edge a flange extending laterally of the body thereof, and having a plurality of longitudinally spaced tongues offset from and transversely of said flange, said tongues projecting upwardly from said flange, and being connected in a substantially permanent manner to the upper section to form a unitary strip with said lower section.

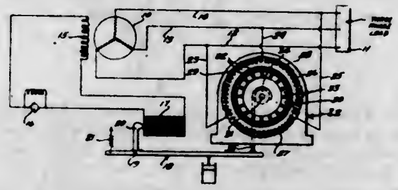
1,900,706. VEHICLE DRIVING APPARATUS AND SYSTEM. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Aug. 19, 1929. Serial No. 387,052. 27 Claims. (Cl. 290—17.)

1. In apparatus of the character described, in combination, a prime mover, a generator, means forming an electrical load for said generator, means for controlling the power supplied to said load, means supplying an alternating potential, the frequency and magnitude of which vary with changes in speed of said prime mover, electromagnetic means for actuating said control means, said electromagnetic means varying in effectiveness with



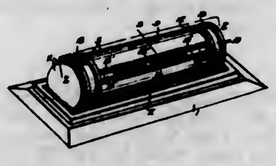
the square of the voltage applied thereto and being connected to be responsive to said alternating potential, and means causing the alternating current supplied to said electromagnetic means to vary with the frequency.

1,900,707. REGULATION OF ALTERNATING CURRENT CIRCUITS. FRANK W. GODSEY, Jr., New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Jan. 17, 1931. Serial No. 509,460. 17 Claims. (Cl. 171—119.)



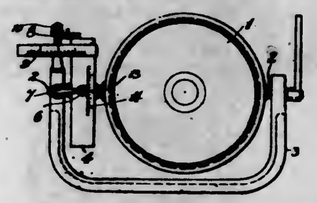
1. In apparatus of the character described, in combination, a source of alternating current, a load supplied therefrom, a carbon pile for affecting a function of the energy supplied to said load, and means for controlling said carbon pile, said means including a spring acting in one direction, a rotary magnetic member opposing the action of said spring and having a winding thereon, and means energized by alternating current and responsive to changes in said function for producing a rotating magnetic field affecting the rotary position of said rotary member, said rotary member being constructed so that change in its rotary position has substantially no appreciable effect upon the current energizing said last-mentioned means.

1,900,708. MORTUARY RECORD CONTAINER. HANS P. HANSEN, Syracuse, N. Y. Filed Mar. 30, 1931. Serial No. 526,307. 2 Claims. (Cl. 40—19.)



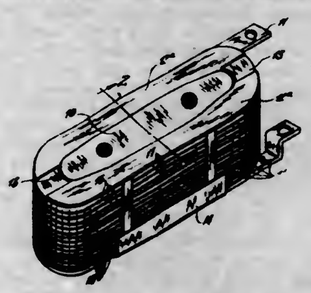
2. In a mortuary record holder the combination of a tubular section, cap sections fitted over and upon both ends of the tubular section and having their inner ends extended beyond the areas of contact with the tubular section and in spaced relation thereto to form annular grooves, said tubular section being provided upon its outer surface with a pair of lengthwise guide grooves undercut transversely, and type plates engaging in said grooves and slidable lengthwise thereof.

1,900,709. GYROSCOPIC NAVIGATIONAL INSTRUMENT. JAMES BLACKLOCK HENDERSON, Lee, England. Filed May 26, 1917, Serial No. 171,819, and in Great Britain May 11, 1916. 39 Claims. (Cl. 33—204.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L. 1313.)



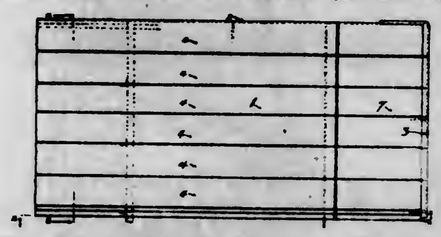
1. In an instrument of the class described, a gyroscope having a rotary axis, a casing for said gyroscope, horisontal supporting trunnions for said casing, said rotary and trunnion axes being at right angles to each other, and means for indicating the rate of tilt of the gyroscope about the trunnion axis.

1,900,710. INSULATOR. JOHN H. HERTNER, Lakewood, Ohio, assignor to The Hertner Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 16, 1932. Serial No. 593,296. 10 Claims. (Cl. 175—21.)



1. An electrical insulator comprising a metallic strip having thereon a metallic phosphate coating.

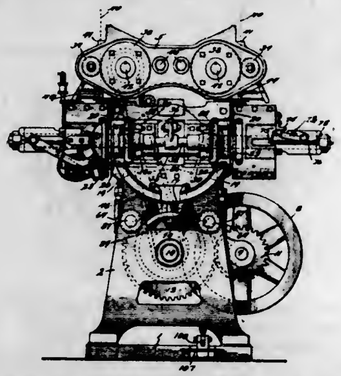
1,900,711. SHEET METAL VESSEL CONSTRUCTION. JAMES E. HOWARD, Jeffersonville, Ind. Filed Sept. 26, 1930. Serial No. 484,488. 5 Claims. (Cl. 114—26.)



2. In a vessel construction having top, bottom and sides of overlapping interengaged sheet metal members, each having along one edge thereof aligned portions bent substantially at right angles to said members, and having flanges formed at the ends of said bent portions, of a

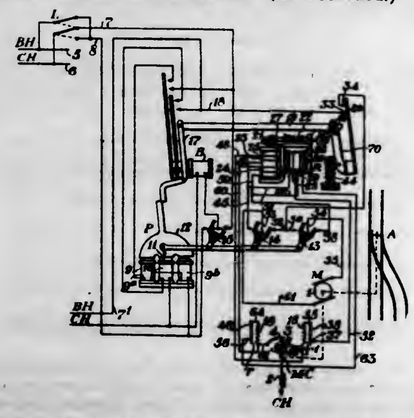
plurality of internal truss and strut members adapted to rigidly support the top, bottom and sides by securement thereof to the aligned bent portions of the overlapping metal members mentioned.

1,900,712. MACHINE FOR MAKING AND INSERTING BASKET HANDLES. LESLIE M. HILE, Benton Harbor, Mich. Filed May 18, 1931. Serial No. 538,155. 35 Claims. (Cl. 140—93.)



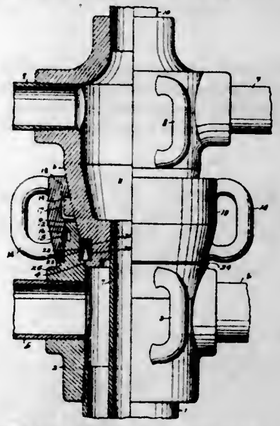
1. In machinery for making and applying upstanding wire handles to baskets, the combination of instrumentalities for performing the successive steps necessary for cutting off a length of wire and forming the same into a bail-shaped wire handle member, and for inserting end portions of said wire member inwardly through the side of the basket, to form an upwardly extending handle, with exposed end portions inside the basket, mechanism having clinching means disposed entirely within the basket for deflecting and bending the inner straight ends of the wire member into position flat wise against the inner side of the basket, formed to position said inner ends at angles to the upright legs of said wire member, whereby said straight end portions will be disposed entirely inside of the basket, and power operated means for actuating said instrumentalities and said mechanism in suitably timed relation to simultaneously clinch the wire ends entirely on the inside of the basket.

1,900,713. RAILWAY TRAFFIC CONTROLLING APPARATUS. CLAUDE M. HINES, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed May 11, 1931. Serial No. 536,497. 2 Claims. (Cl. 175—294.)



1. In combination, an electric motor, an operating circuit for said motor, a circuit breaker for controlling the supply of current to said motor having a first and a second core, an operating winding on said first core included in said motor circuit, means controlled by said operating winding for tripping said circuit breaker, a thermal relay having a heating winding and a normally closed contact, a holding winding on said second core connected in parallel with said operating winding and including said heating winding and said contact in series whereby said holding winding and said heating winding become energized from the potential across said operating winding over said contact, and means controlled by said holding winding for preventing said circuit breaker from tripping.

1,900,714. TUBING HEAD. GRANVILLE A. HUMASON and WILLIAM A. RAYMOND, Houston, Tex. Filed July 16, 1931. Serial No. 551,122. 2 Claims. Cl. 166—14.)



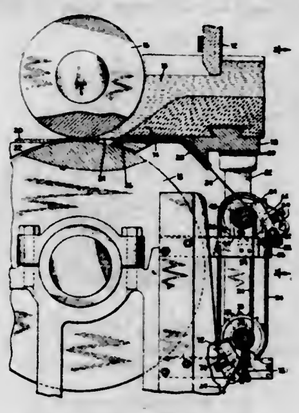
1. In a tubing head, the combination with a bowl having an inside seat, of a tubing hanger in the bowl on said seat, a turnable ring on the bowl, interlocking means carried by said ring and hanger arranged to be interlocked or released by appropriate turning movements of said ring, and an annular, resilient insert in said hanger forming a packing between the hanger and seat and whose underside has an annular groove aligned with the joint between the hanger and seat.

1,900,715. METHOD OF CARRYING OUT EXOTHERMIC CATALYTIC VAPOR PHASE REACTIONS. ALPHONS O. JAEGER, Crafton, Pa., assignor, by mesne assignments, to The Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed May 4, 1928. Serial No. 275,044. 9 Claims. (Cl. 260—123.)

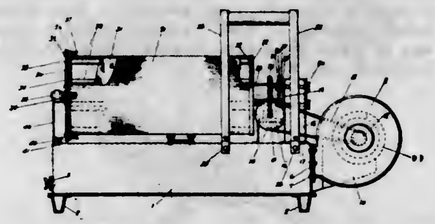
1. A method of carrying out vapor phase catalytic reactions, which comprises passing reaction gases through at least one catalyst zone, absorbing the exothermic heat of reaction by a non-boiling liquid in heat exchanging relation thereto, removing the liquid from the catalytic zone, reducing its pressure to permit a part at least of the exothermic heat absorbed to be given off as latent heat of vaporization, condensing the vapors and returning the condensate and unboiled liquid to the catalytic zone at the pressure there existing.

1,900,716. WIRE GLASS MANUFACTURE. GUSTAV H. JUERGENS, St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y., a Corporation of New York. Filed Jan. 10, 1930. Serial No. 419,792. 8 Claims. (Cl. 49—32.)

1. In apparatus of the class described, in combination, a forming pass, means for feeding molten metal to said forming pass, means for feeding reinforcing wire to said pass through said metal, and means for preheating said wire while being fed, whereby said wire enters the molten metal at a comparatively high temperature, said preheating means comprising devices for supplying electric current to said wires while they are under control of said feeding means.

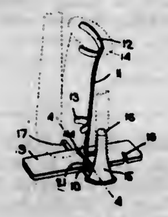


1,900,717. CYANIDE APPLICATOR. KENNETH A. KILBOURNE, Elizabeth, N. J., assignor to American Cyanamid Company, New York, N. Y., a Corporation of Maine. Filed July 7, 1925. Serial No. 41,925. 38 Claims. (Cl. 167—35.)



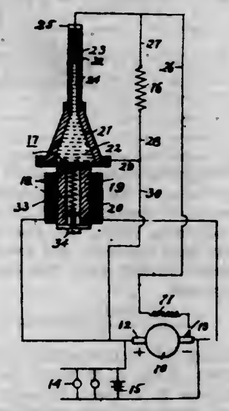
1. An apparatus for fumigating comprising a receiver for fumigant, a receptacle for water and blower means for conducting air through said receptacle and through said receiver successively to cause said fumigant to liberate a poisonous gas.

1,900,718. COMBINED CARRYING CASE AND HOLDER FOR MUSICAL INSTRUMENTS. ALBION S. LANG, Roslindale, Mass. Filed July 22, 1932. Serial No. 623,953. 4 Claims. (Cl. 206—13.)



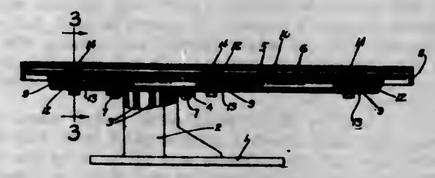
1. A combined carrying case and holder for musical instruments comprising a carrying case element adapted to receive a plurality of musical instruments and a holder element adapted to be received in the carrying case element but removable bodily therefrom, said holder element having a plurality of sections movable relative to each other, each section having means for supporting a musical instrument, the holder element with the instruments supported thereby being removable bodily and as a unit from the carrying case and said holder element forming a support for the instruments when removed from said carrying case the relative movement of the sections of the holder providing for placing the musical instruments in a different position relative to each other when the holder is removed from the case than when said holder is in the case.

1,900,719. GENERATOR REGULATION. BENNETT M. LEECH, Cleveland, and DALE S. COLE, Cleveland Heights, Ohio, assignors to The Leece-Neville Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 27, 1931. Serial No. 540,396. 6 Claims. (Cl. 171—229.)



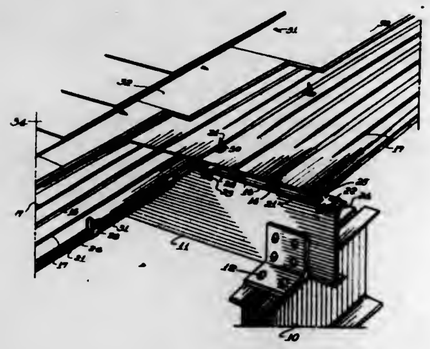
1. In a system of the character described the combination of a generator, and a regulator therefor comprising a magnet having a coil energized by said generator, a liquid chamber extending within said coil and having a flexible wall adapted to be vibrated by said magnet, an electrode in said chamber, and a body of current-conducting liquid in said chamber adapted to be displaced into contact with said electrode by the vibration of said wall.

1,900,720. BUCK STRUCTURE FOR LAUNDRY PRESSES. FREDERICK W. LINDEMANN, St. Paul, Minn., assignor to The Unipress Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 27, 1928. Serial No. 315,542. 6 Claims. (Cl. 68—9.)



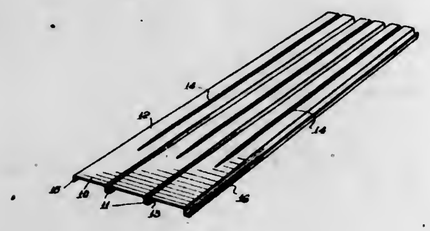
2. A buck providing a steam chamber, a pad cap having a pad-supporting wall normally spaced from the heat-transmitting wall of the buck, said buck having sockets therein, compression springs arranged in the sockets and supporting the cap in spaced relation and linkage means acting counter to the springs to positively limit cap movement in a direction away from the buck and permit universal adjusting motions of the cap laterally in the plane of its working surface.

1,900,721. **ROOF AND FLOOR CONSTRUCTION.** Fred A. MANSKE, EUGENE W. ODENWALDT, and OLIVER E. GIBSON, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 12, 1931. Serial No. 562,522. 10 Claims. (Cl. 189—34.)



1. A roof deck construction comprising a plurality of plates having overlapping ends, each plate being provided with a plurality of spaced, parallel channels, the channels in the end of one plate engaging with those in the adjacent end of an adjoining plate, and ribs formed in each plate intermediate said channels and extending substantially the full length of said plate but terminating short of the one end thereof.

1,900,722. **METHOD OF AND MACHINE FOR FORMING METAL PLATES.** FRED A. MANSKE, EUGENE W. ODENWALDT, and OLIVER E. GIBSON, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1931. Serial No. 576,054. 11 Claims. (Cl. 153—77.)

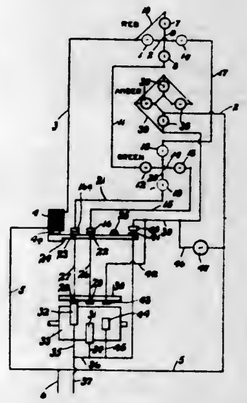


5. The method of forming a plate with channels which comprises forming a plurality of spaced parallel channels coextensive with the length thereof, and forming ribs in said plate intermediate said channels and extending from one end of the plate but terminating short of the opposite end thereof.

6. In a machine for forming metal plates, means for moving said plates along a predetermined path, rolls for forming non-continuous ribs in said plates, a switch arm positioned in the path of travel of said plates, and means associated with said switch arm for controlling the intermittent engagement of said rolls with said plates.

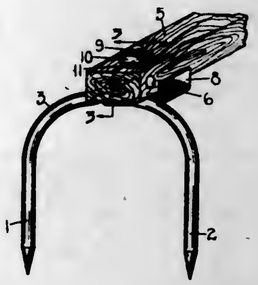
1,900,723. **TRAFFIC SIGNAL.** DALE O. MILLER, Detroit, Mich. Filed Apr. 21, 1930. Serial No. 445,903. 9 Claims. (Cl. 177—337.)

1. In a lighting system, two electric lights of one color, two additional electric lights of a different color, an electric light wiring circuit in which all of said lights are connected in series, a second electric wiring circuit, including two pairs of electric lights all of the lights being connected in series in said second circuit and the two pairs of electric lights in said second circuit being of different colors



and located in right angles to the two pairs of electric lights in the first circuit, means for alternately completing the two wiring circuits and means for automatically breaking both circuits when any one of the four pairs of lights is burned out.

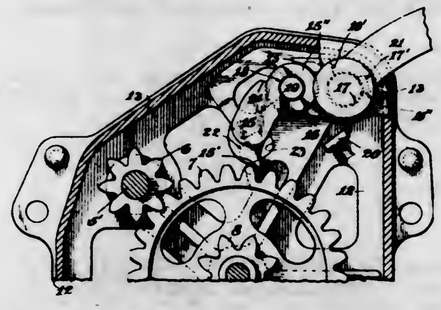
1,900,724. **RAKE TOOTH FOR HAY LOADERS.** PAUL P. MILLER, Ottumwa, Iowa, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa, a Corporation of Iowa. Filed June 10, 1932. Serial No. 616,887. 2 Claims. (Cl. 56—400.)



1. The combination with a raker bar of a hay loader, of an inverted U-shaped tooth having dual prongs, a loop formed in the arc of the tooth and bent substantially at a right angle thereto, a clamp confining said loop and having flanges embracing the bar and in forceful contact with the tooth, and a bolt extending through the clamp, the loop and said bar to hold the clamp and tooth in rigid position on the bar.

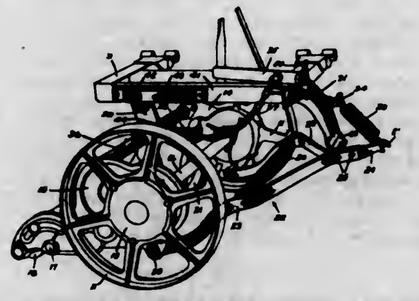
1,900,725. **RELEASE MECHANISM.** FRANK E. MOFFETT, Maywood, Ill., assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 11, 1929. Serial No. 362,178. 4 Claims. (Cl. 188—81.1.)

1. In combination, a housing, a toothed element in said housing, a pawl engageable with said element for preventing movement thereof in a given direction, a member pivotally connected to said pawl and forming therewith a toggle, and means cooperating with said toggle for shifting the same to a position wherein said toothed element cooperates to effect disengagement of the pawl therefrom,



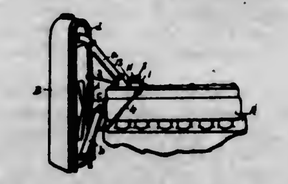
and means on said pawl and housing cooperating upon movement of the pawl to guide the pawl into and out of engagement with said toothed member.

1,900,726. **LAWN MOWER.** AMOS F. MOYER, Minneapolis, Minn., assignor to Toro Manufacturing Company, Minneapolis, Minn., a Corporation of Delaware. Filed Dec. 20, 1930. Serial No. 503,719. 24 Claims. (Cl. 56—7.)



1. The combination with a lawn mowing unit including spaced-apart drive wheels, and a propellant for said unit, of a draft member for connecting the unit with said propellant, said draft member having a pivotal connection with said unit situated at a substantial distance below the axis of said drive wheels, means pivotally connecting the draft member with said propellant, and means connected between said draft member and said propellant adapted to exert a downward pressure on the drive wheels of the mowing unit.

1,900,727. **APPARATUS FOR SAVING RADIATOR ALCOHOL.** ANDREW WILLIAM MURPHY, Norwich, N. Y. Filed May 18, 1931. Serial No. 538,364. 3 Claims. (Cl. 123—174.)

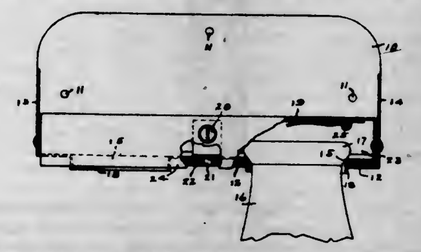


1. The combination with the cooling system of an internal combustion engine including the usual water jacket and radiator and the upflow and return pipes connecting the jacket and radiator, of an overflow pipe leading from the interior of the upper portion of the radiator and provided with two branches, one of said branches being open to the atmosphere, the other branch being connected to one of the first named pipes, and means for diverting the overflow to either of said branches and for cutting off the passage of the overflow to the other branch.

1,900,728. **VULCANIZED RUBBER COMPOSITION AND PROCESS OF VULCANIZING RUBBER.** HERMANN OEHME, Cologne-Kalk, Germany, assignor to Chemische Fabrik Kalk G. m. b. H., Cologne-Kalk, Germany. Filed Feb. 6, 1931, Serial No. 514,053, and in Germany June 26, 1926. 27 Claims. (Cl. 18—53.)

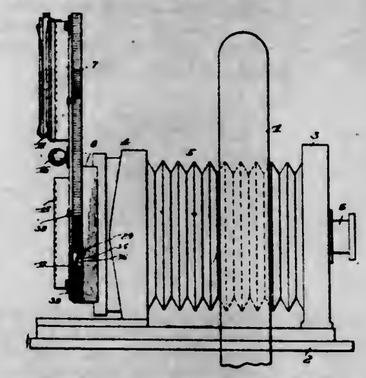
1. An improved vulcanised rubber composition containing a zinc oxide of non-pigmenting properties said zinc oxide being prepared by heating a zinc compound containing volatile residues under such conditions as to exclude the formation of a color pigment.

1,900,729. **MILK BOTTLE RECEIVER.** CORNELIUS B. OSTER and HARRY RAINEY, Rushville, Ind., assignors of one-fourth to Harrie Jones, Rushville, Ind., and one-fourth to Clarence Cole, Indianapolis, Ind. Filed May 4, 1931. Serial No. 534,858. 4 Claims. (Cl. 232—41.)



1. In a receiver for bottles having a laterally projecting ring around their mouths, holding means for suspending a bottle by said ring, and a bottle cover mounted to swing past a vertical plane in opening, said cover having a rear lateral flange which is contacted by the bottle to automatically close the cover over the bottle mouth by contact of the bottle with the cover flange.

1,900,730. **CAMERA BACK.** WILLIAM H. PETIT and EDSON S. HINELINE, Rochester, N. Y., assignors to The Folmer Graflex Corporation, Rochester, N. Y., a Corporation of Delaware. Filed Dec. 11, 1931. Serial No. 580,302. 5 Claims. (Cl. 95—49.)



1. In a camera back, the combination with a mounting board having an exposure opening in the axis of the camera lens, of a rotary back mounted on the board to turn

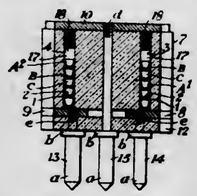
through an angle of one hundred and eighty degrees, a focusing screen and a plate holder diametrically oppositely arranged on the back to alternately register with the exposure opening in the board, and an operating spring for the back tensioned by the movement of the focusing screen into such register and adapted to return the back to a position in which the plate holder is in register.

1,900,731. WELL PLUNGER. JOHN W. PIPPIN, Corpus Christi, Tex., assignor of one-half to H. B. Giles, Nueces County, Tex., and one-half to W. F. Hall and George Lowrey, Harris County, Tex. Filed Feb. 17, 1930. Serial No. 429,189. 1 Claim. (Cl. 103—225.)



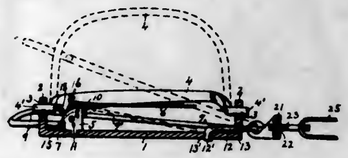
A movable valve body forming part of a pump plunger having an axial passage, the valve body having a chamber therein, a cup-shaped member threaded into the upper end of the valve body and projecting into the chamber, said cup-shaped member having a plurality of lateral passages placing the chamber in communication with the passage in the plunger, a stem projecting from the free end of the cup-shaped member, a sleeve slidably mounted on the stem and having a head provided with a curved face, a valve seat at the lower end of the chamber, a ball valve on the seat and normally engaged by the curved face, a spring on the stem and engaging at one end the free end of the cup-shaped member and at its other end the sleeve for maintaining the valve on its seat.

1,900,732. ELECTRICAL RECTIFIER. WILLARD P. PLACE, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1931. Serial No. 565,094. 18 Claims. (Cl. 175—366.)



5. A rectifier comprising a block of insulating material provided with a hole, an asymmetric unit in said hole, said asymmetric unit comprising a metal disk havng a coating of a compound of the metal formed on one side thereof, an impressionable conducting member in said hole, said member being in the form of a frustum of a cone the one base of which fits into said hole with a small amount of clearance and the other base of which has a diameter which is smaller than the diameter of the coating of said unit, said smaller base being in engagement with the coating of said unit, and means for subjecting said member and said unit to a comparatively high pressure.

1,900,733. ANIMAL TRAP. JAMES IRWIN PNEUMAN, Camillus, N. Y. Filed May 29, 1931. Serial No. 540,986. 8 Claims. (Cl. 43—88.)

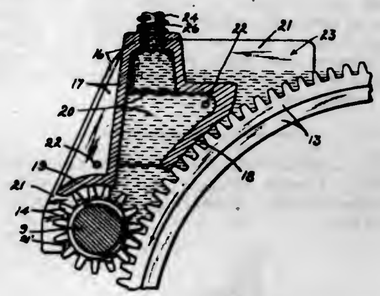


1. In an animal trap having a frame and a pair of jaws pivoted thereto, a post on the frame having a sholder, a jaw-operating spring mounted on the frame and movable into holding engagement with said shoulder against its own tension, and a bait-pan pivoted to said post and provided with an extension adapted to be engaged by the spring when the latter is engaged with the shoulder for releasing said spring from the shoulder when the bait-pan is depressed.

1,900,734. PRODUCTION OF DRIERS FOR VARNISHES, LACQUERS, OIL PAINTS, AND THE LIKE. FRANZ POHL, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 12, 1928, Serial No. 305,613, and in Germany Oct. 25, 1927. 23 Claims. (Cl. 134—57.)

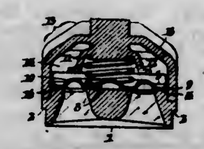
1. The process of producing driers for varnishes, lacquers, oil paints and the like which comprises acting with a compound of a metal selected from the group consisting of aluminium, zinc, manganese, copper, mercury, cobalt and lead on oxidation products of mineral waxes.

1,900,735. LUBRICATING SYSTEM. WILLIAM D. POMEROY, Seneca Falls, N. Y., assignor to Goulds Pumps, Incorporated, Seneca Falls, N. Y., a Corporation of New York. Filed Feb. 3, 1930. Serial No. 425,554. 28 Claims. (Cl. 184—4.)



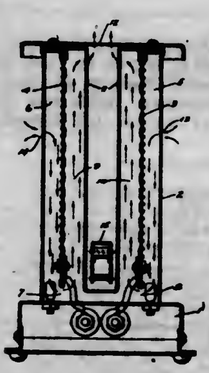
1. In a device of the class described, in combination with a pair of gears in meshing engagement and one of said gears adapted to be partially submerged in a lubricant, of an oil housing supported by the periphery of said gears, a chamber in said housing adjacent the teeth of said gears at the junction thereof, adapted to receive the oil discharged by said gears, and a conduit secured to the housing in communication with said chamber for distributing the lubricant.

1,900,736. VALVE. MAURICE F. RICHARDSON, Berwyn, Pa. Filed Feb. 25, 1931. Serial No. 518,136. 1 Claim. (Cl. 251—127.)



In a valve the combination of a ported seat member, a discous valve element embodying a central concavo-convex dome portion and an annular arched ridge, a stationary overhang engageable by said ridge to limit upward movement of said element, and a crows-foot hold-down component the legs whereof engage the seat member outer edge under forced fit, said component affording peripheral guidance for the valve element while securing all said parts in complete assembly.

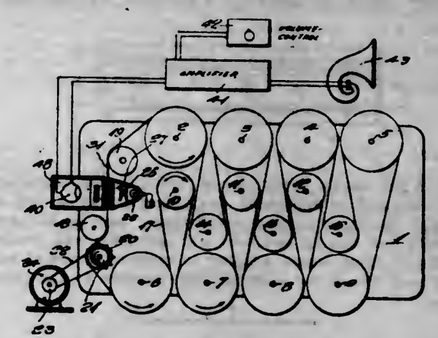
1,900,737. TOASTER. EVEN J. ROHNE, Minneapolis, Minn., assignor to Water-Genter Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 17, 1930. Serial No. 429,075. 9 Claims. (Cl. 53—5.)



1. A device of the class described comprising a heating chamber having air intake openings in its vertical walls, and heating element supports arranged to compel the air entering said openings to circulate downwardly beneath the heating element supports and then upwardly between them, the top wall of the chamber having an opening permitting introduction between said elements of an article to be cooked, and facilitating upward circulation of air, said openings constituting substantially the sole means whereby air is admitted to or expelled from the heating chamber.

1,900,738. FILM APPARATUS. GORDON BROWN SCHNELL, Newark, N. J. Filed Mar. 12, 1931. Serial No. 522,093. 2 Claims. (Cl. 179—100.3.)

1. A film apparatus comprising an optical system, a plurality of reels in rows in echelon, smaller reels in rows in echelon intermediate said first-mentioned rows, the reels of said last mentioned rows being individually aligned with said first mentioned reels of the adjacent row, said smaller reels being larger in diameter than the space between adjacent reels in said first mentioned rows, and a film supported by said reels for movement with

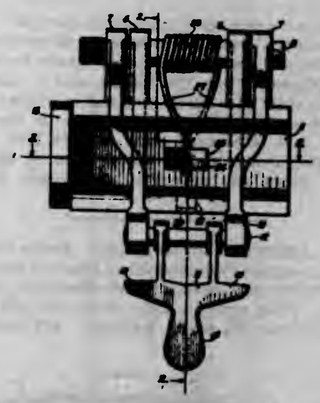


respect to said optical system, said film extending in loops between adjacent reels in said first mentioned rows around said smaller reels of the furthest row.

1,900,739. PRODUCTION OF OLEFINES AND DIOLEFINES. OTTO SCHMIDT, Ludwigshafen-on-the-Rhine, MAX TRUPPENHAUER, Mannheim, and OTTO GROSSKINSKY and HEINRICH FISCHER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 21, 1928, Serial No. 294,566, and in Germany Aug. 29, 1927. 22 Claims. (Cl. 260—170.)

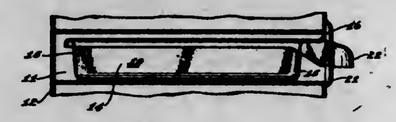
1. A process for the production of olefines and diolefines which comprises bringing a non-aromatic hydrocarbon containing at least 6 carbon atoms in the molecule in a vaporous state and at a temperature between about 500° and 800° C. into contact with lustrous carbon.

1,900,740. RENEWABLE THREADED LINER FOR COAL DRILL BOXING. VICTOR L. SCOTT, Ottumwa, Iowa, and NICHOLAS W. MARSCH, Troy, S. Dak. Filed June 15, 1931. Serial No. 544,362. 11 Claims. (Cl. 255—46.)



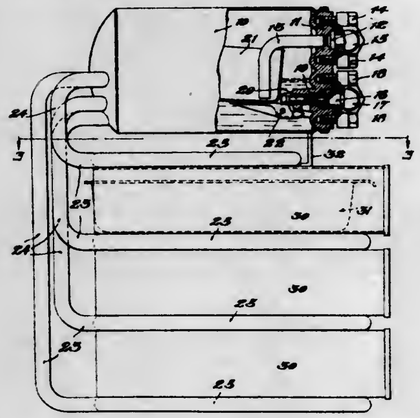
1. A drill boxing structure comprising a pair of boxing sections, and threaded bushing sections enclosed within said boxing sections, said boxing and bushing sections having flat engaging surfaces extending continuously the full length of the structure and of angular contour in cross-section with clearance provided between corresponding faces of said boxing and bushing sections for wear take-up.

1,900,741. ICE PAN. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed July 29, 1929. Serial No. 381,976. 4 Claims. (Cl. 62—108.5.)



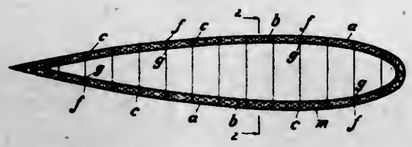
1. A pan for the production of frozen liquids in mechanical refrigerating apparatus comprising a tray, a tray extension having a portion paralleling a wall of the tray, a plate and handle member, said extension and member having locating bosses adapted to register in nested relation, and means for securing said member to the extension.

1,900,742. EVAPORATOR. FRANKLIN G. SLAGEL, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Aug. 13, 1930. Serial No. 475,032. 6 Claims. (Cl. 62—126.)



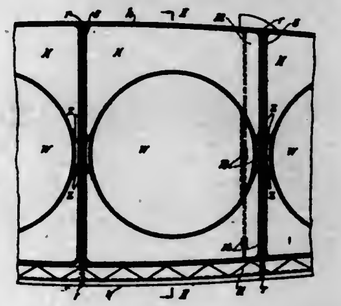
1. In an evaporator for refrigerating systems, a header, means for automatically controlling liquid refrigerant to maintain a body thereof in the header, means for removing gasified refrigerant from the header, and a plurality of tubes having their ends secured to and extending through the rear end of the header below the level of the body of refrigerant, said tubes each being bent to form horizontally extending loops, the horizontal loops of the respective tubes being in respective superposed horizontal planes.

1,900,743. AIRSHIP. HANS STROBL, Berlin-Tempelhof, Germany, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschrankter Haftung, Friedrichshafen, Bodensee, Germany. Filed Mar. 12, 1930, Serial No. 435,276, and in Germany Mar. 18, 1929. 3 Claims. (Cl. 244—3.)



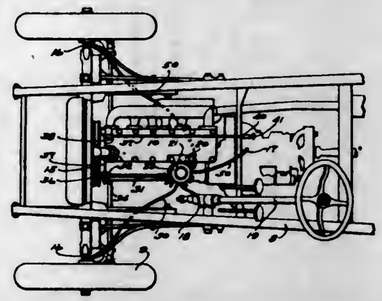
1. A rigid airship comprising an outer hull structure, an inner hull structure, a structure connecting said outer hull to said inner hull, a gas cell within said inner hull, two gas cells within the space between said outer hull and said inner hull, and connecting means between said latter two gas cells.

1,900,744. AIRSHIP. HANS STROBL, Berlin-Tempelhof, Germany, assignor to Luftschiffbau Zeppelin Gesellschaft mit beschränkter Haftung, Friedrichshafen, Bodensee, Germany. Filed June 14, 1932, Serial No. 617,142, and in Germany June 15, 1931. 6 Claims. (Cl. 244—3.)



1. In an airship of the lighter than air type a gase cell of substantially circular cross section with its axis substantially parallel to the longitudinal axis of the airship hull, and a smaller gas cell of substantially cylindrical shape so inserted in said first gas cell that the axes of both cells are substantially at right angles to each other.

1,900,745. PROGRESSIVE DISTRIBUTING LUBRICATOR. ERWIN L. SUTTER, St. Paul, Minn., assignor to Sukete Investment Company, St. Paul, Minn., a Corporation of Minnesota. Filed Dec. 26, 1929. Serial No. 416,485. 11 Claims. (Cl. 184—27.)

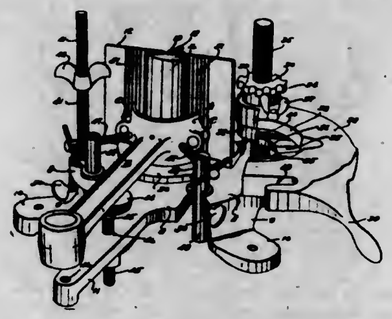


1. A lubricator comprising a body formed with circumferentially spaced radially disposed gun cylinders having grease intake passages, grease discharge plungers working in said cylinders, a presser ring having rolling engagement with said plungers, and a rotary cam-acting gun-actuating element rotatable within and operative on said presser ring.

1,900,746. BABBITTING DEVICE. THOR THORSEN, Plymouth Township, Hennepin County, Minn., assignor to Storm Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 2, 1931. Serial No. 512,909. 11 Claims. (Cl. 22—123.)

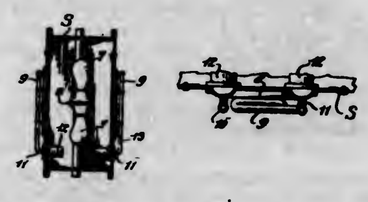
1. A device of the class described comprising a base having a fixed upright face plate, a bed directly mounted on the base, a cope mounted on the base for movement to and from an operative position, a core on the face plate between the bed and cope, a pair of posts on the base,

and a pair of converging set-screws mounted on the posts for axial movement on lines that radiate substantially from the axis of the core for holding a piece of work be-



tween the bed and cope in a definite position, in respect to the core, for cooperation with the face plate, core, bed and cope to complete the mold cavity.

1,900,747. ILLUMINATED SIGN. WALLACE K. WILBY and HARRY J. CUDNEY, Buffalo, N. Y., assignors to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed Nov. 29, 1929. Serial No. 410,816. 8 Claims. (Cl. 40—133.)



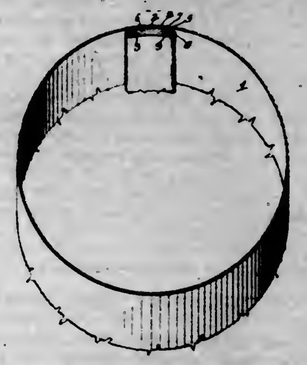
1. An illuminated sign adapted to provide a number of contrasting lighting effects in the illumination of the display characters thereof comprising a sign casing having an opening therein corresponding to the outline of a display character, a translucent element secured to said sign for display through said opening, means within the sign casing for illuminating said element, a second display element formed from an electroluminescent tube and following in outline a portion of the character formed by said translucent element and the opening in said casing, said second element being secured to said sign in close proximity to said translucent element.

1,900,748. PRESSING PAD VENTILATING APPARATUS. FRED CARL WILHELM, Minneapolis, Minn., assignor to The Unipress Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 11, 1929. Serial No. 398,907. 7 Claims. (Cl. 68—9.)



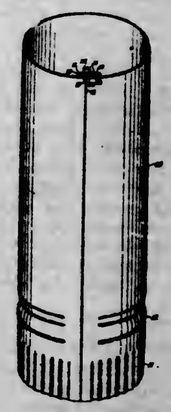
3. In combination with a press having a steam chest having an upper face, a lid-like cap having a working wall overlying and spaced from the face and having a continuous depending flange opposed to the sides of the steam chest and spaced therefrom to permit free vertical and horizontal motions, but adapted to engage the chest to limit horizontal motions of the cap, compressible elements holding the cap in vertically spaced relation above the chest, said cap having perforations establishing atmospheric communication with the space between the cap and chest and said perforations being spread over an area of the cap substantially equal to the area of the upper face of the chest, a pressing pad overlying the perforations, and a presser arm engageable with the pad to depress the cap.

1,900,749. LOCK JOINT FOR METAL PIPES. ALEXANDER C. SLADKY, Milwaukee, Wis., assignor, by mesne assignments, to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Mar. 15, 1930. Serial No. 436,101. 4 Claims. (Cl. 126—309.)



1. A pipe section comprising a metallic sheet, one edge portion of which is folded against the inside of the sheet and then refolded to form a flange spaced from the first named fold and defining a groove, said flange terminating beyond the first folded edge in an outwardly angle locking shoulder, the other edge portion of the sheet having an inwardly offset tongue folded inward upon itself insertable into said groove and terminating in a rearwardly disposed, raw edge for engagement in the angle of said angled locking shoulder.

1,900,750. STOVEPIPE. JOSEPH A. KRANTZ, Dover, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Nov. 24, 1931. Serial No. 577,040. 7 Claims. (Cl. 126—309.)



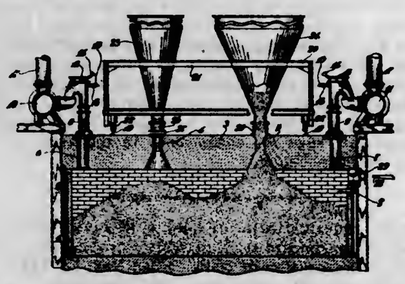
5. A pipe section comprising a metallic sheet, one edge portion of which is folded against the inside of the sheet and then refolded to form a flange spaced from the first named fold and defining a groove, said flange terminating beyond the first folded edge in an outwardly angled lock-

ing shoulder, the other edge portion of the sheet having an inwardly angled locking shoulder and a tongue folded inwardly upon itself insertable into said groove and terminating in a rearwardly disposed raw edge for engagement in the angle of said outwardly angled locking shoulder, the space between said first folded edge and the nearest portion of the outwardly angled locking shoulder being substantially equal to the distance between the forward side of said inwardly angled locking shoulder and said raw edge.

1,900,751. PURIFICATION OF GASES. HANS BAEHR, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 14, 1930, Serial No. 444,338, and in Germany Feb. 27, 1928. 16 Claims. (Cl. 23—3.)

3. The process for the purification of gases contaminated with hydrogen sulphide which comprises the step of passing the gas in the presence of sufficient oxygen to oxidise the hydrogen sulphide to sulphur dioxide, at a temperature between about 100° and 700° C. over a catalyst comprising an oxide of a metal having an atomic weight ranging from 54.93 to 65.38, capable of directly combining with sulphur, an oxygen transferring element of groups 4 to 6 of the periodic system, and up to 10 per cent of a asubstance selected from the group consisting of lead, bismuth, their compounds, and the compounds of the alkali metals and alkaline earth metals.

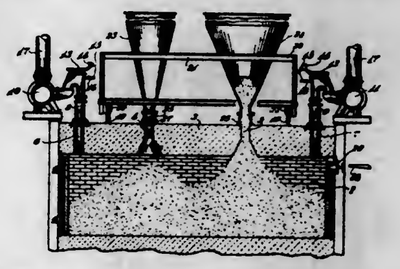
1,900,752. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor, by mesne assignments, to The Koppers Company of Delaware, a Corporation of Delaware. Filed Sept. 29, 1926. Serial No. 138,414. 2 Claims. (Cl. 202—262.)



1. The combination with a horizontal coke oven having a plurality of charging openings in the top thereof and spaced from each other longitudinally of the oven; of a plurality of coal charging containers for cooperating with the charging openings respectively to charge said oven, the aggregate coal capacity of all of said containers approximately equalling the total capacity required for charging the oven with coal up to a substantially level surface throughout the length of the oven adjacent the top thereof so as to leave a gas space above the charge from one end to the other of said oven, and one of said containers being of substantially greater coal capacity than the coal capacity of any container of the remainder of said containers; and gas off-take openings communicating with said oven at the top thereof on opposite sides of the charging opening for the container of greater coal capacity.

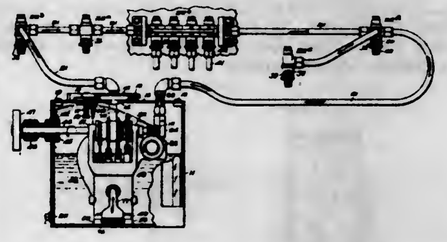
1,900,753. METHOD OF CHARGING COKING RETORT OVENS. JOSEPH BECKER, O'Hara Township, Allegheny County, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Original application filed Sept. 29, 1926, Serial No. 138,414. Divided and this application filed Feb. 20, 1930. Serial No. 429,953. 11 Claims. (Cl. 202—36.)

1. The method of charging a horizontal coke oven having a plurality of spaced charging openings in the top thereof which comprises filling said oven while hot through said openings with coal to the top at one only of said openings, levelling the contents of said oven and with-



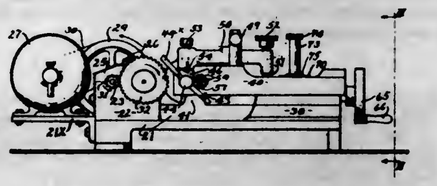
drawing the gaseous products of the oven at two points only and on opposite sides of said one opening during the filling and levelling operations.

1,900,754. LUBRICATING SYSTEM. FREDERICK C. BLANCHARD, Dorchester, Mass. Filed Feb. 8, 1929. Serial No. 338,546. 27 Claims. (Cl. 184—7.)



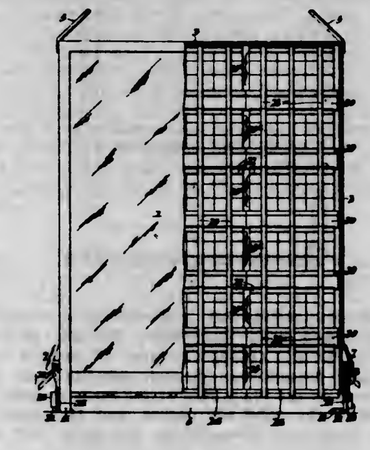
1. Lubricating apparatus comprising, in combination, a circuit conduit system, one or more feeders supplied thereby, means to circulate lubricant in said system under a pressure insufficient to cause said feeder or feeders to feed, and means to cause an intermittent increase of pressure in said system sufficient to cause said feeders to feed.

1,900,755. PISTON RING MILLING MACHINE. THOMAS J. BRUCE, Wichita, Kans. Filed Feb. 2, 1931. Serial No. 512,858. 5 Claims. (Cl. 90—21.)



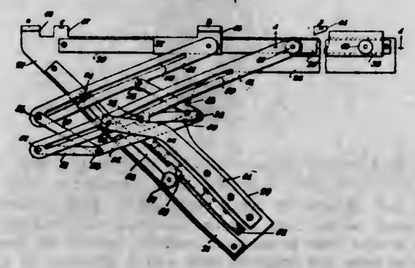
1. In a piston ring milling machine, a base element, a motor supported from said base element, a drive shaft in bearings on the base element; said drive shaft being driven by said motor, an arbor shaft carrying cutters driven by the drive shaft; a bed slidably arranged for movements from or towards the arbor shaft, said bed having seats as bearings for a detachably associated cross shaft carrying a compacted set of piston rings; said cross shaft having a ratchet element and means on the bed plate for engaging said ratchet for the purpose of spacing cuts as slots in the piston rings when said rings are advanced against the rotating cutters under limited movement of the bed element, and means for controlling the forward and rearward movement of the bed plate.

1,900,756. METHOD OF ASSEMBLING AND TRANSPORTING STACKED ARTICLES. GEORGE W. BUTTS, Wynnewood, Pa., assignor to Pennsylvania Railroad Company, a Corporation of Pennsylvania. Original application filed Apr. 11, 1931, Serial No. 529,532. Divided and this application filed Oct. 17, 1931. Serial No. 569,534. 3 Claims. (Cl. 214—152.)



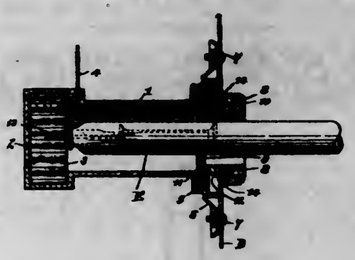
1. A method of loading stacked articles into a bottomless container which consists in arranging the articles in separate individual stacks, each stack being mounted on a separate lading platform and said stacks and platforms being placed side by side whereby the platforms collectively afford a temporary bottom for a container, lowering a container over said stacks, and securing said temporary bottom to the walls of the container.

1,900,757. MEASURING AND COMPUTING INSTRUMENT. EDWIN HOWARD CORLETT, New York, N. Y., assignor to Fairchild Aerial Surveys, Inc., New York, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,620. 5 Claims. (Cl. 33—150.)



3. In a device of the class described, mechanical means including a pair of connected divergent bars, one of which is calibrated, a pair of sliding elements mounted on the non-calibrated bar for setting off two different distances in substantially the same straight line, a sliding element mounted on said calibrated bar and means pivotally connecting said three slidable elements for moving said third slidable element to indicate on said calibrated bar the factor by which one of said distances must be multiplied to equal the other.

1,900,758. ILLUMINATED SIGN. HARRY J. CURRIER, Buffalo, N. Y., assignor to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed July 18, 1928. Serial No. 293,631. 6 Claims. (Cl. 178—328.)



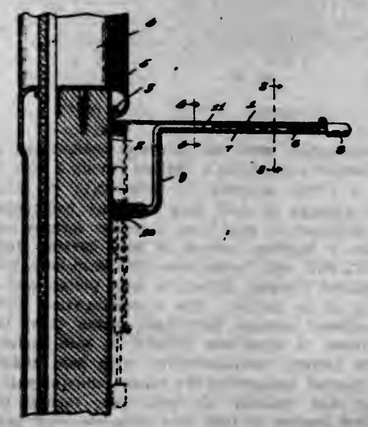
1. In an electric sign, the combination with a wall having an opening, and an electroluminescent tube having an angularly extended electrode carrying terminal portion for insertion through said opening, the latter being of substantially greater diameter than said terminal portion, of a terminal projecting from said terminal portion, and a power line terminal supported behind said opening formed to provide a plurality of tapping points, said terminals being formed for engaging co-operation in any position and angle of said electrode carrying portion with reference to an axis coinciding with the center of said opening.

1,900,759. GREASE INSOLUBLE IN GASOLINE. MAURICE H. ARVESON, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Apr. 25, 1930. Serial No. 447,433. 4 Claims. (Cl. 87—9.)

1. A gasoline insoluble composition of matter comprising about:

	Parts
Free fatty acid	2.5
Fatty acid soap	17.5
Glycerine	37
Oil	35

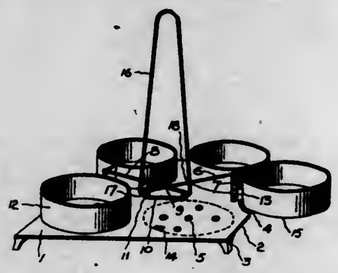
1,900,760. FOLDING SUPPORT. ELDRIDGE M. PENDLETON, Vicksburg, Miss. Filed June 28, 1932. Serial No. 619,792. 2 Claims. (Cl. 46—51.)



1. In combination with a body having a finishing strip, a tray plate having one edge slotted and rolled to provide pintle barrels, a hinged strip having one edge

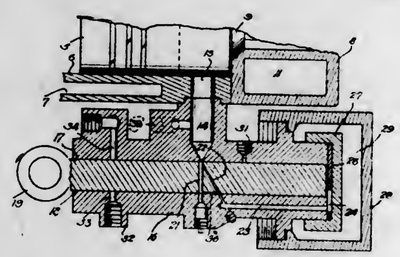
rolled and clamped to the body by the finishing strip and having its opposite edge slotted and rolled to form pintle barrels alining with the first-named pintle barrels, a pintle extending through said barrels and means movably mounted on the plate and adapted to be positioned to engage the body for supporting the plate horizontally.

1,900,761. EGG POACHER. ELIZABETH PROTHAU, Vancouver, British Columbia, Canada. Filed May 27, 1931. Serial No. 540,297. 4 Claims. (Cl. 53—1.)



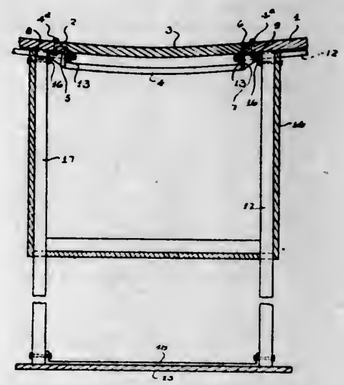
1. An egg poacher comprising a plate having a vertical pivot pin adjacent one edge, a pair of rings pivotally mounted for individual movement about said pin, each ring being normally in contact with the plate and adapted to be swung beyond its borders, and a handle for lifting the plate and its rings.

1,900,762. INTERNAL COMBUSTION ENGINE. ARTHUR A. REIMANN, Oakland, Calif. Filed May 17, 1930. Serial No. 453,818. 1 Claim. (Cl. 123—33.)



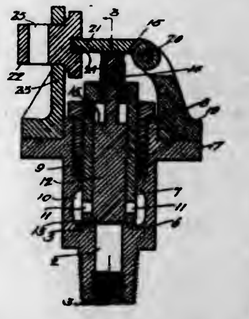
In combination with an internal combustion engine, of an atomizer comprising a casting having a bore formed therein, a piston adapted to reciprocate in said bore, an inlet passage to said bore whereby compressed air may be delivered to said bore, a pocket formed adjacent said bore, a passage formed in said casting and communicating with said pocket and with said bore, an angularly disposed channel formed in said piston and so arranged as to be brought into communication with said last mentioned passage when said piston is at the top of its stroke, a cross-bore formed in said piston, said cross-bore having communication with said channel, a bleeder channel connecting the spaced ends of said cross-bore and said channel, an inlet port formed in said casting and located so that said cross-bore will communicate therewith when said piston is at its lowest point of travel, and an atomising port formed in said casting, said atomising port communicating with said cross-bore, when said piston is at its highest point of travel.

1,900,763. SILO. THOMAS A. ROWE, Red Creek, N. Y. Filed May 14, 1930. Serial No. 452,444. 10 Claims. (Cl. 20—1.4.)



1. The combination with a silo having a vertical door opening, and a band surrounding the silo, of a brace secured to the silo on opposite sides of the door opening and having passageways through opposite ends thereof terminating on the inner face of the brace through which the ends of the band are passed, and fastening means for the band ends arranged on the inner face of the brace.

1,900,764. SEALING AND RELEASE DEVICE FOR CARBON DIOXIDE FIRE SYSTEMS. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1929. Serial No. 403,233. 7 Claims. (Cl. 169—11.)



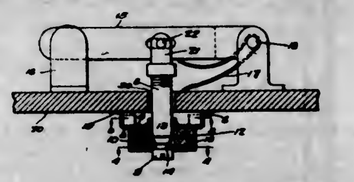
2. In a device of the character described, a body member having a port, a fragile disk normally sealing said port and capable of being ruptured by fluid pressure in the port, a movable element adapted to reinforce the disk at one side to prevent rupture thereof by pressure exerted from the opposite side, and a plurality of means independently operative to retain the said element in normal operative position, one of said means constituting a positive lock for and another being readily releasable to free said element.

5. In a device of the character described, a body member having a port, a fragile diaphragm adapted to overlie and seal the port, a bushing for retaining the diaphragm in the port-sealing position, said diaphragm being attached to and movable with the bushing, a plunger movable in the bushing and adapted in a predetermined adjusted position to engage one side of the diaphragm to prevent rupture of the diaphragm by pressure exerted

thereon from the opposite side, and interengaging shoulders on the bushing and the plunger limiting the movement of the plunger toward the diaphragm to said predetermined adjusted position.

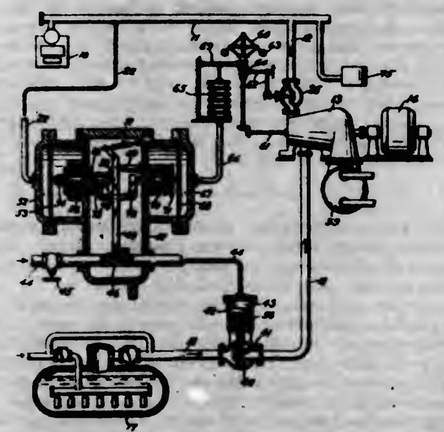
6. In a device of the character described, a body member having a passage terminating at opposite ends in admission and discharge ports respectively, a fragile disk adapted to close said passage intermediate its ends, a bushing in said body adapted to retain the diaphragm in the passage-closing position, said bushing having ports communicating with the discharge port of said passage, a plunger mounted in said bushing and adapted to reinforce the diaphragm against pressure exerted through said admission port, said plunger normally closing said bushing ports and being movable to a position clear of said diaphragm and uncovering the said bushing ports to permit rupture of the diaphragms by said pressure and escape of fluid through the bushing ports to the discharge port of the body, and releasable means for normally holding the plunger in the diaphragm reinforcing position.

1,900,765. HEAT RESPONSIVE DEVICE. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1930. Serial No. 489,219. 3 Claims. (Cl. 200—142.)



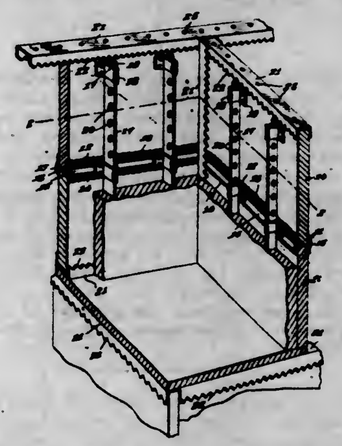
1. In a device of the stated character, the combination with a casing, of a releasable load-engaging member, and means within the casing normally preventing said release, said means including a retaining element adapted for displacement from an operative position to release the said member, and a body of fusible composition held under compression by the load and normally preventing said displacement.

1,900,766. STEAM POWER PLANT. JOHANNES RUTHS, Djursholm, Sweden, assignor to Ruthsaccumulator A. B., Berlin, Germany, a Corporation of Sweden. Filed May 26, 1930, Serial No. 455,838, and in Germany June 5, 1929. 8 Claims. (Cl. 60—54.)



1. A steam plant comprising, in combination, a source of steam of relatively high pressure, a source of steam of relatively low pressure, a prime mover supplied with steam from both of said sources, means to control the supply of steam from the high pressure source in response to variations of speed of the prime mover, means to control the supply of steam from the low pressure source in accordance with variations of steam pressure in the high pressure source, said last-mentioned means being adapted to shut off steam from the low pressure source while permitting flow of steam through the prime mover, and means responsive to excessively low speed of the prime mover to supply steam to the prime mover from said low pressure source independently of the pressure responsive control means.

1,900,767. WALL BRACE AND REENFORCEMENT. AUGUSTUS M. RYAN, Madison, N. J. Filed Aug. 2, 1930. Serial No. 472,550. 1 Claim. (Cl. 72—46.)



A wall brace and reenforcement comprising a substantially Z-shaped bar of corrugated formation providing an intermediate web and offset flanges extended reversely to each other, a pair of corrugated flanges arranged at opposite sides of the web and also opposite the first named flanges and joined with the bar following the plane of the web thereof, the flanges opposite each other being extended parallel with one another from opposite sides of the web, wall boards seated between the flanges and abutting the web, U-shaped brackets carried by the wall boards and certain of the flanges and vertically aligned, and perforated strips accommodated in said brackets.

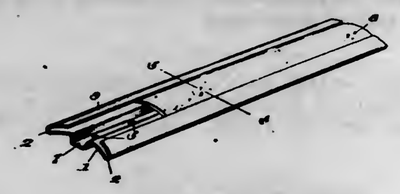
1,900,768. FINISHING WELT. ROBERT C. SCHEMMEL, Union City, Ind. Filed July 8, 1929. Serial No. 376,789. 2 Claims. (Cl. 155—184.)



1. A blind nail finishing welt comprising a pair of spaced apart base fillers, a base fabric encasing said fillers and having a free edge therebetween positioned close to one of the fillers, a flap filler, a separate strip of fabric encasing said flap filler and having its free margins extending from one edge of the flap filler, then folded back beneath the flap

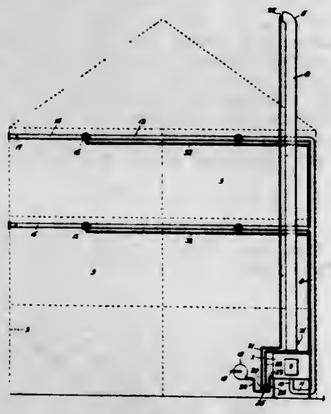
filler, terminating in interfitted relation with the free edge of the base fabric, and a line of stitching passing through the base and flap fabrics adjacent the free edge of the base fabric to unite the base and flap securely together in hinged relation near said last mentioned base filler.

1,900,769. MOLDING. ROBERT C. SCHIMMEL, Union City, Ind. Filed Apr. 30, 1930. Serial No. 448,586. 3 Claims. (Cl. 155—184.)



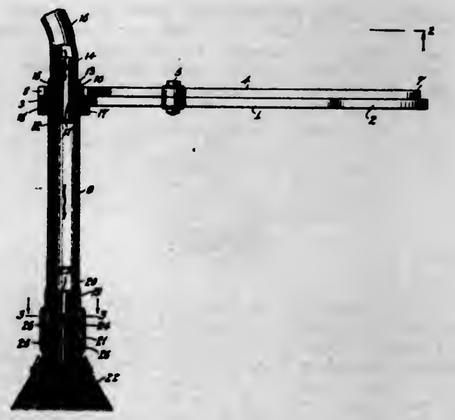
1. A molding strip including a base member having a depressed center portion and longitudinal edges all lying in a single plane, the upper surface of the base member between the depressed center portion and the longitudinal edges being arched above the single plane thereof, marginal portions of the base member being turned inwardly from the longitudinal edges and lying substantially parallel to and spaced slightly above the upper surface of the base portion, a series of tack-receiving perforations provided in the depressed center portion, and a flexible fabric covering strip received under the inwardly turned marginal portions, covering the depressed center portion, and engaging and receiving support from the portions of the arched upper surface of the base member adjacent the depressed center portion.

1,900,770. COMBINED HEATING AND VENTILATING APPARATUS. LOUIS F. SCHLENKER and MARTIN WUERTHNER, Jackson, Mich., assignors to said Schlenker and said Wuerthner, as joint tenants with right of survivorship. Filed Oct. 21, 1929. Serial No. 401,328. 14 Claims. (Cl. 237—46.)



1. A heating and ventilating apparatus comprising in combination an air chamber, means associated therewith which can be employed for heating air passing into and through said chamber, a cold air intake pipe connected with and leading to said air chamber, a main supply pipe connected with and leading from said air chamber, a distributing duct connected with and leading from the main supply pipe, a damper in the outer terminal portion of the distributing duct, branch ducts connected to said distributing duct, each branch duct being provided with a register, a blower, valve-controlled air intake blow piping connecting with and leading from the discharge duct of the blower to the cold air intake pipe for forcing air through the intake pipe thence into the air chamber when the valve-controlled air intake blow piping is open, valve-controlled blower-circulating piping connected with and leading from the discharge duct of the blower to the main supply pipe for forcing air from the chamber into, along and through the main supply pipe when the valve-controlled blower-circulating piping is open, and valve-controlled blower exhausting piping connected with and leading from the discharge duct of the blower to the branch ducts for the purpose of forcing air into the branch ducts and thence into the distributing duct when the valve-controlled blower exhausting piping is open.

1,900,771. DISHWASHER. MYER SIEGEL, New York, N. Y., assignor of one-half to Charles Siegel, New York, N. Y. Filed Aug. 13, 1932. Serial No. 628,739. 1 Claim. (Cl. 15—29.)

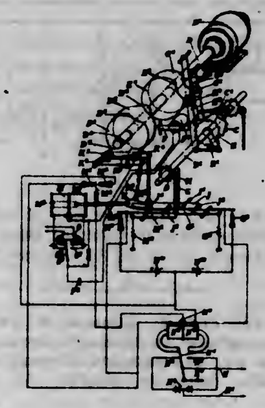


A dish washer including a cleaning head, a tubular member carrying said head, said tubular member at the upper end being provided with a turned-in flange, a sleeve having a shoulder, said sleeve being rotatably positioned in said tubular member with the shoulder resting against said flange, said sleeve having a tubular extension for the reception of liquid which is discharged through the sleeve and the tubular member on to said head, a gear wheel rigidly secured to said tubular member, a handle having an apertured portion through which the portion of the tubular member below the gear wheel extends, an abutment rigidly secured to said tubular member immediately below said handle, a rack continually meshing with said gear wheel, a lever pivotally mounted on said handle and rigidly connected with said rack, whereby when said lever is actuated said gear wheel will be rotated for rotating the tubular member and said head.

1,900,772. AUTOMATIC SECRET TELEGRAPH SYSTEM. JAMES HENRY SMART, Shanghai, China. Filed Jan. 15, 1932, Serial No. 586,766, and in Great Britain Feb. 4, 1931. 10 Claims. (Cl. 178—22.)

1. In an automatic telegraph transmitter controlled by signal holes in a perforated tape passing through it, the combination of two pecker rods adapted respectively to engage in upper and lower signal holes in the perforated tape, means for reciprocating the rods alternately, means for reversing at predetermined intervals the order in which the two rods are reciprocated, a source of marking and spacing electric current, a transmitting relay associated with said source and so controlled by the pecker rods that it transmits a marking current when one pecker rod

engages in a signal hole and a spacing current when the other pecker rod engages in a signal hole, and means whereby the pecker rods which respectively control the



marking and spacing current transmissions of the relay are reversed when the order in which the said rods are reciprocated is reversed.

1,900,773. MOTOR VEHICLE. WILLY STANIEWICS, Brunswick, Germany, assignor to Automobilwerke H. Büssing, Aktiengesellschaft, Brunswick, Germany. Filed Mar. 13, 1930, Serial No. 435,513, and in Germany Apr. 16, 1929. 6 Claims. (Cl. 180—64.)



1. A motor vehicle, comprising a body, a subsidiary frame mounted on said body for lateral swinging movement outwardly relatively to said body, pivot means on the body for supporting the frame during such movement, a motor mounted on said frame, and driving gearing connected with said motor, said motor and driving gearing being movable bodily with said frame.

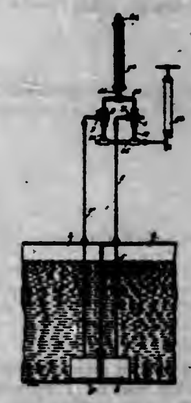
1,900,774. TANK GAUGE. RICHARD STAR, Brooklyn, N. Y. Filed May 23, 1929. Serial No. 365,463. 5 Claims. (Cl. 73—54.)

4. In a tank gauge, means forming a chamber open at the bottom and closed at the top and provided with a depending wall formed with a pair of diametrically opposed triangular notches extending from the bottom towards the top so that the apex of the notches will be between the top and the bottom of the chamber, said chamber being adapted to be placed adjacent the bottom of a tank, a pipe extending through the top of said chamber and a combined gauge and pump connected with said pipe, said combined gauge and pump including a pump structure, a base adapted to receive one end of the pump structure, said base having a mercury chamber provided with a lateral extending bore, said pipe having one end discharging pipe into the top of the mercury chamber whereby when said pump is operated air will be forced into the mercury chamber above the mercury therein and into said pipe and said air chamber until the liquid in said air chamber moves down to the level of apexes of said notches, a supply of mercury filling said bore and part of said mercury chamber and a glass tube connected with said base and in free



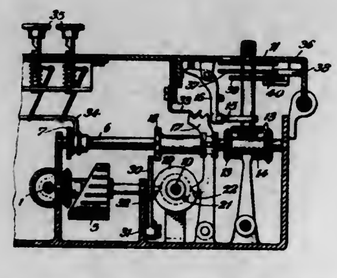
communication to said bore whereby the mercury will rise in said glass tube a distance proportionate to the pressure of air in the mercury chamber and in said air chamber.

1,900,775. TANK GAUGE. RICHARD STAR, Brooklyn, N. Y. Filed Sept. 16, 1930. Serial No. 482,218. 1 Claim. (Cl. 73—54.)



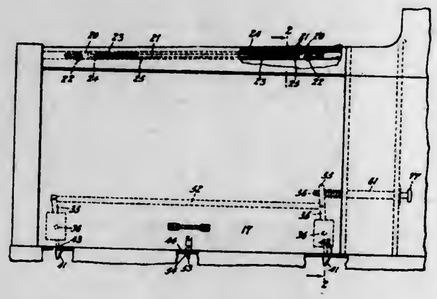
A gauge structure for a pair of tanks comprising a pressure responsive gauge member and an air supply pump, a continuous tubular structure formed with a top section, a bottom section and two side sections connecting the top and bottom sections, a valve interposed in each of the two side sections, means for connecting the top section to said gauge member, and means connecting said pump to said bottom section, each of said valves having an air inlet station, a gauge station, a vent station and an inoperative station, and an air system for each valve extending from said gauge station to a point near the bottom of the respective tank whereby either of said valves may be moved to an inoperative or dead station, while the other valve is caused to direct air to said indicating means for actuating the same with either of said tanks for indicating the level of oil therein.

1,900,776. CALCULATING MACHINE COMPRISING AXIALLY DISPLACEABLE SETTING WHEELS. HEINRICH SUTER, Zurich, Switzerland, assignor to Firm H. W. Egli A. G., Zurich, Switzerland. Filed Sept. 24, 1931, Serial No. 564,883, and in Germany Nov. 22, 1930. 4 Claims. (Cl. 235—137.)



1. In a device of the type described, in combination, a setting wheel for each setting shaft slidable carried thereby, spur gear teeth provided on said setting wheels, a continuous rigid shaft for the transfer of tens of adjacent number wheels and common to all the setting wheels, a com disc for each setting wheel provided on said common shaft, a guideway provided on said cam discs, setting levers cooperating with the guideway on related cam discs and adapted to consecutively advance said setting wheels one step by engagement with the spur gear teeth of the wheels.

1,900,777. AUTOMATIC HOOD LOCK FOR VEHICLES. CARL BERNHARD THORESEN, Richmond Hill, and FRED B. ELIASSEN, Brooklyn, N. Y. Filed May 14, 1932. Serial No. 611,410. 10 Claims. (Cl. 70—14.)



1. In combination with a frame having a movable hood, an arm pivoted to the hood on a transverse axis and provided with a locking head at one end, a frame member for engagement by the locking head, resilient means for rotating the arm in one direction to move the locking head into engagement with the frame member, and means movable longitudinally of the frame and disposed for engaging the other end of the arm to move the latter in the opposite direction, the said means being free from the arm to permit the movement of the arm relatively to the said means.

1,900,778. DROP FRAME BODY FOR TRAILERS. WILL S. TATUM, Hattiesburg, Miss. Filed July 27, 1931. Serial No. 553,390. 8 Claims. (Cl. 296—3.)

1. A drop body for trailers comprising a main frame, a sub-frame disposed in dropped relation with respect to and of less length than said main frame and having its rear end flush with the rear end of the main frame, each of said frames provided with a plurality of superposed decks, spaced front and rear opposed transverse sills for the lowermost deck of the main frame and arranged forwardly of the uppermost deck of the sub-frame, truss



frames secured to said sills, extending at right angles to the latter, spaced outwardly from the sides of the main frame and arranged forwardly of the sub-frame.

1,900,779. PYROMETER. CHARLES B. THWING, Philadelphia, Pa., assignor to Thwing Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1929. Serial No. 405,786. 10 Claims. (Cl. 73—82.)



1. A pyrometer comprising a thermocouple, a conical concentrating reflector on one side thereof, and a tubular mirror in operative relation to said conical reflector for transmitting radiant energy to said thermocouple.

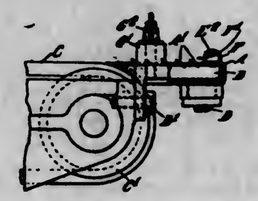
1,900,780. MINING MACHINE. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 11, 1930, Serial No. 474,410. Renewed July 27, 1932. 20 Claims. (Cl. 262—28.)



1. In combination with a mining machine having a cutter bar with a cutter chain movable thereabout adapted to cut a kerf adjacent the mine floor, means for clearing the cuttings from the path of said cutter chain comprising a screw conveyor detachably connectible with said mining machine and having a receiving end disposed adjacent the path of said cutter chain.

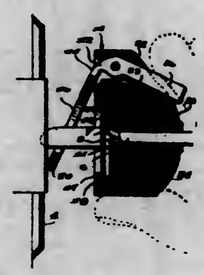
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1,900,781. MANUFACTURE OF GLASSWARE. THOMAS WARDLEY, Greenford, England. Filed Feb. 11, 1932, Serial No. 592,228, and in Great Britain Nov. 19, 1930. 7 Claims. (Cl. 202—31.)



1. Apparatus for use in transferring glassware, comprising a plate having a plurality of oblique and unobstructed apertures through which air issues upwardly in an oblique direction to impinge on the ware supported on said plate and both tend to raise the same and urge the same across the plate while preventing said glassware from being knocked over, and transfer means from which air issues in a substantially horisontal direction across said plate in order to transfer the ware from said plate to a conveyor, there being means supplying air under pressure to said transfer means and the oblique apertures in said plate.

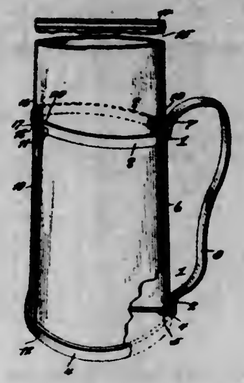
1,900,782. LIGHT PLUG. CHESTER M. WAY, Burlington, Vt. Filed Nov. 20, 1929. Serial No. 408,527. 3 Claims. (Cl. 173—361.)



1. An electrical connector plug having contacts adapted to frictionally engage contact means in a cooperating socket member, and means for forcibly withdrawing said plug from said socket member to disengage said contacts, comprising a bell crank lever fulcrumed adjacent the periphery of said plug and having one arm adapted to engage the walls adjacent said socket member and another arm adapted to be actuated by an operator, said first named arm comprising an annulus placed about said contacts.

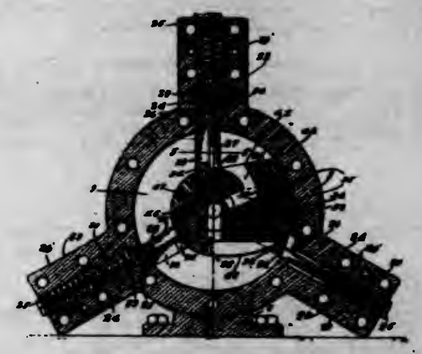
1,900,783. HOLDER FOR PARAFFIN FLUID CONTAINERS. JOHN F. WEISS, Philadelphia, Pa. Filed June 15, 1932. Serial No. 617,480. 1 Claim. (Cl. 65—61.)

As an article of manufacture, a holder for fluid container normally conical in one plane when containing its fluid, said holder comprising a base ring for the support of the bottom of the container, a pair of semi-elliptical clamps for the upper portion of the container, a pair of elements connecting the base ring and one of the clamps rendering the latter relatively rigid to the base ring, one of the elements constituting a handle, the other clamp being hingedly connected to the rigid clamp at a point adjacent where the handle connects to said clamp, whereby said other clamp may swing laterally outwardly to remove the container, the free ends of both clamps having separable interengaging lips, the free end of the hinged



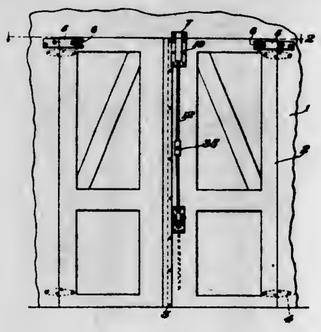
clamp having a bifurcation, the free end of the rigid clamp having a tongue to enter the bifurcation to guide the ends of the clamps into their connected positions.

1,900,784. ROTARY STEAM ENGINE. GEORGE ZENT, Wapakoneta, Ohio. Filed Jan. 10, 1931. Serial No. 507,941. 1 Claim. (Cl. 121—77.)



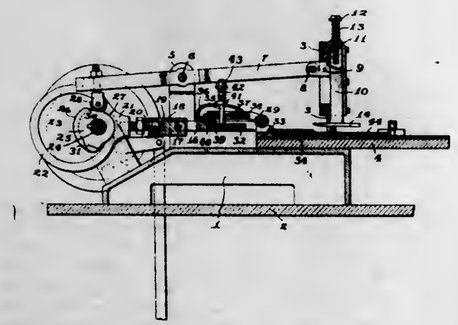
A rotary engine comprising a power shaft having intake and exhaust passages, means connecting the intake passage with a fluid power source, a casing rigidly mounted and receiving the shaft and having a chamber, a rotor secured to the shaft for contact with the walls of the chamber and having intake and exhaust passages, extensions on said casing and having bores communicative with the chamber, said casing having slots in the walls of the chamber thereof, abutments slidably mounted in the slots of the casing and contacting with the rotor at their inner ends and having their outer ends in alignment with the bores, adjustable tension means in the bores and engaging the outer ends of the abutments, said casing having guide grooves with their outer ends terminating outwardly of the walls of said chamber and within the extensions to provide shoulders, stops on the inner ends of said abutments and slidable in the grooves and engageable with the shoulders to limit the outward movement of said abutments, said abutments cooperating with the rotor of the casing to provide a plurality of compartments in the chamber so that the second named intake passage is always in communication with a compartment and the second named exhaust passage is always in communication with another compartment.

1,900,785. AUTOMATIC DOOR OPENER. BYRON B. ASHBROOK, Johnstown, Ohio. Filed Oct. 10, 1930. Serial No. 487,858. 1 Claim. (Cl. 292—93.)



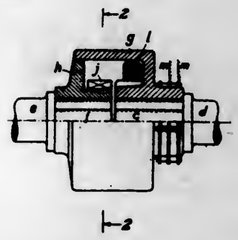
A latch operating device comprising plates secured to opposite faces of a door and having aligned openings, spaced ears on one of said plates, a rib formed on the other plate, an L-shaped lever having a recess receiving the rib with a portion thereof extending through the openings and the door, a pivot pin connecting said ears, teeth on one of said ears, an arcuately curved lever journalled and slidable on the pin and having one end connected to a latch operating medium and provided in its opposite end with a slot to receive the first named lever, teeth on the second lever, and tension means on the pin to urge the second lever into a position to engage the teeth and cause a securing of the second lever against movement in one direction after being moved by the first lever.

1,900,786. SHOE-SOLE SKIVING MACHINE. RALPH H. BARKER, Derry, N. H. Filed Oct. 15, 1931. Serial No. 569,044. 8 Claims. (Cl. 12—31.5.)



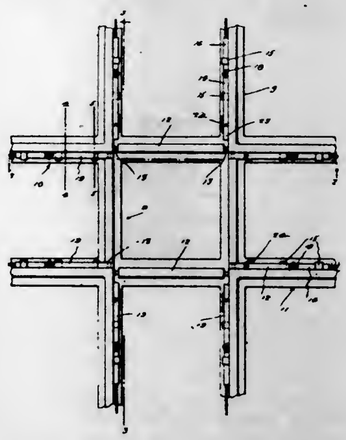
1. A skiving machine of the character described including a shoe sole support having a flat upper surface, a die carried by said surface, said die being formed with a longitudinally extending depression and roughly chamfered sides, said sides being connected at one end by the curved section of the die, a roller for depressing the heel portion of a sole in said die so as to snugly fit the same, with the side portions of the sole projecting above said roughened portion, and a knife positioned to move in a direction substantially parallel to said sole for cutting away the projecting portions of the sole, said die having an inclined end whereby as the roller and cutter passes over said end, the entire sole will be depressed below the cutter and the edge of the cutter will move to a position over the sole as it finishes the cutting stroke thereby producing a breasting line.

1,900,787. COUPLING OR CLUTCH FOR COAXIAL SHAFTS. JUSTIN BAUGNÉE, Differdange, Luxemburg. Filed June 19, 1931, Serial No. 545,574, and in Germany Apr. 15, 1930. 5 Claims. (Cl. 192—48.)



2. A compound clutch for connecting coaxial driving and driven shafts comprising a one-way clutch operating automatically to form a positive connection for one direction of rotation and an electromagnetic clutch operative to magnetically couple said shafts for operation in the opposite direction.

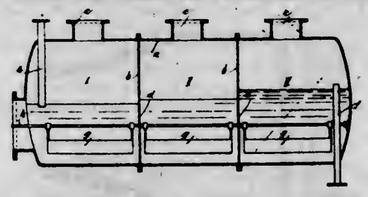
1,900,788. RAILWAY TRACK CROSSING CONSTRUCTION. ELIJAH W. BAYES, Parsons, Kans. Filed Mar. 30, 1932. Serial No. 602,047. 8 Claims. (Cl. 246—381.)



1. In a railway track crossing structure of the class described, a pair of tracks including spaced parallel rails intersecting each other to provide a rail crossing, the heads of the rails being formed with notches defining gaps at the point of juncture of the respective pairs of rails, and a plurality of projectible and retractible gap closing devices, and means for rockably mounting the devices on the flanges of said rails.

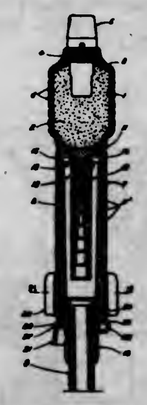
1,900,789. APPARATUS FOR SEPARATING SALTS OR OTHER MATERIALS FROM LIQUIDS. HANS CHRISTIAN AUGUST BEHRENS, Hamburg, Germany, assignor of one half to the Firm Rud. Otto Meyer, Hamburg, Germany, and one-half to the Firm Kupferhütte Ertel, Bieber & Co., Hamburg, Germany. Filed Dec. 4, 1929, Serial No. 411,649 and in Germany Dec. 4, 1928. 2 Claims. (Cl. 159—17.)

1. A process for separating out salts and the like from liquids by the use of high vacuum, comprising placing the salt solution in a tank having several independent stages, said stages then being subjected to varying degrees of



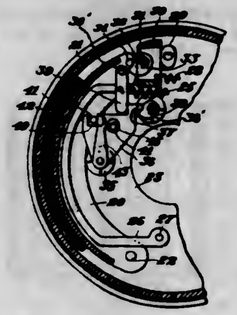
vacuum, separating said solution in said stages, lowering the temperature throughout said separation and finally withdrawing said separated salts from the last stage.

1,900,790. GRENADE. EDGAR WILLIAM BRANDT, Paris, France. Filed July 18, 1931, Serial No. 551,744, and in France July 25, 1930. 18 Claims. (Cl. 102—29.)



6. A grenade of the class described, comprising a grenade body, means for releasably attaching the same to the projective weapon, and an element located in the path of the projectile from said weapon whereby to absorb for the propulsion of the grenade the kinetic energy of the projectile, said element comprising a braking tube secured to the base of the grenade and released therefrom by the impact of the projectile.

1,900,791. AUTOMATIC BRAKE ADJUSTER. HENRY E. BRICE, New York, N. Y. Filed July 25, 1931. Serial No. 553,166. 11 Claims. (Cl. 188—79.5.)



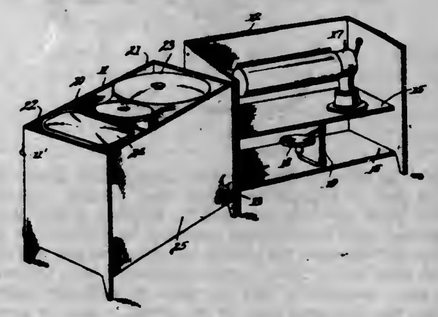
5. Mechanism for the purpose indicated comprising a drum, a pivotally mounted brake shoe for movement into engagement with and retraction from said drum, a service lever pivotally mounted with its free terminal adjacent the free terminal of the shoe, a spring actuated cam carried by the free end of the service lever and engaging an element of the shoe, a rocker formed with a clearance slot for an element of the shoe and engaging opposite sides of the slot in the opposite positions of the shoe, and a spring actuated cam engaging a nose of said rocker.

1,900,792. NONINDUCTIVE CABLE. CARL P. BRODHUN, Wilkes-Barre, Pa., assignor to The Okonite Company, Passaic, N. J., a Corporation of New Jersey. Filed May 1, 1928. Serial No. 274,268. 3 Claims. (Cl. 173—267.)



2. An electric cable comprising a conductor and a plurality of armor strips impregnated with a phenol condensate resulting in strips of stiff bendable non-metallic, non-conductive material, said strips being helically wound in criss-cross relation around the conductor.

1,900,793. CABINET. HORATIO DELVES BROUGHTON, Woodcliff, N. J. Filed Nov. 25, 1931. Serial No. 577,357. 2 Claims. (Cl. 312—152.)



1. A cabinet of the class described having in combination, sections provided with open top portions, means hingedly connecting the sections at one side to permit their movement into and out of closed position, locking means on the opposite sides of the sections to that of the hinged means for detachably connecting the sections in their closed position, one of said sections having a shelf extending longitudinally thereof and provided with an open inner side to permit access to the shelf when the sections are moved relative to each other, the other of said sections having a closed inner wall and a vertically disposed partition dividing the same into spaced compartments, and a cover having sections hinged together adapted to close

the openings in the tops of the sections, the end sections of the cover forming extensions for the cabinet, and means for maintaining the end sections in their horizontal position.

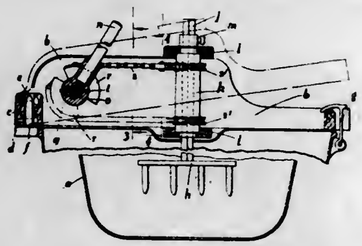
1,900,794. SAFETY DEVICE FOR LOCKS. ALBERT BRUN, Paris, France. Filed July 29, 1931, Serial No. 553,849, and in France Dec. 6, 1930. 2 Claims. (Cl. 70—46.)



1. A lock comprising a fixed casing having tumbler receiving recesses in opposite side portions thereof, a barrel rotatable within said casing and provided with transverse tumbler accommodating recesses, tumblers within the recesses of said barrel for free sliding movement therein whereby either end of any tumbler may enter a related recess in the casing when the tumblers are alined with said casing recesses, the tumblers being notched to accommodate a laterally undulated key for retracting the tumblers from the casing recesses, the said tumbler notches having flaring mouth portions whereby a laterally undulated key is effective to retract any tumbler irrespective of the position thereof transversely of the barrel

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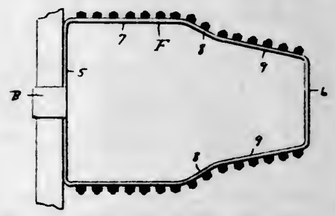
1,900,795. WASHING MACHINE. WILLIAM JOSEPH BUTTERWORTH, Tutbury, England, assignor to Qualcast Limited, Derby, England, a Company of Great Britain. Filed June 24, 1932, Serial No. 619,155, and in Great Britain June 8, 1931. 1 Claim. (Cl. 74—14.)



In a machine of the character described, a bridge having a pair of opposed elongated slots formed therein, a driven shaft vertically mounted for rotation in said bridge, a driving shaft horizontally mounted for rotation in said bridge and disposed for sliding movement within the elongated slots of the latter, means associated with said driving shaft whereby to lock the same in adjusted position within the elongated slots of the bridge, a pair of sectors fixed in inverse opposed relation upon said driving shaft, and a sectional chain secured to each of said sectors and to said driven shaft whereby to transmit the oscillatory movement of the driving shaft to the driven shaft, the links of one section of the chains being in a plane at right angles to the links of the remaining section.

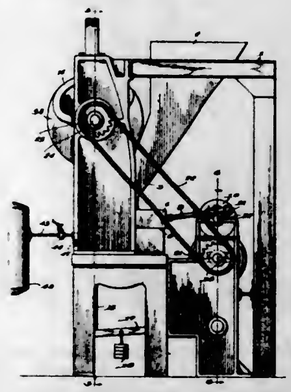
1,900,796. CLOTHES DRIER. PAULINE F. CARTER, Brookline, Mass. Filed Aug. 22, 1932. Serial No. 629,948. 1 Claim. (Cl. 211—89.)

A clothes drying apparatus of the class described comprising a frame, clips mounted on the frame and a hanger bracket mounted on the frame, said hanger bracket being of an inverted U-shaped formation having the end of one leg merging into one end of the frame, said frame being of



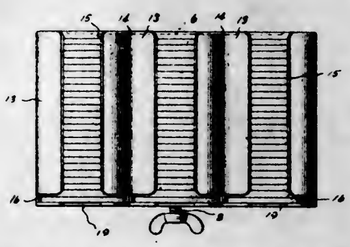
an oblong formation to include end portions and side portions, the side portions having the parts remote from the bracket converging outwardly therefrom.

1,900,797. APPARATUS FOR PRODUCING VARIOUS KINDS OF POTTERY. RICHARD L. CAWOOD, East Liverpool, Ohio. Filed Dec. 9, 1930. Serial No. 501,108. 2 Claims. (Cl. 25—92.)



1. In an apparatus for making articles from air penetrable compressible material, a die casing, die plungers movable into and out of said casing from opposite ends thereof, means for feeding material to said casing between said plungers and means for operating said plungers between said feeding operations to compress the material and eject the finished article, and means for locking said feeding means temporarily against movement during the charging operation.

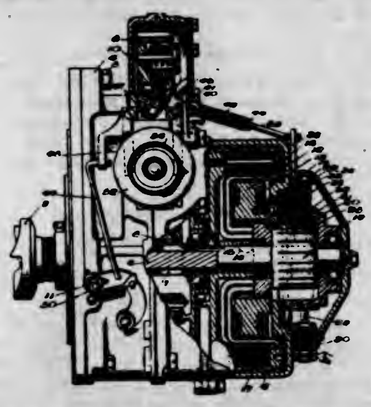
1,900,798. GAME APPLIANCE. REGINALD J. CHAPPELL, Brooklyn, N. Y. Filed June 25, 1930. Serial No. 463,751. 1 Claim. (Cl. 211—49.)



A poker chip holder comprising a cylinder provided with means for supporting the same to make access to the bottom possible, said cylinder being open at the top

and having a bottom wall slotted radially inward past the center and provided with a slot extending throughout the length of the cylindrical wall, the center lines of the slots in the bottom and cylindrical walls lying in a common plane, said cylinder being slotted next to the bottom wall and in crossing relation to the slot in the cylindrical wall, the slot adjacent the bottom wall extending for at least half the interior diameter of the cylinder and being of a width greater than one but less than two poker chips.

1,900,799. ENGINE STARTING MECHANISM. ROLAND CHILTON, Ridgewood, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Oct. 18, 1929. Serial No. 400,704. 12 Claims. (Cl. 290—38.)



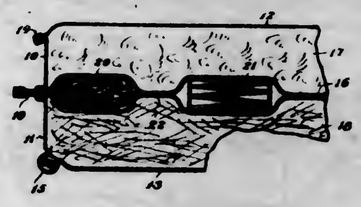
1. In engine starting apparatus, the combination of a driven member adapted to engage and crank an engine to be started, inertia mechanism drivably connected with said driven member and including an electric motor having an armature and commutator, brushes for said commutator, arms carrying said brushes normally out of engagement with said commutator, manually operable means for accelerating said inertia mechanism comprising a hand-cranking shaft and a clutch mechanism interposed between said cranking shaft and inertia mechanism, and common means for controlling said clutch and said brush carrying arms.

1,900,800. NECKTIE CONSTRUCTION. HARRY A. CLARK, Detroit, Mich. Filed May 19, 1932. Serial No. 612,348. 4 Claims. (Cl. 2—150.)



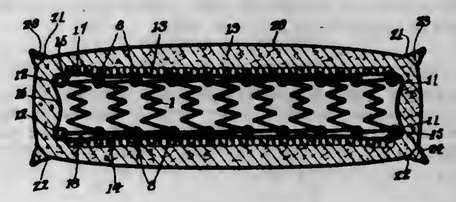
1. A necktie construction comprising a fabricated strip of material folded intermediate the ends to provide a pair of sections substantially in contact with each other, a piece of material embracing the sections adjacent the folded portion, a resilient filler block located between the sections where embraced by the piece of material, a pin having a head, one of the sections having an opening to receive the pin, and means for supporting the pin and likewise the folded portion of the strip at the front of a collar connected to a shirt.

1,900,801. MATTRESS. THOMAS S. COBB, Fort Lauderdale, Fla. Filed Aug. 6, 1930. Serial No. 473,406. 3 Claims. (Cl. 5—359.)



1. A mattress or the like comprising top and bottom walls, side walls connecting the top and bottom walls and formed of companion strips, a two-ply tie sheet extending the entire length and width of the mattress at approximately the center thereof and dividing said mattress into upper and lower sections each containing a fibrous filling, the filling of one section being of a nature different from the filling in the other section, the ends of the tie sheet being extended laterally between the adjacent ends of the companion strips of the side walls and stitched thereto and the plies of said tie sheet between the opposite side walls of the mattress being separated vertically at spaced intervals to form independent compartments and said plies between the compartments being stitched together, and a filling for each compartment of a nature different from the filling in the upper and lower sections of the mattress.

1,900,802. SPRING MATTRESS. SOLOMON COHEN, Leavenworth, Kans. Filed Aug. 4, 1932. Serial No. 627,605. 5 Claims. (Cl. 5—351.)

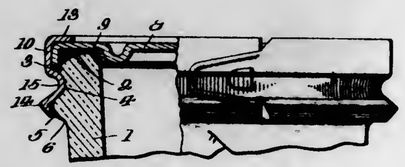


4. A mattress comprising a resilient core, resilient border elements coupled at spaced intervals to the sides and ends of the core at the top and bottom of the latter, superposed webs formed of woven spiral wires, said core being arranged between said webs, a flexible inner casing encompassing said border elements and core and having parts extending between said webs and the said elements and core, said parts being coextensive with said webs, coupling members connecting said webs to the border elements, casing and core, a padding element of fibrous material positioned against said webs and against the other parts of said casing, and an outer casing of textile material enclosing said padding element.

1,900,803. JAR AND CLOSURE THEREFOR. LINDSAY THORNE CRABBS, Chicago, Ill., assignor to Phoenix Metal Cap Co., Inc., Chicago, Ill., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,543. 1 Claim. (Cl. 215—95.)

The combination of a jar and a metal closure therefor comprising a cap and a holding band, said cap having a channel near its peripheral edge adapted to receive a sealing gasket, said band having a portion thereof overlying said cap and said sealing gasket, and a flange depending therefrom having a strengthening bead at the lower edge thereof, said jar having formed therein spaced ribs at

the upper outer face thereof, said flange being so proportioned that the strengthening bead at the lower edge thereof will contact with the lower side of the lowermost rib, whereby when lateral pressure is applied to the flange



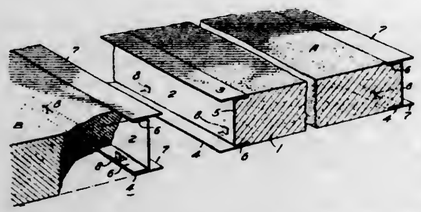
to bead a portion thereof into the space between the ribs the contraction of the metal will cause the overlying portion of the band to draw down on the cap and bring the cap, sealing gasket and jar into tight sealing relation.

1,900,804. BRAKE DRUM OR MEMBER. JAMES H. CROWE, Lakewood, Ohio, assignor to The Midland Steel Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 16, 1931. Serial No. 509,172. 20 Claims. (Cl. 188—218.)



2. A brake drum having a shoe contacting surface composed of substantially eutectoid steel.

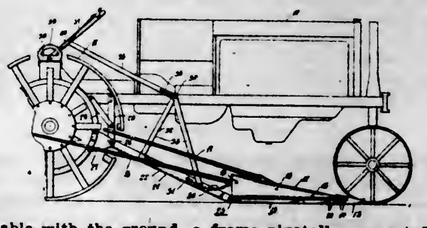
1,900,805. METAL EDGED GYPSUM LUMBER. CLARKE F. DAVIS, Short Hills, N. J. Original application filed Sept. 13, 1932, Serial No. 632,909. Divided and this application filed Dec. 19, 1932. Serial No. 647,971. 38 Claims. (Cl. 72—40.)



1. A precast slab of cementitious material having on opposite edge portions metallic members with either receiving or receivable parts, the adjacent metallic members on two contiguous slabs when inter-engaged being adapted together to form an I beam, each of said metallic members having a web and flanges, one of said members having an uninterrupted web.

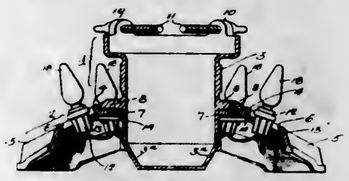
1,900,806. CORN REMOVING ATTACHMENT. ARTHUR M. EVENSON, Spring Grove, Minn. Filed Nov. 17, 1931. Serial No. 575,623. 4 Claims. (Cl. 56—119.)

1. In combination with a farm vehicle having a wheel adapted to travel adjacent a row of corn, a removing head for listed or lodged corn stalks disposed forwardly of the wheel and in its path of travel, comprising a body horizontally arranged and substantially semi-conical with its smaller end foremost, runner means on the body en-



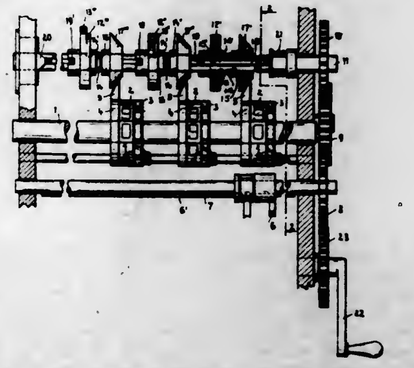
gageable with the ground, a frame pivotally connected to said body and pivoted to the vehicle, and means to move the body into and out of operative position.

1,900,807. CHRISTMAS TREE HOLDER. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's M'f'g Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 3, 1932. Serial No. 609,016. 1 Claim. (Cl. 248—38.)



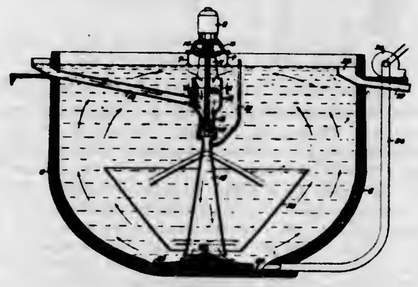
The combination in a Christmas tree holder, of a base consisting of a ring and inclined radiating legs for supporting the holder; a series of openings in the ring, said ring having a depressed internal flange; a receptacle extending through the ring and having an external flange; means securing the flange of the base to the flange of the receptacle, said receptacle having lugs at its upper end, the lugs having threaded openings, and screws extending through the threaded openings and arranged to clamp the trunk of the tree to the receptacle.

1,900,808. CARRYING MECHANISM FOR CALCULATING MACHINES AND THE LIKE. RICHARD HAASE, Brunswick, Germany, assignor to Brunsviga-Maschinenwerke Grimme, Natalis & Co., Aktiengesellschaft, Brunswick, Germany. Filed Nov. 9, 1931, Serial No. 573,995, and in Germany Oct. 1, 1930. 6 Claims. (Cl. 235—137.)



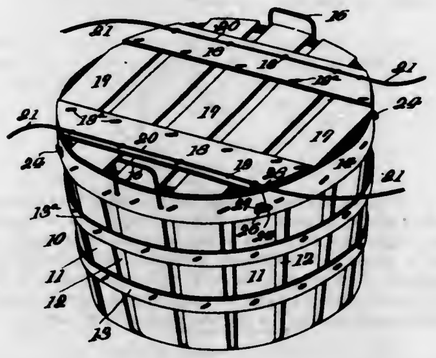
1. In a carrying mechanism for calculating machines and the like, the combination of numeral wheels provided with carrying teeth, carrying wheels for the respective numeral wheels mounted on a shaft parallel to the axis of said numeral wheels and adapted to be engaged by said teeth for shifting the carrying wheels into carrying position, a rod mounted on said shaft and axially shiftable thereon and adapted when shifted to move said carrying wheels out of operative position, and means for moving said rod.

1,900,809. SEWAGE PURIFICATION SYSTEM. FRED V. HAMMERLY, Berkeley, Calif., assignor of one-half to Carroll B. Abbott, Berkeley, Calif., and one-half to Georgia A. Hammerly, Berkeley, Calif. Filed Feb. 26, 1929. Serial No. 342,687. 8 Claims. (Cl. 210—8.)



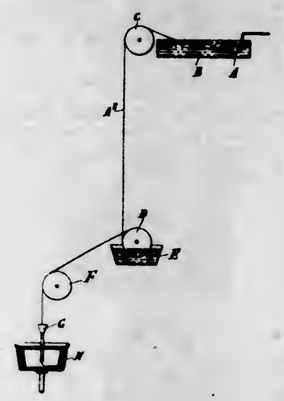
1. A sewage purification system comprising a tank having a basin-shaped bottom, a hopper disposed adjacent the center of the tank, an inlet duct feeding the hopper, a mechanically driven impeller for breaking up the sewage particles and for forcing the circulation of the sewage thru the hopper and against the tank bottom, and means for injecting air into the sewage after it has passed the impeller.

1,900,810. BASKET COVER FASTENER. WILLIS W. HARGROVES, Portsmouth, Va. Filed Aug. 31, 1932. Serial No. 631,253. 4 Claims. (Cl. 217—124.)



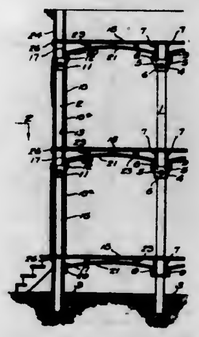
1. The combination of a basket having a reinforcing strip at the top thereof, a cover for said basket, said cover comprising parallel slats and reinforcing members extending substantially across the ends thereof and secured thereto, means for fastening said cover to said basket, said means including wires extending the entire length of each reinforcing member and secured thereto, and fastening elements to which the ends of said wires are secured, said fastening elements being secured to said reinforcing strip.

1,900,811. PRODUCTION OF ARTIFICIAL THREADS AND THE LIKE FROM VISCOSE, AND IN APPARATUS THEREFOR. HORACE JAMES HEGAN and EDWARD HAZELEY, Coventry, England, assignors to Courtaulds Limited, London, England, a British Company. Filed May 18, 1929, Serial No. 364,188, and in Great Britain May 29, 1928. 5 Claims. (Cl. 18—8.)



4. In apparatus for the production of artificial threads and the like from viscose, a spinning nozzle adapted to dip into a precipitating bath, a rotating wheel practically on a horizontal level with the spinning bath, a second rotating wheel situated practically vertically below the first rotating wheel with means for causing fluid to act on the said thread, a third rotating wheel adapted to receive the thread from the second rotating wheel, and a collecting device to which the said thread is finally passed.

1,900,812. HOUSE OR BUILDING CONSTRUCTION. JOHN ADOLF HENKENSIEFKEN, Philadelphia, Pa., assignor of one-fourth to Clara G. Henkensiefken, one-fourth to Frederick Henkensiefken and one-fourth to Frieda Henkensiefken. Philadelphia, Pa. Filed Oct. 29, 1929. Serial No. 403,336. 1 Claim. (Cl. 20—1.)



In a building construction, an upright center post, a building wall in surrounding relation to and spaced from the center post, said building wall comprising a plurality of upright posts spaced at intervals and constituting supports for said wall, clamps carried by the center post and the posts of said wall, said clamps provided with upwardly extending side extensions spaced from the posts, boards supported on the clamps of said wall posts and engaged behind the extensions of the clamps on said wall posts, transverse joists supported on the clamps of the

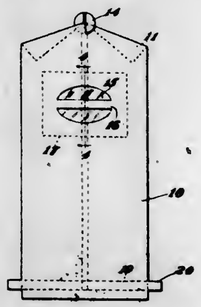
center post and lying against the center post, a pair of transverse boards supported on the clamps of the center post between the upward extensions and the joists, arched boards supported at their inner ends on the joists of the center post, and abutting the transverse boards, said transverse boards and the joists extending from one side of the building wall to an opposite side and in parallelism, the outer ends of the arched boards being supported on the boards carried behind the extensions of the clamps of the wall posts, and a flooring supported on the arched boards and the parallel transverse boards of the center post.

1,900,813. PSYCHROMETER. EARL VERNON HILL, Chicago, Ill., assignor to E. Vernon Hill Company, a Corporation of Illinois. Filed May 7, 1930. Serial No. 450,576. 2 Claims. (Cl. 73—24.)



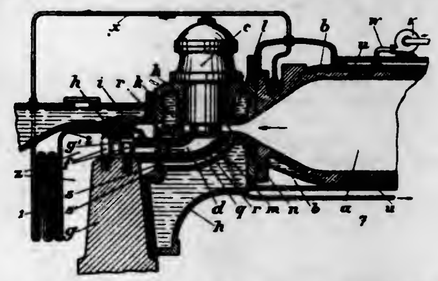
1. In a psychrometer comprising a body having a dry and a wet bulb thermometer mounted thereon and relatively movable concentric scale members pivotally secured to said body, the combination of a handle for whirling the body pivotally mounted to the pivot of the concentric scale members.

1,900,814. STORAGE BAG. WALTER P. HOLLEY, Montgomery, Ala. Filed Mar. 14, 1931. Serial No. 522,694. 1 Claim. (Cl. 206—7.)



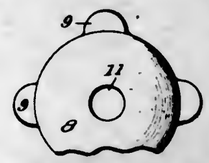
A garment bag provided with upper and lower open ends, means for sealing said ends, a sight opening formed in one of the faces of the bag adjacent the open upper end thereof and covered with a transparent pane mounted upon the inner face of the bag and having a centrally located transverse partition, a reinforcing rectangular frame located within the bag and at the rear of said opening and provided with a transverse partition of a width equaling the width of the first-mentioned partition for preventing the contact of the contents of the bag with the said transparent pane.

1,900,815. EXPLOSION TURBINE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Nov. 10, 1928, Serial No. 318,344, and in Germany Nov. 24, 1927. 4 Claims. (Cl. 60—41.)



1. The combination with an explosion chamber suitable for use in an explosion turbine and adapted to receive intermittent charges of fuel and air which are ignited therein, of a double walled passageway leading from the outlet end of the explosion chamber and arranged to direct the gases to a place of use, the double walls of said passageway defining a cooling chamber for receiving a cooling medium whereby said walls are cooled, said walls being sufficiently thick to withstand the pressure of the gases, shock and other stresses imposed thereon, and a relatively thin walled jacketed insert positioned within said passageway and lining at least a portion of the inner wall thereof so as to be directly contacted by the gases discharging from the chamber and thus protect the thick, cooled wall of such passageway against the high heat of the gases, a conduit for conducting a cooling medium to the jacket of said insert, and a conduit for withdrawing therefrom the cooling medium heated by the heat abstracted from said gases, the thin, inner, gas-swept wall of said insert being adapted to have, during the operation of the explosion chamber, such a small temperature differential between the inner and outer surfaces thereof that no excessive stresses arise therein.

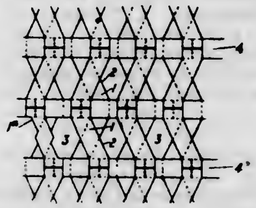
1,900,816. FEEDER FOR INGOT MOLDS. BLOOMFIELD H. HOWARD, Washington, D. C. Filed Dec. 12, 1927. Serial No. 239,494. 4 Claims. (Cl. 22—147.)



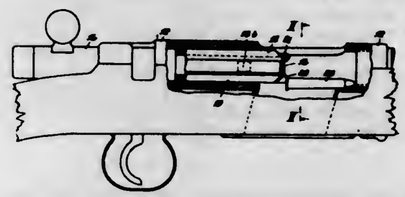
1. A feeder for ingot molds comprising a heat retaining body adapted to cooperate with the upper end of the mold and comprising a portion of minimum cross sectional area and a portion of maximum cross sectional area with an upwardly and inwardly curved wall portion intermediate said areas, and provided with an opening communicating at its lower end to the portion of minimum area.

1,900,817. CHECKER BRICKWORK CONSTRUCTION FOR REGENERATORS. JOSEPH FRASER HYSLOP, Falkirk, Scotland. Filed Mar. 30, 1932, Serial No. 602,057, and in Great Britain Mar. 30, 1931. 2 Claims. (Cl. 263—51.)

1. Checker brick-work for regenerators comprising closed parallel walls including staggered courses of supporting bricks of inverted T-shape, and superposed vertically spaced courses of checker bricks extending between said walls and formed with rectangular end portions filling the gaps left by said supporting bricks, said checker bricks presenting lateral faces disposed in vertical planes inclined obliquely to said closed walls and forming boundaries of vertical flues, the checker bricks of alternate courses having oblique faces oppositely inclined to those of the other courses, whereby to afford vertical flues of approximately diamond section in plan.

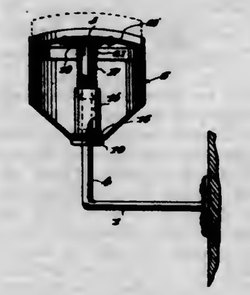


1,900,818. REPEATING FIREARM WITH BOLT ACTION AND CASE MAGAZINE. FRANZ JAGER, Suhl, Germany. Filed May 20, 1932, Serial No. 612,587, and in Germany May 22, 1931. 8 Claims. (Cl. 42—17.)



1. A fire-arm with bolt action, comprising in combination a bolt, a case magazine with lips, a barrel, a rotatable sleeve on the end of the bolt lying adjacent the barrel and longitudinal slots in said sleeve adapted to serve as seats for the said magazine lips and having a greater length than the distance between the outer edges of the magazine lips.

1,900,819. SOAP DISPENSER. WILLIS A. JENNINGS, Chicago, Ill. Filed June 27, 1931. Serial No. 547,417. 3 Claims. (Cl. 45—28.)



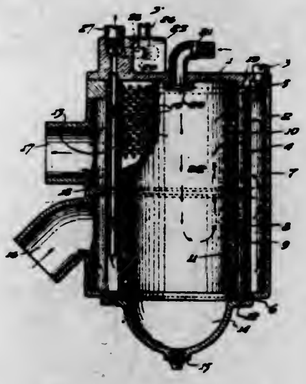
1. A soap holder of the class described comprising a casing having a tapering lower end, a coupling extending through the lower end of said casing and provided with an externally threaded neck, an internally threaded tube having an annular flange formed at its lower end for clamping said casing between the lower ends of said tube and coupling, said coupling provided with an enlarged longitudinally extending aperture, said standard extending through said aperture, a follower in engagement with the upper end of said standard, and means carried by said follower and threaded into said internally threaded tube for causing said follower to move longitudinally within said casing as said casing is rotated upon said standard.

1,900,820. SHIPPING CONTAINER. MELVILLE G. KENYON and MARLOWE H. KLUTER, Richmond, Ind., assignors to The F. & N. Lawn Mower Company, Richmond, Ind., a Corporation of Delaware. Filed July 24, 1931. Serial No. 552,950. 12 Claims. (Cl. 206—46.)



2. In a shipping container for a lawn mower, an arrangement of interior packing to prevent movement of the mower within the container including a bottom member upon which the drive wheels of the mower are adapted to rest, an upwardly projecting inverted V portion formed integrally with said bottom member and adapted to extend between the roller and the cutter bar of the mower, and a supporting member of inverted U shape upon which said roller is adapted to be supported, said supporting member being adjacent to and extending substantially the length of said inverted V portion on the side thereof opposite to said bottom member.

1,900,821. OIL FILTER AND COOLER. JOSEPH E. KLINE, Alpena, Mich. Filed Apr. 10, 1930. Serial No. 443,149. 8 Claims. (Cl. 210—165.)



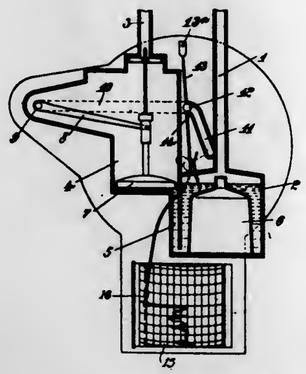
1. An oil filter and cooler comprising an oil cooling chamber and a hot oil chamber inwardly of said oil cooling chamber and having at its upper portion an inlet for hot oil, filtering and insulating means in the hot oil chamber, means affording communication between the upper part of the hot oil chamber and the upper part of the cooling chamber and intercepted by said filtering means, the lower parts of the chambers being out of communication with each other, an outlet conduit for cooling oil leading upward from the lower part of the cooling chamber, and means for dissipating heat from the oil cooling chamber.

1,900,822. SPARE WHEEL AND TIRE COVER ASSEMBLY. CHARLES F. LAMBERT, Grosse Pointe Farms, Mich., assignor to Clayton and Lambert Manufacturing Company, Detroit, Mich., a Corporation of Delaware. Filed Oct. 27, 1932. Serial No. 639,809. 8 Claims. (Cl. 150—54.)



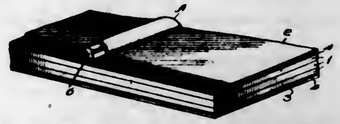
4. A spare tire and wheel assembly comprising a supporting member, a wheel hub having an aperture for detachably receiving a hub cap when in position on one of the axle spindles of the vehicle, fastening means at the hub for securing a portion of the hub directly to said supporting member, a metal tire cover detachably secured to the tire and having a front drum portion for covering the tire and wheel, an aperture formed in said drum portion in alignment with the aperture in said hub, and an auxiliary hub cap simulating said hub cap and removably held in said drum aperture.

1,900,823. DIFFERENTIAL PRESSURE GAUGE FOR MEASURING FLOW OF FLUIDS IN CONDUITS. ARNO LANG, Treuenbritzen, Germany, assignor to The Firm Dr. Martin Böhme, Berlin, Germany. Filed Apr. 12, 1927, Serial No. 183,185, and in Germany May 6, 1926. 3 Claims. (Cl. 73—167.)



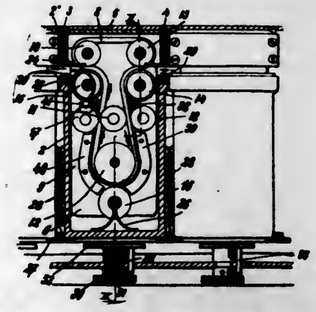
3. A differential pressure gauge for measuring the flow of fluids, comprising a pair of intercommunicating vessels; a liquid partially filling said vessels; a float in one of said vessels and supported by said liquid; a cam; means for transmitting the movement of the float to the cam; a recording lever controlled and actuated by the cam; and a stationary insert body in the other of said vessels to modify the free sectional area of said vessel whereby to produce a modified relationship between the level of the liquid in the other vessel and the differential pressure producing the difference of elevations in the two vessels whereby the changing of level in the float-containing vessel becomes proportional to the square root of the pressure difference applied to the two vessels of the gauge, said cam varying the movement of the recording lever dependent upon the float at certain positions of the liquid with respect to the insert body.

1,900,824. MOLDING CONSTRUCTION FOR COMPOSITE PANELS. GEORGE K. LEWIS, Chicago, Ill., assignor to Carrol C. Kendrick, Chicago, Ill. Filed Feb. 5, 1931. Serial No. 513,654. 2 Claims. (Cl. 20—91.)



2. A composite panel for vehicle body construction comprising body laminations of fibrous material and a sheet metal lamination on the outer surface thereof, said laminations being glued together and compressed in flat formation to form a unitary structure of relatively large area, said sheet metal lamination having embossed therein an integral portion shaped as a molding and raised beyond the surface of the plane of the sheet metal lamination on the opposite side of the fibrous body, and a filler member disposed in a space between said raised molding portion and the body of the panel and forming a strengthening member for said molding portion.

1,900,825. PHOTOGRAPHIC DEVELOPING APPARATUS. ALEXANDER IEZEKIL LIBERMAN, Paris, France. Filed Jan. 10, 1930, Serial No. 419,888, and in Germany Apr. 25, 1929. 7 Claims. (Cl. 95—94.)



1. In a device for developing photographs, the combination of a plurality of developing tanks, each tank being formed in two portions, separate film guiding means for each tank adapted to feed the film to be developed into and out of the associated tank between the two separate portions thereof, means for mounting said film guiding means on one of the portions of each tank, means for normally holding the two portions of each tank a certain distance apart to allow the film to enter and leave the tank, and means for moving one portion of each tank relatively to the other so that the tank may be hermetically closed down when not in operation.

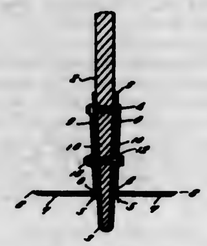
1,900,826. CLOTHES HANGER. JOHN C. LINDSAY, Brooklyn, N. Y. Filed Jan. 16, 1932. Serial No. 587,028. 1 Claim. (Cl. 223—64.)

A clothes hanger comprising two sections of wire, each doubled upon itself to form a pair of laterally projecting supporting members, the open ends of each section being intertwined with the other to form a central upwardly projecting shank, two of the extremities of the wire



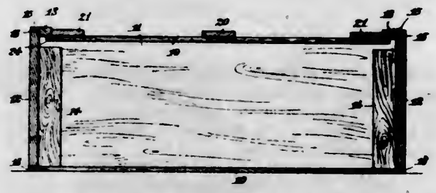
forming said shank being bent upon themselves to form with the shank a three-part clamp, and the lower extremities of said clamp being flared away from the shank providing an entrance for a clothes line into the clamp.

1,900,827. DIBBLE. WILLIAM F. LOVE, Trenton, Fla., assignor to Josie Love, Trenton, Fla. Filed Jan. 14, 1932. Serial No. 586,614. 2 Claims. (Cl. 55—67.)



1. A dibble comprising an elongated handle, a comparatively wide, substantially wedge-shaped head on one end of the handle, a substantially wedge-shaped metallic casing mounted on the head and enclosing said head bolts passing through the head and through the upper portion of the sides of the casing for connecting the casing to the head, said bolts being arranged in a transverse plane, angular gages adjustably mounted on opposite sides of the casing, said gages comprising a vertical leg abutting the casing and a horizontal leg extending outward from the casing, bolts extending through the vertical legs of the gages and through the casing and the head, and nuts threaded on the bolts for drawing the gages toward each other against the casing the last-mentioned bolts being arranged in a transverse plane and the upper portion of the vertical limbs of the gages having notches therein in vertical alinement with the first-mentioned bolts.

1,900,828. BOX. HARRY LUBIN, South Orange, N. J. Filed July 17, 1931. Serial No. 551,487. 2 Claims. (Cl. 217—56.)

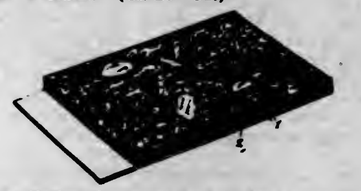


1. A crater or box having sides and ends and transverse bearing members extending inwardly from the upper portions of the ends of the crate or box, a resilient cover having a transverse member disposed intermediate of its ends and extending beyond the sides of the cover and engaging the sides of the crate or box, and transverse members spaced from the ends of the cover and normally disposed at the bearing members on the crate or box, with the ends of the cover beyond the last mentioned transverse members disposed under the said bearing members, and corner members in the box which are spaced from the undersides of the transverse bearing members to form guideways below the transverse bearing members which are terminated at their outer ends by the ends of the box, the guideways serving to receive the last mentioned transverse members with the cover adjacent thereto when the cover adjacent a transverse member is pressed downwardly and is moved in the direction of the adjacent end of the crate or box.

1,900,829. CATALYSTS FOR THE PRODUCTION OF OXYGENATED ORGANIC COMPOUNDS. OSCAR W. LUABY, Baltimore, Md. Filed June 4, 1927. Serial No. 196,637. 21 Claims. (Cl. 260—156.)

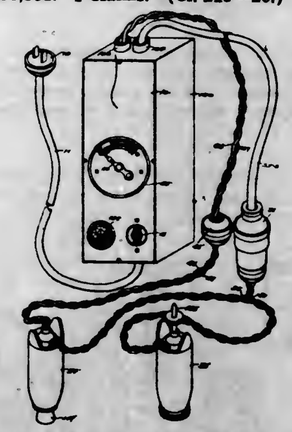
1. A heat resistant catalyst for the production of oxygenated organic compounds, consisting of an intimate mixture of zinc oxide and an oxide of chromium, the oxide of chromium being in the greater amount.

1,900,830. CEDAR BOARD. JOHN FREDERICK MAHLSTEDT, New Rochelle, N. Y., and ABRAM V. A. FELTEN, Pittsfield, Mass. Filed May 28, 1930. Serial No. 455,048. 1 Claim. (Cl. 20—91.)



An aromatic board composed of fragments of aromatic wood pressed together to form a strong sheet, and a backing constituting an odor insulator secured against one side only of the board or sheet.

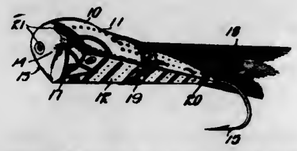
1,900,831. ELECTRICAL CONTROL SYSTEM FOR PERMANENT HAIR-WAVING APPARATUS. EZRA BUDD MARTER, 3d, Burlington, N. J., assignor to A. Edmond Pausser, Philadelphia, Pa. Filed Apr. 22, 1930. Serial No. 446,364. 4 Claims. (Cl. 219—20.)



4. Apparatus of the character described, comprising a main electrical circuit, a switch in said circuit, a pair of branch circuits connected in parallel across said main circuit, a plurality of heating elements connected in one of said branch circuits, a temperature-responsive device disposed adjacent one of said heating elements and connected in the other of said branch circuits, a relay comprising

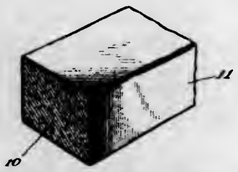
an energising winding connected in said other branch circuit and a movable contact arm normally closing said one branch circuit, whereby said relay and said temperature-responsive device control energisation of said heating elements in accordance with the temperature thereof, a timing device, a movable arm arranged for actuation by said contact arm when said relay operates to deenergise said heating elements at a predetermined temperature, means operable by said movable arm for starting said timing device, and means operable by said timing device for opening said switch and returning said movable arm to normal position after a predetermined interval of time.

1,900,832. FISH LURE. MARSHALL D. MARTIN, New Orleans, La. Filed May 7, 1932. Serial No. 609,918. 2 Claims. (Cl. 43—46.)



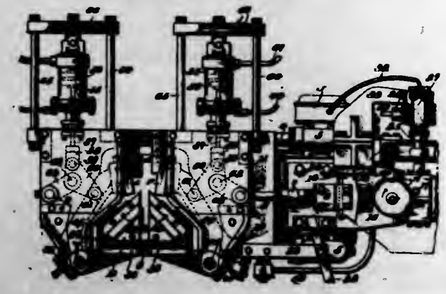
1. An artificial fish lure comprising a tapered body having a flat bottom and a forward end provided with a concaved portion, said concaved portion being formed on the underside of said body, eyes secured to the concaved portion of said end being positioned so as to be seen from the underside of said body, a hook embedded in said body with an eyelet projecting at the forward end and a hook portion at the rear end, the flat bottom of said body providing a wide area on which coloring may be applied, substantially as set forth.

1,900,833. COATED CONCRETE. PETER J. MAUL, Detroit, Mich., and MARTIN HOFFMAN, Chicago, Ill. Filed Oct. 10, 1930. Serial No. 487,879. 5 Claims. (Cl. 72—36.)



5. An article formed from cementitious material, a cellular aggregate and a glazing material, said article having a glaze formed from the glazing material exposed on a surface thereof, and a coating on said glaze.

1,900,834. ELECTRIC WELDING MACHINE. FRED P. MCBERTY, Warren, Ohio. Filed Apr. 22, 1929. Serial No. 357,068. 32 Claims. (Cl. 219—4.)



1. In an electric welding machine for welding together two pieces of work by the combined flash and butt weld method, a pair of supports for said pieces of work, and means carried by said supports for cooperating with the parts of said pieces of work supported on said supports to positively properly position the pieces of work upon said supports in a manner to compensate for the metal burned from said pieces of work during the flashing operation of the machine.

1,900,835. TIRE AND RIM CONSTRUCTION. JAQUELIN M. MEREDITH, Norfolk, Va., assignor of one-fourth to B. F. Yost, Norfolk, Va. Filed Apr. 29, 1931. Serial No. 533,812. 1 Claim. (Cl. 152—20.)



A bicycle tire and rim comprising a rim section having continuous grooves formed therein, the outer walls of the grooves being outwardly inclined, the inner walls of the grooves being inwardly inclined and forming a central rib, wide, spaced, continuous ribs formed on the tire, said ribs having substantially straight outer surfaces and inclined inner surfaces conforming to the shape of the central rib of the rim section, and said ribs of the tire extending laterally within the grooves, setting up a binding action between the ribs and walls of the grooves, under pressure directed thereto caused by inflating the tire.

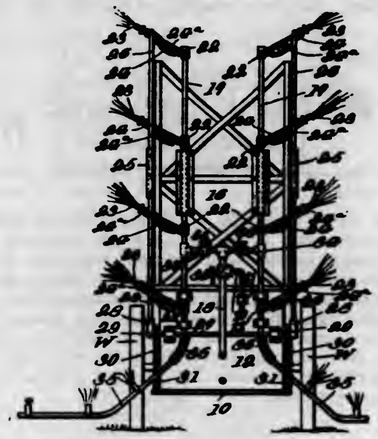
1,900,836. METHOD OF AND APPARATUS FOR PREVENTING THE BURSTING OF LIQUID CONTAINERS SUBJECTED TO FREEZING TEMPERATURE. VERNON MERRITT, Montgomery, Ala. Filed Dec. 5, 1929. Serial No. 411,925. 11 Claims. (Cl. 137—34.3.)



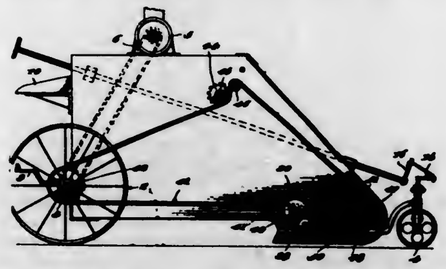
5. A liquid container, comprising sections of variable cross sectional area and pressure releasable valves positioned in the portion of the sections of greatest cross sectional area whereby the release of excess liquid due to freezing thereof, is assured.

1,900,837. SPRAYING APPARATUS. HENRY J. MILLS, Kinderhook, N. Y. Filed Sept. 8, 1931. Serial No. 561,752. 14 Claims. (Cl. 299—37.)

6. A spraying apparatus comprising a movably supported tank, a vertically disposed conduit supported by said tank, and communicating therewith, vertically movable reciprocating means operated by movement of the tank, a spray head connected at one end with the conduit and communicating therewith, and means movably connecting the other end of the spray head with said reciprocating means, so that continuous oscillations are imparted to the spray head in a vertical plane during movement of the tank.



1,900,838. LAWN MOWING MACHINE. FRED B. MINOUS, Oshkosh, Wis. Filed Dec. 31, 1931. Serial No. 584,198. 6 Claims. (Cl. 56—23.)



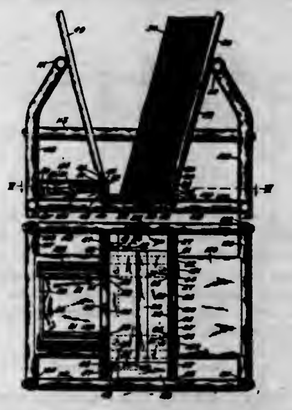
1. A machine of the class described comprising a casing, a supporting and driving means therefor, a mowing element carried by said casing, an elevating conveyor placed adjacent and in the rear of said mowing element, said casing provided with a storage compartment, and packer means having a rearward and downward pulling action mounted within the storage compartment in the rear of said elevating conveyor, said packer means having a raking and packing action for pulling material away from said elevating conveyor and packing the material in said storage compartment.

1,900,839. PROPELLER. WALLACE M. MINTO, Jersey City, N. J. Filed Dec. 16, 1929. Serial No. 414,509. 6 Claims. (Cl. 170—165.)



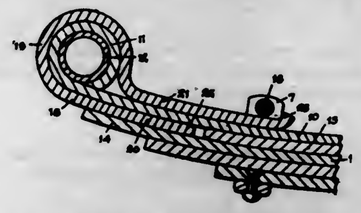
1. In a propeller having blades arranged spirally around the hub thereof successively forward of each other; each blade having a straight forward edge located at right angles to the axis of rotation and the major portions of successive blades working in paths in rear of one another.

1,900,840. LOOSE LEAF BINDER. CHADWICK HARRY MOORE, London, England. Filed Sept. 8, 1931, Serial No. 561,762, and in Great Britain July 2, 1931. 24 Claims. (Cl. 129—28.)



10. In a loose leaf binder the combination of a back structure, withdrawable binding posts supported on the back structure, a device on the back structure for locking the binding posts against withdrawal, a support for the binder and means operative as the binder is placed in position on the support to release the locking device.

1,900,841. SPRING CONSTRUCTION. ROBERT W. NILSON, Toledo, Ohio, assignor to The Mather Spring Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 11,1932. Serial No. 604,447. 2 Claims. (Cl. 267—47.)



1. In a leaf spring, one of the outer leaves of the spring having an eye, a bar having an end portion located between two leaves of the spring, a cylindrical portion surrounding the eye and an inwardly extending end portion located in contact with the surface of the leaf having the eye.

1,900,842. HEATER FOR RODS AND TUBES. EDWI F. NORTHRUP, near Princeton, N. J., assignor to Aja Electrothermic Corporation, Trenton, N. J., a Corporation of New Jersey. Filed Dec. 21, 1925. Serial No 76,878. 21 Claims. (Cl. 219—11.)



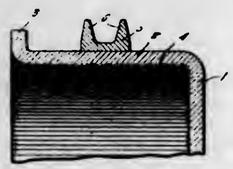
1. In the art of inductive electric heating, a hollow helical coil, a source of high frequency electric current applied to the terminals of the coil and means for moving an article to be heated having much greater length than width or thickness through the coil while it is being subjected to the heating effect of the coil, the coupling between the article and the coil being close.

1,900,843. HEATER FOR RODS AND TUBES. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, Trenton, N. J., a Corporation of New Jersey. Filed Mar. 15, 1930. Serial No. 436,193. 7 Claims. (Cl. 219—11.)



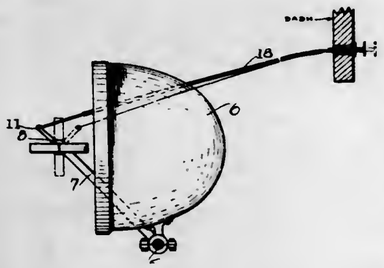
1. In the art of electric heating, a source of alternating current supply, a plurality of helical coils having their axes in line, connections from the source of supply separately to each coil, capacitative means within said connections and a plurality of discharge gaps, one across the coils for supplying high frequency oscillations to the coils from said current supply.

1,900,844. BRAKE DRUM. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 20, 1930. Serial No. 483,356. 5 Claims. (Cl. 188—218.)



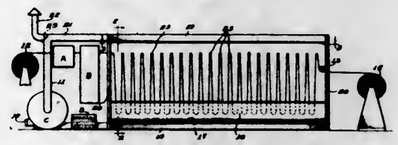
1. A brake drum of low carbon steel having a frictional engaging surface of a higher carbon content, and an exterior rigidifying annulus.

1,900,845. SIGNAL. JOE YONEO OHTA, Terminal Island, Calif. Filed Dec. 28, 1931. Serial No. 583,547. 1 Claim. (Cl. 116—45.)



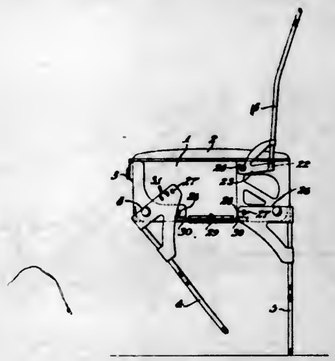
A direction indicator for motor vehicles adapted to be positioned forwardly of and in proximity to a headlight of the vehicle comprising a bracket, a cylindrical head secured to said bracket and having a slot formed therein, a spindle rotatably mounted in said head and having a threaded extremity, a signalling device detachably secured to said threaded extremity and embodying in its construction a frame, and a signal indicia bearing plate carried by said frame, a lever secured to said spindle and movable in the slot of said head, and manually controlled means connected to said lever.

1,900,846. APPARATUS FOR AND METHOD OF DRYING. BUFORD B. RUSSELL, Chicago, and WALTER J. UHLHORN, Oak Park, Ill., assignors to Drying Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed June 2, 1930. Serial No. 458,972. 2 Claims. (Cl. 34—12.)



1. A drying apparatus comprising conveying means, an air delivery duct extending below the conveying means and having central longitudinally extending discharge means on the upper surface, means for delivering heated air under pressure to said duct, a deflecting plate spaced from and extending over said discharge means for the purpose of evenly directing the air toward both sides, and means providing concave surfaces for receiving the air and carrying it upwardly and directing it inwardly above said deflector plate.

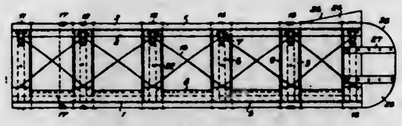
1,900,847. COLLAPSIBLE SEAT, STOOL, OR CHAIR WITH RECEPTACLE FOR HOLDING ARTICLES. WILLIAM ERNEST SIDAY, Richmond, England. Filed Nov. 18, 1930, Serial No. 496,479, and in Great Britain Nov. 19, 1929. 2 Claims. (Cl. 155—148.)



1. In a collapsible chair, a seat, a leg carrying member pivoted to the side of the seat whereby the leg is adapted to be swung between folded and extended positions relative to the seat, said leg carrying member being laterally flexible at a point spaced from its pivot, a fixed formation at the side of the seat, a formation carried by the leg carrying member at said point engageable with and disengageable from the seat carried formation by lateral flexure of the leg carrying member and effective when engaged with said seat carried formation to lock the leg carrying member and leg in one of their aforementioned positions, and cam means carried by the seat for cooperation with said leg carrying member to effect lateral flexure of said member thus to effect disengagement of said locking formations.

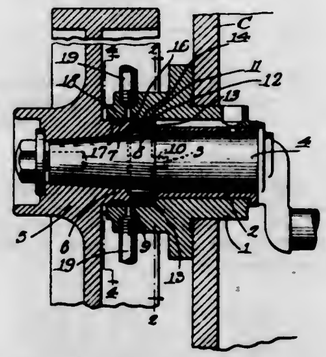
1,900,848. RUDDER FOR SEA-GOING VESSELS. JOHAN GUNDERSEN VADSET, Stavanger, Norway. Filed Jan. 25, 1932, Serial No. 588,716, and in Norway Feb. 23, 1931. 11 Claims. (Cl. 114—168.)

1. A jury rudder for steering vessels, for use when the ordinary rudder or steering gear has broken down comprising a plurality of open semi-cylindrical bodies constituting steering devices, two lines connecting each steering device with the vessel, one of said lines leading to the bow, and the other of which leads to the stern of the vessel, the arrangement of said devices in relation to



the side of the vessel being such that the steering of the vessel in either direction sideways is controlled by paying out or heaving in one of the said lines.

1,900,849. SEAL. MICHAEL H. ACKERMAN, Mansfield, Ohio, assignor of one-half to Louis C. Sickel, Caledonia, Ohio. Filed July 24, 1931. Serial No. 552,968. 3 Claims. (Cl. 286—7.)



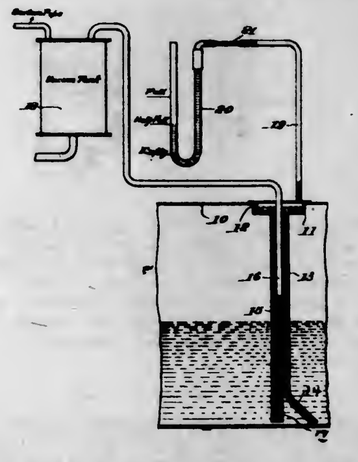
1. A seal of the class described including a ring having an annular flange providing a bearing and sealing surface, a deformable ring carried by the main ring and adapted to be expanded radially when subjected to compression, and a relatively thin metal band engaging the deformable ring and having means adapted to engage said ring and hold the band assembled therewith, said band being split transversely and being expansible to form a sealing, working fit against the structure contacted thereby when the deformable ring is subjected to pressure and expanded radially.

1,900,850. FROTH-FLOTATION PROCESS FOR SLIME-CONTAINING ORE PULPS. MAHLIN S. HANSEN, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed July 31, 1931. Serial No. 554,385. 9 Claims. (Cl. 209—166.)

1. The process of concentrating slime-containing "oxidised ore" pulps by froth flotation, comprising modifying a slime-containing "oxidised-ore" pulp with a fluosilicate of the class including hydrofluosilicic acid, sodium fluosilicate, potassium fluosilicate, calcium fluosilicate, magnesium fluosilicate, and ammonia fluosilicate; and subjecting the modified "oxidised-ore" pulp to the froth-flotation process.

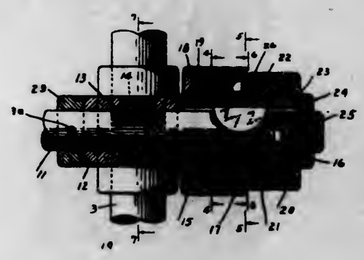
1,900,851. LIQUID LEVEL GAUGE. EDWARD P. HUGHES, Detroit, Mich., assignor of sixty per cent to Walter A. Wood, Detroit, Mich. Filed July 5, 1929. Serial No. 376,107. 4 Claims. (Cl. 73—54.)

1. A liquid level indicator comprising a closed housing, a pair of tubes suspended therefrom and in communication therewith at their upper ends, one of said tubes having its upper end disposed above the bottom of said housing and its lower end substantially closed, the other tube having its upper end disposed at the bottom of said housing and its lower end open, a discharge tube having its lower end in communication with the first named tube



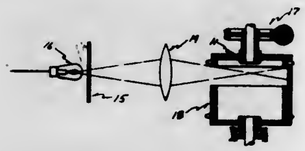
through a restricted passage and adapted for communication with a vessel in which said tubes may be submersed, means for drawing liquid upwardly through said discharge tube, and a pressure-responsive gauge means in communication with the top of said housing.

1,900,852. JIG AND FIXTURE LOCK. FRED W. KUPPERSMITH, Bloomington, Ill., assignor to Williams Oil-O-Matic Heating Corporation, Bloomington, Ill., a Corporation of Illinois. Filed Feb. 8, 1932. Serial No. 591,500. 3 Claims. (Cl. 77—62.)



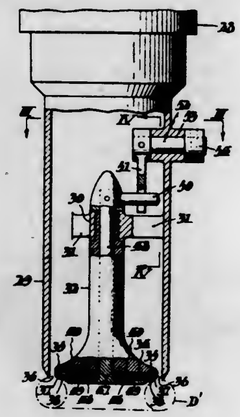
1. A work holder including a base, a plurality of guide posts thereon, a jig plate reciprocable upon said guides, an operating shaft carried by the jig plate adapted to reciprocate the jig plate, an operating handle for the shaft, a multiple disk clutch connecting the handle to the jig plate including a fixed housing about the shaft, a sleeve therein keyed upon the shaft and extending therebeyond, an outstanding flange upon the sleeve exterior of said housing, a housing carried upon the handle surrounding said sleeve on the other side of said flange, a plurality of disks within the first housing alternately keyed to said housing and said sleeve, a plurality of disks within the handle housing alternately keyed to said housing and said sleeve, a plurality of balls interposed between the first housing disks and handle sleeve mounted in apertures provided therefore in said sleeve flange and a plurality of cam depressions in the handle sleeve adapted to co-act with the balls to exert varying pressure upon the housing disks upon rotation of the handle housing to lock or release the operating shaft.

1,900,853. APPARATUS FOR PRINTING FROM A NEGATIVE SOUND RECORD TO A POSITIVE. EARL I. SPONABLE, New York, N. Y., assignor to Fox Case Corporation, New York, N. Y., a Corporation of New York. Filed May 15, 1929. Serial No. 363,224. 6 Claims. (Cl. 95—75.)



1. An apparatus for printing from a negative sound record to a positive comprising spaced coaxial sprocket wheel sections over which the negative and positive move in an overlying relation, means for focusing a line of light on a portion of said film exposed through the space between said sprocket sections with the rays of light substantially normal to the direction of movement of the film at the exposed line.

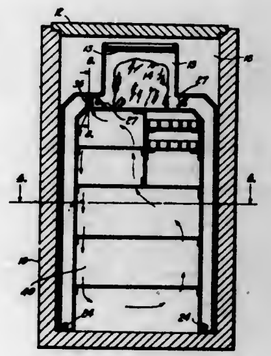
1,900,854. ALIMENTARY PRODUCT FORMING DEVICE. HANS C. ARGE, New York, N. Y., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed June 18, 1932. Serial No. 618,027. 8 Claims. (Cl. 107—14.)



1. In a device for producing annular formations, such as doughnuts and the like, from plastic material, a hopper for the plastic, die mechanism including a tubular outlet member and a normally contracted radially expansible circular cutter member co-axially within the tubular outlet member, and providing jointly therewith, an annular opening for extrusion of the plastic supplied from the hopper; and means for actuating the cutter member to sever annular extrusions of the plastic by contact of its peripheral edge with the inner surface of the tubular outlet member.

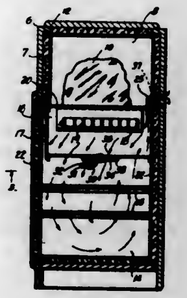
1,900,855. VENTILATING MEANS FOR REFRIGERATORS. GEORGE A. AYLSWORTH, Kansas City, Mo., assignor to Cold Control Corporation, Kansas City, Mo., a Corporation of Missouri. Filed Jan. 12, 1931. Serial No. 508,110. 8 Claims. (Cl. 62—89.)

2. Refrigerating apparatus comprising a closed refrigerating chamber, a refrigerating unit in communication with said chamber, and means providing a single passageway constituting a combined air inlet and outlet to said



chamber having various portions of said passageway maintained at different thermal states for inducing a continuous flow of ventilating air into and out of the chamber.

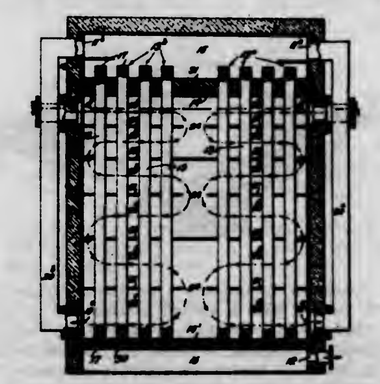
1,900,856. REFRIGERATOR CONSTRUCTION. GEORGE A. AYLSWORTH, Kansas City, Mo., assignor to Cold Control Corporation, Kansas City, Mo., a Corporation of Missouri. Filed Apr. 9, 1931. Serial No. 528,877. 5 Claims. (Cl. 98—51.)



1. A refrigerator construction comprising a cabinet having a refrigerant chamber and a noncommunicating refrigerating compartment, and means providing a single passage for the inflow and outflow of air from the exterior of the cabinet to and from the refrigerating compartment, said passage being exposed to the chilling action of said refrigerant chamber.

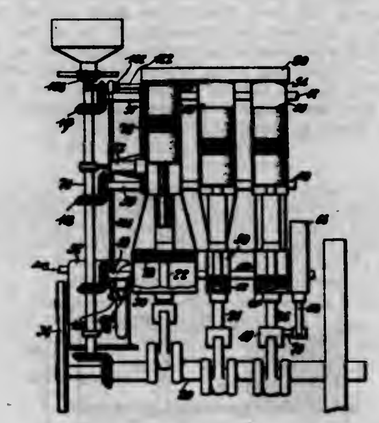
1,900,857. APPARATUS FOR USE IN THE CATALYTIC OXIDATION OF GASES. GEORGE A. BERRY, Bound Brook, and CLARENCE P. LINVILLE, Elisabeth, and ALLING P. BRANDSLEY, Plainfield, N. J., assignors to Calco Chemical Company, Bound Brook, N. J., a Corporation of Delaware. Filed July 15, 1929. Serial No. 378,282. 7 Claims. (Cl. 23—288.)

1. Converter apparatus, comprising a plurality of parallel conversion tubes containing catalytic material, through which the gases to be converted flow, and means for causing a stream of cooling gas to flow back and forth



transversely across all the tubes in a zig-zag path extending from the sections of the tubes near their inlet ends to the sections of the tubes at their outlet ends.

1,900,858. THREE-CYLINDER TANDEM ENGINE. ROBERT EARLL BRUCKNER, Easton, Pa., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1929. Serial No. 338,840. 4 Claims. (Cl. 123—59.)



1. A compounded compressor having more than two cross-compounded cylinders, said compressor being constructed and arranged so that a cylinder of a given stage of compression is intermediate two cylinders of lower stages of compression.

1,900,859. METHOD OF MAKING GELS. GERALD C. CONNOLLY and ERNEST B. MILLER, Baltimore, Md., assignors to The Silica Gel Corporation, Baltimore, Md., a Corporation of Maryland. Filed July 25, 1930, Serial No. 470,761, and in Germany Apr. 27, 1928. 9 Claims. (Cl. 23—182.)

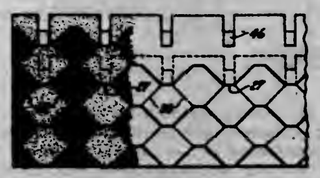
1. In the process of producing gels in which a hydrogel is washed with heated water, that improvement pertaining to controlling the apparent density of the gel which comprises adjusting the temperature of the heated water, the temperature chosen for the water being the higher as the apparent density desired is lower.

1,900,860. DRILL STEEL RETAINER. DUDLEY K. DOVELL, El Paso, Tex., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Nov 4, 1930. Serial No. 493,423. 8 Claims. (Cl. 121—82.)



4. In a tool retaining mechanism, a chuck housing having a bore, a chuck in said bore for receiving a collared drill steel, said chuck housing having formed in its opposite side walls longitudinally elongated slots opening into said bore in advance of said chuck, a pivoted retainer yoke arranged externally of said chuck housing and having end portions projecting through said slots into said bore, said yoke presenting an abutment against which the steel collar is adapted to strike, and a coil spring in said bore acting on said projecting end portions for yieldably maintaining said yoke in retaining position.

1,900,861. ROOFING MATERIAL. NORMAN P. HARSHBERGER, Chicago, Ill., assignor to Bakelite Building Products Co. Inc., New York, N. Y., a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,402. 15 Claims. (Cl. 108—7.)

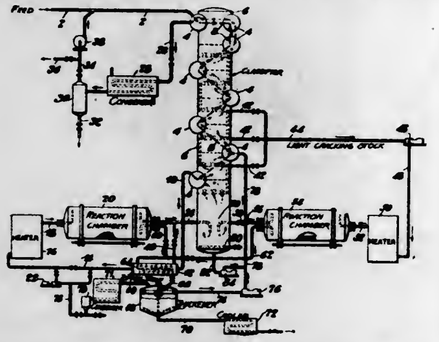


1. A roofing element comprising a body portion having cuts extending inwardly from an edge to form a tongue, said tongue being bent over on the upper surface of the body to extend in a reverse direction from said edge of the body to form means for alining another roofing element of the next course which is laid over said bent over tongue and to form a portion of triple thickness with two roofing elements.

1,900,862. PROCESS FOR REFINING OILS. WILBUR G. LAIRD, New York, N. Y., assignor to Heat Treating Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,636. 1 Claim. (Cl. 196—49.)

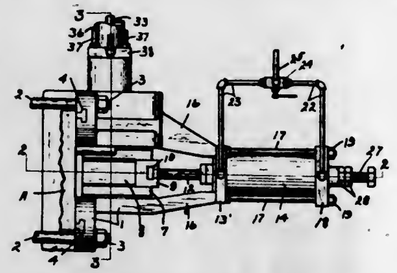
A process of converting relatively heavy hydrocarbons into lower boiling point hydrocarbons, comprising passing oil through a cracking coil and then into a large reaction zone, heating the oil to a cracking temperature in

said coil, discharging the vapors into a vapor fractionating zone where partial condensation occurs, withdrawing the heavy condensate from the base of the tower and passing it with said oil through said coil, withdrawing the relatively lighter but insufficiently cracked



condensate from an intermediate point in said fractionating zone then passing it through a separate cracking coil and into a large cracking zone maintained under relatively high pressure and cracking temperature and subjecting the vapors evolved from said lighter cracked oil to fractional condensation in said fractionating zone.

1,900,863. DIE CASTING MACHINE. NATHAN LESTER, Worcester, Mass., assignor to P. & R. Tool Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 23, 1929. Serial No. 394,717. 14 Claims. (Cl. 22—68.)

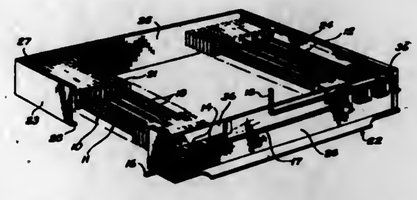


1. In a die casting machine in combination a delivery pot having a chamber therein adapted to contain molten metal normally open at one side for receiving the metal, means for varying the capacity of the chamber, a closure for said chamber having an outlet port for the metal and means for discharging the metal from the chamber through said port.

1,900,864. REFRACTORY POROUS DIAPHRAGM. RUSSELL E. LOWE, New York, NORMAN B. BROWN, St. Albans, and WILLIAM BJORKSTEDT, Jamaica, N. Y., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 7, 1927, Serial No. 173,599. Renewed Dec. 31, 1931. 11 Claims. (Cl. 106—9.)

2. A method of making zircon refractories comprising mixing zircon grog with zircon fines, the grog consisting of particles passing through screens not substantially larger than 20-mesh and not substantially smaller than 40-mesh, said fines constituting between 5% to 20% by weight of the grog-fines aggregate, adding P_2O_5 to said aggregate and firing the mass, the P_2O_5 by weight constituting not substantially less than 4% of the weight of said aggregate.

1,900,865. CONDENSER UNIT FOR REFRIGERATING APPARATUS. SAMUEL MOORE, Buffalo, N. Y., assignor to Fedders Manufacturing Company, Inc., Buffalo, N. Y. Filed Apr. 21, 1932. Serial No. 606,640. 5 Claims. (Cl. 257—36.)

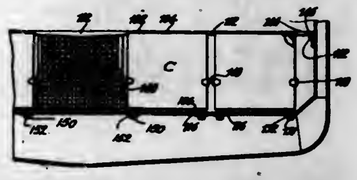


1. A condenser comprising a rectilinear frame having one wall formed with a slotted portion and an opposite wall formed with a marginal notch, a tube unit having one extremity engaging through the slotted portion of said first wall and having its opposite extremity resting in the marginal notch of said opposite wall, and means secured to said opposite wall for closing the open side of the notch to retain the tube unit against removal.

1,900,866. ACOUSTICAL PLASTER. JAMES S. OFFUTT, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 28, 1930. Serial No. 439,851. 4 Claims. (Cl. 106—34.)

1. A sound-absorbing wall plaster composition comprising calcined gypsum, a graded sized aggregate, a saponin foaming agent, a retarder for the gypsum, and substantially 1% each of extremely finely divided ground asbestos to increase the plasticity of the plaster when gaged with water and of elongated wood-fibers which are capable of expanding when wetted and of shrinking on subsequent drying thereby insuring connected porosity in the final set product, the ratio of aggregate to the gypsum being at least 2:1.

1,900,867. CONTAINER AND METHOD AND MEANS FOR HANDLING CARGO BY SUCH CONTAINERS. MARSHALL OLDS, Mountainside, N. J. Filed Oct. 26, 1927. Serial No. 228,822. 8 Claims. (Cl. 214—152.)

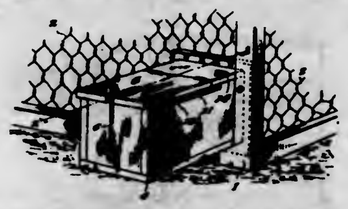


1. The method of loading a ship which includes stowing away a multiplicity of cargo containers in spaced relationship and in substantial or approximate alinement with one another, bridging the spaces between adjacent containers and hauling other containers over the tops of said bridged containers.

1,900,868. ANIMAL FEEDER. FRANK R. RITCHIE, Chippewa Falls, Wis. Filed May 13, 1930. Serial No. 452,030. 2 Claims. (Cl. 119—20.)

2. A feed box having one end open and having its other end portion forming with an opening in its top, a cover normally closing the opening in the top, means for fastening the cover when closed, a gate, a rod pivoting the gate beneath the top of the box back of the opening, whereby

the gate may be swung upward into open position and downward into closed position, said rod extending from one of the side walls of the box and having its outer por-



tion bent to form an actuating arm, and fastening means on the box cosecting with the arm to secure the gate in either open or closed position.

1,900,869. COLOR PHOTOGRAPHIC MATERIAL. MERRILL W. SEYMOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 25, 1931. Serial No. 559,847. 11 Claims. (Cl. 95—2.)

11. A film for the production of color photographs which comprises a support, and coated on one face of said support a sensitive layer consisting of a mixture of two separately color sensitised emulsions, one of said emulsions being sensitized with 1'.2-dethyl-3,4-bensothioseula cyanine iodide and the other of said emulsions being sensitized with 4,4'-diphenyl-3,3'-diethyl 7-(4 phenyl thiazole ethiodide) methyl thiazole carbocyanine iodide.

1,900,870. PHOTOGRAPHIC COLOR PROCESS. MERRILL WILMER SEYMOUR, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 26, 1932. Serial No. 607,570. 7 Claims. (Cl. 95—2.)



1. The method of making a multi-color record that comprises exposure to a light image of an element carrying a plurality of differentially color sensitized layers, developing the affected portions to form uncolored silver images, exposing the element to light of a color capable of affecting only one of said layers, developing a silver and color image in the layer so exposed, exposing the element to white light, developing in the other of said layers a silver and color image, then removing all said silver images in the several layers in a single operation, leaving a color image in each layer.

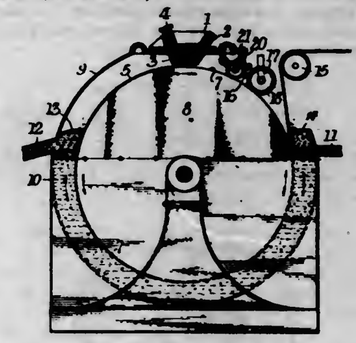
1,900,871. DOUBLE ALPHA KETONIC ACID CELLULOSE ESTERS AND PROCESS OF MAKING THE SAME. CYRIL J. STAUD and CHARLES S. WEBBER, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 25, 1929. Serial No. 342,668. 14 Claims. (Cl. 260—101.)

1 A mixed cellulose ester including an acyl radical and a radical of an alpha ketonic acid.

1,900,872. METHOD OF RECOVERING CELLULOSIC DERIVATIVE SCRAP. ERNEST R. TAYLOR and HENRY B. SMITH, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 29, 1929. Serial No. 381,997. 6 Claims. (Cl. 252—1.)

4. The process of preparing cellulose derivative film scrap for digesting, leaching or other solution treatment which comprises passing the film scrap between relatively closely spaced corrugated rolls.

1,900,873. PROCESS OF MAKING CELLULOSE NITRATE FILM AND SIMILAR PRODUCTS. HENRY E. VAN DERHOEF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 6, 1929. Serial No. 353,049. 7 Claims. (Cl. 18—57.)



1. The process of manufacturing cellulose nitrate film which comprises simultaneously coagulating and curing a cellulose nitrate "dope" by subjecting it to an atmosphere of high relative humidity.

1,900,874. BEARING. AUGUST GUNNAR FERDINAND WALLGREN, Stockholm, Sweden, assignor to Aktiebolaget Nomy, Stockholm, Sweden, a Corporation of Sweden. Filed May 10, 1930, Serial No. 451,233, and in Sweden May 15, 1929. 5 Claims. (Cl. 308—73.)



1. A bearing of the character described comprising an outer annular member, an inner annular member and a plurality of bearing blocks having operative positions between the annular members, one of said members comprising a body portion and supporting layer portions, the other of said members having a body portion and a layer portion forming a bearing surface, said blocks having a body portion, supporting layer portions and layer portions forming bearing surfaces, one group of said supporting portions being recessed and another group of supporting portions projecting and cooperating with the recessed supporting portions to tilt the blocks, said bearing surfaces cooperating to transmit load through the bearing, said body portions consisting of a ferrous metal and said layer portions consisting of a non-ferrous metal of greater hardness than the ferrous metal.

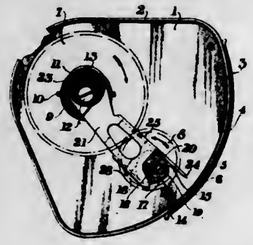
1,900,875. BEARING. AUGUST GUNNAR FERDINAND WALLGREN, Stockholm, Sweden, assignor to Aktiebolaget Nomy, Stockholm, Sweden, a Corporation of Sweden. Filed June 16, 1931, Serial No. 544,767, and in Sweden June 21, 1930. 7 Claims. (Cl. 308—73.)



1. A bearing of the character described comprising relatively rotatable spaced bearing members and a plurality

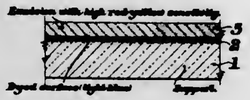
of bearing blocks having operative positions between said members, one of said members having grooves to form bearing shoulders adjacent to the grooves, said grooves being disposed transversely of the direction of movement of the bearing, said blocks having projections cooperating with said bearing shoulders to tilt the blocks, and said grooves having converging sides whereby the angularity between the groove surfaces and the bearing shoulders is less abrupt than a right angle.

1,900,876. MOTION PICTURE FILM FEEDING DEVICE. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 9, 1930. Serial No. 487,412. 16 Claims. (Cl. 88—184.)



16. A device of the class described comprising a guideway for a perforated tape, a claw adapted to feed the tape intermittently along said guideway, mechanism reciprocating said claw transversely of the plane of the guideway for moving the claw into and out of engagement with the tape perforations, and means for moving said claw longitudinally of said guideway in one direction for feeding the tape one step, and for partially reversing the movement of said claw immediately prior to its withdrawal from the tape by said mechanism.

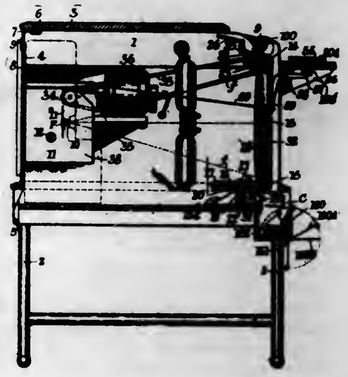
1,900,877. NONHALATION MOTION PICTURE FILM. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 13, 1931. Serial No. 537,048. 2 Claims. (Cl. 95—9.)



1. A motion picture negative film adapted for use in making exposures under illumination particularly rich in light of the longer visual wave lengths and comprising a support and a photographic layer thereon highly sensitive to light of the longer visual wave lengths, said support carrying a dye layer having a density in the blue region of the spectrum not greater than .15 and throughout the other visual portions of the spectrum greater than .3, the dye being unaffected by ordinary photographic processes.

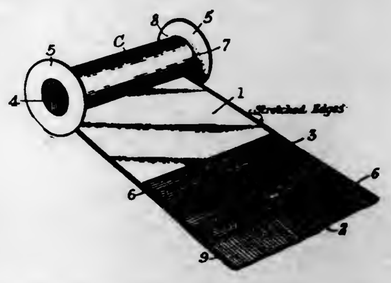
1,900,878. DOCUMENT PHOTOGRAPHING APPARATUS. ROY S. HOPKINS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 3, 1927. Serial No. 237,467. 14 Claims. (Cl. 88—24.)

1. In a document photographing apparatus in combination, a camera having mechanism including a film advancing means and a shutter, a document feeder, mechanism for intermittently operating the document feeder and adapted to move the feeder to advance documents intermittently across the field of the camera, a common operating means for the camera and mechanism for advancing the document feeder, said common operating means including parts cooperating to produce a cycle



of operations to advance the film and operate the shutter upon alternate operations of the document feeder mechanism.

1,900,879. LIGHT TIGHT PHOTOGRAPHIC FILM CARTRIDGE. JOHN G. JONES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed July 27, 1929. Serial No. 381,589. 7 Claims. (Cl. 95—9.)

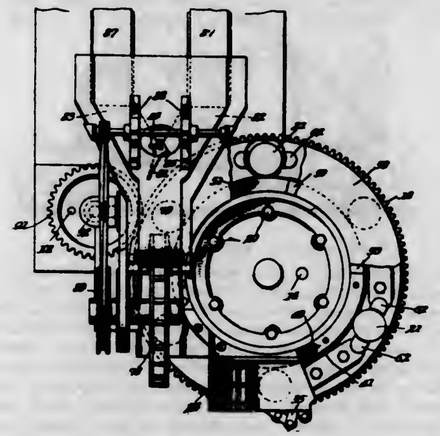


1. A protective covering for photographic light sensitive film comprising a strip of protective paper having the longitudinal edges thereof smoothly stretched thereby having a slightly wavy edge when unrolled.

1,900,880. PROCESS AND APPARATUS FOR MANUFACTURE OF SCREW CAPS. ERIC B. KRAMER, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed July 22, 1931, Serial No. 552,493. Renewed Dec. 22, 1932. 64 Claims. (Cl. 153—2.)

1. The method of making in a single operation curled edge screw caps having a skirt formed with a curled edge and a continuous thread above the curled edge which comprises imparting simultaneously both a bodily movement along a predetermined path and rotational movements to a plurality of hat-shaped blanks, each having a skirt and a flange, and during said movements in immediately successive steps forming the flange into a curled edge and bending the blank skirt to form a continuous thread while leaving the end of the skirt free to permit free shrinkage of the material of the skirt.

17. An apparatus of the class described comprising a feeding mechanism for cupped cap blanks, a rotary mandrel supporting carriage, individually rotating mandrels thereon for receiving a blank, die sections cooperating with said mandrels to form in sequence a curled edge and continuously and progressively beginning at one end and finishing at the other the entire of a continuous-thread in the skirt of the blank above the curled edge, means for rotating the mandrel supporting carriage past



the die sections, means for rotating the mandrels to cause each mandrel to perform at least one complete rotation during the traverse of the carriage past each die section, and automatic means for lifting the cap from a mandrel.

1,900,881. SCREW CAP. ERIC B. KRAMER, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York. Filed July 22, 1931. Serial No. 552,494. 4 Claims. (Cl. 215—43.)



1. In combination with a glass container having a neck formed with a continuous external thread, a screw cap of thin metal having a skirt formed with a continuous thread having a shelf provided near its inner edge with a contact portion which is formed to provide a narrow line contact with the underside of the container thread, the shelf surface and the container thread surface along said line approaching sufficiently close to perpendicularity to the cap axis to produce a downward sealing pressure substantially in excess of the outward wedging pressure, said shelf having a clearance outwardly and upwardly from said line contact about the container thread.

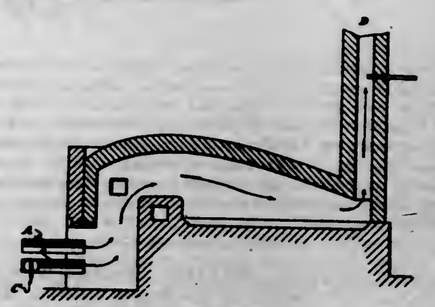
1,900,882. CATALYSTS FOR THE REMOVAL OF ORGANIC SULPHUR COMPOUNDS FROM GASES. OSCAR W. LUBBY, Baltimore, Md., assignor to Wilbert J. Huff, Baltimore, Md. Filed Jan. 28, 1928. Serial No. 250,338. 8 Claims. (Cl. 23—283.)

1. The process for preparing a catalyst for the conversion of organic sulphur compounds to hydrogen sulphide consisting of subjecting a mass consisting originally of an intimate mixture of at least one metal included in the sixth and seventh groups of the periodic system of the elements with at least one polyvalent metal of the first to fifth groups of the periodic system, exclusive of rare metals having an atomic number less than 58, to the action of a gas containing hydrogen and organic sulphur at a temperature above 200° C.

1,900,883. PROCESS FOR PURIFYING GAS. OSCAR W. LUBBY, Baltimore, Md., assignor to Wilbert J. Huff, Baltimore, Md. Original application filed Jan. 28, 1928. Serial No. 250,338. Divided and this application filed Apr. 9, 1929, Serial No. 353,895, and in France Jan. 22, 1929. 17 Claims. (Cl. 23—3.)

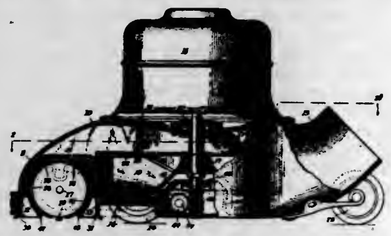
1. The process of converting organic sulfur compounds to hydrogen sulfide in a gas containing elementary hydrogen and which may be free from oxygen and water vapor which comprises reacting a portion of said hydrogen with organic sulfur by subjecting said gas at a temperature above 200° C. to the action of a solid catalyst containing at least one metal included in the sixth and seventh groups of the periodic system of the elements in combination with at least one of the following named elements: copper, cerium, thorium, and antimony.

1,900,884. APPARATUS FOR THE CONTROL OF COMBUSTION. OSCAR W. LUBBY, Baltimore, Md., assignor to Wilbert J. Huff, agent. Filed June 23, 1931. Serial No. 546,245. 7 Claims. (Cl. 236—15.)



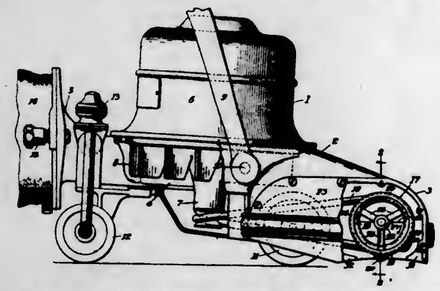
1. In a combustion system, a passage way through which a combustible gas flows, means for admitting air to the gas stream to cause combustion thereof, means for diverting from the gaseous products of combustion a small sample thereof, means for admixing with said sample a definite proportion of hydrogen, a thermal conductivity cell comprising two chambers each inclosing a metal filament, a Wheatstone bridge two of the arms of which respectively include said filaments, a conduit having two branches through which the gaseous mixture flows in substantially equal volumes, said branches respectively communicating with the two chambers of said cell, and one only of said branches including a combustion pipette, a galvanometer connected in said bridge and means controlled by said galvanometer for governing said first mentioned means.

1,900,885. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Dec. 1, 1930, Serial No. 499,135. 22 Claims. (Cl. 15—14.)



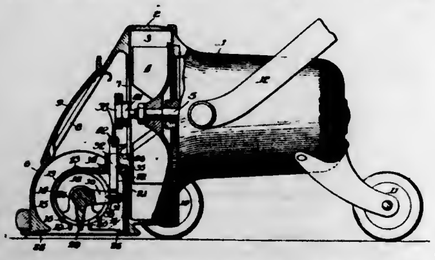
1. In a suction cleaner a suction nozzle, means to draw air through said nozzle, a housing in said nozzle in communication with the exterior atmosphere and open to said nozzle on its under side and a pile penetrating lip adapted to extend between adjacent tufts and into a single tuft of pile formed thereon.

1,900,886. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,390. 12 Claims. (Cl. 15—13.)



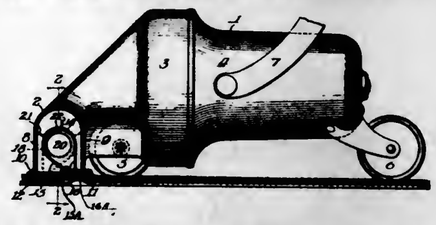
1. In a suction cleaner, a suction nozzle, means to create a reduced pressure in said nozzle, a surface contacting agitator mounted for continuous rotation within said nozzle and interiorly connected to the atmosphere, said agitator comprising a body having an opening therein and a beater bar upon said body extending parallel to said opening, said beater bar and said opening extending helically upon said agitator body, and means to actuate said agitator.

1,900,887. SUCTION CLEANER. WILLIAM H. KITTO, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,385. 7 Claims. (Cl. 15—13.)



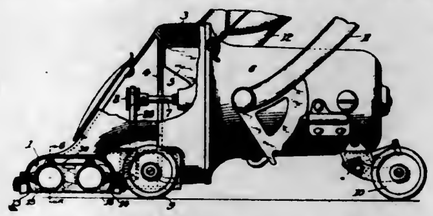
1. In a suction cleaner, a suction nozzle adapted to contact a surface covering undergoing cleaning, means to create a reduced pressure in said nozzle, a member having a downwardly facing opening within said nozzle interiorly connected to air at atmospheric pressure, reciprocating agitating means within said nozzle, and means to positively actuate said agitating means.

1,900,888. SUCTION CLEANER. WILLIAM H. KITTO, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed May 28, 1930. Serial No. 456,386. 2 Claims. (Cl. 15—14.)



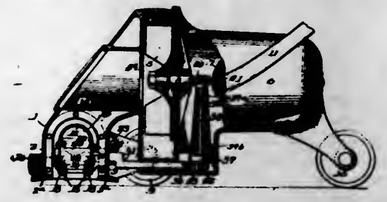
1. In a suction cleaner, a suction nozzle, means to create a reduced pressure in said nozzle, a member rotatably mounted within said suction nozzle interiorly connected to the atmosphere and adapted to be tilted by the movement of the cleaner over the surface covering undergoing cleaning, and means to limit the angle of rotation of the member and to prevent the passage of air between the member and the adjacent wall of the nozzle comprising a sealing stop carried by said member along its entire length and adapted to contact the adjacent wall of said suction nozzle.

1,900,889. SUCTION CLEANER. BERNARD C. BECKER, York, Pa., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 514,012. 11 Claims. (Cl. 15—13.)



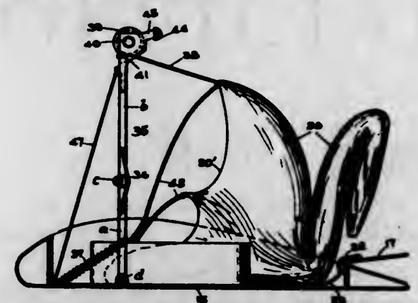
1. In a suction cleaner, a nozzle, a stationary air tunnel interiorly connected to the atmosphere supported in said nozzle and having an exhaust opening therein, surface-contacting agitating means in air sealed relationship with said air tunnel and defining a side of the tunnel mouth, and means to actuate said agitating means.

1,900,890. SUCTION CLEANER. WILLIAM D. SELLERS, Oak Park, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Feb. 12, 1931. Serial No. 515,192. 9 Claims. (Cl. 15—14.)



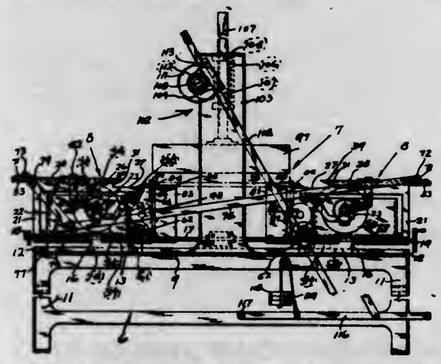
1. In a suction cleaner, a nozzle, a stationary air tunnel interiorly connected to atmosphere supported in said nozzle and having a downwardly facing exhaust outlet, surface-contacting agitating means carried by said air tunnel at the sides of said outlet, and means to impart an alternate-rotary movement to said agitating means.

1,900,891. PARACHUTE MOUNTING FOR AEROPLANES. THEODORE D. CRANE, Council Bluffs, Iowa. Filed Feb. 10, 1930. Serial No. 427,089. 10 Claims. (Cl. 244—21.)



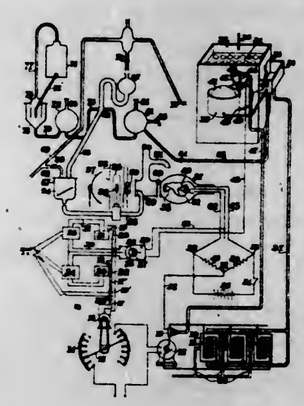
1. In a parachute mounting for an aeroplane, said aeroplane including a hollow plane having an opening in its upper wall, a parachute normally collapsed and disposed in said plane and having an expansible end-portion provided with flexible stays and spreader-strands, a swivel attached to said flexible stays, anchor stays secured to said plane and attached to the swivel, mechanism connected with the spreader-strands and disposed in said plane, a lid normally closing said opening, and means for actuating said mechanism for moving said lid and expansible end-portion of the parachute to permit the air to enter said parachute to cause inflation thereof.

1,900,892. BOX MAKING MACHINE. JOHN W. LOW, Mill Valley, Calif. Filed Dec. 3, 1930. Serial No. 499,713. 14 Claims. (Cl. 93—51.)



1. In a box making machine a frame, folder elements disposed on the frame to fold the flaps, the sides, and the ends of the blank and to support the blank thereon before folding; spreader members associated with the folders, being adapted to be extended over portions of the blank to apply an adhesive to the surfaces that overlie the flaps when the box is folded; an adhesive container in operative relation to each member; a rotary adhesive carrier in each container being operatively connected to the adhesive receiving face of the said members to be rotated in synchronism with said member, and to transfer adhesive from the container to said member; means to urge said blank into engagement with the folder elements; and means to actuate said blank-urging means.

1,900,893. AUTOMATIC SILVER RECOVERY CONTROL. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 28, 1931. Serial No. 540,620. 18 Claims. (Cl. 204—5.)



2. In an automatic control for an electroplating apparatus adapted to receive an electrolyte, the combination with a plating current control means adapted to vary the plating current supplied to said apparatus, and a control circuit for said plating current control means, of a resistance bridge means including balanced resistance arms, a means for varying the resistance of one of said arms corresponding to the plating ion concentration of said electrolyte to impress an electromotive force on said control circuit, and a shunt means for impressing an opposed electro-motive source on said control circuit corresponding to the plate current whereby the plating current is increased or decreased with increase and decrease in the plating ion concentration of the electrolyte.

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THE

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Prints	1—No.	14,060	
Reissues	7—No.	18,762 to No.	18,768, inclusive.
Plant Patent	1—No.	56	
Designs	46—No.	89,433 to No.	89,478, inclusive.
Patents	966—No.	1,900,894 to No.	1,901,858, inclusive.
Total	1,244		

TRADE-MARK RULES—AMENDMENT

Order No. 3,234

U. S. Patent Office, *Washington, Feb. 11, 1933.*

Acting under the provisions of section 487 of the Revised Statutes (U. S. C. Title 35, sec. 11), and with the approval of the Secretary of Commerce, the rules of the Patent Office governing the registration of trade-marks are amended as follows:

Rule 11, add at the end thereof the following paragraphs:

Every attorney prosecuting applications for registration of trade-marks shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit trade-mark business, and if it be not disapproved by him and the attorney so notified within 10 days after submission, it may be considered approved.

Any such attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or exclusion from practice before the Patent Office, or any division thereof.

THOMAS E. ROBERTSON,
Commissioner.

Adjudicated Patents

(C. C. A. Colo.) Pearce patent, No. 1,277,750, for flotation process and apparatus, claims 1 and 3 *Held* valid and infringed. *Stearns-Roger Mfg. Co.* v. *Ruth*, 62 F.(2d) 442.

(C. C. A. N. J.) Chipman patent, No. 1,694,205, for weed killer and method of killing weeds, claims 3, 4, 6, 8, 9, and 10 *Held* invalid. *Chipman Chemical Engineering Co.* v. *Reade Mfg. Co.*, 62 F.(2d) 490.

(C. C. A. Pa.) Behrman patent, No. 1,733,280, for razor and blade therefor, claims 5, 10, 11, and 12 *Held* invalid. *American Safety Razor Corporation* v. *Frings Bros. Co.*, 62 F.(2d) 416.

(D. C. N. Y.) Flaherty reissue patent, No. 16,808, for low viscosity lacquer and film produced therefrom, claims 2, 3, 6, 8, 9, 12, and 17 *Held* invalid. *E. I. du Pont de Nemours & Co.* v. *Glidden Co.*, 1 F. Supp. 1007.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,865,345, G. H. Wheatley, Covering, decided February 13, 1933, claim 19.

Pat. 1,828,471, F. J. Oven, Gasket, decided February 15, 1933, claims 1 and 2.

U. S. Court of Customs and Patent Appeals

Monday, March 6, 1933.

It is ordered that time for the deposit of fee for printing transcript, not due prior to March 1, 1933, be extended for thirty days without application therefor.

It is further ordered that time for filing briefs will be extended on special application therefor, during the present emergency, or until otherwise ordered by the court, in all cases where briefs were not due prior to March 1, 1933.

Attest:

ARTHUR B. SHELTON,
Clerk.

Condition of Applications Under Examination at Close of Business February 25, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 54,996; Trade-Mark Division, 1,096. Oldest new case, Sept. 24, 1932; oldest amended, Sept. 26, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
		New	Amended	
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Oct. 15	Oct. 15	675
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes	Oct. 26	Oct. 27	940
4003	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Dec. 3	Dec. 2	651
7053	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Nov. 8	Nov. 25	488
3028	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Nov. 29	Dec. 2	409
4908C	6. LEWERS, A. M., Carbon Chemistry	Oct. 17	Oct. 15	1,108
5725	7. JARBOE, C. G., Optics; Photography	Nov. 2	Nov. 1	1,070
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 3	Dec. 6	601
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Nov. 30	Dec. 13	592
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 10	Nov. 15	524
8067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus	Sept. 30	Oct. 10	635
7701	12. HENRY, C. C., Machine Elements	Nov. 12	Nov. 16	570
5006	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling	Nov. 9	Nov. 8	809
8007	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes	Dec. 6	Dec. 3	578
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Oct. 24	Oct. 24	1,340
5612	16. SPENCER, C. J., Telegraphy; Telephony	Nov. 29	Nov. 29	563
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting	Oct. 6	Oct. 6	1,177
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	Dec. 28	Dec. 27	353
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 3	Oct. 3	1,266
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	Dec. 12	Dec. 28	336
7723	21. THOMPSON, T. J., Textiles; Cloth Finishing	Oct. 26	Oct. 26	924
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion	Oct. 25	Oct. 25	784
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 4	Oct. 11	673
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	Dec. 27	Dec. 29	448
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors	Oct. 12	Oct. 12	1,217
5808	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Nov. 5	Nov. 16	517
5706	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 2	Dec. 2	634
4888	28. BENSON, A. B., Internal-Combustion Engines	Sept. 26	Sept. 26	990
8062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Oct. 10	Oct. 17	485
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats	Oct. 27	Dec. 3	622
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 14	Oct. 17	1,244
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Nov. 26	Nov. 26	686
6006	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings	Oct. 6	Oct. 7	1,354
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders	Oct. 5	Oct. 5	968
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 10	Oct. 11	870
7024	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring	Sept. 27	Sept. 28	1,433
5660	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 8	Nov. 5	702
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells	Oct. 3	Oct. 19	719
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 12	Oct. 12	993
7890	40. OBERLIN, J. J., Receptacles	Oct. 26	Oct. 28	1,606
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices	Oct. 11	Oct. 14	670
5662	42. CUTTING, H. O., Electric Signaling	Sept. 24	Sept. 28	1,135
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members	Oct. 5	Oct. 5	1,165
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 6	Oct. 5	814
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 16	Dec. 17	510
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Oct. 7	Oct. 19	609
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Oct. 17	Oct. 12	1,420
5731	48. ROEPKE, O. B., Electricity, General Applications	Oct. 21	Oct. 22	710
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification	Oct. 3	Sept. 26	967
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 5	Oct. 5	1,234
8628	51. BACKUS, C. D., Radiant Energy	Nov. 17	Nov. 17	919
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings	Nov. 19	Nov. 19	572
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens	Dec. 21	Dec. 22	466
8674	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits	Oct. 13	Oct. 13	943
6887	55. BOWEN, S. T.—Bread, Pastry, and Confection Making; Cutlery	Dec. 2	Dec. 3	324
	55. BOWEN, S. T.—Designs	†Jan. 20	†Feb. 6	291
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 15	Oct. 15	998
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks	Oct. 27	Oct. 25	563
5605	58. DOWELL, E. F., Abrading; Typewriting	Oct. 26	Oct. 21	592
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel	Oct. 15	Oct. 17	727
5606	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants	Oct. 7	Oct. 7	1,125
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus	Oct. 17	Oct. 18	845
7826	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles	Nov. 1	Oct. 31	1,220
4868	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates	Oct. 7	Oct. 7	1,232
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Oct. 26	Oct. 27	988
5634	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission	Oct. 5	Oct. 3	1,293
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Trade-Marks	†Jan. 25	†Feb. 13	884
	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—Labels and Prints	†Jan. 26	†Feb. 10	182

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE REPLOGLE

No. 3,833. Decided December 27, 1932

PATENTABILITY—REFRIGERATING SYSTEM.

Certain claims for a refrigerating system *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Ralph E. Baker and *Mr. Warren H. F. Schmieding* for Replogle.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GRAHAM, *P. J.*:

The appellant has made application to the United States Patent Office for a patent on improvements in control of automatic refrigeration apparatus. Several claims were rejected by both tribunals in the Patent Office. On appeal to this court, appellant has dismissed his appeal as to all of said claims except claims 9 and 16, which are as follows:

9. In an artificial refrigerating system for maintaining different maximum temperatures within a plurality of chambers, having a single compressor-condenser unit and power appliance, a plurality of evaporators associated with said chambers and adapted to contain liquid refrigerant, and common refrigerant feed and return conduits for connecting said evaporators with the compressor-condenser unit, the combination therewith of means affected by the pressure within the return conduit to control the operation of the power appliance, and means affected by the pressure in one of the evaporators to positively prevent a premature discharge of refrigerant from said evaporator into the return conduit until a predetermined temperature is reached in the chamber associated with said evaporator.

16. In an artificial refrigerating system for maintaining definite maximum temperatures within a plurality of chambers, having a single compressor-condenser unit and power appliance, a plurality of evaporators associated with said chambers and adapted to contain liquid refrigerant, a common refrigerant feed and return conduit for connecting said evaporators with the compressor-condenser unit, a combination therewith of means affected by the pressure within the return conduit to control the operation of the power appliance, a valve for regulating the flow of the refrigerant from one of the evaporators into the return conduit, means responsive to the pressure internally of said evaporator for actuating said valve and including a snap action valve control for maintaining said valve in either its closed or open position until a predetermined maximum or minimum pressure is reached in the evaporator.

Appellant's disclosure is of a mechanical refrigerating apparatus with three refrigerating chambers, in each of which a different predetermined range of temperatures may be maintained, by maintaining different pressures of the evaporant in evaporators in each of said chambers. A condenser unit supplies the refrigerant to each evaporator, the three evaporators having a common inlet pipe. Branch outlet pipes from these evaporators discharge into a common conduit. The first evaporant is in open communication with the common outlet; the second and third have interposed in their branch outlets two-temperature, snap-acting valves, which may be adjusted to varying pressures, and which control the pressure of the refrigerant in said evaporators.

The tribunals of the Patent Office have rejected appellant's claims on a single reference, Eddy, No. 1,185,597, of May 30, 1916. This reference shows three refrigerating chambers, capable of being maintained at different temperatures by evaporators. The refrigerant is admitted to coils in the chambers through balanced valves, such valves being operated jointly by the pressure of the refrigerant upon a diaphragm, and supplementary pressure due to the expansion of a liquid in a thermic receptacle.

The essential difference between the Eddy device and that of appellant, lies in the character of the valves used in the outlet pipes from the different evaporators. Appellant, as has been said, uses a snap valve. Eddy's valves are, as described by the Board of Appeals:

> The valves used in the Eddy construction in the same position are of the usual spring pressure type in which the tension of the spring is adjusted to hold the refrigerating fluid in the coil up to a point where it receives an amount of heat, and then the increased pressure of the fluid is sufficient to overcome spring pressure, open the valve and discharge the heated fluid into the return pipe. These valves are proportioned to prevent back pressure at high pressure into a coil intended for a lower pressure.

The appellant argues that he has devised a new type of refrigerating apparatus; that his application of snap, positive acting, valves, in these conduits, has produced a new and highly useful improvement in the art; that the snap-acting valves which he employs will open, positively and completely, when a certain predetermined high pressure has been attained, and will likewise close, completely and positively, when a predetermined low pressure has been reached. As to the operation of Eddy's valves, appellant argues:

> • • • It will be noted that the underside of the diaphragm 66 is subjected directly to the pressure prevailing in the passage 67 of the valve and consequently subjected directly to the pressure within the evaporator. An increase of pressure within the evaporator causes an increase of pressure on the underside of the diaphragm 66. Thus, it will be seen that the higher the pressure within the evaporator the more the valve 64 will be open and, vice versa, as the pressure in the evaporator decreases the throttling action of the valve 64 increases. It is apparent, therefore, that the valve 64 increases its throttling action to decrease the flow of gaseous refrigerant from the evaporator as the pressure within the evaporator decreases.

It is contended by appellant that this construction of Eddy's valves will create a constant fluttering and a partial opening of the same at frequent intervals as the pressure rises and falls in the evaporators, all of which is obviated by the type of valves appellant uses. He contends that by this means he has made a highly desirable improvement in the art. This improved result is conceded by the Solicitor for the Patent Office.

As to this point, the Board of Appeals says:

> Appellant contends that such valves being opened at a predetermined pressure will also close at substantially the same pressure producing a fluttering of the valves. We do not see that the system will so operate, especially in view of the use of the balanced valves at 44 which control the fluid in the coil in turn acting upon valve 63 to open it. If the valves do not flutter, then the constant and unnecessary starting and stopping of the condensing unit is avoided and the other difficulties referred to in appellant's brief would not occur. But even if fluttering did occur, the correction of the difficulty is obvious, and we can see no invention in changing the valve in the reference to provide one which requires a greater range of pressure to open and close the valves.

We are unable to discern wherein the inlet valve, thus mentioned by the Board, will materially affect the action of the outlet valve, when the pressure in the evaporator is high. Then the operation of the outlet valves may be expected to be as stated by appellant. It is only when the pressure in the evaporator is materially reduced, that such pressure may be said to be in any degree controlled by the inlet valves.

It is admitted that the various elements used in appellant's device are old. It would seem, however, that the combination of these elements has produced a new and useful result. We are not prepared to hold that such adaption of known devices as appellant has used, to as old an art as automatic mechanical refrigeration, is obvious.

What is, or is not, obvious, depends much upon circumstances. The ordinary rule is, that if the suggested change would, on inspection of a device without experimentation, occur to one skilled in the particular art, then such change may be said to be obvious. However, in this case those skilled in this art and employed in perfecting refrigerating devices, seem to have had no mental conception of the application of these well known snap valves to control the refrigerant circulating therein. That there were defects in the operation of the well known spring pressure valves, is apparent. Whether those skilled in the art had no exact understanding of the defects to be remedied, or whether the idea was not conceived by them that such defects might be remedied as appellant has remedied them, we cannot say. One thing only is certain, that the changes were not suggested until appellant filed his application herein.

In this view of the matter, we are unable to come to the conclusion that the improvements which appellant has made were obvious. We have arrived at much the same state of mind expressed by us in *In re Wessblad*, 19 C. C. P. A. (Patents) 1175, 58 F.(2d) 418, 422 O. G. 309, where we said:

> * * * Nevertheless, considering the references in connection with appellant's combination, its admitted novelty, usefulness, and the distinct advancement it made in the absorption refrigerating art, we are out of accord with the conclusion reached by the Patent Office tribunals. We think the claims are patentable.

Again we said, in *In re Fawick*, 19 C. C. P. A. (Patents) 1124, 56 F.(2d) 873, 421 O. G. 855:

> * * * It would seem, therefore, that, if appellant's combination was obvious to those of ordinary mechanical skill, it would have occurred to someone at an earlier date.

Other cases in point are: *In re Angert*, 17 C. C. P. A. (Patents) 575, 34 F.(2d) 1014, 388 O. G. 782; *In re Baker et al.*, 17 C. C. P. A. (Patents) 681, 36 F.(2d) 138, 391 O. G. 504; *In re Symonds*, 18 C. C. P. A. (Patents) 1128, 47 F.(2d) 972, 410 O. G. 7; *In re Howard*, 19 C. C. P. A. (Patents) 768, 53 F.(2d) 523, 414 O. G. 572; *In re Jones*, 19 C. C. P. A. (Patents) 1173, 58 F.(2d) 461, 422 O. G. 308.

The decision of the Board of Appeals is reversed as to said claims 9 and 16, and is in other respects affirmed.

Modified.

U. S. Court of Customs and Patent Appeals

IN RE NIVEN

No. 3,046. Decided December 27, 1932

PATENTABILITY — VALVE GEAR FOR INTERNAL-COMBUSTION ENGINE.

Claims for a valve gear for internal-combustion engine *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. W. W. Harris and *Mr. Clarence B. Zewadski* for Niven.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Appellant has appealed from the decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, refusing to allow claims 9 to 14, inclusive, of his application for a patent, of which claim 9 is typical and reads:

> 9. The combination with an internal combustion engine having a plurality of aligned cylinders, pistons operable within the respective cylinders, a single sleeve valve between each piston and associated cylinder having a combined oscillating and reciprocating movement with respect to the sleeve and cylinder axes, and a crankshaft driven by the pistons of a sleeve driving link extending longitudinally of the crankshaft axis and positioned to one side of the plane of the sleeve and cylinder axes, driving means between the crankshaft and link for moving the link in a plane parallel with the plane of the cylinder and sleeve axes whereby the link occupies successive parallel positions, and means spaced longitudinally of the link connecting the link and respective sleeves for imparting to the sleeves the aforesaid movement.

Claims 1 to 3, inclusive, were canceled. Claims 4 to 8, inclusive, were allowed.

The references relied upon are: Delahaye (French), 431,722, November 18, 1911; Tone, 1,300,518, April 15, 1919; and Lafitte, 1,537,832, May 12, 1925.

The claimed invention relates to internal-combustion engines. The sleeve valves in multiple of the engines are given a combined axial reciprocation and oscillation by use of a single operator common to all the valves, the oscillator being in the form of a link connected with the crank pins at each cylinder of the engine. Appellant's device maintains the sleeve valves in correct relative timing and it is claimed that it simplifies and reduces the engine cost. A modified form shown in appellant's disclosure has three driving links instead of one and cooperates with eccentrics rather than with crank pins. The eccentrics are displaced at such an angle that dead center conditions are avoided.

The Board of Appeals was of the opinion that there was nothing inventive shown in appellant's disclosure over that which was shown in the prior art cited.

The French patent to Delahaye relates to a system of distribution for combustion motors involving substantially the same elements as are shown in appellant's disclosure except that the disks which revolve in unison contain sprockets over which passes a single chain. Appellant has substituted a link drive for the endless chain drive.

The Board pointed out that Tone and Lafitte each showed the equivalent of appellant's link. Appellant's argument is that the general chain sprocket wear results in loss of timed motion. The Board was of the opinion that the substituting of the elements which were old in Tone and Lafitte for the general chain sprocket member in Delahaye did not require invention.

It is admitted by the Solicitor for the Patent Office that better results have been obtained by appellant than were possible to obtain by use of either of the old single devices. The Solicitor has also pointed out that in the ordinary locomotive engine a connection in the form of a bar connects all the wheels on one side so as to make the wheels turn in unison, and that such connections are old in many structures.

The board cited *Smith* v. *Nichols*, 21 Wall. 112, and quoted therefrom as follows:

> But a mere carrying forward or new or more extended application of the original thought, a change only in form, proportions, or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent.

Appellant does not contend that his disclosure shows any single new element, but contends that the combination of old elements has produced a result never obtained before; that he has made an improvement which was unobvious and now has produced an operative device which eliminates many of the defects which made the devices of the old art impracticable. He claims, therefore, to have brought himself under the line of cases which holds in substance that a combination of old elements which obtains an old result in a more facile, economical and efficient way should be protected by a patent, citing *Kryptok Co.* v. *Stead Lens Co.*, 207 Fed. 85; *Carnes Artificial Limb Co.* v. *Dilworth Arm Co.*, 273 Fed. 838; *Nelson Mfg. Co.* v. *Myers & Bros. Co.*, 25 F.(2d) 659, and numerous other decisions to the same effect.

When the case relied upon by the Board, and other cases to the same import by this and other courts, and the authorities relied upon by the appellant, are carefully considered, it is at once apparent that there is no conflict between them. It is well settled that the first one to assemble old elements which, when joined together, produce the old result but in a much improved and more economical way, may be entitled to a patent. Much depends upon the nature of the device under consideration, the character and degree of improvement made, and more particularly upon the consideration of whether or not it would be obvious to the skilled mechanic to make such a combination in order to produce such an improved result. It is true, as pointed out by appellant, that the courts have frequently sustained patents granted for the assembly of various elements old in the art in the production of an improved machine. In each instance, however, invention was present. *Carnes Artificial Limb Co.* v. *Dilworth Arm Co.*, supra; *Kimloch Tel. Co.* v. *Western Elec. Co.*, 113 Fed. 659.

The particular feature which is the essence of appellant's claimed invention is the link which causes the sleeves to work in unison. No doubt it is rigid, durable and better performs the same function performed by the sprocket and chain, but it does not seem to us that it would require anything more than mechanical skill to substitute the link for the chain, especially when we observe that the link idea is not only old in the art shown in the record, but is old in many mechanical contrivances which are familiar even to those who are unschooled in the art.

It is not clear to us that the Board was in error in the rejection of the claims and its decision is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BRENNAN

No. 3,050. Decided December 27, 1932

PATENTABILITY—METHOD OF WRAPPING MEAT CUTS AND MECHANISM THEREFOR.

Claims for a method of wrapping meat cuts and claims for means for carrying out that method *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Roy W. Johns and *Mr. Harry F. Riley* for Brennan.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

BLAND, *J.*:

Claims 9 and 11 of appellant's application for a patent were allowed by the United States Patent Office. The Examiner refused to allow, for lack of invention over the prior art, claims 13 to 17, inclusive. The Board of Appeals affirmed the action of the Examiner, and from the decision of the Board appellant has appealed to this court.

Claims 13 and 14 are illustrative and read:

> 13. In the meat packing art a conduit-shaped appliance adapted to facilitate the rapid application of fabricated tubular flexible wrappings successively to a series of oblong pieces of meat respectively as they are fed forward through said appliance in continuous succession, which appliance comprises a conduit part to receive and guide the meat therethrough, and disposed about said conduit part a wrapping supply magazine adapted to receive its charge thereon in endwise-compressed and shortened form, said magazine being positioned to feed the sleevelike wrapping material progressively over the meat as the pieces are ejected serially from the conduit part.
>
> 14. In the meat packing art, the systematic method of applying protective coverings to pieces of meat of oblong shape and substantially similar cross sectional area, which consists in compacting a long fabric tubular casing endwise into a relatively short compass, then feeding the meat pieces endwise one after another into the casing through the main body thereof and simultaneously stretching the successively remote end parts snugly over the surfaces of the corresponding meat pieces and finally separating the covered pieces by severing the connective sleeve portions.

The reference relied upon by the Board is Reisfeld, 1,292,645, January 28, 1919. The following references are also stated to be of record and are regarded as pertinent to certain claims which were added for the purpose of appeal: Read, 1,218,312, March 6, 1917; Bates, 1,353,210, September 21, 1920; Colby 1,611,268, December 21, 1926.

Appellant's disclosure relates to a method and means for wrapping food products and particularly relates to wrapping meat cuts in preparation for freezing same or for delivery of same to retail shops. The apparatus shown consists of a magazine for storing a supply of tubular knitted fabric of which magazine an inner member forms a guideway for guiding cuts of meat such as loins into wrapping position at the outlet of the magazine. At the end of the inner

member which forms the guideway for the cuts of meat is positioned a plurality of resilient fingers extending inwardly, which act to compress the meat as it emerges from the guideway. The end of the apparatus which receives the meat is enlarged so as to provide a kind of hopper. The meat is manually passed through the device and the operator draws the advanced portion of the covering over the meat, stretching it as it is applied. When the cut of meat has been withdrawn from the resilient fingers the portion of the covering immediately behind the cut being removed is severed and the severed ends of the covering on the meat are then pressed inwardly against the ends of the meat.

The Reisfeld patent relates to a machine for the filling and linking of sausages. It is not a hand operated machine. The Board of Appeals was of the opinion that the Examiner was correct in pointing out that the essential elements of appellant's apparatus as defined by the appealed claims were shown in Reisfeld, the difference being in the size of meat which may be used in the two different machines. The Board, relying upon *Cochrane et al.* v. *Deener et al.*, 1877 C. D. 242, 11 O. G. 687, held that the mere difference in size of the pieces of meat pressed and packaged did not indicate invention either in the operation performed or in the means for performing the operation.

Claim 14 includes the act of severing the connected sleeve portion. The Board stated that this was an ordinary operation in the meat packing art as disclosed in the patent to Bates.

Appellant's main contention here is that it is not obvious to modify the Reisfeld machine which was adapted to receiving sausage only and make it operate successfully in a manually operated device for wrapping pork loins and large cuts of meat.

It does not seem to us that the changes which appellant has made in the Reisfeld structure amount to invention. We concur in the views of the Board of Appeals, and its decision is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

827,351, 909,568, S. A. Ely, Safe, C. C. A., 2d Cir., Doc. 12175, *Ely Norris Safe Co.* v. *The Mosler Safe Co.* Decree reversed (notice Jan. 9, 1933).

909,568. (See 827,351.)

1,100,319, H. Moore, Rubbers, Ct. App., Dist. Col., Doc. 5584, *H. Moore* v. *Lansburgh & Bros.* Decree affirmed Jan. 16, 1933.

1,170,790, A. M. Weston, Serving device for eating houses, D. C., S. D. Ohio, W. Div., Doc. E 766, *Mapleton Corp.* v. *The Smith-Kasson Co.* Dismissed "without record" Jan. 12, 1933.

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, Rice & Kellogg, Amplifying system, filed Jan. 12, 1932, D. C., S. D. N. Y., Doc. E 73/378, *Radio Corp. of America et al.* v. *Modell's Radio Outlets, Inc., et al.*

1,180,159 (a), I. Langmuir, Incandescent electric lamp; 1,410,499, A. Pacz, Metals and their manufacture; 1,687,510, M. Pipkin, Electric lamp bulb, D. C., N. D. Calif. (San Francisco), Doc. E 3467–L, *General Electric Co.* v. *M. Seller Co. et al.* Patents held valid and infringed Dec. 30, 1932. Doc. E 3470–S, *General Electric Co.* v. *The Heyman Co., Inc.* Decree as above.

1,180,159 (b), I. Langmuir, Incandescent electric lamp; 1,410,499, A. Pacz, Metals and their manufacture; 1,423,956, Mitchell & White, Tipless incandescent lamp; 1,687,510, M. Pipkin, Electric lamp bulb, filed Jan. 12, 1933, D. C., Oreg. (Portland), Doc. E 9355, *General Electric Co.* v. *B. F. Sinsheimer.* Decree for plaintiff Jan. 16, 1933.

1,180,799, R. A. Stranahan, Spark plug; 1,529,277, O. C. Rohde, Heat resisting alloy; Des. 54,128, same, Spark plug core; 1,840,437, C. E. Dewar, Spark plug, filed Dec. 19, 1932, D. C., E. D. Mich. (Detroit), Doc. 5715, *Champion Spark Plug Co.* v. *J. Emenor et al (Detroit Spark Plug Exchange).*

1,195,632. (See 1,173,079.)

1,200,714, M. Druckerman, Embroidery, filed Jan. 20, 1933, D. C., E. D. N. Y., Doc. E 6779, *Pioneer Embroidery Works, Inc.*, v. *Columbia Embroidery Co., Inc., et al.*

1,231,764, F. Lowenstein, Telephone relay; 1,618,017, same, Wireless telegraph apparatus; 1,403,475, H. D. Arnold, Vacuum tube circuit, filed Jan. 12, 1933, D. C., S. D. N. Y., Doc. E 73/379, *Radio Corp. of America et al.* v. *Modell's Radio Outlets, Inc., et al.*

1,251,377. (See 1,173,079.)

1,277,229, B. E. Lloyd, Sounding device for dolls; 1,507,826, L. J. Grubman, same, D. C., E. D. N. Y., Doc. E 6738, *Voices, Inc.*, v. *J. Kaufman et al.* Consent decree for plaintiff Jan. 7, 1933.

1,278,985, H. D. Morton, Portable electric arc welding apparatus; Re. 15,813, 1,620,219, same, Arc welding system; 1,648,563, same, Electric arc welding apparatus; 1,648,560, same, Electric arc welding, D. C., S. D. N. Y., Doc. E 57/343, *Automatic Arc Welding Co.* v. *General Electric Co.* Dismissed (notice Jan. 4, 1933).

1,289,645, F. W. Burpee, Can opener, filed Jan. 16, 1933, D. C., W. D. Wis. (Madison), Doc. E 2181, *Burpee Can Sealer Co.* v. *National Pressure Cooker Co.*

1,304,166, R. Douglas, Food product and its method of manufacture, appeal filed Jan. 17, 1933, C. C. A., 2d Cir., Doc. —, *General Foods Corp.* v. *Seeman Bros., Inc.*

1,305,361, C. J. Holslag, Alternating current welding-transformers; Re. 16,012 (of 1,305,362), same, Method of electric arc welding, cutting and repairing; 1,305,363, same, Alternating current metallic arc cutting and welding apparatus, filed Jan. 18, 1933, D. C., N. D. Ohio, E. Div., Doc. E 4582, *Electric Arc Cutting & Welding Co.* v. *Truscon Steel Co.*

1,305,362. (See 1,305,361.) 1,305,363. (See 1,305,361.)

1,306,116, 1,883,229, W. B. Moses, Ignition apparatus; 1,375,658, C. F. Gilchrist, Dynamo-electric machine and brush holder device; 1,443,073, 1,520,287, same, Dynamo electric machine; 1,490,104, same, Brush holder; 1,735,112, same, Switch; 1,482,204, Schwarzmann & Rosner, Timer distributor; 1,517,281; L. B. Ehrlich, Dynamo; 1,669,888, P. F. Wollenweber, Ignition device; 1,676,185, 1,703,319, Gilchrist & Patterson, Combined timer and distributor, D. C., S. D. N. Y., Doc. E 57/296, *The Electric Auto-Lite Co.* v. *Automotive Mfrs., Inc., et al.* Patents sustained, injunction granted (notice Jan. 16, 1933.)

1,339,895, 1,375,298, 1,383,633, 1,547,155, H. L. Ingersoll, Booster motor for locomotives; 1,580,734, same, Controlling apparatus for booster motors; 1,380,348, R. M. Brown, Controlling mechanism for booster motors; 1,487,129, same, Safety clutch for booster motors, D. C., E. D. Pa., Doc. 4645, *H. L. Ingersoll et al.* v. *Bethlehem Steel Co.* Dismissed Jan. 6, 1933.

1,357,928, H. M. Pflager, Mounting for locomotive booster motors, D. C., E. D. Pa., Doc. 4649, *Locomotive Booster Co. et al.* v. *Bethlehem Steel Co.* Dismissed Jan. 6, 1933.

1,375,292. (See 1,339,895.) 1,375,658. (See 1,306,116.)

1,380,348. (See 1,339,895.)

1,381,325, G. J. Meyer, Soaking and washing machine; 1,536,302, Meyer & Fischer, Expanding brush, filed Jan. 28, 1933, D. C., N. D. Ohio, E. Div., Doc. 4583, *G. J. Meyer Mfg. Co. et al.* v. *Union Engineering Co. et al.*

1,383,229. (See 1,306,116.) 1,383,633. (See 1,339,895.)

1,403,475. (See 1,231,764.)

1,410,499. (See 1,180,159 (a) and (b).)

1,416,478. (See 1,614,167.)

1,423,956. (See 1,180,159 (b).)

1,437,129. (See 1,339,895.) 1,443,073. (See 1,306,116.)

1,464,380, W. R. Mestice, Coat and method of making same, filed Jan. 10, 1933, C. C. A., 2d Cir., Doc. 12511, *W. R. Mestice* v. *Oberbeck's Affiliated Stores, Inc.*

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confections, D. C., E. D. N. Y., Doc. E 6414. *Good Humor Corp. of America* v. *Blue Bird Ice Cream & Charlotte Russe, Inc.* Decree for defendant, Jan. 18, 1933.

1,482,204. (See 1,306,116.) 1,490,104. (See 1,306,116.)

1,496,537, B. Hirschhorn, Tea cartridge; 1,497,276, same, Method of manufacturing tea cartridges; Re. 16,897, T. Allatt, Bag closing machine, C. C. A., 2d Cir., Doc. 12258, *Millis Patent Holding Co., Inc.*, v. *J. Tetley & Co. et al.* Decree affirmed (notice Jan. 9, 1933).

1,497,276. (See 1,496,537.)

1,502,494, H. E. Warren, Time indicating apparatus, C. C. A., 6th Cir., Doc. 6190, *Kodel Electric & Mfg. Co. et al.* v. *Warren Telechron Clock Co.* Claims 8 and 9 held invalid Jan. 16, 1933.

1,507,826. (See 1,277,229.) 1,512,869. (See 1,660,857.)

1,512,888, L. Haft, Lighting set, D. C., S. D. N. Y., Doc. E 55/195, *Noma Electric Corp.* v. *Everbest Battery Co., Inc.* Consent decree for plaintiff (notice Jan. 11, 1933).

1,517,281. (See 1,306,116.) 1,520,287. (See 1,306,116.)

1,528,480, N. A. Henderson, Milk bottle and cream separator for use therewith, C. C. A., 10th Cir., Doc. 667, *Cream Top Bottle Corp.* v. *E. Belles et al.* Decree affirmed Jan. 3, 1933.

1,529,277. (See 1,180,799.) 1,536,302. (See 1,381,325.)

1,539,270, F. R. Peters, Locomotive booster motor construction; Re. 16,433, same, Locomotive booster motor controlling mechanism; 1,600,427, M. H. Roberts, Locomotive booster lubrication; 1,647,146, same, Locomotive booster apparatus; 1,602,124, Roberts & Peters, Locomotive booster, D. C., E. D. Pa., Doc. 4647, *Franklin Exp. Supply Co.* v. *Bethlehem Steel Co.* Dismissed Jan. 6, 1933.

1,547,155. (See 1,339,895.)

1,572,181, B. E. Byrd, Knotter device, filed Jan. 17, 1933, D. C., W. D. N. C., Doc. E 70, *Mill Devices Co., Inc.*, v. *W. A. Huffstickler et al.*

1,573,374. (See 1,173,079.) 1,580,734. (See 1,339,895.)

1,600,427. (See 1,539,270.)

1,601,465, 1,770,830, G. J. Barbour, Trickling filter floor construction, D. C., N. D. Ohio, E. Div., Doc. 4361, *The Metropolitan Paving Brick Co.* v. *American Vitrified Products Co. et al.* Patent 1,770,830 and claims 2 and 8 of 1,601,465 held infringed Jan. 11, 1933.

1,602,124. (See 1,539,270.)

1,614,167, G. D. Wilkinson, Broiler oven; 1,416,478, J. F. Lamb, Range, filed Apr. 4, 1932, D. C., M. D. Tenn. (Nashville), Doc. E 503, *Cribben & Sexton Co. et al.* v. *Phillippe & Butterff Mfg. Co.*

1,618,017. (See 1,231,764.) 1,620,219. (See 1,278,985.)

1,647,146. (See 1,539,270.) 1,648,249. (See 1,710,321.)

1,648,560. (See 1,278,985.) 1,648,563. (See 1,278,985.)

1,651,400, C. W. McKinley, Filter; 1,873,924, same, Oil filter member; 1,840,519, same, Oil filter by-pass, filed Sept. 16, 1932, D. C., N. D. Ill., E. Div., Doc. 12,259, *A-C Spark Plug Co.* v. *H. W. Cooper, Inc.*

1,658,323, L. Blackmore, Refrigerator control, D. C., S. D. Iowa, Central Div., Doc. E 4491, *Frigidaire Corp. et al.* v. *J. J. McNamara et al.* Dismissed as to McNamara, consent decree against intervening defendant, Jan. 13, 1933.

1,660,857, J. L. Breese, jr., Fluid fuel burning apparatus; 1,512,869, B. Valjean, Combustion apparatus, filed Sept. 12, 1932, D. C., N. D. Ill., E. Div., Doc. 12253, *Oil Devices Corp. et al.* v. *Sears, Roebuck & Co.*

1,669,235, J. T. Fenton, Dry cleaning system; 1,704,604, A. E. Hatfield, Purifying, dry cleaning solvent; 1,726,843, Hatfield & Alliott, Cleaning process, filed Jan. 6, 1933, D. C., E. D. Mo. (St. Louis), Doc. 10234, *Butler Mfg. Co.* v. *Enterprise Cleaning Co.*

1,669,886. (See 1,306,116.) 1,676,185. (See 1,306,116.)

1,687,510. (See 1,180,159 (a) and (b).)

1,694,702, B. B. Deitel, Vanity case; 1,715,821, same, Novelty case, D. C., S. D. N. Y., Doc. E 59/68, *B. B. Deitel* v. *Unique Specialty Corp. et al.* Dismissed (notice Jan. 17, 1933).

1,703,319. (See 1,306,116.) 1,704,604. (See 1,669,235.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, filed Jan. 20, 1933, D. C., S. D. N. Y., Doc. E 73/454, *Ruben Condenser Co. et al.* v. *A. M. Fleishheim & Co., Inc.*

1,710,321, G. E. Roedding, Furniture fixture; 1,648,249, Winters & Crampton, Hinge, C. C. A., 6th Cir., Doc. 6107, *Winters & Crampton Mfg. Co.* v. *Grand Rapids Brass Co.* Doc. 6106, *Grand Rapids Brass Co.* v. *Winters & Crampton Mfg. Co.* Patent 1,648,249 held invalid, 1,710,321 held not infringed Jan. 17, 1933, in each of above cases.

1,714,191. (See 1,710,073.) 1,715,821. (See 1,694,702.)

1,718,997. (See 1,470,524.)

1,721,391, W. H. Heise, Hearse, D. C., S. D. Calif. (Los Angeles), Doc. E V–8–J, *Big Rock Ranch Co.* v. *Coppie Automobile Works et al.* Patent held valid and infringed Jan. 9, 1933.

1,722,671, A. E. Lingo, Method of making columns, filed Jan. 28, 1933, D. C., N. D. Ohio, W. Div., Doc. E 1827, *J. E. Lingo & Son, Inc.*, v. *E. J. Walker (Gerrtel Co.) et al.*

1,726,843. (See 1,669,235.) 1,726,879. (See 1,173,079.)

1,735,112. (See 1,306,116.)

1,755,114, L. A. Hazeltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, filed Jan. 5, 1933, D. C., S. D. N. Y., Doc. E 73/339, *Hazeltine Corp.* v. *Pilot Radio & Tube Corp. et al.*

1,755,115. (See 1,755,114.)

1,763,280, 1,796,962, C. E. Trube, Electric coupling system, filed Jan. 5, 1933, D. C., S. D. N. Y., Doc. E 73/338, *Hazeltine Corp.* v. *Pilot Radio & Tube Corp. et al.*

1,770,830. (See 1,601,465.) 1,763,924. (See 1,651,400.)

1,796,962. (See 1,763,280.)

1,800,558, Moran & Lee, Goggle, filed Sept. 20, 1932, D. C., N. D. Ill., E. Div., Doc. 12260, *E. Malcom et al* v. *Protective Equipment, Inc., et al.*

1,818,079, H W. Meade, Automatic spark control, filed Jan. 11, 1933, D. C., E. D. Ill. (Danville), Doc. 530–D, *H. W. Meade* v. *Ford Motor Co. et al.*

1,831,709, J. E. Getzen, Return bend, filed Jan. 10, 1933, D. C., S. D. Tex. (Houston), Doc. E 542, *Stockham Pipe & Fittings Co. et al.* v. *Key Boiler Equipment Co., Inc.*

1,833,213, O. G. Gilstrap, Dispatching and receiving head and work-table for pneumatic system, filed Jan. 19, 1933, D. C. Oreg. (Portland), Doc. L–11946, *O. G. Gilstrap* v. *Meier & Frank Co.*

1,833,618 (a), M. E. Griffith, Plastic composition, filed Jan. 11, 1933, D. C. Conn. (New Haven), Doc. E 2266, *The A. S. Boyle Co.* v. *Western Auto Supply Co.*

1,833,618 (b), M. E. Griffith, Plastic composition; T. M. 207,843, Harrison White, Inc., Plastic preparation sold as a substitute for wood, D. C., N. D. Ohio, E. Div., Doc. E 4182, *The A. S. Boyle Co.* v. *Sheffield Bronze Powder & Stencil Co.* Patent and trade-mark held valid and infringed Jan. 5, 1933.

1,840,437. (See 1,180,799.) 1,840,519. (See 1,651,400.)

1,841,159, L. Silverman, Method of making textile fabrics, filed Jan. 21, 1933, D. C., S. D. N. Y., Doc. E 73/457, *Millinery Braid Manufacturers Research Corp.* v. *B. Sussman.* Doc. E 73/458, *Millinery Braid Manufacturers Research Corp.* v. *Ritten Knitting Mills, Inc.*

1,841,577, F. C. Fants, Return bend, filed Jan. 16, 1933, D. C., E. D. Ill. (East St. Louis), Doc. 00 *Stockham Pipe & Fittings Co. et al.* v. *Key Boiler Equipment Co., Inc.*

1,855,168, C. L. Farrand, Loud Speaker, D. C., N. D. Ill., E. Div., Doc. 12399, *Utah Radio Products Co. et al.* v. *Boston Store of Chicago, Inc.* Dismissed Nov. 16, 1932. Same, filed Oct. 17, 1932, D. C., N. D. Ill., E. Div., Doc. 12400, *Utah Radio Products Co. et al.* v. *Wieboldt Stores, Inc.* Same, D. C., E. D. N. Y., Doc. E 6601, *Utah Radio Products Co. et al.* v. *Vim Electric Co., Inc.* Decree for plaintiff Jan 20, 1933.

1,879,861, 1,879,863, H. A. Wheeler, Volume control, filed Jan. 19, 1933, D. C., S. D. N. Y., Doc. E 73/445, *Hazeltine Corp.* v. *Howard Radio Co. et al.*

1,879,863. (See 1,879,861.)

1,881,124, H. Belson, Collar attachment, filed Oct. 19, 1932, D. C., N. D. Ill., E. Div., Doc. 12417, *Crest Specialty Co.* v. *Perfection Supply Co., Inc.*

Re. 15,313. (See 1,278,985.) Re. 16,012. (See 1,305,861.)

Re. 16,483. (See 1,539,270.)

Re. 16,897. (See 1,496,537.)

Des. 54,128. (See 1,180,799.)

Des. 84,664, S. Troy, Woman's shoe, D. C., S. D. N. Y., Doc. E 69/223, *Seymour Troy et al.* v. *A. S. Beck Shoe Corp.* Consent order of discontinuance (notice Jan. 20, 1933).

Des. 87,840, C. R. Kirk, Amusement machine cabinet, filed Oct. 20, 1932, D. C., N. D. Ill., E. Div., Doc. 12418, *C. R. Kirk et al.* v. *K Wilkerson et al.*

Des. 92,892, Havana Cigar & Tobacco Factories, Ltd., Cigar, filed Dec. 30, 1932, D. C., M. D. Pa. (Scranton), Doc. 1018, *The Havana Cigar & Tobacco Factories, Ltd.*, v. *C. Snyder et al.* (*Kohler-Snyder Co.*). Same, filed Jan. 17, 1933, D. C., M. D. Pa. (Scranton), Doc. 1026, *The Havana Cigar & Tobacco Factories, Ltd.*, v. *I. Lukacher* (*Casa Blanca Cigar Co.*). Same, D. C., N. D. Ill., E. Div., Doc. 12424, *The Havana Cigar & Tobacco Factories, Ltd.*, v. *C. W. Silver & Co.* Consent decree Nov. 25, 1932.

T. M. 54,931, Cadillac Motor Car Co., Automobile; T. M. 113,351, same, Motor vehicle and parts thereof; T. M. 226,207, T. M. 201,694, General Motors Corp., Automobile, filed Oct. 18, 1932, D. C., N. D. Ill., E. Div., Doc. 12401, *General Motors Corp.* v. *J. Gard et al.*

T. M. 113,351. (See T. M. 54,931.)

T. M. 201,694. (See T. M. 54,931.)

T. M. 207,843. (See 1,838,618 (b).)

T. M. 226,207. (See T. M. 54,931.)

Disclaimers

1,324,007.—*Worthy C. Bucknam*, Jersey City, N. J. GAS-CUTTING MACHINE. Patent dated December 2. 1919. Disclaimer filed February 18, 1933, by the assignee, *Air Reduction Company, Incorporated.*

Hereby enters this disclaimer to that part of the claim in said specification which is in the following words, to wit:

"1. A gas-cutting machine comprising a support, a frame supported therefrom jointed for universal movement in a plane, a downwardly-directed torch carried by the frame, and a driven tracer connected with the frame and located over the torch.

"2. A gas-cutting machine comprising, in combination, a support, a frame supported therefrom jointed for universal movement in a plane, a downwardly-directed torch carried by the frame, a templet over the torch, and mechanical feed means carried by the frame to cooperate with said templet."

1,502,494.—*Henry E. Warren*, Ashland, Mass. TIME-INDICATING APPARATUS. Patent dated July 22, 1924. Disclaimer filed February 17, 1933, by the assignee, *Warren Telechron Company.*

Hereby enters this disclaimer to the following claims of said Letters Patent, to wit:

"8. In a clock system, the combination with a central station, an alternating current generator thereat supplying light and power through line conductors extending therefrom, and a series of secondary clocks, including a synchronous motor, at the subscribers' stations connected to said conductors, of means for changing the speed of said generator, a master clock and an indicator at the central station having a hand for indicating directly the departure of the alternations sent out by said central station from the time indicated by said master clock, whereby the attendant may be informed of the proper direction to manipulate said speed-changing means to bring said generator into synchronism with said master clock.

"9. In a clock system, the combination with a central station, an alternating current generator thereat capable of supplying current for light and power, line conductors extending therefrom, and a series of secondary clocks, including a synchronous motor, at the subscriber's station connected to said conductors, of means for changing the speed of said generator, a master clock and an indicator at the central station, said indicator having a hand indicating directly the departure of the alternations of said generator from the time indicated by said master clock, whereby the attendant may be informed of the proper direction to manipulate the speed-changing means in order to bring said generator into synchronism with said master clock."

1,855,054. *John Kelly Johnson*, Hartsdale, N. Y. HIGH-FREQUENCY COUPLING SYSTEM. Patent dated April 19, 1932. Disclaimer filed February 23, 1933, by the patentee, assignee, *Hazeltine Corporation, consenting*

Therefore, enters this disclaimer to claims 1 and 3 of said Letters Patent, to wit:

He disclaims from claim 1:

"an electrical conducting shield closely surrounding said inductances whereby the effective coefficient of coupling between said coils is of a sufficiently small magnitude so that said system as a whole tunes to the same frequency to which each of said circuits is individually tuned"

except such an electrical conducting shield closely surrounding said inductances whereby the effective coefficient of magnetic coupling between said coils is of a sufficiently small magnitude so that said system as a whole tunes to the same frequency to which each of said circuits is individually tuned.

He disclaims from claim 3:

"shielding means so situated in relation to said coils that the coupling which would exist between said coils in the absence of said means is reduced to the proper effective value to provide a single resonance characteristic"

except such a shielding means so situated in relation to said coils that the magnetic coupling which would exist between said coils in the absence of said means is reduced to the proper effective value to provide a single resonance characteristic.

Suggestion for the Use of Coupons

The execution of orders for printed copies of U. S. patents, trade-marks, etc., will be considerably expedited if coupons are used. Such coupons may be purchased at the Patent Office in lots of 20 at $2.00 and 100 at $10.00.

Coupon orders do not have to be accompanied by letters of transmittal. They require nothing but the filling in of the patent number, the name of the inventor, the date of issue, and the name and address of the party desiring the service.

TRADE-MARKS

OFFICIAL GAZETTE, MARCH 14, 1933

[VOL. 428. No. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 334,472. SIERRA TALC COMPANY, Los Angeles, Calif. Filed Jan. 30, 1933.

FIBRENE

For Minerals, Specifically Talc.
Claims use since September, 1932.

CLASS 2

Receptacles

Ser. No. 332,891. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Dec. 8, 1932.

FUDGICLE

For Wrappers and Bags Made of Glassine, Vegetable Parchment, Plain and/or Waxed Paper.
Claims use since Oct. 3, 1932.

Ser. No. 332,896. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Dec. 8, 1932.

SHERBICLE

For Wrappers and Bags Made of Glassine, Vegetable Parchment, Plain and/or Waxed Paper.
Claims use since October, 1932.

Ser. No. 334,704. AMERICAN VAULT COMPANY, Brooklyn, N. Y. Filed Feb. 7, 1933.

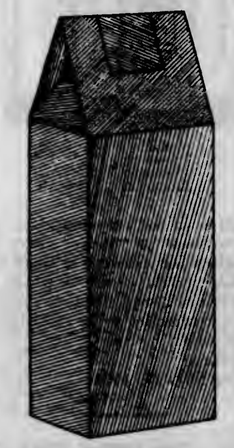
TECHSTONE

For Burial Vaults.
Claims use since Jan. 12, 1933.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 311,634. WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed Mar. 2, 1931.



The cross-hatchings are used in the accompanying drawing only for the purpose of indicating shading, and are not intended to indicate particular colors. Applicant is the owner of Trade-Mark Reg. 158,142.

For Cleaning Preparations of General Utility in Liquid, Paste, and Powder Form, Dry Cleaner, Floor Cleaner, Enamel Cleaner, Porcelain Cleaner, Metal Polish, Stove Polish, Disinfecting Soap, Sweeping Powder, Abrasive Powdered Material for Cleaning Bowls, Pipes, and the Like, Soap in Solid, Powdered, Liquid, and Paste Form.
Claims use since Nov. 1, 1906.

Ser. No. 330,143. FRED B. ASHTON, St. Louis, Mo. Filed Sept. 6, 1932.

SUDATOSINE

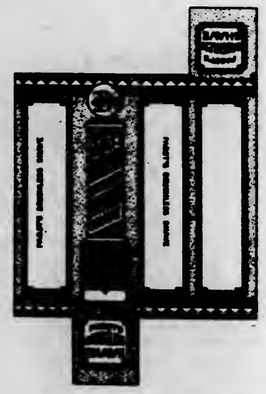
For Soap for Correcting Perspiration Odors.
Claims use since Aug. 20, 1931.

Ser. No. 332,826. JACK CUSHMAN, doing business as Wow! Soap Products Company, Hastings-on-Hudson, N. Y. Filed Dec. 6, 1932.

WOW

For Hand Soap, Which May Also be Used for General Household Purposes.
Claims use since Nov. 1, 1932.

Ser. No. 333,359. PABST PHARMACEUTICAL CO., INC., doing business as Pabst Chemical Co., Chicago, Ill. Filed Dec. 24, 1932.



No claim is made to the representation of a carton or to the words "Brushless" or "Shave" apart from the mark as shown. Although the drawing is lined to indicate red and blue and these are the colors in which the characteristic trade-mark is ordinarily printed, the lines shown in the drawing are not intended to be restrictively indicative of any particular color.
For Shaving Cream.
Claims use since Nov. 25, 1931.

Ser. No. 333,562. THE SHELBY HOME PRODUCTS CO., Shelby, Ohio. Filed Dec. 31, 1932.

LAUNDRI-AIDE

For Washing Compound for Laundry and General Household Use Having Incidental Bluing and Bleaching Properties.
Claims use since June 27, 1927.

Ser. No. 333,788. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Jan. 10, 1933.



All of the wording appearing on the drawing with the exception of the term "Fewa" is hereby disclaimed apart from the mark as shown.
For Soap Preparations.
Claims use since Nov. 15, 1932.

Ser. No. 334,052. FRANCES FLEISCHMANN, doing business as Frances Fleischmann Soap Products, West Haven, Conn. Filed Jan. 18, 1933.



The handwriting appearing on the drawing is applicant's facsimile signature. The representation of the woman's head appearing on the drawing is the portrait of the applicant.
For Facial Soap.
Claims use since Aug. 19, 1932.

Ser. No. 334,071. CHARLES MCALPIN PYLE, doing business as Pyle Manufacturing Co., New York, N. Y. Filed Jan. 18, 1933.

POL-EX

For Cleaning and Polishing Compounds for Metals, Glassware, Enameled Ware, Kitchen Utensils, and Similar Objects.
Claims use since Jan. 6, 1933.

Ser. No. 334,246. BON AMI COMPANY, New York, N. Y. Filed Jan. 23, 1933.



For Scouring Soap in Cake and Powdered Form, and Cleaning and Polishing Powder for Household Use and for Cleaning the Hands.
Claims use since Jan. 14, 1902.

Ser. No. 334,257. MANHATTAN KEROLS PRODUCTS, INC., Brooklyn, N. Y. Filed Jan. 23, 1933.



No claim is made to the representation of the carton and the words "Manufactured by," "Brooklyn, N. Y.," and "Will Not Lay the Nap" apart from the mark shown on the drawing. The vertical lines on the drawing represent red color.
For Polishes, Dressings, and Cleaning Preparations Used on Shoes.
Claims use since Dec. 1, 1932.

Ser. No. 334,588. EDITH C. TOMLIN, Washington, D. C. Filed Feb. 2, 1933.

"SOAPIES"

For Soap Powder Capsules.
Claims use since Dec. 15, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 260,585. TIMOTHY DONALD PERKINS, doing business as Ace Drug Co., San Diego, Calif. Filed Jan. 24, 1928.

ACE DRUG CO.

For Mineral Oil Used for Medicinal Purposes, Quinine, Peroxide of Hydrogen, Boric Acid in Crystal and Also Powdered Form, Citrate of Magnesia, and Antiseptic Solutions.
Claims use since Nov. 1, 1926.

Ser. No. 311,636. WEST DISINFECTING COMPANY, Long Island City, N. Y. Filed Mar. 2, 1931.



The drawing is lined to indicate shading only. Applicant is the owner of Trade-Mark Reg. 158,142.
For Air-Purifying Preparations, Antiseptics, Antiseptic Preparations, Animal Dips, Deodorants, Deodorizing Preparations, Disinfectants, Liquid Disinfectants, Disinfecting Preparations; Insecticides in Liquid, Powder, and Solid Form; Insect Powder, and Chemical Preparations for Air-Purifying Purposes.
Claims use since Nov. 1, 1906.

Ser. No. 325,911. KEEN MANUFACTURING CORPORATION, New York, N. Y. Filed Apr. 8, 1932.

THYM-O-LEA

For Shampoo for Nourishing and Stimulating the Scalp.
Claims use since July 15, 1931.

Ser. No. 326,246. AUSTRALIAN ESSENTIAL OILS LIMITED, Sydney, Australia. Filed Apr. 16, 1932.

MELASOL

For Antiseptic Solution.
Claims use since Apr. 1, 1930.

Ser. No. 329,944. GEORGE W. GOODIN, doing business as Sani-Tex Laboratories, Los Angeles, Calif. Filed Aug. 29, 1932.

SANI-TEX

For Vaginal Antiseptic.
Claims use since Jan. 1, 1930.

Ser. No. 330,260. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill. Filed Sept. 12, 1932.



The drawing of the mark is lined to indicate the colors blue and red. The symbol "℞" is disclaimed apart from the mark shown.

For Epsom Salt, German Chamomile, Borax, Bicarbonate of Soda, Henna Powder, Hair Tonics, Flaxseed, Flaxseed Meal, Boric Acid, Bay Rum, Fly Killer, Fuller's Earth, Fennel Seed, Throat Pastilles, Tooth Paste, Milk of Magnesia Tooth Paste, Mustard Powder, Astringent Mouth Wash, Milk of Magnesia, Russian Mineral Oil, Mineral Oil and Agar, Mentholated Chest Rub; Beef, Iron and Wine; Glycerin Suppositories, Rochelle Salt, Rhinitis (Half Strength), Rhinitis (Full Strength), Licorice Powder, Larkspur Lotion, Almond Lotion, Shaving Lotion Comprising 50% Alcohol Perfumed with Lavender, Oxalic Acid, Zinc Ointment, Mustard Ointment, Tincture of Iodine, Di-Bromo Oxymercury Fluorescein, Cream of Tartar, Sunburn Cream, Borated Cold Cream, Inhalant for Colds, Cold Capsules, Chlorate Potash, Cocoanut Oil Shampoo, Compound Syrup of Hypophosphites, Norwegian Cod Liver Oil, Cough Syrup, White Pine with Tar Cough Syrup; Flaxseed, Menthol, and Wild Cherry Cough Syrup; Alum Powder, Rubbing Alcohol, Antiseptic Mouth Wash, Aspirin, Aspirin Tablets, Soda Mint Tablets, Sodium Phosphate, Senna Leaves, and Sulphur.

Claims use since Sept. 1, 1930.

Ser. No. 331,061. HERBERT R. OELSCHLEGEL, doing business as Ephinol Laboratories, Douglas, Ariz., and Los Angeles, Calif. Filed Oct. 7, 1932.

EPHINOL

For Nose Drops and Spray.
Claims use since July 9, 1932.

Ser. No. 331,950. THE EDLIS BARBERS' SUPPLY CO., doing business as Debonaire Laboratories, Pittsburgh, Pa. Filed Nov. 7, 1932.



The words "Individual Prescription" and the representation of the containers of the goods are disclaimed apart from the mark shown in the drawing.

For Skin Cream and Skin Cleanser.
Claims use since October, 1932.

Ser. No. 331,986. MALCOM G. GIBBS, doing business as E. Z. Chemical Company, Washington, D. C. Filed Nov. 8, 1932.

E-Z CORN TIPS

No claim is made to the word "Corn" apart from the mark as shown.

For Medicated Corn Discs.
Claims use since Oct. 27, 1932.

Ser. No. 332,085. COLUMBIA PLUSH & PUFF CO., INC., Brooklyn, N. Y. Filed Nov. 12, 1932.

MODERN GIRL

For Nail Cream, Nail Bleach, Nail Paste, Cuticle Ice, Cuticle Cream, Deodorant Dentifrices, Nail Powder, Nail Liquid, Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Almond Creams, Vanishing Creams, Foundation Creams, Obesity Astringent, Face Bleaches, Face Packs Cream, Eyebrow and Eyelash Grower Creams, Eye Drops, Hand Lotion, Skin Lotion, Hair Salve, Hair Elixir, Hair Oils, Hair Shampoo, Hair Dyes, Bath Salts, Smelling Salts.

Claims use since Nov. 7, 1932.

Ser. No. 332,451. LEW GOLDIN PHARMACAL CO., Washington, D. C. Filed Nov. 25, 1932.

GOLDEN BALM

The words "Golden Balm" and "Quick Relief" appearing in the drawing are disclaimed except in the association shown.

For Preparation Recommended for Athlete's Foot, Ringworm, Minor Callous, Corns, Eczema, Various Skin Irritations, Cracked Skin Between Toes, Bunions, Etc.

Claims use since Nov. 9, 1931.

Ser. No. 333,256. DAVID CURTIS, doing business as De-Ce Products Co. of New York, New York, N. Y. Filed Dec. 21, 1932.

ANESTOZAL

For Surface Anesthetic for Mucous Tissue and for the Treatment of Irritations and Abrasions of the Skin.

Claims use since Oct. 3, 1932.

Ser. No. 333,603. PARKE, DAVIS & COMPANY, Detroit, Mich. Filed Jan. 3, 1933.

COSADEIN

For Cough Syrup.
Claims use since Dec. 16, 1932.

Ser. No. 333,608. RULAID, INC., Cleveland, Ohio. Filed Jan. 3, 1933.

RUL-AIDS

For Laxatives.
Claims use since Dec. 16, 1932.

Ser. No. 333,632. AARON C. HOFFMAN, doing business as Hi-Gene Co., Newark, N. J. Filed Jan. 4, 1933.

DR. HOFFMAN'S



The picture shown on the drawing is a pen illustration of the applicant.

For Medical Preparations for the Treatment of Coughs and Rheumatism.

Claims use since July 15, 1930.

Ser. No. 333,647. ROBERT C. WHITE COMPANY, Philadelphia, Pa. Filed Jan. 4, 1933.

THIOQUINOZOLE

For Concentrated Base for Insect Destroying Sprays.
Claims use since Mar. 9, 1932.

Ser. No. 333,669. THE CARBY MEDICAL CORPORATION, Elmira, N. Y. Filed Jan. 5, 1933.

TRIC for ATHLETE'S FOOT

The petitioner disclaims the use of the words "For Athlete's Foot", as appearing in the drawing.

For Foot Lotion.
Claims use since Oct. 1, 1932.

Ser. No. 333,675. BRANDFORD W. GRIFFITH, New York, N. Y. Filed Jan. 5, 1933.

Olley Ray

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Lip Sticks, Smelling Salts, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Oct. 15, 1929.

Ser. No. 333,830. LEW GOLDIN PHARMACAL CO., Washington, D. C. Filed Jan. 11, 1933.

SUNGOLD BALM
Quick Relief

The words "Balm" and "Quick Relief" appearing in the drawing are disclaimed except in the association shown.
For Preparation Recommended for Athlete's Foot, Ringworm, Itching, Eczema, Corns, Bunions, Callous, Cracked Skin Between Toes, and Various Skin Irritations.
Claims use since Jan. 9, 1933.

Ser. No. 333,837. NICOLA PASSALACQUE, doing business as Epiphany Chemical Company, Pittsburgh, Pa. Filed Jan. 11, 1933.

GON-A-WA

For Germicidal Detergent for the Treatment of Gonorrhea.
Claims use since Dec. 12, 1932.

Ser. No. 333,845. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 11, 1933.

EUNERCIN

For Products for Use as an Assistant for Mercerising and Similar Treatment on Vegetable and Artificial Fibres.
Claims use since Oct. 14, 1932.

Ser. No. 333,887. LESQUENDIEU, INCORPORATED, New York, N. Y. Filed Jan. 13, 1933.

FLOZOR

For Preparations for Shampooing and for Brightening the Hair and Restoring and Preserving its Lustre and Sheen, and Brilliantine, Liquid and Solid.
Claims use since Jan. 22, 1920.

Ser. No. 333,931. FRANK DRUG CORPORATION, New York, N. Y. Filed Jan. 14, 1933.

LOMEL

For Pharmaceutical Preparation—Namely, a Laxative.
Claims use since Dec. 1, 1932.

Ser. No. 333,954. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Jan. 14, 1933.

NAPHTONE

For Naphthenic Acids and Their Derivatives.
Claims use since Jan. 4, 1933.

Ser. No. 334,016. SOPHIE MAUTWITZ, doing business as The Ab-So-Cur Company, Berwyn, Ill. Filed Jan. 17, 1933.

-AB-SO-CUR-

For Salve Used in the Treatment of Piles.
Claims use since Dec. 10, 1930.

Ser. No. 334,290. PUBLICKER COMMERCIAL ALCOHOL COMPANY, Philadelphia, Pa. Filed Jan. 24, 1933.

FREEZ-PRUF

No claim being made to the words "Freez Pruf" apart from the mark as shown.
For Anti-Freeze Compounds.
Claims use since Jan. 12, 1933.

Ser. No. 334,629. WILBUR C. ANDERSON, doing business as Lexa Laboratories Co., Dayton, Ohio. Filed Feb. 4, 1933.

LEXA

For Headache Tablet.
Claims use since Jan. 13, 1933.

CLASS 11

Inks and Inking Materials

Ser. No. 333,813. TECHNICAL SUPPLY COMPANY, Scranton, Pa. Filed Jan. 10, 1933.

TESCO

For Writing Fluids—Namely, Drawing Inks.
Claims use since Jan. 1, 1913.

Ser. No. 334,221. CHARLES A. BOHLL, doing business as Inter-State Ribbon & Carbon Company, Cleveland, Ohio. Filed Jan. 21, 1933.

TRU-RITE

For Typewriter Ribbons and Carbon Papers.
Claims use since Oct. 1, 1928.

CLASS 12

Construction Materials

Ser. No. 332,477. ALEXANDER AITKEN, doing business as The Stonetone Company, New York, N. Y. Filed Nov. 26, 1932.

Tindertone

For Plastic Coating Compositions.
Claims use since June 1, 1932.

Ser. No. 333,850. COPLAY CEMENT MANUFACTURING COMPANY, Coplay, Pa. Filed Jan. 12, 1933.

HYPER-CEMENT

No claim is made to the word "Cement" apart from the mark shown in the drawing.
For Cement Used for Building Purposes.
Claims use since Dec. 6, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 333,140. THE BALTIMORE STEEL CO., Baltimore City, Md. Filed Dec. 17, 1932.

HYDRO-LATOR

For Green Grocers' Spraying Racks.
Claims use since Sept. 10, 1932.

Ser. No. 333,182. BLUE RIBBON PRODUCTS CO., INC., San Francisco, Calif. Filed Dec. 19, 1932.

IRCO

For Coffee Cooker and Heater.
Claims use since June 30, 1932.

Ser. No. 333,701. EDWARD C. BOWERS and CHARLES L. FELDMAN, receivers for Wickwire Spencer Steel Company, New York, N. Y. Filed Jan. 6, 1933.

CLEVR-CLOSR

No claim is made to the word "Closr" apart from the mark as shown.
For Door Springs.
Claims use since Dec. 1, 1932.

Ser. No. 334,579. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 2, 1933.

MODERN DAIRYMAN

For Milk Can Strainers.
Claims use since 1929.

Ser. No. 334,653. SANITOL SANITARY CORPORATION, New York and Glendale, N. Y. Filed Feb. 4, 1933.

SANITOL

For Toilet Seats.
Claims use since Jan. 30, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,378. WILLIAM WEINER, New York, N. Y., assignor to Van Tine Laboratories, Inc., a Corporation of New York. Filed Mar. 22, 1932.

E. Z. WAX

No claim is made to the word "Wax" apart from the mark shown in the drawing.
For Prepared Liquid Wax.
Claims use since December, 1929.

Ser. No. 333,672. COOK & DUNN PAINT CORPORATION, Newark, N. J. Filed Jan. 5, 1933.

RICHMUND

For Dry, Paste, and Ready-Mixed Paints, Varnishes, Lacquers, Paint Enamel, Liquid Polish for Automobiles and Furniture.
Claims use since November, 1930.

Ser. No. 333,953. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif. Filed Jan. 14, 1933.

NAPHTONE

For Paint Driers.
Claims use since Jan. 4, 1933.

Ser. No. 334,067. MUNDO PRODUCTS, INC., New York, N. Y. Filed Jan. 18, 1933.

FANTAN

For Surface Finishing Preparations—Namely, Paint Enamels and Varnish Stains.
Claims use since Jan. 10, 1933

Ser. No. 334,304. COOK & DUNN PAINT CORPORATION, Newark, N. J. Filed Jan. 25, 1933.

For Dry, Paste, and Ready Mixed Paints, Varnishes, Lacquers, Paint Enamel, Liquid Polish for Automobiles and Furniture.
Claims use since Apr. 1, 1932.

Ser. No. 334,645. THE MARIETTA PAINT & COLOR COMPANY, Marietta, Ohio. Filed Feb. 4, 1933.



For Varnishes.
Claims use since Jan. 1, 1905.

Ser. No. 334,646. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio. Filed Feb. 4, 1933.

GLOW TONE

For Water and Wear Resisting Finish for Interior Walls, Woodwork, and Furniture.
Claims use since Nov. 1, 1929.

Ser. No. 334,676. M. EWING FOX CO., INC., New York, N. Y. Filed Feb. 6, 1933.

REALTEX

For Water Paint in Dry Form.
Claims use since Oct. 26, 1932.

CLASS 17

Tobacco Products

Ser. No. 332,895. MAX AMSTER, New York, N. Y. Filed Nov. 28, 1932.

Honey Clover

For Cigarettes.
Claims use since February, 1932.

Ser. No. 333,902. WEBSTER EISENLOHR, INC., New York, N. Y. Filed Jan. 18, 1933.

FLOR DE GIRARD



The picture and signature forming a part of the mark sought to be registered is that of Stephen Girard, who died prior to the making of this application.
For Cigars.
Claims use since July 19, 1923.

Ser. No. 334,352. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Jan. 26, 1933.

Happy Gal

For Cigarettes.
Claims use since Jan. 25, 1933.

Ser. No. 334,353. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Jan. 26, 1933.

HG

For Cigarettes.
Claims use since Jan. 25, 1933.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,531. TRUCKSEAL DELIVERY COMPANY, Brooklyn, N. Y. Filed Apr. 26, 1932.

TRUCKSEAL

For Motor-Driven Truck Bodies.
Claims use since Nov. 1, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 331,059. THE MONOWATT ELECTRIC CORPORATION, Bridgeport, Conn. Filed Oct. 7, 1932.

MONCOR

For Electrical Wiring Devices Consisting of Plugs, Caps, Taps, Sockets, Double Socket Plugs, Triple Socket Plugs, Receptacles, Outlets, Boxes, Wall Plates, Switches, Blocks, Connectors, Adapters, Flashers, Cords and Cord Sets.
Claims use since July 26, 1932.

Ser. No. 332,008. BUD RADIO, INC., Cleveland, Ohio. Filed Nov. 9, 1932.

BUD

For Radio Apparatus, Supplies, and Equipment Consisting of Radio Sets for Sending and Receiving; Short Wave Converters, Speakers, Aerial Eliminators, Speaker Extension Cords, Tone Controls, Coil Forms, Speaker Plugs, Extension Cord Plugs, Aerial Filters, Voltage Controls, Resistors, Transformers, Interference Filters, Adapters, Sockets, Test Leads, Auto Radio Aerials, Spark Plug Suppressors, Generator Suppressors, Auto Radio Silencer Kits, Variable Condensers, Tip Jacks, Sure Grip Jacks, Sub-Panel Sockets, Phone Plugs, Solderless Plugs, Jacks, Screen Grid Caps, Selector Switches, Universal Aerials, Portable Outlet Cords, Portable Under Rug Banding, Tube Shields, Screen Grid Extension, Electric Extension Cords, Speaker Cords, Phone Cords, Speaker Extension Cords, Aerial Wires, Magnet Wires, Lead-In Wires, Dial Cables, Hook-Up Wires, Shielded Wires, Push Back Wires, Wire Cables, Knife Switches, Aerial Kits; Aerial Equipment Consisting in Ground Clamps, Lead-In Strips, Ground Rods, Strain Insulators, Screw-Eye Insulators, Stand-Off Insulators, and Lightning Arresters; Condensers, Fixed Resistors, Radio Frequency Chokes, Transmitting Chokes, Dials, Cable Plugs, Microphone Cables, Microphone Cable Extensions, Tube Bases, Tube Adapter Forms, Soldering Iron Tips, Transmission Cables, Volume Controls; Short Wave and Television Kits for Transmitting and Receiving, Short Wave and Television Le-Coil Kits for Transmitting and Receiving, Code Practice Sets, Power Transformers, Audio Transformers, Push Pull Transformers, Input Transformers, Output Transformers, Filament Transformers, Microphone Transformers, Radio Convenience Outlets, Microphone Stands, Microphone Rings, Microphone Springs, Microphone Receptacles, Microphone Plugs, Knobs, Toggle Switches, Rotary Switches, Binding Posts, Terminals.
Claims use since December, 1928.

Ser. No. 332,971. UNION OIL COMPANY, Parsons, Kans., and North Kansas City, Mo. Filed Dec. 10, 1932.

CO-OP

For Storage (Wet Cell) Batteries.
Claims use since Jan. 1, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,392. BOYCE W. KNIGHT, doing business as B. W. Knight Mfg. Co., Chicago, Ill. Filed Dec. 27, 1932.

Swingmaster

For Golf Club Weights—Namely, a Device to be Detachably Added to the Head of a Golf Club to Add Weight Thereto.
Claims use since Nov. 30, 1932.

Ser. No. 333,617. JOHN P. STOCKBRIDGE, INC., New York, N. Y. Filed Jan. 3, 1933.

L

PENFOLD

L

For Golf Balls.
Claims use since Nov. 14, 1931.

Ser. No. 334,286. MATT F. LATHERS, Orlando, Fla. Filed Jan. 24, 1933.

BATTY BASE BALL

No claim is made to the words "Base Ball" apart from the mark shown on the drawing.
For Hand Paddle and Ball Game of the Bandalore Type.
Claims use since Nov. 17, 1932.

Ser. No. 334,642. S. H. KRESS & CO., New York, N. Y. Filed Feb. 4, 1933.

BILLY BOY

For Dolls.
Claims use since Sept. 5, 1932.

Ser. No. 334,705. ▼ CONSOLIDATED LITHOGRAPHING CORPORATION, Brooklyn, N. Y. Filed Feb. 7, 1933.

Master Piece

For Jigsaw Puzzles.
Claims use since Feb. 2, 1933.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 326,419. FILECRAFT, INC., Cleveland, Ohio. Filed Apr. 23, 1932.

TRUARC

For Files, Including Curve Tooth Files.
Claims use since Apr. 1, 1928.

Ser. No. 326,426. KARMELKORN CORPORATION, Rockford, Ill. Filed Apr. 28, 1932.

KARMELKORN

For Machines for Popping and Treating Popcorn.
Claims use since Jan. 6, 1931.

Ser. No. 332,357. TUCKEND BLADE CO., Cincinnati, Ohio. Filed Nov. 21, 1932.

TEMPO

For Razor Blades.
Claims use since Nov. 11, 1932.

Ser. No. 332,639. UNITED STATES EQUIPMENT CORPORATION, New Brighton, Pa. Filed Nov. 30, 1932.

JUISTRACTOR

For Fruit Juice Extractor.
Claims use since Sept. 26, 1932.

Ser. No. 333,032. GILLETTE SAFETY RAZOR COMPANY, Boston, Mass. Filed Dec. 13, 1932.

PALM

For Safety Razors and Safety Razor Blades.
Claims use since Mar. 24, 1891, on razors; since December, 1929, razor blades.

Ser. No. 333,180. BAR APPARATUS, INC., New York, N. Y. Filed Dec. 19, 1932.



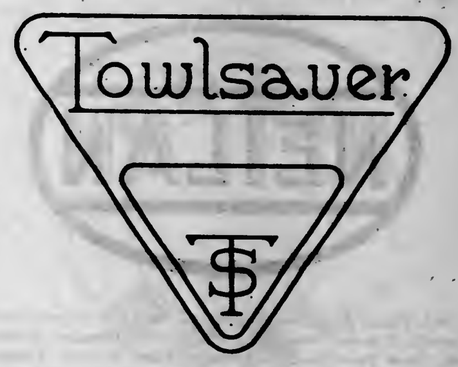
The words "It Saves" are disclaimed apart from the mark shown in the drawing.
For Fountains for Dispensing Soft Drinks.
Claims use since Dec. 14, 1932.

Ser. No. 333,315. THOMAS A. EDISON, INCORPORATED, West Orange, N. J. Filed Dec. 28, 1932. Under section 5b of the act of 1905 as amended in 1920.

Edison

For Machines for Shaving Sound Record Tablets and Parts Thereof.
Claims use since 1905.

Ser. No. 333,618. TOWLSAVER, INC., Los Angeles, Calif. Filed Jan. 3, 1933.



The word "Towlsaver" is disclaimed apart from the other features of the mark shown in the drawing.
For Paper Towel Dispensing Machines.
Claims use since June 18, 1932.

Ser. No. 334,297. AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed Jan. 25, 1933.

JURY

For Safety Razors and Safety Razor Blades.
Claims use since Jan. 18, 1933.

CLASS 25

Locks and Safes

Ser. No. 334,691. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 6, 1933.



For Padlocks and Wall Safes.
Claims use since Nov. 28, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 323,350. NEILAN CO., LTD., Los Angeles, Calif. Filed Jan. 23, 1932.

NEILAN

For Steam Pressure Control Devices and Regulators—Namely, Pressure Recording Controllers, Pressure Recorders, Flow Recording Controllers, Flow Meters, Temperature Recording Controllers, Temperature Recorders, Temperature Controllers, Differential Limit Controllers, Pressure Controllers.
Claims use since May 5, 1926.

Ser. No. 327,608. SOCIÉTÉ ANONYME DES USINES CHAUSSON, Asnieres, France. Filed May 31, 1932.

HERCULE

For Thermostats.
Claims use since Feb. 16, 1926.

Ser. No. 331,411. ROCKWOOD SPRINKLER COMPANY OF MASSACHUSETTS, Worcester, Mass. Filed Oct. 20, 1932.

SPRINK-LA-STAT

For Sprinkler Actuated Thermostat for Fire Detection Apparatus.
Claims use since Sept. 23, 1932.

Ser. No. 333,721. WAK INCORPORATED, Charlotte, N. C. Filed Jan. 6, 1933.

WAK

For Pick Counters for Textile Machines and Revolution Recording Devices.
Claims use since Oct. 11, 1932.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 333,073. KRESGE DEPARTMENT STORE CORPORATION. Newark, N. J. Filed Dec. 14, 1932.

K·D·S

For Jewelry for Personal Wear not Including Watches, Flat and Hollow Silver and Silver Plated Table Ware, Flat and Hollow Silver and Silver Plated Toilet Ware and Ornamental Vases and Watch Chains, Neck Chains, and Finger Rings.
Claims use since Feb. 1, 1927.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 334,237. JOHN A. WEIS, New York, N. Y. Filed Jan. 21, 1933.

Tilta

For Tooth Brushes.
Claims use since July 1, 1929.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 333,505. THE COORS PORCELAIN COMPANY, Golden, Colo. Filed Dec. 30, 1932.

THERMO

For Porcelain Teapots, Drip Coffee Makers, Casseroles, Pie Plates, Service Trays, Salt and Pepper Shakers, Bowls, Sugar and Creamers, Refrigerator Sets and Cake Spatulas, All of China or Porcelain.
Claims use since Dec. 1, 1928.

Ser. No. 334,340. JOHN L. PASMANTIER, New York, N. Y. Filed Jan. 25, 1933.

Hotdrip Coffeemaker

All words shown on the drawing are hereby disclaimed apart from the trade-mark as shown.
For Porcelain and Earthenware Coffee Pots.
Claims use since Jan. 1, 1932.

CLASS 31

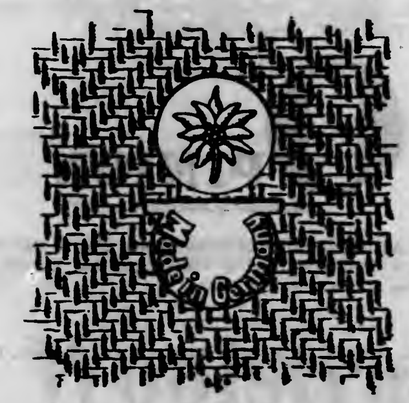
Filters and Refrigerators

Ser. No. 329,158. THE SPARKS-WITHINGTON COMPANY, Jackson, Mich. Filed July 28, 1932.

SPARTON

For Electrical Household and Store Refrigerating Apparatus and Water-Cooling Apparatus, and Air-Conditioning Apparatus, Used for the Preservation of Foodstuffs.
Claims use since Jan. 12, 1932.

Ser. No. 334,008. OTTO ERICH GIESE, New York, N. Y. Filed Jan. 17, 1933.



The words "Made in Germany" are disclaimed apart from the mark shown in the drawing.
For Filtering Materials—Namely, Masse, Pulp.
Claims use since January, 1900.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 328,722. THE SKINNER CHUCK COMPANY, New Britain, Conn. Filed Feb. 1, 1932.

GOLD SEAL

For Piston Rings.
Claims use since Dec. 5, 1931.

Ser. No. 329,285. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio. Filed Aug. 2, 1932.

ONE-STOP

For Tire Covers.
Claims use since Jan. 28, 1930.

Ser. No. 330,398. THE DAYTON RUBBER MANUFACTURING COMPANY, Dayton, Ohio. Filed Sept. 16, 1932.

THOROFARE

For Vehicle Tires and Inner Tubes Made of Rubber and Rubber and Fabric.
Claims use since Aug. 5, 1932.

Ser. No. 333,703. EXCELSIOR LEATHER WASHER MANUFACTURING CO., Rockford, Ill. Filed Jan. 6, 1933.

XL

For Cup Leathers, Valve and Plunger Leathers, Flange Leathers, U and V Leathers, and Leather Washers and Gaskets.
Claims use since 1917.

Ser. No. 334,268. SCHACHT RUBBER MANUFACTURING CO., Huntington, Ind. Filed Jan. 28, 1933.

CHAMPION

For Fruit Jar Rings and Rubbers.
Claims use since Jan. 2, 1933.

CLASS 36

Musical Instruments and Supplies

Ser. No. 333,810. NEW ERA SPECIALTIES CORPORATION, New York, N. Y. Filed Jan. 10, 1933.

DISKADAPT

For Phonograph Turntable Drives.
Claims use since Dec. 9, 1932.

Ser. No. 334,138. CHICAGO MUSICAL INSTRUMENT COMPANY, Chicago, Ill. Filed Jan. 20, 1933.

Rhythm King

For String Instruments—Namely, Guitars and Banjos.
Claims use since January, 1930.

CLASS 37

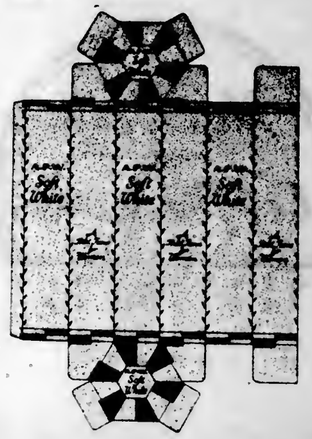
Paper and Stationery

Ser. No. 330,417. BLAISDELL PENCIL COMPANY, Philadelphia, Pa. Filed Sept. 17, 1932.



For Lead Pencils.
Claims use since Dec. 11, 1922.

Ser. No. 334,708. A. P. W. PAPER COMPANY, INC., Albany, N. Y. Filed Feb. 7, 1933.



The terms "Soft White" and "A Toilet Tissue for Women" are disclaimed apart from the mark as shown in the drawing. The representation of the carton per se is disclaimed. The hatching is to indicate the colors blue and silver, in which colors the mark has been displayed, but the right to display the mark in other colors is not waived.
For Toilet Tissue.
Claims use since Jan. 25, 1933.

Ser. No. 334,717. SCOTT PAPER COMPANY, Chester, Pa. Filed Feb. 7, 1933.

SCOTTIES

For Facial Tissues.
Claims use since Jan. 26, 1933.

CLASS 38

Prints and Publications

Ser. No. 323,620. JEWISH OPINION PUBLISHING CORP., New York, N. Y. Filed Jan. 30, 1932.

OPINION
A Journal of Jewish Life and Letters

For Announcements and Publications, and in Particular for a Weekly Journal of Jewish Life and Letters.
Claims use since Nov. 6, 1931.

Ser. No. 334,554. CRANDALL, PIERCE & Co., Chicago, Ill. Filed Feb. 2, 1933.

CRANDALL'S CORPORATION ANALYST

For Publication Issued Periodically.
Claims use since Aug. 6, 1932.

CLASS 39

Clothing

Ser. No. 316,909. LEVI STRAUSS AND COMPANY, San Francisco, Calif. Filed July 18, 1931.

L S CO. Menlo

The word "Menlo" is disclaimed except as used in connection with the balance of the mark as shown.
For Men's and Boys' Negligee Shirts, Dress Shirts, Jumper Shirts, Blouse Shirts, Overalls, Pants, Sweaters, Pajamas, Night-Shirts; and Knitted and Textile Fabric Underwear for Men, Women, and Children.
Claims use since May 12, 1931.

Ser. No. 318,955. JOHN T. RIDDELL, INC., Chicago, Ill. Filed Sept. 11, 1931.



For Shoes, Particularly Athletic Shoes Made of Leather, Rubber, Fabric, and Combinations of These Materials.
Claims use since Jan. 8, 1929.

Ser. No. 331,583. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Oct. 26, 1932.

Woolstra

For Ladies' Underwear and Hosiery.
Claims use since June 7, 1932.

Ser. No. 332,061. THE WALKER T. DICKERSON COMPANY, Columbus, Ohio. Filed Nov. 11, 1932.

TARSAWEDGE WELT ARCH-LOCK-SHOE

The words "Welt" and "Shoe" are disclaimed apart from the mark as shown.
For Shoes Made of Leather, Leather and Fabric, and the Combination of Leather, Rubber, and Fabric.
Claims use since Nov. 1, 1932.

Ser. No. 333,005. LUXITE SILK PRODUCTS CO., Milwaukee, Wis. Filed Dec. 12, 1932.

Luxite Slenderwear
SLENDERIZING UNDERWEAR

Exclusive use to the words "Slenderizing Underwear" and "Slenderwear" is disclaimed apart from the other features of the trade-mark as shown in the drawing.
For Underwear and Foundation Garments for Women.
Claims use since Dec. 6, 1932.

Ser. No. 333,111. THE MENIHAN COMPANY, Rochester, N. Y. Filed Dec. 16, 1932.

Foot WEDGE

For Shoes.
Claims use since Apr. 18, 1932.

Ser. No. 333,135. WOHL SHOE COMPANY, St. Louis, Mo. Filed Dec. 16, 1932.

Styleader SHOES

The word "Shoes" appearing on the drawing is disclaimed apart from the other features of the mark.
For Shoes, Particularly for Women's and Misses' Shoes, Boots, Overshoes, and Felt House Slippers Made of Plain and Fancy Leathers, Satins, Velvets, Straws, Rubber, Felt, and Metal Cloth, and Combinations of These Materials, for Street and Dress Wear.
Claims use since Nov. 1, 1932.

Ser. No. 333,345. JOHN WITTMEYER, New York, N. Y. Filed Dec. 23, 1932.

LONDON ARCH ALL LEATHER

Applicant disclaims the right to the exclusive use of all the wording appearing on the drawing.

For Shoes, Slippers, and Rubbers, Which are Made of Leather, Rubber, and Fabric.

Claims use since July 3, 1932.

Ser. No. 333,494. ARKWRIGHT MERCHANDISING CORPORATION, New York, N. Y. Filed Dec. 30, 1932.

Jr. TOWN

For Coats, Suits, Pants, Sweaters, Hats, Caps, Dress, Work, and Under Shirts; Drawers; Shoes Made of Leather, Fabric, Rubber, and Combinations Thereof, Union Suits, and Neckties, All for Men and Boys, and Hosiery for Men and Women.

Claims use since Jan. 30, 1930.

Ser. No. 333,521. MANDEL & COHEN, New York, N. Y. Filed Dec. 30, 1932.

SPRING MAID

For Coats, Suits, Skirts, Hats, Shoes of Leather, Fabric, Rubber and/or Combinations Thereof; Blouses, Corsets, Brassières, Hosiery, Bathing Suits, Sweaters, Step-Ins (Drawers), Pajamas, Kimonos, Bath Robes All for Women and Children.

Claims use since Aug. 14, 1911.

Ser. No. 333,597. LORRAINE MANUFACTURING COMPANY, Pawtucket, R. I. Filed Jan. 3, 1933.

SHIR-O-SHAKKAR

For Women's and Girls' Skirts, Waists, Suits, Coats, and Pajamas; Children's Rompers, Dresses, and Suits; Men's and Boys' Suits, Coats, Trousers, and Pajamas.

Claims use since Nov. 9, 1931.

Ser. No. 333,930. KOPS BROTHERS, INC., New York, N. Y. Filed Jan. 14, 1933.

TRIMS

For Corset Girdles.

Claims use since Apr. 26, 1932.

Ser. No. 334,141. CONTINENTAL MILLS, INC., Philadelphia, Pa. Filed Jan. 20, 1933.

ANCUNA

For Men's and Boys' Overcoats, Men's and Boys' Topcoats, Men's, Boys', Women's, and Girls' Cloaks and Capes; Men's, Boys', Women's, and Girls' Suits; Men's, Boys', Women's, and Girls' Jackets; Men's and Boys' Vests, and Men's and Boys' Trousers.

Claims use since Dec. 21, 1932.

Ser. No. 334,295. PURITAN UNIFORM CO., INC., New York, N. Y. Filed Jan. 19, 1933.

IMEDION

For Nurses' Uniforms, Maids' Uniforms, and Uniform Dresses.

Claims use since Nov. 5, 1932.

Ser. No. 334,349. CURLEE CLOTHING COMPANY, St. Louis, Mo. Filed Jan. 26, 1933.

SUMMERHAVEN

For Men's and Boys' Suits.

Claims use since Jan. 17, 1933.

CLASS 40

Fancy Goods, Furnishings, and Notions

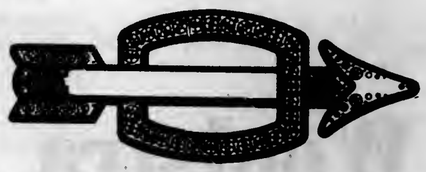
Ser. No. 323,259. THE UNION PIN COMPANY, Winsted, Conn. Filed Jan. 21, 1932.

Trupoint

For Pins of the Type Usually Designated as Toilet Pins and Including Bank and Office Pins.

Claims use since June 1, 1912.

Ser. No. 333,680. MORRIS LUCOMLIN, doing business as The Luco Novelty Company, New York, N. Y. Filed Jan. 5, 1933.



For Ornamental Mountings Intended for Use on Articles of Clothing and Made of Material Other Than Precious Metals—Namely, Buckles, Clasps, Clips, and Millinery Ornaments.

Claims use since Dec. 15, 1930.

Ser. No. 333,945. HENRY POLLAK, INC., New York, N. Y. Filed Jan. 14, 1933.

Picotine

For Straw Braids.

Claims use since Nov. 18, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 316,294. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed June 25, 1931.

VELVANESE

For Fabrics in the Piece Made Wholly or Partially of Cellulose Derivatives.

Claims use since June 22, 1931.

Ser. No. 330,826. NOVELTEX, INC., New York, N. Y. Filed Sept. 30, 1932.

The Aprinette

For Cotton Cloth to be Made into Aprons.

Claims use since Mar. 31, 1932.

Ser. No. 331,623. SAMUEL MCCRUDDEN & CO., LIMITED, Belfast, Ireland. Filed Oct. 27, 1932.

IRIS-LIN

For Handkerchiefs, Both Ladies' and Gentlemen's.

Claims use since Apr. 1, 1915.

Ser. No. 332,345. E. MEYER & CIE., SOCIETE ANONYME, Paris, France. Filed Nov. 21, 1932.

CYNGALYA

For Wool Fabrics in the Piece.

Claims use since June 1, 1932.

Ser. No. 334,089. DUMARI TEXTILE CO., INC., New York, N. Y. Filed Jan. 19, 1933.

POWDER ROOM

For Fabrics in the Piece, Made of Cotton, Rayon, Silk, Wool, and/or Combinations of the Same.

Claims use since Nov. 7, 1932.

Ser. No. 334,176. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Allura

For Woolen Piece Goods.

Claims use since Dec. 1, 1932.

Ser. No. 334,177. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Alva

For Woolen Piece Goods.

Claims use since Dec. 1, 1932.

Ser. No. 334,181. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Cortara

For Woolen Piece Goods.

Claims use since Dec. 1, 1932.

Ser. No. 334,182. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Danta

For Woolen Piece Goods.

Claims use since Dec. 1, 1932.

Ser. No. 334,183. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Elta

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,188. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Kildra

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,189. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Maple Bark

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,190. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Marga

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,192. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Nigra

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,194. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Pikketta

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,195. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Ranga

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,197. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Tamzeen

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,198. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Tilda

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,199. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Twilga

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,200. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Valora

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,202. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Viella

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,456. WULLSCHLEGER & CO., New York, N. Y. Filed Jan. 28, 1933.

TECHNOCRACY PRINTS

No rights are asserted to the exclusive use of the word "Prints" apart from the mark as shown.
For Silk Goods in the Piece.
Claims use since Jan. 23, 1933.

CLASS 43

Thread and Yarn

Ser. No. 332,130. STEINBERGER BROS. INC., New York, N. Y. Filed Nov. 14, 1932.

WONDER-RAY

For Yarns of Cotton, Silk, Rayon, Wool, and Angora, and Mixtures Thereof.
Claims use since 1930.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser No. 331,872. GOODYEAR RUBBER CO. INC., New York, N. Y., assignor to L. E. Shunk Latex Products, Inc., Akron, Ohio, a Corporation of Ohio. Filed Oct. 19, 1932.



The color of the trade-mark is defined as a part thereof, the word "Hytex" and a portion of the border being colored red and the main portion of the background being colored green, the drawing illustrating the mark being appropriately lined to indicate this color.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 1, 1932.

Ser. No. 331,915. BECTON, DICKINSON & CO., Rutherford, N. J. Filed Nov. 5, 1932.

GUIDE LINE

For Clinical Thermometers.
Claims use since August, 1930.

Ser. No. 332,133. THOMAS S. WARREN, Los Angeles, Calif. Filed Nov. 14, 1932.

LIFE LITE
ULTRA-VIOLET

The words "Ultra-Violet" are disclaimed apart from the mark as shown.
For Therapeutic Devices, and More Particularly a Hand Manipulated Therapeutic Device to be Moved Over the Body.
Claims use since Nov. 1, 1932.

Ser. No. 333,653. DR. ERNEST SILTEN, Berlin, Germany. Filed Jan. 3, 1933.

Aerifier

For Apparatus Adapted for the Treatment of Diseases of the Respiratory Organs.
Claims use since Aug. 2, 1932.

Ser. No. 333,717. THE PYRAMID RUBBER COMPANY, Ravenna, Ohio. Filed Jan. 6, 1933.

LULLABY

For Nursing Nipples.
Claims use since Dec. 1, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 334,140. CITRUS JUICE & FLAVOR CO., LTD., Los Angeles, Calif. Filed Jan. 20, 1933.

Kings Court

For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks, and Extracts and Syrups.
Claims use since Mar. 1, 1932.

Ser. No. 334,808. GREEN HORSE BEVERAGE CO., Detroit, Mich. Filed Jan. 25, 1933.



For Non-Alcoholic, Maltless Beverages Sold as Soft Drinks.
Claims use since Aug. 27, 1932.

Ser. No. 334,568. FLOYD SAMUEL LERCH, Hellertown, Pa. Filed Feb. 2, 1933.

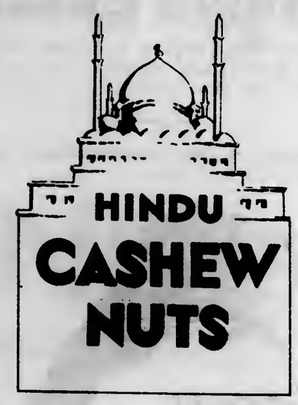


For Non-Alcoholic, Non-Cereal, Maltless Beverages, Sold as Soft Drinks and Sirups and Extracts for Making the Same.
Claims use since Aug. 1, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 309,601. NORTHWESTERN SUPPLY COMPANY, INC., New York, N. Y. Filed Jan. 3, 1931.



No registration rights are herein claimed for the words "Cashew Nuts" and "Hindu" except in the particular arrangement and association in which they appear with the rest of the trade-mark as shown on the drawing.
For Edible Nuts Roasted and/or Salted, Particularly Cashew Nuts.
Claims use since Aug. 7, 1930.

Ser. No. 311,693. PHILADELPHIA MALT EXTRACT CO., Philadelphia, Pa. Filed Mar. 3, 1931.



No claim is made to the words "Malt Syrup", "Philadelphia Malt Extract Co., Philadelphia, Pennsylvania", except in the relation and association shown.
For Malt Syrup.
Claims use since 1926.

Ser. No. 311,980. GEORGE SATIR, Westmoreland, Calif. Filed Mar. 10, 1931.

DESERT CALL

For Fresh Lettuce, Fresh Tomatoes, Fresh Peas, Fresh Cantaloupes, and Fresh Grapefruit.
Claims use since Feb. 27, 1931.

Ser. No. 320,793. PARKWAY DISTRIBUTING CO., INC., Philadelphia, Pa. Filed Nov. 4, 1931.



No claim is made to the words "Never Beaten" apart from the mark shown. The drawing is lined for yellow.
For Foods and Ingredients of Foods—Namely, Cakes, Pretzels, Mayonnaise, Apple Butter, Horse Radish, Pickles, Peanut Butter, Noodles, Potato Chips; Relishes—Namely, Indian Relish, Pimento Relish, Sweet Relish, Cucumber Relish, Sour Relish, Italian Hot Relish, Spanish Hot Relish, Chow-Chow, Sweet Pickles, Sour Pickles, Sweet Mixed Pickles, Sweet Onions, Sour Onions, Sweet Peppers, Hot Peppers; Candies, Marshmallows, Candied Nuts; Canned Fruits, Salads, and Vegetables; Packaged and Loose Dried Fruits; Tea and Coffee.
Claims use since Sept. 24, 1931.

Ser. No. 322,595. OMNIA PRO VITA LABORATORIES CO., Brooklyn, N. Y. Filed Dec. 31, 1931.

VITARIEL

For Cream Cheese.
Claims use since Nov. 24, 1931.

Ser. No. 322,793. L. HEUMANN & COMPANY, INC., New York, N. Y. Filed Jan. 7, 1932.

Rovale

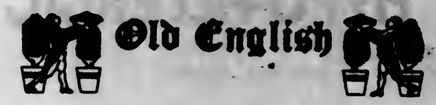
For Candy, Dry Milk, Evaporated Milk, Milk Chocolate, Malted Milk, Malt Syrup, Sugar Syrup, Fruit Flavoring Extracts for Food Purposes, Sweets Consisting Chiefly of Sugar and Fruit Flavoring, Flavoring Extracts for Meats and Soups; Alimentary Paste Products of All Kinds, Dry and Wet; Spices, Coffee Decaffeined, Casein, Sodium Caseinate, Calcium Caseinate, Mixtures of Casein with Carbohydrates, Mixtures of Casein with Saline Matter, Mixtures of Casein with Carbohydrates and Saline Matter, for Food Purposes.
Claims use since Sept. 7, 1931.

Ser. No. 323,930. ALEXANDER MARKETING COMPANY, San Benito, Tex. Filed Feb. 8, 1932.

U-LIKA-ME-?

For Fresh Vegetables.
Claims use since Mar. 1, 1931.

Ser. No. 324,618. LITTLER BAKERIES, INC., Chicago, Ill. Filed Feb. 29, 1932.



The words "Old English" are disclaimed apart from the mark as shown on the drawing.
For Cakes.
Claims use since Jan. 20, 1932.

Ser. No. 326,302. REID, MURDOCH & CO., Chicago, Ill. Filed Apr. 20, 1932.

MALLOWETTES

For Candy.
Claims use since Mar. 17, 1932.

Ser. No. 327,583. FRED DOLD AND SONS PACKING COMPANY, Wichita, Kans. Filed May 31, 1932.

CRESTWAY
BRAND

No claim is made to the word "Brand" apart from the mark as shown.
For Cheese, Butter, and Eggs.
Claims use since Apr. 15, 1932.

Ser. No. 328,396. GOOD HUMOR CORPORATION OF AMERICA, Cleveland, Ohio. Filed June 29, 1932.



The representation of the goods, apart from the mark as shown in the drawing, is disclaimed.
For Ice Cream and Frozen Confections.
Claims use since Apr. 1, 1932.

Ser. No. 328,964. S. M. A. CORPORATION, Cleveland, Ohio. Filed July 21, 1932.

HYPO-ALLERGIC

For Milk.
Claims use since Mar. 17, 1932.

Ser. No. 329,061. PURE-A FOODS, INC., Penn Yan, N. Y. Filed July 25, 1932.

Pure-A

Chef Alexander

No claim is made to the word "Pure" except as a part of the trade-mark of the applicant.
For Prepared Food Products—Namely, Powdered Soup.
Claims use since June 16, 1932.

Ser. No. 329,252. SIMON C. BERRY, Portland, Oreg. Filed Aug. 1, 1932.

SIBERRIAN

For Ice Cream and Frozen Confections, Candy, and Cake.
Claims use since Mar. 15, 1931.

Ser. No. 330,217. GENERAL MILLS, INC., Minneapolis, Minn. Filed Sept. 9, 1932.

HELIUM

For Wheat Flour.
Claims use since Aug. 11, 1932.

Ser. No. 330,474. FOOD PRODUCTS CO., OF AMERICA, Chicago, Ill. Filed Sept. 19, 1932.

DU-RATION

Applicant makes no claim herein to the exclusive right to the word "Ration" apart from the mark as shown.
For Canned Dog Food.
Claims use since Aug. 23, 1932.

Ser. No. 330,528. STANDARD NUT MARGARINE CO., Indianapolis, Ind. Filed Sept. 20, 1932.

WOODLAND

For Oleomargarine.
Claims use since Feb. 9, 1921,

Ser. No. 331,175. BREYER ICE CREAM COMPANY, Philadelphia, Pa. Filed Oct. 12, 1932.

CHOCO-POP

No claim is made to the word "Pop" apart from the mark as shown.
For Frozen Confection.
Claims use since Aug. 9, 1932.

Ser. No. 332,372. GENERAL MILLS, INC., Minneapolis, Minn. Filed Nov. 22, 1932.

PASTRICK

For Flour, Particularly Pastry Flour.
Claims use since Nov. 12, 1932.

Ser. No. 332,772. OTIS HOYT, Long Beach, Calif. Filed Dec. 5, 1932.

COACHELLA GOLD

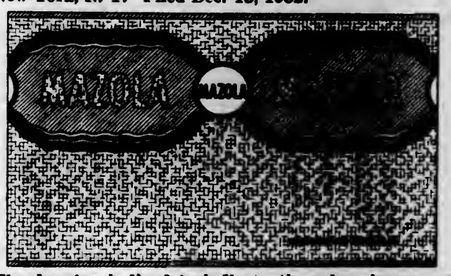
For Fresh Citrus Fruits and Fresh Dates.
Claims use since Mar. 4, 1932.

Ser. No. 332,935. ERNEST C. WATERHOUSE, doing business as Kwickorn Sales Company, Los Angeles, Calif. Filed Dec. 9, 1932.

KWICKORN

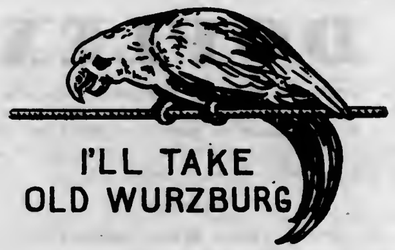
For Food Preparation for Making Corn Muffins, Corn Bread, Corn Pone, Corn Pan Cakes, Etc.
Claims use since Oct. 1, 1932.

Ser. No. 333,026. CORN PRODUCTS REFINING COMPANY, New York, N. Y. Filed Dec. 13, 1932.



The drawing is lined to indicate the colors brown and yellow which are claimed as features of the mark.
For Salad and Cooking Oil.
Claims use since Dec. 6, 1932.

Ser. No. 333,053. THE BACHRACH-FELD COMPANY, INC., doing business as Old Wurzburg Malt Co., Cincinnati, Ohio. Filed Dec. 14, 1932.



No claim is made to the words "Old Wurzburg" apart from the mark shown in the drawing.
For Malt Syrup.
Claims use since July 1, 1931.

Ser. No. 333,187. GENERAL MILLS, INC., Minneapolis, Minn. Filed Dec. 19, 1932.

TEXOKA

For Flour, Particularly Whole Wheat Flour.
Claims use since Nov. 14, 1932.

Ser. No. 333,539. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Dec. 30, 1930.

SUNFLOWER

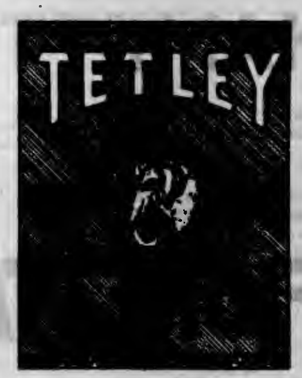
For Tea, Coffee, Cocoa, Chocolate, Sugar, Spices, Prepared Puddings and Desserts, Bread, Cake and/or Cracker Spread, Fruit Juices for Food Purposes, and Jams.
Claims use since 1890.

Ser. No. 333,540. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Dec. 30, 1932.

JOTCO

For Tea, Coffee, Cocoa, Chocolate, Sugar, Spices, Prepared Puddings and Desserts, Bread, Cake, and/or Cracker Spread, Fruit Juices for Food Purposes, and Jams.
Claims use since August, 1927.

Ser. No. 333,541. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Dec. 30, 1932.



The drawing is lined for the colors green, orange, and blue. All wording in the drawing, with the exception of the word "Tetley," is disclaimed apart from the mark as shown, but applicant does not relinquish any of its common-law rights by this disclaimer. No claim is made to the illustration of a carton as such.
For Tea, Coffee, Cocoa, Chocolate, Sugar, and Spices.
Claims use since Aug. 1, 1910.

Ser. No. 333,912. BAY STATE FISHING COMPANY, Boston, Mass. Filed Jan. 14, 1933.

BUDGET SPECIAL

No registration rights are claimed for the word "Special" apart from the mark shown in the drawing.
For Haddock, Cod, Cusk, Hake, Pollack, Mackerel, Butterfish, Herring, Whiting, Flounders, Sole, Bluefish, and Catfish, Fresh, Frozen, Salted, Smoked, and in Cans.
Claims use since Jan. 9, 1933.

Ser. No. 333,930. EGGAR, FORRESTER & VERNER, LTD., London, England. Filed Jan. 14, 1933.

ATODATS

For Dates.
Claims use since July 13, 1932.

Ser. No. 334,083. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Filed Jan. 19, 1933.

BETWEEN SMOKES

For Chewing Gum.
Claims use since Jan. 10, 1932.

Ser. No. 334,373. SWIFT AND COMPANY, Chicago, Ill. Filed Jan. 26, 1933.

HAMETTE

For Ham.
Claims use since Nov. 10, 1932.

Ser. No. 334,380. JOSEPH ANTOGNOLI & CO., Chicago, Ill. Filed Jan. 27, 1933.

FIORETTA

For Malt Syrup and Macaroni.
Claims use since June, 1930.

Ser. No. 334,426. ANIMAL FOODS COMPANY, doing business as Bar-None Sales Company, San Jose, Calif. Filed Jan. 28, 1933.

BAR-NONE

For Canned Foods for Dogs and Cats and Other Carniverous Animals.
Claims use since Dec. 15, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 334,678. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Feb. 6, 1933.

Anderson's Belle

For Whiskey and Other Potable Spirits.
Claims use since Dec. 14, 1928.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 333,550. THE DORECKMUN COMPANY, Cleveland, Ohio. Filed Dec. 31, 1932.

DOPLEX

For Laminated Sheeting, Composed Primarily of Regenerated Cellulose Sheeting, Cellulose Acetate, or the Like, and a Reinforcement of Fabric or the Like, Used for Artificial Glass, Drapes, Shades, Curtains, or the Like.
Claims use since Sept. 29, 1932.

Ser. No. 333,568. HOOD RUBBER COMPANY, INC., Watertown, Mass. Filed Dec. 31, 1932.

MUROGOMME

For Wall Covering Consisting of Sheeting of Prepared Rubber Backed with Fabric.
Claims use since Dec. 15, 1932.

Ser. No. 333,897. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 13, 1933.



For Automobile Tents.
Claims use since Nov. 14, 1932.

Ser. No. 333,906. E. DeF. WILKINSON COMPANY, Providence, R. I. Filed Jan. 13, 1933.

Wilkinson

For Printing Blankets or/and Impression Surfaces.
Claims use since Dec. 7, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MARCH 14, 1933

301,695. CINEMATOGRAPHIC PROJECTION LENSES. TAYLOR, TAYLOR & HOBSON, LIMITED, Leicester, England.
Filed November 15, 1932. Serial No. 332,166. PUBLISHED DECEMBER 27, 1932. Class 26.

301,696. CINEMATOGRAPHIC PROJECTION LENSES. TAYLOR, TAYLOR & HOBSON, LIMITED, Leicester, England.
Filed November 15, 1932. Serial No. 332,165. PUBLISHED DECEMBER 27, 1932. Class 26.

301,697. RAZOR BLADES. MAX STEIN, doing business as Economic Blade Co., New York, N. Y.
Filed November 15, 1932. Serial No. 332,164. PUBLISHED DECEMBER 27, 1932. Class 28.

301,698. RULERS, CALCULATING RULES, SQUARES, TRIANGLES, AND T-SQUARES. A. W. FABER, INC., Newark, N. J.
Filed November 15, 1932. Serial No. 332,143. PUBLISHED DECEMBER 27, 1932. Class 26.

301,699. RULERS, CALCULATING RULES, SQUARES, TRIANGLES, AND T-SQUARES. A. W. FABER, INC., Newark, N. J.
Filed November 15, 1932. Serial No. 332,142. PUBLISHED DECEMBER 27, 1932. Class 26.

301,700. PHOTOGRAPHIC FILM. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed November 10, 1932. Serial No. 332,036. PUBLISHED DECEMBER 27, 1932. Class 26.

301,701. PHOTOGRAPHIC CAMERAS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed November 10, 1932. Serial No. 332,037. PUBLISHED DECEMBER 27, 1932. Class 26.

301,702. PHOTOGRAPHIC CAMERAS. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed November 10, 1932. Serial No. 332,035. PUBLISHED DECEMBER 27, 1932. Class 26.

301,703. PHOTOGRAPHIC FILM. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed November 10, 1932. Serial No. 332,034. PUBLISHED DECEMBER 27, 1932. Class 26.

301,704. LATHES AND DRILL PRESSES. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis.
Filed November 7, 1932. Serial No. 331,949. PUBLISHED DECEMBER 27, 1932. Class 23.

301,705. RAZOR BLADES. GOLDBLATT BROS., INC., Chicago, Ill.
Filed November 5, 1932. Serial No. 331,927. PUBLISHED DECEMBER 27, 1932. Class 28.

301,706. RAZOR BLADES. MCCRORY STORES CORPORATION, New York, N. Y.
Filed November 3, 1932. Serial No. 331,868. PUBLISHED DECEMBER 27, 1932. Class 28.

301,707. AIR CONDITIONING APPARATUS FOR VARYING THE MOISTURE CONTENT OF THE AIR. B. F. STURTEVANT COMPANY, Boston, Mass.
Filed November 1, 1932. Serial No. 331,807. PUBLISHED DECEMBER 27, 1932. Class 34.

301,708. EXPANSION RINGS FOR EXPANDING THE WALLS OF ENGINE PISTONS. JOHN E. OLEN, Minneapolis, Minn.
Filed October 31, 1932. Serial No. 331,750. PUBLISHED DECEMBER 27, 1932. Class 23.

301,709. DUMB WAITERS AND GUIDE RAIL LUBRICATORS. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,699. PUBLISHED DECEMBER 27, 1932. Class 23.

301,710. DUMB WAITERS AND GUIDE RAIL LUBRICATORS. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,696. PUBLISHED DECEMBER 27, 1932. Class 23.

301,711. SCIENTIFIC TESTING INSTRUMENTS AND COMBINATIONS THEREOF FOR TESTING FOR NORMAL OR SUB-NORMAL CONDITIONS IN ALL TYPES OF INTERNAL COMBUSTION ENGINES, AND PARTS OR ATTACHMENTS THEREOF OR AS MAY BE ADDED THERETO. S. J. CROPLEY, Aurora, Ill.
Filed October 12, 1932. Serial No. 331,177. PUBLISHED DECEMBER 27, 1932. Class 26.

301,712. AIRCRAFT ENGINES. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England.
Filed September 29, 1932. Serial No. 330,777. PUBLISHED DECEMBER 27, 1932. Class 23.

301,713. BEDS, BENCHES, BOOKCASES, BREAKFAST SETS, BUFFETS, CABINETS, CHAIRS, CHESTS OF DRAWERS, CHIFFONIERS, CONSOLES, DAVENPORTS, DESKS, DRESSERS, MIRRORS, SECRETARIES, SIDEBOARDS, STANDS, AND TABLES. BAKER FURNITURE FACTORIES, INC., Allegan, Mich.
Filed August 8, 1932. Serial No. 329,395. PUBLISHED OCTOBER 4, 1932. Class 32.

301,714. COMBINATION OIL AND ELECTRIC MARINE LAMPS. WILCOX, CRITTENDEN AND COMPANY, INCORPORATED, Middletown, Conn.
Filed April 22, 1932. Serial No. 326,406. PUBLISHED DECEMBER 27, 1932. Class 34.

301,715. MONTHLY PUBLICATION FOR AIRCRAFT SERVICE. PITCAIRN AVIATION, INC., Philadelphia, Pa.
Filed September 23, 1927. Serial No. 265,130. PUBLISHED NOVEMBER 8, 1927. Class 38.

301,716. ASBESTOS, CLAY, SILICA, SILICON CARBIDE, CRUDE COAL TAR OIL, DEHYDRATED TAR, HARD-COAL PITCH, DIATOMACEOUS EARTH, GRANULATED CARBON, POWDERED CARBON, TALC, MICA, RUBBER, RAW SILK, CELLULOSE FIBRES, AND CARBON MATERIAL FOR WELDING ELECTRODES. SIEMENS-PLANIAWERKE A. G. FUR KOHLEFABRIKATE, Berlin-Lichtenberg, Germany.
Filed June 28, 1929. Serial No. 286,241. PUBLISHED DECEMBER 27, 1932. Class 1.

301,717. SANDWICH SPREADS. FRANCIS H. LEGGETT & CO., INC., New York, N. Y.
Filed April 21, 1931. Serial No. 313,604. PUBLISHED DECEMBER 15, 1931. Class 46.

301,718. CERTAIN NAMED DRUG PREPARATIONS. GILMAN BROTHERS, INC., Boston, Mass.
Filed January 26, 1932. Serial No. 323,452. PUBLISHED DECEMBER 27, 1932. Class 6.

301,719. FROZEN CONFECTIONS COMPRISING A BODY COMPOSED OF A FROZEN MILK PRODUCT AND A COATING OF EDIBLE SUBSTANCE. SOUTHERN DAIRIES, INC., Washington, D. C.
Filed January 8, 1932. Serial No. 322,838. PUBLISHED JULY 19, 1932. Class 46.

301,720. WHEAT FLOUR AND SELF-RISING FLOUR. CITY MILLS COMPANY, Columbus, Ga.
Filed December 22, 1931. Serial No. 322,356. PUBLISHED DECEMBER 27, 1932. Class 46.

301,721. FRESH CITRUS FRUITS. LINDSAY FARM BUREAU FRUIT ASSN., Lindsay, Calif.
Filed November 13, 1931. Serial No. 321,113. PUBLISHED DECEMBER 27, 1932. Class 46.

301,722. MACHINES FOR MAKING BLUE PRINTS AND BLUE LINE PRINTS AND ATTACHMENTS FOR SUCH MACHINES FOR APPLYING A DEVELOPING SOLUTION TO THE PRINTS. THE C. F. PEASE COMPANY, Chicago, Ill.
Filed November 2, 1931. Serial No. 320,736. PUBLISHED DECEMBER 27, 1932. Class 26.

301,723. APPARATUS FOR MAKING FOUNDATIONS AND SOUNDINGS. COMPAGNIE INTERNATIONALE DES PIEUX ARMÉS FRANKIGNOUL, S. A., Liege, Belgium.
Filed October 20, 1931. Serial No. 320,230. PUBLISHED DECEMBER 27, 1932. Class 28.

301,724. MILITARY PERIODICAL PUBLISHED MONTHLY. THE 80TH (BLUE RIDGE) DIVISION VETERANS' ASSOCIATION, Pittsburgh, Pa.
Filed October 13, 1931. Serial No. 320,023. PUBLISHED DECEMBER 27, 1932. Class 38.

301,725. TOY MOLDS. CHANDLER IDE, doing business as Educational Molds Company, Los Angeles, Calif.
Filed November 28, 1932. Serial No. 332,582. PUBLISHED JANUARY 3, 1933. Class 22.

301,726. WHISKEY AND POTABLE SPIRITS. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada.
Filed September 19, 1932. Serial No. 330,494. PUBLISHED JANUARY 3, 1933. Class 49.

301,727. MEDICINAL PREPARATION FOR THE TREATMENT OF ATHLETE'S FOOT. WILLIAM GRAHAM THOMAS, doing business as W. G. Thomas, Pharmacist, Varina, N. C.
Filed October 6, 1932. Serial No. 331,029. PUBLISHED DECEMBER 6, 1932. Class 6.

301,728. CUPS AND CONTAINERS MADE OF TREATED PAPER OR A PAPER-LIKE MATERIAL. INDIVIDUAL DRINKING CUP CO., INC., Easton, Pa.
Filed October 27, 1932. Serial No. 331,619. PUBLISHED JANUARY 3, 1933. Class 2.

301,729. UNFILLED BASE METAL COMPACTS. SAKS & COMPANY, New York, N. Y.
Filed July 18, 1932. Serial No. 328,875. PUBLISHED SEPTEMBER 6, 1932. Class 2.

301,730. MALT BEVERAGE WITH NOT OVER THE LEGAL ALCOHOLIC CONTENT. F. A. POTH'S SONS, INC., Philadelphia, Pa.
Filed November 23, 1932. Serial No. 332,416. PUBLISHED JANUARY 3, 1933. Class 48.

301,731. MALT BEVERAGE WITH NOT OVER THE LEGAL ALCOHOLIC CONTENT. F. A. POTH'S SONS, INC., Philadelphia, Pa.
Filed November 23, 1932. Serial No. 332,417. PUBLISHED JANUARY 3, 1933. Class 48.

301,732. MALT BEVERAGE WITH NOT OVER THE LEGAL ALCOHOLIC CONTENT. F. A. POTH'S SONS, INC., Philadelphia, Pa.
Filed November 28, 1932. Serial No. 332,418. PUBLISHED JANUARY 3, 1933. Class 48.

301,733. PORT WINE. SMITH, WOODHOUSE & CO. LTD., London, England, and Oporto, Portugal.
Filed November 28, 1932. Serial No. 332,427. PUBLISHED JANUARY 3, 1933. Class 47.

301,734. RUBBER TOYS. DR. DOROGI ÉS TÁRSA GUMMIGYAR R. T., Budapest, Hungary.
Filed November 25, 1932. Serial No. 332,448. PUBLISHED JANUARY 3, 1933. Class 22.

301,735. WHISKEY. THE GLENDRONACH DISTILLERY COMPANY, LIMITED, Glendronach, Scotland.
Filed November 25, 1932. Serial No. 332,450. PUBLISHED JANUARY 3, 1933. Class 49.

301,736. ARTICLES OF APPAREL MADE OF FUR—NAMELY, CLOAKS, COATS, NECK PIECES, CAPES, MUFFS, AND GLOVES. JORDAN MARSH COMPANY, Boston, Mass.
Filed October 22, 1932. Serial No. 331,467. PUBLISHED DECEMBER 27, 1932. Class 39.

301,737. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,481. PUBLISHED JANUARY 3, 1933. Class 22.

301,738. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,482. PUBLISHED JANUARY 3, 1933. Class 22.

301,739. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,483. PUBLISHED JANUARY 3, 1933. Class 22.

301,740. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,484. PUBLISHED JANUARY 3, 1933. Class 22.

301,741. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,485. PUBLISHED JANUARY 3, 1933. Class 22.

301,742. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,486. PUBLISHED JANUARY 3, 1933. Class 22.

301,743. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,487. PUBLISHED JANUARY 3, 1933. Class 22.

301,744. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,488. PUBLISHED JANUARY 3, 1933. Class 22.

301,745. BASEBALL BATS. HILLERICH & BRADSBY CO., Louisville, Ky.
Filed November 26, 1932. Serial No. 332,489. PUBLISHED JANUARY 3, 1933. Class 22.

301,746. FROZEN CONFECTIONS. ESKIMO PIE CORPORATION, New York and Brooklyn, N. Y.
Filed May 16, 1932. Serial No. 327,136. PUBLISHED JANUARY 3, 1933. Class 46.

301,747. NOVELTY CONFECTION CONSISTING OF CHOCOLATE-COVERED MOLDED ICE-CREAM. PLEZ B. KENNERLY, doing business as Sweetheart Ice Cream Company, Houston Heights, Houston, Tex.
Filed March 28, 1932. Serial No. 325,582. PUBLISHED DECEMBER 27, 1932. Class 46.

301,748. MALT BEVERAGE WITH NOT OVER THE LEGAL ALCOHOLIC CONTENT. F. A. POTH'S SONS, INC., Philadelphia, Pa.
Filed November 28, 1932. Serial No. 332,415. PUBLISHED JANUARY 3, 1933. Class 48.

301,749. CORSETS, BRASSIÈRES, GIRDLES, UNDERWEAR, AND DRESSES, AND FOUNDATION GARMENTS. ROTH CREATIONS, INCORPORATED, New York, N. Y.
Filed October 20, 1932. Serial No. 331,413. PUBLISHED DECEMBER 27, 1932. Class 39.

301,750. GUT CAST LINES AND TRACES, SILK LINES, CAST LINES AND TRACES IN METAL, LINES AND TRACES MADE OF GUT SUBSTITUTES, ARTIFICIAL BAIT, FISHING HOOKS, MOUNTED AND UNMOUNTED, AND OTHER FISHING TACKLE. DONALD MCLEOD, doing business as D. McLeod & Company, Glasgow, Scotland.
Filed August 10, 1932. Serial No. 329,450. PUBLISHED JANUARY 3, 1933. Class 22.

301,751. FISHING REELS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed November 28, 1932. Serial No. 332,408. PUBLISHED JANUARY 3, 1933. Class 22.

301,752. BOOTS, SHOES, SLIPPERS, AND SANDALS MADE OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. PERTH SHOE COMPANY LIMITED, Perth, Ontario, Canada.
Filed October 26, 1932. Serial No. 331,606. PUBLISHED DECEMBER 27, 1932. Class 39.

301,753. TENNIS RACKETS. HORACE W. HALL, Newton, Mass.
Filed October 26, 1932. Serial No. 331,561. PUBLISHED JANUARY 3, 1933. Class 22.

301,754. BRASSIÈRES. ABRAHAM ZWIEBELSON, doing business as Mollie Mayers, New York, N. Y.
Filed October 24, 1932. Serial No. 331,525. PUBLISHED DECEMBER 27, 1932. Class 39.

301,755. BRASSIÈRES, FOUNDATION GARMENTS, GIRDLES, GARTER BELTS, AND WOMEN'S UNDERWEAR. WESTERN CORSET COMPANY INC., Los Angeles, Calif.
Filed October 24, 1932. Serial No. 331,521. PUBLISHED DECEMBER 27, 1932. Class 39.

301,756. BUTTONS OF NON-PRECIOUS MATERIAL. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich.
Filed October 12, 1932. Serial No. 331,236. PUBLISHED DECEMBER 27, 1932. Class 40.

301,757. FIREARMS — NAMELY, MILITARY AND SPORTING RIFLES, SHOTGUNS, PISTOLS, AND PARTS THEREOF; METALLIC CARTRIDGES, METALLIC SHOT SHELLS, PAPER SHOT SHELLS, EMPTY METALLIC AND PAPER SHELLS, BLANK CARTRIDGES, CAPS, PRIMERS, WADS, SHOT, BULLETS, AND AIR RIFLES. REMINGTON ARMS COMPANY, INC., Bridgeport, Conn., and Ilion and New York, N. Y.
Filed October 13, 1932. Serial No. 331,228. PUBLISHED JANUARY 3, 1933. Class 9.

301,758. BEDS, MATTRESSES, PILLOWS, UPHOLSTERED FURNITURE, AND UPHOLSTERED SEATS AND BACKS FOR FURNITURE, AUTOMOBILES, BUSSES, AND RAILWAY-CARS. REMLINGRATH & PLATTE, Wuppertal-Vohwinkel, Germany.
Filed August 23, 1932. Serial No. 329,770. PUBLISHED DECEMBER 27, 1932. Class 32.

301,759. SHOES MADE OF LEATHER, CANVAS, RUBBER, OR COMBINATIONS THEREOF. GROUND GRIPPER SHOE COMPANY, INC., Harrisburg, Pa.
Filed June 6, 1932. Serial No. 327,752. PUBLISHED DECEMBER 27, 1932. Class 39.

301,760. LEATHER SHOES. EDISON BROTHERS STORES, INC., St. Louis, Mo.
Filed October 31, 1932. Serial No. 331,729. PUBLISHED DECEMBER 27, 1932. Class 39.

301,761. LADIES' FOUNDATION GARMENTS—NAMELY, CORSETS, CORSELETTES, GIRDLES, BRASSIÈRES, BANDEAUX, AND ENSEMBLES. ARLEEN, INC., Miami, Fla.
Filed October 11, 1932. Serial No. 331,136. PUBLISHED DECEMBER 27, 1932. Class 39.

301,762. CERTAIN NAMED WEARING APPAREL. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed March 15, 1932. Serial No. 325,144. PUBLISHED MAY 3, 1932. Class 39.

301,763. PUBLICATIONS ISSUED FROM TIME TO TIME CONTAINING MATTERS OF GENERAL INTEREST. CENTRAL UNITED NATIONAL BANK OF CLEVELAND, Cleveland, Ohio.
Filed September 23, 1932. Serial No. 330,593. PUBLISHED DECEMBER 27, 1932. Class 38.

301,764. LABELS SOLD TO THE TRADE AS SUCH. OUTSERTS, INCORPORATED, New York, N. Y.
Filed September 8, 1932. Serial No. 330,180. PUBLISHED DECEMBER 27, 1932. Class 37.

301,765. DRY, PASTE, AND READY MIXED PAINTS, VARNISHES, LACQUERS, OIL SOLUBLE PLASTIC RESINS AND SOLUTIONS THEREOF IN OILS, AND MINERAL SPIRITS USED AS PAINTERS' MATERIALS. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,934. PUBLISHED DECEMBER 27, 1932. Class 16.

301,766. GLASS BOTTLES, JARS, POTS, JUGS, AND FUNNELS. WHITALL TATUM COMPANY, Millville, N. J.
Filed August 26, 1932. Serial No. 329,877. PUBLISHED DECEMBER 27, 1932. Class 33.

301,767. LIQUID AND DRY POWDER, FOR USE BY MORTICIANS. CLAUDE C. COLIS, doing business as American Rubber Products Co., Bloomington, Ill.
Filed July 26, 1932. Serial No. 329,079. PUBLISHED DECEMBER 27, 1932. Class 6.

301,768. POTTERY BOWLS, JARS, AND VASES. STEPHEN LEEMAN PRODUCTS CORPORATION, New York, N. Y.
Filed July 28, 1932. Serial No. 329,020. PUBLISHED DECEMBER 27, 1932. Class 30.

301,769. PREPARATION FOR THE RELIEF OF INSECT BITES. PORTH AND HAAS COMPANY, New York, N. Y.
Filed July 26, 1932. Serial No. 329,096. PUBLISHED JANUARY 3, 1933. Class 6.

301,770. SOLUBLE ESTER GUMS AND SOLUBLE PLASTIC RESINS EMPLOYED AS PAINTERS' MATERIALS. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,930. PUBLISHED DECEMBER 27, 1932. Class 16.

301,771. SOLUBLE PLASTIC RESINS USED AS PAINTERS' MATERIALS. BECK, KOLLER & COMPANY, INC., Detroit, Mich.
Filed August 29, 1932. Serial No. 329,927. PUBLISHED DECEMBER 27, 1932. Class 16.

301,772. CANNED SARDINES. EMILIO TUDELA, New York, N. Y.
Filed May 11, 1932. Serial No. 326,994. PUBLISHED JANUARY 3, 1933. Class 46.

301,773. MAGAZINE OR PRINTED PERIODICAL PUBLISHED MONTHLY AND AT OTHER INTERVALS. SYNDICATE PUBLISHING CO. INC., New York, N. Y.
Filed April 22, 1932. Serial No. 326,400. PUBLISHED DECEMBER 27, 1932. Class 38.

301,774. MALT EXTRACTS AND MALT SYRUPS FOR FOOD PURPOSES. CHRISTIE & HOOVER, Houston, Tex.
Filed November 16, 1932. Serial No. 332,176. PUBLISHED DECEMBER 27, 1932. Class 46.

301,775. ROASTED AND GROUND COFFEE—NAMELY, A BLEND OF COFFEE AND CHICORY. SOUTHERN COFFEE MILLS, LTD., New Orleans, La.
Filed November 3, 1932. Serial No. 331,876. PUBLISHED JANUARY 3, 1933. Class 46.

301,776. BOTTLED SEA FOODS—NAMELY, A COCKTAIL MADE OF CONCH JUICE. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,537. PUBLISHED JANUARY 3, 1933. Class 46.

301,777. BOTTLED SEA FOODS—NAMELY, A COCKTAIL MADE OF CONCH JUICE. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,536. PUBLISHED JANUARY 3, 1933. Class 46.

301,778. CANNED AND BOTTLED COMBINATIONS OF SEA FOODS AND VEGETABLES — NAMELY, CONCH CHOWDER AND/OR BROTH. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,533. PUBLISHED JANUARY 3, 1933. Class 46.

301,779. CORNED BEEF. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed October 19, 1932. Serial No. 331,378. PUBLISHED DECEMBER 27, 1932. Class 46.

301,780. SLICED FRESH MEATS—NAMELY, STEAKS. WAFFLED STEAK MACHINES, INC., Buffalo, N. Y.
Filed October 6, 1932. Serial No. 331,016. PUBLISHED DECEMBER 27, 1932. Class 46.

301,781. PREPARED MUSTARD. AUGUST BAUER'S SONS, INC., New York, N. Y.
Filed September 30, 1932. Serial No. 330,806. PUBLISHED DECEMBER 27, 1932. Class 46.

301,782. SUGAR. CALIFORNIA AND HAWAIIAN SUGAR REFINING CORPORATION, LIMITED, San Francisco, Calif.
Filed September 28, 1932. Serial No. 330,739. PUBLISHED JANUARY 3, 1933. Class 46.

301,783. FOOD FLAVORING EXTRACTS INCLUDING BUTTER FLAVOR EMULSION, ORANGE EMULSION, LEMON EMULSION, PURE VANILLA, CONCENTRATED VANILLA, WALNUT EMULSION, ALMOND EMULSION. JULIUS LOEWITH, INC., New York, N. Y.
Filed September 17, 1932. Serial No. 330,427. PUBLISHED JANUARY 3, 1933. Class 46.

301,784. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed September 7, 1932. Serial No. 330,165. PUBLISHED DECEMBER 27, 1932. Class 46.

301,785. CEREAL FOODS, CONSISTING OF WHEAT AND MOLASSES, FOR BEVERAGE-MAKING PURPOSES. POSTUM COMPANY, INC., New York, N. Y.
Filed August 6, 1932. Serial No. 329,385. PUBLISHED JANUARY 3, 1933. Class 46.

301,786. TRADING STAMPS. MOVIE STAMPS, INC., New York, N. Y.
Filed April 11, 1932. Serial No. 325,991. PUBLISHED DECEMBER 27, 1932. Class 38.

301,787. ABDOMINAL SUPPORTING BELTS. KOPS BROTHERS, INC., New York, N. Y.
Filed November 26, 1932. Serial No. 332,493. PUBLISHED JANUARY 3, 1933. Class 44.

301,788. MEDICATED BLOOD-STOPPING GAUZE, WADDING, AND BANDAGE GAUZE. PHARMAZEUTISCHE INDUSTRIE A. G., Vienna, Austria.
Filed November 10, 1932. Serial No. 332,046. PUBLISHED JANUARY 3, 1933. Class 44.

301,789. PROPHYLACTIC RUBBER ARTICLES FOR THE PREVENTION OF CONTAGIOUS DISEASES. THE PERFECTION RUBBER COMPANY, Akron, Ohio.
Filed October 31, 1932. Serial No. 331,752. PUBLISHED JANUARY 3, 1933. Class 44.

301,790. PERFUMES AND SACHETS. GUY T. GIBSON, INC., New York, N. Y.
Filed October 26, 1932. Serial No. 331,578. PUBLISHED DECEMBER 27, 1932. Class 6.

301,791. LEATHER. A. C. LAWRENCE LEATHER COMPANY, Peabody, Mass.
Filed November 16, 1932. Serial No. 332,192. PUBLISHED DECEMBER 27, 1932. Class 1.

301,792. PIPES. JESSE M. JENKINS, doing business as Jenkins Associated Industries, New York, N. Y.
Filed November 10, 1932. Serial No. 332,043. PUBLISHED JANUARY 3, 1933. Class 8.

301,793. ENAMEL-LIKE PRODUCT OR SUBSTANCE FOR FINISHING WALLS, WOODWORK, CEILINGS, FLOORS, AND INTERIOR WORK IN GENERAL. GAY-DAY CORPORATION, Chicago, Ill.
Filed November 7, 1932. Serial No. 331,953. PUBLISHED DECEMBER 27, 1932. Class 16.

301,794. COAL. FLORIDA ICE AND COAL COMPANY, Jacksonville, Fla.
Filed November 5, 1932. Serial No. 331,923. PUBLISHED DECEMBER 27, 1932. Class 1.

301,795. CLEANERS AND POLISHERS FOR MOTOR CARS, FURNITURE, WOODWORK, AND THE LIKE. GEORGE H. CALLAGHAN, New York, N. Y.
Filed November 3, 1932. Serial No. 331,850. PUBLISHED DECEMBER 27, 1932. Class 16.

301,796. RETOUCHING VARNISH, PICTURE VARNISH, AND PAINTING MEDIUM TO BE MIXED WITH PAINTS. TALENS & SON, INC., Irvington, N. J.
Filed October 31, 1932. Serial No. 331,761. PUBLISHED DECEMBER 27, 1932. Class 16.

301,797. VARNISHES AND DRY, PASTE, AND READY MIXED PAINTS. SILICA PRODUCTS CORPORATION, New York, N. Y.
Filed October 27, 1932. Serial No. 331,630. PUBLISHED DECEMBER 27, 1932. Class 16.

301,798. CLEANING AND POLISHING PREPARATION. HERBERT J. BROWNE, doing business as Permagloss Manufacturing Company, Atlanta, Ga.
Filed October 21, 1932. Serial No. 331,424. PUBLISHED DECEMBER 27, 1932. Class 16.

301,799. SHOE LASTS, SHOE TREES, AND FOLLOWERS—NAMELY, SECOND LASTS. BROCKTON LAST MANUFACTURING CO., Brockton, Mass.
Filed October 12, 1932. Serial No. 331,176. PUBLISHED JANUARY 3, 1933. Class 50.

301,800. COMPOSITION SHEET MATERIAL MADE OF RUBBER, ACETATE-CELLULOSE OR OTHER NON-INFLAMMABLE MOLDABLE COMPOUNDS. BOLTA RUBBER CO., INC., Lawrence, Mass.
Filed October 7, 1932. Serial No. 331,036. PUBLISHED JANUARY 3, 1933. Class 50.

301,801. MAGAZINE PUBLISHED MONTHLY AND AT OTHER INTERVALS. HOWARD-SCOTT PUBLISHING CO., New York, N. Y.
Filed September 27, 1932. Serial No. 330,708. PUBLISHED DECEMBER 27, 1932. Class 38.

301,802. VARIOUS KINDS OF LEATHERS. J. GREENBAUM TANNING COMPANY, Chicago, Ill.; Boston, Mass.; and Milwaukee, Wis.
Filed September 8, 1932. Serial No. 330,178. PUBLISHED JANUARY 3, 1933. Class 1.

301,803. SECTION OR COLUMN APPEARING IN NEWSPAPER OR PERIODICAL. MEMPHIS PRESS-SCIMITAR COMPANY, Memphis, Tenn.
Filed October 14, 1932. Serial No. 331,263. PUBLISHED DECEMBER 27, 1932. Class 38.

301,804. CATALOGS, DIRECT MAIL ADVERTISING FORMS AND MATERIAL; BROADSIDES, POSTERS, CUT-OUTS, AND LITHOGRAPHED FORMS FOR WINDOW DISPLAY. MICHIGAN LITHOGRAPHING CO., Grand Rapids, Mich.
Filed October 10, 1932. Serial No. 331,115. PUBLISHED DECEMBER 27, 1932. Class 38.

301,805. DRIERS FOR THE HAIR OR OTHER PARTS OF THE BODY. THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio.
Filed October 7, 1932. Serial No. 331,053. PUBLISHED JANUARY 3, 1933. Class 44.

301,806. DRIERS FOR THE HAIR OR OTHER PARTS OF THE BODY. THE MARTIN BROTHERS ELECTRIC COMPANY, Cleveland, Ohio.
Filed October 7, 1932. Serial No. 331,052. PUBLISHED JANUARY 3, 1933. Class 44.

301,807. HAIR GROWER. EVA ROSENKRANTZ, Los Angeles, Calif.
Filed September 27, 1932. Serial No. 330,712. PUBLISHED DECEMBER 27, 1932. Class 6.

301,808. VARNISHES, READY MIXED PAINTS, PAINT ENAMELS, GOLD AND ALUMINUM ENAMEL, STAINS, LACQUERS, AND WOOD FILLERS. THE R. F. JOHNSTON PAINT COMPANY, Cincinnati, Ohio.
Filed September 24, 1932. Serial No. 330,629. PUBLISHED DECEMBER 27, 1932. Class 16.

301,809. PUBLICATIONS ISSUED FROM TIME TO TIME CONTAINING MATTERS OF GENERAL INTEREST. CENTRAL UNITED NATIONAL BANK OF CLEVELAND, Cleveland, Ohio.
Filed September 23, 1932. Serial No. 330,594. PUBLISHED DECEMBER 27, 1932. Class 38.

301,810. PACKING HOUSE PRODUCTS—NAMELY, HAMS AND BACON AND SAUSAGE. E. M. TODD CO., Richmond, Va.
Filed October 22, 1932. Serial No. 331,479. PUBLISHED DECEMBER 27, 1932. Class 46.

301,811. SAUSAGES, SAUSAGE MEAT, BACON, AND LARD. DEERFOOT FARMS COMPANY, Southboro, Mass.
Filed November 4, 1932. Serial No. 331,890. PUBLISHED DECEMBER 27, 1932. Class 46.

301,812. CANNED CORN. THE ILLINOIS CANNING COMPANY, Hoopeston, Ill.
Filed November 2, 1932. Serial No. 331,825. PUBLISHED DECEMBER 27, 1932. Class 46.

301,813. COOKED BANANA CHIPS. ELLIS D. FRIGAR, Philadelphia, Pa.
Filed November 2, 1932. Serial No. 331,822. PUBLISHED DECEMBER 27, 1932. Class 46.

301,814. CANDY. MARY K. JONES, Salisbury, N. C.
Filed October 8, 1932. Serial No. 331,087. PUBLISHED DECEMBER 27, 1932. Class 46.

301,815. EDIBLE FOOD PRODUCT CONSISTING OF LAYERS OF CAKE AND ICE CREAM WITH A COATING SURROUNDING THE LAYERS. ICE CREAM CAKE COMPANY, Philadelphia, Pa.
Filed October 6, 1932. Serial No. 330,998. PUBLISHED DECEMBER 20, 1932. Class 46.

301,816. CANNED TOMATOES, PEAS, AND BEANS. THE FORT LUPTON CANNING COMPANY, Fort Lupton, Colo.
Filed November 7, 1932. Serial No. 331,951. PUBLISHED JANUARY 3, 1933. Class 46.

301,817. CELLULOSE PULPS, AND FELTS MADE THEREFROM. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed October 29, 1932. Serial No. 331,667. PUBLISHED JANUARY 3, 1933. Class 1.

301,818. SYNTHETIC MATERIAL DERIVED FROM CELLULOSE ACETATE AND SOLD IN PLASTIC AND POWDER FORM FOR MOULDING PURPOSES, AND IN THE FORM OF RODS, TUBES, AND SHEETS. BRINOID LIMITED, London, England.
Filed October 17, 1932. Serial No. 331,301. PUBLISHED JANUARY 3, 1933. Class 1.

301,819. OYSTERS. G. CLIFFORD FOOTE, one of the executors of the estate of Henry C. Rowe, deceased, doing business as H. C. Rowe & Company, New Haven, Conn.
Filed September 17, 1932. Serial No. 330,422. PUBLISHED JANUARY 3, 1933. Class 46.

301,820. SOLID CHOCOLATE AND CHOCOLATE FILLED CANDIES AND CONFECTIONERY IN PACKAGE FORM. WILLIAM G. MAYER, New York, N. Y.
Filed October 14, 1932. Serial No. 331,389. PUBLISHED JANUARY 3, 1933. Class 46.

301,821. LIQUID PREPARATION FOR APPLICATION TO THE UNDER SURFACE OF RUGS TO PRODUCE A NON-SKIDDING SURFACE. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed October 19, 1932. Serial No. 331,363. PUBLISHED JANUARY 3, 1933. Class 5.

301,822. PASTE USED FOR PASTING PAPER TO ENAMELED AND THE LIKE SURFACES. KOHLER CO., Kohler, Wis.
Filed October 7, 1932. Serial No. 331,084. PUBLISHED JANUARY 3, 1933. Class 5.

301,823. SAUCES FOR FISH, MEATS, SOUPS, SALADS, VEGETABLES. OLIVE ANN MOORE, Oakland, Calif.
Filed July 20, 1932. Serial No. 328,922. PUBLISHED DECEMBER 27, 1932. Class 46.

301,824. DRESSED POULTRY. JOE B. WALKER, Grand Rapids, Mich.
Filed July 1, 1932. Serial No. 328,569. PUBLISHED DECEMBER 27, 1932. Class 46.

301,825. VITAMIN-CONTAINING SYRUP TO BE USED IN FOOD PRODUCTS. B-VITE COMPANY, Philadelphia, Pa.
Filed July 19, 1932. Serial No. 328,883. PUBLISHED JANUARY 3, 1933. Class 46.

301,826. COFFEE. ALFRED KASPER, doing business as Quieta-Werke Alfred Kasper, Leipsig, Germany.
Filed October 28, 1932. Serial No. 331,663. PUBLISHED DECEMBER 27, 1932. Class 46.

301,827. FEEDS FOR LIVESTOCK AND POULTRY. IOWA CHEMICAL COMPANY, Cedar Rapids, Iowa.
Filed June 2, 1932. Serial No. 327,780. PUBLISHED JANUARY 3, 1933. Class 46.

301,828. MILK, CREAM, BUTTER, EGGS, LARD, AND CHEESE. HENRY BECKER & SON, INC., Roseland, N. J.
Filed October 8, 1931. Serial No. 319,850. PUBLISHED JUNE 7, 1932. Class 46.

301,829. CREAMERY PRODUCTS—NAMELY, MALTED MILK. BORDEN'S MILK PRODUCTS COMPANY, INC., New York, N. Y.
Filed September 1, 1931. Serial No. 318,619. PUBLISHED DECEMBER 27, 1932. Class 46.

301,830. COSMETIC PREPARATIONS. HENRY TETLOW COMPANY, Philadelphia, Pa.
Filed August 26, 1931. Serial No. 318,469. PUBLISHED DECEMBER 27, 1932. Class 6.

301,831. BIRD SEEDS. ARTHUR MARROS, New York, N. Y.
Filed August 26, 1931. Serial No. 318,457. PUBLISHED DECEMBER 27, 1932. Class 46.

301,832. BUTTER, EGGS, BEEF, VEAL, MUTTON, LAMB, ETC. BROOKLYN HOTEL SUPPLY CO., Brooklyn, N. Y.
Filed August 3, 1931. Serial No. 317,594. PUBLISHED DECEMBER 27, 1932. Class 46.

301,833. FRESH PEACHES, FRESH APRICOTS, AND FRESH PLUMS. LINCOLN FRUIT GROWERS ASSOCIATION, Lincoln, Calif.
Filed June 16, 1931. Serial No. 315,913. PUBLISHED DECEMBER 27, 1932. Class 46.

301,834. FOR ATOMIZERS FOR MEDICINES, ANTISEPTICS, PERFUMES, AND THE LIKE. WITT AND HAMM, Boston, Mass.
Filed April 29, 1931. Serial No. 313,987. PUBLISHED JANUARY 3, 1933. Class 44.

301,835. CANDY. SCHUTTER JOHNSON CANDY COMPANY INC., Chicago, Ill.
Filed June 1, 1931. Serial No. 315,284. PUBLISHED DECEMBER 27, 1932. Class 46.

301,836. BAKED RYE FLOUR PRODUCT IN CRACKER FORM. RALSTON PURINA COMPANY, St. Louis, Mo.
Filed April 18, 1931. Serial No. 313,509. PUBLISHED DECEMBER 27, 1932. Class 46.

301,837. DRESSED CHICKENS. MISSOURI STATE CHICKERIES, Jefferson City, Mo.
Filed March 27, 1931. Serial No. 312,614. PUBLISHED JANUARY 3, 1933. Class 46.

301,838. COFFEE, TEA, POWDER FOR MAKING GELATIN DESSERTS AND PUDDINGS, TABLE SYRUP, FOOD FLAVORING SYRUPS, FOOD FLAVORING EXTRACTS, SALAD AND COOKING OILS. WASON BROS. CO., INC., Seattle, Wash.
Filed December 19, 1930. Serial No. 309,182. PUBLISHED JANUARY 3, 1933. Class 46.

301,839. DRAFT CONTROL FOR FURNACES, COMPRISING A GRAVITY BALANCED DAMPER FOR ADMITTING AIR INTO A FURNACE SMOKE PIPE. THORNTON W. PRICE, doing business as The Coal Carburetor Company, New Brunswick, N. J.
Filed September 18, 1930. Serial No. 305,826. PUBLISHED DECEMBER 27, 1932. Class 34.

301,840. RUST PREVENTIVE AND METAL PROTECTIVE PAINTS. HAL B. FLETCHER, San Francisco, Calif.
Filed November 16, 1932. Serial No. 332,185. PUBLISHED DECEMBER 27, 1932. Class 16.

301,841. BOOK, PRINTING, WRITING, AND COVER PAPERS. FITCHBURG PAPER COMPANY, Fitchburg, Mass.
Filed November 14, 1932. Serial No. 332,115. PUBLISHED DECEMBER 27, 1932. Class 37.

301,842. LINOLEUM PASTE AND LINOLEUM CEMENT. SLOANE-BLABON CORPORATION, Trenton, N. J., and Nicetown, Philadelphia, Pa.
Filed November 11, 1932. Serial No. 332,056. PUBLISHED DECEMBER 27, 1932. Class 5.

301,843. CREPE PAPER. DENNISON MANUFACTURING COMPANY, Framingham, Mass.
Filed November 10, 1932. Serial No. 332,033. PUBLISHED DECEMBER 27, 1932. Class 37.

301,844. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, AND CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed October 29, 1932. Serial No. 331,677. PUBLISHED DECEMBER 27, 1932. Class 37.

301,845. FLAT PAINTS, WALL PAINTS, GLOSS PAINTS, ENAMEL PAINTS, WATERPROOF VARNISH, AND PAINTERS' WALL SIZE. F. O. PIERCE COMPANY, Brooklyn, N. Y.
Filed October 26, 1932. Serial No. 331,656. PUBLISHED DECEMBER 27, 1932. Class 16.

301,846. PERFUMES. HOLLYWOOD-MARVEL PRODUCTS COMPANY, Hollywood, Calif.
Filed October 20, 1932. Serial No. 331,404. PUBLISHED DECEMBER 27, 1932. Class 6.

301,847. VARNISHES, PAINT ENAMELS, LACQUERS, ETC. PRATT & LAMBERT-INC., Buffalo, N. Y.
Filed October 17, 1932. Serial No. 331,320. PUBLISHED DECEMBER 27, 1932. Class 16.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

301,848. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ADINO F. FILES, doing business as The Maumee Color Company, Maumee, Ohio. Filed Feb. 16, 1931. Serial No. 311,091.

FRUITINT

For Coloring Materials for Foods.
Claims use since July 7, 1930.

301,849. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JULIUS KERN, doing business as Kern Food Products Co., Los Angeles, Calif. Filed Sept. 12, 1931. Serial No. 318,991.

Kern's

For Fruit Preserves, Jellies, Honey.
Claims use since June 21, 1930.

301,850. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) BAUSCH & LOMB OPTICAL COMPANY, Rochester, N. Y. Filed Jan. 26, 1932. Serial No. 323,444.

PELHAM

For Ophthalmic Mountings.
Claims use since Dec. 17, 1931.

301,851. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE REPUBLIC STAMPING & ENAMELING COMPANY, Canton, Ohio. Filed Feb. 6, 1932. Serial No. 323,906.

MOSS AGATE

For Table and Cooking Hollow Ware of Enameled Base Metal.
Claims use since Dec. 9, 1930.

301,852. (CLASS 45. BEVERAGES, NONALCOHOLIC.) NATHAN LEVIN, doing business as Star Bottling Works, Philadelphia, Pa. Filed Apr. 18, 1932. Serial No. 326,056.

Maxwell

For Ginger Ale.
Claims use since Feb. 1, 1932.

301,853. (CLASS 39. CLOTHING.) WALTER FRED HOSIERY MILLS, INC., Nashville, Tenn. Filed May 6, 1932. Serial No. 326,814.

VENETIAN-POINT

For Hosiery.
Claims use since Jan. 8, 1932.

301,854. (CLASS 32. GLASSWARE.) GEO. BORGFELDT & Co., New York, N. Y. Filed June 16, 1932. Serial No. 328,025.



For Blown Glass Stemware.
Claims use since Dec. 29, 1931.

301,855. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) RIVERSIDE & DAN RIVER COTTON MILLS, INC., Danville, Va. Filed July 7, 1932. Serial No. 328,619.

MARNE

For Cotton Broadcloth Shirting in the Piece.
Claims use since Dec. 1, 1931.

301,856. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE CITIES SERVICE OIL COMPANY, Cleveland, Ohio. Filed Jan. 20, 1933. Serial No. 334,204.

POWER PROVER

For Gas Analyzing Apparatus.
Claims use since December, 1931.

TRADE-MARK REGISTRATIONS RENEWED

40,105. BRUSHES FOR TOILET PURPOSES. Registered April 14, 1903. FLORENCE MANUFACTURING CO., Northampton, Mass., New York, N. Y., and Chicago, Ill. Renewed April 14, 1933, to Pro-Phy-Lac-Tic Brush Company, Northampton, Mass., a Corporation of Delaware, assignee by mesne assignments.

40,116. COMBINATIONS OF QUININ AND PHENETIDIN. Registered April 14, 1903. VEREINIGTE CHININFABRIKEN ZIMMER & Co. GES. MIT BESCHRÄNKTER HAFTUNG, Frankfort-on-the-Main, Germany. Renewed April 14, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,117. SALTS OF DIORTHOÖXYDIBENZALACETON. Registered April 14, 1903. VEREINIGTE CHININFABRIKEN ZIMMER & Co. GES. MIT BESCHRÄNKTER HAFTUNG, Frankfort-on-the-Main, Germany. Renewed April 14, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,137. CERTAIN NAMED PHOTOGRAPHIC GOODS. Registered April 21, 1903. CHEMISCHE FABRIK AUF ACTIEN, (VORM. E. SCHERING,) Berlin, Germany. Renewed April 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,139. PHOTOGRAPHIC CAMERAS. Registered April 21, 1903. THE FIRM OF CARL ZEISS, Jena, Germany. Renewed April 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,140. LENS INSTRUMENTS. Registered April 21, 1903. THE FIRM OF CARL ZEISS, Jena, Germany. Renewed April 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,141. OPTICAL SYSTEMS CONSISTING OF ONE OR SEVERAL LENSES. Registered April 21, 1903. THE FIRM OF CARL ZEISS, Jena, Germany. Renewed April 21, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,710. CERTAIN NAMED PAINT. Registered June 30, 1903. THE MURALO COMPANY. Renewed June 30, 1933, to The Muralo Company, Inc., New Brighton, N. Y., a Corporation of New York, assignee.

90,097. CERTAIN NAMED TOOLS. Registered February 4, 1913. THE COLLINS COMPANY, Collinsville, Conn., a Corporation of Connecticut. Renewed February 4, 1933.

90,216. A LIQUID INSECTICIDE. Registered February 11, 1913. CHARLES W. JOHNSON. Renewed February 11, 1933, to Wm. Kitchen, Houston, Tex., assignee.

90,363. CANNED SALMON. Registered February 18, 1913. GEO. T. MYERS & Co., Seattle, Wash., and Chatham, Alaska. Renewed February 18, 1933, to New England Fish Company, Seattle, Wash., a Corporation of Maine, assignee.

90,364. CANNED SALMON. Registered February 18, 1913. GEO. T. MYERS & Co., Seattle, Wash., and Chatham, Alaska. Renewed February 18, 1933, to New England Fish Company, Seattle, Wash., a Corporation of Maine, assignee.

90,465. CANNED SALMON. Registered February 25, 1913. GEO. T. MYERS & Co., Seattle, Wash., and Chatham, Alaska. Renewed February 25, 1933, to New England Fish Company, Seattle, Wash., a Corporation of Maine, assignee.

90,561. BLENDED WHISKY. Registered March 4, 1913. MITCHELL BROTHERS, LIMITED, Glasgow, Scotland, a Corporation of Great Britain. Renewed March 4, 1933.

90,912. STEEL FORGINGS. Registered April 1, 1913. PENNSYLVANIA FORGE COMPANY, Philadelphia, Pa. Renewed April 1, 1933, to Pennsylvania Forge Corporation, Tacony, Philadelphia, Pa., a Corporation of Pennsylvania, assignee.

90,954. SALVES FOR DERMATOLOGICAL PURPOSES. Registered April 8, 1913. DR. BAYER ÉS TÁRSA, Budapest, Austria-Hungary. Renewed April 8, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee, by mesne assignments.

90,967. A REMEDY FOR NERVOUS DISEASES. Registered April 8, 1913. CHEMISCHE FABRIK GÜSTROW, DR. HILLRINGHAUS & DR. HEILMANN, Güstrow and Heideweg, Germany. Renewed April 8, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

90,976. BACTERIAL PREPARATION USED AS A REMEDY FOR CERTAIN NAMED DISEASE. Registered April 8, 1913. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed April 8, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,050. TILES. Registered April 8, 1913. THE VITROLITE COMPANY, Parkersburg, W. Va., a Corporation of West Virginia. Renewed April 8, 1933.

91,144. CANNED SALMON. Registered April 15, 1913. WARREN PACKING COMPANY, Portland, Oreg., a Corporation of Oregon. Renewed April 15, 1933.

91,183. DYESTUFFS FOR DYEING AND PRINTING PURPOSES. Registered April 22, 1913. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed April 22, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,218. A PREPARATION IN CERTAIN FORMS FOR TREATING CERTAIN DISEASES. Registered April 22, 1913. KALLE & Co., Aktiengesellschaft, Biebrich-on-the-Rhine, Germany. Renewed April 22, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,240. DENTAL FILLING COMPOSITIONS, DENTAL IMPRESSION COMPOSITIONS. AND ARTIFICIAL TEETH. Registered April 22, 1913. VICTOR PAPPENHEIM & Co., Berlin, Germany. Renewed April 22, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,300. THREAD AND YARN OF CERTAIN NAMED MATERIALS. Registered April 22, 1913. H. E. VERRAN COMPANY, INCORPORATED. Renewed April 22, 1933, to The Frampton Company, Inc., New York, N. Y., a Corporation of New Jersey, assignee.

91,391. FIREARMS. Registered April 29, 1913. J. STEVENS ARMS & TOOL CO., Chicopee Falls, Mass. Renewed April 29, 1933, to Savage Arms Corporation, New York and Utica, N. Y., a Corporation of Delaware, assignee.

91,578. A VEGETABLE PRODUCT TO BE USED AS BASIS FOR PASTE. Registered May 13, 1913. CHAS. W. JACOB & ALLISON, New York, N. Y., a Firm. Renewed May 13, 1933.

92,041. LOTION FOR TREATING THE SKIN. Registered June 17, 1913. J. W. BROOKS & CO. INCORPORATED, Portland, Me. Renewed June 17, 1933, to J. W. Brooks & Co. Inc., Brighton, Mass., a Corporation of Maine.

92,188. CANNED LOBSTER, KIPPERED HERRING, CRAB-MEAT, MACKEREL, SARDINES, CLAMS, AND BLUEBERRIES. Registered June 24, 1913. COCHRAN, BURNS & FARNSWORTH CO. Renewed June 24, 1933, to Howard B. Ritchie, Boston, Mass., assignee.

92,336. BEER, LAGER-BEER, ALE, AND PORTER. Registered July 1, 1913. HARVARD BREWING COMPANY, Lowell, Mass. Renewed July 1, 1933, to The New England Brewing Company, Boston, Mass., a Corporation of New Jersey, assignee.

92,402. CANNED SALMON. Registered July 8, 1913. COLUMBIA RIVER PACKERS ASSOCIATION, Astoria, Oreg. Renewed July 8, 1933, to Portland Trust and Savings Bank, Portland, Oreg., a Corporation of Oregon, assignee by mesne assignments.

92,492. MALT EXTRACT. Registered July 8, 1913. HENRY S. WELLCOME, London, England. Renewed July 8, 1933, to Burroughs Wellcome & Co. (U. S. A.) Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

92,539. FRESH AND CURED PORK. Registered July 15, 1913. THE DANAHY PACKING COMPANY, Buffalo, N. Y., a Corporation of New York. Renewed July 15, 1933.

92,728. A CORDIAL. Registered July 22, 1913. SHEFFIELD DENTIFRICE Co., New London, Conn., and New York, N. Y. Renewed July 22, 1933, to Sheffield Dentifrice Company, New London, Conn., a Corporation of Connecticut.

92,746. AN INSECTICIDE. Registered July 22, 1913. UNITED DRUG COMPANY, as assignee of Vex-All Company, Inc., New York, N. Y. Renewed July 22, 1933, to United Drug Company, Boston, Mass., a Corporation of Delaware, successor.

92,779. A REMEDY FOR CERTAIN NAMED DISEASES. Registered July 29, 1913. THE BACORN COMPANY, Elmira and Elmira Heights, N. Y., a Corporation of New York. Renewed July 29, 1933.

92,821. OLEOMARGARIN. Registered July 29, 1913. THE OHIO BUTTERINE COMPANY, Cincinnati, Ohio, a Corporation of West Virginia. Renewed July 29, 1933.

92,838. CERTAIN PAINTS AND PAINTERS' MATERIALS. Registered July 29, 1913. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill., a Corporation of Indiana. Renewed July 29, 1933.

92,839. CYLINDER-OIL, ENGINE-OIL, AND GAS-ENGINE OIL. Registered July 29, 1913. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill., a Corporation of Indiana. Renewed July 29, 1933.

92,886. CIGARS. Registered August 5, 1913. GARCIA & VEGA, New York, N. Y., a Firm. Renewed August 5, 1933.

92,902. HEATING STOVES AND RANGES. Registered August 5, 1913. MICHIGAN STOVE COMPANY. Renewed August 5, 1933, to Detroit-Michigan Stove Company, Detroit, Mich., a Corporation of Michigan, assignee.

LABELS

REGISTERED MARCH 14, 1933

41,831.—*Title:* E-Z THE E-Z GRATER AN ENTIRELY DIFFERENT KITCHEN NECESSITY. For Graters. ACE PRODUCTS COMPANY, INC., New York, N. Y. Published January 19, 1933.

41,832.—*Title:* BEECH-NUT ASSORTED DROPS. For Assorted Drops. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Published May 2, 1932.

41,833.—*Title:* ARCH GRASP ARCH SUPPORT SHOES. For Shoes. BIRD & SON, INC., East Walpole, Mass. Published Jan. 23, 1933.

41,834.—*Title:* LIQUID LATEX. For Prophylactic Rubbers. COMET ENVELOPE & PRINTING CO., New York, N. Y. Published December 3, 1932.

41,835.—*Title:* DICKINSON'S WITCH HAZEL. For Witch Hazel. THE E. E. DICKINSON CO., Essex, Conn. Published January 23, 1933.

41,836.—*Title:* DICKINSON'S WITCH HAZEL. For Witch Hazel. THE E. E. DICKINSON CO., Essex, Conn. Published January 10, 1933.

41,837.—*Title:* EAGLE BLEACHING WATER. For Bleaching Water. EAGLE WASHING WATER COMPANY, Chicago, Ill., assignor to Pasquale Giordano and Joe Boszo, Chicago, Ill., doing business as Eagle Washing Water Co. Published January 6, 1932.

41,838.—*Title:* CYCLE. For Oranges. FILLMORE CITRUS ASSOCIATION, Fillmore, Calif. Published June 1, 1932.

41,839.—*Title:* GLIDER. For Oranges. FILLMORE CITRUS ASSOCIATION, Fillmore, Calif. Published June 1, 1932.

41,840.—*Title:* FIRE-PRUF ASH TRAYS. For Ash Trays. GENERAL PRODUCTS, New York, N. Y. Published January 11, 1933.

41,841.—*Title:* GOOD SEED. For Lawn Grass Seed. GOOD SEED COMPANY, INC., Fredonia, N. Y. Published December 19, 1932.

41,842.—*Title:* JUNGLE GUM. For Gum. THE GOUDEY GUM CO., Boston, Mass. Published January 4, 1933.

41,843.—*Title:* RED RIBBON BLEND VANILLA AND VANILLIN. For Blend of Vanilla and Vanillin Used for Flavoring Desserts, Ice Cream, Cake, Etc. GREEVER-LOTSPEICH MFG. CO. INC., Knoxville, Tenn. Published December 29, 1932.

41,844.—*Title:* QUEEN 'O QUALITY. For Canned Salmon. P. E. HARRIS & Co., Seattle, Wash. Published October 4, 1932.

41,845.—*Title:* GUARANTEE PACKAGE. For Chocolates. GEORGE C. MILLER & CO. INC., Boston, Mass. Published January 11, 1933.

41,846.—*Title:* MILLER MADE GUARANTEE PACKAGE CHOCOLATES. For Chocolates. GEORGE C. MILLER & Co. INC., Boston, Mass. Published January 11, 1933.

41,847.—*Title:* ANIMAL CRACKERS. For Animal Crackers. RUSSELL BOX COMPANY, Medford, Mass. Published August 15, 1931.

41,848.—*Title:* REDDY-LOC. For Window Screens. THE F. B. SCHUMACHER CO., Hartville, Ohio. Published December 12, 1932.

41,849.—*Title:* PAINT ELTONA PRODUCTS. For Paint Products. ABRAHAM SOCKLOFF, New York, N. Y. Published October 7, 1932.

PRINTS

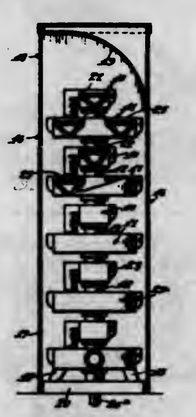
REGISTERED MARCH 14, 1933

14,069.—*Title:* FAVORITE FEEDS. For Turkey Feeds. THE PAGE MILLING CO., Luray, Va. Published January 28, 1933.

REISSUES

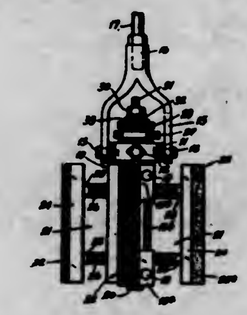
MARCH 14, 1933

18,762. HUMIDIFYING APPARATUS. GEORGE D. DOHERTY, Evanston, Ill., assignor to Doherty-Brehm Company, Minneapolis, Minn., a Corporation of Delaware. Original No. 1,760,976, dated June 3, 1930, Serial No. 199,904, filed June 20, 1927. Application for reissue filed June 3, 1932. Serial No. 615,257. 24 Claims. (Cl. 257—180.)



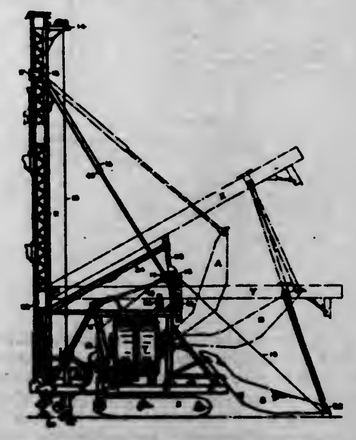
20. A combined air humidifier and heat radiator comprising a plurality of adjacent hollow heating sections connected together for circulating a heating medium therethrough, a casing open to the atmosphere for housing said sections, means for imparting humidity to the heated air rising from said heating sections, and an additional heating section for increasing the temperature of the heated and humidified air beyond that which the mixture possesses after being humidified so as to avoid an excess of free moisture in the mixture where it discharges from said casing.

18,763. HONING DEVICE FOR CYLINDERS. JOSEPH SUNNEN, Kirkwood, Mo. Original No. 1,846,371, dated Feb. 23, 1932, Serial No. 357,748, filed Apr. 24, 1929. Application for reissue filed July 15, 1932. Serial No. 622,778. 19 Claims. (Cl. 51—184.1.)



1. An apparatus of the class described comprising a revoluble carrier, mounts carried thereby and movable transversely thereof, cylinder engaging elements of abrasive material carried by certain of said mounts, cylinder engaging elements of non-abrasive elastic material carried by certain other of said mounts, all of said elements being disposed longitudinally of the axis of rotation and spaced equidistant thereabout, and means for actuating all of said mounts and adjusting all of said elements radially of said axes.

18,764. CONCRETE MIXING AND DISTRIBUTING APPARATUS. JAMES E. BUSHNELL, North Plainfield, and JOSEPH C. LUKACHOVIC, Plainfield, N. J., assignors to Ransome Concrete Machinery Company, Plainfield, N. J., a Corporation of New Jersey. Original No. 1,796,232, dated Mar. 17, 1931, Serial No. 286,082, filed June 16, 1928. Application for reissue filed Oct. 31, 1931. Serial No. 572,416. 17 Claims. (Cl. 214—95.)



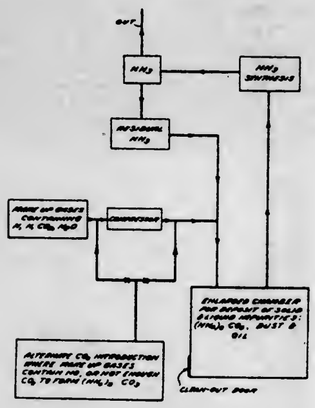
1. In a mixing and distributing unit comprising a base member, a charging skip and distributing mast movably mounted on said base for movement relative therewith, and means cooperating between said skip and mast for erecting and lowering said mast.

18,765. CONSTRUCTIONAL MATERIAL. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Original No. 1,770,361, dated July 8, 1930, Serial No. 262,761, filed Mar. 19, 1928. Application for reissue filed Nov. 17, 1930. Serial No. 496,317. 13 Claims. (Cl. 94—18.)



1. Constructional material comprising a preformed compressible strip having the sides thereof surfaced with rubber, and over said surfacing another surface of bituminous material as described.

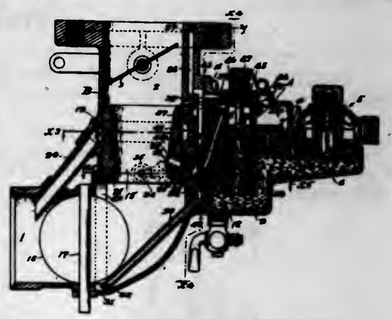
18,766. PROCESS FOR PURIFYING THE NITROGEN-HYDROGEN MIXTURE IN THE SYNTHESIS OF AMMONIA. LOUIS C. JONES, Greenwich, Conn., assignor to Chemical Engineering Corporation, New York, N. Y., a Corporation of Delaware. Original No. 1,794,908, dated Mar. 3, 1931, Serial No. 180,617, filed Apr. 2, 1927. Application for reissue filed May 17, 1932. Serial No. 611,929. 4 Claims. (Cl. 23—198.)



1. In a process of synthetically producing ammonia, in which a mixture of hydrogen and nitrogen is passed over a catalyst and a portion of the ammonia is removed by condensation or the like, the improvement which comprises admixing the circulating gas containing residual ammonia with the "make-up" gas containing carbon dioxide in a region of reduced velocity and depositing solid ammonium carbonate formed by the resulting reaction in said region.

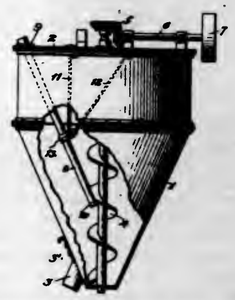
18,767. CARBURETOR. ORVILLE H. ENSIGN, Pasadena, Calif., assignor to Ensign Carburetor Co. Ltd., Huntington Park, Calif., a Corporation of California. Original No. 1,792,080, dated Feb. 10, 1931, Serial No. 40,532, filed June 30, 1925. Application for reissue filed Nov. 21, 1932. Serial No. 643,784. 10 Claims. (Cl. 261—41.)

1. A carburetor comprising an air intake; a throttle controlled suction passage; a constant level fuel chamber; a fuel passage comprising a suction chamber, a fuel riser opening from said fuel chamber into said suction chamber above the normal fuel level; and a U-tube portion connecting said suction chamber to said suction passage; an



idling by-pass leading from near the delivery end of the fuel passage to the suction passage above the throttle; and calibrated means supplying air to said suction chamber.

18,768. FEED MIXER. INGVAL EDLAND, Monitor, Oreg. Original No. 1,762,654, dated June 10, 1930, Serial No. 411,836, filed Dec. 5, 1929. Application for reissue filed Feb. 10, 1932. Serial No. 593,401. 3 Claims. (Cl. 259—97.)



1. An improvement in a dry feed mixer of the type embodying a conical mixing chamber and a central vertical screw conveyor in said chamber for agitating, elevating and dropping the feed; said improvement comprising an inclined liquid-introduction pipe within said chamber, the upper end of said pipe passing through the top of said chamber at a point near the peripheral edge thereof, the lower end of said pipe being disposed within the small lower end portion of the chamber intermediate the ends of and near the periphery of said screw conveyor, and means fixedly mounting said pipe in said chamber.

PLANT PATENTS

GRANTED MARCH 14, 1933

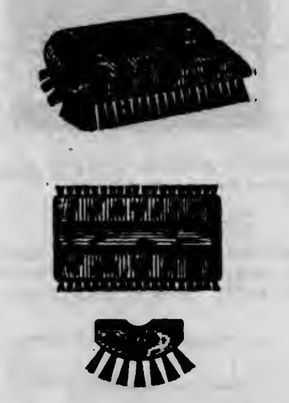
56. CARNATION. ADOLPHE F. J. BAUR, Indianapolis, Ind., assignor to Baur-Steinkamp & Company, Inc., Indianapolis, Ind. Filed Nov. 17, 1932. Serial No. 643,087. 1 Claim. (Cl. 47—1.)

The variety of carnation herewith described and shown, characterized particularly by its flowers of light pink color, medium size and large yield, also by its freedom from disease and by other superior growing and blooming habits.

DESIGNS

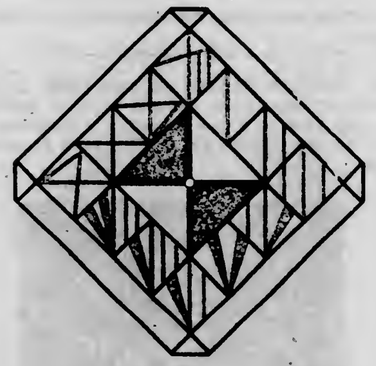
MARCH 14, 1933

89,433. BRUSH. GATES B. AUPPERLE, Albany, N. Y., assignor to Mohawk Brush Company, Albany, N. Y. Filed June 17, 1932. Serial No. 44,111. Term of patent 14 years.



The ornamental design for a brush, as shown.

89,434. DIAL FOR TIMEPIECES. MARGUERITE BRUNSWIG, Los Angeles, Calif. Filed May 28, 1932. Serial No. 43,870. Term of patent 3½ years.



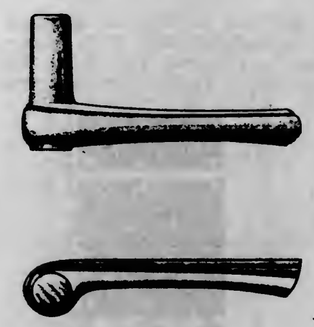
The ornamental design for a dial for timepieces, as shown and described.

89,435. AUTOMOBILE DOOR. BURNELL MALCOLM CALVERT, Terre Haute, Ind. Filed Jan. 22, 1932. Serial No. 42,595. Term of patent 3½ years.



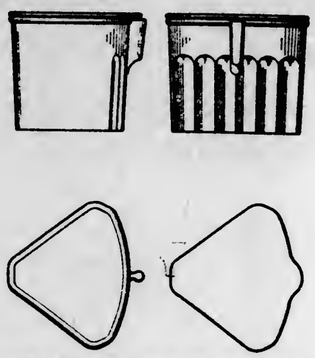
The ornamental design for an automobile door as shown.

89,436. OUTSIDE DOOR HANDLE OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. ERIC S. CARLSON, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 11, 1933. Serial No. 46,788. Term of patent 7 years.



The ornamental design for an outside door handle or similar article for an automotive vehicle substantially as shown.

89,437. JAR. JEDDIAH B. CLARK, Dunkirk, Ind., assignor to Indiana Glass Company, Dunkirk, Ind., a Corporation of Indiana. Filed Jan. 14, 1933. Serial No. 46,835. Term of patent 7 years.



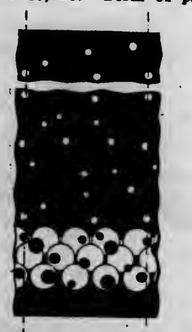
The ornamental design for a jar, as shown.

89,438. GAME BOARD. WILLIAM ROBERT CLUFF, New York, N. Y. Filed Dec. 4, 1931. Serial No. 41,965. Term of patent 14 years.



The ornamental design for a game board as shown and described.

89,439. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 28, 1933. Serial No. 47,025. Term of patent 3½ years.



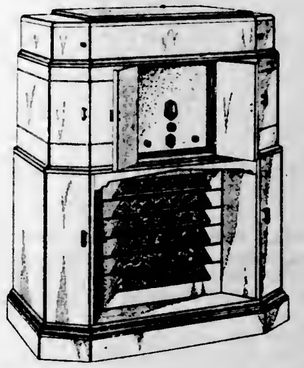
The ornamental design for a textile fabric or similar article as shown and described.

89,440. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 28, 1933. Serial No. 47,026. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,441. RADIOCABINET. ARTHUR C. HAGGSTROM, Rockford, Ill., assignor to E. H. Scott. Filed Dec. 24, 1932. Serial No. 46,581. Term of patent 7 years.



The ornamental design for a radiocabinet substantially as shown.

89,442. TEXTILE FABRIC OR THE LIKE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co., New York, N. Y., a Corporation of Delaware. Filed Nov. 10, 1932. Serial No. 45,858. Term of patent 3½ years.



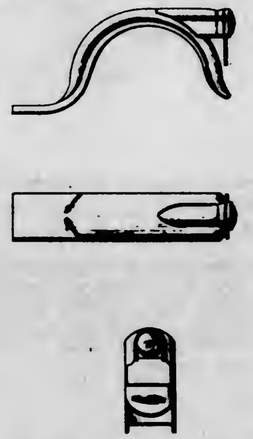
The ornamental design for a textile fabric or the like, as shown and described.

89,443. VALVE CASING. ERIC J. HERVONEN, Worcester, Mass. Filed Sept. 1, 1931. Serial No. 40,973. Term of patent 7 years.



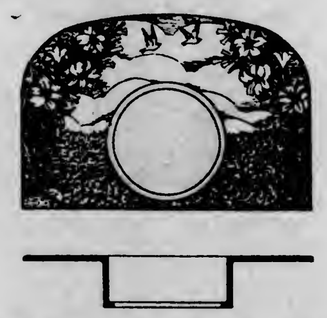
The ornamental design for a valve casing, as shown and described.

89,444. COMBINED FENDER AND TAIL-LIGHT SOCKET FOR TOY AUTOMOBILES. HARRY T. KINGSBURY, Keene, N. H. Filed Jan. 4, 1933. Serial No. 46,730. Term of patent 14 years.



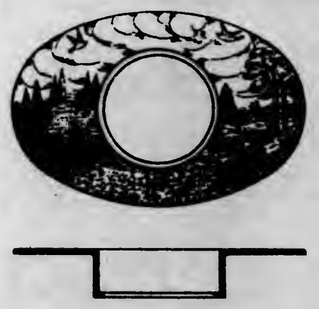
The ornamental design for a combined fender and tail light socket for toy automobiles, as shown.

89,445. GRAVE MARKER. FRANK L. MICHAELS, Fort Thomas, Ky. Filed Dec. 1, 1932. Serial No. 46,270. Term of patent 7 years.



The ornamental design for a grave marker substantially as shown.

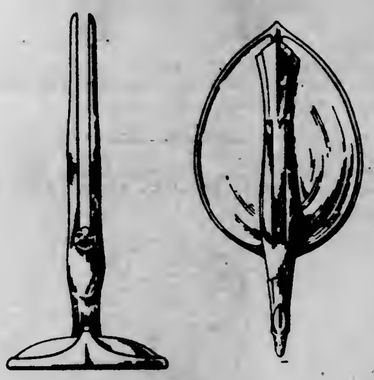
89,446. GRAVE MARKER. FRANK L. MICHAELS, Fort Thomas, Ky. Filed Dec. 1, 1932. Serial No. 46,271. Term of patent 3½ years.



The ornamental design for a grave marker substantially as shown.

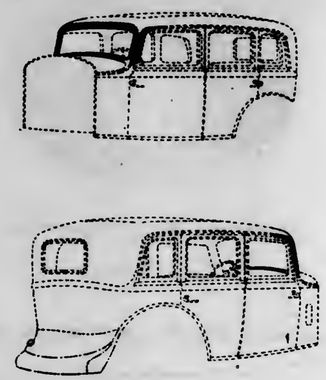
89,447. AUTOMOBILE RADIATOR ORNAMENT OR SIMILAR ARTICLE. JOHN R. MORGAN, Birmingham, and WILLIAM SCHNELL, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 11, 1933. Serial No. 46,796. Term of patent 7 years.





The ornamental design for an automobile radiator ornament or similar article substantially as shown.

89,448. AUTOMOBILE BODY. AMOS E. NORTHUP, Pleasant Ridge, Mich., assignor to The Murray Corporation of America, Detroit, Mich., a Corporation of Delaware. Filed Feb. 17, 1932. Serial No. 42,895. Term of patent 3½ years.



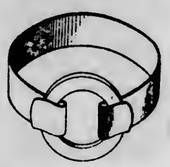
The ornamental design for an automobile body, substantially as shown and described.

89,449. FOUNTAIN PEN. RUSSELL C. PARKER, Janesville, Wis., assignor to Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Filed Sept. 7, 1932. Serial No. 44,764. Term of patent 14 years.



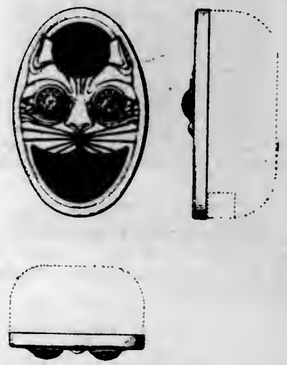
The ornamental design for a fountain pen substantially as shown and described.

89,450. BRACELET. WILLIAM REISS, Bronx, N. Y. Filed Feb. 1, 1933. Serial No. 47,075. Term of patent 7 years.



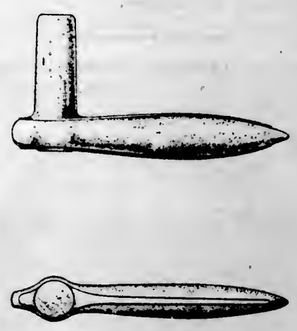
The ornamental design for a bracelet, as shown and described.

89,451. AUTOMOBILE SIGNAL LAMP. HENRY J. SAUER, Fairfield, Conn., assignor to The Kilborn-Sauer Company, Fairfield, Conn., a Corporation of Connecticut. Filed Sept. 26, 1932. Serial No. 45,066. Term of patent 7 years.



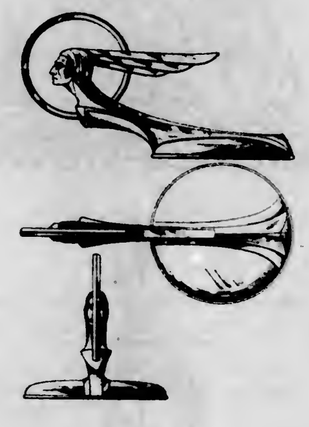
The ornamental design for an automobile signal lamp, as shown and described.

89,452. OUTSIDE DOOR HANDLE OR SIMILAR ARTICLE FOR AN AUTOMOTIVE VEHICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 11, 1933. Serial No. 46,796. Term of patent 7 years.



The ornamental design for an outside door handle or similar article for an automotive vehicle substantially as shown.

89,453. AUTOMOBILE RADIATOR ORNAMENT OR SIMILAR ARTICLE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 11, 1933. Serial No. 46,797. Term of patent 7 years.



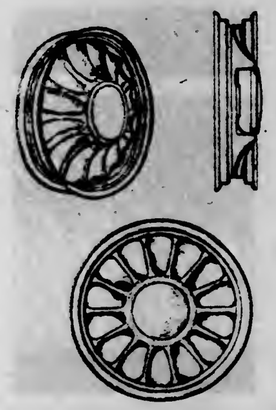
The ornamental design for an automobile radiator ornament or similar article substantially as shown.

89,454. TEXTILE FABRIC OR THE LIKE. JACK SCHWEIZER, Rye, N. Y. Filed Jan. 21, 1933. Serial No. 46,914. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,455. WHEEL. CHARLES W. SINCLAIR, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 27, 1932. Serial No. 46,623. Term of patent 14 years.



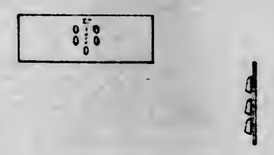
The ornamental design for a wheel, substantially as shown.

89,456. TEXTILE FABRIC OR THE LIKE. GILBERT V. TILLIARD, Jackson Heights, N. Y. Filed Feb. 8, 1933, Serial No. 47,093. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,457. STOVE PANEL ASSEMBLY. ALBERT H. TINNERMAN, Cleveland, Ohio. Filed Oct. 30, 1931. Serial No. 41,583. Term of patent 7 years.



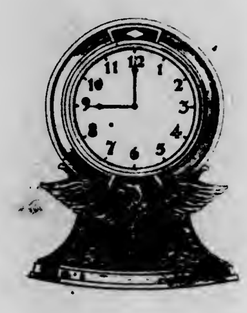
The ornamental design for a stove panel assembly, as shown and described.

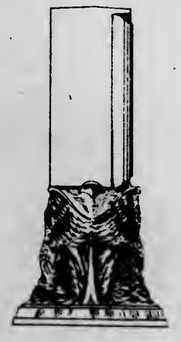
89,458. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 28, 1933. Serial No. 47,023. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,459. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn. N. Y. Filed Dec. 1, 1932. Serial No. 46,274. Term of patent 7 years.





The ornamental design for a clock case, as shown.

89,460. CLOCK CASE. FRANK J. ABEL, Massapequa, N. Y., assignor to Henry Hyman, Brooklyn, N. Y. Filed Dec. 3, 1932. Serial No. 46,301. Term of patent 7 years.





The ornamental design for a clock case, as shown.

89,461. BRUSH. GATES B. AUFSESSER, Albany, N. Y., assignor to Mohawk Brush Company, Albany, N. Y. Filed June 17, 1932. Serial No. 44,112. Term of patent 14 years.

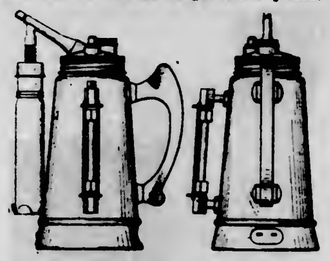






The ornamental design for a brush as shown.

89,462. VAPORIZER OR SIMILAR ARTICLE. HYMAN W. BERGMAN, Kansas City, Mo. Filed Dec. 10, 1932. Serial No. 46,425. Term of patent 7 years.





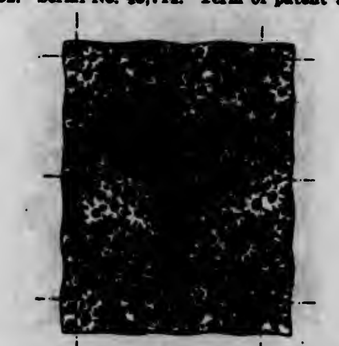
The ornamental design for a vaporiser or similar article, as shown.

89,463. DISPLAY STAND. SAMUEL GORDON, Boston, Mass. Filed Nov. 28, 1932. Serial No. 46,181. Term of patent 7 years.



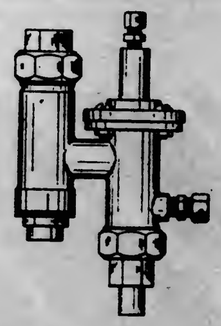
The ornamental design for a display stand, as shown.

89,464. TEXTILE FABRIC OR SIMILAR ARTICLE. CARL R. HELLMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,744. Term of patent 3½ years.



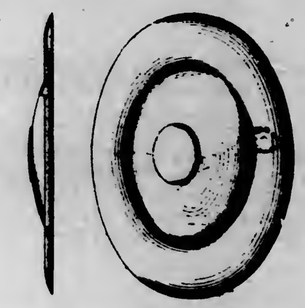
The ornamental design for a textile fabric or similar article as shown and described.

89,465. VALVE CASING. HERBERT S. HUMPHREY, Kalamazoo, Mich., assignor to H. L. G. Company, Kalamazoo, Mich. Filed Dec. 27, 1932. Serial No. 46,626. Term of patent 7 years.



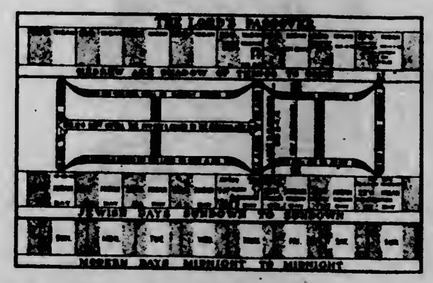
The ornamental design for a valve casing, as shown.

89,466. COMBINATION SPARE TIRE COVER SIDE MEMBER AND SPARE WHEEL HUB CLOSURE FOR A TIRE COVER OR SIMILAR ARTICLE. GEORGE ALBERT LYON, Asbury Park, N. J., assignor to Lyon Incorporated, Asbury Park, N. J., a Corporation of Delaware. Filed Oct. 10, 1932. Serial No. 45,275. Term of patent 14 years.



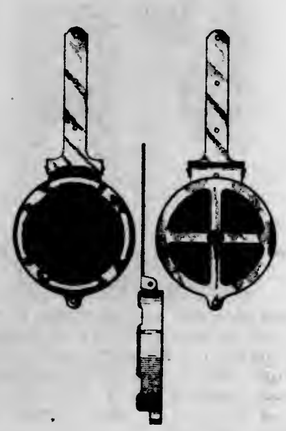
The ornamental design for a combination spare tire cover side member and spare wheel hub closure for a tire cover or similar article as shown and described.

89,467. EDUCATIONAL CHART. ELMER G. MARTIN, East Lampeter Township, Lancaster County, Pa. Filed Dec. 20, 1932. Serial No. 46,587. Term of patent 7 years.



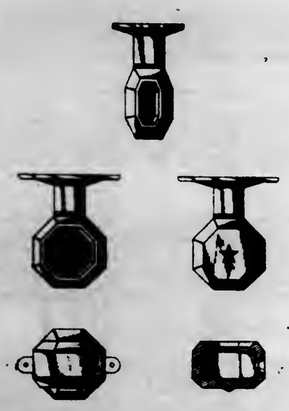
The ornamental design for an educational chart as shown.

89,468. COMBINED CASING OR FRAME AND BRACKET FOR LIGHT REFLECTOR SIGNAL. HERMAN C. REICHHARDT, Evanston, Ill., assignor, by direct and mesne assignments, to Star-Brite Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1926. Serial No. 42,328. Term of patent 14 years.



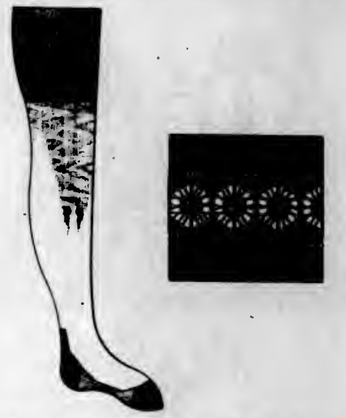
The ornamental design for a combined casing or frame and bracket for light reflector signal, as shown.

89,469. VEHICLE REAR LIGHT CASING. HERMAN C. REICHHARDT, Evanston, Ill., assignor, by direct and mesne assignments, to Star-Brite Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1931. Serial No. 42,329. Term of patent 7 years.



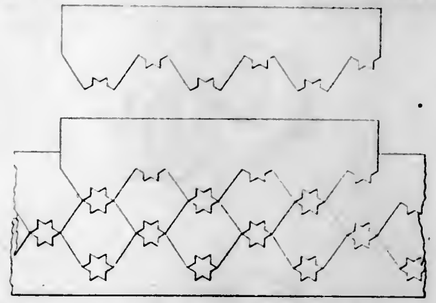
The ornamental design for vehicle rear-light casing as shown.

89,470. STOCKING. ROBERT B. SCHINDLER, Spring City, Pa. Filed Feb. 2, 1932. Serial No. 42,715. Term of patent 3½ years.



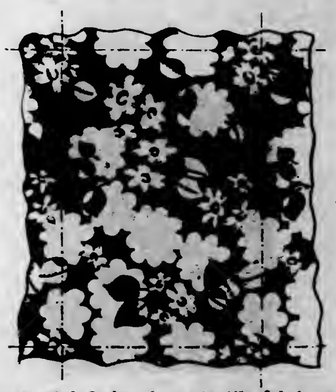
The ornamental design for a stocking as shown.

89,471. ROOFING. RICHARD S. STREETER, Oakland, and OTTO E. HENDRICK, Alameda, Calif. Filed Nov. 28, 1932. Serial No. 46,182. Term of patent 7 years.



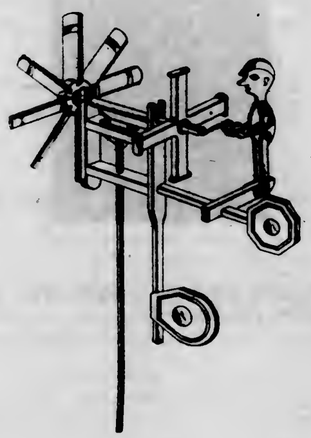
The ornamental design for a roofing substantially as shown.

89,472. TEXTILE FABRIC OR SIMILAR ARTICLE. PHILIP A. VOGELMAN, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,025. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,473. TOY WINDWHEEL. JAMES WILLIAM WHELAN, Washington, D. C. Filed Jan. 5, 1933. Serial No. 46,743. Term of patent 14 years.



The ornamental design for a toy windwheel, as shown.

89,474. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 24, 1932. Serial No. 45,050. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,475. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 26, 1932. Serial No. 45,099. Term of patent 3½ years.



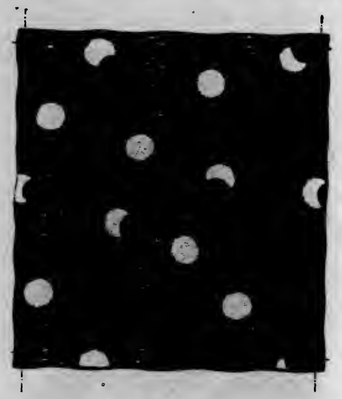
The ornamental design for a textile fabric or similar article as shown and described.

89,476. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Oct. 14, 1932. Serial No. 45,344. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,477. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,286. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,478. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,714. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

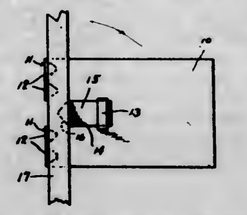
GRANTED MARCH 14, 1933

1,900,894. GROUND CONNECTER. GEORGE L. BARNES and HOWARD D. CHAPMAN, Los Angeles, Calif.; said Chapman assignor to said Barnes. Filed July 26, 1930. Serial No. 470,972. 8 Claims. (Cl. 247—1.)



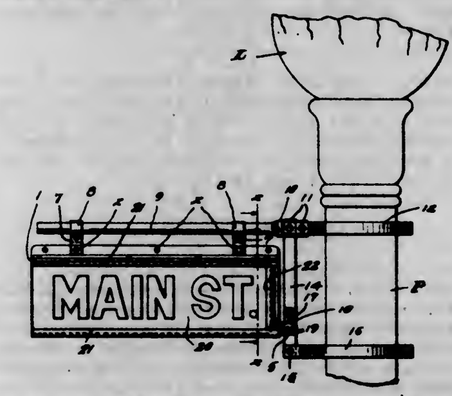
3. A ground connecter comprising: a pair of two-part clamps; the parts of each clamp having co-acting jaws for receiving a pipe therebetween; extensions on the parts of each clamp having openings; a bolt passing through the openings to pivotally connect the parts of one clamp to the parts of the other clamp; and a nut on the bolt adapted to co-act therewith in clamping the jaws of each clamp about a pipe.

1,900,895. EXPANSION JOINT ANCHOR. JOHN C. BARTHOLET, Tacoma, Wash. Filed July 27, 1931. Serial No. 553,447. 8 Claims. (Cl. 94—51.)



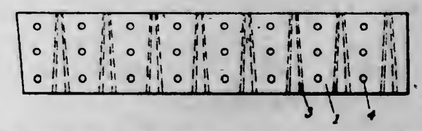
1. An anchor for the purpose specified comprising a plate provided at one end with a pair of posts extending upwardly therefrom and bendable relative thereto, and a third post rising from the plate intermediate the ends of the plate and in staggered relation with respect to the first mentioned posts.

1,900,896. SIGN. PETER H. BETHEA, Washington, D. C. Filed July 28, 1932. Serial No. 624,271. 4 Claims. (Cl. 40—128.)



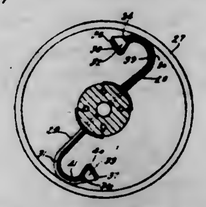
1. A sign comprising two members having their upper marginal portions connected, said members having relative movement to vary the inclination of said members one toward the other, a supporting rod, means for securing an end portion of the rod to a support, means coacting with the rod and the connected marginal portions of the members for suspending the sign from the rod, a bar positioned adjacent to the inner end of the rod and substantially at right angles thereto, one end portion of the bar being secured to said end portion of the rod, means for securing the opposite end portion of the bar to a support, inwardly directed flanges carried by the inner ends of the members of the sign, said flanges being in overlying relation, and a member secured to the bar and to the overlying flanges of the members of the sign to hold the sign against sway.

1,900,897. LINER. CHARLES BUTTERFIELD, Norwood, Ohio, assignor to Harold W. Nichols, Cincinnati, Ohio. Filed Mar. 16, 1931. Serial No. 522,832. 3 Claims. (Cl. 217—3.)



1. A package liner comprising an elongated substantially rectangular blank with straight edges, having tapered pleats formed therein from one longitudinal edge to the other, and the ends secured together to form a tapering tubular basket liner.

1,900,898. ROTARY ENGINE. NEIL CHRISTIE, Larder Lake, Ontario, Canada. Filed May 28, 1932, Serial No. 614,114, and in Canada June 5, 1931. 2 Claims. (Cl. 253—81.)

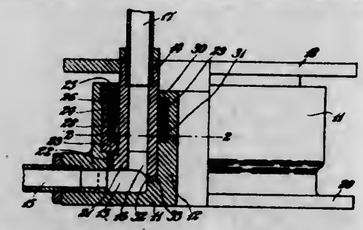


1. In an engine, a hollow shaft forming a fluid inlet and having longitudinal passages forming exhausts, a fly wheel rim concentric with said shaft, feed pipes tapping the hollow of said shaft and rigidly secured to said rim and curled outwardly therefrom, cups forming impulse members and secured to the curved ends of said pipes and having exhaust openings connected to said exhaust passages, and valves introduced in said exhaust passages and adapted to direct the impulse fluid into reverse contact with the cups.

1,900,899. ROTARY COUPLING FOR STEAM AND OTHER PRESSURE FLUID SUPPLY CIRCUITS. GILBERT HAROLD DAVIES, Ebbw Vale, Wales. Filed Aug. 3, 1931, Serial No. 554,982, and in Great Britain Aug. 6, 1930. 5 Claims. (Cl. 285—9.)

1. A rotary coupling comprising a member having an annular chamber therein, a pressure fluid conduit communicating with said chamber, an annular hollow member rotatably seated in the annular chamber in the first-mentioned member, the interior of said hollow member

being open at the inner side to the annular chamber and said member being closed at its outer side, a fluid pressure conduit extending through the closed side of said member to communicate with the interior thereof and said mem-



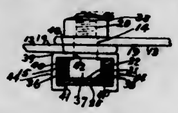
ber being movable axially under pressure admitted to the annular chamber in the first-mentioned member, and means for limiting the axial movement of the hollow member, said limiting means forming a fluid-tight seat.

1,900,900. ORNAMENTAL RIBBON AND METHOD OF MAKING SAME. HAROLD A. EVANS, Lynn, Mass., assignor to Parco Specialty Co., Lynn, Mass., a Corporation of Massachusetts. Filed Dec. 16, 1929. Serial No. 414,365. 8 Claims. (Cl. 154—2.)



1. The method of manufacturing ornamental ribbons for application to sheet articles, comprising the coating of the central portion of a strip having selvaged edges with a stripe of permanently plastic agglutinant, applying a protective strip to the stripe and cutting the strip, the stripe, and the protective strip into two separate, elongate members, each of which comprises a ribbon having an adhesively coated marginal portion protected with a protective covering member, and its opposite edge provided with a selvaged edge.

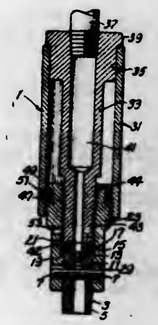
1,900,901. GARAGE DOOR CONTROL DEVICE. EDWARD S. BAGLEY, Hartford, Conn. Filed May 27, 1929. Serial No. 366,272. 7 Claims. (Cl. 268—62.)



1. In a garage door control device, a pair of doors adapted to swing towards each other, a track disposed at right angles to the plane of said doors when the latter are closed, a member movable in said track, a tension member for connecting the rear end of said track to an overhead part of the garage structure, a pair of links pivotally connected at their rear ends to said member at a point above said track, said links having their forward ends respectively connected to said doors, diagonal braces connected at their forward ends to the lintel of the doorway and having their rear ends connected to the under side of said track, and a member partially encircling said track and associated with said first mentioned member for preventing the latter from jumping the track.

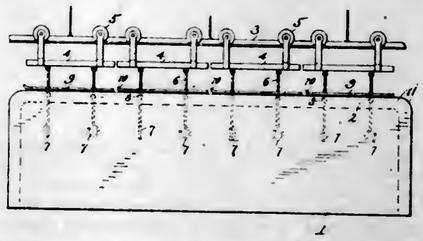
1,900,902. COUPLING. FRANK S. BARKS, St. Louis, Mo. Filed Apr. 10, 1931. Serial No. 529,001. 5 Claims. (Cl. 286—176.)

1. In combination a hollow fitting, and a coupler for a pressure lubricating system, said coupler comprising a nozzle and a hollow connecting member having a threaded bore and being adapted to thread with said nozzle, said connecting member also being adapted to lock with said fitting to join said fitting and nozzle, and means between said nozzle and connecting member adapted to



provide a substantially constant frictional drive therebetween, said means comprising resilient means reacting between said nozzle and connecting member, said means constituting the only driving means between said nozzle and said connecting member.

1,900,903. CARRIER FOR OVENS, FURNACES, OR THE LIKE. EARL T. BENNINGTON, Cleveland Heights, Ohio, assignor to The Cleveland Crane & Engineering Company, Wickliffe, Ohio, a Corporation of Ohio. Filed Jan. 15, 1927. Serial No. 161,382. 3 Claims. (Cl. 25—142.)



1. A carrier for furnaces, ovens or the like, having supporting wheels adapted to travel on an overhead track, a frame, load supporting members depending from the frame, a cover plate of substantially the same length as the frame slidably mounted on said members, one end of said plate being upwardly inclined, and means on said members intermediate the ends thereof for supporting said plate.

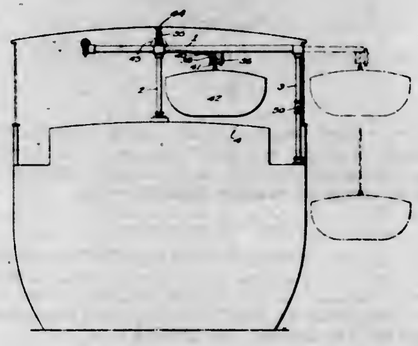
1,900,904. FLEXIBLE WEAR-RESISTING SEALING FABRIC AND METHOD OF MAKING THE SAME. EDWARD H. BERGER, Manville, N. J., assignor to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1929. Serial No. 356,243. 12 Claims. (Cl. 91—68.)



1. An article of manufacture comprising a base member having coatings thereon, said base member consisting of a woven fabric made from strands of fire-resisting fibrous material, one of said coatings consisting of a water-insoluble gum and the other consisting of an oil and vapor-resisting material.

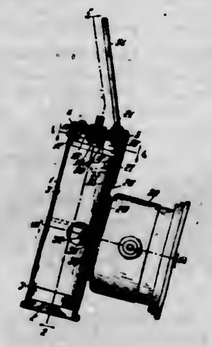
9. A method of manufacturing a water, oil and vapor-proof flexible sealing fabric, which consists in applying a thin layer of a rubber compound to one side of an asbestos fabric and then calendering and curing, after which the other side is impregnated with a protein compound by a series of brushing and drying applications, and then subjected to a series of dipping and drying applications in a hardening solution to give a coating of substantial thickness.

1,900,905. BOAT HOIST. WILLIAM IRVING BOWDEN, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 22, 1930. Serial No. 483,666. 13 Claims. (Cl. 9—22.)



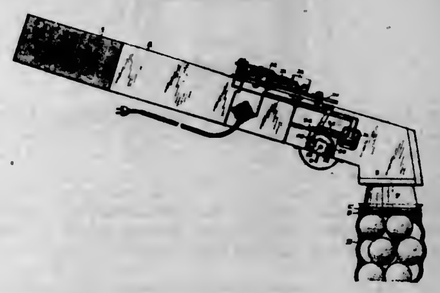
1. In a boat hoist, the combination with an elongated hollow casing, of a threaded shaft journaled at one end of said casing and extending longitudinally therethrough, an inner hollow casing slidably supported in the first-named casing and surrounding said shaft, said inner casing comprising a nut having threaded engagement with said shaft, boat hoisting and supporting apparatus carried by said inner casing, and means for rotating said shaft.

1,900,906. PORTABLE ELECTRIC ILLUMINATING APPARATUS. LE ROY O. BROWN, Chicago, Ill., assignor to Justrite Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 538,027. 8 Claims. (Cl. 240—10.6.)



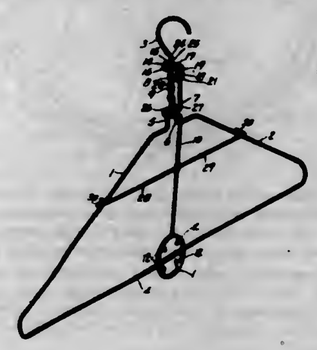
1. In a portable electric illuminating apparatus, a metal battery casing adapted to receive a plurality of sets of battery cells and open at one end for direct insertion of cells to fill the same, springs on the bottom wall thereof, a plurality of series of superposed dry cells having the lower end terminals of the lower cells of each set engaged by said respective springs for electrically connecting said cells in parallel with said casing, a cover for said casing, a metal bar carried thereby engaging the upper terminals of the upper of said several series of batteries for electrically associating said batteries in parallel when said cover is closed, a pair of electrical terminal members mounted upon a wall of the casing with one thereof insulated from the same, a metal member insulated from the casing and in contact with the other of said terminals, a flexible metallic element carried by the cover and contacting with said metal member when the cover is closed, and means for electrically connecting said last-named member with said bar thereby to connect the cells with said terminals while the cover is closed.

1,900,907. BAG FILLING APPARATUS. HERMAN A. BUXTON, Cleveland Heights, Ohio, assignor to The Chase Bag Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1929. Serial No. 411,720. 7 Claims. (Cl. 226—58.)



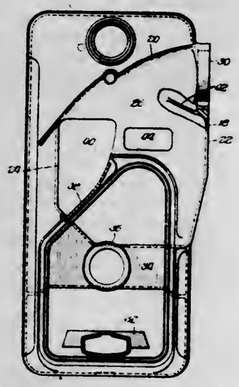
1. In a bag filling apparatus, a gravity delivery chute having a flaring receiving end, a downwardly extending discharge end including means for suspending a bag therefrom, a rotatable wheel having spokes extending into said chute and adapted to rotate said wheel by the objects passing through said chute, and adjustable indexing means for controlling the rotatable movements of said wheel, and the number of objects passing through said chute into said bag.

1,900,908. GARMENT HANGER. JOHN G. CAMPBELL and LAWRENCE A. CAMPBELL, Kansas City, Mo. Filed Oct. 11, 1930. Serial No. 487,985. 6 Claims. (Cl. 223—62.)



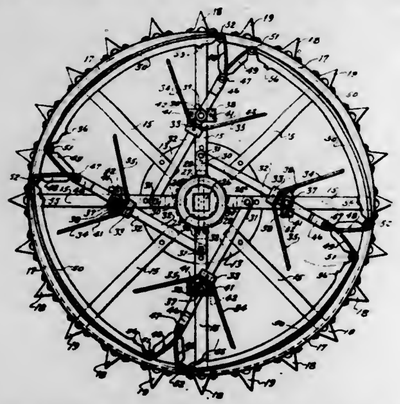
1. A garment hanger comprising a stem provided with a hook and having a bent portion, a bow including rails diverging from said hook to form a seat, and a horizontal rail connecting said diverging rails, a retainer comprising a wire having one end pivotally mounted in said bent portion of the stem and an opposite enlarged end engageable with said horizontal rail, and means for resiliently latching the retainer to the bow.

1,900,909. RADIATOR. GLEN C. CARNAHAN, Chicago, Ill., assignor to James B. Clow & Sons, Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1931. Serial No. 506,127. 3 Claims. (Cl. 126—91.)



1. A radiator of the class described having, in combination, a vent section and a plurality of adjacent communicating sections, said vent section comprising a chamber, a flue connection extending from the chamber, a side wall of the chamber having a large atmospheric opening at a point remote from the flue connection, and said wall having a smaller supplemental opening disposed between the larger opening and the flue connection.

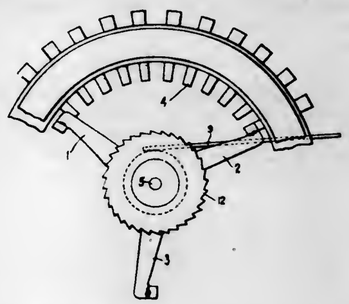
1,900,910. AUXILIARY TREAD FOR TRACTORS. DAVID CARPENTER, Cherryville, N. C. Filed Dec. 9, 1931. Serial No. 579,844. 3 Claims. (Cl. 301—38.)



3. An expansible tread for a tractor wheel having spokes comprising a plurality of tread members pivotally connected to each other at their ends, means slidably mounted on the spokes of the tractor wheel for supporting the tread members, and means mounted on the hub of the tractor wheel for moving said supporting means and the tread members to form an auxiliary tread having a circumference greater than the circumference of the tractor wheel.

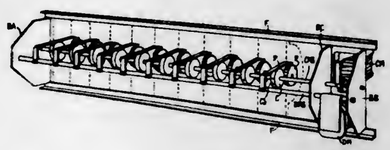
1,900,911. TELEPHONE SYSTEM. DAVID ADAM CHRISTIAN, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Nov. 17, 1930, Serial No. 496,145, and in Great Britain Nov. 23, 1929. 16 Claims. (Cl. 179—18.)

1. In a rotary switch mechanism in which a set of fixed contacts are successively engaged by a plurality of movable contacts and wherein the movable contacts are electrically connected, the provision of a like plurality of brushes and a cooperating commutating device com-



prising an insulating ring with a metal segment which functions to sequentially electrically connect said brushes with said movable contacts as the movable contacts successively engage the contacts of said fixed set.

1,900,912. ELECTROMAGNETIC SWITCH. DAVID ADAM CHRISTIAN, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Sept. 19, 1931, Serial No. 563,875, and in Great Britain Sept. 23, 1930. 15 Claims. (Cl. 179—18.)



1. In a switching mechanism comprising a plurality of switches, an individual pawl and a cooperating individual ratchet for each of said switches, means for selecting any one of said pawls to operatively associate said selected pawl with its cooperating ratchet, and means common to said switches for operating said pawls to effect the movement of the ratchet cooperating with the selected pawl.

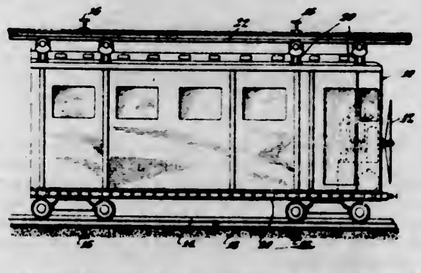
1,900,913. ELECTRICAL COUPLING DEVICE. JOHN P. COLEMAN, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 2, 1931. Serial No. 512,977. 3 Claims. (Cl. 173—332.)



1. Apparatus for supporting a coupling member comprising a pipe secured to said coupling member, two fixed spaced guides provided with means which receive said pipe in such manner that a limited amount of axial movement of said coupling member is permitted, the guide which is nearest said coupling member also being provided with a plurality of plungers movable radially toward and away from said pipe and biased into engagement with said pipe by means of springs, a compression spring interposed between said coupling member and the nearest guide, and means for preventing rotation of said coupling member about the axis of said pipe.

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1,900,914. SYSTEM FOR PREVENTING THE DERAILMENT OF SCREW-DRIVEN VEHICLES. MANUEL GOMIS CORNET, Madrid, Spain. Filed Dec. 11, 1930, Serial No. 501,729, and in Spain Dec. 11, 1929. 8 Claims. (Cl. 104—242.)



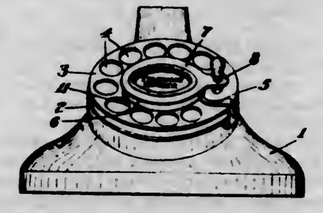
1. In combination with a vehicle, a frame structure enclosing the vehicle, tracks supported within the frame on the bottom thereof for supporting said vehicle for travel within said frame, guide rails positioned within the frame at the top, sides and bottom thereof extending in parallel relation to said tracks, and derailment-preventing means secured to the top, sides and bottom of the vehicle and engaging said guide rails.

1,900,915. WRENCH SET. WILLIAM F. COSTELLO, New Britain, Conn., assignor to The New Britain Machine Company, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 11, 1932. Serial No. 592,309. 4 Claims. (Cl. 206—16.)



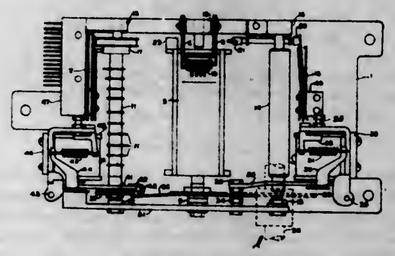
1. A holder for a graduated set of superposed, double-headed wrenches, comprising a substantially rigid base member adapted to underlie the bottom wrench of the series and having an upwardly and inwardly bent end portion engageable between the jaws of the several corresponding wrench ends, and strap means pivotally connected to the opposite end of the base member and detachably connectable to the said bent end portion, said means being adapted to extend upwardly between the opposite jaws of the wrenches and over the top of the uppermost wrench.

1,900,916. DIAL OPERATOR. JOHN FRANCIS CURRIVAN, Forest Hills, N. Y., assignor to Good-Ad, Inc., a Corporation of Pennsylvania. Filed Dec. 31, 1929. Serial No. 417,606. 8 Claims. (Cl. 179—90.)



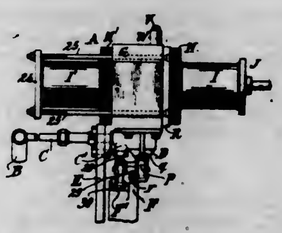
1. For use with a dial telephone having a rotatable dialing disc provided with an annular series of holes, and having centrally thereof an area adapted to disclose printed matter, a dial operator comprising a rotatable and reciprocal plunger and means for maintaining said plunger in alignment with said hole series for selected projection into desired hole, said aligning means lying wholly outwardly of said area so as not to obscure the same.

1,900,917. SELECTOR SWITCH SUITABLE FOR USE IN TELEPHONE SYSTEMS. GERALD DRAKIN, New York, N. Y., and LOUIS JEAN JOSEPH SCHREURS, Antwerp, Belgium, assignors to International Standard Electric Corporation, New York, N. Y. Filed May 31, 1930, Serial No. 458,044, and in Great Britain June 26, 1929. 13 Claims. (Cl. 179—27.51.)



1. In a selector switch comprising a plurality of sets of brushes and mounted on a movable carriage, a device for selecting a particular set of said brushes, and means to operate said device by a movement of said carriage preliminary to the movement thereof which advances the brushes over the bank of the selector.

1,900,918. CAN TESTING MACHINE. WILLIAM DIETER, Newark, N. J., assignor to E. W. Bliss Company, a Corporation of Delaware. Filed Oct. 24, 1931. Serial No. 570,831. 5 Claims. (Cl. 73—51.)



1. A can testing machine of the described type, its units comprising each two chambers, front and rear, with a diaphragm exposed on its opposite sides to the pressures from the respective chamber, means for applying the can to be tested in hermetic communication with the front chamber, and the rear chamber having a total capacity approximately equal to the combined capacity of the front chamber and can, and valve means for simultaneously admitting and discharging air to and from both chambers, whereby pressure differences due to temperature changes of the confined air are substantially equalized.

1,900,919. COMBINED VENTILATING AND FIRE SHUTTER FOR MOTION PICTURE PROJECTION MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,739. 6 Claims. (Cl. 88—17.)

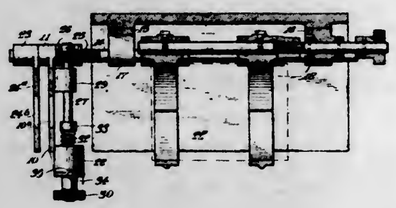
4. A combined ventilating and fire shutter for motion picture machines which comprises a rotatable multi-bladed

shutter, a second multi-bladed shutter moveable with respect to the first shutter, said second shutter having a plurality of operative positions with respect to the first



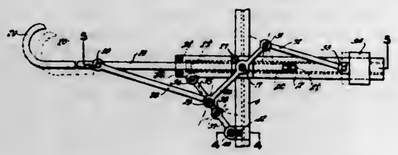
shutter, substantially the entire area of the blades of said shutters being disposed at the same angle to the plane normal to the axis of rotation.

1,900,920. GATE FOR MOTION PICTURE MACHINES. AUGUSTO DINA, Jersey City, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 4, 1929. Serial No. 404,543. 16 Claims. (Cl. 88—17.)



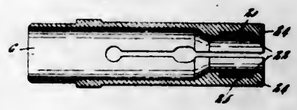
2. A door driving and locking device for motion picture machines which comprises a driven gate door, a driving member, means permitting the member to drive the door away from the gate by a continuous movement thereof, in one direction or another, and means for automatically locking said drive member at predetermined points in the movement of the door.

1,900,921. APPARATUS FOR GUIDING AND STEADYING DRILL STEM AND DRILL PIPE. WILLIAM H. ENDSLEY, Henderson, Tex. Filed Apr. 1, 1931. Serial No. 526,949. 10 Claims. (Cl. 255—35.)



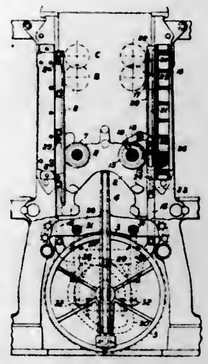
1. A pipe stabilizer for well drilling, embodying a pivotally mounted substantially horisontal member, a single hook ended pipe engaging member slidably supported by said horisontal member, link and crank means for moving both members in an arc, link and crank means for selectively moving said pipe engaging member longitudinally with relation to said horizontal member, and means for maintaining both of said members in a substantial balance upon a supporting member.

1,900,922. GRIPPING FACE FOR CHUCKS AND METHOD OF MAKING THE SAME. LEIGH R. EVANS, Elmira, N. Y., assignor to Morrison Machine Products, Inc., Elmira, N. Y. Filed Sept. 23, 1930. Serial No. 483,837. 3 Claims. (Cl. 279—123.)



1. A chuck having a stock engaging face provided with wear-resisting portions, in which a shallow recess is formed in said face, and an insert of a hard, brittle metallic material having relatively low tensile strength welded in said recess to the metal of said chuck, with the metal of the chuck forming a reinforcement on all sides except the face of the insert.

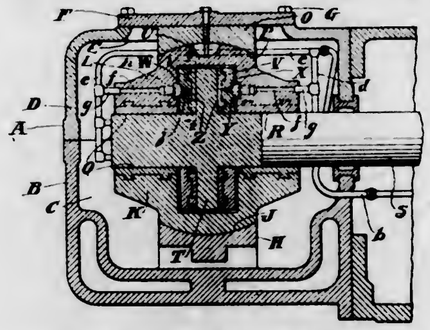
1,900,923. PRINTING PRESS. FRITZ FALLERT, Bern, Switzerland. Filed Mar. 24, 1931, Serial No. 524,834, and in Germany June 29, 1928. 5 Claims. (Cl. 101—269.)



1. In a printing press, having vertically disposed printing beds and having impression cylinders provided with channels and mounted in a rising and falling slide, a drive and control arrangement, comprising vertical racks mounted on the frame of the press, pinions connected with the impression cylinders and engaging said vertical racks during the movement of the slide, a toothless gap on the periphery of each of said pinions corresponding to said channels on the impression cylinders, an auxiliary driving mechanism for bridging over said gaps in the driving pinion and for initiating the rotation of the printing cylinders and means for bringing said auxiliary driving mechanism into operation in such a manner, that the impression cylinders gradually are brought from a standstill to the full peripheral velocity.

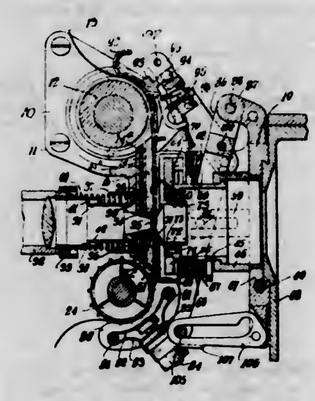
1,900,924. OILING DEVICE FOR BEARINGS. ROWLAND V. D. FIRTH, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 22, 1930. Serial No. 446,285. 2 Claims. (Cl. 308—160.)

1. In combination with a rotatable member, a thrust bearing having a supply passage for oil, thrust shoes in the bearing having bearing surfaces thereon, oil passages in the thrust shoes extending substantially parallel to the bearing surfaces in a direction counter to the direction of rotation of said member and opening at one end of said shoes, radially extending grooves in said end of the thrust shoes to receive oil from the oil passages, said grooves being wedge-shaped in cross section with the end nearest the center of the shoe blending into the bearing surface, and thrust buttons interposed between the bearing and



the thrust shoes to permit oscillating movement of the thrust shoes relatively to the bearing and having passages to convey oil from the supply passage to the oil passages.

1,900,925. COMPOUND FILM GATE. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1928. Serial No. 315,379. 9 Claims. (Cl. 88—17.)



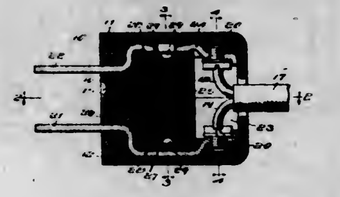
1. In combination with an aperture plate, an idler and a continuously rotating sprocket for feeding film thereover, a film gate comprising pivoted members carrying pressure shoes adapted to contact with said idler and said sprocket, a slidable member mounted independently thereof and carrying pressure shoes adapted to contact with said aperture plate, and a single means for controlling the position of all of said members.

6. In an aperture plate, a plurality of metallic members, mica separators therebetween, and facing strips over which a film may be passed, and members of metallic material inserted in said facing strips under the perforated portions of said film.

7. In a projection machine, an aperture plate having film engaging surfaces of comparatively soft material and hard metallic members inserted in said film engaging surfaces and substantially flush therewith in a position to contact with the perforated portions of the film.

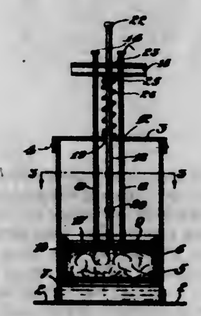
8. In a film gate, pressure shoes, a support therefor, and means for mounting said shoes on said support comprising a swivel joint permitting pivotal movement of said shoes in all directions whereby said shoes may be self aligning when pressed into film engaging position.

1,900,926. COMBINATION PLUG AND FUSE. ADOLPH J. FRIESEL, Chicago, Ill. Filed Apr. 13, 1931. Serial No. 529,660. 2 Claims. (Cl. 200—115.5.)



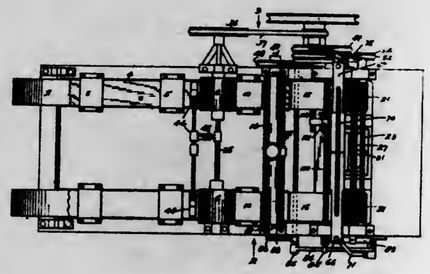
1. In an electrical device, a plug, a housing member comprising a plurality of sections of insulating material detachably fastened together to form a hollow body, a pair of terminals embedded in said housing member, one of said terminals comprising two sections having their adjacent ends arranged in exposed spaced apart relation on the inner periphery of the housing, a cylindrical fuse block positioned on the interior of said housing, said block having a plurality of fuse members on its outer periphery, a mounting for said block providing means permitting the block to be shifted to bring any one of said fuse members into cooperative relation with the adjacent ends of said terminals, said fuse members extending longitudinally of said cylindrical fuse block, and said block having grooves underlying each of said fuse members providing receptacles of substantial depth for the melted material of the burnt out fuses.

1,900,927. CLOTHES CLEANING MACHINE. EDWIN G. GETTINS, Los Angeles, Calif. Filed Aug. 24, 1931. Serial No. 559,010. 7 Claims. (Cl. 68—37.)



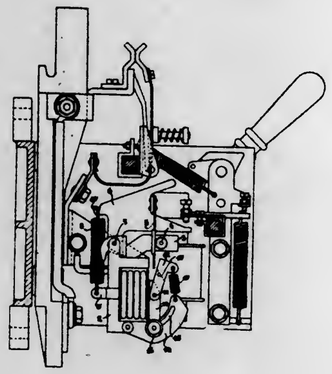
4. In a clothes cleaning machine, a tank, a clothes receiving basket in said tank, a plunger plate in said basket, means for vertically reciprocating said basket and plate, and means for limiting upward movement of said plate relative to upward movement of said basket; said basket and plate reciprocating means including means for advancing said plate downwardly relative to said basket, and means for advancing said basket upwardly relative to said plate beyond the limit of upward movement of the latter.

1,900,928. FIRECRACKER TUBE ROLLING MACHINE. WILLIAM F. GONGAWARE, Santa Monica, Calif. Filed Aug. 24, 1931. Serial No. 558,879. 13 Claims. (Cl. 93—181.)



1. A machine for making a tight-wound, convolute-layer tube including a turnable core, means to feed a flat strip blank thereto, a spinning, friction platen, means to press the coiling tube to the platen, and means to eject the tube from the core.

1,900,929. ELECTRIC SWITCH. LEONHARD HAAG, Frankfort-on-the-Main, Germany. Filed May 1, 1930. Serial No. 449,022. 8 Claims. (Cl. 200—88.)



1. In an indirect electric release device, the combination of a magnetic core, an exciting winding upon said core, a release member movably mounted on said core, spring means for actuating said release member anchored to said core, an armature pivoted to said core and under the influence of the magnetic field thereof, a secondary winding upon said core, a release mechanism actuated by small but protracted excess currents fed by said secondary winding and mounted on said core, a catch on said release member in the path of said armature and normally held by said release mechanism, an adjusting armature pivoted to said core for adjusting the ratio of transformation between said exciting winding and said secondary winding, a projection on said adjusting armature lying in the magnetic circuit of said first mentioned armature adapted to alter the reluctance thereof, a scale plate secured to said core, means for clamping said adjusting armature to said scale plate, and a spring connected between said scale plate and said first mentioned armature tending to draw said first mentioned armature away from said core.

1,900,930. PORTABLE MAGNIFIER. OSCAR HAUSER, Ozone Park, N. Y., assignor to Kollmorgen Optical Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 20, 1931. Serial No. 558,201. 1 Claim. (Cl. 88—39.)



In combination a casing or container, a sleeve within the container secured to the bottom thereof, a shaft or rod movable axially of the container, a plate carried by said rod and maintaining the same in line with said sleeve, a groove in the shaft cooperable with spring fingers provided by said sleeve when the shaft is in its innermost position, a spring placed under compression by the inward movement of said shaft and held compressed by the engagement of said fingers with the groove in said shaft, stop mechanism limiting outward movement of the shaft under the action of said spring, a lens mount carried at the outer end of said shaft, a lens carried by said mount, and a cover for the container carried by said lens mount, the permitted inward movement of said shaft being sufficient to move the lens into the container and said cover to closed position.

1,900,931. FLASH-LAMP. HARRY T. HIPWELL and HARRY H. HIPWELL, Pittsburgh, Pa. Filed Mar. 19, 1930. Serial No. 437,074. 7 Claims. (Cl. 240—10.66.)

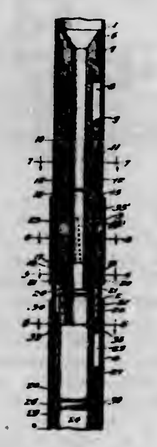


1. The combination with a flash lamp casing and a cap therefor, of a suspending member of generally U shape, a recess in said cap having holes through one wall, the legs of said member extending through said holes, and having the inner ends thereof bent outwardly to engage the adjacent walls of the recess, and a disc-like member positioned over said recess to support the inner ends of said suspending member against movements in a lateral direction.

1,900,932. ROTARY WELL DRILLING BIT CONTROL. JAN H. HOLLESTELLE, St. Louis, Mo., assignor to The Kennedye Corporation, St. Louis, Mo., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,454. 1 Claim. (Cl. 255—27.)

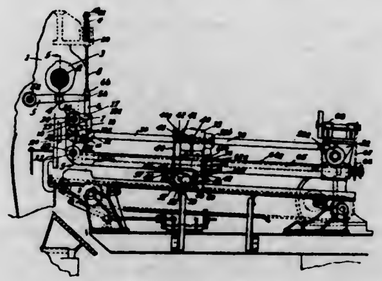
A rotary drill bit control comprising in combination, an outer casing including a plurality of sections, a coupling joining two of said sections, a hollow shaft disposed within said casing, means carried by said coupling for driving said shaft in timed relation with said casing comprising a lug upon said coupling which is slidably positioned within a substantially longitudinal groove in said hollow shaft, and means associated with said hollow shaft

for limiting longitudinal motion of said shaft with respect to said casing, a liquid-tight plunger carried at the top of said shaft within said casing on one side of said coupling, a liquid-tight gland carried at the lower end of said



casing upon the opposite side of said coupling, the space within said casing between said plunger and said gland adapted to carry a liquid to retard movement of said shaft with respect to said casing.

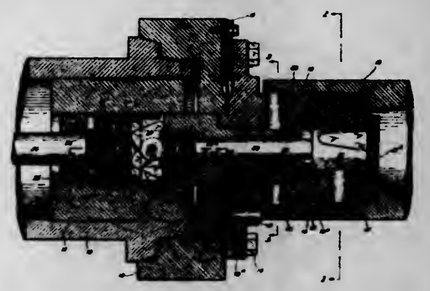
1,900,933. AUTOMATIC GAUGE FOR SHEET METAL SHEARS. EDWIN B. HUDSON, Butler, Pa., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Jan. 10, 1929. Serial No. 331,432. 9 Claims. (Cl. 164—59.)



1. In combination with a shear and a table, a gauge comprising a housing slidably supported upon rails above said table, a movable stop member pivoted upon said housing, a square shaft parallel to said rails, means upon said shear to rotate said shaft at a predetermined point in said shear stroke, a bevel gear slidably but non-rotatably mounted upon said shaft in said housing, a second bevel gear meshing with said first and mounted upon a shaft at right angles to said square shaft, and operating arms connecting said second shaft to said movable stop means.

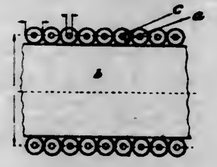
1,900,934. CHUCK. THOMAS J. HUDSON, Cleveland, Ohio, assignor to The Warner & Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 27, 1930. Serial No. 439,480. 7 Claims. (Cl. 279—2.)

1. In a chuck, a chuck body having two sets of jaws, a pair of cam members for actuating them, one of said cam members being keyed to said body, an actuator, the adjacent portions of the actuator and cam members be-



ing slotted, and equalizing transmitting means in the slotted portions whereby said cam members and actuator will rotate as a unit when said chuck body is rotated.

1,900,935. LOADING STRUCTURE FOR A SIGNALING CONDUCTOR. RICHARD LESLIE HUGHES and ERIC BAGULEY, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Filed June 17, 1931, Serial No. 545,002, and in Great Britain July 10, 1930. 9 Claims. (Cl. 178—45.)



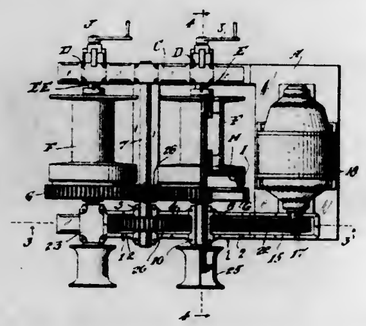
1. A loading material comprising a centre core and an outer layer in which the centre core is of higher resistivity than the outer layer and the outer layer is of higher permeability than the core.

1,900,936. WINDOW FASTENER. EDWARD P. HUTTON, Philadelphia, Pa., assignor of one-half to Alexander J. Gibson, Philadelphia, Pa. Filed Nov. 1, 1929. Serial No. 403,960. 3 Claims. (Cl. 292—58.)



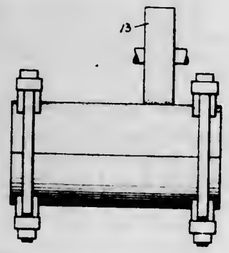
1. In a window fastener of the class described, a cylindrical cap adapted to be supported upon a meeting rail and to support an axial shaft, a sleeve mounted on said shaft, a locking dog carried by said sleeve at one end and an actuating lever mounted on the other end and adapted to engage a slot in said cap to thereby effect axial translation of the locking dog when the sleeve is rotated upon the shaft.

1,900,937. HOISTING ENGINE. CHARLES W. KAHLERTH, Newark, N. J. Filed Apr. 30, 1931. Serial No. 533,975. 7 Claims. (Cl. 254—185.)



1. In a hoisting engine, the combination of a hoisting drum shaft having a drum thereon, a drum driving shaft, a driving connection between said shafts, a pair of spaced bearing frames having bearings for said shafts, one of said frames being hollow to form a gearing chamber and having elongated bearings for said shafts in the walls of and extending across said chamber, a power shaft, a sprocket on said power shaft within said gearing chamber, a second sprocket on said drum driving shaft within said gearing chamber, and a chain co-operating with said sprockets respectively, located within said gearing chamber and passing upon opposite sides of the bearing for said hoisting drum shaft.

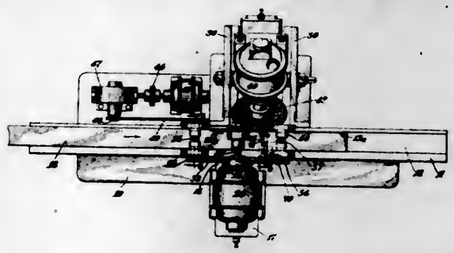
1,900,938. METHOD OF MAKING LINED BEARINGS. EDWARD P. KERAUISH, Cleveland, Ohio, assignor to The Cleveland Graphite Bronze Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 22, 1928. Serial No. 314,106. 1 Claim. (Cl. 29—149.5.)



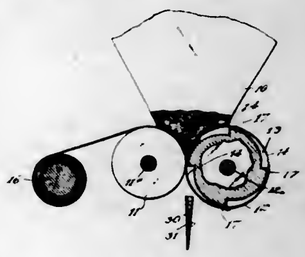
In a method of making lined bearings, the steps which consist in forming a roughly true cylindrical shell provided with a lining of bearing material, splitting the same along a diametral plane, clamping together the two split half cylinders, removing the stock from the outside of such clamped half cylinders to bring the same into a truly cylindrical condition, and then holding such half cylinders still clamped together while removing stock from the interior thereof to bring the interior surface of said half cylinders into a truly cylindrical condition concentric with the outside surface thereof.

1,900,939. APPARATUS FOR SHAPING MOLDING. HARMON C. KINNEY, Ambler, Pa., assignor, by mesne assignments, to Ambler Asbestos Shingle & Sheathing Company, a Corporation of Pennsylvania. Filed Aug. 21, 1930. Serial No. 476,806. 8 Claims. (Cl. 51—78.)

1. A grinding machine for slabs comprising a bed grooved to receive the slab, means for advancing the slab, a grinder head having vertical and horizontal adjustments to operate on the upper side of one edge of the slab, a second grinder head similarly adjustable to operate in the opposite direction on the other side of said slab, and means for adjustably positioning the second head at variant angles below said bed.

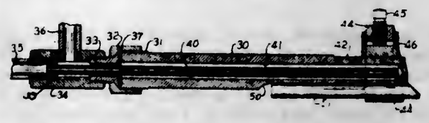


1,900,940. ROOFING AND METHOD OF MAKING SAME. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1929. Serial No. 383,887. 8 Claims. (Cl. 154—2.)



1. The method of forming tapered roofing elements having the main body portion thereof composed of hardened plastic material which consists in feeding lengths of fibrous sheets over a smooth surface, simultaneously discharging homogeneous plastic material composed of bitumen and hardening fillers onto one face of said fibrous sheet and forcing said plastic material into a cavity of variable depth acting in opposition to said smooth surface.

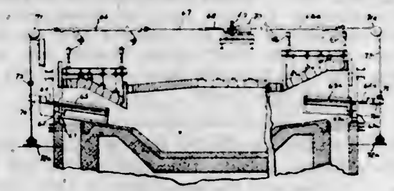
1,900,941. WELDING ELECTRODES. EDWARD H. KUHLMAN, Dayton, Ohio. Filed Sept. 28, 1931. Serial No. 565,663. 9 Claims. (Cl. 219—4.)



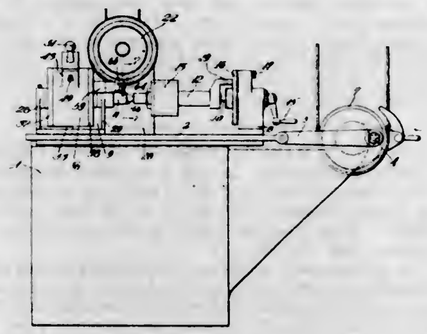
1. A welding electrode having an adjustable welding tip, and adjustable means for maintaining the tip in any desired position on the exterior surface of the electrode.

1,900,942. OPEN HEARTH FURNACE CONSTRUCTION. KENNETH C. MCCUTCHEON, Ashland, Ky., assignor to The American Rolling Mill Company, Middletown, Ohio, a Corporation of Ohio. Filed Jan. 9, 1931. Serial No. 507,662. 7 Claims. (Cl. 263—15.)

1. In a furnace, movable roof sections at either end thereof, a plurality of lever arms for each section mounted on said framework, means for suspending said roof sections at interspaced points from the said lever arms, and means for moving said lever arms, said lever arms being of different lengths whereby different parts of said sections are moved different distances.



1,900,943. TRUING MEANS FOR FORMED GEAR GRINDING WHEELS. EDWARD W. MILLER, Springfield, Vt., assignor to The Fellows Gear Shaper Company, Springfield, Vt., a Corporation of Vermont. Filed Sept. 17, 1929. Serial No. 393,294. 5 Claims. (Cl. 125—11.)

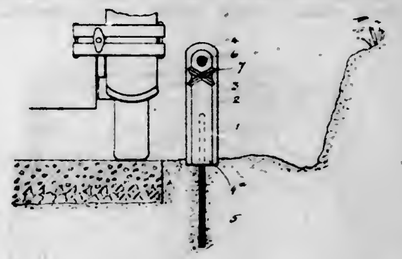


1. In a gear grinding machine, the combination with a work supporting center, of a cylinder coaxial with said center having an external surface substantially the same in diameter as the base circle of the prescribed involute curve of the gear tooth faces to be ground, a rockable holder having a plane surface engaging said cylindrical surface and adapted to rock thereon, a truing tool carried by said holder and located in the same plane with said plane surface, and overlapping projections, one of which is fixed with respect to said cylinder and the other is secured to the rocking holder, said projections having engaging surfaces formed correspondingly to the mating tooth surfaces of a rack and gear couple of which the pitch line coincides with said plane surface.

1,900,944. RECOVERY OF FIBROUS MATERIAL AND RUBBER FROM WASTE RUBBER STOCK. JOHN KEARSLEY MITCHELL, Philadelphia, Pa., assignor to Dispersions Process, Inc., Dover, Del., a Corporation of Delaware. Filed Aug. 1, 1928. Serial No. 296,870. 5 Claims. (Cl. 18—52.)

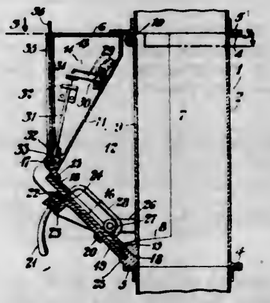
4. A process of recovering fibrous material and rubber from waste rubber stock associated with fibrous material, which comprises manipulating the stock with the rubber as a plastic, coherent and integral mass in the presence of little, if any, water, but in the presence of water-soluble, liquid agents which serve to soften the rubber and to render the rubber non-adherent to the fibrous material so that the latter works its way to the surface of the mass, and removing the fibrous material from the rubber mass.

1,900,945. ROAD MARKER. EDMUND T. D. MYERS, Jr., Richmond, Va. Filed Mar. 2, 1931. Serial No. 519,519. 1 Claim. (Cl. 40—145.)



A road marker consisting of a short post-like body having a light reflecting surface, mounted on a ductile stem which is completely hidden in the ground, and which has sufficient stiffness to hold the marker up under ordinary conditions, but which will allow the marker to be struck down without damage to the marker or to the striking agent.

1,900,946. PNEUMATIC DISPATCH TUBE APPARATUS. JOHN T. NEEDHAM, North Plainfield, N. J., assignor, by mesne assignments, to Pneumatic Tube Supply Co. of Delaware. Filed Apr. 2, 1930. Serial No. 441,082. Renewed July 29, 1932. 19 Claims. (Cl. 243—25.)

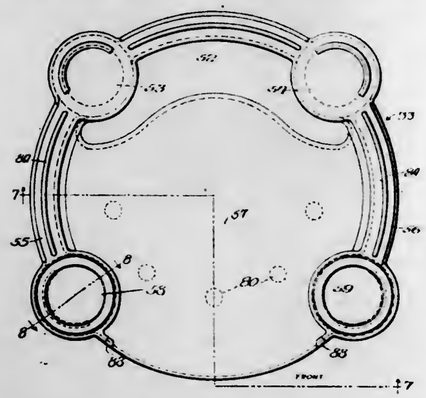


1. A terminal device for the insertion of carriers into a pneumatic dispatch tube line, comprising a tubular casing adapted to be interposed between and joined at its ends to the adjacent ends of two sections of a pneumatic dispatch tube line to form a passage for conducting carriers from one of said tube sections to the other, said casing having a uniform internal cross section at all points in its length and having a segmental wall portion shiftably mounted for movement to a position to permit the insertion of carriers into the carrier passage through the opening in the casing afforded by displacement of said wall portion; and means to releasably hold said segmental wall portion in position to close said opening.

1,900,947. SECTIONAL BOILER. CHARLES A. OLSON, Geneva, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Continuation of application Serial No. 301,527, filed Aug. 23, 1928. This application filed Apr. 19, 1932. Serial No. 606,268. 1 Claim. (Cl. 122—218.)

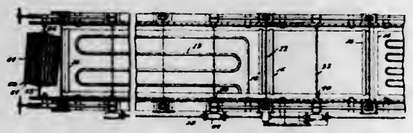
A boiler comprising a plurality of superposed interconnected water chambers spaced apart to provide intervening horizontal flue passages, each chamber having only a single vertical flue passage extending therethrough connecting said horizontal passages to form a continuous flue, said vertical passages being of elongated arcuate shape with their middle portions vertically widely sepa-

rated while having extremities of reduced cross-sectional area extending toward a position of vertical alinement with the extremities of the underlying and overlying vertical passages to provide a shorter path to exit for the flue gases flowing directly through said extremities than



is provided for the gases flowing directly between and through said middle portions, successively superposed middle portions of the vertical passages being about three times more widely spaced apart than are successive extremities.

1,900,948. METHOD AND APPARATUS FOR TILTING TRAY CONVEYER SYSTEMS. KURT T. POTTHOFF, Brooklyn, N. Y. Filed Oct. 19, 1928. Serial No. 313,514. 25 Claims. (Cl. 266—7.)



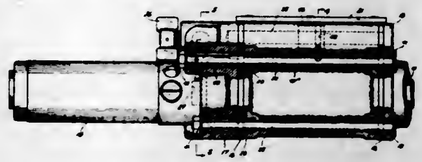
1. An apparatus comprising a series of tanks; a frame over the tanks; sprockets above the tanks at both ends of the tanks and at lower level intermediately of said ends and also a distance above the outer corners of the end tanks; cross-shafts fast to and supporting said sprockets of the lower levels; conveyor chains at opposite sides of the apparatus and passing under said sprockets of said lower level and over the other sprockets; trays having their ends suspended from opposite chains; main drive shafts rotatably mounted longitudinally of said frame; worms fast on said main shafts; worm wheels fast on the cross shafts and engaged by said worms; and means for driving one of the main shafts.

1,900,949. SLIDER FOR FASTENERS. GEORGE E. PRENTICE, Berlin, Conn. Filed July 12, 1932. Serial No. 622,085. 39 Claims. (Cl. 24—205.)



1. An actuating slider for use with separable fasteners of the class described, said slider having converging guide channels and consisting of sheet material, the slider comprising front and rear wings and a neck integrally connecting the wings, said neck being arched in planes at right angles to each other whereby to provide a stiff rigid strut between the wings, the fastener engaging surface of the neck being of curved contour and continuously smooth and uninterrupted from one margin of the neck to the other margin thereof, said surface merging smoothly into the inner surfaces of the front and rear wings respectively.

1,900,950. FLUID PRESSURE MOTOR. JOSEPH EDWARD REHOR, Shaker Heights, Ohio, assignor to The Rotor Air Tool Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 12, 1929. Serial No. 392,029. 2 Claims. (Cl. 121—34.)

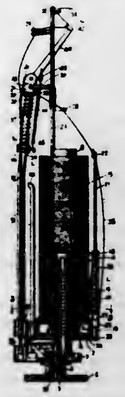


1. A motor comprising a cylinder body with a member attached to an end thereof, a clamping bolt, and an opening extending through said body and member for the clamping bolt, a rotor in the cylinder bore, a slidable abutment blade in the cylinder body and at its inner end adapted to engage the surface of the rotor, and means including said bolt opening for supplying fluid pressure to the outer end of the blade.

1,900,951. MANUFACTURE OF RUBBER-IMPREGNATED PRODUCTS. GEORGE A. RICHTER, WALLACE B. VAN ARSDEL, and ROGER B. HILL, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 22, 1929. Serial No. 357,332. 3 Claims. (Cl. 91—68.)

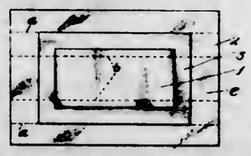
1. A process which comprises impregnating fibrous sheet material with rubber latex, drying, treating with a caustic soda solution to remove resins and proteins associated with the latex, mechanically working the sheeting while wet with the chemical solution, washing free of chemical solution, and drying.

1,900,952. COMPENSATING LET-OFF MECHANISM. HARRY G. ROBINSON, Waterbury, Conn., assignor to Industries of America, Inc., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,338. 7 Claims. (Cl. 96—15.)



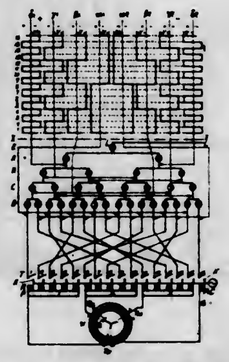
1. In a thread carrier for sinuous path braiding machines, a carrier base, a thread support mounted rotatably thereon, means to regulate rotation of said support relatively to said base, for delivery of thread, and means to facilitate oscillating rotative movement of said base relatively to said thread support during its progress through a sinuous path without corresponding rotative movements of said thread support.

1,900,953. PACKAGE FORMING METHOD. SHY ROSEN, Bloomington, Ill., assignor, by mesne assignments, to Shellmar Products Company, Chicago, Ill., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,493. 5 Claims. (Cl. 93—35.)



1. The method of forming a package which consists in laying a template on a blank of wrapping material, laying a backing board on said template, then folding said wrapping blank around the side edges and one end edge of said template to partially overlap said board, then securing the folded over sections to said board, and then removing the template.

1,900,954. DISTRIBUTOR FOR USE IN TELEGRAPHY OR THE LIKE. EDWARD KENNETH SANDEMAN, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed Feb. 10, 1931, Serial No. 514,761, and in Great Britain Feb. 12, 1930. 7 Claims. (Cl. 178—51.)



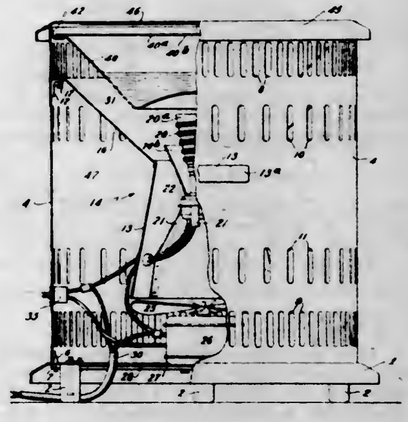
1. An arrangement for use in a telegraph system employing a distributor comprising several valves adapted to operate as a multiple switching arrangement, a means for providing a substantially square wave, said means comprising an amplifier valve, and a voltage operated device comprising a neon lamp shunted by a condenser associated with the output circuits of said amplifier valve.

1,900,955. GOGGLE VENTILATOR. HARRY F. SHINDEL, Reading, Pa., assignor to Willson Products, Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Mar. 18, 1932. Serial No. 599,698. 4 Claims. (Cl. 2—14.)



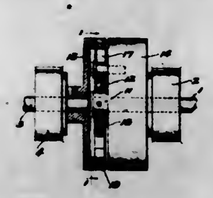
1. A goggle eye-cup having a ventilator opening in the wall thereof, and a pair of eccentrically dished essentially identical port discs secured in said opening in reverse positions to provide cooperating baffled ports.

1,900,956. PORTABLE HEATER. WILLIAM W. SOMERSALL, Natick, Mass., assignor to New England Pressed Steel Company, Natick, Mass., a Corporation of Massachusetts. Filed Apr. 2, 1932. Serial No. 602,707. 12 Claims. (Cl. 219—39.)



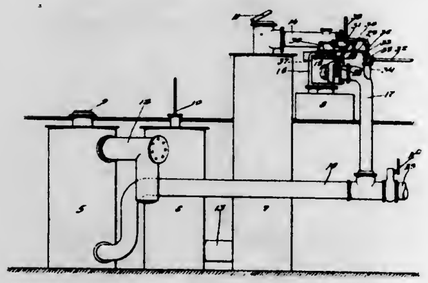
1. A device of the character described comprising a casing having an inlet at its bottom, said casing being open at its upper end and having openings adjacent to said end providing a peripheral outlet, a longitudinally extending flue within said casing, said flue having a flaring mouthpiece arranged in cooperative relation with the open end of said casing to provide an axial discharge, a heating element disposed in the flue with its lower end adjacent to the small end of the mouthpiece, a fan disposed adjacent to the lower end of said flue, and a removable dished member fitting within the top of said casing, said member providing a closure for the open end of said casing and cooperating with said mouthpiece to define a divergent annular delivery passage communicating with said outlet to provide a peripheral discharge.

1,900,957. FREE-WHEEL COUPLING. HAROLD HERBERT VERNON STANLEY, Hayes, and GEORGE FREDERICK CLARK, West Drayton, England. Filed Apr. 2, 1931, Serial No. 527,316, and in Great Britain Apr. 15, 1930. 3 Claims. (Cl. 192—46.)



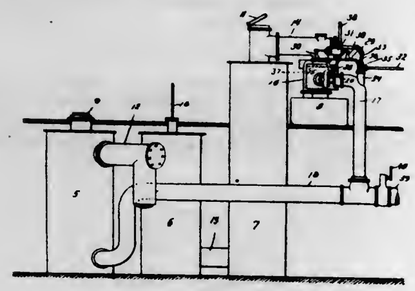
1. In combination, a driving member, pawl actuating means carried by and rotatable with said driving member, a flywheel loosely mounted on said driving member, a pawl pivoted to said flywheel, resilient means connecting said pawl actuating means and said pawl, a driven member including a hub having ratchet teeth internally thereof, said pawl actuating means acting to urge said pawl into cooperative engagement with said ratchet teeth upon the rotation of said driving member, said flywheel acting to retard movement of said pawl relative to said pawl actuating means prior to the engagement of said pawl with said ratchet teeth, and means carried by said flywheel adapted to cooperate with said pawl actuating means upon the cessation of rotation of said driving member whereby said resilient means is maintained under tension.

1,900,958. GAS MANUFACTURE. JOHN B. EBERLEIN and GEORGE R. STEERE, Detroit, Mich., assignors, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 15, 1924. Serial No. 737,656. 6 Claims. (Cl. 48—80.)



1. A water gas plant including a single generator and a single superheater, a gas line leading from said generator and by-passing the superheater, a gas line leading from said superheater, a housing into which both of said lines extend, a washbox communicating with said housing, and valve mechanism in said housing adapted to alternately open one of said lines and close the other.

1,900,959. GAS MANUFACTURE. GEORGE R. STEERE, Larchmont, N. Y., assignor to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Original application filed Sept. 15, 1924, Serial No. 737,656, and in Great Britain May 19, 1925. Divided and this application filed Feb. 10, 1931. Serial No. 514,857. 2 Claims. (Cl. 48—80.)



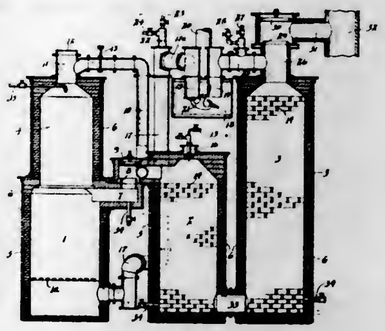
1. A water gas set comprising a single generator, a single carburetor, and a single superheater, the individual units being located in separate and detached shells, a washbox, a gas line leading directly from said generator into said washbox and by-passing the carburetor and superheater, a gas line leading directly from said superheater into said washbox, and valve mechanism for alternately opening one of said lines and substantially simultaneously closing the other.

1,900,960. METHOD OF DECORATING METAL SURFACES. KENJIRO TAKEDA, Osaka, Japan. Filed Jan. 19, 1931. Serial No. 509,671. 4 Claims. (Cl. 41—35.)

1. The method of decorating metal surfaces which consists of forming a perforated pattern of relatively hard metal, positioning the pattern on the surface of an article to be decorated, formed of relatively softer metal, placing the pattern and article on a mold, and thereafter rotating the mold, article and pattern in opposite directions while exerting a pressure thereon to force the softer material of the article into the perforations and around the harder material of the pattern.



1,900,961. GAS MAKING APPARATUS. CHARLES I. TENNEY, Newton, Iowa, assignor, by mesne assignments, to Semet-Solvay Engineering Corporation, New York, N. Y., a Corporation of New York. Filed May 18, 1925. Serial No. 31,028. 16 Claims. (Cl. 48—80.)



1. A water gas plant including a single generator, a single superheater, and a washbox, a gas line leading directly from said generator to said washbox, and by-passing the superheater, a gas line leading directly from said superheater to said washbox, and a single valve for alternately opening one of said lines and substantially simultaneously closing the other.

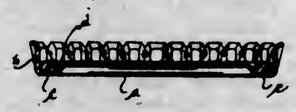
3. A carburetted water gas making apparatus in combination, a generator, a substantially unobstructed fuel-receiving chamber disposed over and communicating with said generator so as to feed fuel thereto, a gas passage leading from the top of said generator, a carburetor with which said passage communicates, means for closing said passage, a superheater in series with said carburetor, a conduit leading from said carburetor to the top of said chamber, means for closing said conduit, means for directing air into said superheater and successively back through the said carburetor, conduit, chamber and generator for generating gas, a gas line leading from the base of said generator and by-passing the carburetor and superheater, a second gas line leading from the superheater, and valve mechanism for alternately opening one of said lines and substantially simultaneously closing the other.

1,900,962. CONTINUOUSLY LOADED TELEGRAPH CABLE. JOHN RICKETTS VERNY, London, England, assignor to International Standard Electric Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 22, 1930, Serial No. 477,149, and in Great Britain Sept. 18, 1929. 8 Claims. (Cl. 178—45.)



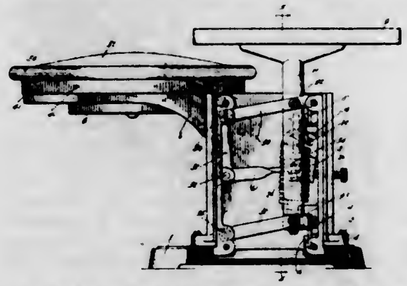
1. A submarine cable comprising alternate loaded sections and unloaded sections, the length of which are varied in such manner that the loading decreases from the center of the cable toward the end.

1,900,963. BOTTLE CLOSURE. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 27, 1930. Serial No. 439,295. 6 Claims. (Cl. 215—39.)



1. A bottle cap embodying therein a metal shell and a skirt therefor, the top of said shell being provided with a channel adjacent said skirt, and a gasket within said channel, consisting of a rubber compound having a low content of a vulcanizing agent, whereby upon the subjection of a container, with a cap applied thereto, to heat, said gasket will be semi-vulcanized.

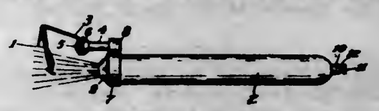
1,900,964. SCALE. MATHIAS J. WEBER, Chicago, Ill., assignor to The Health-O-Meter Company, Chicago, Ill., a Corporation of Illinois. Filed July 22, 1926. Serial No. 124,253. 11 Claims. (Cl. 265—68.)



1. In a weighing scale, the combination of a base, a platform mounted thereon and vertically shiftable thereto, an indicating mechanism on said base, a rack bar for shifting said indicating mechanism and means interconnecting said rack bar and said shiftable platform for indicating the weight when said platform is shifted under the influence of a weight, said means including adjustable devices for compensating the gain and loss movements of the indicating mechanism as it passes through its complete movement corresponding with the full extent of movement of the platform.

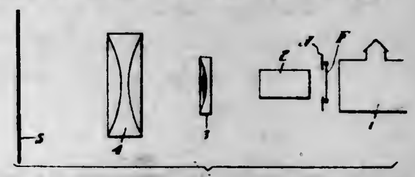
1,900,965. ILLUMINATED RAZOR. FRANK WEISS, Revere, Mass. Filed July 28, 1932. Serial No. 625,415. 1 Claim. (Cl. 240—6.46.)

In combination with an implement having an opening for the reception of a handle attaching lug and also having a working edge laterally spaced from said opening, a straight hollow handle, a band around the inner end of the handle rigid therewith, an attaching lug rigid with the band, and means contained within the handle to project a beam of light axially from the inner end thereof, the lug having a shoulder to engage the implement around the opening therein, said lug further projecting beyond the inner end of the handle and being



disposed parallel to and laterally spaced from the axis of the handle an amount equal to the lateral spacing of the working edge of the implement from the lug receiving opening.

1,900,966. PROJECTION APPARATUS. WALTER G. WOLFE, Greenwood, Mass., assignor to Wilmot R. Evans, trustee, Boston, Mass. Filed Dec. 27, 1927. Serial No. 242,647. 3 Claims. (Cl. 88—24.)

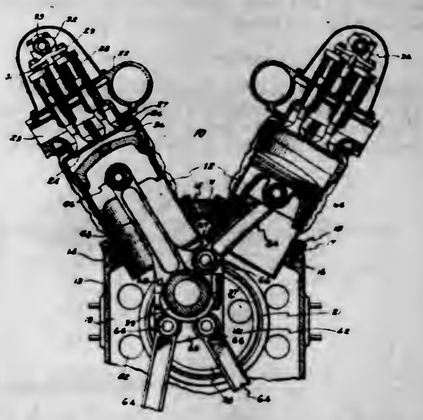


1. In a projection apparatus, a wide angle projector, a translucent display screen in intercepting relation to the beam thereof, and a colored screen member intercepting the beam axially, and having a variant absorptivity decreasingly from the center outwardly.

1,900,967. SAFETY PAPER. FRANK S. WOOD, Quincy, Mass. Filed Apr. 22, 1931. Serial No. 532,115. 8 Claims. (Cl. 91—67.95.)

1. The method of producing a safety paper consisting in creating an alkaline state in such paper and in so treating said paper with a ferrocyanide as to produce an ink set condition without affecting the normal color of the paper.

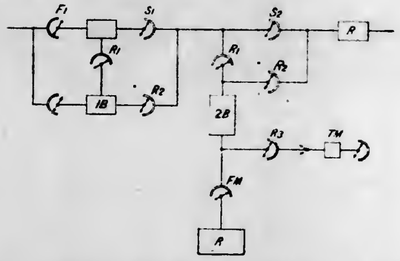
1,900,968. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Oct. 1, 1928, Serial No. 309,631. Divided and this application filed Jan. 16, 1930. Serial No. 421,661. 9 Claims. (Cl. 123—6.)



1. The combination in an internal combustion engine having pistons, of a crank shaft having cylindrical crank cheeks forming journals and having crank pins between

the journals, bearings for said journals, connecting rods connecting the pistons to said crank pins, and a lubricating system including means to deliver oil under high pressure to the crank pin bearings and to deliver oil under low pressure to the journal bearings.

1,900,969. AUTOMATIC OR SEMIAUTOMATIC TELEPHONE EXCHANGE SYSTEM. ESMOND PHILIP GOODWIN WRIGHT, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed Apr. 23, 1931, Serial No. 532,223, and in Great Britain May 13, 1930. 19 Claims. (Cl. 179—18.)



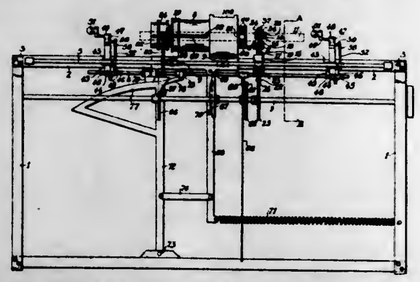
1. In a telephone system the combination of a register sender comprising an impulse receiving device and an impulse sending device, a switching device common to a plurality of said register senders adapted to be set in accordance with code digits transmitted thereto and means whereby said sending device is adapted to transmit trains of impulses under direct control of said switching device and said impulse receiving device.

1,900,970. SLIDING HAIR AND WAVE CLIP. SAMUEL ALIMENA and WILLIAM NAUMANN, Scranton, Pa. Filed Nov. 11, 1932. Serial No. 642,298. 2 Claims. (Cl. 132—48.)



1. A device of the class described comprising a substantially U-shaped member formed of spring material and a sheath in which one limb of the member is slidably arranged said sheath having one end closed and its other end open with said one limb passing through the open end and said sheath being of a length substantially equal to the length of said one limb.

1,900,971. APPARATUS FOR CUTTING GLASS TUBING. ERNEST ASHFORD, Charlton, London, England. Filed June 12, 1930, Serial No. 460,671, and in Great Britain June 20, 1929. 5 Claims. (Cl. 49—50.)



1. Apparatus for cutting glass tubing into lengths comprising means for rotating a length of glass tubing to be cut, a pivotally mounted flame producing jet nozzle and means connected with the nozzle adapted to contact with the surface of the glass tubing to move the nozzle about its pivot in correspondence with variations in the shape of the tubing, and cooling rollers adapted to contact with the heated surface of the tube in the region of the line of application of the flame.

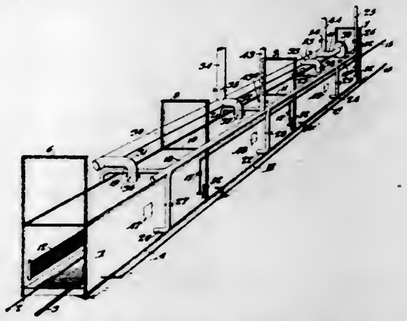
1,900,972. PURIFYING BENZANTHRONE. WALTER BECKER, Feudenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 25, 1929. Serial No. 335,144. 2 Claims. (Cl. 202—46.)

1. A process of purifying crude benzanthrone, which comprises distilling from a directly heated retort crude benzanthrone to which comminuted iron has been added with the aid of superheated steam.

1,900,973. PHOSPHORIC ACID ESTERS. HEINRICH BERTSCH, Chemnitz, Germany, assignor to H. Th. Böhme A. G., Chemnitz, Germany, a Corporation of Germany. Filed Nov. 11, 1927, Serial No. 232,719, and in Germany Nov. 25, 1926. 7 Claims. (Cl. 260—98.)

1. A process for the production of water-soluble phosphoric esters of oils and fats, comprising the steps of treating a fatty substance containing an ester forming group with not substantially less than 50% by weight of phosphoric acid anhydride and washing the reaction product.

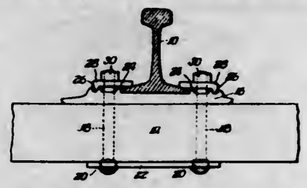
1,900,974. PROCESS OF DEHYDRATING VEGETABLES AND THE LIKE. WILLIAM H. BOZARTH, Vineland, N. J., assignor to Osborn Products Inc., a Corporation of New Jersey, Edward E. Grosscup, receiver. Filed May 11, 1928. Serial No. 277,090. 5 Claims. (Cl. 99—5.)



3. The process of dehydrating fruit and vegetable materials comprising, placing the material into a closed compartment, creating a partial vacuum therewithin to withdraw surface moisture from said material, then continuously introducing into and continuously discharging outside air from said compartment for a period of time, closing the source of outside air and the discharge thereof and recirculating the moisture-laden air within the compartment, and alternately effecting the circulation of outside air and the recirculation of moisture-laden air through the compartment until the material has been dehydrated to the desired degree, the entire process being effected without the introduction into the compartment of an extraneous source of moisture.

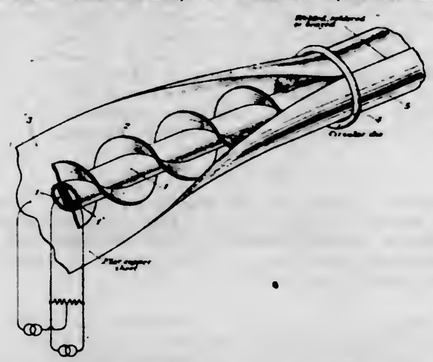
1,900,975. RAIL JOINT. JOHN BRUNNER, Chicago, Ill. Filed June 12, 1930. Serial No. 460,669. 2 Claims. (Cl. 238—210.)

1. An assemblage of the character described comprising, in combination, a tie, a rail section, a tie plate, and means for holding the rail section in rigid engagement with the tie plate, said means including a plurality of spaced transverse ribs provided on said tie plate to each side of the rail respectively, and clamping shoes, certain of said ribs forming positioning shoulders for the base



flange of the rail section, the others providing a groove on each side of the rail for receiving a portion of the clamping shoe to position the same, said shoe engaging the base flange of the rail, and a fastener extending completely through the clamping shoe, tie plate and tie for securing the clamping shoe.

1,900,976. CONCENTRIC CONDUCTOR SYSTEM. ALLEN CARPE, New York, N. Y., and FRANK A. LEIBE, Dunellen, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed May 22, 1930. Serial No. 454,734. 6 Claims. (Cl. 173—265.)



1. A concentric conductor system including an inner conductor comprising two pieces of conducting material of substantially semi-circular section, with their flat sides abutting, and a sheet of thin, flat dielectric material located between and extending beyond the flat sides of the two sections of tubing, said elements being twisted together to form a spiral core, and a tubular outer conductor mounted upon the edges of the spiral insulating element.

1,900,977. CONTACT DEVICE. CESARE CIPPITELLI, Frankfort-on-the-Main, Germany, assignor to Firm Voigt & Haeffner A. G., Frankfort-on-the-Main, Germany. Filed Jan. 6, 1931, Serial No. 507,032, and in Germany Jan. 21, 1930. 9 Claims. (Cl. 200—48.)



1. An electrical contact device comprising a contact pin, a plurality of contact fingers bent at an angle and disposed one after another around the contact pin to form a contact sleeve, each contact finger having a web-like extension at its middle part with a large and a small curved out part, the smaller curved out part of each contact finger being inserted in the larger curved out part of the next contact finger, the contact fingers being attached to form a contact sleeve.

1,900,978. METHOD OF CONSTRUCTING AND MAINTAINING CRUDE OIL CONDUCTORS. THOMAS DE LA MARE, Salt Lake City, Utah. Substitute for application Serial No. 165,449, filed Feb. 2, 1927. This application filed May 29, 1930. Serial No. 457,079. 4 Claims. (Cl. 25—154.)



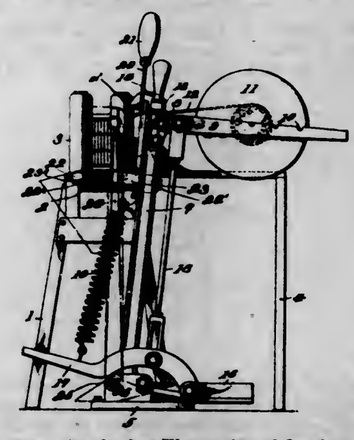
2. The method of constructing composite pipe having a wood lining and a concrete jacket surrounding said lining, consisting in closing the ends of said wood lining, substantially filling the space inside the lining with brine, subjecting said brine to a predetermined pressure before concrete is applied, allowing said lining to remain under said pressure until all parts thereof have swelled to the desired degree, and applying said concrete jacket while the said lining is under internal pressure.

1,900,979. LINGERIE STRAP HOLDER. OLIVE M. DE MENT, Decatur, Ill. Filed July 26, 1932. Serial No. 624,864. 5 Claims. (Cl. 24—73.)



4. A lingerie strap holder comprising clasps formed as a safety pin and having a penetrating point adjacent one end and a shield for the same, the other end portion of the clasp being bent to extend upwardly for engagement through the shoulder portion of a dress with the clasp extending parallel to the shoulder portion of the dress, a chain attached at one end to the shield carrying end of one clasp, and a hook at the shield carrying end of the other clasp and engageable through a selected link of the chain.

1,900,980. METHOD OF AND APPARATUS FOR BUNDLING FLOORING. ELMER C. DITTMAR, Williamsport, Pa., assignor to The Cromar Company, Williamsport, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1921. Serial No. 437,820. 24 Claims. (Cl. 100—31.)



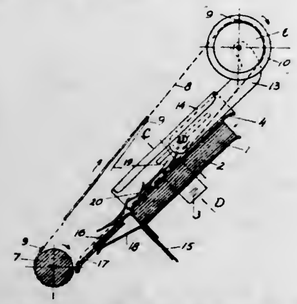
1. An apparatus for bundling strips of flooring comprising means for holding flooring strip supporting members, means for holding strips of flooring on said flooring strip supporting members, means for placing said strips of flooring under compression and a band tensioning device for drawing the ends of a band together around said strips.

6. The method of forming a bundle of flooring consisting in placing upon a support a strip supporting member, nesting a series of flooring strips upon said strip supporting member, placing upon said nested strips a top strip support, inserting spacing strips between said strips of flooring and binding said strip support and strip supporting members together by a band encircling said strip supporting members.

1,900,981. PROCESS FOR RENDERING CARBON DISULPHIDE SOLUBLE IN WATER. KARL DÖBMAIER, Leverkusen-on-the-Rhine, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 6, 1927, Serial No. 217,872, and in Germany Sept. 22, 1926. 2 Claims. (Cl. 252—6.)

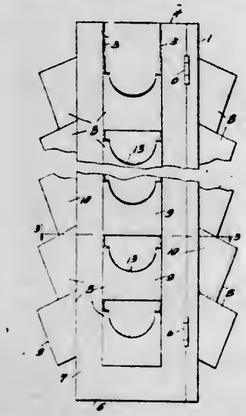
1. As a new composition of matter, a mixture comprising carbon disulphide, a butyl alcohol and a soap, being soluble in water.

1,900,982. TYPEWRITER AND LIKE MACHINE. PAUL DREYER, Stavanger, Norway. Filed May 21, 1931, Serial No. 538,984, and in Norway Apr. 12, 1930. 9 Claims. (Cl. 197—130.)



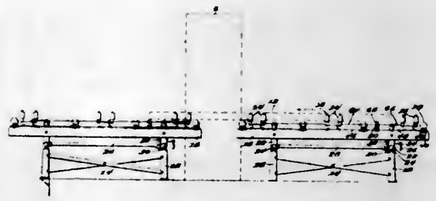
6. In a typewriter the sub-combination of a platen; means for supporting a pile of envelopes; two endless bands passing around said platen; cross bars arranged between said endless bands and adapted to engage under the crossing flap of the topmost envelope of the said pile; and a resilient plate pressing on said pile, said resilient plate being adapted to leave the closing flap free, substantially as described.

1,900,983. DISPLAY STAND AND SHIPPING CASE. GEORGE E. EVERITT, Decatur, Ga. Filed Oct. 15, 1931. Serial No. 569,076. 14 Claims. (Cl. 217—12.)



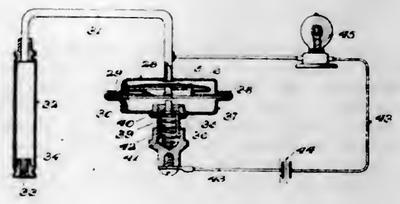
13. A display device for packages of merchandise and the like, comprising a surface carrying parallel channels, a plurality of pocket elements adapted to contain merchandise arranged in tier formation, the upper edge of each pocket constituting a supporting abutment for a superimposed pocket, means for supporting the lowermost pocket, and means carried by the pockets adapted to slidably seat in said channels.

1,900,984. CENTERLESS GRINDING OR POLISHING MACHINE. RUFUS W. FULLER, Deerfield, Mass., assignor to Production Machine Company, Greenfield, Mass., a Corporation of Massachusetts. Filed Sept. 19, 1929. Serial No. 393,825. 8 Claims. (Cl. 51—144.)



1. A centerless grinding or polishing machine for cylindrical work having, in combination, feeding and abrasive means, and means for supporting the work at the side of the abrasive means comprising supporting rolls, guide members comprising pairs of freely rotatable rolls having axes perpendicular to the axis of the work, and means for simultaneously adjusting the different pairs of rolls to accommodate work of different diameters.

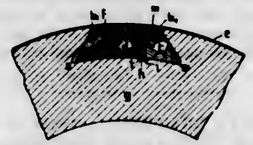
1,900,985. PRESSURE RESPONSIVE VESSEL. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed June 8, 1928. Serial No. 283,970. 10 Claims. (Cl. 297—3.)



4. A device of the class described comprising a dished member, a supporting base therefor, and a flexible wall tapering in thickness and connecting said member and base.

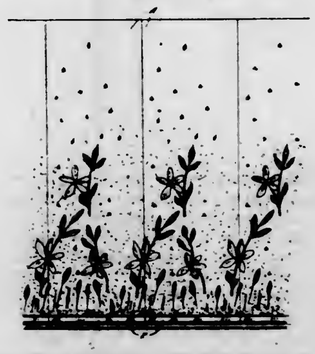
1,900,986. DEVICE FOR THE CLAMPING OF FLEXIBLE PRINTING BLOCKS OR STEREOS ON THE FORM-CYLINDER OF COPPERPLATE OR INTAGLIO PRINTING MACHINES. PETER GIETZ, Johannisberg-on-the-Rhine, Germany, assignor to Maschinenfabrik Johannisberg G. m. b. H., Geisenheim-on-the-Rhine, Germany. Filed Aug. 6, 1931, Serial No. 555,600. and in Germany Dec. 29, 1930. 1 Claim. (Cl. 101—415.1.)

A device for clamping flexible printing blocks or stereos on the form-cylinder of copper-plate or intaglio printing machines, comprising in combination with the form-cylinder having a groove of dove-tail shaped cross section in the periphery extending in the axial direction of said cylinder and with printing block or stereo bent at the ends, a clamping wedge, a clamping ledge on one of said bent ends of said printing block or stereo cooperating with said wedge, and a projection of said clamping ledge interposed between the under surface of said wedge and the bottom



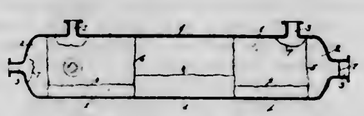
of the dove-tail groove so that said ledge is not only moved in the direction of the circumference, but also pressed in the direction towards the axis of the form-cylinder.

1,900,987. WALL PAPER. JENNIE H. GOFF, Lisbon Falls Me. Filed Feb. 9, 1932. Serial No. 591,912. 1 Claim. (Cl. 41—34.)



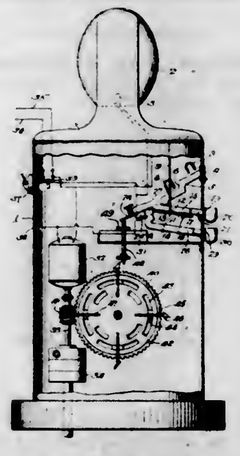
An article of manufacture comprising an elongated strip of wall paper having transversely extending weakened lines thereon dividing the strip into sections, one section being matched with the other sections and each section being of a length substantially the height of the wall to be covered by the paper and said strip having a transverse border forming part above each weakened line which parallels the line and is of narrow width and forms a bottom edge for the section.

1,900,988. STEEL VESSEL AND METHOD OF PRODUCING SAME. FRITZ GORSCHLÜTER and ERNST POHL, Borsigwerk, Germany, assignors to Borsigwerk Aktiengesellschaft, Borsigwerk, Germany, a Corporation of Germany. Filed June 3, 1929, Serial No. 368,182, and in Germany Mar. 28, 1927. 7 Claims. (Cl. 29—148.2.)



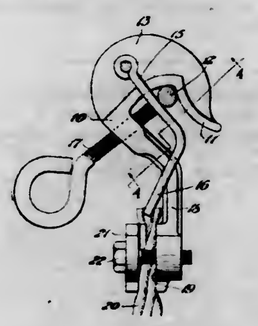
5. The method of making a steel vessel adapted for use under high pressure and temperature conditions which consists in forming plates from steel having a high yield point and little inclination to aging containing a low percentage of carbon, .2% to .5% molybdenum and at least .05% but less than .1% aluminum, and welding said plates together to form a vessel.

1,900,989. COIN CONTROLLED DISPENSING APPARATUS. HOBART J. HALSTED and NORMAN R. BRIGGS, Buffalo, N. Y. Filed July 24, 1930. Serial No. 470,517. 3 Claims. (Cl. 194—6.)



1. In a bending machine an electric motor, a rotatable member driven thereby, a guide channel for receiving checks, and having a bottom of conductive material, a movable member constituting an extension of the top of the channel, an inverted channeled contact carried by said member and insulated from the bottom of the guide channel, means on the contact for stopping a check supplied thereto and maintaining an electrical connection between the contact and the bottom of the guide channel, a circuit including the motor and controlled by said check, and means actuated by the rotatable member for shifting the channelled contact to release the check and break the circuit to the motor, said means including a series of lifting cams carried by and adjustable relative to each other on the rotatable member, and a push member for transmitting thrust from each cam to the channelled contact.

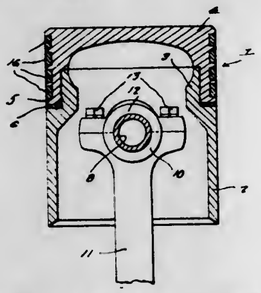
1,900,990. CONNECTER. TOMLINSON F. JOHNSON, Atlanta, Ga. Filed Oct. 30, 1930. Serial No. 492,300. 3 Claims. (Cl. 173—273.)



1. A connecter of the character described comprising, in combination, a hook member having a strengthening rib and a curved bill adapted to be slipped over a conductor; a sheet metal clamping member having arms straddling and pivotally connected to said strengthening flange and having a connecting portion to engage the conductor and clamp it in said hook member; an eye-bolt passing through said hook member having its end abutting the clamping member to exert clamping pressure on said

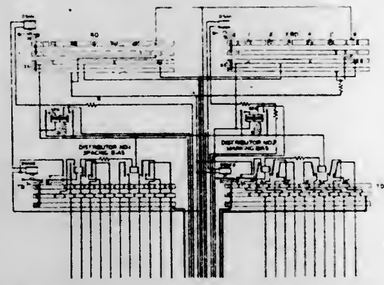
clamping member; an arm projecting downwardly from said hook member; and means on the lower end of said arm for clamping a tapping cable or conductor thereto so that the cable may extend either upwardly or downwardly while the hook member is clamped in upright position.

1,900,991. PISTON. AXEL C. MATHESON, Minneapolis, Minn. Filed Apr. 28, 1931. Serial No. 532,323. 1 Claim. (Cl. 74—108.)



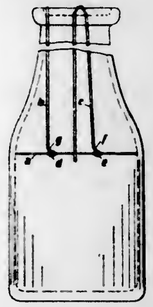
A piston of the class described comprising a lower part, a stationary wrist pin carried thereby, a bushing rotatably arranged on the pin and having flanges at its ends, a piston rod having a semi-circular recess at its upper end in which a part of the bushing fits, a cap having a semi-circular recess therein in which another part of the bushing fits, screw bolts for connecting the cap to the upper end of the rod, said bolts passing downwardly through threaded holes in the cap and upper end of the rod with their heads uppermost, a ring carrying head part threaded to the upper end of the lower part and having threaded sockets in its upper face for receiving a tool for threading the head to the lower part and removing the head from the lower part, screws fitting in the sockets for entirely closing the same, and having their heads flush with the upper face of the head part, said head part having a slightly reduced lower part of the same thickness throughout, grooves at its outer circumference for receiving some of the rings and its inner circumference threaded and the upper portion of the lower part of the piston being of less exterior diameter than the rest of said lower part and exteriorly threaded to engage the internal threads of the head part, the internal walls of said upper part of the lower part of the piston curving upwardly and outwardly to form a large space for facilitating manipulation of the cap of the connecting rod and the bolts which connect the cap with the rod.

1,900,992. IMPULSE TRANSMISSION SYSTEM. THOMAS A. MCCANN, East Orange, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 9, 1932. Serial No. 585,757. 13 Claims. (Cl. 178—2.)



1. In an impulse transmission system, two rotary impulse distributors adapted to be alternately and automatically connected to a load circuit, circuits whereby one of said distributors at a time is connected to said load circuit, a plurality of relays, one of said relays being actuated to close its contact once during every rotation of either of said distributors, and the other of said relays being actuated at the transmission of a special code impulse group over said distributor whereby the other of said distributors is caused to be connected to the load circuit.

1,900,993. CREAM SKIMMER. AUSTIN O. MIDDLEMISS, Portland, Oreg. Filed Apr. 18, 1929, Serial No. 356,019. Renewed Sept. 2, 1931. 2 Claims. (Cl. 210—51.5.)



1. In a cream skimmer the combination of an elongated skimming plate having one curved edge adapted to fit the inside of a bottle, two handle members of substantially the same length having hooks at one end to engage the bottle, the other ends of said handle members pivoted at spaced points to the elongated member with pivots being substantially parallel and extending transversely of the member.

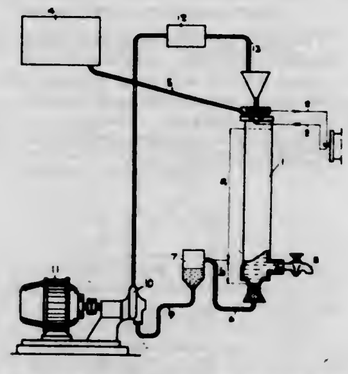
1,900,994. PURIFYING OF NATURAL HEAVY SPAR. JOHANNES MÜLLER, Homberg-on-the-Lower-Rhine, Germany, assignor to "Sachtleben" Aktiengesellschaft für Bergbau und Chemische Industrie, Homberg-on-the-Lower-Rhine, Germany, a Germany Company. Original application filed May 6, 1929. Serial No. 360,987, and in Germany July 30, 1928. Divided and this application filed July 2, 1930. Serial No. 465,456. 4 Claims. (Cl. 23—122.)

1. A method of purifying natural heavy spar consisting in calcining under oxidizing conditions at 1300–1350° C. lump heavy spar, quenching it in dilute solutions containing sulphide and removing the metal sulphides.

1,900,995. METHOD OF TREATING LIQUIDS. MARION F. NICHOLS, Knoxville, Tenn., assignor of one-half to Campbell Wallace, Knoxville, Tenn. Filed June 9, 1931. Serial No. 543,246. 4 Claims. (Cl. 210—2.)

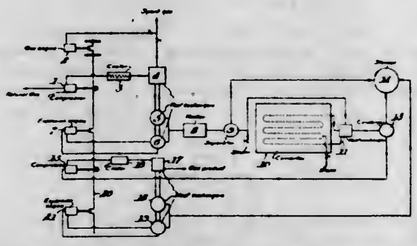
1. The method of treating the waste products from tanneries to clarify and purify the same, comprising combining the green waste water from the soaking of the green hides in vats, the green wash water from washing the green hides after the soaking operation, and waste liquor from the alkali vat and the waste liquor from the acid vat to produce a liquid mass adding to this liquid mass sufficient sulphuric acid to break up the sulphides present, thereby liberating hydrogen sulphide gas; removing the hydrogen sulphide gas by agitation of the liquid mass: combining the waste liquor from the handler or rocker vats, and the waste lime sediment from the lime treating vats to produce a second liquid mass: combining the waste liquor from the white hide wash, the waste liquor from the bate pool, and the old lime liquor from the vats in which the hides are limed to produce a third liquid mass: combining the three liquid masses and allowing the same to stand so that the solid material settles out: withdrawing the liquor having fine particles in suspension from the presence of the sediment: adding to the liquor a small amount of a solution of green hide fleshings to aid in de-coloring the same: adding to the liquor thus obtained calcium acid phosphate in the presence of an alkali for producing a floc which combines with the fine particles in suspension in the liquor and settles with them: and separating the liquid thus obtained from the sediment produced.

1,900,996. METHOD OF REMOVING ONE OR MORE OF THE METALS OF THE IRON GROUP FROM SOLUTIONS CONTAINING SALTS OF ONE OR MORE OF THE SAID METALS. KNUT WILHELM PALMAER, Stockholm, Sweden. Filed Aug. 12, 1929, Serial No. 385,466, and in Sweden Aug. 28, 1928. 2 Claims. (Cl. 204—1.)



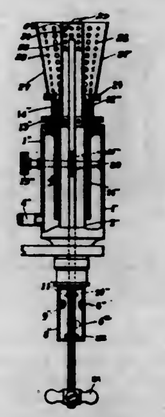
1. In a process for removing one or more metals of the iron group from solutions containing salts of such metals by electrolysis with a cathode consisting of continuously flowing mercury, the improvement which comprises causing the mercury to flow at such a rate with regard to the current density that the deposited metal is completely removed by the mercury in amalgamated form without appearing as a film or coating on the cathode surface at the current density used.

1,900,997. PROCESS FOR THE CONVERSION OF GASEOUS PARAFFIN OR OLEFINE HYDROCARBON INTO LIQUID AROMATIC HYDROCARBONS. ALEXANDER S. RAMAGE, Detroit, Mich., assignor, by mesne assignments, to Merlin Wiley and Ora L. Smith, trustees, Detroit, Mich. Filed May 21, 1930. Serial No. 454,493. 6 Claims. (Cl. 196—10.)



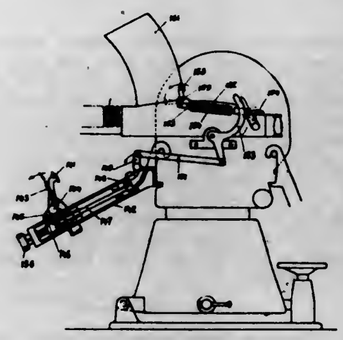
3. Process which comprises passing the highly volatile and normally gaseous constituents of natural gas gasoline admixed with steam successively over and in contact with a mass of ferric oxide and a mass of iron presenting a large surface, at a temperature of at least about 1000° F., and regulating the quantity of admixed steam to maintain the iron in its metallic state.

1,900,998. BURNER. ARTHUR WHITTAKER RICHARDSON, Shell Haven, Thames Haven, England, assignor to Shell-Mex, Limited, London, England, a Company of Great Britain. Filed Aug. 1, 1928, Serial No. 296,762, and in Great Britain Aug. 2, 1927. 5 Claims. (Cl. 158—94.)



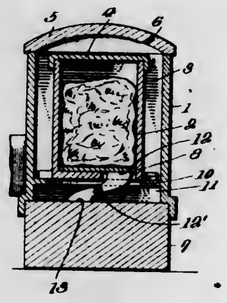
1. In a device of the class described, a container for combustible liquid having a combined draft and wick tube with means for admitting air to the lower portion of said tube for passage upwardly therethrough, a wick surrounding and contacting the said tube, and an outer tube formed of a material that is an extremely poor conductor of heat, surrounding and contacting the said wick whereby the wick can be located below the top of the tube when the lamp is alight.

1,900,999. FIRING-DEVICE FOR DEMOUNTABLE MACHINE-GUNS. AUGUSTE LOUIS RICORDEL, Paris, France, assignor to Precision Moderne, Paris, France, a Corporation of France. Filed Nov. 30, 1931, Serial No. 578,096, and in France Dec. 3, 1930. 4 Claims. (Cl. 89—27.)



3. In a machine-gun, a firing device comprising a support hinged on the head of the mounting and resting on the support of said head, a foot rest and a firing pedal mounted on a slide, means for fixing the position of the slide along the support, a fire-cam acting on the fire-lever, means to transmit the motion from the firing pedal to the fire-cam, safety means to hinder the loading of the machine-gun when the firing pedal is depressed.

1,901,000. HEAT TRANSFERRER FOR CONTROLLING SOLID CO_2 FOR REFRIGERATION PURPOSES. WALTEN B. ROBE, Towson, Md., assignor to Thermal Control Corporation, a Corporation of Delaware. Filed Apr. 8, 1930. Serial No. 442,637. 12 Claims. (Cl. 62—91.5.)



9. An apparatus of the character described comprising an outer container, an inner container adapted to hold solid CO_2 and having a space between the containers, means for conveying the CO_2 vapor from the inner container to the space between the inner and outer containers and means for making a thermal connection between the inner container and outer container and thermostatic means for controlling the thermal connection between the inner and outer container.

1,901,001. LATHERING DEVICE. FREDERICK ROHLEDER, Vaux Hall, N. J. Filed Nov. 23, 1931. Serial No. 576,879. 1 Claim. (Cl. 128—57.)



A lathering device comprising resilient supports, each support having a shaft portion from the ends of which arms project, a handle connected to the ends of said arms, all of said arms converging toward said handle, rows of balls rotatably mounted on said shaft portions, parallel connecting members joining said shaft portions and positioned at obtuse angles relatively to said shaft portions for maintaining said balls in rows arranged on the bias relatively to said shaft portions, and connecting elements arranged above the balls and connecting the arms at each end of the device for maintaining said parallel connecting members in positions at obtuse angles relatively to said shaft portions.

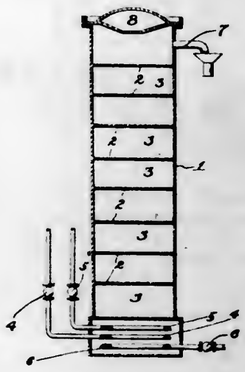
1,901,002. DEVICE FOR FEEDING AND CONTROLLING THE FLOW OF MATERIALS. WILLIAM ROSS, Surbiton, England. Filed Jan. 8, 1929, Serial No. 331,106, and in South Africa Jan. 11, 1928. 3 Claims. (Cl. 83—44.)

1. Mechanism for controlling the flow of granular or pulverulent or like material comprising in combination an inclined chute having apertures therein of varying sizes and formed with a taper at its lower end, a rotary member disposed above the chute adjacent its upper end and a flexible mat carried on said rotary member, said flexible mat being composed of a plurality of endless chains united together so as to form a unit which is flexible both longitudinally and transversely and being arranged to bear



upon the material on the chute for a substantial portion of its under surface so as to drag upon the material and so control and feed same.

1,901,003. PROCESS OF WASHING NITROGLYCERINE AND SIMILAR ESTERS. ARNOLD SCHMID, Vienna, Austria; Hans Schmid and Irma Schmid, administrators of said Arnold Schmid, deceased, assignors to Karl Schmid, Mannheim, Germany. Filed Jan. 25, 1928, Serial No. 249,475, and in Germany Feb. 5, 1927. 1 Claim. (Cl. 260—144.)



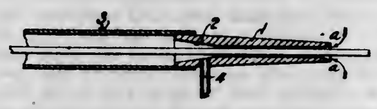
Process of continuously washing liquid esters of nitric acid, which comprises emulsifying the same with a washing agent maintaining the emulsion in an extended slowly flowing body for some time, locally agitating to maintain the emulsification but avoiding an intermingling of the freshly introduced acidulous ester with the already deacidified portions.

1,901,004. ELECTRIC GLOW DISCHARGE TUBE. GEORG SEIBT, Berlin-Schoneberg, Germany. Filed Mar. 12, 1931, Serial No. 522,121, and in Germany Mar. 18, 1930. 7 Claims. (Cl. 250—27.5.)



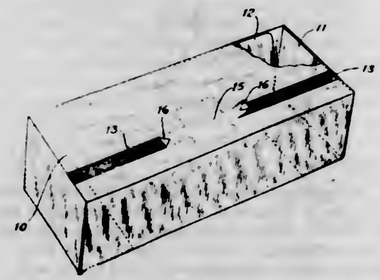
1. A glow discharge tube having a cathode and a first anode, the discharge between which serves as a source of electrons, a second anode to which an amplification current passes from the said source of electrons, and a controlling electrode which controls the said amplification current, parts of said cathode being arranged opposite one another, parts of said first anode being also arranged opposite one another and being enclosed by said parts of said cathode, said discharge electrodes enclosing a central space in which the glow discharge particles passing from said cathode through said first anode fly against one another from several directions and impinge on one another, parts of said second anode being arranged at right angles to said discharge electrodes and enclosing said central space and being adapted to attract the electrons from said central space at right angles to their original direction and parts of said controlling grid being arranged between said central space and said second anode.

1,901,005. MANUFACTURE OF LOADED ELECTRIC SIGNALING CONDUCTORS. WILLOUGHBY STATHAM SMITH, Benchams, NEWTON POPPLEFORD and HENRY JOSEPH GARNETT, Lymne, Solefields, Sevenoaks, and JOHN NORMAN DEAN, Orpington, England. Filed May 25, 1931, Serial No. 539,964, and in Great Britain Feb. 14, 1931. 2 Claims. (Cl. 178—45.)



1. In the manufacture of a loaded signaling conductor having a spacing material applied between the central conductor and the loading material, wherein said spacing material is removed during the process of heat treating the conductor in order to provide a space between the conductor and the loading material retaining a carbonaceous material, the method of subjecting said carbonaceous material to an inert atmosphere containing water vapour, which water vapour reacts at the temperature of the heat treatment with the retained carbonaceous material for preventing attack of said carbonaceous material upon said conductor.

1,901,006. PAPER DISPENSING RECEPTACLE. CHARLES W. SPAIN, Hartford, Conn. Filed May 23, 1931. Serial No. 539,443. 4 Claims. (Cl. 206—57.)

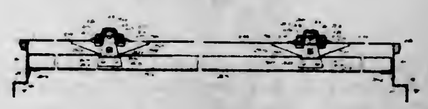


1. A receptacle comprising a box-like enclosure having lateral narrow openings within one of its surfaces, and a partially cut portion of said surface centrally disposed and intercepting said lateral openings whereby said central portion may be readily detached to provide an opening extending longitudinally across the face of the receptacle formed of a single piece of foldable material through which goods within the receptacle may be individually withdrawn.

1,901,007. PROCESS OF TREATING ARTIFICIAL FIBERS. HANS CÆSAR STUHLMANN, Premnitz, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 25, 1929, Serial No. 402,547, and in Germany Nov. 16, 1928. 3 Claims. (Cl. 18—54.)

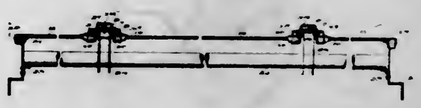
1. The process which comprises treating in a continuous manner buncnes of artificial fibers obtainable by precipitating a viscose solution in an acid precipitating bath in an acid-moist state with hot water, and simultaneously stretching the fibers.

1,901,008. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,398. 6 Claims. (Cl. 105—5.4.)



1. In a roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam member extending longitudinally of the car in spaced relation to the roof sheets, brackets for securing the beam member to the carlines, and members respectively connected to said brackets and projecting on opposite sides of the associated carline into supporting engagement with the undersides of adjacent portions of neighboring roof sheets.

1,901,009. RAILWAY CAR. EARL R. SWANSON, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1929. Serial No. 366,402. 5 Claims. (Cl. 105—5.4.)

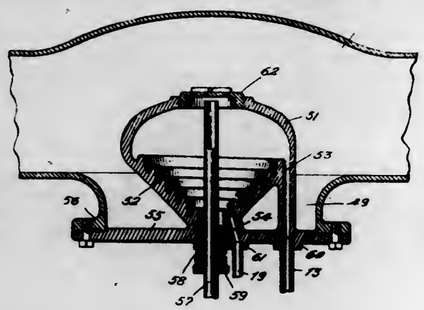


1. In a flexible roof for railway cars, the combination with a plurality of carlines, of roof sheets respectively associated with and spanning the spaces between the carlines, a beam member extending longitudinally of the car in spaced relation to the roof sheets, means rigidly secured to the carlines for supporting said beam member, and plate like members spaced above said beam member and respectively extending continuously between adjacent carlines for supporting said roof sheets, said beam supporting means being disposed intermediate the ends of adjacent plate-like members and the latter being secured in overlapping relation to the carlines independently of said beam supporting means.

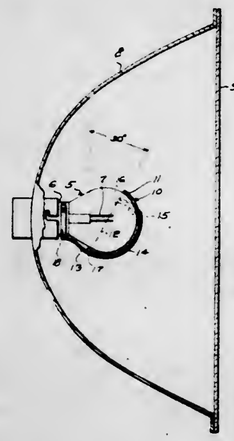
1,901,010. APPARATUS FOR RECONDITIONING USED OIL. ERNEST J. SWEETLAND, Piedmont, Calif. Filed Apr. 28, 1922. Serial No. 557,088. 9 Claims. (Cl. 184—6.)

1. In combination with the lubricating system of an automotive internal combustion engine, a pressure filter including means for separating the solids and water from the lubricating oil forced therethrough, a distilling device in communication with said filter and having return

communication with said lubricating system, of automatic control means interposed in the communicating line between the filter and the distilling device and having communication with the lubricating system whereby the lubricating oil at a predetermined viscosity will be returned directly from the filter to the lubricating system.

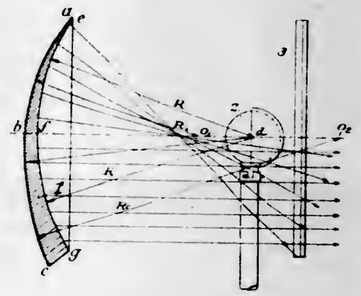


1,901,011. ANTIGLARE DEVICE FOR AUTOMOBILES. JULIAN PAUL TEDFORD, Oklahoma City, Okla., assignor to Leon N. Farr, O. R. Randle, W. H. Courtner, and Geo. W. Riddle. Filed Dec. 12, 1931. Serial No. 580,685. 1 Claim. (Cl. 240—48.6.)



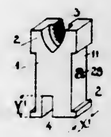
A spherically curved reflecting shield to be mounted upon the forward end portion of an electric bulb and a separate holding device therefor, said holding device comprising a longitudinal body portion including an arm portion provided at its forward free end with a pair of diverging arms, the arm portion and the arms being longitudinally curved to correspond to the curvature of the shield and having their rear end portions substantially circumferentially equi-distantly spaced, said arms being provided at their free ends with inwardly facing extensions to engage over the edge of the shield and the arm portion being provided adjacent to its rear end with an inwardly projecting extension to engage over the edge of the shield, said arm portion being longer than said arms so that the shield is held at a selected angle, said body portion extending rearwardly beyond the arm portion for a substantial distance, and a U-shaped socket carried by the rear end of the body portion for engaging with the shank of the bulb.

1,901,012. HEADLIGHT FOR VEHICLES. JEAN TOURRIOL, Paris, France. Filed Mar. 31, 1930, Serial No. 440,459, and in France Apr. 9, 1929. 1 Claim. (Cl. 240—41.38.)



Headlight for vehicles, comprising a source of light, two semi-menisci juxtaposed along their rectilinear edge, the upper semi-meniscus having its rear and front surfaces converging from the lower edge to the upper and front edge, the lower semi-meniscus having its rear and front surfaces diverging from its upper edge to the lower and front edge, a reflecting layer on the rear surfaces of these semi-menisci, the front and rear surfaces of these semi-menisci each being a portion of a sphere, the front surfaces of the semi-menisci having a common radius, the radii of the rear surfaces of the said upper and lower semi-menisci being respectively smaller and larger than the common radius of the front surfaces of these semi-menisci, all the centers of these spheres being placed on the same horizontal axis passing through the source of light which is disposed in the vicinity of the common center of the front surfaces of the upper and lower semi-menisci.

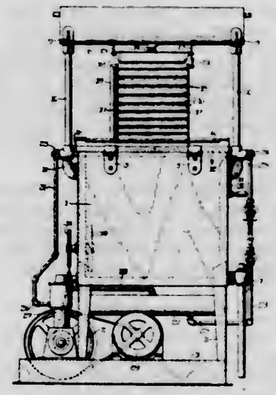
1,901,013. PROCESS AND APPARATUS FOR PHOTOGRAPHIC TYPE-COMPOSING. EDMOND UHER, Jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Filed June 25, 1930, Serial No. 463,761, and in Germany May 5, 1930. 12 Claims. (Cl. 95—4.5.)



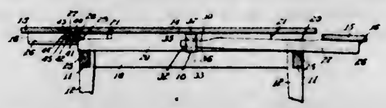
1. A photographic type-composing process, comprising setting up by a succession of manual operations separate movable control bodies each representing a printing character, and deflecting a beam of light into a direction determined by certain dimensions of each of the said control bodies in succession, thereby causing the corresponding printing characters to be photographed on a moving sensitized strip.

1,901,014. MILK COOLING AND STORING APPARATUS. GEORGE E. WALLIS, Evanston, Ill., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1931. Serial No. 543,832. 4 Claims. (Cl. 257—200.)

1. Milk cooling and storing apparatus, comprising, a tank, a cooler mounted thereon, means for positioning said cooler alternatively outwardly of said tank and within said tank, means for directing a flow of milk over said cooler in outward position for entry into said tank, and means for supplying refrigerant to said cooler, said cooler being partially immersed in said milk when within said tank.



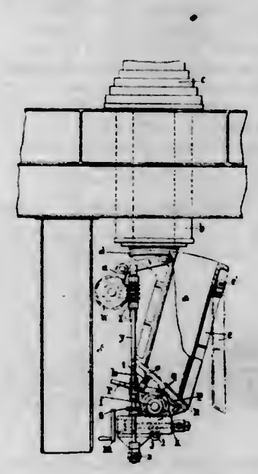
1,901,015. REFECTORY TABLE. FREDERICK B. WALTER, Wabash, Ind. Filed Mar. 19, 1930. Serial No. 436,948. 9 Claims. (Cl. 45—118.)



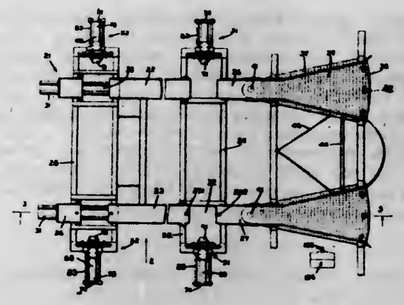
1. In a refectory table, the combination with the main frame and main top associated with said main frame to provide a space for an extension-leaf beneath one edge of the main top, of an extension leaf slide structure slidably mounted in the main frame beneath the main top, slidably-coacting elements carried respectively by the main frame and leaf-structure producing positive upward movement of the inner end of the slide-structure by outward sliding of the slide-structure, and vertically-separable elements carried respectively by the main frame and the inner end of the slide-structure of the limiting outward movement of the slide-structure only when the inner end of said slide-structure is elevated.

1,901,016. COKE DISCHARGER FOR RETORTS FOR THE CARBONIZATION OF COAL AND THE LIKE. FREDERICK JOSEPH WEST and ERNEST WEST, Manchester, England, assignor to West's Gas Improvement Company Limited, Manchester, England, a British Company. Filed Mar. 14, 1932, Serial No. 598,852, and in Great Britain May 7, 1931. 10 Claims. (Cl. 214—18.)

1. In coke extractors for vertical retorts, the combination of a pivotally mounted coke chamber having a hinged coke discharge door and locking means therefor at one side thereof and an arcuate projection for closing the connection between said coke chamber and the retort at the opposite side thereof, and manually operable means for raising and lowering said coke chamber to make a gas-tight joint between said arcuate projection and the retort and for removing any pressure between said arcuate projection and the retort to facilitate their relative movements.



1,901,017. AUTOMATIC TIRE INFLATER FOR VEHICLES. ELLIS EDMOND WHITE, Los Angeles, Calif., assignor to Pneumatic Tire Inflating Devices Corporation, Los Angeles, Calif., a Corporation of California. Filed Sept. 25, 1930. Serial No. 484,419. 6 Claims. (Cl. 152—11.)

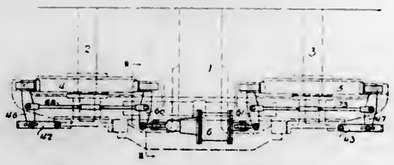


1. A machine for inflating a pneumatic tire mounted upon a wheel of a vehicle and having inlet means extending laterally from said wheel and communicating with the interior of the tire, a runway adapted to receive said vehicle, an inflating head disposed beside said runway and comprising a backing plate mounted in a vertical plane, a block movable with respect to said plate and having a socket in its outer face adapted to receive said inlet means, means resiliently retaining said block substantially centrally of said plate, and means for advancing said plate and block toward said runway to seat said inlet means within said socket, and means for supplying air under pressure to said socket.

1,901,018. TREATMENT OF MAGNETIC ALLOYS AND PRODUCTS RESULTING THEREFROM. CLARENCE GEORGE BIEBER, Huntington, W. Va., assignor to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 19, 1932. Serial No. 594,155. 13 Claims. (Cl. 175—21.)

1. The process of heat treating magnetic alloys of the nickel-iron type, which comprises subjecting such alloys to an initial super-annealing treatment, slowly cooling the super-annealed alloys in a hydrogen atmosphere, reheating the cooled alloys to about 1160° F. in air, and rapidly cooling said reheated alloy on a copper plate.

1,901,019. BRAKE MECHANISM. JAMES G. BLUNT, Schenectady, N. Y. Filed Jan. 3, 1931. Serial No. 506,340. 6 Claims. (Cl. 188—56.)

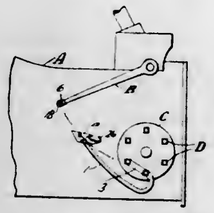


1. In a brake rigging for the wheels on one side of a railroad vehicle having a plurality of axles with wheels attached to the ends of said axles, hanger levers; brake shoes attached to said hanger levers adjacent faces of the wheels on said side; a cylinder and a fluid pressure actuated piston therefor; a pair of main power levers; a rigid rod member pivotally connected at its opposite ends to said power levers intermediate the ends thereof, one of said power levers being pivotally connected at its upper end to a fixed member and the other power lever being pivotally connected at its upper end to said piston; substantially horizontal lever members pivotally connected at their inner ends with the lower ends of said hanger levers, and operably connected at their outer ends to the lower ends of the adjacent power levers, whereby the operation of said piston will actuate the rigging and the brake shoes will be engaged with their adjacent wheels.

1,901,020. PREPARATION OF PURE PHOSPHATES. CHARLES F. BOOTH, Anniston, Ala., assignor to Swann Research, Incorporated, a Corporation of Alabama. Filed Feb. 1, 1932. Serial No. 590,318. 10 Claims. (Cl. 23—107.)

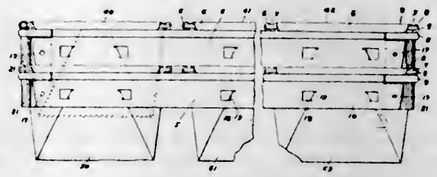
1. Process of producing pure crystalline di-basic alkali metal ortho-phosphate from solutions containing iron and aluminum compounds in solution, comprising adding to said solution a small percentage of a tetra-basic pyrophosphate and then causing said di-basic alkali metal ortho-phosphate to crystallize from said solution.

1,901,021. LOCKING CATCH. BENHARD G. BUSS, Golden, Ill. Filed Nov. 16, 1931. Serial No. 575,231. 2 Claims. (Cl. 74—39.)



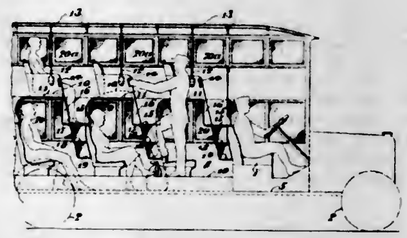
1. In a device of the kind described, in combination with a fixed member and an adjacently mounted movable member adapted for travel in a curved path, a resilient arm secured at one end to the fixed member with the free end thereof directed towards the movable member and disposed laterally of the line of travel of the movable member, a lock pin upon the movable member and projecting laterally therefrom towards the extended axis of the fixed member, a lock plate rigidly mounted upon the free end of the resilient fixed member, the said plate being so angularly shaped and recessed at its margins as to force the travel of the said pin in one direction over one edge of the said plate and its return over the opposite edge of the said plate, and an interrupter hook upon the said lock plate and so arranged as to temporarily impede the travel of the said lock pin over said plate.

1,901,022. MULTIPLE BAKE PAN. ELMER H. CHANDONIA, Cincinnati, Ohio, assignor to The Lockwood Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 17, 1930. Serial No. 496,092. 5 Claims. (Cl. 53—6.)



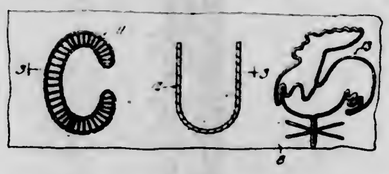
1. In combination with a unit comprising a plurality of substantially parallel bake pans, an angular encircling supporting band for supporting the bake pans, said band having projections at its corners formed by the metal of the band bent outwardly upon itself to provide a corner protector spaced from the pan corner edges and extending sufficiently forwardly and outwardly beyond the normal limits of the band, to rest upon the tops of corresponding corner portions of a subjacent similar set of nested pans.

1,901,023. SINGLE DECK BUS WITH SUPERIMPOSED SEATS. ELBERT A. CORBIN, Jr., Gradyville, Pa., assignor of one-half to William A. Brown, Philadelphia, Pa. Filed Oct. 15, 1927, Serial No. 226,298. Renewed July 29, 1932. 8 Claims. (Cl. 296—64.)



1. An enclosed passenger seating compartment for vehicles having a roof and a single deck between its support and the roof, and a longitudinally extending aisle, superimposed seats transversely disposed along said aisle, the lower seats being positioned below the upper seats but out of vertical alignment therewith, the upper of said seats having leg pockets extending to the tops of the backs of the lower seats.

1,901,024. ART OF MARKING PLASTIC MATERIAL. JACOB EDGE, Downingtown, Pa., assignor, by mesne assignments, to United States Gypsum Company, Wilmington, Del., a Corporation of Delaware. Filed July 12, 1929. Serial No. 377,729. 9 Claims. (Cl. 92—39.)



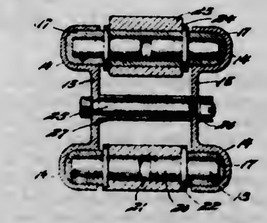
1. A carrying felt for use in board forming machinery, said felt having secured to at least one face thereof a cord arranged to form an intaglio mark in the adjacent face of the newly formed, comparatively soft board.

1,901,025. AERIAL. CHARLES SAMUEL FRANKLIN, Buckhurst Hill, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 17, 1927, Serial No. 213,450, and in Great Britain Sept. 6, 1926. 6 Claims. (Cl. 250—33.)



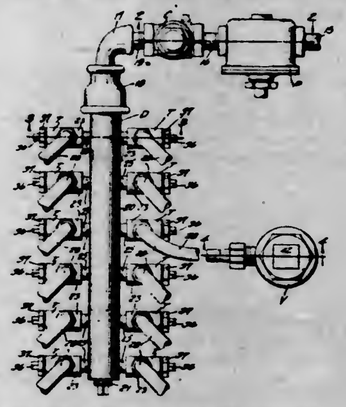
5. An aerial system for wireless communication comprising an antenna connected to ground at one end only, said antenna comprising a single wire feeder connected to an absorbing arrangement, said arrangement including a radiating element and a resistance element, both said elements having a combined effective resistance equivalent to the surge impedance of said single wire feeder.

1,901,026. JOINT CONNECTION. MICHAEL G. GIORDANO, Cranston, R. I. Filed Jan. 21, 1932. Serial No. 587,866. 7 Claims. (Cl. 287—54.)



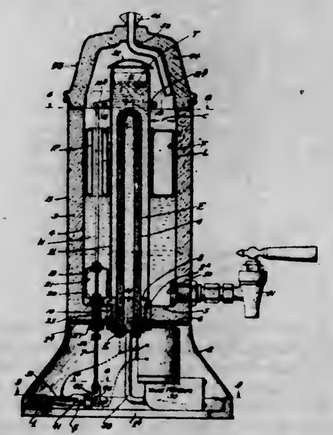
1. In a joint connection for two members to be connected, said members having bores, side links having bushing housing recesses at the ends thereof, bushings mounted in said recesses, collared bearing trunnions having their inner ends in the bores of the members to be connected and their outer ends movably seated in said bushings, said outer ends being cylindrical, and means for locking said side links to each other to urge the collars of the trunnions upon the bushings.

1,901,027. FORCE FEED LUBRICATING APPARATUS. DAVID GRATTAN, Los Angeles, Calif. Filed May 22, 1928. Serial No. 279,750. 2 Claims. (Cl. 184—7.)



1. A force feed lubricating system including a plurality of distributing units and means for forcing lubricant under pressure to the units; each unit including an oil conduit leading from the unit to a part to be lubricated, a regulating valve for each unit by which the amount of oil flowing therethrough can be varied; a terminal valve for each conduit disposed in proximity to the part to be lubricated and having means responsive to a predetermined pressure of oil in the respective conduit, to deliver oil to the respective part; and means for each terminal valve by which the terminal valves can be adjusted independently of each other to insure that they will respond to one and the same pressure.

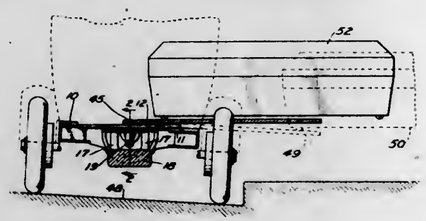
1,901,028. WATER HEATER FOR COFFEE MAKING. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 24, 1932. Serial No. 600,877. 25 Claims. (Cl. 219—38.)



1. A liquid heater comprising a container body and a cover for the same, the container body having an outlet in its lower portion, a smaller diametered receptacle sup-

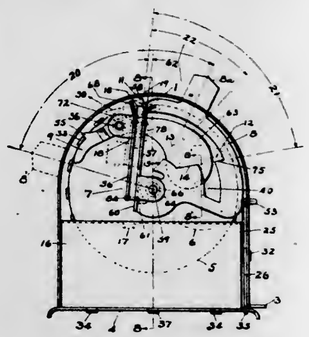
ported within the container and having its riser wall spaced from the riser wall of the container body and disposed to leave a chamber within which heated liquid is normally stored, the said receptacle having a discharge outlet spaced downwardly from the said cover, a liquid supply duct leading to the lower portion of the receptacle, an electric heating member disposed within the receptacle, and control means responsive to variations in the level of the heated liquid in the said chamber for simultaneously controlling the heating member and the flow of liquid through the duct.

1,901,029. SELF-LEVELING PLATFORM OF A TILTED BODY. WILLIAM H. HEISS, Los Angeles, Calif., assignor to Big Rock Ranch Company, Los Angeles, Calif., a Corporation of California. Filed July 15, 1929. Serial No. 378,299. 4 Claims. (Cl. 296—16.)



1. In a hearse, the combination of: a body having a longitudinal axis; a platform normally disposed within said body and movable about said axis; means for laterally swinging said platform to a transverse position relative to said hearse, said axial and said lateral movements of said platform being independent; and locking means for arresting said axial movement of said platform in any one of a plurality of positions relative to said axis.

1,901,030. REGISTERING BANK. OTTO C. HOFFMAN, Buffalo, N. Y., assignor of one-half to John J. Dunn, Buffalo, N. Y. Filed May 26, 1928. Serial No. 280,867. 4 Claims. (Cl. 235—100.)



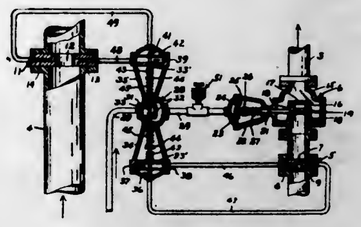
1. In a self-registering bank adapted to register coins of several denominations and having a casing with a single deposit opening therein for all the different coins, a coin carrier, a registering dial, a coin box having a coin slot beneath said carrier, and an oscillating lever adapted to engage and retain a coin in its initial position in said carrier to oscillate said carrier in one direction to register said coin on said dial and to release said coin and oscillate said carrier in the opposite direction whereby said coin may be dropped through the slot of said coin box.

1,901,031. PUMPING APPARATUS. GRANVILLE A. HUMASON, Houston, Tex. Filed July 25, 1932. Serial No. 624,425. 11 Claims. (Cl. 103—5.)



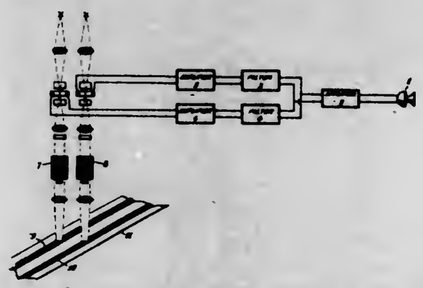
8. In a pump, a well casing, a casing head thereon, a tubing supported in said casing head, a fluid inlet at the lower end thereof, means to seal about said tubing in said casing head, means to seal about said tubing adjacent the lower end thereof, a slidable plunger closing the passage through said tubing, a plurality of valves opening outward from said tubing between said sealing means, and means including a line to conduct pressure fluid into the upper end of said tubing above said plunger to force said plunger downwardly in said tubing to discharge liquid upwardly in said casing, there being an outlet for said liquid at the upper end of said casing, said valves being arranged on said tubing to allow an outlet for said pressure fluid to the casing when said plunger has made its downward stroke.

1,901,032. FLUID FLOW CONTROL DEVICE. FLOYD L. KALLAM, South Gate, Calif. Filed Aug. 10, 1929. Serial No. 384,980. 8 Claims. (Cl. 137—164.)



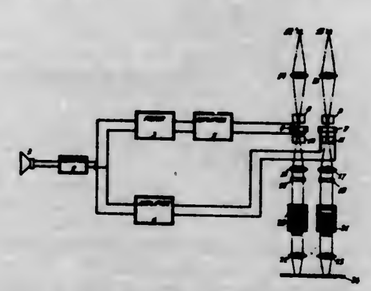
1. In combination, pipes carrying streams of fluid, a motor valve operative in a said pipe and including a valve stem, spring means coactive with said valve stem to constantly and yieldingly urge a disposal thereof to close the valve, means providing a chamber having a flexible diaphragm wall bearing axially of and against said valve stem, a pipe conveying fluid to said chamber for expanding the chamber against resistance of said spring means, a valve in said last pipe to control the fluid flow therein, means simultaneously operative in accordance with the fluid flow rates in the said first pipes to urge opposite actuations of said control valve, and a constantly open relief valve in said last pipe between said chamber and control valve.

1,901,033. METHOD OF RECORDING AND REPRODUCING PHONOFILMS. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 24, 1929, Serial No. 357,859, and in Germany May 19, 1928. 4 Claims. (Cl. 179—100.3.)



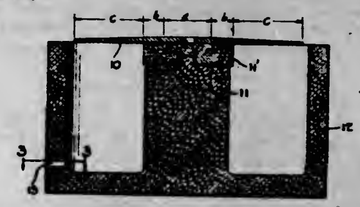
1. The method of photographic recording and reproduction which comprises, producing a sound to be recorded, modulating an electric current in accordance with said sound, separating the high and low frequency components of said modulated current, controlling the intensity of a light beam in accordance with each of said frequency components, independently recording the intensity of the light beams on a moving film record, restricting the light permitted to fall upon the moving film record from the light beam controlled by the high frequency to a small area with respect to the line of motion of said film, restricting the light permitted to fall upon the moving film record from the light beam controlled by the low frequency to a relatively large area with respect to the line of motion of said film, thus producing two records upon said film, passing light through the two records, restricting the light passing through each record in the same manner as in the recording, and photoelectrically controlling a single electric current in accordance with the total amount of light passing through the film record, and reproducing the originally recorded sound thereby.

1,901,034. METHOD OF RECORDING AND REPRODUCING PHONOFILMS. AUGUST KAROLUS, Leipzig, Germany, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 24, 1929, Serial No. 357,860, and in Germany June 18, 1928. 10 Claims. (Cl. 179—100.3.)



1. In apparatus for recording and reproducing photophonographic sound records, means for dividing the frequency band of the sound to be recorded into a number of frequency bands, and means for separately recording said different frequency bands, said last mentioned means including slitted members having a width in the direction of the motion of the photophonographic record chosen in accordance with the frequency range being recorded through said slit.

1,901,035. METHOD OF MAKING COLD ROLLED DISKS. GROSVENOR L. KELLEY and EDWARD G. BUDD, Philadelphia, Pa., assignors to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 2, 1928. Serial No. 282,441. 4 Claims. (Cl. 29—148.)



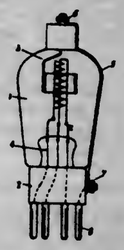
2. The method of forming a tapered disk which comprises cold rolling a disk blank to an intermediate state, thereafter annealing the outer peripheral portions of the blank while retaining the inner peripheral portions below the temperature at which exaggerated grain growth appears and thereafter cold rolling the outer peripheral portions of the blank.

1,901,036. CARTON. WILLIAM S. KINKEAD, Chicago, Ill. Filed July 20, 1929. Serial No. 379,736. 1 Claim. (Cl. 206—47.)



A container for seam binding and edging material comprising an internal and external carton, registering slots in the side walls of said cartons adjacent one of the corners thereof and between the edges of two adjacent side walls, there being additional registering slots in an intermediate portion of the contiguous side walls of each carton for securing therein the free end of the material, there being registering circular openings in the center of the tops of each of said cartons, and a circular carton of tacks mounted in said openings and protruding above the tops of said cartons for supporting and preventing the displacement of said box of tacks.

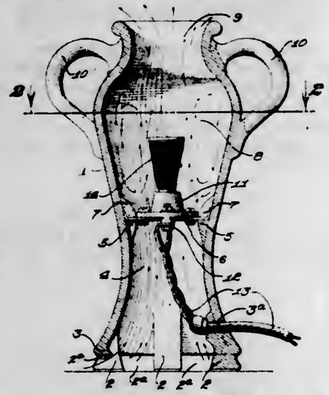
1,901,037. ELECTRIC DISCHARGE DEVICE. DIRK LELY, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 31, 1927, Serial No. 216,613, and in the Netherlands Nov. 5, 1926. 2 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising an evacuated envelope, a plurality of electrodes contained therein, a base sealed to said envelope and provided with a plurality

of contact pins, a terminal projecting from the top of the envelope opposite to the base, a conductor connected between said terminal and one of said electrodes, a second terminal on the base and a conductor connected between said second terminal and one of said contact pins, lead-in conductors within the envelope passing through the base and connected between the remaining electrodes and the remaining contact pins, and a conductor external to the envelope connected between said first and second terminals.

1,901,038. ELECTRIC HEATER. DAVID S. MARSHALL, San Diego, Calif. Filed Oct. 23, 1929. Serial No. 401,676. 2 Claims. (Cl. 219—34.)



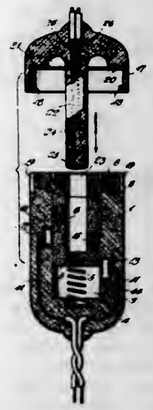
1. In an electric heater, an open-ended shell comprising a lower constricted portion adjacent its lower extremity, an upper constricted portion adjacent the upper extremity of said shell, and a belled or enlarged portion intermediate said constricted portions, the walls thereof diverging gradually from said lower constricted portion and converging abruptly into said upper constricted portion, a conical heating element disposed within said enlarged portion with its sides diverging upwardly in substantially parallel relation with the diverging walls of said enlarged portion, whereby air passing upwardly from said lower constricted portion is deflected towards the abruptly converging walls of said enlarged portion and thereby caused to set up convection currents so that the air particles are warmed repeatedly before passing out of said upper constricted portion.

1,901,039. PROCESS OF BRIGHT ANNEALING STEELS AND ALLOYS. ROBERT JOHN OWENS and HUGH JOHN FRASER, Huntington, W. Va., assignors to The International Nickel Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1931. Serial No. 579,983. 5 Claims. (Cl. 148—4.)

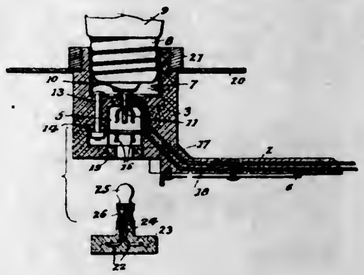
3. The process of annealing a product from the group consisting of nickel stainless steel and nickel-chromium alloys with a bright surface which comprises forming the aforesaid product, imparting a bright surface to said product, treating said product with nitric acid to render the bright surface passive and then heating said product to a temperature of about 1650° F. to about 2000° F. for several hours in the presence of a reducing atmosphere to anneal said product without producing any substantial discoloration of the bright surface.

1,901,040. SEPARABLE WEATHERPROOF PLUG. JOHN H. PERONI, Freeport, N. Y., and SIDNEY H. ALEXANDER, Englewood, N. J. Filed May 4, 1931. Serial No. 534,974. 6 Claims. (Cl. 173—328.)

1. A separable weatherproof plug comprising a socket formed with a chamber open at one end, contacts embedded in said socket and engaged by conductors and having portions exposed through the wall of the chamber in spaced relation to the bottom thereof, a shield movably mounted in said chamber and guarding said contacts from water and foreign elements, a cap detachably applied to the open end of the socket and having a portion extending into said chamber and engaging said shield to move the shield out of its normal position, said extension carrying contacts engaged by conductors and the shield having contacts exposed through side portions thereof and engaged by the contacts of the extension and moved into engagement with the contacts of the socket when the shield is moved to its adjusted position.

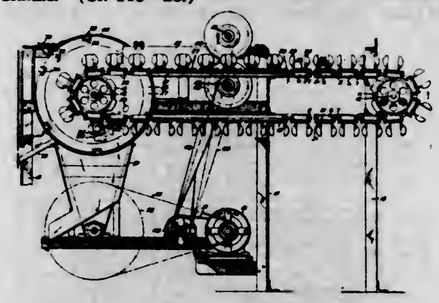


1,901,041. ONE-PIECE PLUG AND RECEPTACLE. JOHN H. PERONI, Freeport, N. Y., and SIDNEY H. ALEXANDER, Englewood, N. J. Filed May 29, 1931. Serial No. 541,044. 6 Claims. (Cl. 240—9.)



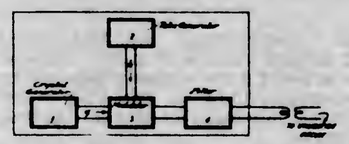
2. In an electrical fixture, a plurality of duplicate units, each consisting of a bulb receiving socket and an arm formed integral therewith and projecting transversely from the socket, a plug projecting upwardly from the free end of said arm, conductors extending longitudinally through said arm and into said socket, terminals carried by said plug and engaged by said conductors, and terminals in said socket engaged by the other ends of said conductors and constituting means to grip the plug and terminals thereof of a companion unit and releasably connect the units for pivotal movement relative to each other and establish electrical communication beween their conductors.

1,901,042. FRUIT PITTING MACHINE. FRANK ROBBINS, Sacramento, Calif., assignor of one-half to Libby, McNeill & Libby, San Francisco, Calif., a Corporation of Maine. Filed Jan. 19, 1927. Serial No. 161,966. 30 Claims. (Cl. 146—28.)



1. A fruit pitting machine comprising means for bisecting a fruit and its contained pit, means for pitting bisected fruit, a chain conveyor for carrying fruit to said bisecting means and said pitting means from a receiving station, and means on said conveyor for receiving and holding fruit against lateral displacement and with the suture of said fruit in a predetermined position with respect to said bisecting means, whereby the fruit is maintained with its suture coincident with the longitudinal axis of the machine irrespective of the varying contours of the fruit placed therein.

1,901,043. OSCILLATION GENERATOR. HANS OTTO ROOSENSTEIN, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Sept. 4, 1929. Serial No. 390,869, and in Germany Sept. 10, 1928. 3 Claims. (Cl. 250—36.)



1. The process for the production of artificial masses which comprises heating a non-distillable polymerization product of a butadiene to a temperature between about 100° and 500° C. until the product has practically completely lost its tensile elasticity.

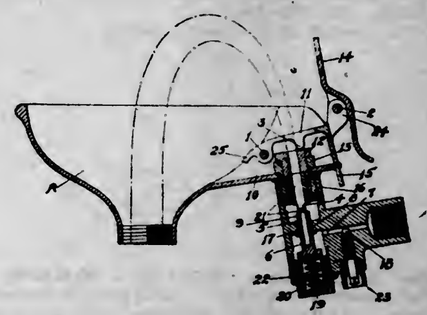
1,901,044. PRODUCTION OF ARTIFICIAL MASSES. OTTO SCHMIDT and BERTHOLD SCHNELL, Ludwigshafen-on-the-Rhine, and EGON MEYER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 4, 1929, Serial No. 360,615, and in Germany May 8, 1928. 25 Claims. (Cl. 18—55.)

1. The process for the production of artificial masses which comprises heating a non-distillable polymerization product of a butadiene to a temperature between about 100° and 500° C. until the product has practically completely lost its tensile elasticity.

1,901,045. PRODUCTION OF FOILS. OTTO SCHMIDT, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Oct. 11, 1929, Serial No. 399,100, and in Germany Nov. 5, 1928. 12 Claims. (Cl. 18—57.)

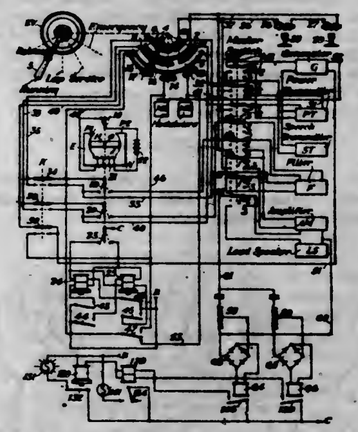
1. The process for the production of thin artificial masses which comprises warming a soft foil of a non-distillable synthetic polymerization product of a dioleflne, which is free from sulphur, in the presence of oxygen.

1,901,046. DRINKING FOUNTAIN. WILLIAM H. SCHULTE, Trenton, N. J. Filed Apr. 29, 1932. Serial No. 608,180. 5 Claims. (Cl. 299—13.)



3. In a fountain, the combination with a bowl, of a water supply valve chamber secured thereto by a hollow fitting, a web dividing the valve chamber, a spring pressed valve seated against the lower side of said web, a nozzle slidably mounted in said fitting, a tappet carried by said nozzle and arranged to engage the upper end of said valve, and means for operating said nozzle arranged to prevent finger access to said nozzle and normally providing a cover therefor.

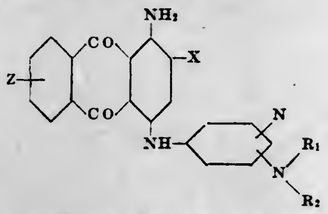
1,901,047. ELECTRIC CONTROL SYSTEM. ANDREW J. SORENSEN, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1931. Serial No. 581,553. 16 Claims. (Cl. 246—63.)



1. A control system including, a transmitting circuit, a source of control current of a predetermined frequency, coding means adapted to supply to said circuit from said source periodic impulses of current, telephone means adapted to supply to the transmitting circuit a telephone current of voice frequencies, a receiving circuit influenced by said transmitting circuit, means controlled by said receiving circuit responsive only to current of the predetermined frequency of the control current to establish a signal corresponding to the periodic impulses, and other means controlled by the receiving circuit responsive to the telephone current to establish telephone communication.

1,901,048. PREPARATION OF NEW DYESTUFFS OF THE ANTHRAQUINONE SERIES. SAMUEL VON ALLMEN, Basel, Switzerland, assignor to Chemical Works formerly Sandoz, Basel, Switzerland. Filed Sept. 22, 1930. Serial No. 483,753, and in Germany Oct. 4, 1929. 5 Claims. (Cl. 260—60.)

1. The dyestuffs of the general formula:

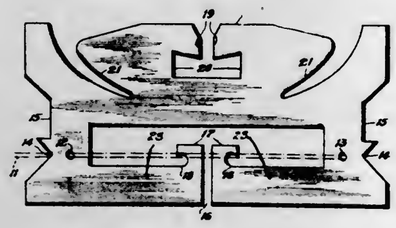


wherein X represents a halogen or a SO_3H-group, Y represents hydrogen, an alkyl or a SO_3H-group, Z represents a halogen, a SO_3H-group or a phenylenediamine group, and R_1 and R_2 represent hydrogen or an alkyl group, which are in dry state dark powders, dissolving in water with a blue to violet coloration and dyeing wool from an acid bath bluish-grey to greenish-grey shades which may be afterchromed yielding pure grey tints.

1,901,049. PROCESS FOR THE PRODUCTION OF GENUINE WATERMARK PAPERS WITHOUT USING RELIEF MOLDS. FRIEDRICH VON HEINRICH, Budapest, Hungary, assignor of one-half to National Bank of Hungary, Budapest, Hungary, a Corporation of Hungary. Filed Oct. 15, 1931, Serial No. 569,113, and in Austria Oct. 20, 1930. 2 Claims. (Cl. 92—48.)

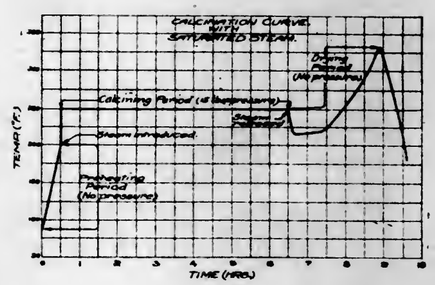
1. The herein described method of producing gradations or half tones in the watermarks of paper, comprising the making of a photographic half tone reproduction of the design to be used as a watermark, decomposing said reproduction by a line screen, and reproducing the said decomposed reproduction on a paper forming surface with the water permeability of said surface at various places proportional to the light tone values of the corresponding parts of the photographic reproduction, the water permeable and water impermeable parts of said surfaces corresponding with the resist covered and uncovered parts of the screen decomposition of the half tone picture.

1,901,050. REELING MEANS. JOHN S. VOORHEES, Derby, Conn. Filed Oct. 17, 1929. Serial No. 400,203. 17 Claims. (Cl. 242—96.)



1. An anchor comprising a body portion having a mouthed opening on the interior thereof, a portion for reeling line thereon substantially overlying said opening, an abutment preventing lateral insertion and withdrawal of a continuous line into and from said opening except upon displacement of the normal position of line previously reeled on said reel portion.

1,901,051. HIGH STRENGTH CALCINED GYPSUM AND PROCESS OF MANUFACTURING SAME. WILBUR S. RANDEL and MANVEL C. DAILEY, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 8, 1929. Serial No. 384,343. 23 Claims. (Cl. 23—122.)



1. The step in the process of calcining gypsum to produce a high strength calcined gypsum which comprises heating gypsum in a closed container for a period of 5 to 7 hours with the pressure of the steam in contact with the gypsum maintained substantially uniform at approximately 17 pounds per square inch gauge.

22. Calcium sulphate hemihydrate in the form of individual crystal fragments that are entirely homogeneous throughout and have no porosity.

1,901,052. COMPOSITION FOR MOLDING INVESTMENT INLAYS. MANVEL C. DAILEY, Maywood, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930, Serial No. 465,646. Renewed July 30, 1932. 14 Claims. (Cl. 22—188.)

1. A molding composition a mixture of the following ingredients:

	Per cent
Finely ground silica	60–80
Alpha gypsum	20–40

Retarder to regulate the set with water.

1,901,053. DENTAL INVESTMENT COMPOSITION. MANVEL C. DAILEY, Maywood, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed July 3, 1930, Serial No. 465,648. Renewed July 30, 1932. 7 Claims. (Cl. 22—188.)

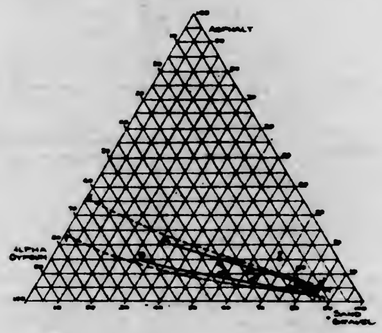
1. An investment composition comprising a mixture of the following ingredients:

	Grams
Alpha gypsum	40
Powdered silica	60
Gum arabic	½

1,901,054. DENTAL MODEL STONE COMPOSITION. MANVEL C. DAILEY, Chicago, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 10, 1931. Serial No. 556,336. 6 Claims. (Cl. 18—47.)

1. A composition of matter suitable for use in the preparation of dental models, which comprises alpha gypsum, and an amount of Rochelle salt sufficient to substantially overcome the setting-expansion of said alpha gypsum.

1,901,055. MASTIC FLOORING, COMPOSITION, AND METHOD OF PREPARING. HARRY K. LINSELL, La Grange, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1931. Serial No. 512,296. 16 Claims. (Cl. 106—34.)



13. A mastic composition comprising from 10 to 77 parts by weight of alpha gypsum, 4 to 36 parts by weight of asphalt, and 0 to 86 parts by weight of an aggregate, the total combined enumerated ingredients always to total 100 parts by weight.

1,901,056. MODEL PLASTER. WILBUR S. RANDEL, Farnams, Mass., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 13, 1932. Serial No. 586,377. 1 Claim. (Cl. 106—34.)

A molding plaster composition comprising 50–80% alpha gypsum and an amount of Portland cement sufficient to control the setting and expansion of said composition when mixed with water.

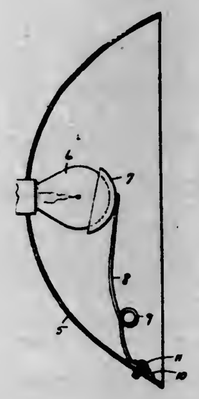
1,901,057. ACOUSTIC CORRECTIVE MATERIAL. CARLISLE K. ROOS, Wheaton, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed July 10, 1930. Serial No. 466,916. 3 Claims. (Cl. 106—34.)



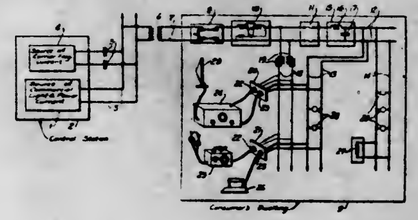
3. An acoustical composition comprising alpha gypsum, a gas-forming agent, a strengthening agent, and wood fiber; the alpha gypsum and wood fiber being so proportioned relative to each other that they will mutually contribute toward the piercing of the cell-walls of the bubbles produced in the mass on gaging the same with water.

1,901,058. GLARE ELIMINATOR FOR VEHICLE HEADLIGHTS. LANCELOT C. ROWLEY, Grand Rapids Township, Kent County, Mich. Filed Feb. 9, 1932. Serial No. 591,883. 1 Claim. (Cl. 240—48.6.)

In combination, a main vehicular headlight reflector, a light bulb arranged within said reflector and supported thereby, a resilient support comprising a single length of wire having a substantially straight end, together with a longitudinally curved end, and a looped intermediate portion between said ends, a fastening element engaged with the main reflector adjacent the open side thereof, and said curved end of said support at the free extremity thereof provided with a return bend forming a substantial U engaging said fastening element, and a concaved auxiliary reflector disk fixedly secured to the extremity of the first named end of said support and being urged by said support into yieldable engagement with said light bulb.



1,901,059. SYSTEM OF ELECTRICAL DISTRIBUTION. GORDON BROWN SCHEIBELL, Newark, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 21, 1930. Serial No. 490,181. 2 Claims. (Cl. 179—2.5.)

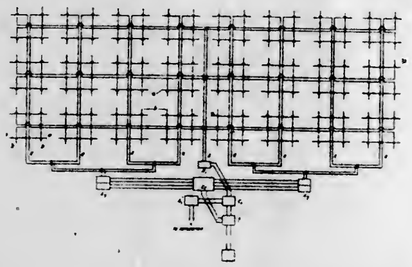


1. In a wired radio broadcasting system in which both commercial power and signalling energy are transmitted over power lines to consumer's local distribution lines connected with commercial power consuming devices, means for supplying signalling energy from said power lines comprising, auxiliary wire lines designed for the exclusive transmission of signalling energy, said wire lines being coupled to said power lines in a manner such as to prevent the passage of commercial power thereover and means for preventing the passage of signalling energy over said consumer's local power distribution lines, said auxiliary wire lines being disposed with respect to said consumer's local power lines for conjoint use therewith in the operation of a radio receiving system requiring both commercial power and signalling energy.

1,901,060. ANTENNA. OMMO SCHMIDT, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 18, 1930, Serial No. 429,282, and in Germany Feb. 19, 1929. 2 Claims. (Cl. 250—33.)

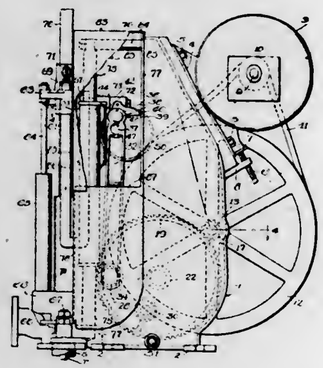
1. An aerial layout, particularly for short wave operation, employing two antenna systems, one comprising of a number of vertical linear aerials arranged one above the other in one plane, the other comprising a number of hori-

zontal linear aerials arranged in a plane parallel to and spaced from the first, each of the two antenna systems being connected by means of separate transmission lines to



common high frequency apparatus, and phase adjustment apparatus associated with each of said separate transmission lines.

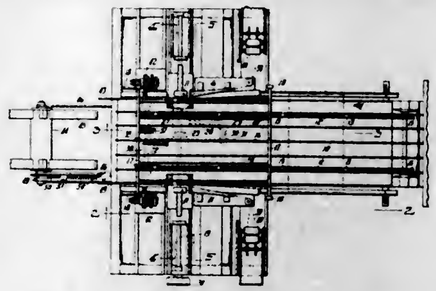
1,901,061. PUMP. DANIEL R. SCHOLES, Oak Park, Ill., assignor to Aermotor Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 19, 1931. Serial No. 509,740. 22 Claims. (74—14.)



1. In a pump having operated and operating means, a shielding means for the operating means and having an overhung portion, and a U-shaped connecting rod operatively connecting said operated and operating means and having a part thereof passing through said overhung portion, and another part thereof operating outside of said shielding means.

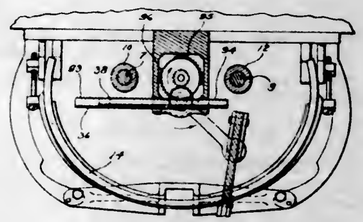
1,901,062. COUNTING AND BUNCHING DEVICE. WILLIAM E. SHARKEY, Middletown, Ohio, assignor to The Raymond Bag Company, Middletown, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,834. 11 Claims. (Cl. 93—93.)

1. The combination with an endless conveyor having means for simultaneously advancing a plurality of articles one behind the other, and driving mechanism for said conveyor, of a device having a plurality of sections movable successively into a position to receive said articles from said conveyor, operating mechanism to impart intermittent movement to said receiving device, means for connecting said operating mechanism with the driving mechanism for said conveyor, means for controlling said connection comprising a movable part, a controlling member mounted adjacent to the path of said articles and connected with said movable part and arranged to be engaged and actuated by said articles as they are advanced by said conveyor to actuate said movable part to cause said connection to be established and to maintain said connection so long as there is an article in engage-



ment with said controlling member, and means for actuating said movable part to interrupt said connection when there is no article in engagement with said controlling member.

1,901,063. GUARD FOR WOOD HEEL TURNING MACHINES. WESLEY J. SHAW, Haverhill, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 23, 1927. Serial No. 242,105. 6 Claims. (Cl. 74—105.)

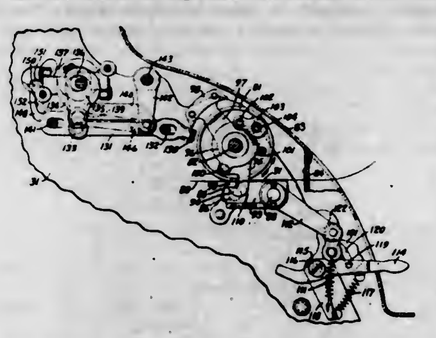


1. A safety device for machines having two horizontally spaced cutters for turning opposite sides, respectively, of a heel block, a clamp for holding the heel block, a jack upon which the clamp is mounted, and a member, carried by the frame on which the jack is swingable toward either cutter from an intermediate position between the cutters, comprising a separate guard for each cutter, the guards being relatively movable, and mechanism for supporting the guards and moving them into positions interposed between the cutters, respectively, and the clamp when the jack occupies the intermediate position, and for moving each guard, in a plane between the jack and the cutters, out of said interposed position, said mechanism comprising toothed gearing co-operating directly with said member on which the jack is swingable, and driven by swinging movement of the jack from the intermediate position toward either of the cutters, and arranged to drive that guard which is interposed between the jack and the cutter toward which the jack is swinging, out of interposed position between the jack and the last-named cutter.

1,901,064. CASH REGISTER. BERNIS M. SHIPLEY, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Jan. 30, 1930. Serial No. 424,690. 18 Claims. (Cl. 235—130.)

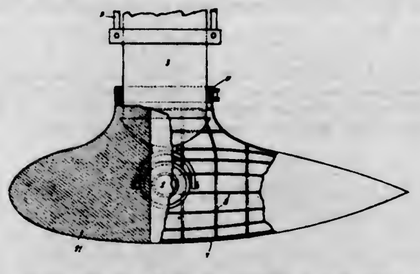
1. In a machine of the class described; the combination with a machine releasing mechanism; a feeding

means; and tension means for the feeding means; of means to releasably hold the tension means in contact with the feed means; means to separate the tension means from



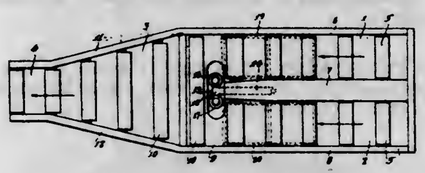
the feed means; and means operable by the holding means to lock the machine releasing mechanism against releasing movement.

1,901,065. MICROPHONE WINDSHIELD. RALPH K. SPOTTS, Los Angeles, Calif., assignor to Radio-Keith-Orpheum Corporation, a Corporation of Maryland. Filed Mar. 27, 1931. Serial No. 525,716. 4 Claims. (Cl. 179—178.)



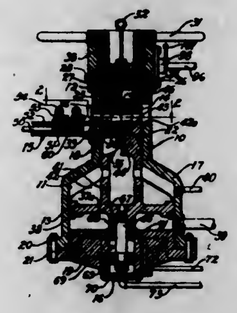
1. A sound pick-up device including a streamlined windshield assembly, and a microphone mounted within said assembly with its sound wave receiving surface parallel to the streamlining of said assembly.

1,901,066. CONVEYER SYSTEM. HERBERT E. TWOMLEY, Riverside, Calif., assignor to Clara B. Parker, executrix of George D. Parker, deceased. Filed Feb. 21, 1931. Serial No. 517,397. 11 Claims. (Cl. 198—32.)



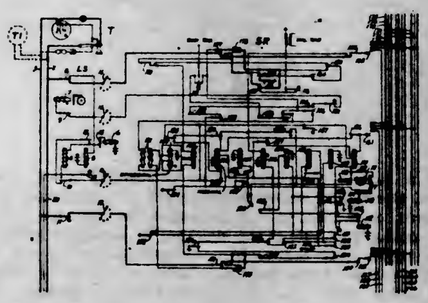
1. In a conveyer system in which several branch conveyers converge into a single continuing conveyer, parcel engaging stopping means for each of said branch conveyers, means mounting each of said stopping means upon its associated branch conveyer for movement into position to engage parcels on that conveyer, and means operable by arrival of a parcel at the junction from either branch conveyer for operating the stopping means in that conveyer to a non-obstructing position and for simultaneously moving the stopping means in the other conveyer to obstructing position.

1,901,067. MACHINE FOR CUTTING METAL BARS AND THE LIKE. HARRY F. VICKERS, Detroit, Mich. Filed Aug. 25, 1930. Serial No. 477,620. 7 Claims. (Cl. 164—56.)



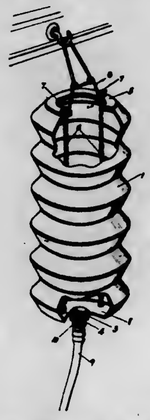
1. A machine of the character described including, a body having a cylinder opening, a stationary die block in the body, a piston in the cylinder operable by fluid pressure, cylinder and piston means for returning the piston after actuation, a die block carried by the piston, there being an opening in the stationary die block and an opening in the die block carried by the piston in register with the opening in the stationary die block, and means for feeding work into the openings, said means including a member shiftable toward and away from the die blocks, a grip on the member operable to grip an object upon movement of the member toward the die blocks, and cylinder and piston means for shifting the member, and a control for the two cylinder and piston means whereby they operate in synchronism during the returning of the piston.

1,901,068. MULTIOFFICE TELEPHONE SYSTEM. JOHN WICKS, Oak Park, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 28, 1929, Serial No. 395,882. Renewed Mar. 28, 1932. 53 Claims. (Cl. 179—27.)



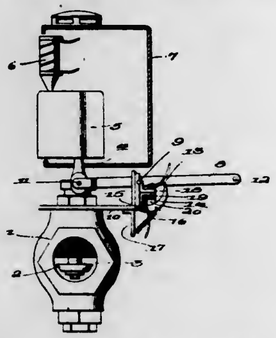
1. In a telephone system, a selector repeater having access to local trunks and to outgoing trunks, means including said selector repeater and one of said trunks for extending connections to a subscriber's line, a busy test circuit in said selector repeater for determining the idle or busy condition of a called line, and a discriminating test circuit in said selector repeater for determining the class of connection in which a busy called line is engaged, said circuits being effective only when a call has been extended to a subscriber's line by way of a local trunk.

1,901,069. COLLAPSIBLE FOUNTAIN SYRINGE. HARRY S. WILLIAMS, Denver, Colo., assignor to William A. Bryans, Denver, Colo. Filed May 10, 1930. Serial No. 451,270. 4 Claims. (Cl. 128—227.)



1. A device of the character described comprising a circular bellow-like collapsible bag of water proof material, a bottom for the bag having an outlet nipple for connection thereto of a water tube, a flat metal ring secured to the top of said bag by vulcanization, a hinged ball secured to said ring at opposite diametric points, and flexible members connecting said ring and said bottom for limiting the extension of the bag.

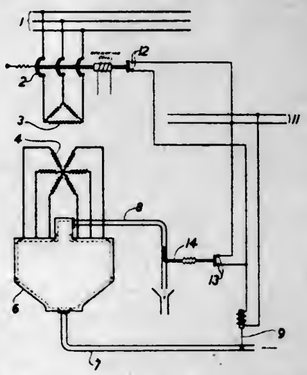
1,901,070. MOTOR OPERATED VALVE. ROBERT T. WILLIAMS, Quincy, Ill. Filed Nov. 22, 1929. Serial No. 409,037. 9 Claims. (Cl. 137—139.)



2. A motor controlled valve comprising a valve element, electrical responsive means for actuating said valve element, a connecting rod arranged between the actuating means and the valve element, a manually actuated lever operatively connected with said connecting rod and having ratchet teeth therein, a pawl in position to engage the ratchet teeth, and an electric switch responsive to a predetermined position of the pawl for controlling an auxiliary circuit to the electrically responsive actuating element.

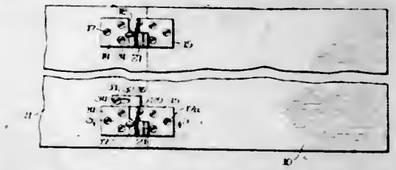
1,901,071. RECTIFIER COOLING SYSTEM CONTROL. HAROLD WINOGRAD, Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 22, 1930. Serial No. 490,462. 7 Claims. (Cl. 175—363.)

3. In an electric current rectifying system, an electric current rectifier having double walls to provide for the circulation of a cooling medium therebetween, a source of current supply for said rectifier, a circuit breaker operative to connect the said source of current with said rectifier, thermostatic means arranged adjacent the path of the cooling medium, a source of control current, and an electro-magnetically operated valve arranged in the



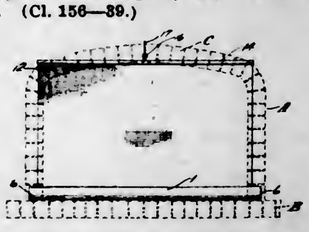
path of and controlling the flow of the cooling medium, said circuit breaker connecting an operating coil of said valve with said source of control current upon said operating connection of said circuit breaker to open said valve, said thermostatic means connecting the coil of said valve for opening the same with said source of control current at a pre-determined temperature of the cooling medium.

1,901,072. HINGE. GEDOR W. ALDERN, Rockford, Ill., assignor to American Cabinet Hardware Corp., Rockford, Ill., a Corporation of Illinois. Filed Jan. 29, 1930. Serial No. 424,162. 6 Claims. (Cl. 16—172.)



1. A hinge adapted to be secured to the surfaces of two parts to be connected comprising, in combination, a U-shaped socket member having an open side secured to one of said parts with the open side in abutment with the surface thereof, and a second member having a pintle thereon secured to the other of said parts, said pintle having a curved surface in rocking engagement with said socket abutting surface and being irregular in cross section for spaced engagement with opposed portions of said socket member.

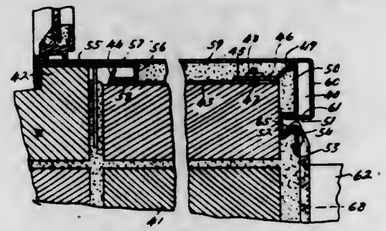
1,901,073. FIREPLACE SCREEN. AGARD H. BAILEY, Altadena, Calif. Filed Apr. 6, 1932. Serial No. 603,496. 1 Claim. (Cl. 156—39.)



In a device of the kind described, an elongated tubular housing having a longitudinal slot adjacent its intended upper side and plugs mounted in the ends of the housing,

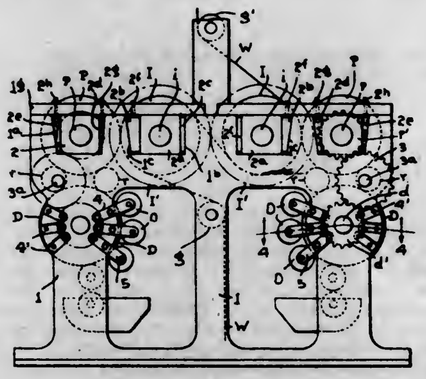
radially spaced pins extending through the said housing into the end plugs adjacent the intended lower side of the housing, the said pins having enlarged heads at their outer ends, the said heads extending beyond the periphery of the housing to act as supporting feet therefor, a roller mounted in the housing between the said end plugs, a screen attached at one end to the roller and wound thereon, the outer end of the screen being extended through the said slot and secured around a rod, a sleeve enclosing the said rod and end of the screen and having a slot to pass the screen, an eye attached to the sleeve, and a hook attached to the said eye.

1,901,074. RADIATOR SUPPORT. GUSTAF IVAR BARCLAY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed July 19, 1928. Serial No. 294,019. 9 Claims. (Cl. 248—17.)



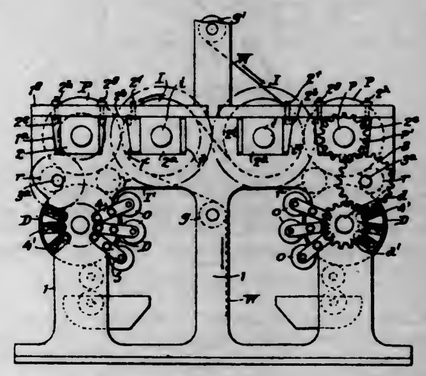
6. A radiator hanger support for use in a wall having a window opening comprising a portion extending into the opening and anchored to the wall and provided with a depending portion formed with inwardly and outwardly opening grooves adapted to respectively receive the radiator hanger and plaster at the inner side of the wall.

1,901,075. CHANGEABLE ROTARY PRESS. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed Sept. 13, 1924. Serial No. 737,553. 12 Claims. (C. 101—220.)



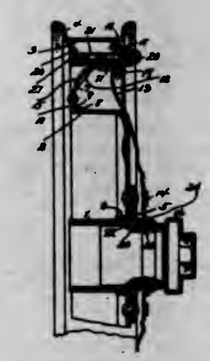
1. A rotary printing press having interchangeable plate and impression cylinders respectively adapted to print sheets of different length; and means for leading a web in either direction between the plate and impression cylinders; with means for inking the plate cylinders including inking drums and ink distributing rollers cooperating with the drums; and means whereby the ink distributing rollers can be set at either side of the ink drums in accordance with the lead of the web and direction of rotation of the plate cylinders.

1,901,076. CHANGEABLE ROTARY PRESS. HENRY F. BECHMAN, deceased, Battle Creek, Mich., by City National Bank & Trust Company of Battle Creek, Battle Creek, Mich., administrator, assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Original application filed Sept. 13, 1924, Serial No. 737,553. Divided and this application filed May 5, 1930, Serial No. 450,008. Renewed Aug. 16, 1932. 9 Claims. (Cl. 101—247.)



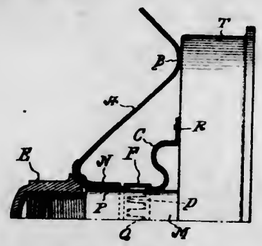
1. In a rotary cylinder web printing press, a main frame provided with a plurality of aligned openings in each side frame for the reception of journal boxes, each opening having an inclined side; rectangular journal boxes mounted in said openings; plate and impression cylinders mounted in said boxes, said cylinders being changeable in accordance with the length of page to be printed, wedge plates for laterally adjusting the plate cylinder boxes in their openings in accordance with the size of the cylinders employed, means for adjusting the wedges and means for leading a web through the press and between the plate and impression cylinders to be printed thereby.

1,901,077. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Apr. 7, 1924. Serial No. 704,889. 13 Claims. (Cl. 301—6.)



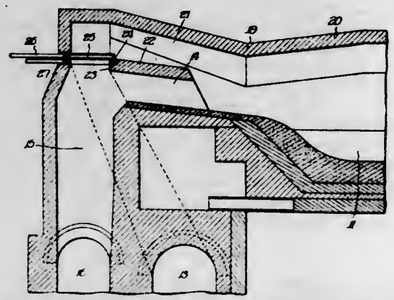
1. In a vehicle wheel, the combination with a brake drum, of a cover plate for said brake drum spaced therefrom, and means upon said cover plate for creating a flow of air through the space between said brake drum and cover plate.

1,901,078. VEHICLE WHEEL. PIERRE MARCEL BOURDON, Paris, France, assignor to Michelin et Cie., Clermont-Ferrand, France, a Corporation of France. Filed Dec. 14, 1931, Serial No. 580,962, and in France Jan. 17, 1931. 6 Claims. (Cl. 301—6.)



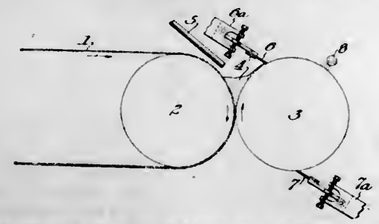
1. In a vehicle wheel construction, a vehicle wheel carrying teeth, a hub, a brake drum, and an elastic member on the brake drum having teeth to mesh with the teeth of the wheel, and securing means for the wheel for binding the teeth together and placing the elastic member under tension.

1,901,079. OPEN HEARTH FURNACE. ARTHUR J. BOYNTON, Chicago, Ill., assignor, by mesne assignments, to Open Hearth Combustion Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,319. 2 Claims. (Cl. 263—15.)



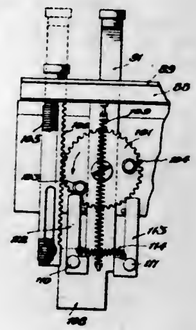
1. In an open hearth furnace, a furnace chamber, separate air and gas slag pockets and uptakes, a central gas port connected to the gas uptake, the air uptakes terminating in the floors of the furnace ends on either side of the gas port, a single air port joining the air uptakes and extending above the gas port, a passage through the gas port wall communicating with the air port, and means for closing said opening.

1,901,080. WIPER MECHANISM FOR COATING MACHINES AND PROCESS. DONALD B. BRADNER, Oxford, Ohio, assignor to The Champion Coated Paper Company, Hamilton, Ohio, a Corporation of Ohio. Filed Feb. 5, 1932. Serial No. 591,207. 7 Claims. (Cl. 91—43.)



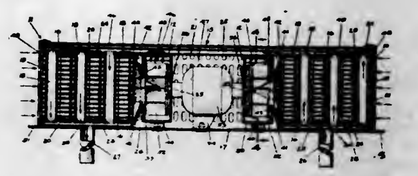
5. In an apparatus for forming on a moving surface an even layer of coating composition containing a liquid vehicle, including a movable doctor member, the association with said doctor member of plural means for cleaning the surface of the latter and preparing it for reuse which in the order of their occurrence are a wiping means, a means for delivering a stream of washing liquid, and a second wiping means.

1,901,081. MONEY HANDLING MACHINE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Automatic Cashier Company, Watertown, Wis., a Corporation of Wisconsin. Original application filed May 24, 1924, Serial No. 715,662. Divided and this application filed Feb. 4, 1932. Serial No. 590,956. 5 Claims. (Cl. 133—4.)



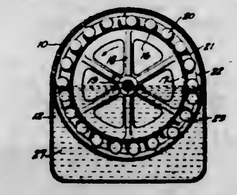
1. A money handling machine comprising a coin tray, coin ejecting mechanism, a slidable plate for operating the coin ejecting mechanism, arms pivotally connected to the plate, and means engageable with the arms for operating the plate.

1,901,082. HEATING APPARATUS FOR AUTOMOTIVE VEHICLES. VERNON J. BUTTERFIELD, Minneapolis, Minn., assignor to Tropic-Aire, Incorporated, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,403. 5 Claims. (Cl. 257—137.)



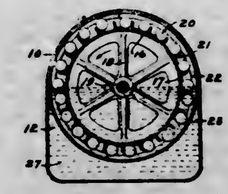
1. In combination, a heating element adapted to be positioned in a closed body and including a plurality of sets of air-circulating passages, the air-circulating passages of each set having their outer portions open to said closed body and the inner portions of the air-circulating passages of the different sets being arranged in spaced apart relation, means for supplying heat to said air-circulating passages, and a plurality of air propelling means between said air-circulating passages of the different sets, each including a casing situated in communication with the inner portions of a set of air-circulating passages, there being an air passage affording communication between each casing and the interior of said closed body, and an air propeller in each casing, for withdrawing air from said closed body and for returning the withdrawn air back into said closed body, the said air propeller being adapted to cause the said withdrawn and returned air to travel through said air-circulating passages, to thus be heated and kept in continuous circulation within the closed body.

1,901,083. HEAT TREATING EDIBLE SUBSTANCES. FRANK D. CHAPMAN, Berlin, Wis. Filed Jan. 19, 1931. Serial No. 509,733. 7 Claims. (Cl. 99—8.)



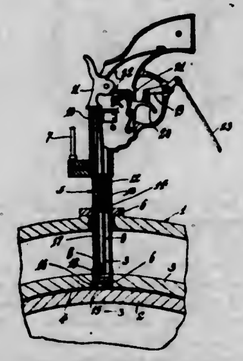
1. The process of heat treating edible substance, which comprises, transporting successive hermetically sealed batches of the substance for a definite period of time through a heated liquid having lower specific heat than that of pure water, and utilising the said specific heat to control the rate of heat transfer.

1,901,084. PROCESS OF TREATING MATERIAL. FRANK D. CHAPMAN, Berlin, Wis. Filed Jan. 19, 1931. Serial No. 509,734. 10 Claims. (Cl. 99—8.)



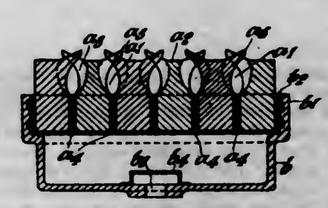
1. The process of treating edible substance, which comprises, transporting hermetically sealed batches of the substance through liquid having a predetermined density, and varying the depth of submergence and utilising the said density to control the degree of agitation of the batches during said transportation.

1,901,085. FLUID INJECTING DEVICE. CEYLON C. CORKRAN, San Francisco, Calif. Filed Aug. 7, 1928. Serial No. 298,097. 1 Claim. (Cl. 184—18.)



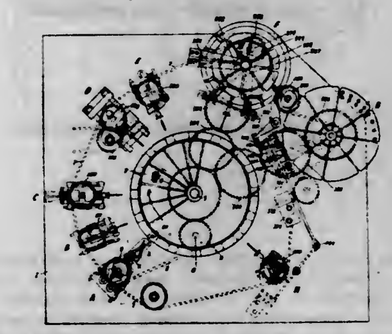
A lubricator device for an engine including a cylinder, a piston operatively mounted therein, a lubricator barrel in communication with said cylinder and having an oil feed means, a plunger operatively mounted in said barrel, a spring for yieldingly retaining said plunger in retracted position, a hammer adapted to strike said plunger to force the oil contained in said barrel into said cylinder, a trigger mechanism adapted to be manually actuated to operate said hammer, and means associated with said trigger for actuating said trigger and thereby said hammer in timed relation with the travel of the piston in the cylinder.

1,901,086. GAS BURNER. FREDERICK JOHN COX, Tufnell Park, London, England. Filed June 13, 1932, Serial No. 616,849, and in Great Britain May 28, 1931. 3 Claims. (Cl. 158—104.)



1. A gas burner comprising a burner surface element having a combustion chamber arranged below its outer surface, and means for supplying combustible gas to the combustion chamber, the surface element having a slot extending from the combustion chamber to the outer surface of the element, each side of the slot being in the form of a series of undulations forming projections extending from the opposite side of the slot over the combustion chamber and over said means.

1,901,087. APPARATUS FOR MECHANICALLY MOUNTING ELECTRODES OF THERMIONIC TUBES. WALTHER DALHEIMER, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 26, 1927, Serial No. 228,791, and in the Netherlands Aug. 12, 1926. 33 Claims. (Cl. 250—27.5.)



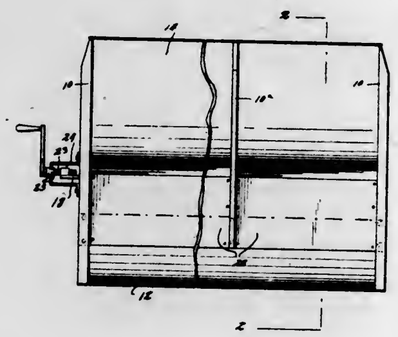
1. A device of the character described, comprising a stationary frame, a rotatable table mounted on said frame, a chuck for holding a glass stem at the periphery of said rotatable table, and a plurality of mechanisms adjacent the periphery of said table for mounting electrodes on the glass stems in said chuck, the said mechanisms being mounted to move radially of said table, and common actuating means for moving said table step by step to bring said chuck into registry with said mechanisms in succession and to move said mechanisms in succession radially of said table to bring them into and out of the path of the traveling stem.

1,901,088. METHOD OF MAKING HOSE CONNECTIONS. BURNS DICK, Ferguson, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Oct. 6, 1930. Serial No. 486,679. 2 Claims. (Cl. 29—148.2.)



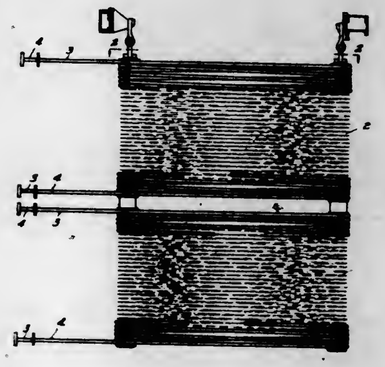
1. The method of making pressure-tight connection between a hose of compressible material and a fitting member, which comprises placing a tubular sleeve of ductile material around the hose end and a cylindrical nipple in the end of the hose, said hose end and sleeve abutting the fitting member and said sleeve being of substantially the same internal diameter as the normal external diameter of the hose except as to the part receiving the extremity of the hose, which part is of smaller diameter than the hose diameter, and then progressively compressing the sleeve from its open end toward the fitting member and throughout substantially its entire length.

1,901,089. HOG FEEDER. JOSIAS D. DUUCK, Sequim, Wash. Filed Feb. 24, 1928. Serial No. 256,780. 1 Claim. (Cl. 119—56.)



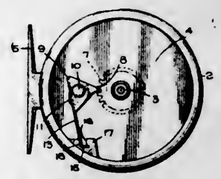
A hog feeder as described comprising a magazine having a longitudinally disposed channel in the bottom thereof, a pair of feed troughs positioned beneath said magazine, a channeled feed guiding member secured to the bottom of the magazine, an apertured bottom member secured to the bottom of said feed guiding member, an apertured slide member engaging said bottom member, a pair of guard plates dependingly supported above said troughs on opposite sides of said feed guiding member, a plate engaging the outer edge of one of said troughs, means for securing said plate in upstanding position, and slide operating means carried by an end of the magazine, said slide operating means consisting of a bracket mounted on one end wall of the magazine, an internally threaded lug secured to one end of the apertured slide member, and a crank journaled in the bracket and having a screw threaded shank engaging the internal threads of the lug to shift the slide member longitudinally.

1,901,090. MULTIPLE HEAT EXCHANGE COIL. MARTIN EULE, Berlin-Spandau, and ERICH ANDERS, Berlin-Charlottenburg, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed July 16, 1931, Serial No. 551,148, and in Germany Nov. 30, 1929. 3 Claims. (Cl. 257—255.)



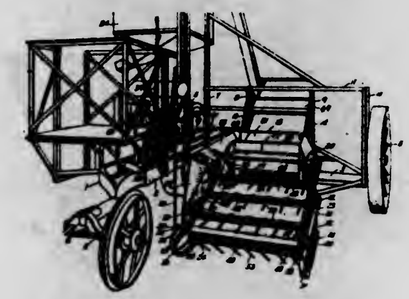
1. A packet of tubing for heat exchangers or the like, consisting of a plurality of tube lengths, wound into similarly shaped independent helical coils, some running clockwise and others counterclockwise all of said coils being coaxially disposed relatively to one another, each of said coils having the shape of a flattened cylinder, whose lateral surfaces constitute two parallel planes spaced apart from one another, the turns of each coil being inserted between the turns of an oppositely wound coil, the number of spaced parallel planes in which the straight tube portions of the coils are located being equal to the total number of parallel coil sides contained in the packet.

1,901,091. FISHING REEL. JOHN REGINALD FAWCETT, Studley, England, assignor to William Hall & Company Limited, Studley, England, a Company of Great Britain. Filed Sept. 30, 1931, Serial No. 566,118, and in Great Britain Dec. 19, 1930. 5 Claims. (Cl. 242—84.6.)



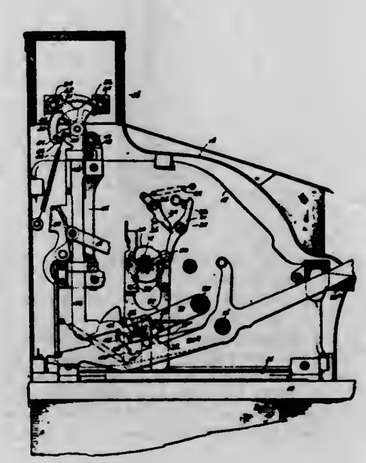
1. A fishing reel comprising a drum forming the reel proper, a supporting structure on which said drum is mounted rotatably, a toothed wheel associated with the drum, a pawl coacting with said toothed wheel, a lip along one side of said pawl, a blade spring acting on said pawl, one end of said spring blade being bent over to project transversely of the main portion, a housing on the supporting structure, and an internal shoulder in said housing behind which shoulder the bent over end of the spring engages the main part of said spring engaging the pawl and being enclosed between the inner wall of the supporting structure and the lip on said pawl to prevent sideways displacement of said spring.

1,901,092. CORN HARVESTING MACHINE. HENRY DAN FISK, Independence, Mo., assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 489,910. 8 Claims. (Cl. 56—364.)



1. In a machine of the character described including a frame, a cylinder and pick-up conveyor housing pivotally supported by the frame, a threshing and shelling cylinder in the cylinder housing, and a pick-up mechanism supported in the front of said housing for picking up and discharging grain directly into the cylinder.

1,901,093. CASH REGISTER. FREDERICK L. FULLER, West Orange, N. J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Mar. 20, 1919, Serial No. 283,720. Divided and this application filed June 24, 1927. Serial No. 201,156. 21 Claims. (Cl. 235—23.)



1. In a cash register, clerk's and transaction keys, a one-piece indicator bearing both clerk's and transaction indicia, and means for controlling said indicator by a clerk's key or a transaction key or by simultaneous operation of both, to expose the proper indication.

1,901,094. ADHESIVE TAPE. JOHN GABOSCH, Chicago, Ill., assignor to The Kendall Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 13, 1930. Serial No. 488,203. 1 Claim. (Cl. 154—43.)



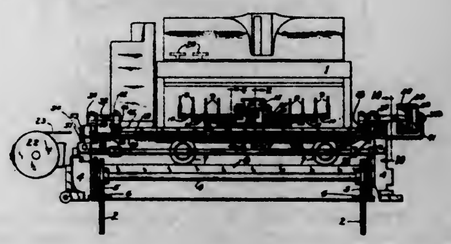
An adhesive tape comprising a flexible backing, a reinforcing element of open mesh fabric, and an adhesive mass penetrating said fabric, binding the same to said backing and providing a pressure-sensitive adhesive surface for applying the tape.

1,901,095. MODIFIED COTTON. CHARLES F. GOLDTHWAIT, Mount Lebanon Township, Allegheny County, Pa., assignor, by mesne assignments, to Textile Machinery Corporation, a Corporation of Delaware. Filed June 4, 1931. Serial No. 542,105. 4 Claims. (Cl. 8—20.)

1. A modified cotton fibre retaining approximately its original dimensions and characterised by the X-ray diffraction diagram of highly oriented cellulose.

3. A modified mercerised cotton fibre retaining approximately its original dimensions and characterised by the X-ray diffraction diagram of highly oriented cellulose.

1,901,096. TABULATOR REBOUND TRAP. FREDERICK P. GORIN, Seattle, Wash., assignor to Gorin Shocklesspeed Tabulator Company, King County, Wash. Filed Aug. 11, 1928. Serial No. 299,082. 10 Claims. (Cl. 197—176.)



4. In a typewriter, tabulating mechanism, a carriage rebound trap, means for setting the trap, and means acted upon by the carriage movement in letterfeed direction to unset the trap.

1,901,097. CASH REGISTER. CHARLES W. GREEN, Ilion, N. Y., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Original application filed Oct. 20, 1925, Serial No. 63,695. Divided and this application filed June 7, 1927. Serial No. 197,088. 17 Claims. (Cl. 235—23.)

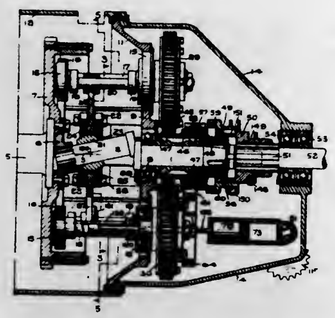
1. In a machine of the class described, a special key, a pair of normally concealed indicators associated with

said key, a pair of parallel links for supporting the opposite ends of each of said indicators, a bail connecting the links at one end of said pair of indicators, and means for



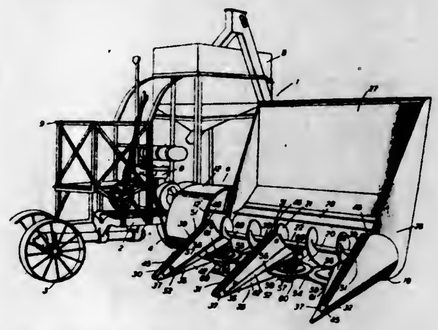
rocking said bail to rock said pairs of links to cause said related pair of indicators to be elevated into exposed position.

1,901,098. VARIABLE SPEED DEVICE. EDWARD EWART GUINNESS, Rednal, near Birmingham, England, assignor of one-eighth to Hubert Humphreys, Birmingham, England. Filed Nov. 19, 1931, Serial No. 576,167, and in Great Britain July 29, 1931. 1 Claim. (Cl. 74—54.)



A variable speed gear of the kind specified and comprising, a driving member in the form of a crank shaft having a crank pin inclined to its axis, a collar slidable on said crank pin and in which the latter may turn freely, connecting rods carried by said collar, rocker shafts arranged adjacent said crank shaft and to which said connecting rods are connected respectively, a variable speed driven member one way clutch mechanism adapted to transmit a one way drive to said variable speed driven member from said rocker shafts and means adapted to return said connecting rod mechanism from its maximum throw to its minimum throw position, such means comprising a push rod axially slidable in one of said rocker shafts which is made hollow for this purpose, a projection on said push rod extending through a longitudinal slot provided in the said hollow rocker shaft and abutting the connecting rod associated with the said rocker shaft, and means associated with said push rod and adapted to slide the push rod axially to return said connecting rod mechanism to the minimum throw position.

1,901,099. CUTTER MECHANISM FOR CORN HARVESTERS. STEPHEN H. HALE, Kansas City, Mo., assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Apr. 11, 1930. Serial No. 443,363. 12 Claims. (Cl. 56—102.)



1. In combination with a longitudinal conveyor, cutter mechanism including rotary cutter members having teeth inclined in their direction of rotation and means for rotating said members at different peripheral speeds to direct cut material toward one end of the conveyor.

1,901,100. ILLUMINATED PUMP DIAL. CHARLES W. HOFFRITZ, Los Angeles, Calif. Filed June 27, 1930. Serial No. 464,413. 8 Claims. (Cl. 40—130.)

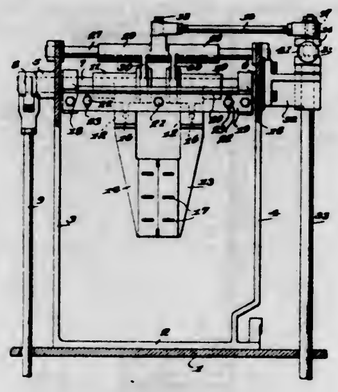


1. In combination with display apparatus, a dial casing carried thereby, a transparent cover for the dial, a glass dial having a series of translucent characters thereon displayed thru the transparent cover, a neon tube arranged in the casing concentrically of said dial and diffusing light upon the dial so as to illuminate the characters thereof, a transformer case adjacent to the dial into which the neon tube extends, and a fluid-tight seal means rendering the separate parts of the dial, transformer, cover, and tube proof against entrance of moisture, air and the like.

1,901,101. LABEL PICKING MECHANISM. CARL HOLM, Worcester, Mass., assignor to Economic Machinery Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 21, 1931. Serial No. 564,167. 23 Claims. (Cl. 216—54.)

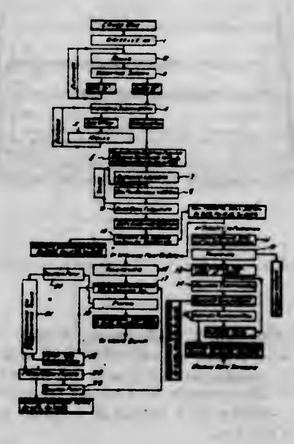
1. In a labeling machine, the combination of a label holder and a label picking mechanism for withdrawing

the exposed label from the holder and advancing the same to the article to be labeled, said picking mechanism com-



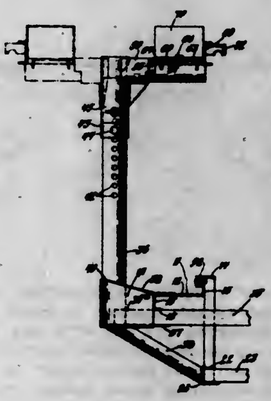
prising a pair of pickers and means for relatively moving said pickers while in contact with and prior to the withdrawal of the exposed label from the label holder.

1,901,102. ORE CONDITIONING PROCESS. GROVER J. HOLT, Crosby, RICHARD O. HOCKING, Nashwauk, AMEL E. MATSON, Hibbing, and ARTHUR K. KNICKERBOCKER, deceased, St. Paul, Minn., by Francis D. Butler, special administrator, St. Paul, Minn., assignors to The Reclamation Company, St. Paul, Minn., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,430. 10 Claims. (Cl. 75—17.)



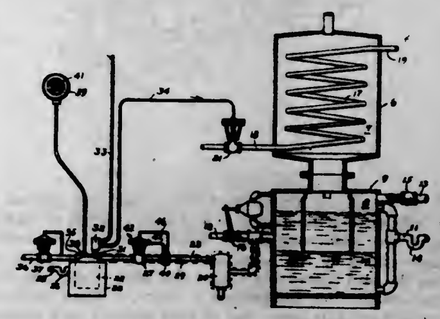
1. A method of conditioning manganiferous ore comprising sizing the ore, converting the iron content into magnetic iron oxide, and the manganese content into manganous oxide, separating the particles having a high iron content, sulphidizing the remainder to render the manganese compound more susceptible to separation by flotation and then subjecting the treated material to flotation.

1,901,103. MEANS FOR TRANSPORTING VEHICLES AND THE LIKE. IRVING H. JUDD, Detroit, Mich., assignor to Whitehead & Kales Company, River Rouge, Mich., a Corporation of Michigan. Filed Aug. 17, 1931. Serial No. 557,662. 25 Claims. (Cl. 280—33.1.)



11. In a transportation means of the class described, a runway for receiving vehicles to be transported, posts extending upwardly from opposite sides of the runway, and a ramp for one of the vehicles to be carried mounted for rotary, longitudinal and vertical movements upon said posts.

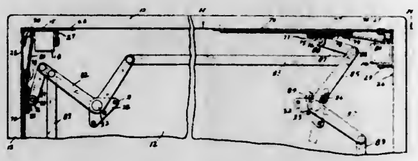
1,901,104. CONDENSER CONTROL APPARATUS. FLOYD L. KALLAM, South Gate, Calif. Filed Jan. 8, 1929. Serial No. 330,121. 11 Claims. (Cl. 196—132.)



1. In apparatus for producing a mixed condensate from hydrocarbon vapors, means providing a condenser chamber, means providing a stream of a cooling medium flowing through said chamber, means automatically operable to maintain a constant pressure in the chamber, and means automatically operable in accordance with the volatility of the condensate to so control the flow rate of said stream as to effect the production of a condensate of a constant and predetermined volatility.

11. In a continuously operating apparatus for fractionating a variable mixture of hydrocarbon vapors, a condenser receiving said mixture for condensing a fraction of the vapors thereof, and control means to variably determine the fraction of condensation in said condenser, said means operable in direct accordance with the vapor pressure of the condensed product of the condenser to continuously maintain the said vapor pressure of said condensed product at a constant value.

1,901,105. FOLDING TABLE. JOHN KOVATS, Fairfield, Conn., assignor to The Leg-O-Matic Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 28, 1930. Serial No. 432,069. 17 Claims. (Cl. 45—11.)



1. In a table, a plurality of supporting legs pivoted to the table and foldable against it, linked rigid pivoted means for connecting the legs with each other so that movement of any leg will give similar movement to the other legs, and an individual locking means for each leg for holding said connecting means against movement when the legs are in supporting position.

1,901,106. FOLDING TABLE. JOHN KOVATS, Bridgeport, Conn., assignor to The Leg-O-Matic Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 31, 1930. Serial No. 458,011. 14 Claims. (Cl. 45—11.)

1. In a table, a plurality of supporting legs pivoted to the table on individual pivots and each capable of folding against the under side of the table, a movable connecting means carried by the table, and a hinged connection between the said connecting means and each of the legs, said hinged connection comprising a pair of links pivotally connected at their ends, one of said links of each connection having its free end pivoted to a leg and the other having its free end pivoted to the connecting means, said connection adapted to have the pivotally connected ends of their links pressed downwardly whereby said connections are capable of transmitting movement from any leg to each of the other legs to extend the legs to supporting position and to fold them against the table as the hinged means is straightened and collapsed.

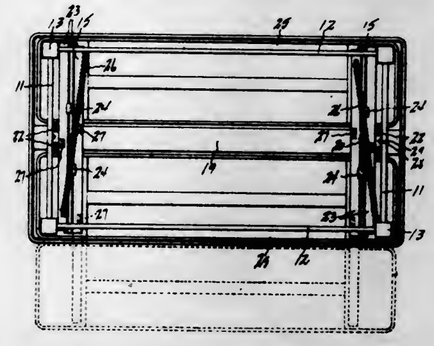
1,901,107. FOLDING TABLE. JOHN KOVATS, Bridgeport, Conn., assignor to The Leg-O-Matic Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 31, 1930. Serial No. 458,012. 14 Claims. (Cl. 45—11.)

1. In a table, a plurality of supporting legs pivoted to the table on individual pivots and each capable of folding against the under side of the table, and a movable connection connected to each of the legs and capable of transmitting movement from any leg to each of the other legs to extend the legs to supporting position and to fold them against the table, said connection including rigid



straps, pivotally connected links connecting said straps to each other, and slotted guideways by which said straps are guided in their movements.

1,901,108. TABLE. OAK LANDAW, Nappanee, Ind., assignor to Mutschler Bros. Co., Nappanee, Ind. Filed May 19, 1930. Serial No. 458,565. 11 Claims. (Cl. 45—113.)



1. In combination, a table frame, a table top shiftable relative to said frame, an extension leaf slidable relative to said frame, means carried by said top for normally holding said leaf therebeneath, and means for urging said leaf to extended position upon release of said leaf by an upward movement of the top.

1,901,109. PROCESS FOR THE PRODUCTION OF STARCH. WERNER MAIER, Baden-Baden, Germany, assignor to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 22, 1932, Serial No. 588,197, and in Germany Jan. 18, 1928. 4 Claims. (Cl. 127—71.)

1. Process for the production of finely divided starch forming a paste with cold water which comprises atomising an aqueous suspension of starch into a stream of heated air containing water vapor in such amount that the vaporization of water from the atomised particles occurs at a temperature above the gelatinising temperature of the starch and below a temperature at which further alteration of the starch is effected, whereby the starch is simultaneously gelatinised and dried.

1,901,110. REVERSIBLE MAT. RAYMOND J. MAMMES, Los Angeles, Calif., assignor to Metro-Goldwyn-Mayer Corporation, Culver City, Calif., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,354. 3 Claims. (Cl. 88—16.)

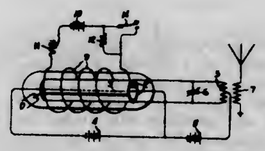


1. An apparatus for producing reversible mats, comprising a frame of non-light reflecting material, a plate of transparent material positioned in said frame, a portion of said plate being covered with opaque but light reflecting material, a non-reflective background for said plate, separate means for illuminating the front and rear of said plate, said illuminating means being adapted to be selectively operated to illuminate the front or rear of said plate, and a camera directed toward said plate and adapted to photograph one side thereof.

1,901,111. ANTIFREEZING SOLUTION. REIBUKE MASUDA, Toledo, Ohio, assignor to Larrowe-Suzuki Company, Detroit, Mich., a Corporation of Ohio. Filed Feb. 17, 1930. Serial No. 429,212. 3 Claims. (Cl. 252—5.)

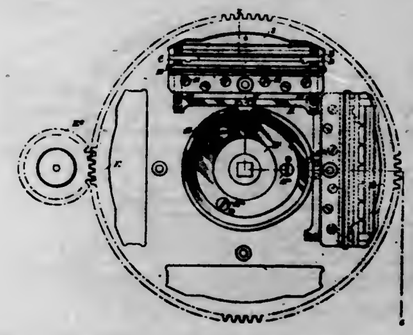
1. An anti-freezing liquid comprising a water solution of a betaine.

1,901,112. SIGNAL TRANSMITTING MEANS. ELMER D. MCARTHUR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 20, 1928, Serial No. 320,700. Renewed Oct. 15, 1932. 6 Claims. (Cl. 250—17.)



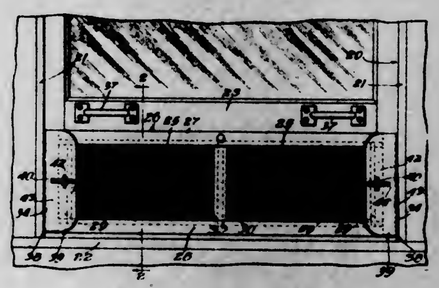
1. The combination, in a high frequency transmitter, of an electron discharge device, having a cathode and a plurality of anodes, said anodes being symmetrically arranged with respect to the cathode and adjacent thereto, an oscillatory circuit connected between said anodes, means for producing a unidirectional magnetic field between said anodes, said magnetic field being independent of current in said oscillating circuit, and means for varying said magnetic field in accordance with the signal to be transmitted thereby to vary the intensity of the oscillations produced in said oscillatory circuit.

1,901,113. SLUG CASTING MACHINE. RICHARD E. MEAD, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,964. 18 Claims. (Cl. 199—55.)



1. A slug casting mold comprising side and end walls which define between them a cavity wherein the slug is cast, one of the side walls of the mold being fixed as a whole, and the other side wall thereof presenting a relatively fixed rear section which determines the effective front section which restricts the width of the mold cavity at the front.

1,901,114. VENTILATOR. AUGUST D. MEISELBACH, Chicago, Ill. Filed July 7, 1930. Serial No. 465,861. 5 Claims. (Cl. 98—99.)

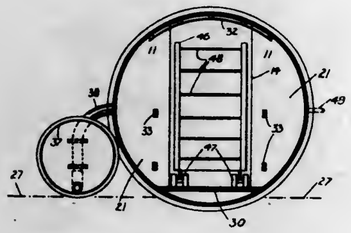


5. In a foraminous structure of the kind described and made up of a plurality of substantially parallel strips, the strips made of thin sheet metal and corrugated transversely and nested together, the strips being interlocked longitudinally by the nesting and means holding the strips thus nested.

1,901,115. PREPARATION OF BREAD AND THE LIKE FOR WRAPPING. WILHELM MULLER, Enfield, near Sydney, New South Wales, Australia, assignor of one-third to Automatic Bread Baking Company Limited, and one-third to Francis Hawkins, Sydney, Australia. Filed Apr. 24, 1930, Serial No. 447,074, and in Australia June 6, 1929. 1 Claim. (Cl. 34—30.)

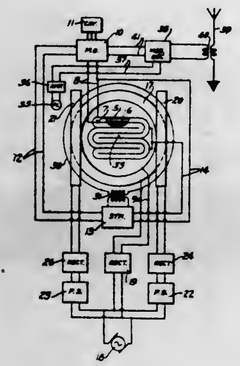
In and for the preparation of bread and the like for wrapping a vacuum chamber comprising a cylindrical shell

with end walls having doorways, airtight doors hingedly mounted upon said end walls and having fastenings, a flooring, a moisture screen arranged across the top of the said chamber, a drainage pipe with suitable control cock,



a pressure release valve and gauge, a condenser connected by pipe to said vacuum chamber and having a gauge glass, and drainage pipe with control cock and vacuum inducing means coupled to said condenser.

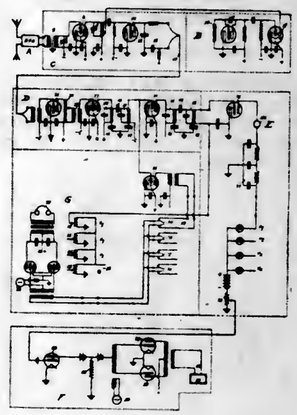
1,901,116. COLOR TELEVISION. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,630. 20 Claims. (Cl. 178—6.)



1. In a television system, means for producing an arc for scanning an object, electrode rails for predetermining the path of said arc, means for moving said arc, and means for imparting various colors to said arc.

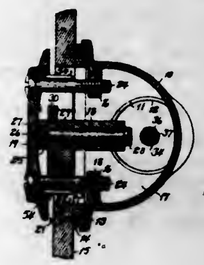
1,901,117. RECEIVING SYSTEM. HAROLD O. PETERSON, Riverhead, Long Island, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,319. 13 Claims. (Cl. 250—20.)

1. In combination, an antenna; means for amplifying the energy collected by the antenna; reactionless monitoring means for determining the strength of the amplified energy, said reactionless monitoring means comprising an electron discharge device having a control electrode, and a substantially non-reactive path connecting said control



electrode to said amplifying means; means for rectifying the amplified energy; and, means for translating the rectified energy.

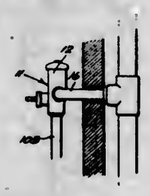
1,901,118. WASTE AND OVERFLOW FITTING. ELTON A. POPE, Oakville, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Feb. 29, 1932. Serial No. 595,705. 6 Claims. (Cl. 4—203.)



1. In a waste-and-overflow fitting, the combination with an overflow-head; of a face-plate having a substantially unbroken exposed front surface and spaced forwardly of the said overflow-head in position to receive a bathtub-wall therebetween, and provided with means to form an overflow-passage between the rim of the face-plate and the bathtub-wall; a waste-valve; and control-means for the said waste-valve including a finger-lever mounted upon the rear face of the said face-plate and projecting outwardly beyond the periphery thereof.

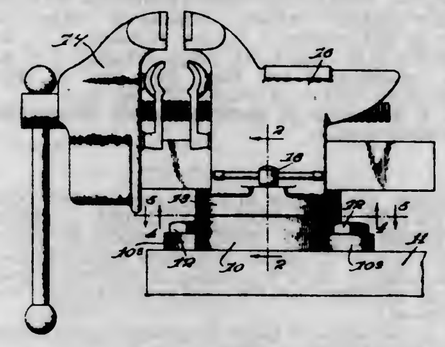
1,901,119. FLUSH VALVE. WALTER PUTNAM, Pasadena, Calif. Filed Jan. 5, 1931. Serial No. 506,714. 6 Claims. (Cl. 137—93.)

6. A valve device of the character described, including: a fluid delivery member having a fluid inlet and an outlet opening; a valve means having a closure element to cooperate with said outlet opening and fluid actuated means tending to move said closure element toward open position when there is fluid pressure in said delivery member and to move said closure element into a position closing said outlet opening when a condition of vacuum is exerted in said delivery member; a fluid operated mechanism having a moving part which is movable between holding posi-



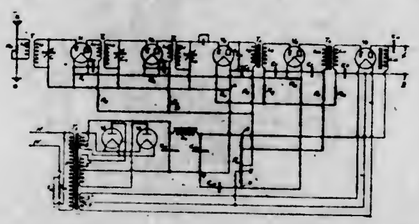
tion and releasing position in accordance with the presence or absence of fluid pressure in said mechanism, said moving part in said holding position maintaining said closure element in its position closing said outlet opening; and means for controlling the fluid pressure in said fluid operated mechanism.

1,901,120. SWIVEL BASE CONSTRUCTION. WILLIAM A. RANKIN, Rock Island, Ill., assignor to Birtman Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 18, 1931. Serial No. 581,970. 4 Claims. (Cl. 81—41.)



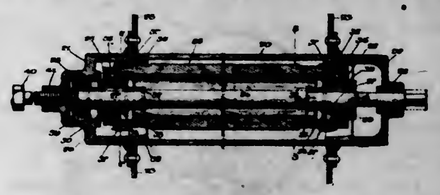
1. Swivel base construction, including; a base member; a body member pivotally mounted on the base member; and a clamping screw carried by one of said members, said member having a portion of its periphery recessed opposite said clamping screw whereby tightening of the clamping screw will cause engagement between said members at two points opposite said clamping screw.

1,901,121. RADIO RECEIVING SYSTEM. ALGER S. RIGGS, North Bergen Township, Hudson County, N. J. Filed Mar. 2, 1927, Serial No. 172,093. Renewed May 28, 1932. 11 Claims. (Cl. 250—27.)



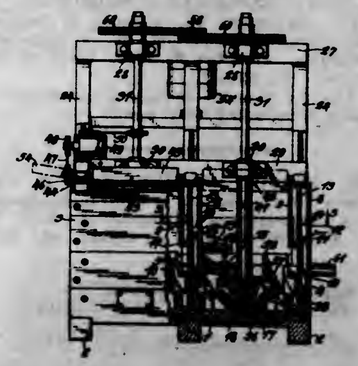
1. A radio receiving system including a plurality of electron tubes connected in cascade, an alternating current power source, a rectification circuit for supplying rectified current to the circuits of said electron tubes, a distribution circuit connected with said rectification circuit and independent reactance devices interposed in series between points in each of the output circuits of said electron tubes and the input circuits of selected electron tubes and points in said power distribution circuit for energizing the output circuits of each of the electron tubes while preventing interference in said electron tube circuits from said alternating current source.

1,901,122. VIBRATOR FOR SCREENS AND OTHER APPARATUS. SAMUEL DAVIS ROBINS, Hewlett, N. Y., assignor to Robins Conveying Belt Company, Passaic, N. J., a Corporation of New Jersey. Filed Jan. 6, 1932. Serial No. 585,061. 16 Claims. (Cl. 74—14.)



1. A vibrator comprising a vibratory element, a shaft, an annular mass element surrounding said shaft and bodily movable by generated centrifugal force into rolling contact with said vibratory element, an annular element also surrounding the shaft and affording an internal bearing for said mass element, and a connection between said internal bearing element and the shaft whereby the bearing element is positively rotatable with the shaft yet movable in paths transversely of the axis of rotation of the shaft.

1,901,123. FLOTATION MACHINE. JOSEPH P. RUTH, Jr., Denver, Colo., assignor to The Ruth Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 14, 1931. Serial No. 562,750. 13 Claims. (Cl. 261—93.)

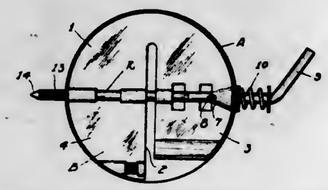


1. A flotation machine comprising, a casing having a bottom, an impeller bowl located near the bottom of the casing, the side of the bowl forming a conical surface, an impeller having a body portion whose outside shape corresponds to that of the inside of the bowl, means, including a shaft, for supporting the impeller so that it may rotate about an axis that coincides with the axis of the bowl, the upper surface of the impeller having a hub for the reception of the lower end of the shaft, a sleeve surrounding the hub, a pipe surrounding the shaft and having its lower end in contact with the upper end of the sleeve, a plurality of radial blades extending upwardly from the upper surface of the impeller, means for introducing pulp into the top of the impeller adjacent the shaft, and means for rotating the impeller.

1,901,124. PROCESS AND PRODUCT FOR COATING MOLDS AND CORES. CHARLES MARSHALL SAEGER, Jr., Bowmanstown, Pa. Filed Feb. 17, 1930. Serial No. 429,228. 21 Claims. (Cl. 22—189.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. The method of producing molds or cores consisting of selecting the molding sand or components, tempering same, making the mold or core, coating one or more surfaces of the mold or core with a hydrated rubber mixture, and dehydrating said coating to the desired extent.

1,901,125. DAMPER. JOHN C. F. SCHAFER, Mount Pulaski, and JOSEPH F. BLESER, Springfield, Ill.; said Bleser assignor to said Schafer. Filed Jan. 4, 1932 Serial No. 584,638. 4 Claims. (Cl. 126—292.)

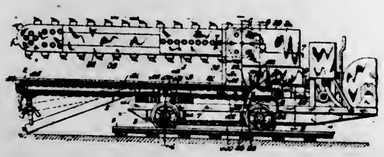


1. A damper for a pipe, comprising a plate of substantially uniform thickness throughout and having a slit extending inwardly from the periphery to enable the plate to straddle said pipe; a pointed screw-threaded damper rod removably mounted on said plate; screw-threaded means on said plate at one side of said slit to receive and guide the threaded rod during the perforating of the pipe; and an abutment formed from said plate on the opposite side of said slit and extending to both sides of said plate to engage the interior wall of the pipe when the latter is straddled by said plate and said rod is rotatably fed in said threaded guiding means.

1,901,126. EXPLOSIVE COMPOSITION. ROBERT SCHLESS, Emporium, Pa., assignor to Pennsylvania Powder Company, Emporium, Pa., a Corporation of Pennsylvania. Filed Oct. 29, 1930. Serial No. 492,092. 14 Claims. (Cl. 52—11.)

1. A dope for dynamite containing an explosive ingredient and a comminuted cereal straw.

1,901,127. MINING MACHINE. LEON E. SIMMONS, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 24, 1930. Serial No. 504,610. 40 Claims. (Cl. 262—28.)



1. In a mining machine, a portable support, a guiding frame pivotally mounted on said support for horizontal swinging movement relative thereto, kerf cutting mechanism mounted on said guiding frame for bodily movement therealong including a pivoted kerf cutter swingable in a vertical plane at one side of said guiding frame and arranged to cut, during movement of said kerf cutting mechanism along said guiding frame, a kerf parallel to the direction of such movement, and motor operated devices for feeding said cutting mechanism relative to said guiding frame, for swinging said kerf cutter, and for swinging said guiding frame relative to said support.

1,901,128. ELECTRIC LAMP. CHARLES G. SMITH, Medford, Mass., assignor to Raytheon Inc., Cambridge, Mass., a Corporation of Massachusetts. Filed Apr. 15, 1924, Serial No. 706,658. Renewed July 19, 1932. 16 Claims. (Cl. 176—122.)



1. An electric lamp comprising a vessel containing a rarefied mixture of a gas having a relatively low ionizing potential and a gas having a relatively high ionizing potential, a source of electrons, and means in said vessel whereby substantially all of said electrons are accelerated to a higher velocity than that corresponding to the ionization potential of the gaseous constituent of said mixture having the highest ionization potential and whereby said gas is bombarded by the accelerated electrons.

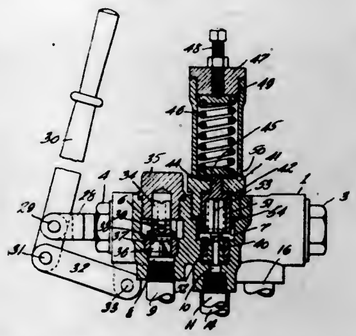
1,901,129. CELLULOSIC COMPOSITION OF MATTER CONTAINING PHENYL STEARATE. HENRY B. SMITH and STEWART J. CARROLL, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 25, 1931 Serial No. 546,910. 4 Claims. (Cl. 106—37.)

2. A composition of matter comprising nitrocellulose and phenyl stearate.

1,901,130. CELLULOSE ORGANIC DERIVATIVE COMPOSITION OF MATTER CONTAINING A BB'-DIALKOXY DIETHYL ADIPATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,327. 8 Claims. (Cl. 106—40.)

2. A composition of matter comprising cellulose acetate and a lower BB'-dialkoxy diethyl adipate.

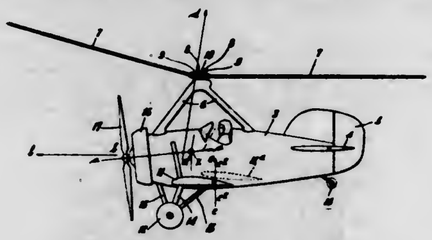
1,901,131. VALVE DEVICE. THOMAS F. STACY, Piqua, Ohio, assignor to The French Oil Mill Machinery Co., Piqua, Ohio. Filed May 10, 1929. Serial No. 362,074. 9 Claims. (Cl. 138—16.)



1. A valve device for fluid operated presses and the like, comprising a casing having a closed chamber with ports for three pipe connections spaced apart along the same and two annular seats controlling communication between the intermediate port and the other ports, a valve element extending into said chamber from outside and at its inner end movable back and forth within the chamber to position spaced sections thereof alternately in closing positions across said seats, one of said annular seats being smaller than the other and the section of the valve element in the chamber at the point where it passes out of said chamber having a cross sectional area of a size between the area enclosed by the said seats.

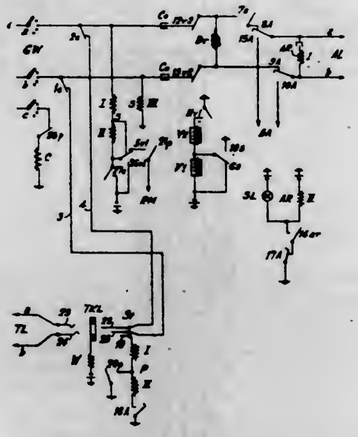
CARNEGIE LIBRARY OF ATLANTA

1,901,132. ROTARY-WINGED AIRCRAFT. PAUL H. STANLEY, Glenside, Pa., assignor to Autogiro Company of America, Philadelphia, Pa., a Corporation of Delaware. Filed Mar. 12, 1932. Serial No. 598,328. 11 Claims. (Cl. 244—19.)



2. In combination in an aircraft, a rotative sustaining system having a forwardly traveling positive effective lift line with increasing forward speed of the craft, and a fixed wing sustaining system having a rearwardly traveling positive effective lift line with increasing forward speed of the craft.

1,901,133. AUTOMATIC TELEPHONE SYSTEM. JOHANNES STICH, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske Aktiengesellschaft of Wernerwerk, Siemensstadt near Berlin, Germany. Filed Feb. 19, 1932, Serial No. 594,066, and in Germany Mar. 2, 1931. 5 Claims. (Cl. 179—27.)



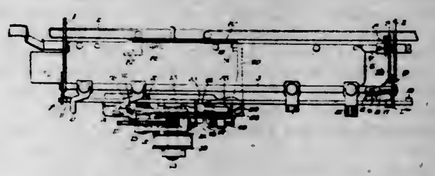
1. In an automatic telephone system, a two-way trunk line, a relay associated with one end of said trunk line adapted to operate as an impulse-repeating relay in calls in one direction and as a ring-cut-off relay in calls in the opposite direction, and subscriber controlled means for operating said relay.

1,901,134. AUTOMATIC DEPTH CONTROL FOR PLOWS. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 5, 1931. Serial No. 566,925. 10 Claims. (Cl. 97—103.)



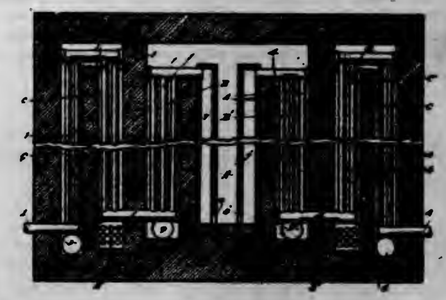
1. The combination with a wheeled plow, of a hitch device pivotally attached thereto and to a tractor, and means attached to the plow and to the hitch device operating to resist a vertical movement of the rearward end of the plow.

1,901,135. CARRIAGE-RETURN MECHANISM. OSCAR J. SUNDSTRAND, Rockford, Ill., assignor to Sundstrand Corporation, Wilmington, Del., a Corporation of Delaware. Filed May 19, 1928, Serial No. 278,950. Renewed June 22, 1931. 12 Claims. (Cl. 197—65.)



7. The combination of a laterally movable carriage, a set of maximum-limit stops on the carriage, a set of intermediate-limit stops on the carriage, said sets of stops being located in different planes, carriage-return mechanism including controlling means movable into the plane of either set of limit stops, and manipulative means for adjusting the position of said controlling means.

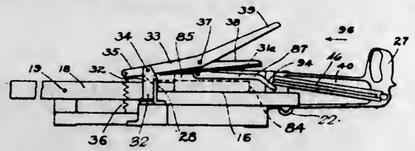
1,901,136. PROCESS OF DISSOCIATING HYDROCARBON GASES AND VAPORS TO PRODUCE A MIXTURE OF NITROGEN AND HYDROGEN IN DETERMINED PROPORTIONS. WILLIAM D. WILCOX, Lawrence, Kans. Filed June 28, 1930. Serial No. 464,690. 7 Claims. (Cl. 23—7.)



1. The process of obtaining a mixture of nitrogen and hydrogen in determined proportions by the dissociation of hydrocarbon gases and vapors, which comprises passing a mixture of hydrocarbon gases with a volume of steam

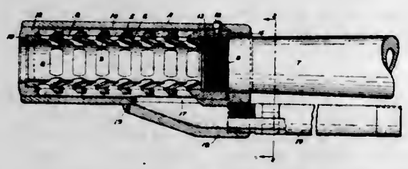
sufficient to supply to oxygen for the oxidation of the carbon in the hydrocarbon gases to carbon monoxide, through a conduit heated to a temperature in excess of 1800° F., thereby effecting a partial dissociation, simultaneously heating a volume of air, sufficient to supply the required proportion of nitrogen in an independent conduit, to a temperature in excess of that at which ignition will take place, bringing the gas and air into intimate mixture in a combustion chamber, withdrawing the resultant product and removing the oxides of carbon.

1,901,137. BOOK SECTIONER. GEORGE BAKER, Los Angeles, Calif., assignor to Oversewing Machine Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 26, 1931. Serial No. 559,522. 20 Claims. (Cl. 164—34.)



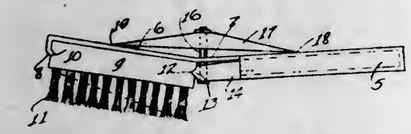
1. A book tablet divider for separating into smaller tablets a tablet consisting of sheets having their edges secured together by a back, including: a support for holding a tablet with its back in a position for being divided; a plurality of dividing members in spaced relation transversely of said back; and means for supporting said dividing members and moving said dividing members first between the leaves of the tablet and then through the back of the tablet on said support.

1,901,138. MUZZLE BRAKE AND GAS COLLECTOR. GLADEON M. BARNES, Hastings, Mich. Filed Feb. 17, 1932. Serial No. 593,534. 4 Claims. (Cl. 89—42.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



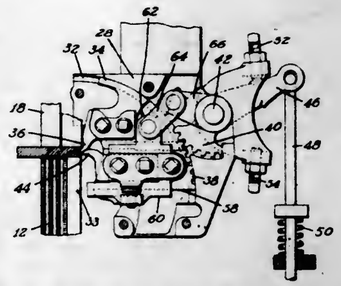
4. In combination with a gun barrel, a tubular muzzle brake connected to the gun, and having gas ports, a collar on the front and the rear end of the brake, a casing mounted on the collar and having an internal flange on its rear end abutting the rear face of the muzzle brake, a gas port in the casing, and means for securing the casing to the muzzle brake.

1,901,139. BRUSH. MELVIN C. BARTON, Yuba City, Calif. Filed Dec. 12, 1930. Serial No. 501,976. 1 Claim. (Cl. 300—1.)



The combination of a brush and a handle, said handle having an extension formed thereon said extension having a hooked extremity, said brush comprising a back portion carrying bristles therein, said brush having grooved ends, one of which is adapted to be engaged by said hooked extremity, a block interposed between said handle and said brush said block having a nose adapted to engage the other groove formed in said brush, said extension and said handle being angularly disposed with relation to each other and a bridge piece superimposed on said handle and said extension and engaging said handle and said extension at its ends only and a clamping member for holding said bridge piece in engagement with said handle and said extension.

1,901,140. METHOD OF AND MACHINE FOR SOLE FITTING. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 14, 1929, Serial No. 362,964, and in Great Britain June 1, 1928. 53 Claims. (Cl. 12—27.)



1. That improvement in methods of channeling soles which consists in relatively moving a sole and means for channeling a sole to form a continuous channel in the sole, and changing the relation between the sole and the channeling means during the continuous channeling operation in such a manner as to locate the channel in the sole face in one portion of the sole and in the sole edge in another portion of the sole.

1,901,141. SUBTERRANEAN AUTOMATIC OIL WELL CONTROL. GRANT BATTELLE, Long Beach, Calif. Filed Mar. 11, 1931. Serial No. 521,719. 8 Claims. (Cl. 166—2.)

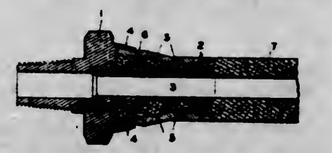


1. An apparatus for recovering oil, comprising a non-leaking well casing, a seal within the casing and above the oil-bearing structure, a discharge tube within the casing and extending from the bottom to the top of the well and through the seal, a heat-insulating and compression casing surrounding the discharge tube, a valve at the top of the discharge tube, and means for actuating the valve to open and closed positions actuated by the pressure within the compression tube.

1,901,142. PROCESS FOR THE PRELIMINARY TREATMENT OF RAW SUGAR AND THE LIKE. JULIEN BERGE, Tirlemont, Belgium, assignor to Raffinerie Tirlemontoise, Société Anonyme, Tirlemont, Belgium, a Corporation. Filed Mar. 15, 1930, Serial No. 436,255, and in Germany Aug. 26, 1926. 8 Claims. (Cl. 127—61.)

1. The process of reducing the sugar content of dried syrup adhering to sugar crystals in raw sugar comprising placing said sugar in an enclosure, moistening said syrup to bring it to a fluid-like state and regulating the temperature and moisture content of said syrup to reduce the sugar content thereof by crystallization, and then removing the syrup from the sugar crystals.

1,901,143. HOSE FITTING. ALBERT BRUNNER, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed Mar. 8, 1930. Serial No. 434,193. 1 Claim. (Cl. 285—84.)



The combination with a hose, of a fitting therefor comprising a body portion having a tubular part extending into the hose and an outer annular flange adapted to surround the hose end, the bore of the flange being so tapered that its diameter at the outer end is less than its diameter adjacent the body portion of the fitting, a sleeve surrounding the end of the hose and maintaining it in pressure engagement with the periphery of the tubular part, the inner end of said sleeve being rigid and having a conical exterior surface positioned within said annular flange and in contact with the inner surface thereof whereby longitudinal separation of the sleeve from the body member will be prevented.

1,901,144. HEEL. JAMES CAVANAGH, Cohasset, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 26, 1927, Serial No. 163,693. Renewed July 19, 1932. 7 Claims. (Cl. 36—24.5.)



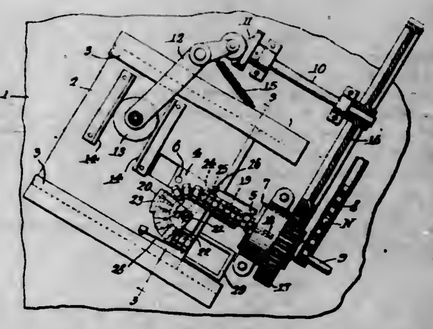
1. A wood heel having its attaching surface bounded by a flat rim of substantial width and having a groove substantially parallel to the periphery of the heel and forming an inner boundary for said rim, the portion of the attaching surface bounded by the inner margin of said groove being concave and having its periphery substantially on a level with said flat rim.

1,901,145. COMPOSITION AND THE PRODUCTION THEREOF. PETER C. CHRISTENSEN, East Orange, N. J. Reissued for abandoned application Serial No. 155,560, filed Dec. 17, 1926. This application filed July 12, 1932. Serial No. 622,109. 16 Claims. (Cl. 134—26.)

7. A composition of the character described, comprising an alkaline solution having one of the group of aldehydes consisting of aldol, acetic aldehyde and paraldehyde mixed therewith and having "leather gum", shellac and urea dissolved therein.

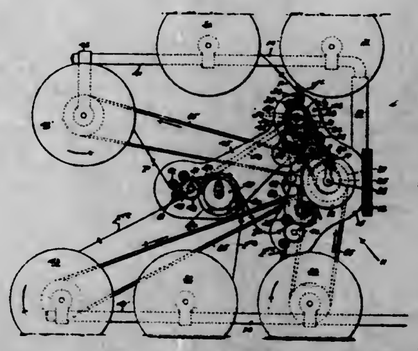
16. The method which consists in commingling protein constituents of leather and shellac in solution and mixing with the solution urea and an aldehyde of the group consisting of aldol, acetic aldehyde and paraldehyde.

1,901,146. DELIVERY MECHANISM FOR NUT TAPPERS. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio. Filed Feb. 26, 1932. Serial No. 595,358. 16 Claims. (Cl. 10—139.)



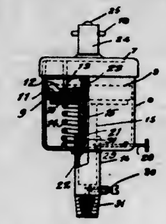
1. A nut tapping machine including a tap mounted for reciprocation having a stem with an arcuate portion, and a thrust receiving device mounted for oscillation relative to and concentric with said arcuate portion.

1,901,147. SOUND TRACK PRINTING ATTACHMENT FOR MOTION PICTURE PRINTERS. FRANK J. COOTS, Jr., and GEORGE SEID, Hollywood, Calif. Filed May 16, 1931. Serial No. 537,826. 7 Claims. (Cl. 95—75.)



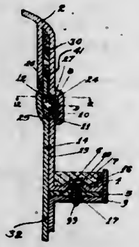
1. An attachment for a film printing machine embodying: an arm plate adapted to be attached to the frame of said machine; an apertured light drum mounted on said arm plate; a gate mounted on said drum opposite the aperture therein for guiding a sensitised film and a record bearing film over said aperture; a sprocket roller mounted on said arm plate in offset relation with said drum and in substantial alignment with said gate; and means for driving said sprocket roller so as to pull said films engaged by said roller across said aperture.

1,901,148. LUBRICATING MEANS. JOHN L. CREVELING, near Tucson, Ariz., assignor to The Lubrication Corporation, South Bend, Ind., a Corporation of Delaware. Filed May 31, 1924, Serial No. 717,149. Renewed July 27, 1932. 3 Claims. (Cl. 221—47.4.)



1. A cylindrical reservoir having end closures, one of which has an outlet, a tube having one end fitted as a piston adapted to reciprocate in said outlet and the other end carried by and opening through a piston normally sustained by a spring against pressure of a body of lubricant in the reservoir so that the lubricant is forced through said tube into the nozzle so long as the pressure on the fluid is greater than the resistance or back pressure on the outlet nozzle, means for preventing back flow of lubricant through said tube when the spring pressed piston yields, and means for preventing disengagement of said reciprocating members.

1,901,149. BURIAL VAULT. BEN DANCER, Houston, Tex., assignor of one-half to Phylura E. Skalinder, Houston, Tex. Filed Oct. 31, 1930. Serial No. 492,542. 21 Claims. (Cl. 27—35.)



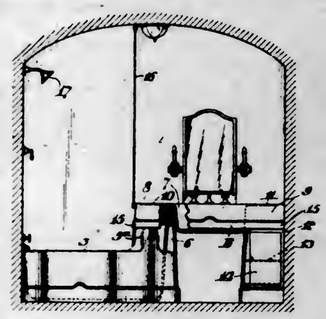
1. In a vault, a body member having a bottom and side walls extending vertically therefrom, a cover member having downwardly extending walls arranged to overlap said side walls a substantial distance when in operative position thereon, oppositely extending recesses in said members, a gravity operable latch pivotally mounted in one of said recesses, said latch being movable automatically by gravity to engage said other recess when said cover member is in position.

1,901,150. INFLATABLE FIGURE TOY. ISTVÁN DOROGI, and LAJOS DOROGI, Budapest, Hungary, assignors of one-half to DR. Dorogi & Co. Rubber Goods Factory Limited, Budapest, Hungary. Filed June 15, 1931, Serial No. 544,692, and in Hungary Feb. 9, 1931. 6 Claims. (Cl. 46—53.)



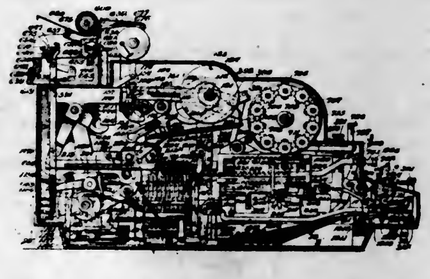
1. An inflatable and deflatable hollow rubber toy, having a rubber wall, said rubber wall being freely stretchable, the outer surface of said wall having separated fibres connected thereto so that the stretchability of said rubber wall is substantially undiminished.

1,901,151. BATHROOM FIXTURE. JOSEPH EBLE DRUCKENMILLER, Edge Hill, Pa. Filed July 22, 1931. Serial No. 552,488. 8 Claims. (Cl. 4—146.)



3. A bathroom fixture comprising a bath tub body, a lavatory adjacent said body and having a basin and shelves at opposite ends of the basin, and pedestals beneath the shelves and spaced apart to provide an open space beneath the basin, one of said pedestals being hollow and containing a foot extension of said body.

1,901,152. CALCULATING MACHINE. JOHN G. DUNKER, Chicago, Ill., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Mar. 23, 1915. Serial No. 16,500. 111 Claims. (Cl. 235—60.)



1. In a machine of the class described, the combination of a registering gear wheel, a rotatable gear wheel of the design set forth and movable laterally in respect to said registering gear wheel, racks positioned on opposite sides thereof and united for concurrent reciprocation, means for keeping said second gear wheel and either rack engaged during movement of the latter in both directions, and means to engage the registering gear wheel with the rotatable gear wheel during the movement of the rack in one direction.

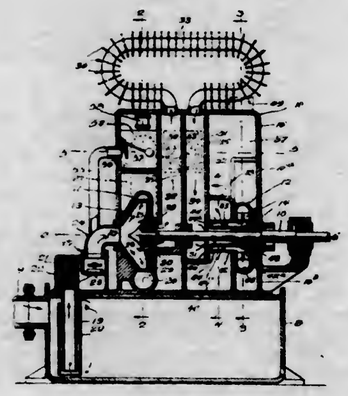
1,901,153. BOOKKEEPING MACHINE. JOHN G. DUNKER, Chicago, Ill., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Sept. 8, 1924. Serial No. 736,645. 70 Claims. (Cl. 235—60.)

1. A machine of the class described comprising, in combination, a travelling carriage, a plurality of independent accumulating means, means for independently or jointly at the same time actuating said accumulating



means, and means, determined by the position of the carriage, for automatically conditioning the machine for totalizing from one of said accumulating means.

1,901,154. VACUUM CONDENSATION PUMP. AUGUSTUS C. DURDIN, Jr., Chicago, Ill. Filed June 22, 1931. Serial No. 545,916. 13 Claims. (Cl. 103—6.)



1. In a vacuum condensation pump, the combination of a centrifugal water pump having an axially disposed inlet in its casing communicating with the return pipe of a steam heating plant, an impeller having an axially disposed inlet and operating to separate water from gaseous fluid by centrifugal action and discharge the water through a water discharge passageway, there being a separate gaseous fluid outlet in said impeller adjacent its axis of rotation, and a vacuum pump having its inlet connected to said gaseous fluid outlet of the impeller.

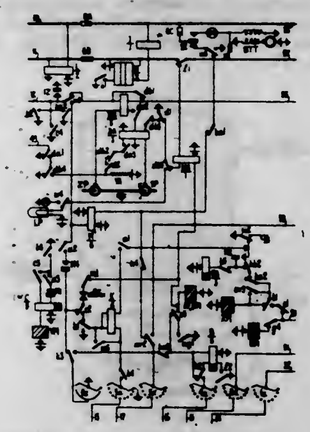
1,901,155. RECEPTACLE FOR LIQUIDS. SIMON W. FARBER, Brooklyn, N. Y., assignor to S. W. Farber, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 3, 1932. Serial No. 596,492. 2 Claims. (Cl. 215—47.)

1. A receptacle for liquids having a neck, a top member engaging the neck and forming an outlet, a removable cup-shaped strainer having an extended surface in frictional contact with the inner surface of the top member



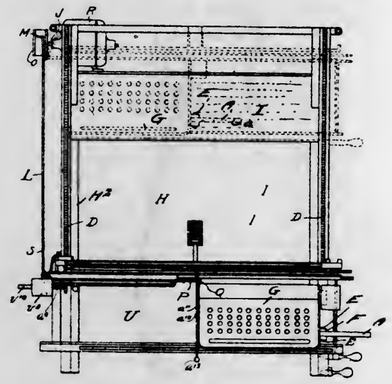
and a removable stopper having an extended surface in frictional contact with the inner surface of the cup-shaped strainer.

1,901,156. TELEPHONE SYSTEM. CHARLES GILLINGS and FRANCIS TATLOCK BELAS, Liverpool, England, assignors to Associated Telephone and Telegraph Company, Chicago, Ill., a Corporation of Delaware. Filed June 1, 1931, Serial No. 541,266, and in Great Britain June 23, 1930. 16 Claims. (Cl. 179—18.)



1. In a telephone system employing register controllers to direct the setting up of connections over serially related trunk groups, means effective depending upon an all-trunks-busy condition being encountered at a trunk group during the setting up of a connection to transmit a characteristic signal back over the trunk conductors of the partially set up connection, and means in the register controller responsive to said signal to cause the release of the partially set up connection and to control the transmission of trains of impulses having a value different from the value of the trains of impulses normally transmitted, to set the desired connecton up over another route.

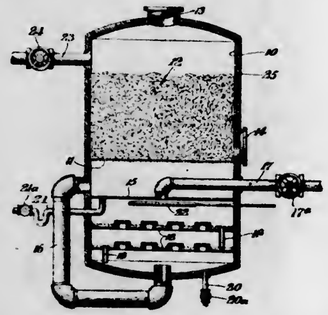
1,901,157. TYPEWRITING MACHINE. FREDERICK P. GORIN, Seattle, Wash., assignor to Gorin Shocklesspeed Tabulator Company, Seattle, Wash. Filed June 8, 1926. Serial No. 114,504. 16 Claims. (Cl. 197—66.)



1. The combination with a typewriting machine having a writing bed and a head movable thereon, a line finder upon the head which at all times is in register with a line above a line which is being written.

15. An attachment for a typewriting machine having a writing bed movable with respect to its support for clamping the paper in position, comprising a motor, a carriage movable relative to said bed by the motor, a switch, and connections between the switch and the writing bed which causes the switch to be operated when the writing bed is operated.

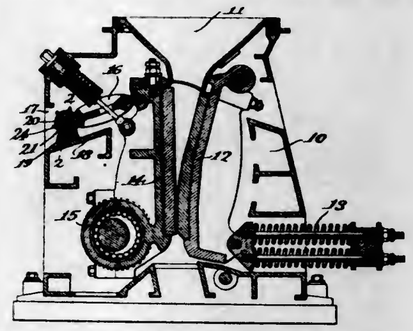
1,901,158. REFINING HYDROCARBONS. THOMAS T. GRAY, Elizabeth, N. J., assignor to The Gray Processes Corporation, Newark, N. J., a Corporation of Delaware. Filed July 29, 1930. Serial No. 471,454. 18 Claims. (Cl. 261—96.)



1. In an apparatus of the character described, a shell, a partition dividing said shell into two compartments, a passage connecting said compartments, means in one compartment for supporting solid adsorptive material for free drainage, a vapor inlet for said last mentioned compartment, a fractionating column contained within said other compartment, and a vapor outlet from said last compartment.

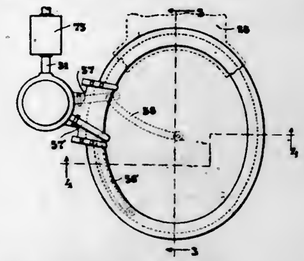
1,901,159. SHEAR PIN FOR CRUSHING MACHINES. WILLIAM W. GUEST, Los Angeles, Calif. Filed Dec. 6, 1930. Serial No. 500,576. 10 Claims. (Cl. 83—53.)

1. In a yielding jaw rock crushing machine, bushings seated in the side walls of the machine, a shear pin having its end portions seated in said bushings and a toggle thrust sleeve arranged on said shear pin between said bushings, the ends of which sleeve and the inner



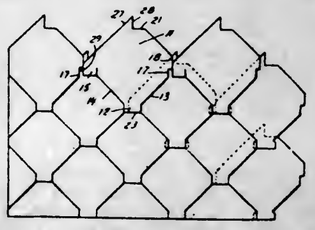
faces of which bushings constitute shearing elements for cutting the shear pin in the event of abnormal pressures thereupon.

1,901,160. SANITARY WATER CLOSET ATTACHMENT. FERAUCCIO GUIDETTI, Elmhurst, and GIUSEPPE BONTEMPI, New York, N. Y., assignors to The Watairway Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1930. Serial No. 496,898. 11 Claims. (Cl. 4—7.)



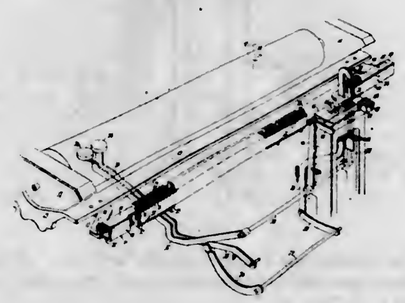
1. In apparatus of the class described, adapted for use in connection with a closet bowl, the combination, with a fluid delivery arm movable between two extreme positions within said bowl, of a supporting bracket for said arm, hook-shaped means inwardly extending from said bracket, for resting said bracket onto, and embracing the rim of said bowl, and adjustable means, carried by said bracket, movable against the outer surface of said bowl, for securely clamping said bracket onto said rim.

1,901,161. SHINGLE. NORMAN P. HARSHBERGER, Scarsdale, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed June 5, 1931. Serial No. 542,317. 4 Claims. (Cl. 108—7.)



1. An interlocking shingle element having an interlocking lug extending from the converging end of two adjacent edges and having a projection on one side edge and a recess beneath the projection, said projection arranged to abut against a second projection on a non-homologous side edge of a like shingle element to form a slot, the opposite sides of which are defined by an outer edge of the second projection and an edge of said recess, said slot arranged to receive and lock with the interlocking lug of another shingle.

1,901,162. TYPEWRITING MACHINE. WILLIAM F. HELMOND, West Hartford, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 14, 1931. Serial No. 562,696. 11 Claims. (Cl. 197—70.)

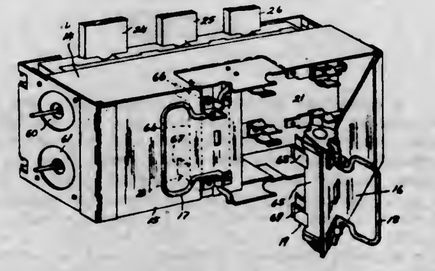


1. In a machine of the class specified, a column-stop-bar in the form of a metal tube, opposite walls of the tube being pierced by slots at regular intervals to divide said walls into duplex sets of rack-teeth, the slots on one side matching those upon the opposite side.

1,901,163. PROCESS OF TREATING EMULSIONS. CARL G. HINRICHS, St. Louis, Mo. Filed Mar. 12, 1926. Serial No. 94,324. 31 Claims. (Cl. 196—4.)

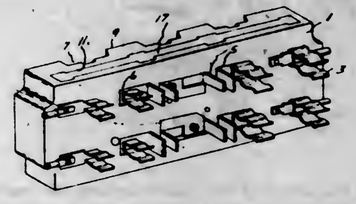
2. The process of treating rolly oils from petroleum wells which includes the addition thereto of a modification of a product resulting from the application of external heat to ricinoleic acid to form and eliminate water molecules therefrom.

1,901,164. FUSE PANEL BOARD. JOHN G. JACKSON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1931. Serial No. 564,241. 3 Claims. (Cl. 247—10.)



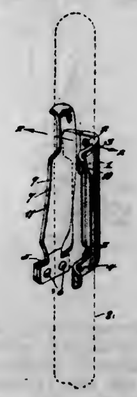
1. A panel board having a groundable cabinet, bus bars in said cabinet, and a switch and fuse unit in the cabinet in front of said bus bars and including a metal casing open at the back and receiving the bus bars and provided at the front thereof with hinged closure means, an insulator block extending longitudinally of the casing between the bus bars and closure means, fuse clips spaced apart on said insulator block and extending toward said closure means, strap connectors extending from the bus bars through the block and having portions forming switch contacts, connectors extending from certain of the fuse clips and having portions cooperating with the potions just mentioned of the bus connectors to form switch contacts, and switch contacts carried by said closure means and operable when the closure means is closed to engage the switch contacts aforesaid and close a circuit between the bus bars and fuse clips.

1,901,165. REENFORCED BLOCK STRUCTURE FOR ELECTRIC FIXTURES. JOHN G. JACKSON, Detroit, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 21, 1931. Serial No. 564,243. 13 Claims. (Cl. 175—369.)



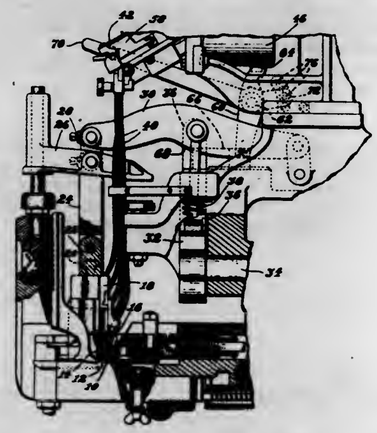
1. In combination, a porcelain base having a recess in an edge thereof, cement in the recess, and a steel reenforcement in the cement.

1,901,166. HANDLE SUPPORT. NEUBURY L. JORDAN, Princeton, N. J. Filed June 24, 1932. Serial No. 619,186. 5 Claims. (Cl. 24—257.)



1. A handle holder or support for fastening to a fixed object, comprising a body having upper and lower arms shaped to conform to a handle, the lower part of the body opposite the lower arm having an outwardly extending arm, and a yieldable clamping element fastened to the last named lower arm, said clamping element being relatively yieldable and normally inclined toward the first upper and lower arms, thereby permitting a handle to be clamped between the element and said upper and lower arms.

1,901,167. MACHINE FOR INSERTING FASTENINGS. JACOB C. JORGENSEN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 27, 1931. Serial No. 525,818. 6 Claims. (Cl. 1—18.1.)



1. In a machine of the class described, the combination with means for driving a fastening in a cycle of operations of the machine, and means for feeding a fastening to the driving means in the course of the cycle, of mechanism constructed and arranged for use at the will of the operator either to prevent the feed of any fastening and also the operation of the driving means during the cycle or to prevent such feed without preventing the operation of the driving means.

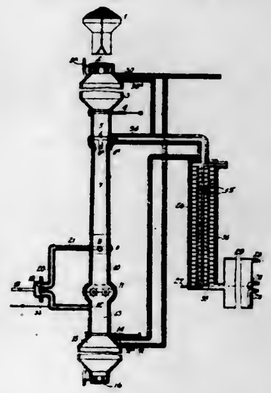
1,901,168. SECTIONAL ROD COUPLING. MAX KALBEN, San Diego, Calif. Filed Dec. 16, 1930. Serial No. 502,643. 5 Claims. (Cl. 287—116.)



1. In a sectional sewer rod coupling, a connector member provided with a wrench engaging middle portion and reduced threaded portions at its opposite ends and provided with a groove in one side only at one end and a similar groove in its opposite side only at its other end, said grooves being separated from each other so that the inner ends of said grooves are offset in relation to each other.

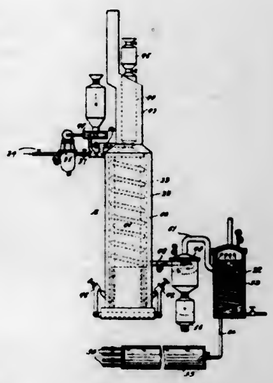
1,901,169. DISTILLATION OF SOLID CARBONACEOUS MATERIAL. LEWIS C. KARRICK, Salt Lake City, Utah. Filed May 7, 1924. Serial No. 711,554. 14 Claims. (Cl. 202—15.)

7. The process of distilling solid carbonaceous material, which consists in feeding carbonaceous material simultaneously through a plurality of parallel retorts at different pressures, heating a first retort by superheated steam, passing the resulting vapors through a heat-exchange device that is provided with a supply of water



thereby generating another supply of steam at lower pressure, and heating a second retort from said other supply.

1,901,170. GASIFICATION OF CARBONACEOUS MATERIAL. LEWIS CASS KARRICK, Salt Lake City, Utah. Original application filed Oct. 29, 1926, Serial No. 144,947. Divided and this application filed Dec. 20, 1927. Serial No. 241,287. 3 Claims. (Cl. 48—206.)



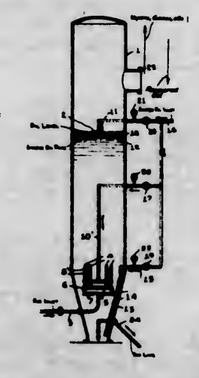
1. A continuous process for producing water gas from material such as coal, coke and the like which comprises preheating granular particles of said material in a chamber, periodically delivering material from the preheated chamber into a second heating chamber which is maintained under pressure, and thereafter continuously discharging said material from the second chamber and passing the same at high pressure by means of steam in a generally downward direction through an externally heated tube of extended length and of restricted cross section at a temperature and period of time sufficient to effect substantially gasification of the carbon constituent of the material, the material while being heated in the pre-heating chamber being maintained under the working pressure of the second chamber by the medium maintaining pressure therein.

1,901,171. STEERING WHEEL ATTACHMENT. THOMAS J. KAUFFMAN, Grosse Pointe Village, Mich., assignor to Square D Company, Detroit, Mich., a Corporation of Michigan. Filed July 18, 1932. Serial No. 623,244. 3 Claims. (Cl. 74—33.)



1. A steering wheel attachment including a pair of aligned members, a union between and providing a swivel mounting for one of said members, a knob fixed to the swivelly mounted member, yieldable means associated with one of said members and union for cushioning the knob, and a steering wheel rim clamping member projecting from and actuable by portions of said union and the other of said members.

1,901,172. OIL TREATMENT PROCESS AND APPARATUS THEREFOR. HENRY C. KIRK, Baltimore, Md.; Colonial Trust Company executors of said Henry C. Kirk, deceased. Filed Dec. 8, 1927. Serial No. 238,648. 13 Claims. (Cl. 196—65.)

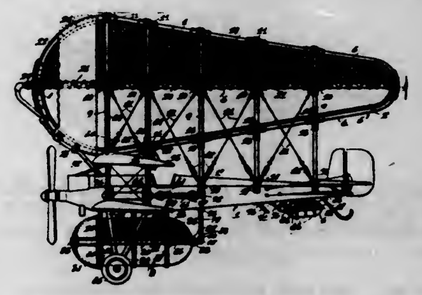


12. In a process of heat treating oil under conversion conditions of temperature and pressure with air streams injected thereinto to produce lighter distillates therefrom, the step of entirely enveloping such air streams within streams of injected oil.

13. Apparatus for heat treating hydrocarbon oils to produce lighter distillates therefrom which comprises a still for maintaining a body of oil under conversion conditions of temperature and pressure, means for injecting air in upwardly directed streams, into the body of oil near the bottom thereof, means for injecting oil in upwardly directed streams along with the air, and means for injecting downwardly directed oil streams into the body of oil near the upper level thereof, supplementing the upwardly directed streams, whereby circulatory currents are set up in the body of oil.

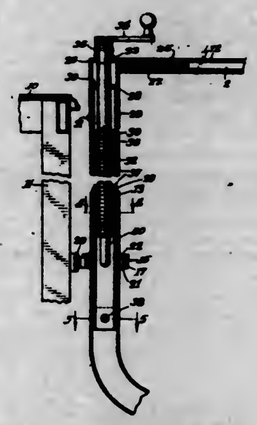
1,901,173. DIRIGIBLE-AIRPLANE. HERMAN L. KUHN, Union, Miss., assignor of fifty per cent to W. H. Coffey, Ludlow, Miss. Filed Mar. 4, 1932. Serial No. 596,843. 24 Claims. (Cl. 244—5.)

1. An aircraft comprising an airplane complete in itself and including a fuselage, bi-planes, landing gear and the usual flight controlling elevators and rudders; combined with dirigible balloons one located over the airplane with



its longitudinal axis approximately parallel to that of the fuselage, and separate dirigible balloons located beneath the airplane at the front and back ends of the same.

1,901,174. HOSPITAL TABLE. FRANK KUSTERLE, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,408. 6 Claims. (Cl. 45—111.)

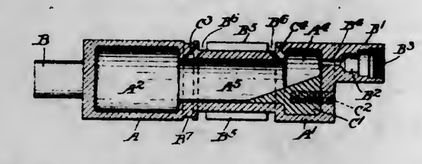


1. In a hospital table the combination of a table top, a hollow post for supporting said top, means for vertically, adjustably mounting said top on said post comprising a nut disposed inside of said post and mounted therein so as to be non-rotatable and supported against downward movement, a screw mounted on said table top so as to be rotatable in axially fixed position relative thereto, said screw depending from said table top and into said post and having co-operative engagement with said nut, whereby the table top is vertically adjustable as an incident to rotation of the screw, and a handle disposed above said table top and connected to said screw for facilitating manual rotation thereof.

1,901,175. CRANK SHAFT. ARNOLD LACK, Beloit, Wis., assignor to H. H. Shockey, Chicago, Ill. Filed Apr. 1, 1931. Serial No. 526,888. 4 Claims. (Cl. 74—38.)

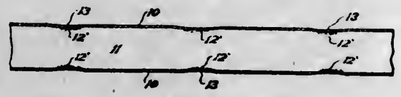
4. A crank shaft comprising an elongated hollow cylindrical member closed at both ends, crank pins pro-

jecting longitudinally from each closed end and parallel with the longitudinal axis of the shaft, a gear integral with the crank shaft, the crank shaft having cylin-



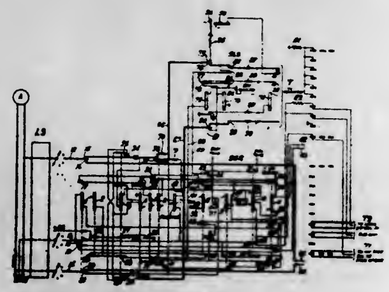
drical bearing surfaces at each side of the gear, the outside diameters of the gear and both bearing surfaces being substantially the same.

1,901,176. METHOD OF WELDING. GOTTFRID C. LAWSON, Canton, Ohio, assignor to The United Metal Products Company, Canton, Ohio, a Corporation of Ohio. Filed Jan. 7, 1932. Serial No. 585,277. 7 Claims. (Cl. 219—10.)



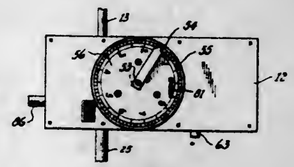
1. The method of welding a sheet metal door and the like, consisting in forming projections upon opposite edges of a metal strip and forming openings in the edge portions of the strip adjacent to and transversely alined with said projections, placing the strip between two parallel sheet metal plates with the strip disposed in a plane transverse to the planes of said plates, and then welding the plates to said strip through said projections.

1,901,177. MULTIOFFICE TELEPHONE SYSTEM. OSCAR C. LEVY, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 31, 1932. Serial No. 602,124. 12 Claims. (Cl. 179—18.)



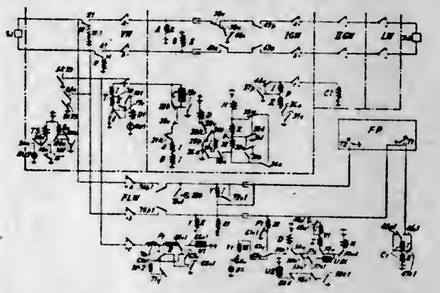
1. In a telephone system, a main office and a sub-office, two groups of trunks connecting the offices, local trunks in the sub-office, a selector repeater in the sub-office for extending local or outgoing calls, means in the selector repeater for preliminarily routing all calls to the main office via an idle trunk in one of said groups, means responsive to the receipt of an impulse series of a particular value for switching the call from the trunk in said one group to an idle trunk in the other of said groups, and means responsive to the receipt of a plurality of impulse series of particular values for switching the call from the trunk in said one group to an idle one of the local trunks.

1,901,178. LIQUID DISPENSING METER. JOHN F. MALM, Chicago, Ill., assignor of one-half to Frank A. Adkins, Chicago, Ill. Filed Oct. 28, 1929. Serial No. 402,916. 5 Claims. (Cl. 221—101.)



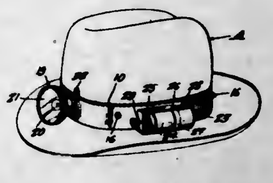
1. A liquid dispensing meter comprising a reciprocating measuring means, indicating means, means operatively connecting said measuring and indicating means, said indicating and operating means comprising a toothed wheel, a pawl normally coacting with said wheel for rotating it in one direction, means for locking said wheel against rotation in said direction, and means operated by said reciprocating means for reciprocating said pawl with reference to the teeth of said wheel and for unlocking said locking means and rotating said wheel.

1,901,179. AUTOMATIC TELEPHONE SYSTEM. MAXIMILIAN MATHIAS, Berlin, Germany, assignor to Siemens & Halske Aktiengesellschaft, Siemensstadt near Berlin, Germany. Filed Mar. 31, 1932, Serial No. 602,187, and in Germany May 29, 1931. 7 Claims. (Cl. 179—18.)



1. In a telephone system, a subscriber's line, a timing device individual to the line, means for establishing two classes of connections with the line, and means controlled by the timing device for automatically releasing connections of one class after a predetermined time but not connections of the other class.

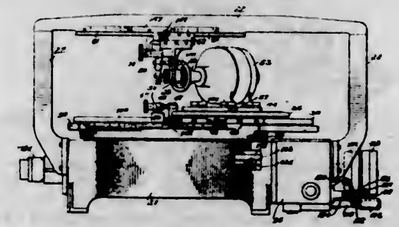
1,901,180. ELECTRIC HEAD LAMP. OCTAVE O. McBRIDE, McKinney, Tex. Filed Nov. 17, 1931. Serial No. 575,671. 1 Claim. (Cl. 240—60.)



A lamp of the character described, comprising an endless flexible band, battery holders carried at opposite sides thereof, each holder including a retaining frame for removably receiving an electric dry cell battery and having

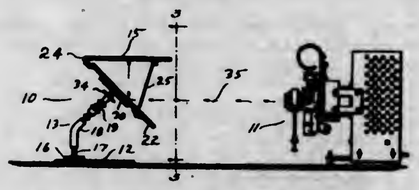
a releasable bail pivoted to the frame, the frame being fitted with an embracing ring insulated therefrom, an adjustable pole contact on the bail, a lamp housing intermediate of the battery holders and upon the band, an electric lamp within the housing, normally open electric circuit connections between the lamp and said batteries, said circuit connections being confined within the band, and a manually operable switch mounted in the band directly rearwardly of the housing for manual operation for opening and closing the electric circuit.

1,901,181. TORIC LENS GENERATING MACHINE. JOSEPH J. MCCABE, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 5, 1927. Serial No. 181,202. 12 Claims. (Cl. 51—55.)



1. In a machine of the class described, a rotatable support, a tool carriage adjustably mounted on said support, an annular cutter adjustably mounted on said tool carriage, a transversely moving guideway, and means including a member operatively connected with said tool carriage and movable along said guideway when said tool carriage is adjusted relative to said support, for rotating said support.

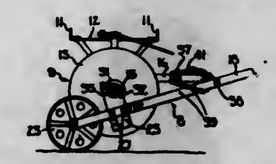
1,901,182. PORTABLE DISPLAY SCREEN. BYRON MCCANDLESS, U. S. Navy. Filed Aug. 31, 1931. Serial No. 560,251. 4 Claims. (Cl. 88—24.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



2. A portable displaying screen comprising an image reflecting means, an image displaying means, means for supporting said displaying means at a suitable angle to said reflecting means, and means for supporting said reflecting means, said reflecting means supporting means comprising a frame, means to secure the reflecting means to the front of said frame, an open socket fixed to the back of said frame, a rectangular plate receivable in said socket, a threaded stud projecting from said plate through the open channel, a nut on said stud to fixedly secure said plate in said socket, an adjustable arm having one end securable to said stud, and a base for the other end of said arm.

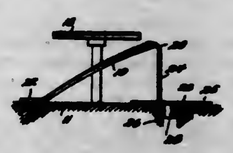
1,901,183. TRANSPORT TRUCK FOR DISK HARROWS. HERBERT B. MCKAHIN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed May 28, 1931. Serial No. 540,527. 7 Claims. (Cl. 55—73.)

1. A transport truck for disk harrows comprising a supporting bar adapted to extend beneath the disk gang of a disk harrow, a wheel mounted on the lower end of the supporting bar, said bar having a plurality of longitudinally spaced perforations near its upper end, a bolt adapted to be inserted in any one of said holes, and a flexible means



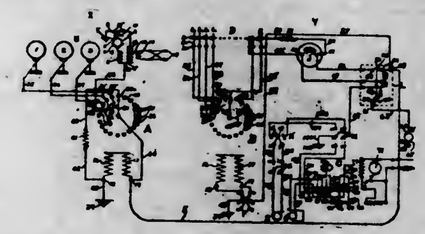
attached to said bolt, whereby the truck may be secured to the harrow frame by wrapping the flexible means around a member of the frame, said flexible means being of sufficient length to extend around frame members of varying proportions.

1,901,184. FOOT REST DEVICE. WILLIAM MOLONEY, Hamilton Beach, N. Y. Filed Nov. 28, 1931. Serial No. 577,835. 1 Claim. (Cl. 74—81.)



In a device of the class described, in combination, a motor vehicle accelerator pedal comprising a movable part provided with a head curved in cross section and having a smooth foot contacting surface and laterally extending flanges, and a separately formed foot guiding member spaced rearwardly of said pedal and secured to the floor of said vehicle, said member also being of considerable lateral extent and provided with a smooth laterally and downwardly inclined foot contacting surface, whereby a downward pressure of the foot of an operator will cause the foot to slide laterally to gradually depress said pedal.

1,901,185. SUBMARINE MINE CONTROL. PAUL R. NELSON, Fort Totten, N. Y., assignor to the Secretary of War, in behalf of the United States. Filed Nov. 12, 1928. Serial No. 318,930. 26 Claims. (Cl. 102—8.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

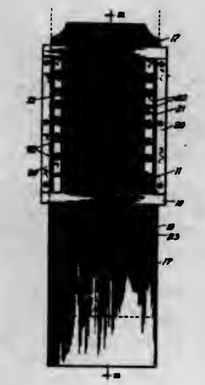


1. A system of submarine mine control comprising a plurality of submerged mines, a remote control, a single conductor interconnecting mines and remote control to provide a path of electrical distribution therebetween and means for automatically firing any of said mines on impact.

1,901,186. APPARATUS FOR TESTING PHOTOPAPER. JACK NORWORTH, New York, N. Y. Filed Feb. 17, 1932. Serial No. 593,548. 3 Claims. (Cl. 95—10.)

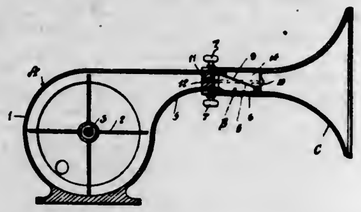
1. An apparatus as characterized comprising a frame, means for supporting sensitized paper therein, a slide hav-

ing an opening of less size than the frame and adapted to be brought to various positions in the frame and obtain an exposure therethrough at different parts of the sensi-



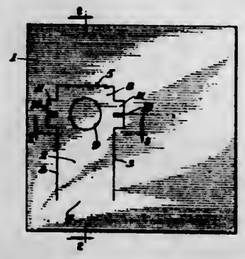
tized paper, and means for simultaneously printing an exposure designation with each exposure through the opening.

1,901,187. AIR OPERATED HORN. ROBERT T. OSBORNE, Warren, Ohio. Filed Jan. 21, 1932. Serial No. 587,979. 2 Claims. (Cl. 116—137.)



1. A voice or reed member for air operated horns, comprising a member having an inclined wall provided with openings, reeds secured to said wall and arranged opposite said openings, a vertical wall at each end of said member, and a partition intermediate of said walls, said walls and partition being spaced from one another to provide recesses for said reeds.

1,901,188. DISPLAY CARD. LOUIS A. PHILLIPS, Tenafly, N. J. Filed Feb. 25, 1932. Serial No. 594,991. 2 Claims. (Cl. 206—79)



1. A display card having a tongue struck out therefrom but integrally connected with the body of the card at the base of the tongue, said tongue having a portion adapted to be bent to provide an article-holding ledge and provide an opening in the body of said card when so bent, said ledge portion being provided with slots adapted to receive adjacent edge portions of the body of the card when the ledge portion is bent in transverse position.

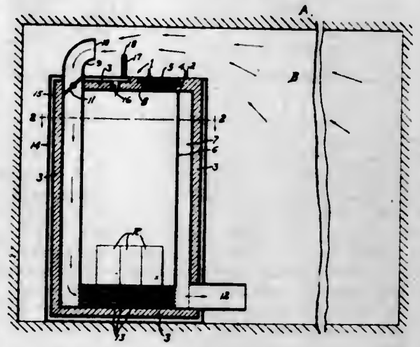
1,901,189. METHOD OF FORMING SEPARABLE FASTENER SLIDERS. ROLAND J. POUX, Meadville, Pa., assignor to Hookless Fastener Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Apr. 5, 1929. Serial No. 352,793. 12 Claims. (Cl. 29—148.)



1. The method of forming separable fastener sliders by a series of successive operations, which includes feeding a continuous strip of metal to a coining press for forming a plurality of spaced lugs on said strip, feeding said strip to a blanking die for blanking said strip to the shape of a series of interconnecting slider elements each of which has two flat wing portions connected by a narrow relatively thick portion, said blanks being connected in the strip, and feeding said strip to a severing machine for cutting said elements from said strip.

12. The method of forming separable fastener sliders by a series of successive operations which comprises forming a series of connected slider blanks in a metal strip, each of said blanks having two flat wing portions, each of which is wider at one end than at the other end, and connected by a relatively narrow neck portion, said slider blanks being connected by relatively narrow integral portions of the strip, bending up flanges on the side edges of each of said wing portions of said blanks while so connected, and trimming said flanges while said blanks are connected in the strip.

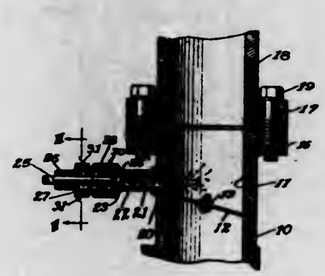
1,901,190. REFRIGERATING APPARATUS. FREDERICK W. RABE, St. Louis, Mo. Filed Feb. 3, 1930. Serial No. 425,425. 5 Claims. (Cl. 62—91.5.)



1. A refrigerating apparatus including a refrigerated compartment, a refrigerant receptacle, said refrigerant receptacle being provided with an air duct disposed so as to substantially surround a chamber located within the refrigerant receptacle which receives a refrigerant that gives off gas when sublimation thereof takes place, an air inlet element leading to said air duct, an air discharge element leading from said air duct and so arranged as to discharge air passing therethrough into said refrigerated

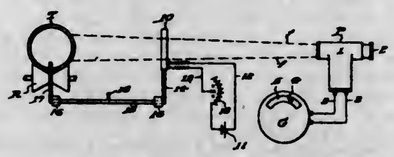
compartment, a gas chamber arranged to substantially surround said refrigerant receptacle and having an outlet opening, and a gas discharge duct leading to said gas chamber from the interior of said refrigerant chamber.

1,901,191. GAS AND AIR MIXER FOR HYDROCARBON ENGINES. WILLIAM B. RAWLS, Chicago, Ill., assignor, by direct and mesne assignments, to Gas Krakker Corporation, Chicago, Ill., a Corporation of Illinois. Filed Mar. 21, 1930. Serial No. 437,671. 2 Claims. (Cl. 123—119.)



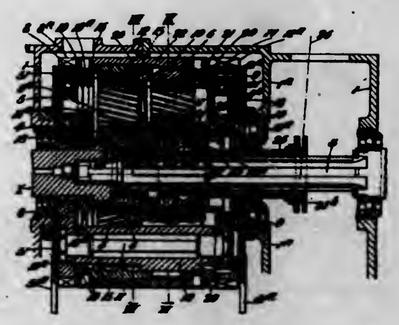
1. In combination with a carbureter and throttle, a port opening into the carburetor above the leading edge of the throttle when the latter is in idling position, a passaged body engaged in said port, a valve seat in said passage, a valve cooperating with said valve seat, a valve stem extending outwardly from said valve, a valve guide engaging said valve stem and having a chamber to receive said valve when opened, a spring in said chamber acting against the valve to close the same, said valve guide being threadingly engaged with said passaged body to vary the compression of said spring, and offset radial air ports in the valve guide and opening into said chamber substantially tangentially thereto whereby to create a swirling motion of the entering air prior to entry into the carbureter.

1,901,192. APPARATUS FOR MEASURING TEMPERATURES OF MOVING BODIES. GUSTAV A. REINHARDT and RICHARD H. EURICH, Youngstown, Ohio, assignors to Bacharach Industrial Instrument Company, Pittsburgh, Pa. Filed Feb. 20, 1929. Serial No. 341,382. 6 Claims. (Cl. 73—32.)



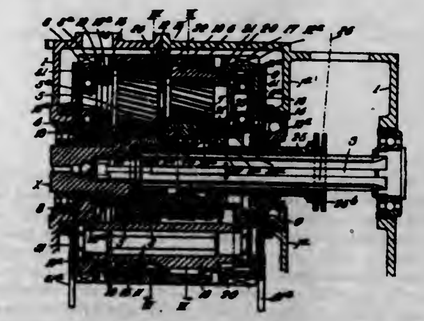
1. In combination with a radiation pyrometer, means for causing the pyrometer to normally indicate a temperature approximating that of a body whose temperature is to be measured and means for rendering said first-mentioned means ineffective upon the pyrometer when the body whose temperature is to be measured is introduced into its field.

1,901,193. POWER TRANSMISSION MECHANISM. PIERO MARIANO SALERNI, Westminster, London, England. Filed Oct. 8, 1930, Serial No. 487,186, and in Great Britain Oct. 16, 1929. 13 Claims. (Cl. 74—34.)



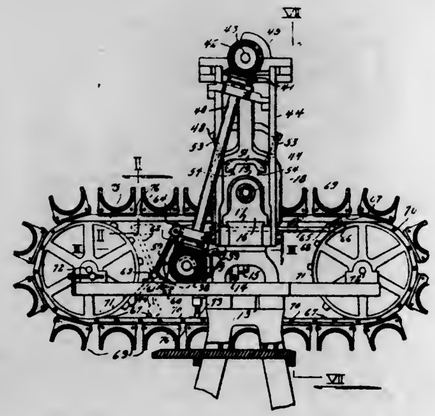
1. Epicyclic gearing comprising a driving sun-member and a planet-carrying member carrying a compound planet thereon, a driven sun-member having a hollow annular formation to adapt it to receive clutching-means, an internally toothed annular member, and means for rotatably connecting the said members with the driven shaft, the driving sun-member being provided with a roller-bearing surface, the larger planets of the compound planet pinions having rollers engaged therewith, said rollers revolving around the rollers of the driving sun-member, a roller track on the internally toothed annular member for the said planet rollers, the driven sun wheel having rollers thereon, roller-bearing surfaces for the smaller planets of the compound planet pinions, said latter rollers being engaged by the rollers on the driven sun wheel, whereby the driven sun wheel is externally supported.

1,901,194. POWER TRANSMISSION MECHANISM. PIERO MARIANO SALERNI, Westminster, London, England. Filed Oct. 8, 1930, Serial No. 487,188, and in Great Britain Oct. 16, 1929. 30 Claims. (Cl. 74—34.)



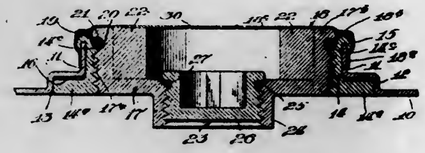
1. Epicyclic gearing, comprising a driving sun member, a planet-carrying member with at least one compound planet thereon, one planet-pinion being in mesh with the driving sun member, a driven sun member in mesh with another planet pinion, an internally toothed annular member disposed around and engaged by the first mentioned planet pinion, and axially movable clutch means rotatable with the driven shaft and movable within the driven sun member to operatively engage with the driving sun member, such clutch means being arranged for engaging also with other members of the gearing.

1,901,195. TILE MANUFACTURE. WILLIAM SALISBURY, Toledo, Ohio. Filed Jan. 14, 1931. Serial No. 508,592. 12 Claims. (Cl. 25—42.)



3. A duct section handling machine comprising a cradle, operating means for positioning a clamp on a duct section in the cradle, and radial piercing means for the clamped section.

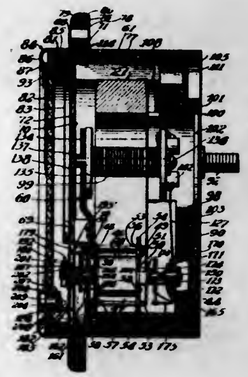
1,901,196. CLOSURE DEVICE. JOHN W. SHERA, Chicago, Ill., assignor to American Flange & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 6, 1932. Serial No. 585,091. 2 Claims. (Cl. 220—39.)



1. A closure plug for structure of the class described which comprises a cylindrical body externally threaded, said body having a cylindrical open-top chamber formed therein and extending into close proximity to the bottom thereof providing a relatively thin-walled, cup-shaped structure, and two diametrically opposite lugs extending inwardly from the circular chamber wall and integral therewith, the lugs being of triangular shape in plan view to permit a tool or object to be inserted between the ends of the lugs and engage oppositely-facing and non-aligned sides of the lugs.

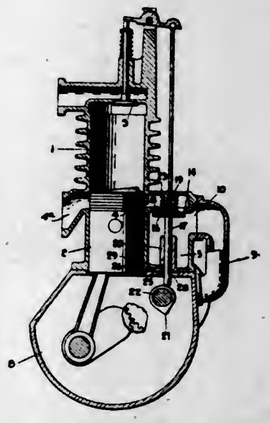
1,901,197. ELECTRICAL MEASURING INSTRUMENT. RAY SIMPSON, River Forest, Ill., assignor, by mesne assignments, to Jewell Electrical Instrument Company, a Corporation of New Jersey. Filed June 17, 1930. Serial No. 461,766. 8 Claims. (Cl. 171—95.)

1. In an electrical measuring instrument the combination of a magnetic structure comprising a permanent magnet, and a pole piece unit comprising a member formed with opposed pole pieces and integrally joined with each other, said magnet having a pair of legs resiliently engaging and securing said pole piece unit to said magnet, a pair



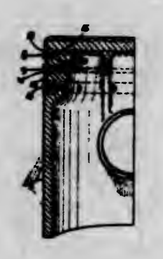
of spacers having a drive fit in the body of said magnetic structure, and a bridge permanently secured to the ends of said spacers.

1,901,198. CYLINDER PORT CONTROL. OWEN H. SPENCER, Indianapolis, Ind. Filed June 11, 1929. Serial No. 369,996. 2 Claims. (Cl. 123—75.)



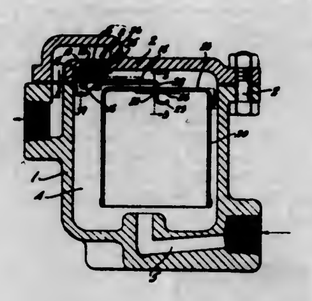
1. The combination with a cylinder of an engine having valve controlled inlet and exhaust ports in its outer end, a piston controlled exhaust adjacent its inner end, and tappets for operating said valves, of an air chamber independent of said tappets and having an air inlet port opposite the lower exhaust port, a partition in said chamber, a valve seat in said partition, a valve adapted to slide through said seat for controlling the passage of air through the air chamber and air inlet port cooperating therewith, a tappet carrying said valve, means for operating said latter tappet in timed relation with the first mentioned tappets, and means for conveying air to said chamber.

1,901,199. PISTON AND RING THEREFOR. WALTER H. STINE, Los Angeles, Calif., assignor of one-half to Lyman M. King, jr., Los Angeles, Calif. Filed Dec. 11, 1931. Serial No. 580,389. 9 Claims. (Cl. 74—109.)



1. A piston provided with an annular convexity which extends therearound, said convexity forming two oppositely disposed piston ring seats and piston rings provided with concave seating faces adapted to ride upon said convexity, there being clearances provided adjacent to said seats to maintain a perfect abutment of the external faces of said piston rings within the piston cylinder during the operation of said piston.

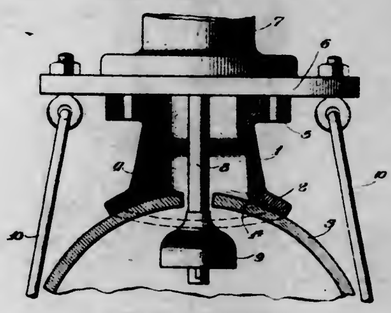
1,901,200. STEAM TRAP. LESLIE P. STRONG, Lakewood, Ohio, assignor to The Clark Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 16, 1932. Serial No. 599,116. 15 Claims. (Cl. 137—103.)



1. A steam trap, comprising a chambered casing having an inlet and an outlet, valve means for controlling said outlet, a vertically movable inverted bucket in the chamber of said casing, said bucket being provided in its top wall with an air vent opening, and means connecting said bucket and said valve means so as to effect operation of said valve means by vertical movement of said bucket in said chamber, said connecting means being associated with said air vent opening and being adapted to prevent said opening from becoming clogged, such as with impurities entering said chamber through said inlet.

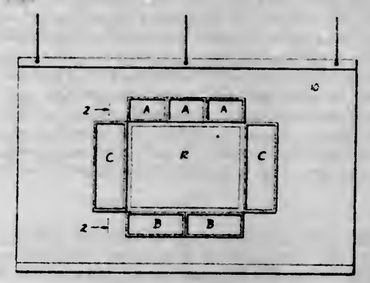
1,901,201. METHOD OF FORMING AND REENFORCING FLANGED APERTURES IN HOLLOW BODIES. JAMES HALL TAYLOR, Oak Park, Ill. Filed Dec. 12, 1929. Serial No. 413,498. 2 Claims. (Cl. 29—148.2.)

1. The method of forming and reenforcing a flanged aperture in a hollow body which consists in forming an aperture in said hollow body, forming a nozzle with a flange of increased thickness to fit the curvature of said hollow body adjacent said aperture, superposing said nozzle upon said hollow body, flanging the wall of said aperture



against the interior surface of said nozzle, welding the upper portion of said flanged wall to said nozzle and the lower flange of said nozzle to said hollow body.

1,901,202. ELECTROSTATIC LOUD-SPEAKER. ADOLPH A. THOMAS, New York, N. Y. Filed Apr. 30, 1929. Serial No. 359,235. 10 Claims. (Cl. 88—16.2.)



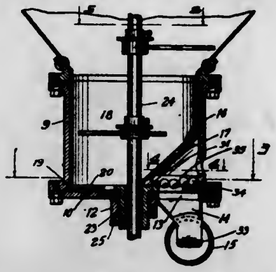
1. The combination of a motion picture screen and a plurality of electrostatic loud-speakers arranged around said screen, said loud-speakers being flat structures mounted substantially parallel with said screen and having different natural frequencies to accentuate the entire musical scale within practical limits.

2. In talking movie apparatus, a curtain having a motion picture screen, and an electrostatic loud-speaker mounted on said curtain adjacent said screen, the vibratory electrode of said loud-speaker being open to the free air at the front of said curtain.

1,901,203. COAL FEEDER. GEORGE S. THOMPSON, Pueblo, Colo., assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filed Feb. 9, 1931. Serial No. 514,510. 5 Claims. (Cl. 221—136.)

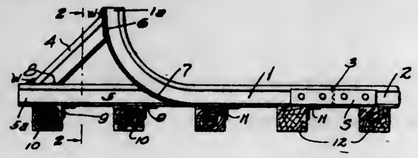
1. A coal feeder comprising a housing having a discharge-opening and having a spaced partition dividing the housing into a compartment over the discharge-opening and a supply-chamber exteriorly of the compartment, a

rotary disk having an opening to convey coal from the chamber through the space of the partition, into the compartment for its delivery through the discharge-opening,



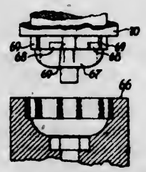
gravity-impelled bodies in the compartment to effect the discharge of coal from the opening of the disk, and means for rotation of the disk.

1,901,204. WHEEL STOP. ARNOLD H. TOLD, Chicago, Ill. Filed July 30, 1932. Serial No. 626,886. 11 Claims. (Cl. 104—254.)



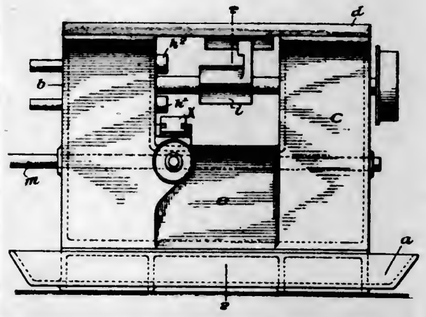
1. In a wheel stop, a section of a rail having a substantially horizontal portion, terminating at its forward end in a face adapted to abut the end of a traffic rail, and having a rear part inclined upwardly of said horizontal portion to form a wheel engaging element, and a structure at the rear of said upwardly inclined part arranged to brace the latter to road bed ties located beyond the end of the traffic rail, said bracing structure consisting of rail pieces corresponding in cross section to said wheel-engaging element and having their forward ends abutting spaced points on the base flange of said element and secured thereto.

1,901,205. APPARATUS FOR MOLDING INSULATING ARTICLES. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Original application filed May 7, 1928, Serial No. 275,768. Divided and this application filed Oct. 30, 1930. Serial No. 492,166. 5 Claims. (Cl. 18—42.)



1. In a device for molding under pressure insulation articles having bayonet grooves formed in a surface thereof, the combination with male and female pressure die members, one of said die members having fixed elements adapted to form portions of the groove respectively, said last mentioned die member also having elements adapted to form other portions of the grooves, said last mentioned elements being movable relatively to said fixed elements to permit separation of the article from said die member by sequential rotary and longitudinal movements relatively thereto upon completion of the molding operation.

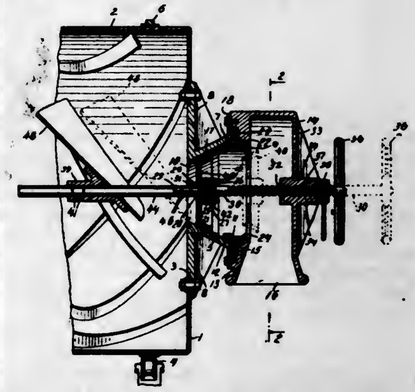
1,901,206. MULTIPLE SPINDLE METAL WORKING MACHINE. OLOF ENOCH TROBECK, Berlin, Germany, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 25, 1931, Serial No. 518,045, and in Germany Nov. 1, 1930. 11 Claims. (Cl. 29—37.)



1. A multiple spindle automatic machine having a base and a chip receiving pan, two upright standards secured to said base and spaced apart to provide an open sided frame and adapted to carry an indexible work spindle carrier and its co-operating mechanisms, and a bracing roof formed member between said standards and below said work spindle and in position to deflect chips and turnings from the work into the chip receiving pan.

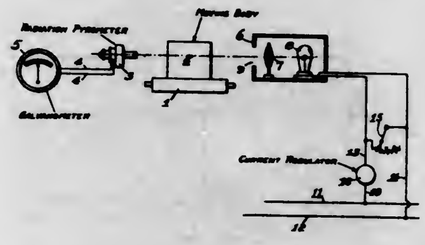
11. An automatic multiple spindle machine having a frame comprising a bed provided with a pair of spaced upright box formed standards unconnected at their sides and beam connected at their top and within which space a reciprocating tool carrier is located in position to leave a clear opening below the tool carrier and from standard to standard, and a roof shaped member filling a part of said space below the tool carrier and connected at its ends with the standards to give rigidity to the framework and having its sides converging to the top and spaced below the tool carrier thereby to deflect the chips and turnings away from the operating mechanisms of the machine.

1,901,207. MIXING DEVICE. HERBERT RYAN TUMIM, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 14, 1930. Serial No. 475,196. 17 Claims. (Cl. 259—8.)



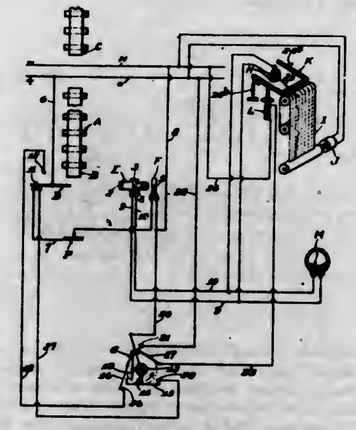
1. The combination comprising a rotatable mixing chamber having a discharge opening at one end thereof providing a seat for a closure, a closure seated in the discharge opening and rotatable therewith, a discharge hopper communicating with said opening and normally rotatable with the mixing chamber, and means to hold said discharge hopper in fixed position while the mixing chamber and closure rotate.

1,901,208. PROCESS AND APPARATUS FOR MEASURING TEMPERATURES OF MOVING BODIES. LOUIS L. VAYDA, Aspinwall, Pa., assignor to Bacharach Industrial Instrument Company, a Corporation of Pennsylvania. Filed Feb. 16, 1929. Serial No. 340,874. 6 Claims. (Cl. 73—32.)



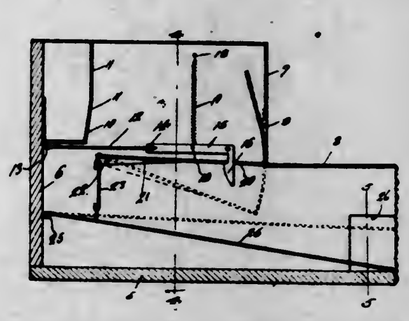
6. A process of measuring the temperature of a heated body, which consists in first creating in a measuring instrument which is responsive to radiant energy, by means other than said body, an electro-motive force approximately equal to that produced in the instrument equal to that produced in the instrument by radiation from the body, when the body is moved through the field of reception of the instrument, then passing said body through such field, and at the same time cutting off the effect of such other means on the instrument as long as the radiation from the body effects the instrument.

1,901,209. APPARATUS FOR MEASURING TEMPERATURES OF MOVING BODIES. LOUIS L. VAYDA, Aspinwall, Pa., assignor to Bacharach Industrial Instrument Company, a Corporation of Pennsylvania. Filed May 17, 1930. Serial No. 453,206. 4 Claims. (Cl. 73—32.)



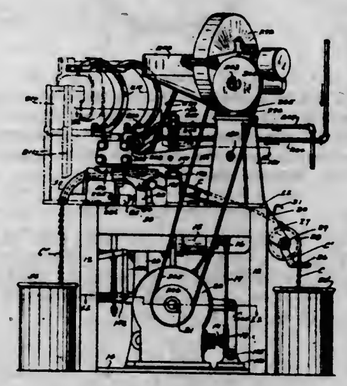
4. In a thermo-electric radiation pyrometer, a source of heat adapted to maintain the thermocouple in a controlled degree of activity, said source of heat located on the side of the thermocouple opposite that acted upon by heat from the body to be measured, and means for rendering said source of heat inactive during the time of passage of an article to be measured through the focus of said pyrometer.

1,901,210. ANIMAL TRAP. JAMES S. VICKERS, Alexander City, Ala. Filed June 2, 1931. Serial No. 541,672. 2 Claims. (Cl. 43—70.)



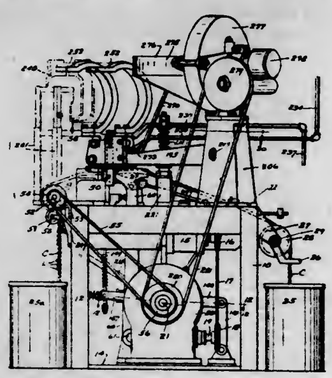
1. A trap of the character described comprising a housing, a cage adjacent the housing, a tiltable plate mounted within the housing, a pedal swingably supported within the housing, said plate being provided with an opening therein, and located beneath the pedal, a rockable trigger, said trigger being provided with a head engageable through the opening to support the plate in a horizontal position, and being engageable at its opposite end with the pedal, said trigger being rockable by the said pedal when a weight is imposed thereon releasing the plate so that an animal will drop into the bottom of the housing and subsequently pass into the cage.

1,901,211. ELECTRIC WELDING MACHINE. MERRITT R. WELLS, Cleveland Heights, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 15, 1930. Serial No. 502,362. 39 Claims. (Cl. 219—4.)



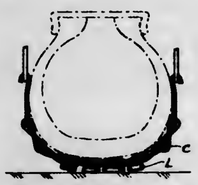
2. In a machine adapted to weld metallic parts to the links of a chain, a guideway through which the chain is progressed, means including a plurality of independently movable slides adapted to position metallic parts in contact with the links and means acting thereafter to simultaneously weld the metallic parts to the chain.

1,901,212. ELECTRIC WELDING MACHINE. MERRITT R. WELLS, Cleveland Heights, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 5, 1931. Serial No. 520,191. 30 Claims. (Cl. 219—4.)



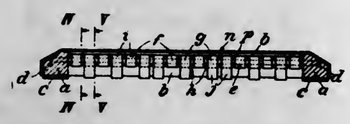
1. In a welding machine, the combination with a guideway for work, of means to grip the work, a plurality of means adapted to simultaneously bring a plurality of metallic parts into contact with the work, and wherein one of said last named means is bodily shiftable relative to another one of said last mentioned means.

1,901,218. METHOD OF MAKING TIRE CHAINS. MERRITT R. WELLS, Cleveland, Ohio, assignor, by mesne assignments, to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Dec. 15, 1930, Serial No. 502,862. Divided and this application filed Sept. 3, 1931. Serial No. 560,970. 12 Claims. (Cl. 59—85.)



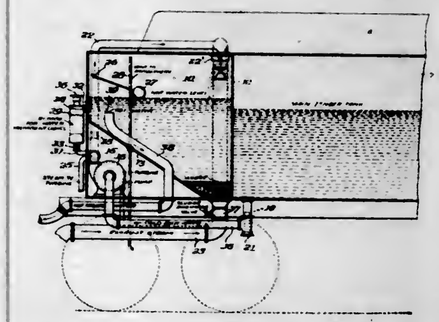
1. In the method of making tire chains, the steps of holding a link of a chain by means engaging its interior, simultaneously feeding a pair of lugs on opposite regions of a link, simultaneously welding the lugs thereto while pressing them against the lugs and while supporting the link on the opposite side.

1,901,214. MOVABLE KEY DEVICE FOR MUSICAL INSTRUMENTS HAVING KEYS. EDGAR WILLEMS, Chenes-Bougeries, Geneva, Switzerland. Filed Aug. 20, 1932. Serial No. 629,567, and in Switzerland Aug. 1, 1932. 6 Claims. (Cl. 84—465.)



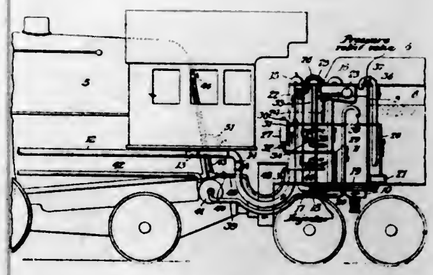
1. Movable key device for musical instruments having keys, for the musical development of the ear, intended to be placed on the keys of the instrument and comprising a support on which the keys are arranged, the said keys hiding the notes of the instrument, having the same height, the same lenght, the same colour and being situated at the same distance one from the other, each forming an intermediary by which the note of the instrument situated underneath the key of the device may be struck.

1,901,215. APPARATUS FOR CONDITIONING BOILER FEED WATER. LYNDON F. WILSON, Chicago, Ill. Filed July 30, 1928, Serial No. 296,180. Renewed July 30, 1932. 5 Claims. (Cl. 122—434.)



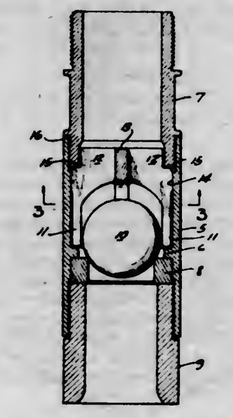
1. A locomotive tender including a raw water tank having a forward portion partitioned off to form a hot water compartment provided with a sloping bottom forming the top of a chamber beneath the compartment, a pump mounted in said chamber, pipes connecting the suction side of the pump with the tender tank and the delivery side of the pump with said compartment, an exhaust steam heater connected with the delivery side of the pump, means for conducting exhaust steam to said heater, a sludge discharge at the bottom of said compartment, and a pipe communicating with said compartment above the bottom thereof through which the hot water may be withdrawn from the compartment.

1,901,216. FEED WATER CONDITIONER. LYNDON F. WILSON, Chicago, Ill. Filed Oct. 10, 1929. Serial No. 398,692. 14 Claims. (122—454.)



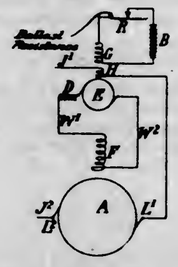
1. A method of conditioning feed water for locomotive boilers which comprises utilizing exhaust steam from the locomotive boiler to heat and deliver water from a tender tank to a compartment on the tender, utilizing a predetermined water level in said compartment for controlling the steam supplied for said water delivery, utilizing exhaust steam supplemented by live steam without delivering water to maintain the water in said compartment at a predetermined temperature, and delivering the water at said temperature from said compartment to the locomotive boiler.

1,901,217. INSERTED GUIDE AND BUMPER FOR BLIND CAGES. JOHN A. YERKES and REES H. LEMMON, Long Beach, Calif. Filed Feb. 12, 1930. Serial No. 427,979. 4 Claims. (Cl. 251—121.)



1. In combination with a tubular valve cage for a check valve, an integral insertable valve guide unit initially of larger diameter than the bore of said valve cage positioned in the bore of said valve cage and having a press fit therewith to restrain it against downward movement therein, said guide unit including a plurality of axially extendng ribs and an upper abutment in said cage to retain said unit against upward movement.

1,901,218. CONSTANT CURRENT VARIABLE VOLTAGE ELECTRIC GENERATING SYSTEM. GILBERT AUSTIN, JAMES COLQUHOUN MACFARLANE, and WILLIAM ALLEN MACFARLANE, Glasgow, Scotland. Filed July 30, 1931, Serial No. 553,956, and in Great Britain Nov. 15, 1930. 7 Claims. (171—224.)



1. In or for a constant current-variable voltage generating system, the combination with a main constant current dynamo of size smaller than the normal for the required output, of an exciter the capacity of which is such that under transient conditions it is capable of giving a voltage at its terminals several times (the limits being from twice to about 100 times, in accordance with the design required) higher han that required from the exciter by the main dynamo field under full load excitation, the field excitation of the exciter consisting of an abutment coil supplied from a separate source of constant voltage and an opposing coil the current in which is either the main constant current or a current strictly proportional thereto, the magnet system the exciter being made of extremely low reluctance in order to enable it to work with a small difference in M. M. F. between the two coils for the purpose of providing "rigidity" of current output, and having a small number of ampere turns in each coil for the purpose of obtaining "rapidity" of operation under transient conditions, the number of ampere turns in each coil being as small as possible concomitantly with the desired voltage and low reluctance of the exciter.

1,901,219. BREATHING APPARATUS. JOSEPH L. BELCHER, Long Beach, Calif. Filed July 30, 1932. Serial No. 626,260. 1 Claim. (Cl. 9—20.)



A breathing apparatus comprising a housing having an opening provided with resilient pneumatic cushion edges to snugly embrace the face and enclose the nostrils and mouth of a wearer; means for holding said housing in operative position; a pair of air tubes, each having one end connected to the interior of said housing to provide air passages; an elongated float mounted adjacent to and between the ends of said tubes remote from the mask to normally retain said ends projected in a substantially vertical position above the surface of a body of water within which said wearer may be submerged, whereby air may be supplied through said tubes to said wearer when submerged, by the natural breathing process; and suitable valves interposed between the submerged ends of said tubes and the interior of said housing and arranged to permit passage of air in opposite directions only through said tubes whereby a circulation of air in one direction only may be maintained through said tubes by the natural breathing process of said wearer.

1,901,220. GUY GUARD. THEODORE BIRKENMAIER, St. Louis, Mo., assignor to W. N. Matthews Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 24, 1931. Serial No. 558,898. 3 Claims. (Cl. 189—31.5.)

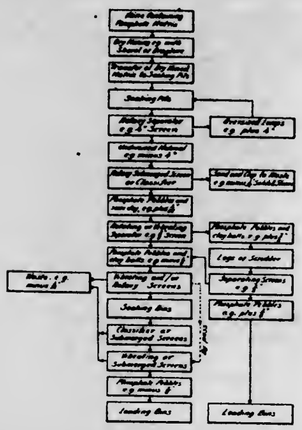


1. A guy guard comprising a longitudinal body portion, spaced gripping means formed on said body portion, said means being adapted to freely receive a guy strand therebetween when said body portion is angularly disposed to said guy strand, said means being adapted to securely engage said guy strand when said body portion is angularly turned to substantially align with said strand, and means associated with said gripping means adapted to reenforce said means, said reenforcing means comprising a strip extending from one of said gripping means and fastened to said body portion.

1,901,221. MINING AND TREATMENT OF PHOSPHATE-ROCK. JOHN TREADWELL BULLWINKEL, Brooklyn, N. Y., assignor to The Phosphate Mining Co., New York, N. Y., a Corporation of New York. Filed May 9, 1931. Serial No. 536,182. 12 Claims. (Cl. 209—2.)

1. The method of mining and treating phosphate rock embedded in a matrix of clay and sand, etc., which comprises dry mining the material or matrix, transferring the dry mined material to one or more soaking pits where it is submerged in water, causing the material to

remain submerged for a sufficient period of time to effect disintegration or softening of the phosphate matrix or material preparatory to further treatment for the sepa-



ration of the phosphate rock and maintaining the material substantially free throughout said steps from any disintegrating force which would break down any soft pebbles.

1,901,222. TREATMENT OF PHOSPHATE ROCK. JOHN TREADWELL BULLWINKEL, Brooklyn, N. Y., assignor to The Phosphate Mining Co., New York, N. Y., a Corporation of New York. Filed Apr. 17, 1931. Serial No. 531,012. 5 Claims. (Cl. 209—2.)

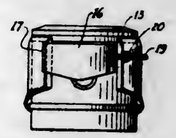
1. The improvement in the treatment of phosphate rock which comprises preliminarily removing débris from a matrix or material having phosphate rock embedded therein by a wet separating process, subjecting the phosphate rock product of such process with its relatively small remnant of clay to a soaking treatment for a sufficient period of time to effect disintegration of the clay, and then subjecting the material to a washing treatment to remove the disintegrated clay from the phosphate rock.

1,901,223. AUTOMOBILE ROBE OR BLANKET. LESTER C. BUSH, Columbus, Ohio. Filed Oct. 27, 1931. Serial No. 571,846. 2 Claims. (Cl. 2—88.)



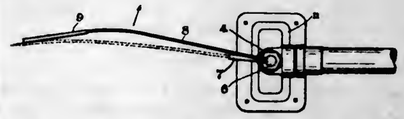
1. A robe formed with a slit of a length sufficient to receive the head and neck of the wearer, slide fasteners attached to the side edges of said slit and extending the full length thereof, longitudinally extending flaps attached to the side edges of the slit and arranged flat on one side of the robe, said flaps being shorter in length than said slit and when extended therethrough serving as a collar around the neck of the wearer, the flaps when in this position will lie between the neck and the fastener and protect the former when said fastener is drawn up tight to hold the collar snugly in place.

1,901,224. PISTON RING COMPRESSOR. SELMA B. BUSAINGER, San Leandro, Calif. Filed Jan. 6, 1932. Serial No. 584,941. 2 Claims. (Cl. 29—86.4.)



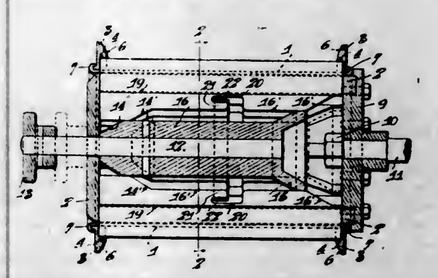
1. A piston ring compressor comprising a cylindrically-shaped sleeve open on one side and composed of spring sheet metal, the edges of said opening being spaced a material distance apart, one of the curved ends of the sleeve being bent inwardly and the other being bent outwardly, each of the said opening edges having an outwardly and backwardly extending flange thereon, means adapted to coact with each of said flanges and to draw them together, said means comprising an arcuate band having a hook on one end adapted to hook onto one of the flanges of the sleeve, said band having a flange on its other end, and means for drawing together said latter flange and the other flange of the compressor.

1,901,225. LAWN SPRINKLER. JOHN HENDERSON BUTLER, Berkshire Township, Delaware County, Ohio. Filed June 25, 1932. Serial No. 619,185. 4 Claims. (Cl. 299—69.)



1. In a sprinkling device, the combination of a rotatably mounted water jet discharging nozzle and a vane placed at such a distance from the nozzle that in operation the amount of water that hits the vane is automatically adjusted to the minimum necessary to drive the vane.

1,901,226. FLANGED SPOOL AND HOLDER THEREFOR. RALPH H. CARTER, Johnson City, Tenn., assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed July 13, 1932. Serial No. 622,349. 10 Claims. (Cl. 242—130.)

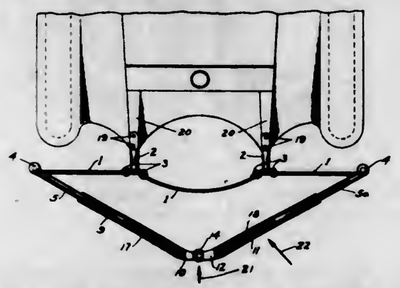


1. In combination, a collapsible spool holder with blades associated therewith, and a spool portion provided with flanges, slotted throughout its length to a distance sufficient to extend into the flanges of said spool.

5. In combination, a spool holder including blade-like elements adapted to be projected outwardly, and a spool, said spool having a flange at either end, slots running lengthwise of the spool and positioned so as to coincide with the position of the above-noted blade-like elements,

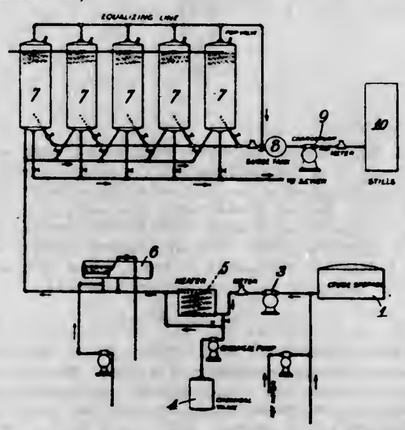
said blades and slots being of sufficient length to extend partly into the said flanges when the said blade-like elements are in projected position, said flanges being provided with openings coinciding with the ends of the slots, and adapted to accommodate the blades when they are in projected position, said flanges being provided with surfaces adapted to limit the outward motion of said blades when they are being projected.

1,901,227. VEHICLE BUMPER. FRANK M. COSSALTER, Goldbar, Wash. Filed Mar. 19, 1932. Serial No. 599,999. 1 Claim. (Cl. 293—55.)



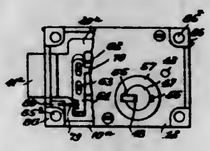
In a vehicle bumper the combination of a pair of tubular members having one of each of their ends hinged together, a rod slidable within the free end of each of the tubular members, means for pivotally securing the projecting end of each rod to the chassis of a vehicle so that said projecting ends are in spaced relation with respect to each other, a spring within each tubular member and between its rod and the hinge point of the said tubular members whereby the action of said springs normally preserves the entire assembly in V-shaped formation so that a blow upon the said hinge point of the tubular members will cause both tubular members to slide toward the pivotal connections between the rods and the chassis, and a blow upon either of the tubular members will cause the other tubular member to slide towards the pivotal connection between its rod and the chassis.

1,901,228. PROCESS FOR THE REMOVAL OF IMPURITIES FROM CRUDE PETROLEUM. LLOYD L. DAVIS, ALFRED HENRIKSEN, and JOHN J. ALLINSON, Ponca City, Okla., assignors to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed July 5, 1928. Serial No. 290,409. 8 Claims. (Cl. 196—4.)



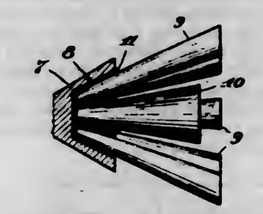
1. A process for the removal of water soluble mineral compounds from petroleum oil including the steps of adding water to the salt-containing petroleum oil, thereafter heating the mixture thus formed with sufficient incidental agitation to dissolve the salt in the added water, said heating being to a temperature below the boiling point of such mixture, but sufficiently high to rupture the asphaltic films surrounding the salt whereby the added water is enabled to dissolve the same, filtering the mixture and separating the brine from the oil by settling.

1,901,229. MULTIPLE KEY LOCK. WILLIAM F. DIESEL, Rochester, N. Y., assignor to Sargent & Greenleaf, Inc., Rochester, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,251. 19 Claims. (Cl. 70—71.)



1. A lock comprising a support, a bolt movable thereon, a rotary key receiving element for moving the bolt, and means including relatively adjustable parts for controlling the bolt arranged to be conditioned by the use at one operation of a control key operating in said element whereby to render said parts responsive to subsequent operations by a different key inserted in said element for adjusting the parts to free the bolt.

1,901,230. TOOTHBRUSH. HAROLD PALMER DUBY, Los Angeles, Calif. Filed Apr. 5, 1932. Serial No. 603,269. 4 Claims. (Cl. 15—167.)



1. In a tooth brush, a brush head comprising a central tuft of bristles, and an annular arrangement of spaced individual tufts of bristles encircling said central tuft and protruding at their outer ends beyond the outer end of said central tuft.

1,901,231. TIRE CASING REPAIR APPARATUS. ALBERT H. FISHER, East Cleveland, Ohio, assignor to Kex Company, Incorporated, St. Louis, Mo., a Corporation of Missouri. Filed July 25, 1927. Serial No. 208,152. 2 Claims. (Cl. 152—27.)



1. A tire casing repair apparatus forming an individual semi-permanent, self-contained unit, comprising a rubber plug of mushroom-shape having a head section and a stem

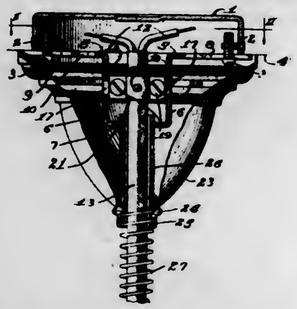
section and a metal inserting terminal semi-permanently connected with the extreme end only of said stem section, said terminal providing an inserting point adjacent one end of a plurality of outwardly diverging clamping elements with hook shaped jaws adjacent the opposite end and a tapered sleeve engaged over said clamping elements and holding the ends thereof in firm clamping engagement with the end of the stem, the taper and position of said sleeve providing for an increase of clamping engagement with the end of the repair plug as the sleeve is drawn through the puncture aperture in the tire casing.

1,901,232. DROP CORD PROTECTOR. JOHN B. GLOWACKI, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,541. 3 Claims. (Cl. 247—30.)



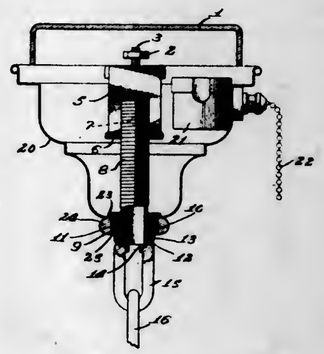
1. The combination with an outlet box cover and a drop cord projecting therethrough, of a protector for said drop cord comprising an apertured split member, apertured projections integrally formed thereon, a clamping member projecting through said apertured projections to permit the apertured split member to be clamped on the drop cord, and means on said apertured member coacting with the cover to hold the protector against rotation with respect to said cover.

1,901,233. DROP CORD AND CANOPY SUPPORTING BRIDGE. JOHN B. GLOWACKI, Chicago, Ill. Filed Feb. 9, 1931. Serial No. 514,475. 19 Claims. (Cl. 247—20.)



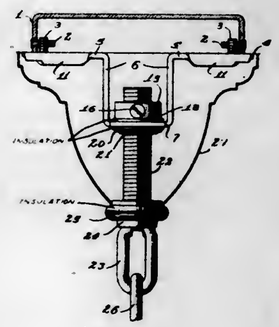
1. A drop cord and canopy supporting device comprising a U-shaped bridge having openings therein to adapt the same to be fitted to outlet boxes of different sizes, a drop cord gripping means bridged across the U-shaped bridge and a canopy supporting means adjustably connected with the bridge to enclose the bridge and hold the canopy in position.

1,901,234. FIXTURE AND CANOPY SUPPORT. JOHN H. GLOWACKI, Chicago, Ill. Filed Feb. 18, 1931. Serial No. 515,568. 8 Claims. (Cl. 240—85.)



1. A fixture and canopy supporting unit comprising a coupler attachable to a fixture supporting stem, a fixture supporting unit having a split head projecting into said coupling and engaged on said stem to hold the coupler locked in position, and a canopy supporting unit adjustably engaged on said coupler for supporting a canopy.

1,901,235. FIXTURE BRIDGE. JOHN B. GLOWACKI, Chicago, Ill. Filed Feb. 24, 1931. Serial No. 517,673. 4 Claims. (Cl. 240—85.)

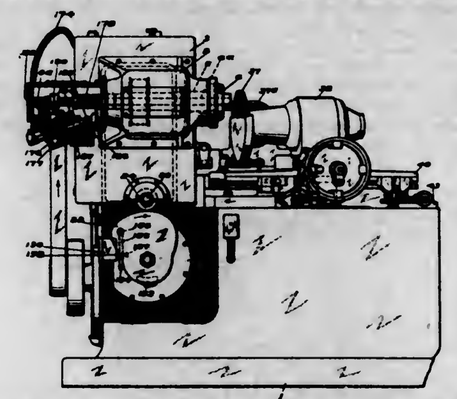


1. A fixture supporting device comprising a bridge member having slots therein to permit the bridge member to be removably attached to standard outlet boxes of different sizes by means of the outlet box cover supporting screws, guide flanges formed on said bridge member, and slotted extension blades slidably engaged between said guide flanges and adapted to be supported in position by means of the outlet box cover supporting screws.

1,901,236. GRINDING MACHINE. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 11, 1929. Serial No. 331,838. 19 Claims. (Cl. 51—8.)

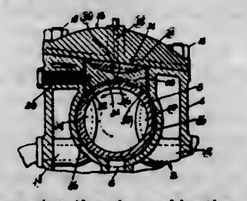
1. In apparatus of the class described, a pair of tables or carriages, individual fluid pressure means to operate

said carriages, means for setting in operation the fluid pressure to procure movement of one of said carriages,



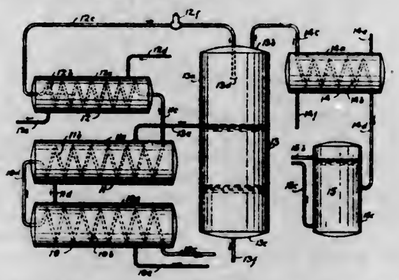
and means responsive to movement of said first carriage for setting the fluid pressure in operation to move the other carriage.

1,901,237. VALVE CONSTRUCTION. HARVEY H. HALLER, Los Angeles, Calif., assignor to The Wehr Motor Company, Los Angeles, Calif., a Corporation of California. Filed July 19, 1930. Serial No. 469,179. 9 Claims. (Cl. 123—190.)



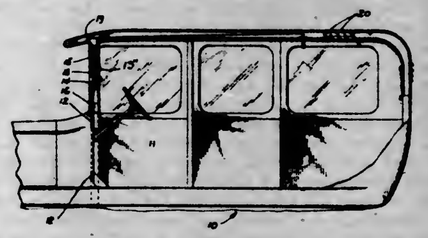
1. In a valve construction, in combination with a double-concave shoe, a plano-convex shoe provided with cut-out portions in the sides thereof for rendering said plano-convex shoe more elastic.

1,901,238. PROCESS OF RECOVERING DRIP OIL FROM CERTAIN RESIDUUMS. GUY N. HARCOURT, Larchmont, N. Y., assignor, by mesne assignments, to Alco Products Incorporated, New York, N. Y., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 440,937. 1 Claim. (Cl. 196—5.)



A process of recovering drip oil from water gas tar comprising heating the tar above the boiling point of water in a plurality of heating stages, the first of which comprises a heat exchange step with water previously separated from the process and the second of which comprises a heating step with heat supplied from an independent source, spraying the oil under sub-atmospheric pressure into a vaporizing and separating zone, continuously withdrawing unvaporized water and tar from separate points within said zone, utilizing the heat from said water to preheat the tar in said first heat exchange step, continuously withdrawing vapors from said zone, condensing said vapors and separating the drip oil from the aqueous portion of the condensate.

1,901,239. INCLOSED BODY FOR AUTOMOBILES. GEORGE N. HEIN, San Francisco, Calif. Filed Feb. 23, 1926. Serial No. 89,833. 6 Claims. (Cl. 296—28.)

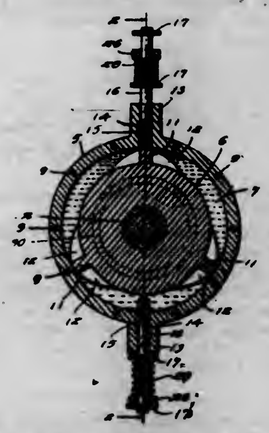


3. An inclosed body for motor vehicles comprising a body, a top therefor, a door on each side of said body hinged to said body, a front corner post of elongated cross sectional area disposed with its major cross sectional dimension in the line of vision of the operator and extending from said body to said top and inclined rearwardly from the axis of the hinge connection between said door and said body, and a windshield of trapezoidal configuration supported between said corner posts in a rearwardly inclined position.

1,901,240. METHOD OF DEWAXING OILS. ALFRED HENRIKSEN, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Jan. 18, 1930. Serial No. 421,815. 4 Claims. (Cl. 196—19.)

1. A method for removing wax from wax-containing oils comprising the steps of adding a suitable solvent and a colloidal asphaltite, chilling the mixture to the desired temperature, and subjecting the chilled mixture to a centrifugal action.

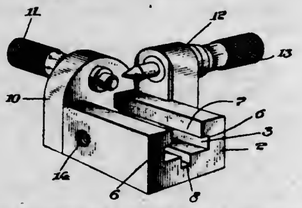
1,901,241. HYDRAULIC CLUTCH. WILLIS O. HIGBY, West Leyden, and WILLARD C. HIGBY, Ithaca, N. Y. Filed Feb. 11, 1932. Serial No. 592,850. 1 Claim. (Cl. 192—58.)



A clutch of the character described comprising a casing formed to provide a circular chamber and having a side wall, an end wall integral with the side wall, and a second end wall removably attached to the side wall, means for coupling one end of a shaft to the radial center

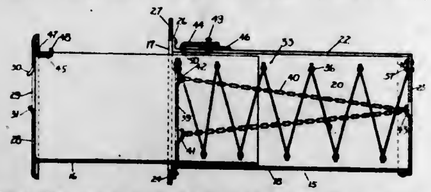
of the first mentioned end wall, a rotor within the chamber and concentric with said shaft, a second shaft secured at one end in the radial center of the rotor and extending through the removable end wall, said rotor being of materially less diameter than the chamber, a plurality of paddles disposed transversely of the periphery of the rotor and extending the full width thereof and further engaging at their free edges the wall of the chamber, said casing side wall having diametrically opposed recesses therein opening into the chamber, a blade reciprocably mounted in each of said recesses for extension into the chamber for contact with said rotor, said chamber containing a fluid surrounding the rotor, a stem carried by each of said blades and extending through the casing wall to the exterior thereof, a pair of lever members each having two angularly disposed arms and each further having one arm pivotally attached to the casing adjacent a stem and having its other arm arranged with the adjacent stem slidably extended therethrough, a pair of stops carried by each stem with the attached arm disposed therebetween, a spring member surrounding each stem between the inner stop and the attached arm, means for oscillating said levers, and cam means carried by the rotor at each side of each paddle for facilitating the passing of the paddles and blades in the slipping of the clutch.

1,901,242. CIRCULAR CHASER GRINDING GAUGE. WILLIAM J. HOGG, Cleveland, Ohio, assignor to The National Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 9, 1931. Serial No. 543,098. 11 Claims. (Cl. 33—185.)



3. A circular chaser gauge having a chaser supporting block having a guide-way for the insertion of a chaser slide therein, an adjustable stop and an adjustable micrometer located transversely to each other on said block.

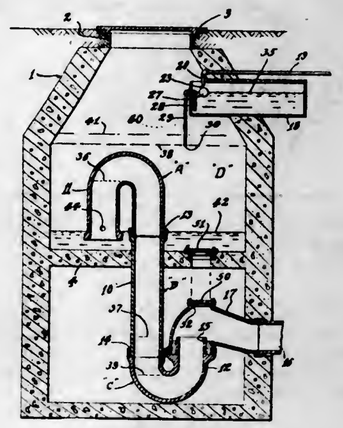
1,901,243. DISPENSER. PAUL H. HORWITT, Springfield, Mass., assignor to The Menasha Products Company, Chicago, Ill., a Corporation of Wisconsin. Filed Jan. 17, 1930. Serial No. 421,336. 1 Claim. (Cl. 312—61.)



In a dispenser, a casing having a rear wall, a follower plate, spring means to urge said plate towards the front of said casing, and means to limit forward movement of said plate, said limiting means comprising a chain anchored at the middle thereof on a hook centrally positioned on said rear plate and having the two ends thereof secured, respectively, to points adjacent the upper and lower margins of said plate.

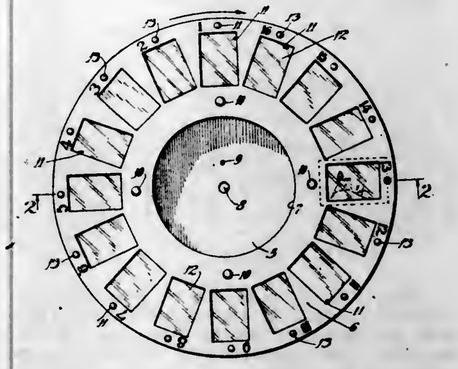
1,901,244. APPARATUS FOR AUTOMATICALLY FLUSHING SEWERS. HOWARD W. JEWELL, Los Angeles, Calif. Filed Apr. 18, 1931. Serial No. 531,135. 3 Claims. (Cl. 137—106.)

2. In a sewer flushing system, a tank, a siphon of large capacity for periodically discharging liquid contents from said tank in response to the rapid rise of liquid in said tank above a predetermined level, an auxiliary tank positioned above said predetermined level, a second siphon for discharging liquid contents from said auxiliary tank into said first tank, said second siphon requiring an initial flow of liquid in excess of a predetermined rate of flow to start its siphonic action, and having its discharge end positioned in said first tank substantially at said predetermined level, means for constantly supplying liquid to said auxiliary tank at less than said predeter-



mined rate of flow, whereby liquid from said means fills said auxiliary tank and overflows through said second siphon into said first tank without setting up siphonic action in said second siphon until the liquid in said first tank rises to said predetermined level and contacts with the discharge end of said second siphon to initiate siphonic action therein, whereby the contents of said auxiliary tank are quickly transferred to said first tank, thus producing a rapid rise of liquid in the first tank to start the siphonic action of the first siphon.

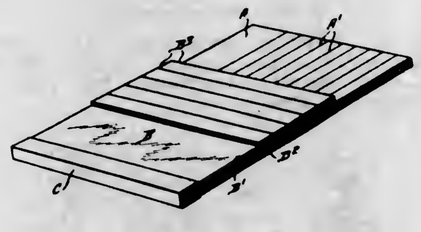
1,901,245. INTERCHANGEABLE HOLDING MEMBER FOR PROJECTION MACHINES. FRANK N. JONES, Chicago, Ill. Filed Sept. 6, 1930. Serial No. 480,128. 4 Claims. (Cl. 88—27.)



1. An interchangeable holding member for projection machines, comprising a main circular light weight disc

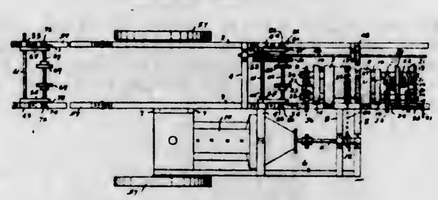
member composed of aluminum or equivalent light weight material, a supplementary disc member of similar material overlapping said main disc member and having its inner edge spaced from the center of said main disc member, registering openings in both said main disc member and said supplementary disc member, a picture film inserted between said disc members, and permanent fastening elements securing said disc members together adjacent said openings to prevent removal of said picture film.

1,901,246. BOOK, PAD, AND TABLET, AND LINE RULER THEREFOR. PHILLIP H. KAUFMANN, Cleveland Heights, Ohio. Filed Sept. 26, 1930. Serial No. 484,604. 10 Claims. (Cl. 281—3.)



1. A line ruler comprising a sheet provided with spaced narrow, line-like, relatively weak areas extending thereacross for facilitating bending, the distance between said areas being great relative to the width thereof.

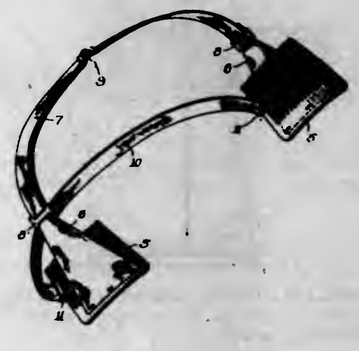
1,901,247. PIPE CLEANING MACHINE. FRANK KINZBACH, Houston, Tex. Filed Feb. 1, 1927. Serial No. 165,100. 4 Claims. (Cl. 29—81.)



1. A pipe cleaning machine including means for propelling a pipe lengthwise, a rotatable frame adapted to surround the pipe, cleaning means mounted in the frame and adapted to operate against the surface of the pipe, means for driving said propelling means and frame and means for moving said cleaning means outwardly from the pipe, said moving means including a ring on said frame and normally rotatable therewith, means for retarding the rotation of said ring relative to the frame rotation and operative connections between said ring and cleaning means.

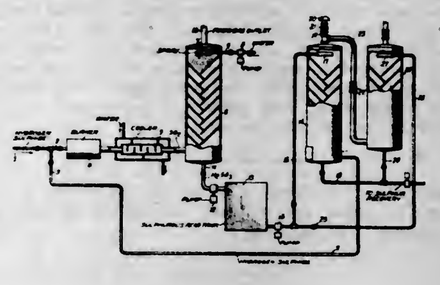
1,901,248. DEVICE FOR ELIMINATING FACIAL WRINKLES. EDITH A. LARSEN, Chicago, Ill. Filed Nov. 20, 1929. Serial No. 408,607. 6 Claims. (Cl. 128—76.)

4. A device for eliminating facial wrinkles comprising, in combination, a pair of combs having teeth adapted to be inserted upwardly and rearwardly into and to grip firmly the hair adjacent the temples respectively, and a pair of head bands attached to the backs of said combs



and adapted to pass around the head to place a tensioning draw on the combs and make them pull the hair and scalp.

1,901,249. METHOD AND APPARATUS FOR CONVERTING HYDROGEN SULPHIDE INTO SULPHUR. BERT H. LINCOLN, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed July 25, 1932. Serial No. 624,641. 4 Claims. (Cl. 23—226.)

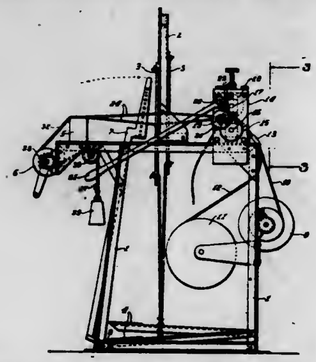


1. A process of converting hydrogen sulphide into sulphur comprising the steps of burning a portion of the hydrogen sulphide to form sulphur dioxide, absorbing the sulphur dioxide thus formed in water to form sulphurous acid, and contacting the sulphurous acid with the remaining portion of the hydrogen sulphide to form sulphur.

1,901,250. METHOD AND APPARATUS FOR WEAVING. PETER MATTLER, St. Louis, Mo., assignor to Johnson-Stephens & Shinkle Shoe Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 23, 1929. Serial No. 349,337. 13 Claims. (Cl. 139—11.)

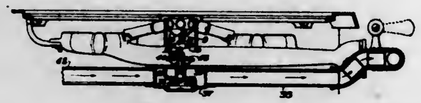
1. A machine for weaving fabrics, comprising, means for feeding a wide band of weaving material simul-

taneously with a similar band of backing material, means for putting the weaving material into a plurality of



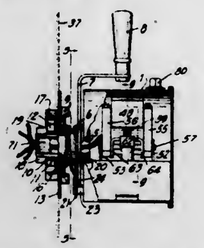
strips against the backing material, and weaving mechanism mounted to receive the cut strips as the warp for the fabric to be woven.

1,901,251. IGNITION SYSTEM FOR GAS BURNERS. RUFUS H. MAURER, Brookline, Mass., assignor to Spencer Thermostat Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 14, 1929. Serial No. 399,657. 2 Claims. (Cl. 158—115.)



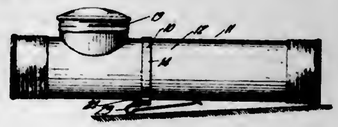
1. In combination, a gas range having a plurality of burners, a pilot light casing, tubes branching from said pilot light casing to each of said burners, said pilot light casing and said tubes forming an integrated, rigid, removable structure normally supported by said burners, a pilot burner separate from said pilot light casing and unattached thereto, said pilot burner being constructed and arranged to maintain a flame within said casing, and a thermostatically controlled valve controlling the gas supply of all said burners in accordance with the condition of the pilot burner.

1,901,252. SWITCH. FRANCIS R. MEGINNISS, Albany, N. Y. Filed Apr. 3, 1930. Serial No. 441,365. 14 Claims. (Cl. 200—69.)



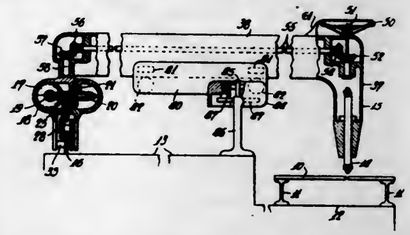
13. In a switch of the character described, the combination with a fluid-tight container, of means therein for making or breaking an electrical circuit, movable means exterior of the container for building up potential energy, and means for transforming said energy into kinetic energy and transmitting it by a bodily movement of said container to said first mentioned means to effect an actuation thereof.

1,901,253. CLAMP AND SUPPORT FOR FLASH LIGHTS. FRANCIS R. MEGINNISS, Albany, N. Y. Filed Dec. 10, 1930. Serial No. 501,876. 7 Claims. (Cl. 240—52.5.)



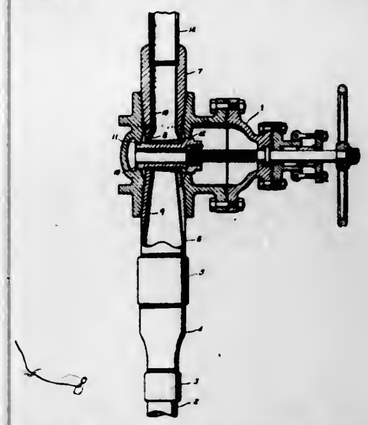
1. In combination, a flashlight provided with a casing, a clamping member comprising a loop formed of resilient material having slitted portions interfitted with each other and movable relatively to each other whereby said loop may frictionally engage said casing, and a support for the flashlight on said loop.

1,901,254. CUTTING MECHANISM. ADOLF MESSER, Frankfort-on-the-Main, Germany. Filed Apr. 19, 1932, Serial No. 606,274, and in Germany May 1, 1931. 15 Claims. (Cl. 266—23.)



1. A cutting apparatus having a frame structure, a pair of spaced supports therefor, a torch on said frame structure, power driven means remote from the torch for moving said frame structure and said torch along the work, and means amnually operable from a point close to said torch for guiding said torch.

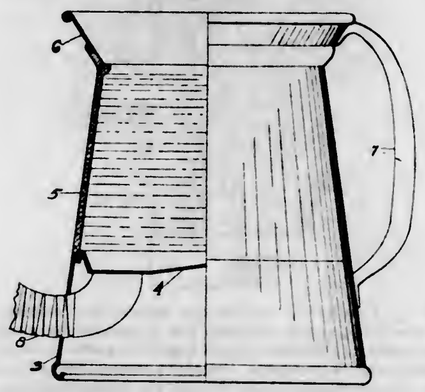
1,901,255. GATE VALVE. DANIEL J. MORAN, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Aug. 15, 1931. Serial No. 557,229. 4 Claims. (Cl. 251—62.)



1. In an oil well valve assembly, a conventional gate valve having a valve seat and inlet and outlet ports, a member to protect the seat from the abrasive action of the solid particles in the oil comprising, an abrasion

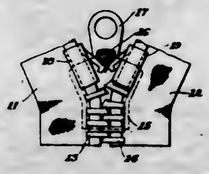
resisting fitting removably positioned in the inlet port through which the effluent oil is adapted to flow, said fitting having an internal cross-section of progressively decreasing diameter and terminating in an orifice having a smaller diameter than the valve seat, said fitting adapted to convert the effluent oil stream into a jet for projection thereof past the valve seat without contacting the same.

1,901,256. NONDECANTING LIQUID MEASURE. RICHARD B. MUNDAY, Dayton, Ohio, assignor, by mesne assignments, to The Cincinnati Ball Crank Co., Cincinnati, Ohio, a Corporation of Ohio. Filed July 17, 1929. Serial No. 378,899. 2 Claims. (Cl. 221—25.)



1. A non-decanting open top liquid dispensing measure, comprising, a transparent shell, a metallic outwardly flaring rim socketed within the upper end of the shell, a metallic base for the lower end of the shell providing a bottom for the shell and a supporting skirt, the base formed with an annular recess at the juncture of the bottom and skirt for a socketed connection with the lower end of the shell, and a handle connecting said metallic rim and base.

1,901,257. LOCK SLIDER. SAMUEL H. NORTON, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Jan. 10, 1930. Serial No. 419,816. 10 Claims. (Cl. 24—205.)

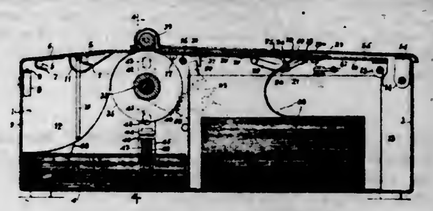


1. In a slide fastener having opposed series of fastener elements, a slider movable along the same to control the interlocking thereof, said slider having a wedging portion which enters between the fastener elements to disengage them when the slider is moved in one direction, and slider locking means for engagement with said wedging portion to lock the slider against unintended movement in fastener opening direction.

1,901,258. AUTOGRAPHIC REGISTER. FRANK E. PFEIFFER, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed May 4, 1931. Serial No. 534,874. 30 Claims. (Cl. 282—16.)

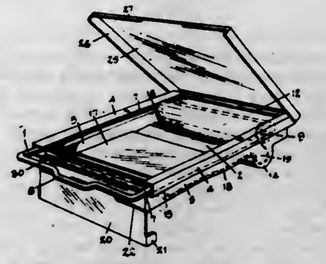
1. In an apparatus for feeding and aligning a plurality of superimposed strips of paper having transverse creases

therein, a fixed table having an edge thereon, means for pulling the strips over the table, and means operable at a



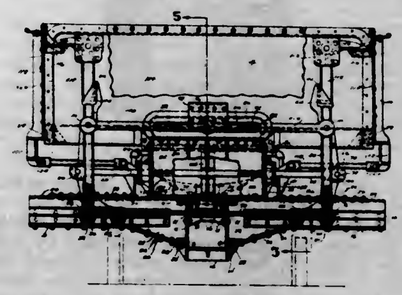
certain stage in the operation of the apparatus for moving and holding the strips against the edge whereby the strips are aligned when the creases reach the edge.

1,901,259. CONTAINER AND ROLLER OF CIGARETTES. JAMES G. POSTTEUS, Toledo, Ohio. Filed Oct. 14, 1931. Serial No. 568,682. 2 Claims. (Cl. 131—5.)



1. In a contained for cigarettes, the side walls of the container having channels, a U-shaped handle member slidably supported in the channels, a cross head connected to the handle and adapted to be reciprocated through substantially the entire length of the container in a plane parallel to the plane of the major portion of the bottom wall of the container, and a flexible element connected to the container at points proximate to the ends of the stroke of the cross head, the flexible sheet element being adapted to be slidably engaged by the cross head, portions of the flexible sheet element being adapted to receive cigarette materials and located between the cross head and the bottom wall of the container for compressing the cigarette materials into cigarette form.

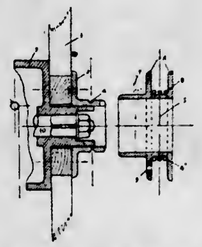
1,901,260. DUMP CAR. ROBERT E. POWERS, New York, N. Y. Filed Nov. 1, 1927. Serial No. 230,257. 56 Claims. (Cl. 105—265.)



2. In a dump car, a body, an underframe comprising a center sill and transverse members adjacent each end thereof, rocker elements connected to said body and

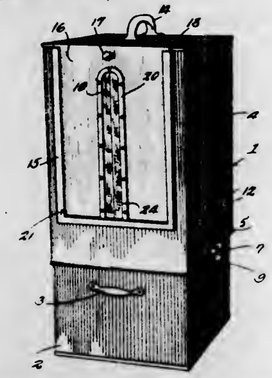
mounted on the center sill for tilting said body, connected sectional strut elements mounted for lateral movement on the transverse members, said strut elements supporting the body in normal position, fluid pressure means for moving said strut elements to free the latter from body supporting position, and side gates normally retained in closed position by said strut elements.

1,901,261. AUTOMOBILE EXTRACTOR. SEBASTIÃO KNEIPP RAMOS, Lagoa Vermelha, Brazil. Filed Jan. 29, 1930, Serial No. 424,348, and in Brazil Feb. 24, 1929. 1 Claim. (Cl. 242—95.)



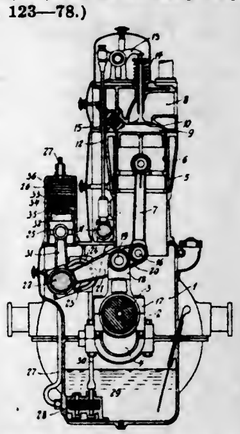
An automobile extractor for use in connection with automobiles having a rear wheel and a hub forming part thereof including a sleeve element to slidably interfit with and overlie the full length and extend beyond the hub of the rear wheel, means for securing the sleeve to the hub, the sleeve being integrally formed with spaced annular flanges to provide a cable drum, the outer flange being coincident with the extreme outer edge of the sleeve, the inner flange being coincident with that portion of the sleeve immediately overlying the extreme outer end of the hub of the wheel when the sleeve is in position on the hub, the sleeve inwardly of the inner flange being without projection, the disposition of the drum forming flanges maintaining the cable wholly beyond the end of the wheel hub to thereby avoid contact of such cable with the hub of the forward wheel of the vehicle in the operation of the extractor.

1,901,262. DUST COLLECTOR. ELI ROBIDEAU, Malone, N. Y. Filed Dec. 10, 1929. Serial No. 413,094. 2 Claims. (Cl. 15—142.)



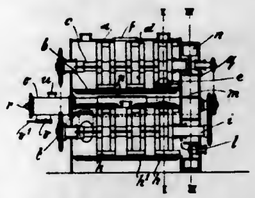
1. A dust collector comprising a cabinet having an opening for the reception of the article which is to be rid of dust, the cabinet including a base and a cap fitting over the base, the cap being provided at its lower end with an outwardly flared flange which facilitates the introduction of the upper end of the base into the lower end of the cap, a stud carried by the base, and a nut on the stud and engaging the side wall of the cap, the flange of the cap having in its lower edge a notch which receives the stud, the flange extending outwardly beneath the nut to retain the cap when the nut is loosened slightly, the cap being supplied with an internal support which engages the upper end of the base.

1,901,263. INTERNAL COMBUSTION ENGINE. OTTO SEVERIN RUUD, Oslo, Norway. Filed Nov. 25, 1931. Serial No. 577,341, and in Germany July 4, 1930. 14 Claims. (Cl. 123—78.)



1. In an internal combustion engine the combination of a working piston, a crank pin, a pitman rod made in two parts, a leverage connecting the pitman parts together, and a yieldable resistance controlling the position of said leverage and thereby the operative length of the pitman.

1,901,264. METHOD OF PRODUCING ANIMAL FOOD. CONRAD SCHLOTTERHOSE, Wesermunde-Wulsdorf, Germany. Original application filed Jan. 30, 1931, Serial No. 512,426, and in Germany Nov. 26, 1930. Divided and this application filed Feb. 20, 1932. Serial No. 594,353. 3 Claims. (Cl. 99—11.)

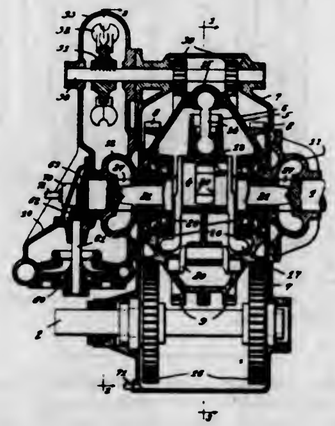


1. A method for producing animal foods from protein substances containing water, especially from fish having a low percentage of fat and other material containing glue, consisting in heating the material and in removing the adhesive property of the glue causing the caking on the heating surfaces by repeated cooling of the material during the heating periods.

1,901,265. TRANSMISSION. HEINRICH SCHNEIDER, Beloit, Wis. Filed July 7, 1928. Serial No. 291,075. 19 Claims. (Cl. 60—54.)

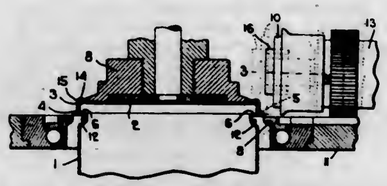
10. In a hydraulic transmission the combination of driving and driven members, a differential pump comprising a crank driven by the driving member, an inner cylinder rotor bearing on the crank, an outer piston rotor eccentric with relation to the inner rotor but having a driving connection therewith and serving to drive the driven member, and pistons flexibly connected with the outer rotor and operating in cylinders of the inner rotor, a turbine having a driving connection with the driven member for transmitting its torque thereto, said driving

connection being afforded through a step-down gearing connection with the outer rotor, the same comprising a pinion driven by the turbine meshing with a toothed rim provided on the outer rotor, and an adjustable nozzle for



discharging fluid from the pump to operate the turbine, said nozzle being arranged to be controlled to determine the power transmission ratio between the driving and driven members.

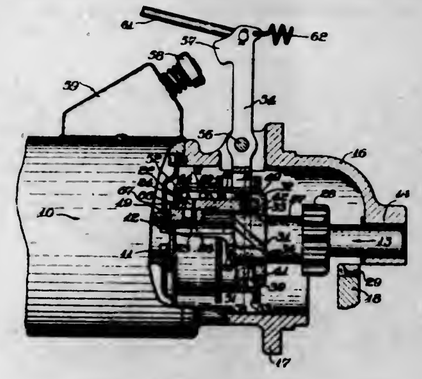
1,901,266. MACHINE FOR SEALING CANS. HARRY SEBELL, Boston, Mass., assignor to Arthur H. Parker, Lexington, Mass. Filed July 11, 1930. Serial No. 467,177. 6 Claims. (Cl. 113—1.)



1. In a can-sealing machine for sealing a can cover to a can body with a U-shaped sealing strip, the combination with two rotatable sealing members between which the U-shaped sealing strip passes and by which said sealing strip is applied to the can cover and can body, one of said sealing members being in the form of a wheel, of a presser roll situated axially of the sealing wheel and rotatable relative thereto and arranged to act on the portion of the can cover which overlies the edge of the can body.

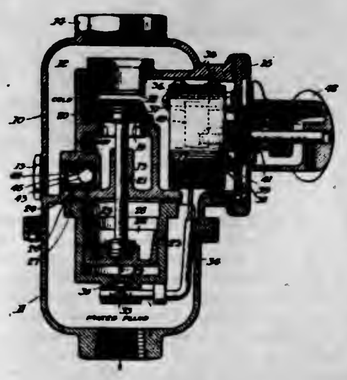
1,901,267. STARTING MECHANISM FOR INTERNAL COMBUSTION ENGINES. YOUSTON SEKELLA, Elmira Heights, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed June 30, 1931. Serial No. 548,019. 16 Claims. (Cl. 74—7.)

1. In a starting mechanism for internal combustion engines, a power shaft, a driving member slidably mounted thereon for movement into and out of engagement with a member of an engine to be started, an actuating member, cooperating means on said driving and actuating members including an inclined connection and a yielding detent whereby longitudinal movement of the actuating member is positively transmitted to the driving member



when the parts are in their normal driving relative positions, said means allowing substantially unimpeded relative longitudinal movement toward their normal positions.

1,901,268. WATER MIXER. MORTON O. SNEDIKER, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1931. Serial No. 580,363. 6 Claims. (Cl. 236—12.)

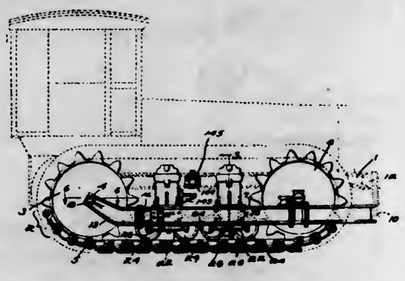


1. In combination, a casing having a mixing valve and a piston for controlling the same and provided with hot and cold fluid chambers and connections thereto for hot and cold fluid supply lines, a thermostat immediately adjacent to the outlet from the mixing valve, a pilot valve operated by said thermostat for controlling the admission of fluids to both sides of said piston, and means within the casing, sensitive to an unbalanced pressure condition in the hot and cold supply lines for utilizing the fluid having the dominant pressure for positioning said piston under the control of said pilot valve.

1,901,269. TRACKLAYING TRACTOR. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed Oct. 6, 1926. Serial No. 139,892. 5 Claims. (Cl. 305—9.)

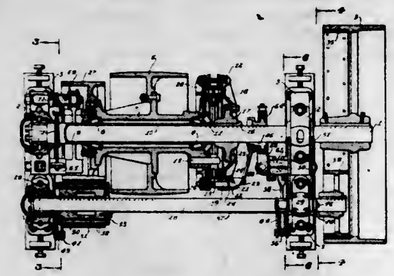
1. In a track laying tractor, a pivoted track laying structure having a driving sprocket arranged with its axis coincident with the axis of the track laying struc-

ture, said track structure including a U-shaped frame pivoted at the open end of the U, the outer leg of said U-shaped frame having a detachable bearing portion sepa-



rable from said frame at a point beyond the rim of said driving sprocket whereby said sprocket may be removed without removing said track structure.

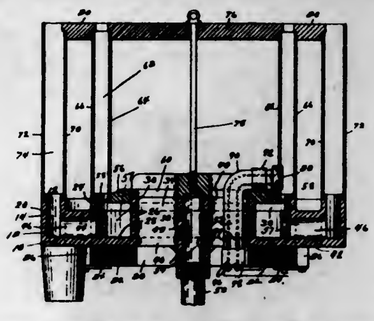
1,901,270. DRIVING MECHANISM. FRED D. STANLEY, Coffeyville, Kans., assignor to The Oil Country Specialties Mfg. Co., Coffeyville, Kans., a Corporation of Kansas. Filed Nov. 26, 1930. Serial No. 498,240. 2 Claims. (Cl. 74—26.)



1. A reversible driving mechanism, comprising, a base, a main shaft journaled thereon, a wheel on said shaft, a yielding friction lining on an inner cylindrical surface of said wheel, means for driving said wheel, a driven wheel mounted on said shaft, a friction drum having a plain exterior cylindrical friction surface and rigidly connected to rotate with said driven wheel, an auxiliary shaft having a pair of friction elements rigidly secured to rotate together thereon, one of said elements having a plain exterior cylindrical friction surface engageable with the lined interior surface of said first wheel and the other having a yielding cylindrical friction facing engageable with the friction surface of said drum, means for mounting said auxiliary shaft including bearings at both ends thereof mounted for movement on said base, means for moving said bearings individually to force said friction elements into and out of engagement with their respective cooperating surfaces, and a clutch adapted to connect said driven wheel to rotate with said first wheel.

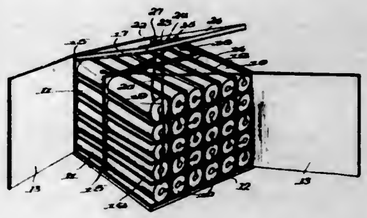
1,901,271. LIQUID FUEL BURNER. WILLIAM EDWARD TAFT, Athol, Mass., assignor to Taft Oil Burner Company, Athol, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 457,854. 4 Claims. (Cl. 158—81.)

1. A liquid fuel burner having a vaporizing channel that has an opening at the top, spaced combustion tubes surrounding and upstanding above said opening, an electric heating element located in a position to heat and vaporize the liquid fuel in said channel, and a resistance conductor disposed within the bottom of the space between said tubes and immediately above the open top of said channel in position to ignite the fuel vapors at the time



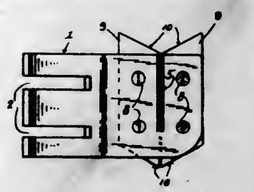
they issue from said open top, said heating element and resistance conductor being connected together for concurrent energization.

1,901,272. COORDINATED BATTERY CONSTRUCTION. LYSLE G. TATRO, Decorah, Iowa, assignor to H. B. Montgomery, Decorah, Iowa. Filed Apr. 16, 1930. Serial No. 444,822. 3 Claims. (Cl. 136—109.)



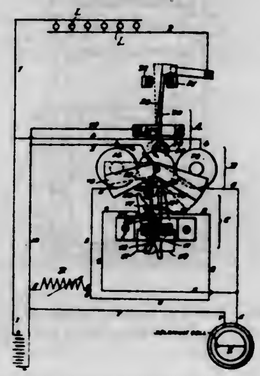
2. A battery unit comprising a casing, a group of relatively deep series connected cells, a second group of series connected cells of the same diameter as those of the first group but relatively short in comparison thereto, said two groups of cells being assembled in diametrically superposed relation in said casing, and terminals carried by said casing connected to the ends of said two groups of cells, substantially as and for the purposes described.

1,901,273. SILK CLEANER. JAMES FYFE TAYLOR, South Bethlehem, Pa. Filed Apr. 16, 1932. Serial No. 605,712. 2 Claims. (Cl. 28—68.)



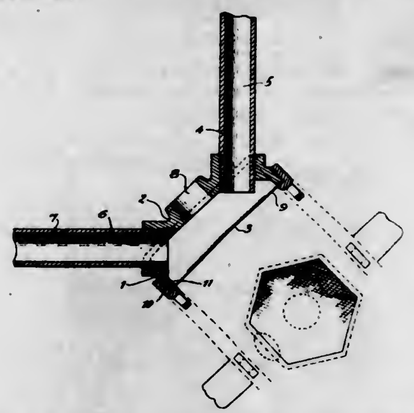
1. A silk cleaner comprising a supporting arm, means for mounting said supposting arm in position on a machine, said arm having a thread retaining slot extending transversely thereinto from one longitudinal edge thereof, the arm further having holes therein adjacent one side of the slot and comparatively short, longitudinal slots therein adjacent the other side of the thread slot, duplicate, removable interchangeable guides mounted on the arm on opposite sides of the thread slot, and securing elements for the guides engaged in the holes and in the longitudinal slots.

1,901,274. CONTROLLING MEANS FOR ELECTRIC LIGHTING INSTALLATION OF RAILWAY CARS. FERUCCIO TRINCHERO, Genoa, Italy, assignor to Enrico Garda, Turin, Italy. Filed Feb. 6, 1928. Serial No. 252,343. 1 Claim. (Cl. 250—41.5.)



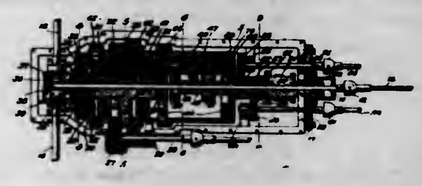
An electric lighting installation especially adapted for lighting railway cars including a main circuit, a shunt circuit connected with the main circuit and including a selenium cell and an electro-magnet, a second circuit connected in shunt with the main circuit and including a second electro-magnet and a variable resistance, a circuit interrupter in said main circuit, an armature associated with said interrupter and actuated by said magnets to effect the opening and closing of said main circuit, means for cutting out said resistance temporarily in said second named shunt circuit in response to a current in said second named shunt circuit larger than the current in said first named shunt circuit and means for cutting out said selenium cell temporarily in said first named circuit in response to a current in said first named shunt circuit larger than the current in said second named shunt circuit whereby said main circuit may be opened and closed according to any variation of intensity of light.

1,901,275. PREPARING DYE PASTE FOR PRINTING AND DYEING. ROBERT O. WOOD, Hamburg, N. Y., assignor to National Aniline & Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 26, 1929. Serial No. 388,526. 7 Claims. (Cl. 209—250.)



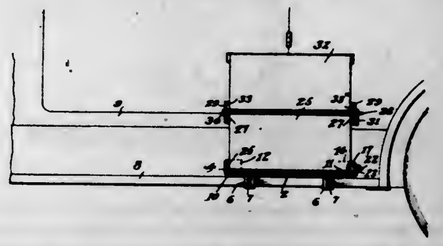
1. In the process for screening a dye paste which is so viscous through a screen which is so fine that under the static influence of gravity little of the paste will pass therethrough, the improvement which comprises sweeping a body of said dye paste across and in contact with the surface of the screen under the influence of an initial velocity head in excess of that due to normal gravity flow directed at an acute angle to the surface of the screen, and collecting the dye paste which passes through the interstices of the screen.

1,901,276. MOTOR VEHICLE DIFFERENTIAL GEAR DRIVE AND GUIDE IN FOUR WHEELS, COMBINED WITH TRIPLE DIFFERENTIAL AND BRAKE IN ONE UNIT. PETER PAUL ADAMS, Turkey River, Iowa. Filed Jan. 6, 1930. Serial No. 418,928. 6 Claims. (Cl. 74—99.)



1. A differential comprising a housing, a drive shaft journalled in said housing, a drive gear secured to said shaft, pinions journalled to said gear, driven gears meshing with said pinions, pinions journalled to said driven gears, power delivering gears in mesh with the second named pinions, front and rear power axles connected with said power delivering gears, brakes for holding either of the driven gears against rotation, and a braking means whereby the driven gears may be simultaneously held against rotation.

1,901,277. EGG CASE CARRIER. LEMMET L. AMSPACKER, Glasco, Kans. Filed Apr. 7, 1930. Serial No. 442,322. 2 Claims. (Cl. 224—29.)

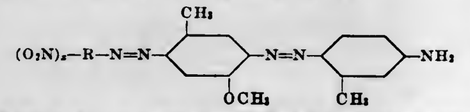


1. A carrier for holding end-cleated cases on autos, comprising a rectangular frame provided on one end, at two of its corners, with overhanging brackets, and supplied at its opposite end, at a third of its corners, with a straight, upstanding tongue, the frame being provided on one side with spaced upstanding stops, the opposite side of the frame, at the tongue, being open, so that a case can be slid upon the frame, against the stops, between the brackets on the one hand and the tongue on the other hand, with the cleat at one end of the case overhung and engaged by the brackets, a retainer having a vertical flange overlapping the open side of the frame, to hold the case against the stops, the retainer having a horizontal flange overhanging the tongue and overhanging the cleat at the opposite end of the case, to supplement the brackets in

holding down the case on the frame, and means for securing the retainer to the tongue removably, and for adjustment toward and away from the stops and the open side of the frame.

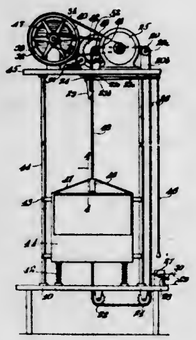
1,901,278. SECONDARY DISAZO DYESTUFFS. JAMES BADDILEY, Manchester, and JAMES HILL, Glastonbury, England, assignors to Imperial Chemical Industries Limited, Westminster, England. Filed July 21, 1932, Serial No. 623,906 and in Great Britain Feb. 12, 1926. 5 Claims. (Cl. 261—81.)

1. The process of manufacturing new secondary disazo dyestuffs, suitable for dyeing acetyl cellulose in even level shades, which comprises combining a diazotized nitroamine of the bensine or naphthalene series, including derivatives thereof except sulphonic acids and sulphonates with cresidine, rediazotizing and combining with *m*-toluidine, to produce dyes having the general formula



where *x* is 1 or 2 and R represents an aromatic residue free from sulphonic acid or sulphonate groups and which dye acetyl cellulose in even level shades.

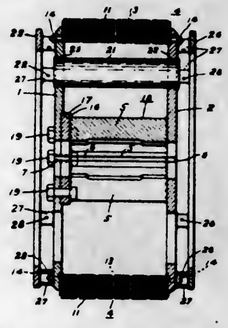
1,901,279. PACKAGE CARRIER. JAMES L. BALDWIN, Chicago, Ill. Filed Dec. 16, 1927. Serial No. 240,492. 5 Claims. (Cl. 187—3.)



1. An elevator lift comprising a power element, a driving clutch member operated by said power element, a driven clutch member automatically engaged by the driving clutch member when the power element has attained a suitable value, an elevator-operating shaft, a reduction-gearing between said driven clutch member and said shaft for the operation of the carrier in the lifting direction, a brake effective upon said driven clutch member, and a speed-responsive device energized by said shaft when the shaft is rotated at excess speed in the lowering direction to apply said brake.

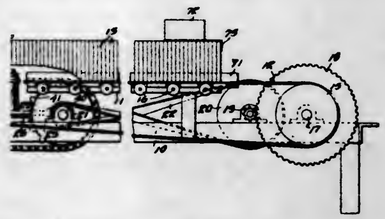
1,901,280. ROTOR CONSTRUCTION. HAROLD L. BARNHOLDT, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 26, 1929. Serial No. 350,024. 10 Claims. (Cl. 171—206.)

1. A fabricated rotor for a dynamo-electric machine comprising a shaft, a laminated core, two end plates disposed in spaced axial relation, a plurality of axially-disposed spacing pieces the ends of which are rigidly welded to one of said plates, means for removably attaching the



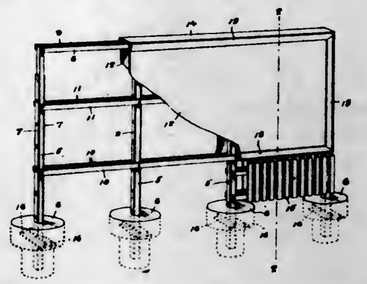
other of said plates to the opposite ends of said axial spacing pieces, said plates and one of said spacing pieces being keyed to said shaft.

1,901,281. TILE FEEDER. JAMES ARTHUR BOWER, Anderson, Ind., assignor to The National Tile Company, Anderson, Ind., a Corporation of Ohio. Filed June 1, 1931. Serial No. 541,496. 7 Claims. (Cl. 198—35.)



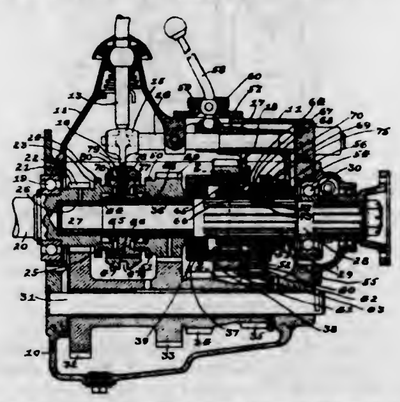
1. A tile feeder comprising an endless conveyor and means for intermittently driving the conveyor, a weighted hook for holding tile in an upright position on said conveyor, and an escapement device for releasing tile at the delivery end of the conveyor, means for intermittently operating the escapement device, and resilient means adjacent said escapement device for assisting in ejecting a tile upon the beginning of the operation of the said escapement device, substantially as set forth.

1,901,282. BILLBOARD CONSTRUCTION. ELIAS G. BURKET, Altoona, Pa. Filed Nov. 30, 1932. Serial No. 645,067. 1 Claim. (Cl. 40—125.)



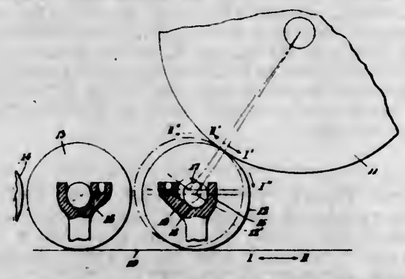
A billboard comprising a series of uprights, spaced longitudinal strips carried by said uprights and disposed at opposite sides thereof, face boards imposed upon said strips, a marginal framing about said face boards, the face boards being disposed opposite each other, end strips on the outermost of the uprights, and a head strip imposed upon the uppermost longitudinal strips.

1,901,283. TRANSMISSION MECHANISM. EVERETT R. BURTNETT, San Marino, Calif. Filed Oct. 28, 1931. Serial No. 570,715. 20 Claims. (Cl. 74—57.)



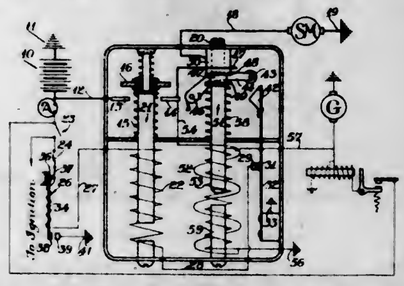
5. In transmission mechanism, a drive shaft, a driven shaft aligned with said drive shaft and having its driven end in journal engagement therewith, a sleeve shaped member, said sleeve shaped member being rotatably sleeved on said driven shaft member with its ends terminating within the ends of the latter, means for driving said sleeve shaped member from said drive shaft at the same speed as, or at different speed than, said drive shaft, said sleeve shaped member having a bell shaped portion with the bell opening toward the driving end of said driven shaft, cams rotatable with said driven shaft and disposed thereon within the bell portion of said sleeve shaped member, roller clutch members between said cams and the bore of said bell and to be actuated by the bell portion of said sleeve shaped member to drive said driven shaft through the medium of said cams in one direction and permit over-run of said driven shaft in the same direction under momentum of the latter, a coupling member mounted nonrotatable but axially movable on said driven shaft, said sleeve shaped member and coupling member each having parts to be engaged to positively prevent relative rotation therebetween, and means to shift said coupling member into positive engagement with said sleeve shaped member to optionally supplant the overrunning drive couple between said sleeve shaped and driven shaft members with a positive drive couple therebetween.

1,901,284. PRINTING PRESS. FRANK P. CARLSON, Astoria, N. Y. Filed Feb. 12, 1932. Serial No. 592,459. 5 Claims. (Cl. 101—358.)



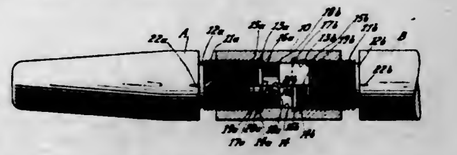
1. A printing press having an inking roller permanently in frictional engagement with the vibrator, adapted to be alternately elevated above and lowered into contact with the press-form through the alternate changes in rotation of said vibrator.

1,901,285. AUTOMATIC STARTING MECHANISM FOR INTERNAL COMBUSTION ENGINES. FRANK T. CHRISTIAN, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 2, 1931. Serial No. 527,234. 8 Claims. (Cl. 290—38.)



1. In combination with an internal combustion engine, electrical starting and ignition circuits therefor, said starting circuit including a battery and a motor, said ignition circuit including an ignition switch, electro-magnetic means whereby closure of the ignition switch causes closure of the starting motor circuit, means whereby said starting motor circuit is opened when the engine starts, means for limiting the time of cranking the engine by opening said starting motor in case the engine fails to start after a predetermined time of cranking, means for delaying for a predetermined time the effective reclosure of the starting motor circuit in case of engine stall, said means for limiting the time of cranking being arranged to prevent reclosure of the starting motor circuit until reset by the operator.

1,901,286. ROD COUPLING. GEORGE B. COE, Montclair, N. J., assignor, by mesne assignments, to Tube Reducing Corporation, Wilmington, Del., a Corporation of Delaware. Filed Mar. 14, 1931. Serial No. 522,535. 2 Claims. (Cl. 287—105.)

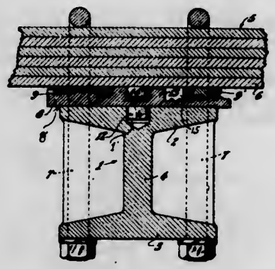


2. A rod coupling comprising in combination, oppositely threaded rod parts having reduced complementary unthreaded splined portions at their inner ends and flat annular abutment faces disposed in planes normal to the axis, and a sleeve having oppositely threaded end portions and an internal annular abutment rib of less internal diameter than the threaded portions said rib being provided with flat annular abutment faces disposed in planes normal to the axis for cooperating with the faces of the rod parts to lock the parts together when assembled.

1,901,287. ADJUSTABLE SPRING AND AXLE WEDGE. ALOYSIUS W. CORRIVEAU, West Springfield, Mass. Filed June 30, 1932. Serial No. 620,110. 6 Claims. (Cl. 267—52.)

1. In a device for adjusting the plane of a front axle of a motor vehicle, a wedge comprising two members the bottom one having a pin for engaging the recess in the

axle and a hub formed with a recess to receive the pin of the lower leaf of a front spring, the said members having intermeshing teeth formed on the same arc of a

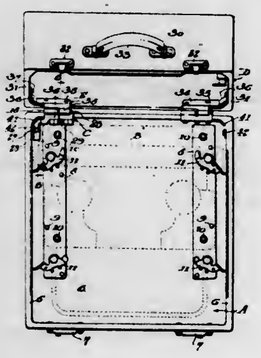


circle, whereby the upper member may be adjusted relative to the lower member to offset the caster or twist of an axle.

1,901,288. MANUFACTURE OF VAT DYESTUFFS AND OF INTERMEDIATE PRODUCTS RELATING THERETO. ALFRED DAVIDSON and ARNOLD SHEPHERDSON, Blackley, Manchester, England, assignors to British Dyestuffs Corporation Limited, Blackley, Manchester, England. Filed May 9, 1929, Serial No. 276,500, and in Great Britain May 26, 1927. 4 Claims. (Cl. 260—60.)

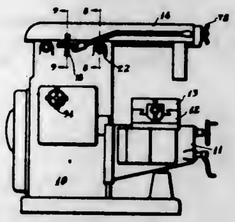
4. In the manufacture of new chlorinated vat dyes from 1-araylamino anthraquinone-2-carboxylic acid compounds, the step which comprises heating to a temperature between 180 and 190° C., a mixture comprising said anthraquinone carboxylic acid compound and thionyl chloride in the presence of a high boiling solvent, the amount of thionyl chloride being greater than that necessary to form the corresponding acid chloride of said anthraquinone carboxylic acid compound.

1,901,289. HINGE. BERNARD J. DOWD, West Hartford, Conn., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 4, 1931. Serial No. 555,132. 9 Claims. (Cl. 16—177.)



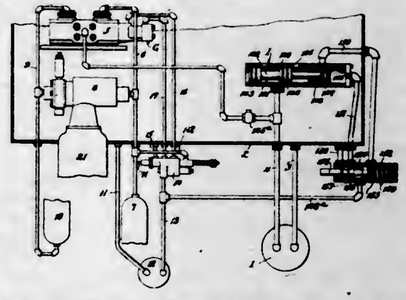
1. A hinge comprising a base section, and a cover section, one section having a hinge pintle, the other section having a pintle receiving roll to receive the pintle when the sections are moved to present the pintle and roll in coaxial relation and then relatively longitudinally to bring the pintle and roll into cooperative relation, and a manually releasable latch to secure the pintle and roll against separation.

1,901,290. MILLING MACHINE. SOL EINSTEIN and LESTER F. NENNINGER, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 13, 1930. Serial No. 428,178. 3 Claims. (Cl. 90—18.)



1. In a milling machine having a column, a work table slidably mounted thereon, a variable speed transmission for the table supported by the column, said column having an overarm projecting over said table, means to adjust the overarm relative to the column, speed change control means for said transmission mounted on the end of the overarm and additional speed change control means for said transmission on the side of the column, indicating means with each control means, and means to interconnect said control means in all positions of adjustment of the overarm whereby operation of one will simultaneously operate the other.

1,901,291. HYDRAULIC PRESS. WALTER ERNST, Mount Gilead, Ohio, assignor to Hydraulic Press Manufacturing Company, Mount Gilead, Ohio. Filed June 27, 1929. Serial No. 373,985. 15 Claims. (Cl. 138—17.)

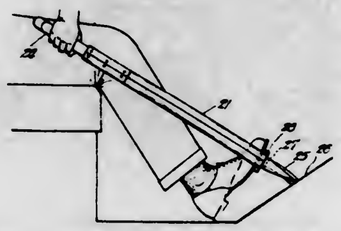


1. The combination with a hydraulic press including a reciprocatory platen; of a continuous discharge pump; means forming with the press and the pump a hydraulic circuit; a reversing valve operatively connected in said circuit for controlling the direction of movement of the platen; means for moving the reversing valve when the platen reaches the end of its pressing stroke to effect a return of the platen; a by-pass valve operatively connected in said circuit and adapted to open when the platen reaches the end of its return stroke for diverting the pressure fluid from the press to thereby bring the platen to rest at the end of the return stroke thereof simultaneously with the continued discharge of the pump; and hydraulic means controlled by the platen for operating said by-pass valve from its closed to its fully open position and vice versa.

1,901,292. BRAKE THROW MEASURING DEVICE. LEON L. GRAHAM, Chicago, Ill., assignor to Bendix-Cowdrey Brake Tester, Inc., South Bend, Ind., a Corporation of Delaware. Filed July 9, 1928. Serial No. 291,468. 5 Claims. (Cl. 33—169.)

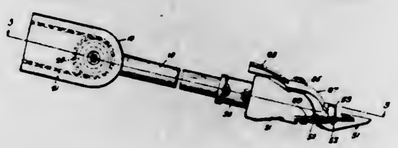
1. A device for measuring the throw of an automobile brake pedal or the like comprising a brace bar arrangeable

alongside the pedal with one end engaging the floor of the automobile, a movable member carried by said brace bar and having a part engageable by the underside of the pedal whereby said member may be moved correspondingly to the pedal throw, said brace bar having graduations thereon to show the extent of movement of said member caused by depression of the pedal, and means affording a yielding connection between said brace bar and said movable member.



5. A device for measuring the throw of an automobile brake pedal or the like comprising two adjacent relatively movable bars, one having a hand-hold and a part adapted to rest on the floor of the automobile and the other having thereon a member adapted to be moved in the operation of the pedal, means yieldingly connecting said bars and a casing in which said bars are enclosed, said casing having an opening therein and having graduations adjacent said opening and said last-mentioned bar having an indicator point thereon, the movement of which may be observed through said opening with reference to said graduations.

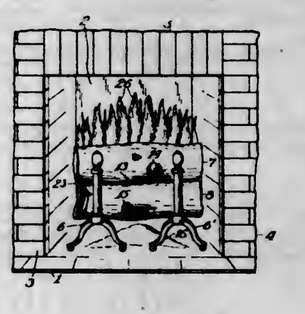
1,901,293. MOWING DEVICE. BENJAMIN F. GRAVELY, Dunbar, W. Va. Filed Aug. 8, 1931. Serial No. 555,972. 4 Claims. (Cl. 56—257.)



1. A mowing device comprising a tubular support, a cutting mechanism including a finger guard carrying bar and a cutter bar, a casing secured to said guard carrying bar, and mounted on said support for lateral rocking movement, a drive shaft within said support having a rotatable head fixed thereon and operable within said casing, a vertical rock shaft supported in the casing, a yoke straddling said rock shaft and pivotally connected thereto, an arm on the yoke pivotally connected with said head, and a lever secured intermediate its length on the rock shaft and having one end connected with said cutter bar and the other end free.

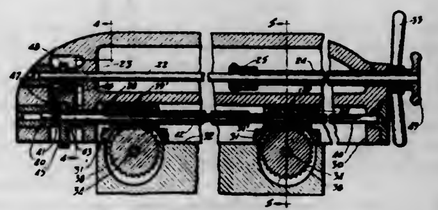
1,901,294. ANIMATED IMITATION HEARTH FIRE. FRANK A. GRITT and FENTON STEWART, Indianapolis, Ind., assignors to Gritt, Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed June 30, 1930. Serial No. 464,952. 6 Claims. (Cl. 272—15.)

1. An animated imitation hearth fire having a backless imitation log shell with openings therein, colored translucent material seated in the log shell covering the openings, a lamp arranged rearward of the lower portion of the log shell, a distorting reflector arranged between the log shell and the lamp and facing towards the



lamp, the reflector having openings therein to admit light from the lamp to the translucent material, and a rotary light-interrupter mounted upon the lamp.

1,901,295. MILLING MACHINE. MAX DE HAAS and BERNARD SASSEN, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,665. 13 Claims. (Cl. 90—18.)

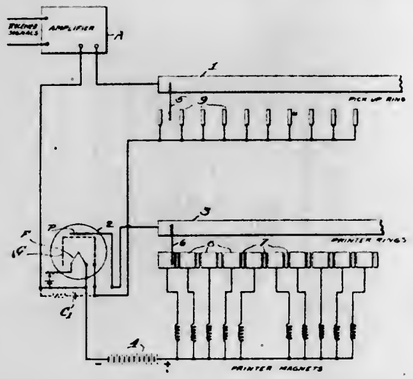


1. In a milling machine having a column and a cutter arbor journalled therein, an overarm slidably mounted on the column for supporting the outboard end of said arbor, means for effecting longitudinal adjustment of the overarm relative to the column, mechanism for clamping the overarm to the column comprising a plurality of clamping bolts mounted in the column, rotating means mounted on said bolts, and means carried by the overarm in operative engagement with said rotating means for effecting actuation thereof and thereby clamp the overarm in any position of longitudinal adjustment.

1,901,296. MULTIPLEX TELEGRAPH SYSTEM. HAKON H. HAGLUND, Flushing, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1929, Serial No. 343,109. Renewed Oct. 14, 1931. 75 Claims. (Cl. 178—52.)

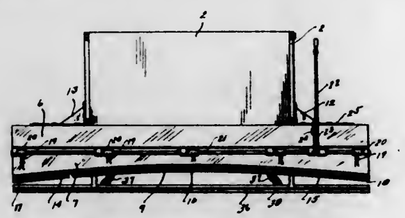
1. In a multiplex telegraph system, the combination of a source of periodic telegraph signals, a distributor equipment including pick-up rings and storage rings, telegraph storage elements connected to said storage rings, a thermionic device of the type described having input and

output circuits, said thermionic device being characterized by continued operation unaffected by grid potential after starting, said source of signals and said pick-up



rings being included in said input circuit, and said storage rings, said telegraph storage elements and a source of current being included in said output circuit.

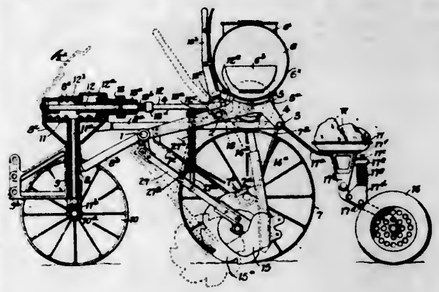
1,901,297. AGGREGATE SPREADER AND TRUCK BODY. FRANK B. HURT, La Grande, Oreg. Filed Mar. 30, 1931. Serial No. 526,346. 19 Claims. (Cl. 94—44.)



1. In a device of the class described, the combination of a truck body, a discharge opening for aggregates disposed within the rear of the bottom of the truck body and the lower edge of the side walls of the truck body, an aggregate spreader head disposed in registry with the openings and therebelow, spreader head ends extending laterally beyond the side walls of the truck body, a bottom to the spreader sloping downwardly and outwardly, a hinged plate associated with one of the side walls of the spreader head, hydraulic and manually manipulative means for setting a plate to variably predetermine an opening through which aggregates may be distributed, an air blast pipe extending transversely of the truck body and mounted beneath the aggregate distributing opening, nozzles disposed along the pipe, and means for forcing an air blast through the aggregates as the same leave the spreader head.

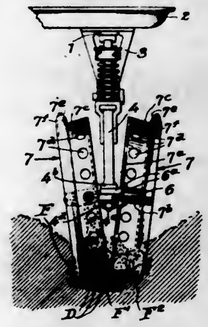
1,901,298. SEEDING MACHINE. BEN P. JOHNSON, Springfield, Ohio, assignor to Edward E. Greiner, Springfield, Ohio. Filed Feb. 6, 1932. Serial No. 591,407. 12 Claims. (Cl. 111—52.)

1. In a seeding machine, a frame; a supporting wheel adjacent each end of the frame; a combined steering and balancing wheeled forecarriage connected to the frame on the center line thereof; a series of furrow openers vertically adjustably mounted with respect to the frame; seed distributors, a cylindrical seed hopper on each side of the center line of the frame; means connected with the distributors for holding the hoppers on the frame; distributing pipes extending from the distributors and discharg-



ing behind the respective furrow openers; a drive shaft for operating the distributors; and means operated by the forecarriage for rotating the shaft.

1,901,299. MULCHING WHEEL FOR SEEDING MACHINES. BEN P. JOHNSON, Springfield, Ohio, assignor to Edward E. Greiner, Springfield, Ohio. Original application filed Feb. 6, 1932, Serial No. 591,407. Divided and this application filed Feb. 6, 1932. Serial No. 591,408. 13 Claims. (Cl. 97—56.)



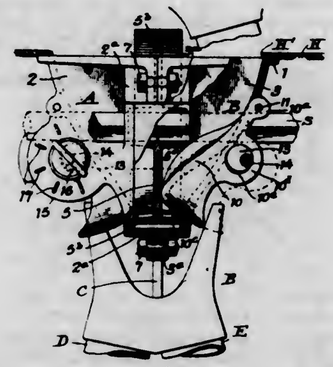
1. A mulching device for operating in a seed furrow, comprising a wheel closed at one side and open at its other side, means as the wheel is rolling for collecting soil from the furrow through the open side of the wheel, and means as the wheel is rolling for discharging the soil in the form of a loose mulch through the closed side of the wheel.

3. In a device as set forth in claim 1, the periphery of the wheel adjacent the closed side being substantially flat, and the periphery of the wheel adjacent the open side being of substantially half rounded cross-section and of larger diameter than the flat portion.

1,901,300. DOUBLE RUN FORCE FEED GRAIN DISTRIBUTOR. BEN P. JOHNSON, Springfield, Ohio, assignor to Edward E. Greiner, Springfield, Ohio. Original application filed Feb. 6, 1932, Serial No. 591,407. Divided and this application filed Feb. 6, 1932. Serial No. 591,409. 10 Claims. (Cl. 221—137.)

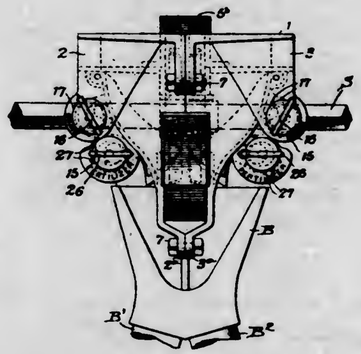
1. In a grain distributor, a casing; a force-feed wheel rotatably mounted in the casing; a grain compartment

cooperating with the web of the wheel and contracting towards the points of discharge; an adjustable throat in said compartment forming part of the wall thereof and



adjustable towards and away from the web of the wheel to regulate the amount of grain passing through the compartment; and means for adjusting the throat.

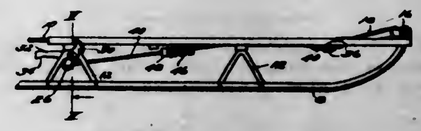
1,901,301. COMBINED GRAIN AND FERTILIZER DISTRIBUTOR. BEN P. JOHNSON, Springfield, Ohio, assignor to Edward E. Greiner, Springfield, Ohio. Filed Feb. 8, 1932. Serial No. 591,727. 10 Claims. (Cl. 221—137.)



1. In a combined grain and fertilizer distributor, a casing; a force-feed wheel rotatably mounted in the casing; separate grain and fertilizer compartments cooperating with the web of the wheel and contracting towards their points of discharge; an adjustable throat in each compartment forming part of the wall thereof and adjustable towards and away from the web of the wheel to regulate the amount of material passing through each compartment; and means for adjusting each throat.

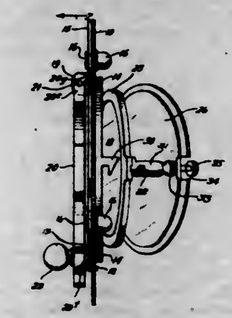
1,901,302. SLED BRAKE. GEORGE W. JOHNSTON and SAMUEL MUCHNIK, St. Joseph, Mo.; said Johnston assignor to said Muchnik. Filed July 20, 1931. Serial No. 551,870. 6 Claims. (Cl. 188—8.)

1. The combination with a sled having a runner-supported bed and a longitudinally extending neck forming a part of said bed, of braking apparatus comprising a transverse shaft; a plurality of gripper members on said shaft; a connecting rod reciprocably mounted beneath said bed; and laterally extending operating handles join-



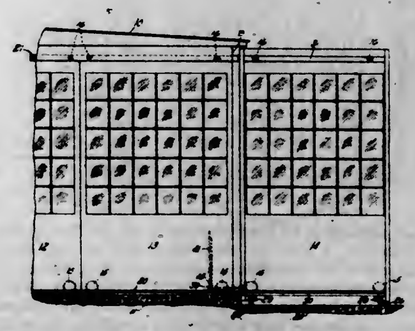
ing said connecting rod beneath said neck said handles projecting horizontally to positions between said neck and runners.

1,901,303. ATTACHMENT FOR DOORS. HENRY F. KEIL, Scarsdale, N. Y., assignor to Francis Keil & Son, Inc., a Corporation of New York. Filed Dec. 12, 1928. Serial No. 325,595. 14 Claims. (Cl. 20—39.)



11. In a device of the character described, in combination, a door having an opening therein; means secured to said door and having an aperture therein over said opening; a signaling member movably carried by said door, said signaling member having opposed portions between which said aperture is exposed; and means mounted on that side of the door remote from the side on which said signaling member is mounted for closing or exposing said aperture.

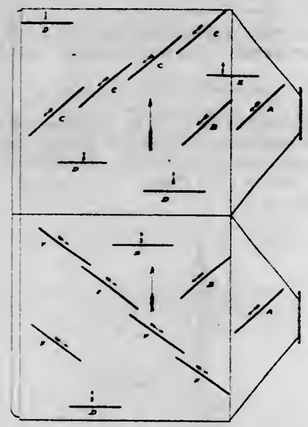
1,901,304. SLIDING DOOR ARRANGEMENT. PATRICK F. KING, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 9, 1931. Serial No. 514,426. 8 Claims. (Cl. 20—19.)



1. A door arrangement for aircraft hangars and the like, comprising a supporting track adapted to receive a plurality of doors in end to end relation, a truck located

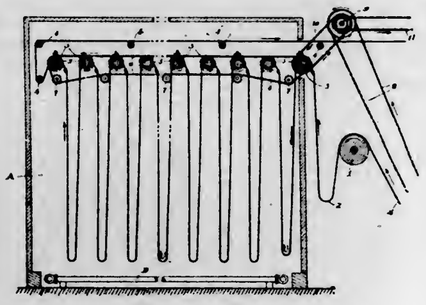
at one end of said track and movable at an angle thereto, and a plurality of tracks on said truck one behind the other and adapted to be respectively brought into registry with said first mentioned track.

1,901,305. CONCRETE MIXER BLADE. ALBERT KNOWLES, San Francisco, Calif. Filed Dec. 28, 1929. Serial No. 417,109. 4 Claims. (Cl. 83—73.)



1. In combination with a revolvable cylindrical concrete mixer drum which is relatively long to its diameter, a series of angularly arranged blades secured to the inner surface thereof extending substantially from end to end of the drum, and a similar series of opposite angular arrangement and a plurality of non-angularly disposed lifting blades placed at various places throughout the drum in a manner to successively exert a lifting action on material from end to end of the cylinder.

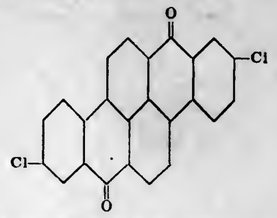
1,901,306. VULCANIZING OR DRYING APPARATUS. GEORGE H. KNOWLTON, Westbrook, Me. Filed Apr. 10, 1929. Serial No. 354,050. 16 Claims. (Cl. 271—2.3.)



1. An apparatus of the class described, including means for supporting a sheet of material draped or festooned to form a series of depending loops having free lower ends, the said means being arranged for continuously feeding the sheet of material for passing the same into, through and out of a drying and vulcanizing chamber, and means for varying the frictional contact between the sheet and the feeding means, whereby overrun or feed of the material in the loops may be taken up without interrupting the feed of the sheet.

1,901,307. HALOGENATED VAT DYESTUFFS OF THE 3.4.8.9- and 4.5.8.9-DIBENZPYRENEQUINONE SERIES AND A PROCESS OF PREPARING THEM. GEORG KRAENZLEIN, HEINRICH VOLLMANN and MARTIN CORELL, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 25, 1929, Serial No. 409,752, and in Germany Dec. 4, 1928. 6 Claims. (Cl. 260—61.)

6. As a new product dichloro-3.4.8.9-dibenzpyrene-5.10-quinone of the following probable formula:

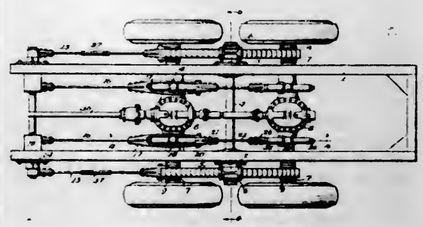


being an orange yellow powder which crystallizes from nitrobenzene in the form of orange needles, dissolving in concentrated sulfuric acid to a blue solution and dyeing cotton reddish-yellow tints.

1,901,308. VAT DYESTUFFS OF THE ISODIBENZANTHRONE SERIES AND METHOD OF MAKING THEM. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 21, 1929, Serial No. 415,780, and in Germany Apr. 8, 1927. 11 Claims. (Cl. 260—45.)

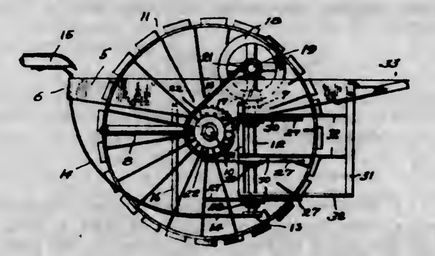
1. The process of producing vat dyestuffs which comprises condensing in the presence of a copper salt an isodibenzanthrone containing at least one nitrogen atom having a reactive hydrogen atom attached thereto with a polynuclear compound containing at least one negative substituent selected from the group consisting of halogen and nitro substituents.

1,901,309. FOUR-WHEEL VEHICLE DRIVE CONSTRUCTION. AXEL R. LE MOON, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 442,165. 6 Claims. (Cl. 280—124.)



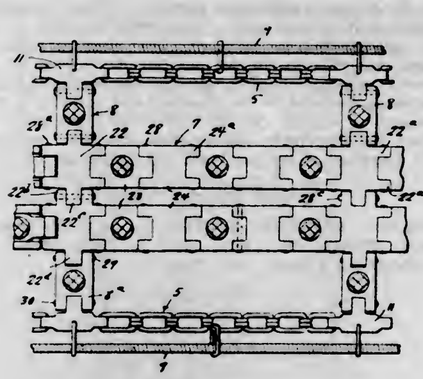
1. In a vehicle, a frame structure, a pair of driving axle housings, springs centrally secured to the frame and having their ends slidably resting upon the axle housings, parallel link structures connecting said housings above and below the axes of the housings, said link structures including compression spring connections with the axle housings for resisting relative motion between said housings, and thrust bars connecting said link structures with the frame.

1,901,310. STALK-CUTTING MACHINE. WILLIAM JULIUS LEWIS, Clarksdale, Miss. Filed Sept. 8, 1932. Serial No. 631,714. 8 Claims. (Cl. 55—62.)



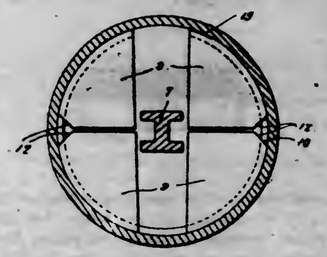
1. In a machine for cutting stalks, the combination of an axle having spindles at its ends and a horizontal U-shaped intermediate part extending to the rear of the machine, opposite traction wheels journaled on the spindles of the axle, a frame mounted on the spindle parts of the axle, a vertical shaft journaled in the frame in advance of the U-shaped part of the axle, a gearing for transmitting the drive of at least one of the tractor wheels to the vertical shaft to rotate the latter, sets of horizontal cutting blades fixed on the vertical shaft in spaced vertical relation, stationary cutting blades respectively coacting with the sets of cutting blades fixed on the vertical shaft, and a grating mounted in the forward part of the frame to guide the stalks between the coacting cutting blades as the machine moves forward.

1,901,311. ANTISKID DEVICE. FRED LLOYD, Wilkes-Barre, Pa Filed May 11, 1932. Serial No. 610,649. 2 Claims. (Cl. 152—14.)



1. In an anti-skid device, a pair of side chains each consisting of a plurality of sections composed of interconnected loop like links and lug equipped plates connecting said sections; a pair of intermediate tread chains, each consisting of a plurality of sections composed of longitudinally arranged caulk equipped tread plates, and plate like links connecting the caulk equipped tread plates, lug equipped plates connecting the sections of each intermediate tread chains, means pivotally connecting the lug equipped plate of one intermediate tread chain with the lug equipped plate of the other intermediate tread chain, and transversely disposed caulk equipped tread plates connecting the lug equipped plates of the intermediate tread chains with the lug equipped plates of the side chains.

1,901,312. PISTON CONSTRUCTION. WILLIAM J. LUCAS, Oklahoma City, Okla. Filed Mar. 30, 1932. Serial No. 602,068. 2 Claims. (Cl. 74—108.)



1. As a new article of manufacture, a split radially expansible resilient ring having one end knurled for anchorage purposes, a plurality of segmental plates having their outer peripheral edge portions attached to said ring, said plates being spaced apart to facilitate expansion and contraction of the ring.

1,901,313. HEAT-PRODUCING COMPOUND. LEO MANN, Providence, R. I., assignor to Harry Dexter Peck, Providence, R. I. Filed Nov. 11, 1931. Serial No. 574,360. 10 Claims. (Cl. 44—3.)

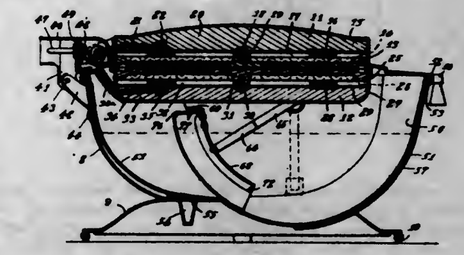
2. A composition of matter for producing heat upon the addition of water comprising, in combination, a metal, an element of cathodic relation to said metal, a depolarizer and electrolyte-forming salts of said metal and said depolarizer.

3. A composition of matter for producing heat upon the addition of water comprising, in combination, a metal, graphitic carbon, manganese hydroxide and electrolyte-forming salts of the metal and for manganese salts.

6. A composition of matter producing heat upon the addition of water comprising, in combination, the following constituents.

Iron	17 ounces
Manganese hydroxide	1 ounce
Graphitic carbon	30 grains
Ferric chloride	30 grains
Ferrous sulfate	30 grains
Manganese chloride	30 grains
Manganese sulfate	30 grains

1,901,314. GRIDDLE. MICHAEL W. MCARDLE, Chicago, Ill. Filed July 3, 1930. Serial No. 465,511. 15 Claims. (Cl. 53—10.)



1. An electric griddle comprising upper and lower grids, an open top batter bowl, a tray having a bowl supporting portion, said grids being supported over said bowl, and means connecting the grids to the tray, the batter bowl being positioned on said bowl supporting portion with the grids located so as to normally close the top of the batter bowl.

1,901,315. FABRICATED FRAME. ROY A. MCCARTY, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 27, 1929. Serial No. 366,481. 4 Claims. (Cl. 171—252.)

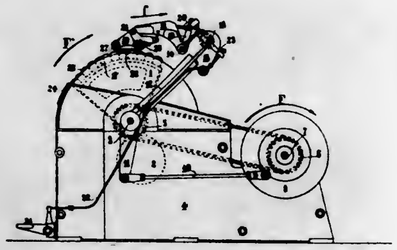


1. In a dynamo-electric machine, a stator frame comprising a pair of annular plates, means for rigidly holding said plates in fixed relation, said plates having equal outer diameters but one of said plates having an inner diameter somewhat less than the other, a movable concentric plate nested within the one of said plates having the larger inner diameter, a laminated core disposed between said concentric plate and the plate having the smaller inner diameter, longitudinally extending core-supporting rods extending through perforations in both of said annular plates for holding the laminations in fixed radial relation, and lamination-clamping means cooperating with said rods for clamping said concentric plate against said core to hold the laminations in fixed face-to-face relation.

1,901,316. PROCESS OF PREPARING TRIBROMOETHYLALCOHOL. HANS MEERWEIN, Marburg-on-the-Lahn, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 16, 1932, Serial No. 593,420, and in Germany Feb. 25, 1931. 17 Claims. (Cl. 260—156.)

1. In the process of preparing tribromoethylalcohol, the step which comprises treating tribromoacetaldehyde with an aluminium alkyl compound in the presence of an organic solvent being inert to the starting materials.

1,901,317. HIDE AND LEATHER DRESSING MACHINE. DANIEL MERCIER, Annonay, France. Filed May 1, 1931. Serial No. 534,411. 6 Claims. (Cl. 149—14.)



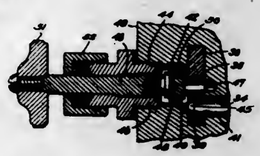
1. A machine for dressing hides and leathers, comprising a cylindrical member, at least a portion of the periphery of the cylindrical member being provided with an abrading device, means for rotating the cylindrical member, an oscillating system mounted about the axis of the cylindrical member and oscillatable by the means for rotating the cylindrical member, said oscillating system comprising stretching means overhanging the cylindrical member, and means for approaching the stretching means toward the abrading device on the cylindrical member to dress a hide or leather positioned between the cylindrical member and the stretching means.

1,901,318. MEANS FOR BALANCING CABLES EQUIPPED WITH A LONG SEA-EARTH. JOSEPH W. MILNOR, Maplewood, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 11, 1931. Serial No. 562,379. 16 Claims. (Cl. 178—63.)



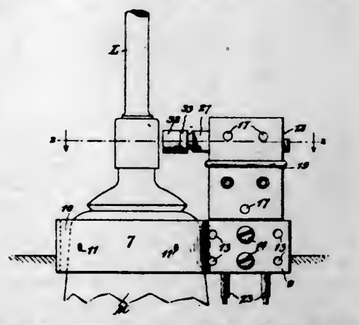
1. A submarine cable telegraph system comprising a duplex bridge having equal impedance arms, a main artificial line and a sea-earth cable in one of said arms and a main cable and an artificial line for balancing said sea-earth cable disposed in the other impedance arm, said main and sea-earth cables being arranged in inductive relationship and said main and sea-earth artificial lines being similarly inductively related.

1,901,319. FOUNTAIN CUSPIDOR. CLARENCE W. MOORE, Roslyn, Pa., assignor to Ritter Dental Manufacturing Company, Inc., Rochester, N. Y., a Corporation of Delaware. Original application filed Nov. 30, 1926, Serial No. 151,736. Divided and this application filed Sept. 5, 1929. Serial No. 390,487. 5 Claims. (Cl. 251—167.)



5. In a fluid distributing element, a valve comprising a valve seat disc having a concentric bore and a valve seat surrounding the bore, the seat disc partially enclosed and embedded in the material of the element, said element having a chamber adjacent the seat, and a stem removably mounted in the chamber and carrying a valve arranged to engage the valve seat, said disc having a second bore laterally spaced from the first mentioned bore and out of registry with the valve stem.

1,901,320. ELECTRIC SWITCH. GUSTAV M. MORTENSON, Warren, Pa. Filed Apr. 8, 1929. Serial No. 353,537. 3 Claims. (Cl. 200—59.)



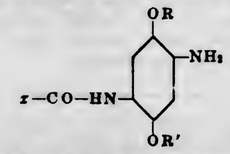
1. A switch comprising a casing having alined non-circular openings in two opposed sides and a removable side section extending between said sides, a non-circular bar slidably engaged with said openings and having an end projecting from the casing to be inwardly pushed, a spring in the casing acting on said bar in a direction to move its projecting end outwardly, an insulating block in the casing secured to said bar and normally abutting one of said sides of the casing to limit the movement of said bar under the influence of said spring, and a switch mounted on said removable side section of the casing, said switch having an actuating portion in the inward path of said insulating block.

1,901,321. PROCESS FOR RENDERING HARMLESS THE PRECIPITATES FORMED BY HARD WATER. FERDINAND MÜNZ, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works Inc., New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1929, Serial No. 353,272, and in Germany Apr. 17, 1928. 3 Claims. (Cl. 210—23.)

1. A process which comprises adding to hard water a derivative of an unsaturated fatty acid compound, containing at least one sulfonic acid group directly linked to a carbon atom which is obtainable by acting with fuming sulfuric acid on the unsaturated fatty acid compound.

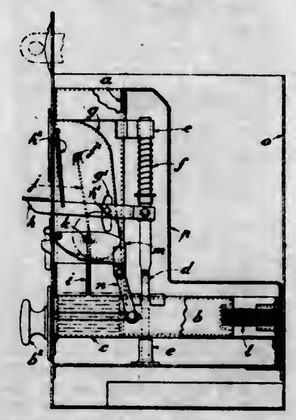
1,901,322. MONOACYLATED 2.5-DIAMINOHYDROQUINONEETHERS. WILHELM NEELMEIER, EUGEN RIMELE, and EUGEN GLIETENBERG, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 5, 1930, Serial No. 500,416, and in Germany Dec. 24, 1929. 10 Claims. (Cl. 260—124.)

6. As new products monoacylated 2.5-diaminohydroquinoneethers of the general formula:



wherein R and R' stand for alkyl groups and α stands for one of the radicals aryl and aralkyl, being generally white to yellowish crystalline substances, insoluble or scarcely soluble in water and being valuable intermediate products in the manufacture of dyestuffs.

1,901,323. COIN EXCHANGING MECHANISM. WILLIAM FRANCIS NEWALL, Winsford, England. Filed Dec. 11, 1931, Serial No. 580,335, and in Great Britain Dec. 17, 1930. 4 Claims. (Cl. 194—68.)



1. Coin-exchanging mechanism for prepayment meters, vending machines and like purposes comprising a drawer to receive the minor coins to be exchanged, a bolt normally holding the drawer closed, a manually operated bolt-retracting member adapted to be made operable by the inserted major coin acting as a fulcrum therefor, and means to support the major coin whilst the drawer is closed but to release the major coin when the drawer is opened, as set forth.

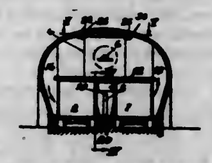
1,901,324. ABRASIVE BODY AND METHOD OF MAKING THE SAME. EMIL E. NOVOTNY, Philadelphia, Pa., assignor to John Stogdell Stokes, Huntingdon Valley, Pa. Filed July 26, 1929. Serial No. 381,884. 17 Claims. (Cl. 51—278.)

17. A composition for the production of abrasive bodies comprising, a liquid condensation product of phenol and formaldehyde, abrasive granules, and solidified carbon dioxide.

1,901,325. ABRASIVE BODY AND METHOD OF MAKING THE SAME. EMIL E. NOVOTNY, Philadelphia, Pa., assignor to John Stogdell Stokes, Huntingdon Valley, Pa. Filed Sept. 6, 1929. Serial No. 390,848. 10 Claims. (Cl. 51—280.)

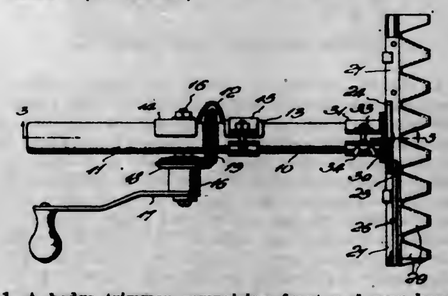
4. A composition for the production of abrasive bodies comprising, abrasive grains having dry surfaces, said surfaces coated with a dry and fusible synthetic resin, the resin surface being coated with a sticky synthetic resinous material.

1,901,326. DRYING DEVICE. JOHAN GUSTAF OLSSON, Lidingon, and FRANS IVAR EUGEN STENFORS, Alsten, Sweden, assignors to Aktiebolaget Svenska Fläktfabriken, Stockholm, Sweden. Filed Nov. 4, 1930, Serial No. 493,448, and in Sweden Apr. 12, 1929. 4 Claims. (Cl. 34—46.)



2. In a drier, two canals for the material to be dried, said canals having substantially horizontal top and bottom walls, means for admitting fresh air to said canals, and air exhausting suction conduit extending longitudinally between said canals and having longitudinally spaced exhaust air inlets, said suction conduit being adjacent one of said horizontal longitudinal walls, longitudinally disposed partition means between the two canals, said partition means extending from said suction conduit to the other of said horizontal walls and embodying air heating means, and means for forcing air alternately in opposite directions across said canals and through said heating means.

1,901,327. HEDGE TRIMMER. AMOS R. PAULLIN, Newton, Iowa. Filed Feb. 17, 1932. Serial No. 593,609. 2 Claims. (Cl. 30—11.)



1. A hedge trimmer comprising front and rear handle sections spaced apart in end-to-end relation, a connecting

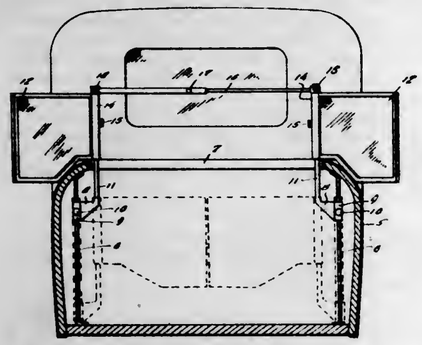
member for said handle sections having channel-shaped terminals lying against said handle sections, means fixedly securing one of said terminals to one of said handle sections, a contractible collar clamped around the other of said terminals and the other of said handle sections, a rotary member mounted between said handle sections, driving means for said rotary member, trimming means mounted on the front end of the front handle section, and driving connections between said rotary member and said trimming means.

1,901,328. LAWN MOWER SHARPENING TOOL. BENJAMIN B. PHELPS, Minneapolis, Minn., assignor of one-third to William J. Kelly and one-third to Harry Haskell, Minneapolis, Minn. Filed Jan. 21, 1932. Serial No. 587,994. 1 Claim. (Cl. 76—82.1.)



In a device of the class described, the combination of a frame having an elongated slot, a file, a pair of gripping elements slidably attached to said frame, each of said gripping elements comprising a foundation disposed parallel to said frame, a plate having a downwardly bent flange attached to the bottom of said foundation, the straight portion of said plate being parallel throughout its entire length with said foundation, another plate attached to the bottom of the first mentioned plate and being parallel throughout its entire length to said foundation, a strip attached to the top of said foundation and adapted to enter said elongated slot, a bolt passing through said foundation, plate, said other plate and said strip, and a wing nut associated with said bolt for slidably fastening each of said gripping elements and file to said frame.

1,901,329. RUMBLE SEAT WINDOW APPLIANCE. JOSEPH D. PHILLIPS, Helena, Mont., assignor of one-half to John E. Phillips, Helena, Mont. Filed Nov. 10, 1931. Serial No. 576,293. 1 Claim. (Cl. 296—85.)



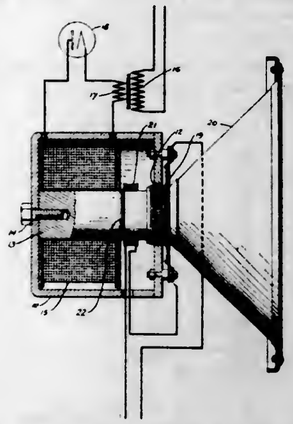
In combination with a rumble seat compartment of an automobile, a pair of vertically arranged rods located in the front part of the compartment, one adjacent each side thereof and having their lower ends connected with the bottom of the compartment and their upper ends with portions of the top thereof, a pair of substantially horizontal brackets, each having a vertically arranged sleeve thereon through which a rod passes, whereby each bracket is slidably and rotatably mounted on its rod, a set screw passing through each sleeve engaging the rod for holding the bracket in adjusted position, a second pair of vertically arranged rods having their lower ends connected with those ends of the brackets which are opposite the ends carrying the sleeves, whereby the second pair of rods are offset from the first pair and can pass through the top opening of the compartment when the brackets are moved upwardly on the first pair of rods, a rod adjustable as to its length having its ends detachably connected to the upper ends of the second pair of rods, a pair of windshield frames, each having a sleeve at one side thereof for telescoping a rod of the second pair, a set screw passing through the sleeve last-mentioned and engaging the last-mentioned rod to hold the frame in adjusted position, and clips in the compartment for engaging the frames, when the same have been lowered in the compartment, to hold said frames against rattling.

1,901,330. FLUID-CONDUCTIVE HOSE. JACQUES POBEREJSKY, Bois Colombes, France, assignor to "Superflexit," a Corporation of France. Filed Oct. 11, 1930, Serial No. 488,097, and in Germany Mar. 20, 1930. 2 Claims. (Cl. 137—90.)



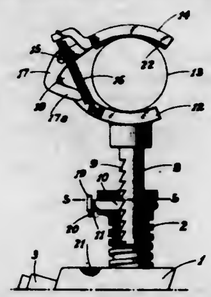
1. A hose for inflammable fluids especially adapted for conveying inflammable fluids to internal combustion engines subject to vibrations, comprising a helical wire coil, a cellulose layer thereon, said cellulose layer being formed of cellulose film wound about the coil and cemented together by means of adhesive material, a fabric covering surrounding the cellulose layer, a sheath of soft yielding material encasing the fabric, a layer of asbestos, encasing the sheath of soft yielding material, and a protective metallic braid covering the asbestos.

1,901,331. ELECTRODYNAMIC LOUD-SPEAKER. EDWIN S. PRIDHAM, Oakland, Calif., assignor to The Magnavox Company, Oakland, Calif., a Corporation of Arizona. Filed May 15, 1929. Serial No. 363,311. 18 Claims. (Cl. 179—115.5.)



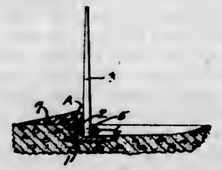
1. In a signal reproducer, means for electro-magnetically producing a magnetic field, a diaphragm, a conductor for actuating said diaphragm capable of being energized from an external source of modulated current and moving transversely to said field, and a second stationary conductor connected in series circuit with said first conductor and disposed in inductive relation with respect to said electromagnetic field for neutralising currents induced in said conductor by variations in the strength of said magnetic field.

1,901,332. AUTOMOBILE JACK. LEO E. PRYOR, Delano, Calif. Filed Feb. 1, 1932. Serial No. 590,039. 5 Claims. (Cl. 254—134.)



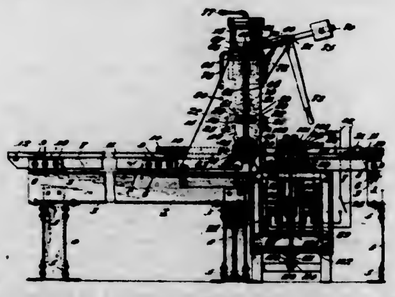
1. A jack including a load supporting member, an axle engaging hanger on the upper end of said member, a vertically movable jack element, a stem depending from the member and slidably mounted in the element, said stem having a row of downwardly facing ratchet teeth down one side, a pawl mounted in the element, means holding the pawl yieldably engaged with the teeth, a body in which said element is mounted, and means between the pawl and body to hold the pawl against disengagement from the teeth when the element is fully retracted in the body.

1,901,333. TRAFFIC SIGN. KARL C. PARKHURST, Wichita, Kans. Filed Aug. 14, 1931. Serial No. 557,040. 7 Claims. (Cl. 40—125.)



1. In a traffic sign, a base member having a vertical portion and an approach obliquely extending downward to the road bed level, and a flexible indicia plate carried by the vertical portion opposite from the approach and being attached thereto near the lower portion thereof, for the purpose specified.

1,901,334. APPARATUS FOR FORMING LADDERS. CLAUDE D. REED, Lebanon, Pa., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed June 11, 1930. Serial No. 460,385. 38 Claims. (Cl. 219—2.)



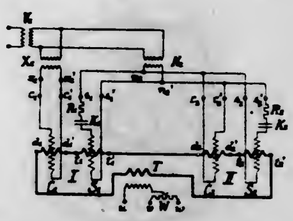
1. In a machine for fabricating metal ladders having side stringers and rungs with projecting end portions, electrodes for engaging and electrically heating both ends of the rungs, and means independent of the electrodes operated by fluid pressure for clamping and attaching the rungs to the side stringers by upsetting the ends of the rungs.

1,901,335. BOTTLE FILLING MACHINE. ADOLPH R. REYNOLDS, Columbia, S. C. Filed Feb. 16, 1932. Serial No. 593,332. 12 Claims. (Cl. 226—111.)



1. In a filling valve for a liquid tank, the combination of a valve casing having a liquid exit, valve and tank connecting means, an exit closing member freely disposed in said valve casing and arranged to close said exit under pressure of the liquid, a piston casing, a piston in said casing, means connecting said piston casing with said valve casng, plunger means secured to said piston and adapted to unseat said exit closing member with the stroke of said piston, and pressure controlling means whereby said piston is actuated.

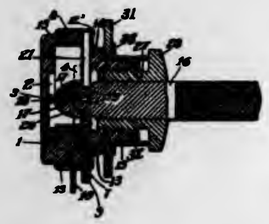
1,901,336. MEASURING ARRANGEMENT FOR MEASUREMENT OF RATIO OF TRANSFORMATION AND PHASE ANGLES OF VOLTAGE AND CURRENT TRANSFORMERS. JOSEF SLAVIK, Brunn, Czechoslovakia. Filed Apr. 2, 1929, Serial No. 351,861, and in Czechoslovakia Apr. 5, 1928. 18 Claims. (Cl. 175—183.)



1. In a device for calibrating instrument transformers, the combination with two similar electric meters each including two driving systems, of an unknown transformer to be calibrated, a standard instrument transformer, an auxiliary current source, one driving system of said meters being connected to the secondary of the said unknown transformer and to the said auxiliary current source, while the three other driving systems of the meters are connected to the secondary of the said standard transformer and to the said auxiliary current source, and means whereby both meters are simultaneously driven by the cooperation of currents supplied from the said secondaries

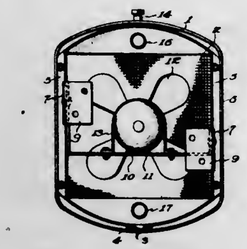
with currents supplied from the said auxiliary source, to compare the electrical energy passed through the meters within a given time and to deduce therefrom the calibration values of the unknown transformer.

1,901,337. CANOPY SWITCH. SAMUEL L. SNEIERSON, Roxbury, and EIFFEL B. GALB, Auburndale, Mass., assignors, by direct and mesne assignments, to Carling Tool & Machine Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 2, 1932. Serial No. 602,770. 5 Claims. (Cl. 200—63.)



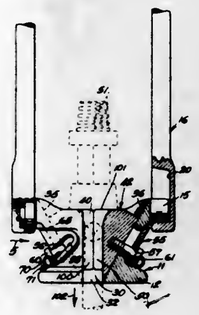
1. An electric switch adapted to be mounted on a support including a switch body having contacts therein, a spring contact in said body adapted to be moved to different positions to complete and interrupt the circuit between said contacts, a casing for the body having an aperture therein, a rotary actuating member extending through the opening in the casing and arranged to rotate said spring contact, an internally threaded sleeve having a shoulder thereon independent of the casing and an externally threaded sleeve having a shoulder thereon adapted to be threaded in said internally threaded sleeve and to function as a guide for the rotary spring actuating member, whereby said switch may be mounted on the support held between the projecting shoulders on the internally and externally threaded sleeve members.

1,901,338. UNIT HEATER. JOHN T. SORENSEN, Chicago, Ill., assignor to Zenith Heater Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 14, 1931. Serial No. 568,781. 9 Claims. (Cl. 257—137.)



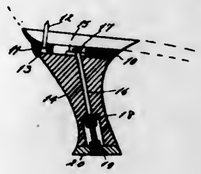
4. In a device of the class described comprising a radiator core, a motor, a fan, a one-piece sheet metal shell laterally surrounding said core, turned back edges on the adjoining ends of said shell, a drive cleat enfolding said edges to secure the ends of said shell and cause said shell to tensionally embrace said core, a frame plate secured to said shell, a backwardly extending sheet metal bracket arm secured to each side of said shell and having one end bent at right angles to provide means to fasten said bracket arm to a support, said arms being disposed on said shell in staggered relation to each other, and means carried by said arms to support said motor and fan.

1,901,339. SUCKER-ROD ELEVATOR. EDWARD E. STEVENSON, Los Angeles, Calif., assignor to Emsco Derrick & Equipment Company, Los Angeles, Calif., a Corporation of California. Filed May 14, 1932. Serial No. 611,345. 10 Claims. (Cl. 294—91.)



1. In a sucker-rod elevator of the type described, the combination of: a body having an opening therein, said opening being adapted to receive a sucker-rod; walls forming a passage in said body communicating with said opening, said passage being adapted to accommodate the passage of said sucker rod into said opening; a closure mechanism operable to close said passage; locking means operable to releasably retain said closure mechanism in open position, said locking means being adapted to be released by contact with said sucker-rod when said sucker-rod is positioned in said opening; automatic means adapted to operate said mechanism to close passage when said locking means is released; and manual means for operating said mechanism to open said passage.

1,901,340. HEEL FOR LADIES' SHOES. GORDON A. TAYLOR, Camden, N. J. Filed Mar. 20, 1931. Serial No. 524,036. 3 Claims. (Cl. 36—42.)



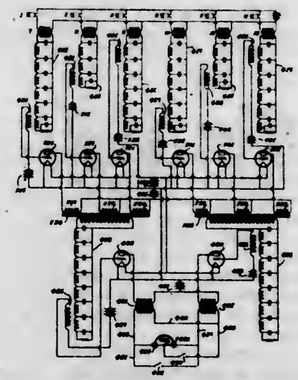
1. In a shoe heel, a metal attaching member adapted for permanent securement to the heel portion of a shoe, a flange formed around a portion of said member, a wooden heel, the upper portion of which is adapted to fit and be housed in said flange, an anchor bolt passing through the wooden heel lengthwise thereof, said bolt having a beveled head for engagement with the contracted portion of a button hole slot formed in the attaching member, a setting up nut threaded upon the lower portion of the anchor bolt whereby the wood-end heel is held in place and a sleeve nut threaded upon the lower end of said bolt whereby a top lift may be secured to the bottom of the heel.

1,901,341. REFLECTOR UNIT FOR SIGNS. SIDNEY C. VINCENT, Baltimore, Md., assignor to The Automatic Lighting Company, Baltimore, Md., a Corporation of Maryland. Filed Apr. 4, 1930. Serial No. 441,644. 7 Claims. (Cl. 88—1.)



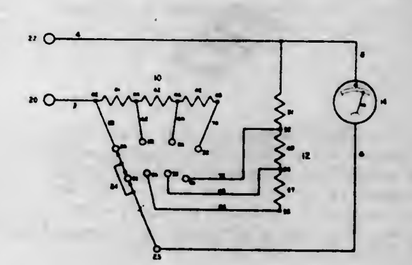
1. A reflecting device including a lens having an abutment, a cap surrounding the lens and provided with threads, a threaded lock washer adapted to cooperate with said threads on the cap and with said abutment, whereby the lens may be secured to a suitable plate or support.

1,901,342. SOUND RANGING SYSTEM. HORATIO W. LAMSON, Arlington, Mass., assignor to General Radio Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1929. Serial No. 348,631. 5 Claims. (Cl. 177—386.)



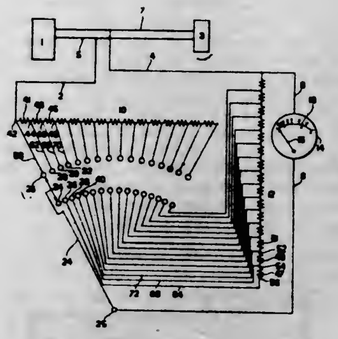
2. An electric system having, in combination, two units for independently picking up sound impulses and for translating them into electrical impulses, each unit comprising a plurality of sound pick-up devices, a lag line associated with each pick-up device, means for retarding the electrical impulses picked up from the lag lines, a plurality of vacuum tubes, one for each pick-up device, and each having an input circuit and an output circuit, means for biasing the vacuum tubes to keep the current flow in the input circuits at a negligible value, means for connecting the lag lines individually with the corresponding input circuits, two circuits respectively connecting together the output circuits corresponding to each unit, a lag line associated with each connecting circuit, means for retarding the electrical impulses in each of the last-named lag lines, a vacuum tube for each of the last-named lag lines and having an input circuit and an output circuit, means for connecting each last-named lag line with the corresponding last-named input circuit, means including two transformers each having a primary winding in each of the last-named output circuits and a secondary winding, phase-indicating means, and means connecting the latter to the secondary windings.

1,901,343. ELECTRIC INSTRUMENT. MELVILLE EASTHAM, Cambridge, Mass., assignor to General Radio Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Mar. 30, 1931. Serial No. 526,170. 2 Claims. (Cl. 171—95.)



1. An instrument of the class described having, in combination, a network having a series arm and a shunt arm, an input connection and an output connection connected with the network, a meter connected with the output connection and provided with an indicator having a predetermined range of movement, and means for adjusting the series arm and the shunt arm to vary the significance of the indications of the indicator and for maintaining the impedance of the network and the meter substantially constant irrespective of the adjustment of the series arm and the shunt arm.

1,901,344. POWER-LEVEL INDICATOR. JOSEPH WARREN HORTON, Cambridge, Mass., assignor to General Radio Company, Cambridge, Mass., a Corporation of Massachusetts. Filed June 27, 1931. Serial No. 547,444. 7 Claims. (Cl. 171—95.)



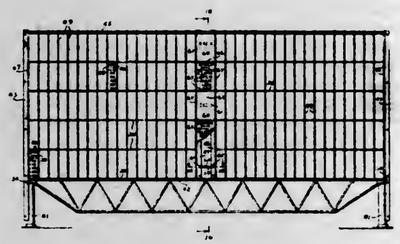
2. In a power-level indicator, a source of alternating electric power, a load, a junction connecting the source with the load, a network connected with the junction and having a high impedance in order that it shall draw but little power from the junction, an indicator controlled by the network having a predetermined range of movement, and means for adjusting the network to vary the significance of the indications of the indicator and for maintaining the said impedance substantially constant irrespective of the adjustment of the network, the network being of such nature as to present a purely resistive load, independent of frequency, throughout the said range.

1,901,345. CHAIN CONNECTING LINK. EDWIN G. CARLSON, Riverside, R. I., assignor to Speidel Chain Co., Providence, R. I.. a Firm composed of Frederic Speidel and Eugen Speidel. Filed Dec. 19, 1930. Serial No. 503,507. 7 Claims. (Cl. 59—85.)



1. In a chain, body links, connecting links comprising two members, and means for connecting or disconnecting said members by a relative movement of said members with parts of one sliding on parts of the other substantially throughout the length of said members in a plane between the planes of the opposite surfaces of the body links of the chain laterally of the chain.

1,901,346. INDICATOR DEVICE. JOSEPH C. CONN, Boonton, N. J. Filed July 19, 1932. Serial No. 623,334. 13 Claims. (Cl. 40—28.)



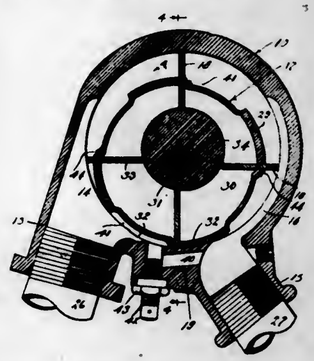
1. In a quotation board, the combination of a frame including a base, upright partitions supported in spaced relation thereon and horizontal members extending across the space between said partitions, a plurality of indicator units removably mounted one upon another in said space and between adjacent vertically spaced horizontal members with the lowermost of said units resting upon the lower of said horizontal members, and means for releasably locking said indicator units in operative stacked relation between said vertically spaced members.

1,901,347. BUILT-IN TABLE. DAVID A. HILDEBRAND, Oakland, Calif., assignor of one-half to John A. Rolph, Oakland, Calif. Filed June 27, 1932. Serial No. 619,444. 1 Claim. (Cl. 45—51.)



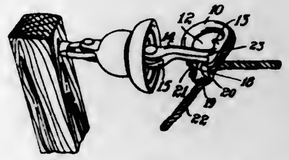
An extensible table, in combination, an extensible supporting element consisting of a plurality of successively variable frictionally cooperating sliding members, a fixed table top member and a free table top member, means for automatically raising the rearward boards of the free table top member as the table is moved to closed position, means for automatically positioning the free table top member as the table is extended, the final extending movement of the table automatically locking the free table top member in position.

1,901,348. FLUID DISPENSER OR METER. DAVE KAPUCZIN, Los Angeles, Calif. Filed Feb. 21, 1928. Serial No. 255,879. 5 Claims. (Cl. 73—37.)



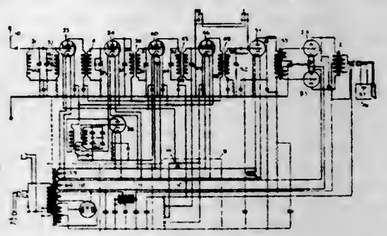
2. A meter of the character described having a cylindrical body with spaced ports, a rotor mounted eccentric in the body and having sliding engagement with the body between the ports, and blades carried by the rotor; there being means for by-passing fluid between the ports, said means including two cooperating conduits, one stationary and in the body and the other in the rotor.

1,901,349. 270° CLAMP. JOHN S. LAPP, Le Roy, N. Y., assignor to Lapp Insulator Company, Inc., a Corporation of New York. Filed May 23, 1930. Serial No. 455,002. 9 Claims. (Cl. 24—135.)



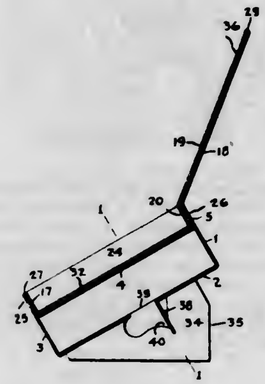
2. A clamp having a substantially 270° exteriorly grooved body portion, a tangential extension at one end to secure said clamp to an insulator support or the like, an apertured tangential extension at the other end, a clamping element cooperating with said apertures to secure said tension member to said extension, and an inwardly extending projection on said body portion.

1,901,350. RADIO SIGNALING SYSTEM. MAURICE L. LEVY, Rochester, N. Y., assignor to The Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 20, 1931. Serial No. 517,190. 13 Claims. (Cl. 179—171.)



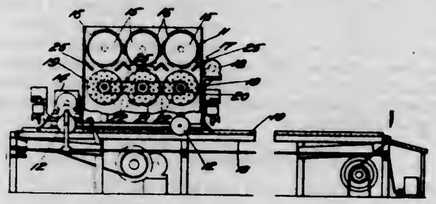
1. The method of adjusting the amplification of an amplifier including a vacuum tube having cathode, control grid, and anode elements and a screen shielding said control grid from said anode, said vacuum tube having its parts so proportioned and arranged and being operated so that the anode current varies in exponential relation to the voltage applied to said control grid which comprises simultaneously varying the voltages applied to said control grid and said screen in such a manner that the transconductance of the vacuum tube varies substantially as an exponential function.

1,901,351. DUMMY DISPLAY BOX. FRANK A. MARX, Cincinnati, Ohio, assignor, by mesne assignments, to The Richardson Taylor-Globe Corporation, Cincinnati, Ohio, a Corporation of Ohio. Filed July 24, 1930. Serial No. 470,438. 9 Claims. (Cl. 206—44.)



1. A cardboard dummy display box comprising a collapsible body having front and back walls and a bottom, hinged ends adapted to extend outward from the body in the flat condition, a top on the body connected to the front and back walls and depressed below upward extensions of the front and back walls and of the ends to form a tray in the upper part of the dummy box and substantially parallel into the bottom, and a display lid connected with the extension of the back wall of the body.

1,901,352. MACHINE FOR MAKING COMPOSITE SHEETS. LOUIS MCCARTHY, Boston, Mass., assignor to The Macallen Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 23, 1930. Serial No. 422,928. 3 Claims. (Cl. 154—2.5.)



1. In a machine for forming composite sheets from flaky or plate-like material, the combination with a bed and an elevated, horizontally disposed, rotating foraminous drum for showering the flakes or plates by gravity upon said bed, of a rotating, horizontally disposed squirrel cage of substantially the same length and diameter as said drum located directly beneath the latter and comprising parallel end heads connected by a number of parallel rods spaced at various distances from the center of said end heads.

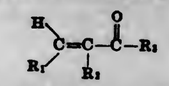
1,901,353. ARCH SUPPORT. JEAN G. MITCHIE, Boston, Mass., assignor to Stephenson Laboratories Trust, Boston, Mass., a Voluntary Trust of Massachusetts. Filed Jan. 7, 1932. Serial No. 585,188. 4 Claims. (Cl. 12—146.)



1. The process of producing an insole for reenforcing articulated members of the foot which comprises producing from plastic material a model conforming to the undistended sole of an individual's normal foot, smoothly applying light fabric to the sole portion of said model throughout its entire area and detachably securing margins of the same to said model, cementing a sheet of resilient material to said fabric, fashioning the upper surface thereof while secured to the model to conform to the surface contour of the inner sole of the shoe, cementing a covering of pliable material to said resilient material permitting the cement to harden while the insole is secured to said model, and detaching the insole thus formed from the model.

1,901,354. MIXED RUBBER-LIKE MASSES AND PROCESS OF PREPARING CAME. KURT MEISENBURG, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 16, 1931, Serial No. 509,280, and in Germany Jan. 20, 1930. 12 Claims. (Cl. 260—6.)

1. Process which comprises heating a mixture of a butadiene hydrocarbon and of a ketone of the general formula



wherein R_1 denotes hydrogen or an alkyl group or an aryl group of the benzene series, R_2 means hydrogen or an alkyl group, and R_3 an alkyl group or an aryl group of the benzene series, said mixture containing the ketone in an amount between about 5–50% by weight (calculated on the butadiene hydrocarbon-ketone mixture), to a temperature between about 80–150° C., until polymerization is complete.

1,901,355. SELF ALIGNING INTERFITTING SPINDLE AND SOCKET ELEMENT. FRED NOLTIN, Berwyn, Ill., assignor to The Oscar C. Rixson Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1931. Serial No. 570,245. 2 Claims. (Cl. 64—98.)



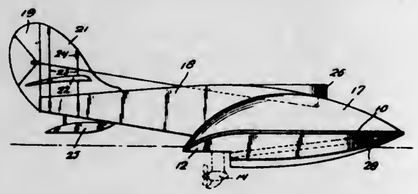
1. An interfitting spindle and socket member, comprising a spindle having a socket fitting end with opposite sides inclined inwardly toward the end of the spindle, and a socket element formed with a socket to receive the tapered end of the spindle, said socket having opposed faces formed for engagement with the spindle along the edges only of the inclined faces thereof.

1,901,356. ROLL ROOFING PACKAGE. JOHN H. PLUNKETT, Beverly Hills, Calif., assignor to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1932. Serial No. 595,096. 5 Claims. (Cl. 206—59.)



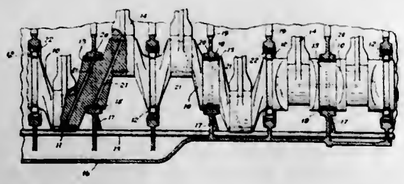
1. A package comprising a roll of roofing material enclosed by a rendible wrapper, a rip cord between said roll and said wrapper, the ends of said cord extending beyond the ends of the wrapper and being bent back against the outer face thereof, and means for sealing said cord to the outer face of the wrapper adjacent the ends of the cord with the free ends of the cord extending beyond said sealing means.

1,901,357. SPEED BOAT. FELDER J. RAULERSON and HARDY H. RAULERSON, Jacksonville, Fla. Filed Dec. 14, 1931. Serial No. 580,952. 3 Claims. (Cl. 114—66.5.)



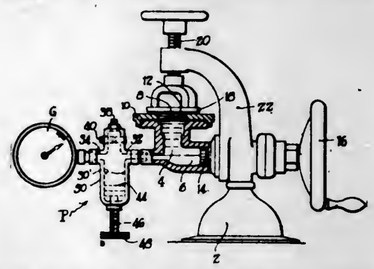
1. A boat of the character described comprising a relatively broad hull, and a relatively narrow body projecting centrally therefrom, said hull including a stepped bottom and spaced parallel extensions projecting rearwardly beyond the step, a cockpit adapted for the installation of either an outboard or inboard motor, and a cowl partly embracing said body and curved downwardly and connected to the adjacent edges of the hull, both body and cowl being of framework, covered with air-plane cloth.

1,901,358. CRANK SHAFT. EARLE A. RYDER, West Hartford, Conn., assignor to The Pratt & Whitney Aircraft Company, East Hartford, Conn., a Corporation of Delaware. Filed Jan. 24, 1931. Serial No. 510,950. 1 Claim. (Cl. 74—88.)



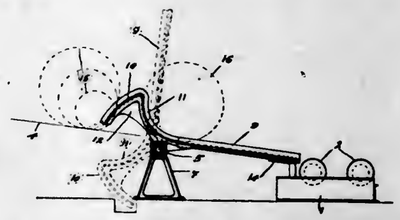
An engine crank shaft construction comprising, a shaft having a plurality of cranks thereon, a plurality of alined bearings for supporting said shaft, said bearings being alternately of plain journal and anti-friction types, said cranks having plain journal surfaces, continuous lubricant supplying means for said journal shaft bearings, and means provided within said shaft supporting bearings and said shaft whereby said cranks may be lubricated.

1,901,359. TESTING APPARATUS. SAMUEL N. SENNA, Chicopee, Mass., assignor to B. F. Perkins & Son, Inc., Holyoke, Mass., a Corporation of Massachusetts. Filed May 6, 1929. Serial No. 360,695. 1 Claim. (Cl. 265—14.)



Testing apparatus of the class described comprising in combination, a base including a fluid chamber, a yieldable diaphragm clamped thereover, a piston associated with said chamber for displacing fluid therein, a pump having a bore in communication with said chamber, a piston in said bore at a side of its point of communication with said chamber and a valve plug in the bore at another side of said point of communication to facilitate introduction of fluid into said bore.

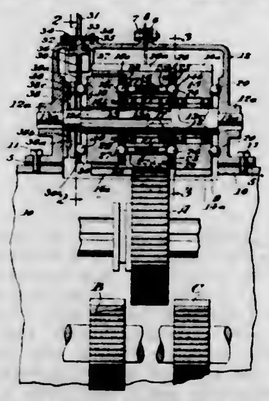
1,901,360. APPARATUS FOR HANDLING CYLINDRICAL ARTICLES AND THE LIKE. KARL F. SNOW, Brecksville, Ohio, assignor to The C. O. Bartlett & Snow Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 17, 1930. Serial No. 482,389. 3 Claims. (Cl. 214—130.)



1. In apparatus of the class described, the combination of a pair of laterally spaced arms provided with inwardly sloping surfaces, said arms pivotally supported on a transverse axis and on one side of their center of gravity so as to normally occupy a substantially vertical position, said arms provided with arcuate terminal portions adapted to engage cylindrical articles upon an inclined conveyor and singly feed the same on to said arms upon pivotal movement thereof.

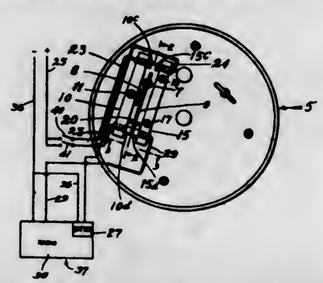
1,901,361. SAFETY DEVICE FOR MOTOR VEHICLES. ELWYN B. TRACY, Littleton, Mass., assignor of one-half to The Macallen Company, Boston, Mass., a Corporation of Massachusetts. Filed June 25, 1932. Serial No. 619,257. 14 Claims. (Cl. 192—4.)

1. In combination with the power transmission and gear shift mechanism of an automobile, of a safety device for preventing unauthorized movement of the vehicle, comprising a casing attached to the transmission housing, a fixed shaft within the casing, rotatable gears mounted on the shaft and adapted to be intermeshed with a sliding gear of the transmission, a non-rotatable member cooperating with one of said gears, clutch devices, one interposed between said gears and the other between one of said gears and said non-rotatable member to lock the parts



together, and a releasing device mounted on the shaft and cooperating with said non-rotatable member to maintain said member and said gears in cooperative relation, and shiftable to permit axial separation of the gears and non-rotatable member to release the clutch devices.

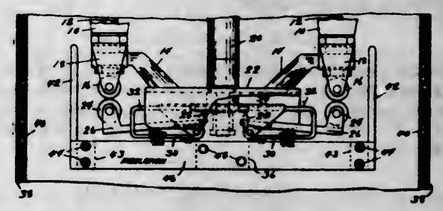
1,901,362. TIME CONTROL MECHANISM. NORMAN O. TRAIN, Los Angeles, Calif. Filed Apr. 16, 1930. Serial No. 444,798. 1 Claim. (Cl. 200—35.)



In an electric switch, a pair of cooperating switch arms arranged in a generally parallel relation to each other, each of said arms carrying at each end a contact which is directed toward and is adapted to engage the corresponding contact on the other arm, means to support one of said arms in a stationary manner, means to pivotally support the other of said arms between its ends, yielding means tending to draw the end portions of said switch arms toward each other at one end of the switch and thus close the contacts at that end of the switch while opening the contacts at the other end of the switch, means to operate the switch in opposition to said yielding means to close the last recited contacts and open the other set of contacts, said switch-operating means consisting of a spring arm, and a clock operatively related to said spring arm by means of a stem operable by the clock and located between said switch arms.

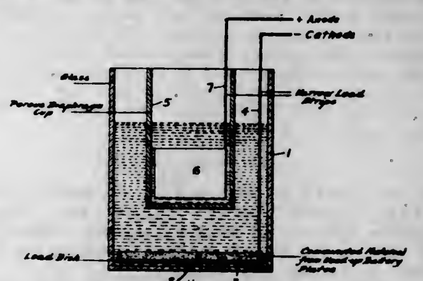
1,901,363. CIRCUIT INTERRUPTER. GEORGE A. BURNHAM, Saugus, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 1, 1930. Serial No. 425,295. 14 Claims. (Cl. 200—150.)

1. A circuit interrupter having the combination of an oil containing enclosing casing, separable arcing members immersed in the oil in said casing, and an insulated metal plate immersed in the oil between the wall of said casing and said arcing members and located in a plane parallel with the line of separation of said contact members and



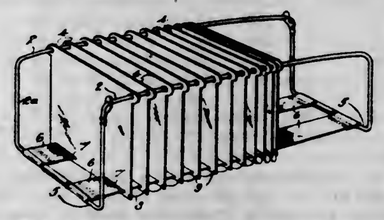
in position to intercept the circuit interrupting arc drawn between said contact members and prevent it from engaging said wall, said plate also having good heat-absorbing ability and adapted to cool the circuit interrupting arc.

1,901,364. PROCESS OF MAKING BASIC METAL SULPHATES AND RECOVERY OF METAL FROM WASTE METALLIC COMPOUNDS. EDMUND OLIN CUMMINGS, High Point, N. C. Filed Nov. 28, 1930. Serial No. 498,601. 18 Claims. (Cl. 204—9.)



1. In a process of making basic metal sulphates, electrolytically reducing in the cathode compartment of a two-compartment cell powdered waste metal compounds containing sulphate material while simultaneously dissolving an anode consisting of the previously reduced waste metal compounds, using as anolyte a solution which forms no precipitate with a water soluble compound of the anode metal and as catholyte a solution which gives no precipitate with alkali metal sulphates, after the electrolysis removing separately the anolyte and catholyte, adjusting the alkali and sulphate content of the catholyte so that when mixed with the anolyte a basic metal sulphate having the desired percentages of oxide and sulphate will be obtained, then mixing the two solutions, filtering, and washing the pigment.

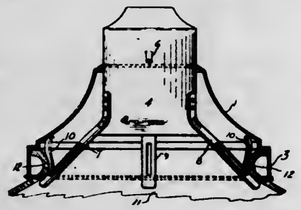
1,901,365. FILING DEVICE. JAMES H. FIELD, Newark, N. J. Filed Aug. 7, 1926. Serial No. 127,787. 12 Claims. (Cl. 129—16.)



12. A filing device comprising a container open at its upper side, longitudinally extending supporting means at opposite sides of the container, a partition in said con-

tainer slidably suspended on said supporting means transversely of said container, and means mounted in the container and resiliently engaging said partition for normally retaining said partition in said sliding engagement with the supporting means.

1,901,366. SCREWLESS HOLDER. JAMES J. FLYNN, Camden, N. J., assignor to Faries Manufacturing Company, Decatur, Ill., a Corporation of Illinois. Filed Sept. 26, 1932. Serial No. 634,899. 4 Claims. (Cl. 240—133.)

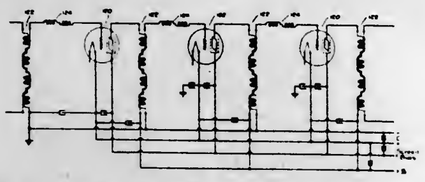


1. A device of the character described comprising an outer collar having a central opening therein, there being a plurality of notches in the edge of said opening, a cylinder member which fits said opening, a plurality of lugs thereon adapted to register with said notches, a plurality of arms secured to said cylinder member which extend radially therefrom and in an outward and downward direction, a vertical tongue on each arm adjacent its lower end, said tongue adapted to engage the inner side of a globe to be supported.

1,901,367. PROCESS FOR PRODUCING METALS AND METAL ALLOYS LOW IN CARBON. EMIL GUSTAF TORVALD GUSTAFSSON, Stockholm, Sweden. Filed Feb. 10, 1930, Serial No. 427,429, and in Sweden Feb. 19, 1929. 13 Claims. (Cl. 75—17.)

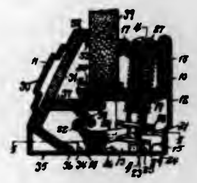
1. A process for producing metals and metal alloys low in carbon, consisting in reducing and melting a charge containing oxide ore and reducing agent in deficit of the amount theoretically required for complete reduction of the metal oxides in the ore, treating the thereby formed slag rich in metal oxide, in presence of the produced metal poor in constituents of reducing character, with thermic reducing agent in such a quantity as to obtain below the slag a metal bath containing said reducing agent only in a proportion insufficient to substantially influence the properties of the metal produced, separating metal and slag, and treating the slag with reducing agent in such a quantity as to obtain a metal rich in said reducing agent from remaining metal oxide in the slag.

1,901,368. TRANSFORMER. LESTER L. JONES, Oradell, N. J. Filed Oct. 25, 1929. Serial No. 402,379. 20 Claims. (Cl. 179—171.)



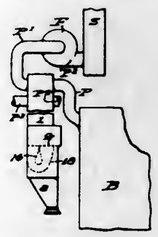
16. An amplifier for use over a predetermined range of frequencies such as the broadcast band, said amplifier comprising a plurality of electron emission tubes, coils for coupling said tubes in cascade, said coils consisting of sections so selected that the natural frequency of each of the sections is outside of the frequency range.

1,901,369. STORE FRONT CONSTRUCTION. FRED HIMMEL and ISIDORE HIMMEL, New Haven, Conn., assignors to The Himmel Brothers Company, New Haven, Conn., a Corporation. Filed Jan. 7, 1932. Serial No. 585,289. 3 Claims. (Cl. 20—56.4.)



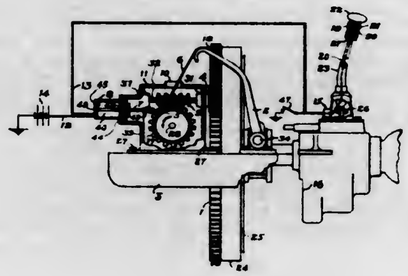
1. In a store-front construction, the combination with inner and outer strips thereof, of a mounting-block connected with the inner strip, said mounting-block comprising a head, a shelf and perforated lugs below the shelf, the head and shelf formed with aligned threaded openings, a screw extending through said openings, a rocker pivotally mounted between said lugs and connected with said screw, a supporting-member connected with the outer strip and formed with a rearwardly-projecting plate adapted to engage with the under-surface of said shelf, and with a cam-surface adapted to be engaged by said rocker.

1,901,370. DUST SEPARATING AND COLLECTING DEVICE. MAX H. KUHNER, Cornwells Heights, Pa., assignor to Badenhausen Corporation, Cornwells Heights, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1930. Serial No. 484,730. 8 Claims. (Cl. 183—79.)



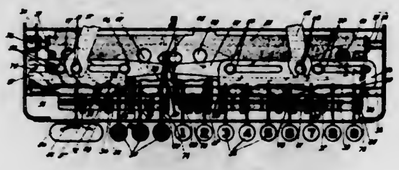
1. In combination, in a dust removing system including a dust generator, a flue leading from said dust generator, an exhaust fan in said flue for producing a strong induced draft through said flue to carry the dust from said generator, and a dust remover and collector in said flue between said generator and said exhaust fan and comprising a casing having an inlet chamber through which said dust carrying gases pass, said inlet chamber decreasing in cross-sectional area in the direction of gas travel to substantially increase the linear speed of said gases as they pass therethrough, said casing also being provided with a passage of the same cross-sectional area as that of the delivery end of said inlet chamber and communicating therewith, said passage following substantially a semicircle or path, the radius of which is relatively small, to produce in the particles of dust floating in said stream centrifugal force sufficient to throw said particles out of said stream to the outer wall of said semicircular passage, said outer wall being provided with narrow openings therethrough spaced relatively widely from each other to provide an extensive inner curved gas-guiding surface between said openings over which surface the gas may travel at a relatively high speed, whereby the dust borne by said stream and thrown outwardly by the centrifugal force developed therein is impelled through said openings, and a closed settling chamber below said outer wall of said passage.

1,901,371. AUTOMOBILE CLUTCH CONTROL SYSTEM. EDWARD H. LANGE, Baltimore, Md. Filed Oct. 9, 1929. Serial No. 398,549. 10 Claims. (Cl. 192—82.)



1. In an automobile having a source of mechanical power, a manually operated transmission gear shift lever, a source of electrical power, and a clutch lever, a clutch lever operating apparatus which comprises a rotating drum operated by means of the source of mechanical power, a speed proportioning mechanism interrelating the speed of the drum and of the source of mechanical power, an electric switch located upon the transmission gear shift lever, an electromagnetic solenoid actuated by the source of electrical power and from the electric switch, and a frictional belt variably coupled with the drum, having one end connected to the plunger of the electromagnetic solenoid and the other to the clutch lever.

1,901,372. CALCULATING MACHINE. HARRY LANDSIEDEL, Norwood, Ohio, assignor, by mesne assignments, to Remington Rand Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 31, 1924. Serial No. 703,101. 22 Claims. (Cl. 235—60.)



1. A calculating machine comprising a type carrier, a laterally movable paper carriage, a device preventing operation of said type carrier, means controlled by the paper carriage for operating said device to position to permit operation of said type carrier, a differential device for limiting movement of said type carrier, and a series of keys settable for engagement by said differential device.

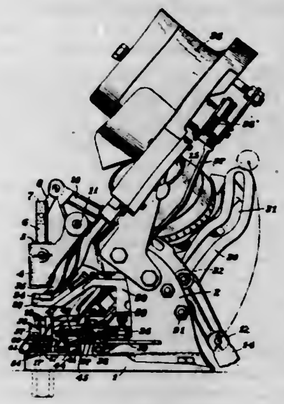
1,901,373. UREA-FORMALDEHYDE CONDENSATION PRODUCT AND PROCESS. ERNEST LIONNE, Swampscott, Mass. Filed Sept. 28, 1928. Serial No. 309,120. 12 Claims. (Cl. 260—3.)

1. The combination of a urea formaldehyde resin in an intermediate jelly stage of condensation and a colloidal retarder intimately associated therewith which acts to hinder further condensation of said product.

1,901,374. PRODUCTION OF MASSES RESEMBLING LINOXYN. MARTIN LUTHER, Mannheim, and HANS BELLER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 26, 1929, Serial No. 373,932, and in Germany July 3, 1928. 10 Claims. (Cl. 260—8.)

1. The process for the production of masses resembling linoxyn, which comprises treating with oxygen a mixture of esters of polyhydric alcohols with the unsaturated acids prepared by splitting off water from the mixture of acids resulting from the oxidation of waxes.

1,901,375. BUTTON ATTACHING MACHINE. FREDERICK H. PETERSON, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 8, 1931. Serial No. 528,680. 31 Claims. (Cl. 218—6.)

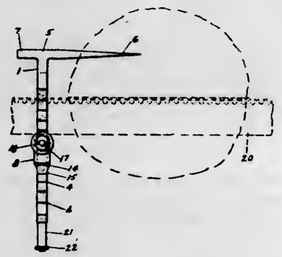


1. A button attaching machine including an undercut anvil post for supporting a button fastening member, a jaw carrier slidably mounted on said post, jaws secured to said carrier, a spring for normally holding the jaws under compression, and the jaws and the anvil post interlocking to normally hold the button fastening member on said anvil post.

12. A button attaching machine including an anvil for supporting a button fastener, a plunger located above the same for driving a button head on the fastener, fastener gripping means including jaws associated with the anvil and normally interlocking with said anvil, and means for lowering said jaws, said means being synchronized with the stroke of the plunger whereby the jaws remain closed during the greater part of the downstroke of the plunger and remain open during substantially one-third of the initial upstroke of the plunger.

30. An anvil, a jaw carrier on said anvil, pivotal jaws in said carrier, means on the jaws and carrier for normally locking the jaw carrier against movement when in its upper position, a two-piece compressible lever provided with spring means therein, and a tucker lever cooperating with said two-piece lever, said tucker lever being provided with a cam whereby a movement of said tucker lever will move said jaw carrier downwardly when the jaws are unlocked from said anvil.

1,901,376. GUIDE FOR SAW BLADES IN WOOD SAWING. MERRITT E. PIXLEY, Clackamas County, Oreg. Filed June 6, 1932. Serial No. 615,481. 6 Claims. (Cl. 143—163.)



1. A saw guide which consists of the combination with a supporting post and means for anchoring it at one end to the stock to be cut, of a collar adjustable upon the post, a resilient arm pivotally secured to the collar, and means for effecting graduated adjustment of the collar on the post.

1,901,377. BUFFER. DE FOREST ROE, Elyria, Ohio, assignor to The Colson Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 10, 1929. Serial No. 361,875. 8 Claims. (Cl. 45—137.)

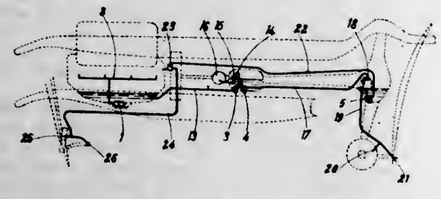


1. A buffer for furniture legs comprising a rubber annulus of substantial thickness divided transversely at one point of its length and having an interior bore of gradually diminishing transverse area proceeding from the middle toward both ends of the bore.

1,901,378. MANUFACTURE OF PAPER-BOARD. PAUL H. ROGERS, Hartsville, S. C. Filed Sept. 2, 1931. Serial No. 560,865. 3 Claims. (Cl. 92—3.)

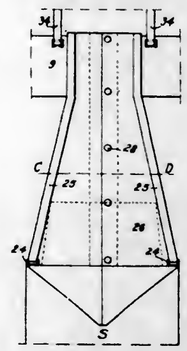
1. Corrugating paper-board composed of semi-chemical pulp having in admixture therewith cotton fibers.

1,901,379. SYSTEM FOR THE CENTRAL LUBRICATION OF VEHICLES. LÉON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Feb. 29, 1928, Serial No. 258,033, and in France Apr. 23, 1927. 2 Claims. (Cl. 184—7.)



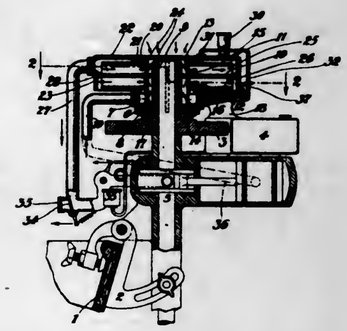
1. A lubricating installation for motor vehicles, including a main reservoir and auxiliary reservoirs, pumps driven by the moving parts of the vehicle for delivering the lubricants in a circuit from the main reservoir to the several auxiliary reservoirs and return, receiving troughs arranged in each auxiliary reservoir for retaining a portion of the delivered lubricants, and wicks leading from said trough to parts of the vehicle requiring lubrication.

1,901,380. PARACHUTE EQUIPMENT. JACQUES CHARLES GERMAIN SALONE and GEORGES DENIS LUCAS, Paris, France, assignors to Société Salone, Ing. E. C. P. & Lucas, Paris, France. Filed Aug. 27, 1931, Serial No. 559,788, and in France Sept. 12, 1930. 1 Claim. (Cl. 244—21.)



A parachute equipment of the type described comprising in combination, a parachute, a cable connected to the suspension ropes of said parachute, a bag provided with a hole in its bottom for the passage of said cable, said bag being adapted to normally contain said parachute, a belt normally carried by the passenger, means for quickly connecting said belt to said cable, a skirt, two strong straps, disposed along the edges of said skirt and secured to said belt, two rings on the bag for receiving said straps, whereby the bag may be used as a seat equipment.

1,901,381. GAS ENGINE MUFFLER AND SUPERCHARGER. GARFIELD P. SMITH, Brooklyn, N. Y. Filed Feb. 6, 1930. Serial No. 427,915. 4 Claims. (Cl. 60—32.)



8. Combined supercharger and exhaust expeller for internal combustion engines comprising a unitary rotor adapted to be secured to the crank shaft of the engine and having inner and outer series of radially disposed chambers separated by a heat conductive partition, a fixed casing for connection with a carburetor and contacting one end of said rotor and encompassing the sides thereof

in spaced relation to said chambers by contacting said partition to segregate said series of chambers, that part of the casing communicating with the lower series of chambers being open to atmosphere adjacent the periphery of said rotor, an air inlet, the upper series of chambers communicating centrally with the air inlet and the lower series of chambers being adapted to communicate centrally with the exhaust of the internal combustion engine.

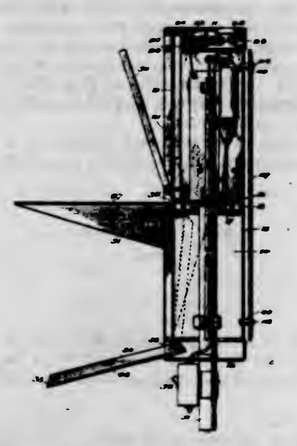
1,901,382. FIBROUS COMPOSITION CONTAINING FILLER AND BINDER SUBSTANCES AND PROCESS OF MAKING THEM. EARL P. STEVENSON, Newton, Mass., assignor to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Apr. 6, 1931. Serial No. 528,248. 20 Claims. (Cl. 92—21.)

1. A fibrous pulp in water suspension in association with a binder substance in particle form, the binder particles containing filler materials in substantially homogeneous distribution therein.

1,901,383. PROCESS FOR RECOVERING THE OIL-SOLUBLE SULPHONIC COMPOUNDS FORMED IN THE ACID REFINING OF MINERAL OILS. GEORGE VOOGT, Hamburg, Germany, assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Mar. 25, 1931, Serial No. 525,827, and in Germany Mar. 31, 1930. 4 Claims. (Cl. 260—159.)

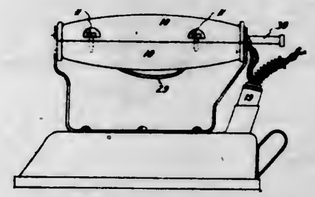
1. The process of recovering the oil-soluble sulphonic compounds formed in the acid refining of mineral oils, which consists in separating the acid sludge from the oil, adding an alkaline solution and alcohol to the oil, whereby the oil soluble sulphonic compounds are separated from the oil in the form of alkali sulphonates, drawing off the alcoholic alkaline sublye containing the alkali sulphonates and treating said sublye with a salting out agent, drawing off the bulk of alcohol, water and dissolved mineral matters from the salted out sulphonate oil mixture, treating the said mixture with concentrated alcohol so as to dissolve the alkali sulphonates, separating the non-dissolved residue from the solution and evaporating the latter to dryness.

1,901,384. CABINET FOR ARC LAMPS. JAMES H. WAGENHORST, Detroit, Mich. Filed Mar. 8, 1930. Serial No. 434,854. 14 Claims. (Cl. 176—115.)



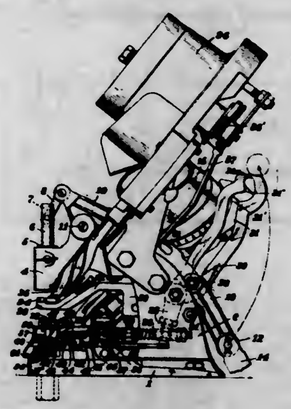
1. In an arc lamp, the combination of a casing for the lamp elements having a light opening in one side thereof, a lower reflector having an upwardly extending flange for retaining ash falling from the arcing elements and hinged to the casing adjacent its bottom and swingable to a position wholly within the casing when not in use, and an upper reflector hinged to the casing swingable downwardly to form a closure for said opening.

1,901,385. ELECTRIC IRON. HORACE KINTON WARNER and GEORGE ROBERT ELLIOTT, Auckland, New Zealand, assignors to Warnell Patents Limited, Auckland, New Zealand, a Company of New Zealand. Filed Mar. 17, 1931, Serial No. 523,328, and in New Zealand July 24, 1930. 2 Claims. (Cl. 200—157.)



1. In electric irons, a hollow handle, a horizontal base board of insulator material arranged within such hollow, a pair of contact studs fixed upon the surface of such base board and interposed in the current supply lead to the iron heating element, a bridging plate or disc mounted to rotate on such board and adapted in one position to connect the studs and in other to disconnect them, a stem piece mounted to slide longitudinally in the handle above the base board, connected to such bridging plate or disc by a tension spring, adapted when moved forwardly to turn it to the connecting position, a spring acting on the stem piece and forcing it to the rearward, or disconnecting, position, a bell crank lever mounted to extend vertically in the handle and having an upwardly extending arm engaging the rear end of the stem piece and its second arm extending rearwardly and downwardly, and a bow shaped lever arranged to extend along beneath the handle with its bow downward, and having its forward end pivoted in the handle and its rear end articulated to the second arm of the said bell crank lever.

1,901,386. BUTTON ATTACHING MACHINE. FRANKLIN R. WHITE, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 7, 1932. Serial No. 585,319. 20 Claims. (Cl. 218—6.)

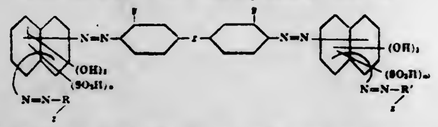


6. A button attaching machine including a plunger, an anvil beneath said plunger, a jaw carrier slidable up and down said anvil and provided with tack gripping jaws,

means for normally holding the jaw carrier in an upper position, a cam-operated lever bearing on said jaw carrier, a tucker lever, a cam on said tucker lever for operating said lever, and an oscillating lever for operating said tucker lever, said oscillating lever cooperating and being synchronized with the said plunger whereby the said jaw carrier will be lowered and the jaws spread when the said plunger has nearly completed its stroke.

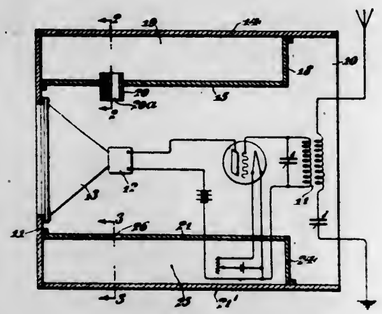
1,901,387. AZODYESTUFFS. KARL WIEDEMANN, Leverkusen-I. G. Werk, and HEINRICH CLINGESTEIN, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 2, 1932, Serial No. 596,404, and in Germany Mar. 9, 1931. 5 Claims. (Cl. 260—71.)

1. Azodyestuffs of the probable general formula:



wherein "—a—" stands for a carbon-carbon linkage or for the urea bridge, "y" stands for the carboxylic acid group or for an alkoxy group, "z" stands for the carboxylic acid group or for an alkoxy group, "R" and "R'" stand for radicals of the benzene or naphthalene series, the substituents "s" being attached to "R" or "R'" respectively in ortho-position to the azo-group, each azo-group being attached to the respective hydroxy-naphthalene-sulfonic acid radical in ortho-position to a hydroxy group, and "n" and "n'" stand for the numbers one or two, being in form of their alkali metal salts dark powders, soluble in water, dyeing the vegetable fibre reddish- to greenish-grey shades, which by after-treating in substance or on the fibre with copper-yielding agents form copper complex compounds.

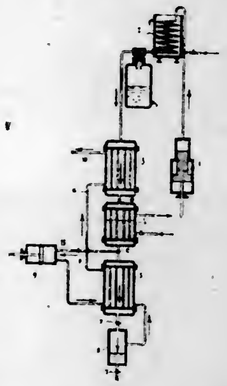
1,901,388. METHOD AND APPARATUS FOR ELIMINATING THE EFFECT OF CABINET RESONANCE. IRVING WOLFF, Merchantville, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1930. Serial No. 445,448. 17 Claims. (Cl. 274—2.)



1. In the art of avoiding undesired acoustic action in sound-producing apparatus comprising a cabinet resonant within a given frequency range and a sound producer diaphragm associated with said cabinet, the method which comprises developing during operation of said apparatus within said frequency range, a relatively low pressure region at a region about the diaphragm within said cabinet where a relatively high pressure region would otherwise develop.

5. In apparatus of the character described, a cabinet normally resonant within a given frequency range, a vibratory member associated with said cabinet, and means disposed within said cabinet and providing a resonator operable to compensate for acoustic action of said cabinet with respect to said member during vibration of the latter within said frequency range.

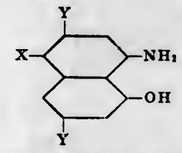
1,901,389. PROCESS FOR LIQUEFYING AND RECTIFYING AIR. MAURICE HAZARD-FLAMAND, Douai, France. Filed Oct. 9, 1929, Serial No. 398,459, and in France Oct. 18, 1928. 3 Claims. (Cl. 62—175.)



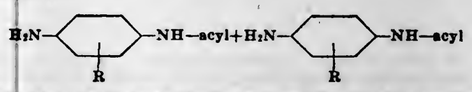
1. A process for liquefying air which comprises passing the air under high pressure through an exchanger and then through a refrigerator, dividing the air after it has passed through the refrigerator into two streams, expanding one of said streams in a low pressure liquefying chamber, expanding the other of said streams in a work performing device operable by the expansion, returning the unliquefied air under low pressure from the liquefying chamber in heat exchange relationship to the air flowing to the liquefying chamber, and also returning the expanded, low pressure air from the work performing device in heat exchange relationship to the air flowing to the liquefying chamber.

1,901,390. BLACK AZODYESTUFFS AND PROCESS OF MAKING SAME. RICHARD FLEISCHHAUER and CARL-THEO SCHULTIS, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 2, 1930, Serial No. 486,052, and in Germany Oct. 9, 1929. 10 Claims. (Cl. 260—70.)

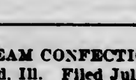
1. A process which comprises combining a 1-amino-8-hydroxy-naphthalene sulfonic acid of the general formula:



wherein one X means hydrogen, the other X a sulfonic acid group and Y means hydrogen or a sulfonic acid group, with the diazo compounds of two amines of the formulæ:

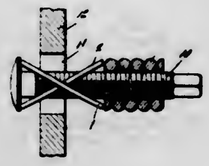


wherein one R means hydrogen, an alkoxy, hydroxyl or carboxylic acid group, the other R an alkoxy, hydroxyl or carboxylic acid group, and the benzene nuclei may contain a halogen, alkoxy, alkyl or sulfonic acid group, transforming in the disazo dyestuffs thus produced the acylamino groups into amino groups by saponification, tetrazotising and combining these tetrazo compounds with two compounds of the formula:



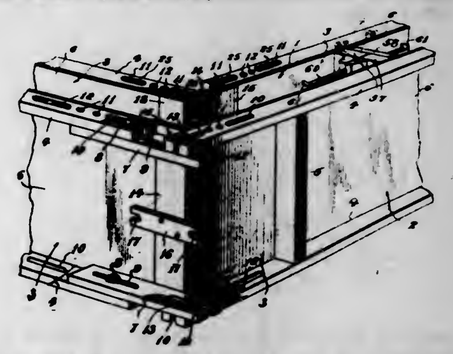
wherein each Z means an amino or hydroxy group.

1,901,391. COMBINATION WASHER. CHRISTIAN FORBERG, St. Thomas, Ontario, Canada. Filed Mar. 8, 1932. Serial No. 597,578. 3 Claims. (Cl. 85—3.)



2. A washer of the class described comprising two members of loop-like shape with the sides elongated, and means for pivoting one part on the other part at substantially the centers of the side portions thereof.

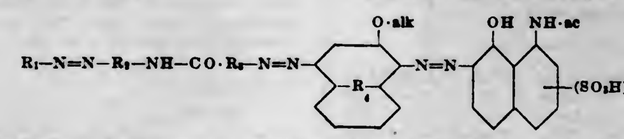
1,901,392. CONCRETE FORM. JOHN S. FREDERICK, Emaus, Pa. Filed July 31, 1930. Serial No. 472,005. 7 Claims. (Cl. 25—131.)



7. In a building mold, a bracket for connecting ends of mold forming sections, said bracket having leaves adapted to be secured to mold sections longitudinally thereof, one leaf having a tongue extending from its inner end, a hinge block pivoted to said tongue for turning in a plane parallel to the tongue, and a sleeve hinged to said block and having a shank swiveled to the inner end of the other leaf axially thereof.

1,901,393. POLYAZODYESTUFFS. EUGEN GLIETENBERG, Leverkusen-I. G.-Werk, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 5, 1931, Serial No. 542,466, and in Germany June 10, 1930. 5 Claims. (Cl. 260—72,.)

1. The azodyesuffs of the probable general formula:



wherein R_1 stands for the radical of a coupling component of the group consisting of phenols, salicylic acid compounds, aceto-acetic acid arylamides, methylketol and pyrazolones, R_2 stands for a benzene nucleus which may be substituted by a sulfonic acid group, R_3 stands for a benzene nucleus which may be substituted by halogen, alkyl or alkoxy, R_4 may be subetituted by a sulfonic acid group "alk" stands for an alkyl group, "ac" stands for an acyl group and "n" stands for one of the numbers one and two, being in the form of their alkali metal salts dark powders, dyeing the vegetable fibre green shades of good fastness to light.

1,901,394. ICE CREAM CONFECTION BAR. BERT R. J. HASSELL, Rockford, Ill. Filed July 6, 1931. Serial No. 548,845. 3 Claims. (Cl. 99—11.)



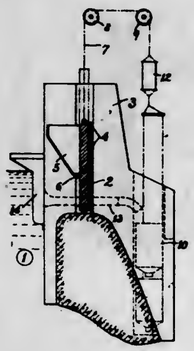
1. A confection comprising a core of normally liquid material frozen to a substantially solid state, the core being adapted to be coated by dipping into molten, edible, coating material, said first mentioned material having mixed therein a granular, edible, farinaceous material which is unaffected by the heat of the molten coating material when dipped therein, whereby to provide solid projections on the surface of the core for adhesion thereon of the coating material, and an edible coating for the core.

1,901,395. DIRECTION SIGNAL. ALVIN L. JOHNSON, Worcester, Mass. Filed Jan. 13, 1931. Serial No. 508,490. 2 Claims. (Cl. 116—39.)



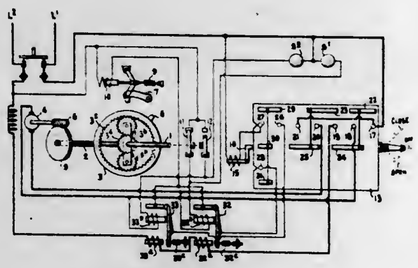
1. The combination with a car having a window and a steering column, of a pneumatic direction signal having a suction cup thereon for holding it against the window on the inside, said signal having two opposite collapsible arms connected with the interior of the signal separately, a flexible band detachably mounted on the steering column having two flexible air bags therein, and a flexible tube connecting each air bag with one of said arms.

1,901,396. AUTOMATIC REGULATING AND CONTROLLING GATE. SHINICHIRO KAMBARA, Yokohama, Japan. Filed Feb. 10, 1932. Serial No. 592,087. 3 Claims. (Cl. 61—26.)



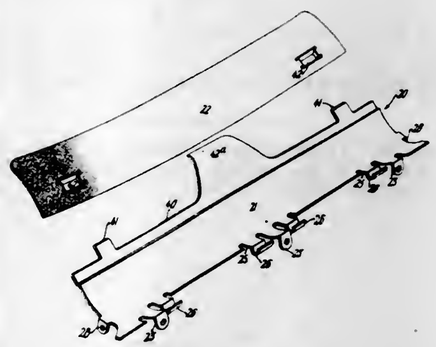
1. An automatic regulating and controlling gate comprising a gate suspended by a rope, a regulating casing secured in front of said gate having means for gradually flowing water therein, a vessel suspended by the rope connected to said gate and having a limited drain hole, an overflow receiver having a passage for discharging water into said suspended vessel, said regulating casing being adapted to increase buoyancy in the case of sudden rise of water level for opening the gate while it being unaffected by the slow rise of level and said suspended vessel being effective to operate the gate when the over-flow of water is discharged into said vessel.

1,901,397. DRIVING MECHANISM FOR VALVES AND OTHER DEVICES. CLARENCE W. KUHN, North Milwaukee, Wis., assignor, by mesne assignments, to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed June 13, 1928. Serial No. 285,111. 2 Claims. (Cl. 172—239.)



1. The combination with a part to be driven into a definite limit, a driving motor therefor, a quickly interruptible driving connection therebetween, a relay responsive to interrupt said driving connection, said relay having an operating winding connected in circuit with said motor to effect response thereof under given current conditions, and having a restraining winding to prevent response thereof under the action of said former winding, and means for controlling said restraining winding to prevent response of said relay except during final movement of said part into said limit.

1,901,398. TYPEWRITING MACHINE. LAWRENCE E. LENTZ, Harrisburg, Pa., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 18, 1928. Serial No. 270,867. 8 Claims. (Cl. 197—143.)



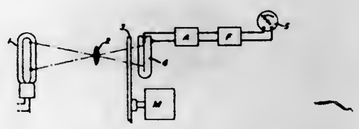
1. A paper-table for typewriting machines, including a flexible upper and a lower section, and means associated with both sections for securing the same laterally in position, including in the lower section a central member and a member at each end thereof to engage the upper section when flexed, to retain the upper section in position on the lower section by the former's own resiliency.

1,901,399. SIGHT. CHARLES E. LYMAN, Jr., Middlefield, Conn., assignor to The Lyman Gun Sight Corporation, Middlefield, Conn. Filed Feb. 25, 1930. Serial No. 431,191. 9 Claims. (Cl. 33—47.)



1. In a front sight, a generally hollow cylindrical hood, an insert having a generally circular peripheral portion adapted to closely fit within said hood, there being longitudinally directed slots in said hood, and radially extending arms on said insert received in said slots.

1,901,400. HARMONIC ANALYZER. WARREN A. MARRISON, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 27, 1931. Serial No. 559,605. 10 Claims. (Cl. 175—183.)



1. A wave analyzer comprising in combination a source of light, a light responsive device, a disc between said source and said device whose periphery has been cut to represent a wave to be analyzed in polar coordinates, means for rotating said disc sequentially at speeds proportional to the frequencies of the wave component in the wave to be analyzed, and means for obtaining an indication of the current in said light responsive device.

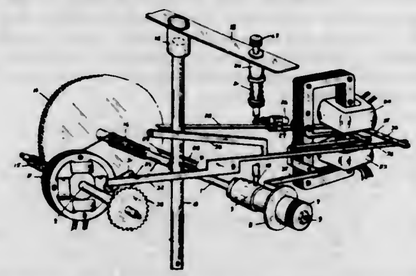
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1,901,401. CONDUCTOR SUPPORT. SAMUEL S. MATTHEW, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 11, 1931. Serial No. 521,659. 15 Claims. (Cl. 191—43.)



1. A conductor support comprising an inverted U shaped sheet-metal-member having a groove and depending lips, a recess formed at each end of the member opening into the groove and having a passage thereunto through the wall of said member, a yoke member having a boss and arms projecting therefrom and having a passage through each end, each passage coinciding with one of the passages through the ends of the first member, a bolt for each recess and having a head therein and a shank projecting through the said corresponding passages and means on each shank to draw and hold the U member and yoke member together.

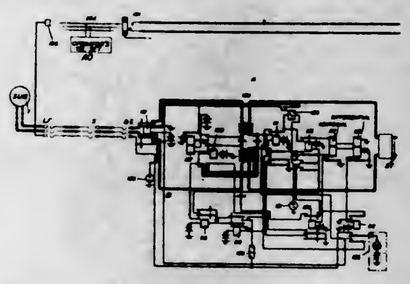
1,901,402. MOTOR OPERATED MECHANISM. IRA E. MCCABE, Chicago, Ill. Filed Feb. 11, 1932. Serial No. 592,219. 10 Claims. (Cl. 172—239.)



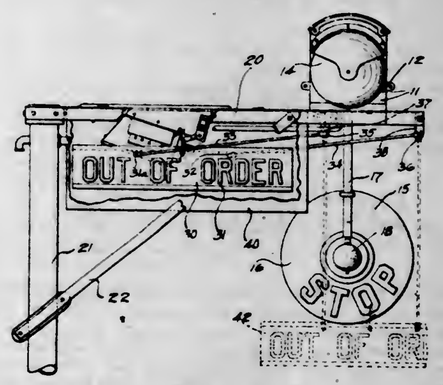
1. A motor operated mechanism of the character described including an electric motor, an electric circuit therefor, an actuating rod, means operated by the motor to impart axial movement to the rod in one direction and means to impart opposite axial movement thereafter when the motor circuit is broken, a relay having a movable coil, a circuit therefor, a relay energizing switch in said circuit, a switch in the motor circuit, means actuated by the closing of the energizing switch to cause the movement of the movable coil to close the motor switch, means for opening the closed motor switch actuated by a predetermined movement of the actuating rod, and means for holding the rod against movement in the opposite direction, said holding means active only as long as the relay remains energized following the opening of the motor switch by the movement of the actuating rod.

1,901,403. TELEPHONE SYSTEM. PAUL B. MURPHY, Nyack, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1930, Serial No. 500,517. Renewed Apr. 15, 1932. 11 Claims. (Cl. 179—27.)

1. In a telephone system, a first office, a second office, a subscriber's line at the first office, an operator's position at the second office, means for establishing a connection from the subscriber's line to the operator's position, means for establishing a second connection from the operator's position to the subscriber's line, means for transmitting a direct current signal from the operator's position toward the subscriber's line, and means for translating said direct current signal into an alternating current signal for transmission over said connections.



1,901,404. OUT-OF-ORDER SIGNAL. BURNETT D. NEWTON, Los Angeles, Calif., assignor to Magnetic Signal Co., a Corporation of California. Filed Nov. 19, 1924. Serial No. 750,746. 11 Claims. (Cl. 177—379.)

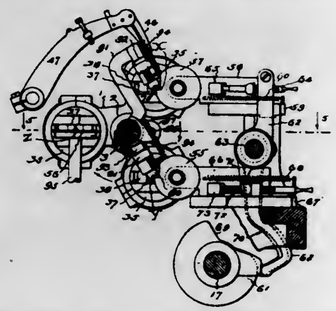


10. In combination: a wigwag signal; an out-of-order signal; a source of energy for operating said signals; latch means for holding said out-of-order signal in non-indicating position; electrical means for holding said latch means in latching position; and means for neutralizing said electrical means upon failure of said wigwag to operate when energized, said electrical means releasing said latch means upon failure of said source of energy.

1,901,405. MACHINE FOR SHAVING AND SLOTTING SCREWS. FRANK E. NEWTON, Hartford, Conn. Filed Dec. 18, 1931. Serial No. 581,827. 10 Claims. (Cl. 10—3.)

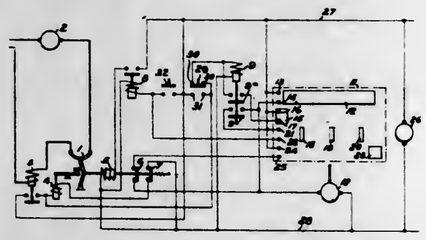
1. A shaving and slotting machine comprising a rotatable head, mechanism for imparting three intermittent rotary movements of one hundred and twenty degrees each during each complete rotation of said head, three spindles rotatably mounted one hundred and twenty degrees apart in said head, means for rotating said spindles at the first and second stops and interrupting the rotation of the spindles at the third stop of said head, blank holding chuck jaws carried by said spindles, means for opening and closing said chuck jaws at the first stop of said head, a re-shaving tool movable toward the axis of the chuck jaws at the first stop, a shaving tool movable

toward the axis of the chuck jaws at the second stop, a rotatable slotting saw adjacent the third stop, and means for drawing the spindles axially toward the slotting saw



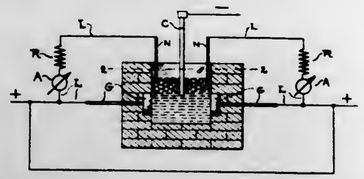
at said third stop, said stops of the head carrying the spindles being only as long as the shaving tool operates on the blanks.

1,901,406. CIRCUIT BREAKER CONTROL SYSTEM. HENRY V. NYE, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed June 20, 1928. Serial No. 286,812. 20 Claims. (Cl. 175—294.)



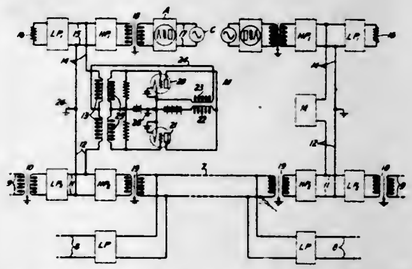
1. In combination, a circuit breaker, means for closing said circuit breaker, means including an overload relay for causing said circuit breaker to open, a rotary timing device having an initial position, a single motive device for rotating said timing device in one direction only, means responsive to the actuation of said overload relay for energizing said motor and thereby causing said timing device to rotate from its initial position continuously through one complete revolution, and means for causing said timing device to actuate said circuit breaker closing means to reclose said circuit breaker.

1,901,407. ELECTROLYTIC PROCESS FOR PRODUCING ALLOYS OF LITHIUM. HANS OSBORG, Frankfort-on-the-Main, Germany. Filed June 5, 1931, Serial No. 542,460, and in Germany June 6, 1930. 7 Claims. (Cl. 204—19.)



1. The process of producing a lithium alloy containing a metal melting at a relatively high temperature above about 600° C., which comprises establishing an electrolytic cell having a fused bath containing a lithium compound capable of permitting the electro-deposition of lithium and maintaining a cathode and a plurality of anodes including a graphite anode and an anode of a metal to be electro-deposited, and passing an electric current through said cell via said graphite anode and said metal anode to cause the deposition of an alloy of lithium and the said metal at the cathode.

1,901,408. BILATERAL MODULATOR CIRCUIT. EUGENE PETERSON, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 21, 1929. Serial No. 348,740. 8 Claims. (Cl. 179—171.)



1. In combination, a transmission line, means for impressing relatively low frequency waves on said line, means for impressing carrier waves on said line, a modulating device, circuit means connecting the input circuit of said modulator to said line, and circuit means connecting the output circuit of said modulator to said line contiguous to said input circuit connecting means, said input and output connecting circuits being conjugately related so that output energy produces substantially no difference of potential between the input terminals of the modulator device.

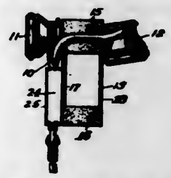
1,901,409. COATING MATERIAL FOR CASTING MOLDS. FRED M. POE, Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, New York, N. Y., a Corporation of Delaware. Filed May 4, 1932. Serial No. 609,283. 5 Claims. (Cl. 22—189.)

1. A coating for casting molds consisting of a liquid mixture containing ground fused silica and ground graphite.

1,901,410. COATING FOR BUILDINGS AND METHOD FOR MAKING SAME. EMIL POEGEL, Newark, N. J. Filed May 31, 1930. Serial No. 458,891. 4 Claims. (Cl. 134—78.5.)

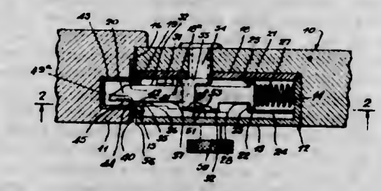
1. A coating for weatherproofing buildings comprising a cod liver oil base, a bee's wax filler, and acid acetic glacial.

1,901,411. METHOD OF SIGNALING TRAFFIC BY A HAND DEVICE. CLARENCE A. RICH, Lynn, Mass. Filed May 5, 1926. Serial No. 106,867. 1 Claim. (Cl. 177—329.)



In a road arm and hand signaling device, a hand harness, means for mounting the harness on the hand of the operator, a casing having a red lens, a casing having a green lens, a lamp mounted in each casing adapted to illuminate the lens, circuits for the lamps and a source of electrical energy, means mounting the first mentioned casing on one side of the harness, means mounting the second mentioned casing on the opposite side of the harness, at substantially a right angle to the first casing, switch means for automatically closing the circuit to the lamp in the first mentioned casing when the arm and hand of the operator are raised to an upright position, and for closing the circuit to the lamp in the second mentioned casing and opening the circuit to the lamp in the first casing when the hand and forearm of the operator is bent back over the upper arm, and means for opening the circuit to both lamps when the arm of the operator is dropped to the side, all three movements conforming to the natural movements of the hand and arm for regulating traffic.

1,901,412. LOCK. WILLIAM A. RICHTER, New York, N. Y. Filed July 10, 1931. Serial No. 549,898. 9 Claims. (Cl. 70—14.)



2. In a lock, a casing adapted to be mounted on a door, a keeper adapted to be mounted on a door jamb, a latch bolt slidably mounted for longitudinal movement within said casing, and having a ramped portion on one face thereof adapted to engage the keeper to permit the door to be slammed shut, said bolt being adapted to move transversely of said casing and having a portion on the opposite face thereof for engaging a portion of the keeper upon being transversely moved, and resilient means for normally retaining the bolt out of engagement with said portion of said keeper.

1,901,413. VALVE CONSTRUCTION FOR CONTAINERS. WALTER A. ROSELLE, New York, N. Y. Filed Oct. 30, 1931. Serial No. 572,098. 13 Claims. (Cl. 221—60.)



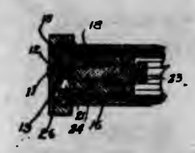
13. As an article of manufacture, a valve device for a tube closure, formed of a strip of thin, flexible, non-corrodible metal substantially non-resilient and provided with an integral boss-like finger piece near one end drawn from the metal of the strip.

1,901,414. COMBINATION FOUNTAIN PEN AND PENCIL. SOLOMON M. SAGER, Evanston, Ill. Filed Apr. 24, 1930. Serial No. 446,808. 2 Claims. (Cl. 120—14.)



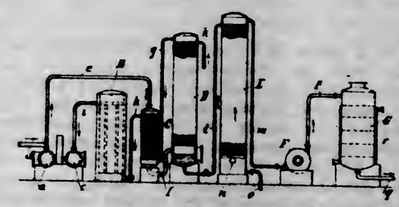
1. A writing instrument comprising, a fountain pen having an ink visible barrel with a plunger rod reciprocable therein and extending therefrom terminating in a plunger head, a casing provided with means defining a chamber adapted to receive pencil leads and being open at one end to permit removal or insertion of said leads, and a cylindrical member removably connecting said pen and said casing, said member having an interior partition providing closure means for the plunger head and of said pen and for an end of said casing, said casing being insertible in said cylindrical member to abut said partition.

1,901,415. ATOMIZER. FRANK A. SCHNEIDER, San Francisco, Calif. Filed Sept. 24, 1930. Serial No. 484,110. 9 Claims. (Cl. 299—120.)



1. In a liquid atomizer a cup open at one end, a nozzle disc at the other end of the cup to close the same, said disc having a discharge orifice therethru; an atomizer within the cup having its periphery spaced from the inner periphery of the cup to form an intake chamber thereat, said cup having an aperture thru its wall to admit fuel into the said intake chamber, said atomizer having a whirling chamber therein in communication with the said orifice, and having passages thru the wall thereof to admit liquid from the intake chamber tangentially into the whirling chamber; means secured to the open end of the cup to cover the same and to hold the atomizer in the cup; and attachment means on said cup whereby the cup is attached to a conduit so that the apertures thereof communicate with the interior of the said conduit.

1,901,416. PRODUCTION OF GASEOUS MIXTURES CONTAINING SULPHUR DIOXIDE. MAX SCHROEDER, Berlin, Germany. Filed June 22, 1929, Serial No. 373,024, and in Germany May 15, 1929. 15 Claims. (Cl. 23—178.)

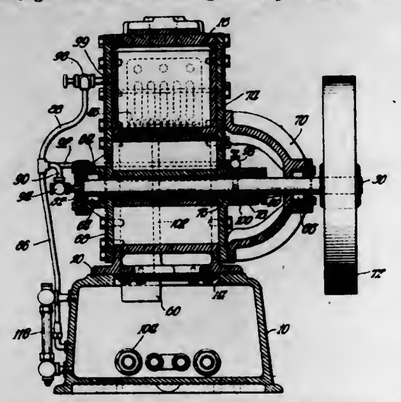


1. The method of producing a mixture of sulphur dioxide and oxygen which comprises forming a liquid solution of sulphur dioxide at a predetermined pressure, and passing a gas containing oxygen in contact with the solution at a lower pressure.

1,901,417. PUMP. OLIVER S. SLEEPER, Mount Vernon, Ill., assignor to J. P. Devine Manufacturing Company, Mount Vernon, Ill., a Corporation of Illinois. Filed Oct. 20, 1930. Serial No. 489,817. 5 Claims. (Cl. 230—205.)

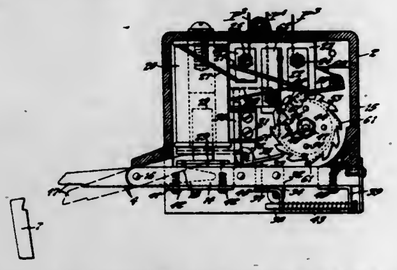
4. A pump comprising a housing, an eccentric cylinder in said housing, the periphery of the cylinder being smooth and devoid of oil grooves, the ends of the cylinder each lying all in one plane and being smooth and devoid of oil grooves, said housing having complementary peripheral and end faces also smooth and devoid of oil grooves, and oil supply means for delivering oil to the parts, the clear-

ances between the parts being such that the capillary oil film necessary for mechanical lubrication has capillary strength in excess of the gaseous pressure differences



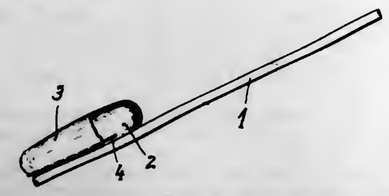
generated by said pump, whereby an effective capillary seal may be maintained at every point without flooded lubrication.

1,901,418. TIMING DEVICE FOR LOOM STOP-MOTIONS. EDWIN C. SMITH, Providence, R. I., assignor to Rhode Island Warp Stop Equipment Company, Portland, Me., a Corporation of Maine. Filed Dec. 2, 1931. Serial No. 578,491. 10 Claims. (Cl. 139—371.)



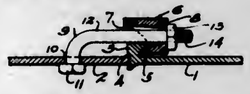
1. In a timing device for loom stop-motions, the combination with an electro-magnetic stop-device, and an electrical circuit therefor, of a timing unit in circuit with said stop-device, contact means incorporated with said timing unit for closing the circuit and constituting one terminal thereof exposed at intervals by turning the timing unit, a driving member constituting the other terminal of the electric circuit to turn the timing unit and at the stated intervals encounter the exposed contact means to close the circuit, and means to impel the driving member.

1,901,419. TOOTH-CLEANER. MARIE HELENE STEINERT, Chemnitz, Germany. Filed Jan. 19, 1932, Serial No. 587,466, and in Germany Dec. 31, 1930. 2 Claims. (Cl. 15—210.)



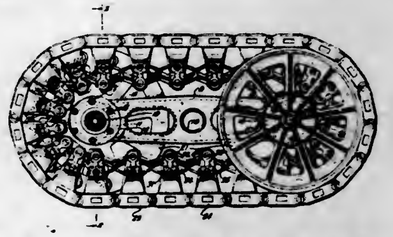
1. A tooth-cleaner of the character described, comprising a handle, a wedge-shaped back forming a part of said handle and projecting from one of the sides thereof, the cleansing surface of said back being flat and wider than the portion of said back adjacent to said handle, and a removable fabric cover surrounding said back, said cover narrowing towards said handle and being held in position by the narrow portion of said back.

1,901,420. PIPE STRUCTURE. JOHN R. STERNAMAN, Springfield, Ill. Filed Sept. 26, 1929. Serial No. 395,487. 3 Claims. (Cl. 285—140.)



1. Means for securing together the ends of adjacent pipe sections comprising an outward ridge on one of said ends, and a hook member having an end portion secured to the wall of the other section and a shank extending along said sections, a lug engaging the surface of said ridge facing away from said ends, said shank extending outside of said ridge and through said lug, and a nut threaded on said shank for drawing said sections together, said shank being spaced a substantial distance from the referred to end portion of said hook member and there being a curved portion of substantial radius between said shank and end portion, and the engaging surfaces of said ridge and said lug forming an acute angle with the wall of the adjacent section whereby expansion and contraction of said sections is facilitated without straining the sections or loosening the joint.

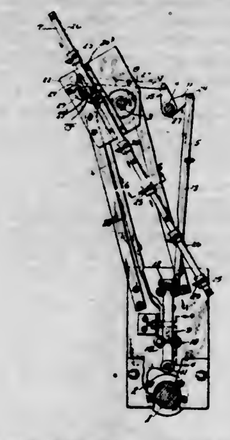
1,901,421. TRACKLAYING DEVICE. FREDERICK A. STREICH, Oshkosh, Wis., assignor to A. Streich & Bro. Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Jan. 6, 1930. Serial No. 418,949. 2 Claims. (Cl. 305—8.)



2. In a track laying device having a longitudinal support, having a pair of spaced apart wheels rotatably mounted on each end of the support, and having a plurality of shoes pivotally connected together to form an endless band extending around the pairs of wheels, said shoes each having side edges overlapping the peripheries of the wheels; spaced apart upright portions in connection with each shoe, pins extending between said upright portions, links connecting the pins of adjacent shoes, and braces in connection with the outer sides of the upright portions and curving outwardly to a spaced position therefrom and being there connected to a shoe, said braces and upright portions fitting between the pairs of wheels, and the outwardly curved portions of the braces being positioned adjacent the inner sides of the wheels to clear dirt therefrom during movement of the device.

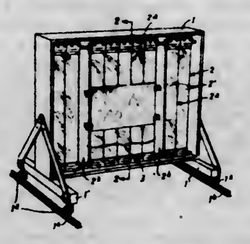
1,901,422. CONTROLLING MECHANISM FOR FULL FASHION TEXTILE MACHINES. GEORGE S. WEINERTH, Reading, Pa. Filed Mar. 27, 1930. Serial No. 439,289. 15 Claims. (Cl. 66—167.)

5. In combination with the cam shaft, control rod and take-up shaft of a full fashion textile machine, control mechanism comprising manipulating mechanism directly connected to said control rod and release mechanism for releasing said manipulating mechanism for movements



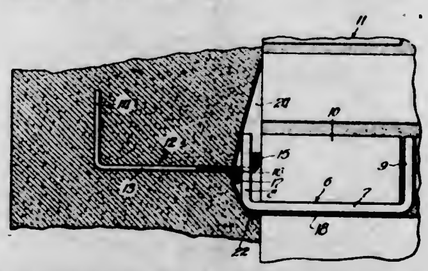
into operative and inoperative connection with said cam shaft in accordance with the number of rotations of said take-up shaft.

1,901,423. COMBINED FOCUSING SCREEN AND RETAINING MEMBER FOR SENSITIZED MATERIAL. ELLIS WEISKER, New York, N. Y. Filed Mar. 23, 1931. Serial No. 524,610. 18 Claims. (Cl. 88—24.)



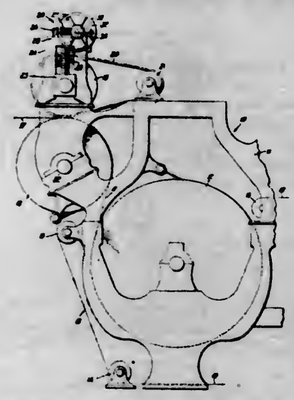
1. A combined focusing screen and retaining member for sensitized material composed of a series of sections comprising strips of transparent material, and means for mounting said transparent strips in adjustable relationship.

1,901,424. LINING ANCHORING MEANS. ROGER F. WILEY, Denver, Colo., assignor to Plibrico Jointless Firebrick Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1930. Serial No. 475,147. 6 Claims. (Cl. 72—101.)



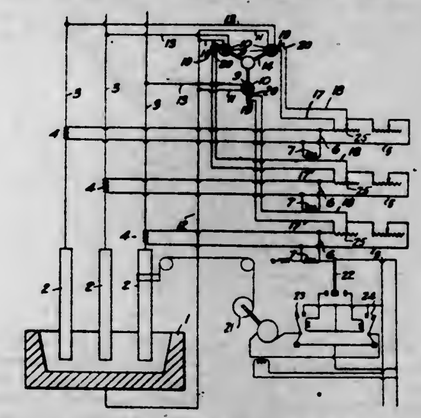
1. In combination, a retaining wall, a refractory lining, an anchor member embedded in said wall, an anchor member embedded in said lining, a connection between said members at a point outside the plane of said retaining wall permitting expansion and contraction of the lining in every direction in the plane thereof independently of the retaining wall, and a shield having a slot therein accommodating one of said members and cooperating with said retaining wall and the other of said members for encasing said joint.

1,901,425. PAPER-MARKING MACHINE. HARRISON R. WILLIAMS, New York, N. Y. Filed Mar. 14, 1929, Serial No. 347,001. Renewed July 19, 1932. 8 Claims. (Cl. 92—48.)



1. In combination with a paper making machine through which the paper passes as a continuous web, a pair of metal rolls, the paper web being arranged to pass continuously between said rolls, a vertically slidable bearing block disposed at each end of one of said rolls, a guide for each of said bearing blocks, a vertically disposed threaded stud integral with each of said bearing blocks, an internally threaded worm wheel carried by each of said studs, means for holding said worm wheels against vertical movement, and means for rotating said worm wheels synchronously.

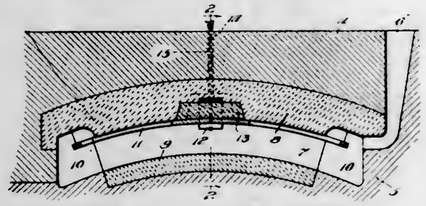
1,901,426. ARC FURNACE CONTROL APPARATUS. JOHN YOUNG, Welland, Ontario, Canada. Filed May 1, 1931. Serial No. 534,215. 3 Claims. (Cl. 13—13.)



1. In a three-phase arc control apparatus, in combination a furnace hearth, three electrodes, bus bars supplying current to the three electrodes, a current regulating circuit including a current regulator associated with each electrode, and a shunt circuit including a rheostat in circuit with each current regulator, a voltage regulator com-

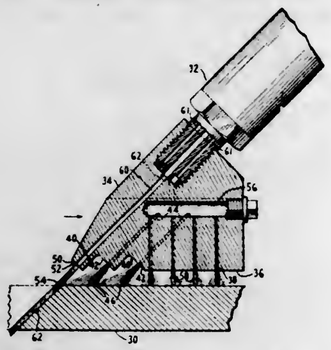
prising a magnetic coil connected between each bus bar and, the furnace hearth, a movable member superimposed above the coils, a plurality of contacts on the member, a plurality of contacts adapted to coact with the contacts on the member, each pair of coacting contacts being connected into a current regulating circuit and when out of contact with each other causing a further resistance to be inserted into the shunt circuit with a consequent increase of current through the corresponding current regulator, and means due to the weakening of the current in a magnetic coil for causing the member to break contact between the contacts connected with the current regulating circuit associated with such coil.

1,901,427. LINING FOR CASTING MOLD CAVITIES. JOHN D. ALLEY, Pittsburgh, Pa., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Original application filed Aug. 22, 1929, Serial No. 387,817. Divided and this application filed June 1, 1932. Serial No. 614,697. 3 Claims. (Cl. 22—189.)



1. A lining of low thermal conductivity and capable of resisting repeated heat shocks for a casting mold cavity lining and consisting of fused silica and a refractory binder composed of Kentucky ball clay and Georgia kaolin.

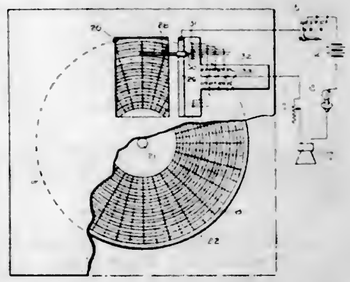
1,901,428. METHOD OF CUTTING METAL BY MEANS OF GASES. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 13, 1930. Serial No. 502,026. 8 Claims. (Cl. 148—9.)



1. A method of cutting continuously across the flange portions of metallic members formed by the intersection of two plate-like portions, in which at least one of such portions terminates at the intersection, which includes: directly obliquely at the flange portion a jet of an oxidising gas in quantities greater than necessary to penetrate only the metal of said flange, effecting relative movement of the flange portion and the oxidizing gas jet so that the direction of the jet is opposite to the movement thereof relative to the portion, and acting on the metal of the flange in advance of such jet with an extensive series of successive preheating flame jets, part at least of said preheating jets being directed obliquely in the same general sense as the oxidising jet.

8. A method of cutting metallic members along a proposed line, in which relative motion of the member and an oxidising jet is effected, which includes: heating the metal of the member by a series of forward heating jets acting substantially in line with the line of the cut, directing a plurality of other heating jets at the metal on each side of the previously heated metal, and finally subjecting the metal to the action of the oxidizing jet substantially along the initially heated line.

1,901,429. METHOD AND MEANS FOR SOUND CORRECTION IN AN ELECTRIC CIRCUIT. WILLIAM N. BARLOW, Yonkers, N. Y. Filed Apr. 23, 1930. Serial No. 446,692. 3 Claims. (Cl. 179—100.3.)



1. In an apparatus for charting sound corrections required in talking picture reproduction apparatus having sound reproduction means, the combination of a turn table rotating at a predetermined speed, a charted disc carried by the turn table, a rheostat in electrical connection with the sound reciproduction means of a film projector, comprising a series of resistances, contact members for each resistance, and a contact finger movable from one contact to the next to bring each resistance into a circuit, said finger having a stylus movable therewith and in contact with the charted disc to translate movement of the finger in terms of lines upon the charted disc.

1,901,430. HAIR WINDING MECHANISM. GEORGE EDWARDZ BJÖRKMAN, Djursholm, Sweden. Filed Apr. 17, 1931. Serial No. 530,790. 3 Claims. (Cl. 132—38.)



3. A winder element for hair waving devices, comprising a stem, a hollowed element of insulating material having a central bore, whereby to permit insertion for

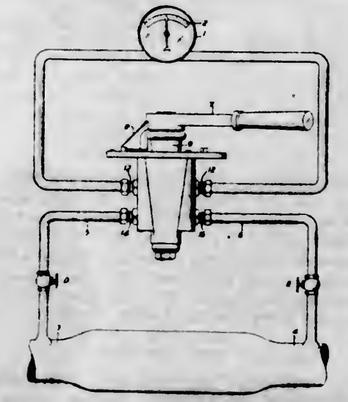
reciprocation and rotation of the same over said stem, said element having a notch formed thereon, the terminals of said notch being defined by a plurality of substantially parallel disposed tongues extending oppositely in spaced relationship one with respect to the other, said tongues being adapted to guide and maintain within the notch the hair wound by said element on said stem as the winder element is rotated in either direction.

1,901,431. METHOD OF AND APPARATUS FOR DETERMINING TRUE ROCK TEMPERATURE IN ROTARY DRILLED WELLS. LEWIS A. BOND, Los Angeles, Calif., assignor to Shell Oil Company, San Francisco, Calif., a Corporation of California. Filed Sept. 22, 1928. Serial No. 307,621. 3 Claims. (Cl. 234—11.)



2. A method of determining true rock temperatures in a bore-hole, which comprises: lowering a heat-sensitive element a distance below the normal bottom of said bore-hole; and recording the temperature to which said heat-sensitive element is subjected.

1,901,432. PRESSURE LEAK INDICATOR. ROBERT WALTER BRADLEY, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 21, 1930, Serial No. 469,609, and in Great Britain Nov. 20, 1929. 3 Claims. (Cl. 137—77.)



3. In combination with a gas filled cable, a pressure leak indicator comprising a differential pressure gauge, two pilot tubes connecting said indicator to the cable to be tested, a means in the line of said pilot tubes between said cable and said indicator for controlling the passage of gas from said cable to said indicator, said means comprising a valve having a single operating handle, said valve being designed to be rotated to permit a flow of gas either through one or both of said pilot tubes, or for completely stopping the passage of gas.

1,901,433. ARTIFICIAL LARYNX. GEORGE W. BURCHETT, Peekskill, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 537,307. 17 Claims. (Cl. 3—1.)

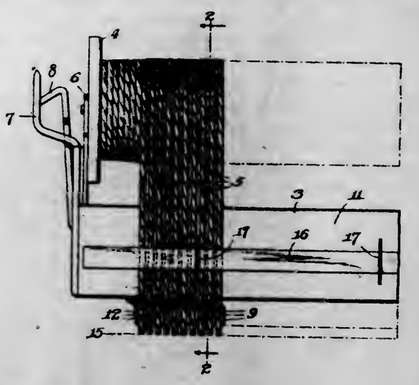


1. An artificial larynx comprising electrical means for producing sound waves, and means for conducting said sound waves into the vocal cavities of a user of said larynx.

1,901,434. GERMICIDAL AND DETERGENT SUBSTANCES. ARTHUR R. CADE and HALVOR O. HALVORSON, Minneapolis, Minn. Filed Oct. 15, 1928. Serial No. 312,742. 7 Claims. (Cl. 167—14.)

1. A composition of matter comprising an alkali soap of an unsaturated soap forming acid and an alkaline reacting substance in such proportions that an aqueous solution thereof shall have a pH value between 10 and about 12.6 when the concentration of soap in such solution is 0.1%.

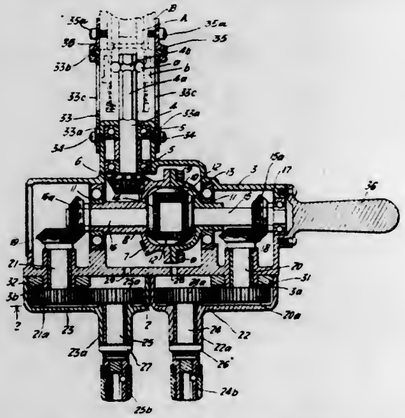
1,901,435. TUFT YARN FRAME FOR LOOMS FOR WEAVING TUFTED PILE FABRIC. EUGENE F. CLARK, Damariscotta, Me., assignor to Marshall Field Mills Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Refile of application Serial No. 454,949, filed May 23, 1930. This application filed June 18, 1931. Serial No. 545,293. 8 Claims. (Cl. 139—10.)



1. In a tuft yarn frame, a body bar provided with spool supporting means and provided also with parts forming a row of passages for yarn strands and a yieldable element carried by and extending longitudinally of

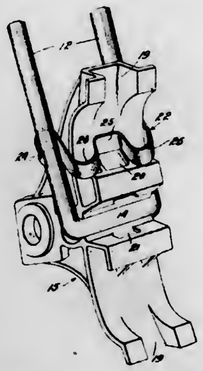
the bar and having an uninterrupted surface extending continuously across the paths of a multiplicity of yarn strands passing from a spool supported by said means to said passages and constructed to engage and press against the strands.

1,901,436. DUPLEX EQUALIZING APPARATUS. CHARLES B. COATES, Cleveland, Ohio, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 23, 1928. Serial No. 264,193. 8 Claims. (Cl. 81—57.)



1. The combination with a machine having a rotatable spindle extending therefrom, of an attachment therefor for driving threaded securing members simultaneously to the same degree of tightness, said attachment having a plurality of spindles projecting therefrom, means for transmitting the rotation of said rotatable spindle differentially to said plurality of spindles, means for supporting said attachment upon said machine, and means for adjusting said attachment rotatably relative to said machine.

1,901,437. BRAKE BEAM ADJUSTER AND RELEASE DEVICE. SETH A. CRONE, East Orange, N. J., assignor to Buffalo Brake Beam Company, New York, N. Y., a Corporation of New York. Filed June 18, 1930, Serial No. 461,872. Renewed Oct. 7, 1931. 9 Claims. (Cl. 188—216.)

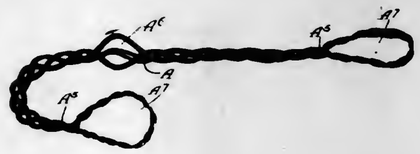


5. In combination, a brake head, a hanger with which the head is movably connected, and a release spring having a bearing relation with the oppositely disposed sides of the hanger and head.

1,901,438. FILTERING MATERIAL. WALTER C. DAVIDSON, North Canton, Ohio, assignor to The Hoover Company, a Corporation of Ohio. Filed Oct. 5, 1929. Serial No. 397,743. 1 Claim. (Cl. 183—51.)

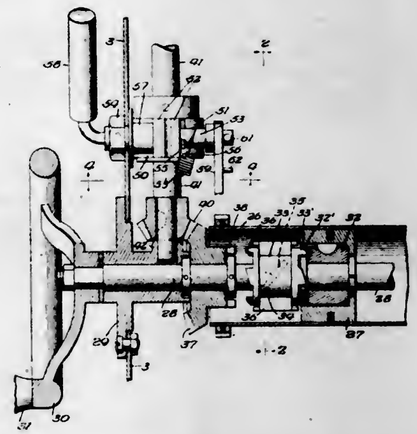
A dust separating bag for use with a suction cleaner comprising an air-porous fibrous sheet the fibers of which have a coating of latex and which has greater strength longitudinally than transversely of its length.

1,901,439. SLING AND METHOD OF MAKING THE SAME. JAMES F. DREW, Kenosha, Wis., assignor to Macwhyte Company, Kenosha, Wis., a Corporation of Illinois. Filed Mar. 17, 1931. Serial No. 523,316. 12 Claims. (Cl. 96—25.)



1. As a new article of manufacture a cordage article formed of a single continuous flexible member braided upon itself to form a plurality of integral eyes.

1,901,440. DUPLICATING MACHINE. JOHN J. FLANIGAN, Oak Park, Ill., assignor to Vivid, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Sept. 11, 1931. Serial No. 562,245. 20 Claims. (Cl. 242—55.)

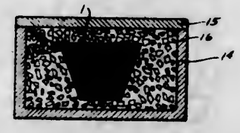


1. The combination of a frame having a bed, a winding reel at one end of said bed, an operating member for said reel and aligned therewith, a gelatin band in a roll at the other end of the bed and stretched over the bed and connected to the reel, a shaft connected to said roll and extending to said operating member at an angle thereto, and means for operatively connecting said operating member to or disconnecting it from the shaft or the reel.

1,901,441. PROCESS OF MAKING PHOTOGRAPHIC SILVER SALT EMULSIONS. STEFAN FRÄNKEL, Berlin, Germany. Filed July 8, 1931. Serial No. 549,577, and in Germany Oct. 17, 1930. 6 Claims. (Cl. 95—7.)

1. A process for making emulsions of the type described which comprises mixing, in the presence of a colloid, a silver salt and a halogen salt that forms insoluble salts with silver, said silver salt and said reacting halogen salt containing anions and cations respectively that form an insoluble precipitate during said reaction.

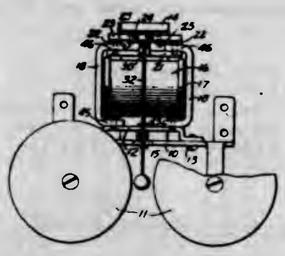
1,901,442. PROCESS FOR MANUFACTURING BELTS. ABRAHAM L. FREEDLANDER, Dayton, Ohio. Filed Apr. 16, 1931. Serial No. 530,535. 19 Claims. (Cl. 154—4.)



1. In a method of manufacturing a driving belt, superimposing a plurality of layers of rubberised fabric, stretching said layers of fabric, freezing the layers of fabric in prestretched, superimposed condition, and shearing portions therefrom while frozen.

14. In a method of manufacturing a belt, forming a belt in a prestretched condition on a form and stretching it while so forming it, freezing it while so formed and stretched, and vulcanizing it in its frozen stretched condition before it can thaw.

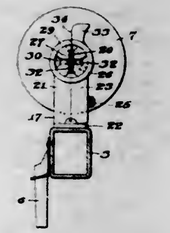
1,901,443. SIGNALING DEVICE. JOHN S. GARVIN, Bogota, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1929. Serial No. 411,459. 2 Claims. (Cl. 177—7.)



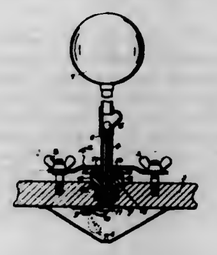
1. A polarized electromagnetic device comprising a coil, a core on which said coil is mounted provided at each end with two polar extensions, the extensions of one end being poled oppositely to the extensions of the other end of said core upon the energization of said coil, a permanent magnet having each pole thereof bridging a pair of oppositely poled core extensions and an armature interposed between one pole of said permanent magnet and a pair of oppositely poled core extensions.

1,901,444. TUBE FRAME. JAMES A. GRUNDY and WILLIAM MCK. PAYNE, Philadelphia, Pa., assignors to John Bromley & Sons, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1932. Serial No. 594,764. 17 Claims. (Cl. 189—10.)

1. In a tube frame, a frame bar, two coaxial spools having adjacent end portions and remote end portions, means on the bar for rotatably supporting the remote end portions of the spools, a bearing bracket carried by the bar for the adjacent end portions of the spools, a spool connecting member rotatably supported by the bracket and having transversely extending grooves in the respective end portions thereof, and transversely extending parts projecting from the adjacent end portions of the spools and into said grooves and adapted to engage the walls thereof for causing equal rotation therewith, said parts being adapted to be inserted into and removed from said grooves by transverse movement of said spools.

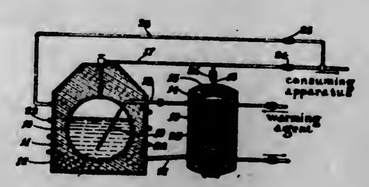


1,901,445. APPARATUS FOR TRANSFERRING AND STORING LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Lankwitz, Germany, assignor to Flüga Aktien-Gesellschaft, St. Moritz, Switzerland. Filed Nov. 12, 1927, Serial No. 232,924, and in Germany Nov. 13, 1926. 6 Claims. (Cl. 226—73.)



1. In apparatus for transferring and storing liquefied gas, the combination with a container for liquefied gas of the pressure type having a wall provided with a filling orifice and means for maintaining the same normally closed, of a filling vessel for holding a charge of liquefied gas provided with a neck adapted to extend through said filling orifice, means in said orifice for guiding said neck to operative position arranged to have thermal contact with the same over a relatively small area, and means in said neck for releasing said charge from said filling vessel when moved to operative position.

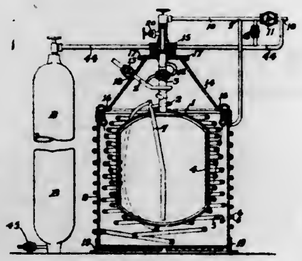
1,901,446. METHOD OF CONSERVING LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Lankwitz, Germany, assignor to Flüga Aktien-Gesellschaft, St. Moritz, Switzerland. Filed Nov. 21, 1927, Serial No. 234,914, and in Germany Nov. 24, 1926. 3 Claims. (Cl. 62—1.)



1. The method of conserving liquefied gas held in a container which comprises cooling an adsorbent by passing the

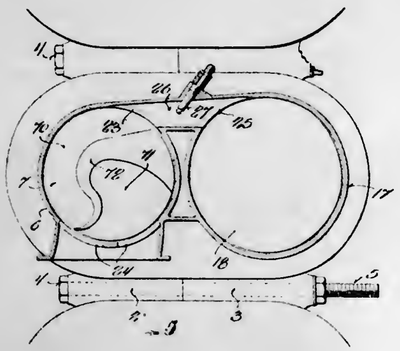
liquefied gas in thermal contact with the adsorbent during periods of consumption of the liquefied gas, and adsorbing the gas evaporated from the liquefied gas in the adsorbent during periods of non-consumption.

1,901,447. APPARATUS FOR PREPARING PRESSURE GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Britz, Germany, assignor to Flüga Aktiengesellschaft, St. Moritz, Switzerland, a Corporation of Switzerland. Original application filed Oct. 5, 1927, Serial No. 224,268. Divided and this application filed June 8, 1932. Serial No. 616,044. 6 Claims. (Cl. 62—1.)



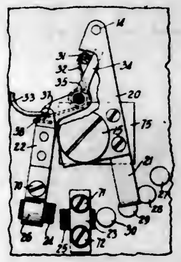
2. Apparatus for supplying gas material in the gas phase converted from liquefied gas, comprising an insulated container for the liquefied gas, a receiver for gas in the gas phase, a gas phase withdrawal conduit leading from said container to a consuming device, flow controlling means in said conduit, a liquid phase withdrawal conduit leading from said container and communicating with said first named conduit in advance of said flow controlling means, and a connection leading from said receiver to said conduit for supplying gas conserved from said container.

1,901,448. INTERNAL COMBUSTION ENGINE. CARL F. HIGH, Madison, Wis. Filed June 5, 1929. Serial No. 368,572. 4 Claims. (Cl. 123—65.)



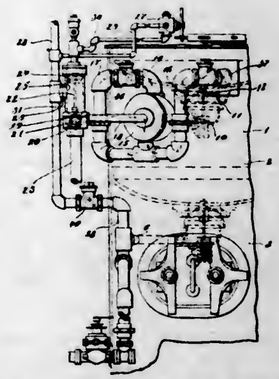
2. In an internal combustion engine of the two stroke cycle type, a piston provided with a peripheral channel of helical contour, and a central pocket inclined downwardly and outwardly toward the periphery of the piston, the lower edges of said channel and said depression being substantially in the same horizontal plane.

1,901,449. MULTICONTACT SWITCH. JOSEPH F. D. HOGE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Feb. 24, 1930. Serial No. 430,472. 2 Claims. (Cl. 200—146.)



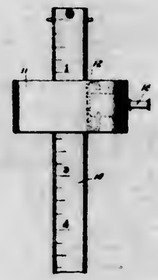
1. In a multi-contact switch, a brush guiding member having an axle pivoted to a stationary support, a metal brush fastened rigidly to said member, a secondary arm having a separate axle bearing, a carbon contact attached to said secondary arm, an axle pin for said secondary arm rigidly attached to said guiding member in a position to eccentrically pivot said secondary arm, a series of stationary metal contacts arranged to contact with said metal brush, a stationary carbon contact arranged to contact with said secondary arm carbon contact, a tension spring for holding said carbon contacts together, means to move said guiding member to wipe said metal brush over said metal contacts and thereby rotate said axle pin in said secondary arm bearing for wiping the surface of said secondary carbon contact over the surface of said stationary carbon contact during a period of rotation of said brush guiding member, a stationary pin mounted in said guiding member, and an extension on said secondary arm for engaging said pin to open said carbon contacts.

1,901,450. SAND BLAST MACHINE FOR APPLYING PRESSURE TO ABRASIVE. FOSTER J. HULL, Hagerstown, Md., assignor to Pangborn Corporation, a Corporation of Maryland. Filed Dec. 10, 1930. Serial No. 501,175. 4 Claims. (Cl. 51—12.)



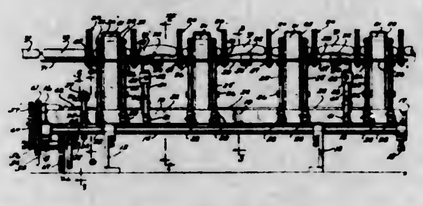
4. The combination in a sand blast machine for applying pressure to abrasive, having upper and lower tanks with means for admitting the abrasive to the upper tank and transferring it from the upper to the lower tank by gravity, means providing a supply of air under pressure means for maintaining the pressure in the lower tank and alternately applying and exhausting the pressure in the upper tank including an air pressure operated double controller valve connected to the air pressure supply and to the lower tank and means for preventing expansion of the air in the lower chamber and consequent backflow from the lower chamber into said controller valve.

1,901,451. GAUGE. HARRY G. JACKSON, Jenkintown, Pa. Filed Apr. 15, 1932. Serial No. 605,447. 4 Claims. (Cl. 33—42.)



1. A gauge comprising a bar and a head slidable thereon, said head having a slot adjacent to the bar, a resilient member occupying the slot, and a clamping unit positioned to exert pressure upon the resilient member, said resilient member having ends engaging and locking the clamping unit against withdrawal from said head.

1,901,452. SAUSAGE LINKING MACHINE. PARKER A. JACOBSON, Winona, Minn. Filed June 13, 1930. Serial No. 460,935. 18 Claims. (Cl. 17—34.)



1. In a sausage linking machine, a pair of rock-shafts, two pairs of arms mounted on the rock-shafts and spaced longitudinally thereof, cooperating spacers and squeezers carried by the arms, a pair of cooperating twisting belts mounted on the rock-shafts between said two pairs of arms, means for driving the belts, means for operating the rock-shafts to open and close the spacers and squeezers and belts, said arms having hinge joints that permit secondary opening and closing movements of the spacers and squeezers in respect to the rock-shafts and belts, and which structure further includes yielding means under strain to close the spacers and squeezers.

1,901,453. WHIPSTOCK. LAURENCE C. KELLY, Beverly Hills, Calif. Filed Nov. 1, 1929. Serial No. 403,968. 7 Claims. (Cl. 255—1.)

1. A whip-stock, comprising an elongated body having a cutter deflecting upper end, a bore extending from said upper end down into the body and adapted at its upper end for communication with a pipe string, and lateral discharge passages from the bore out through the sides of the body.

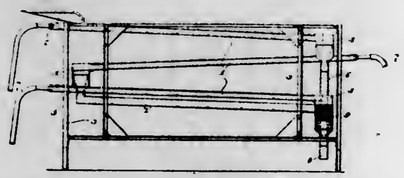


1,901,454. METHOD OF CEMENTING WHIPSTOCKS IN WELL BORES. LAURENCE C. KELLY, Beverly Hills, Calif. Original application filed Nov. 1, 1929, Serial No. 403,968. Divided and this application filed Nov. 21, 1932. Serial No. 643,616. 7 Claims. (Cl. 255—1.)



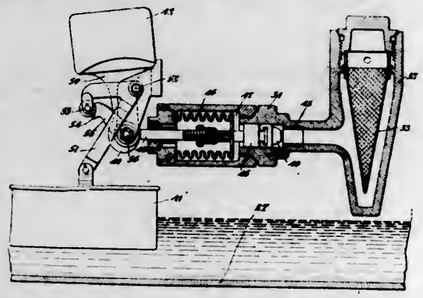
1. The method of setting a hollow whipstock in a well bore, that includes lowering the whipstock to position in the well bore on the lower end of a pipe string, forcing cement down through the pipe string into the hollow of the whipstock and thence through openings in the whipstock to the exterior thereof, whereby the cement surrounds at least a portion of the whipstock, allowing the cement to set, and then disconnecting the pipe string from the whipstock, and removing the pipe string, leaving the whipstock set in the cement.

1,901,455. APPARATUS FOR WASHING FRUITS. RIDGWAY R. KENNEDY, Philadelphia, Pa., assignor to Abbotts Dairies, Inc., Philadelphia, Pa., a Corporation. Filed Nov. 27, 1928. Serial No. 322,117. 2 Claims. (Cl. 146—194.)



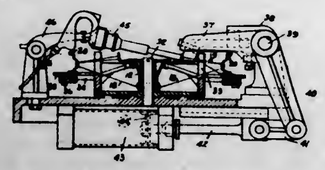
1. A fruit washer comprising a flume formed of a series of reversely inclined longitudinal channel sections positioned laterally in offset relation, means for supplying water to the upper end of each section, screens respectively connecting the lower end only of one section with the upper end of the next succeeding section and extending laterally, and in inclined relation relatively to the sections connected thereby, and drains below the respective screens.

1,901,456. OIL BURNER. GORDON KINSMAN, Jersey City, N. J., assignor to Caloroil Burner Corporation, a Corporation of Delaware. Filed Aug. 18, 1927. Serial No. 213,745. 1 Claim. (Cl. 158—42.1.)



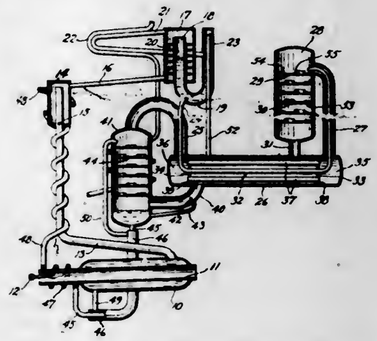
In a cutoff for oil burners the combination of an oil tank, a plunger valve for cutting off the supply of oil to said tank, a bellows connected to said plunger valve and normally maintaining it open, said plunger valve acting to maintain the bellows out of contact with the oil, a weight for actuating said valve to shutoff position, a cam operative thereby, a plunger loosely interposed between said cam and said bellows, a trip for the weight normally maintaining it in inoperative position, a float in said tank, and connections between said float and said trip effective to release the weight when the oil in the tank rises above a predetermined level.

1,901,457. APPARATUS FOR MAKING WIRE WHEELS. HARRY W. KRANZ, CHARLES S. HOLDEN, and HAROLD R. UBER, Lakewood, Ohio, assignors to The Cleveland Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 18, 1931. Serial No. 523,490. 10 Claims. (Cl. 219—2.)



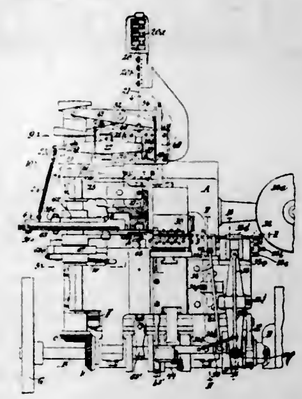
1. In a wheel making apparatus, the combination of a spindle for securing the hub of the wheel, with a spider mounted coaxially therewith and adapted to secure the rim of said wheel, complementary spoke and rim securing means movable axially of said spindle, and means for upsetting the ends of said spokes.

1,901,458. REFRIGERATION. ALVAR LENNING, Jackson Heights, N. Y., assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed May 28, 1929. Serial No. 366,700. 9 Claims. (Cl. 62—119.5.)



1. In an absorption refrigerating apparatus, a generator, a condenser, an evaporator and an absorber, means to supply liquid refrigerant to the evaporator, means to circulate an absorption liquid between and through said generator and absorber, a gas conduit for conducting vaporous refrigerant from said evaporator and introducing the same above the liquid level in said absorber and adapted to receive excess unevaporated refrigerant from the evaporator, and a branch conduit connected to said gas conduit for withdrawing unevaporated refrigerant from said gas conduit and introducing the unevaporated refrigerant below said liquid level in the absorber.

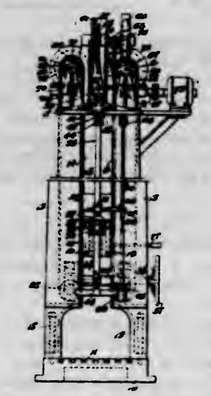
1,901,459. MACHINE FOR MAKING AND ASSEMBLING A VALVE PIN AND VALVE GASKET SUPPORT. ARTHUR J. LEWIS, Stratford, Conn., assignor to A. Schrader's Son, Inc., New York, N. Y., a Corporation of New York. Filed June 29, 1929. Serial No. 374,782. 24 Claims. (Cl. 29—33.)



2. A machine of the class described, comprising a pin-forming mechanism, a mechanism for forming a cup having a tubular extension, means for transferring the formed cup and axially aligning the tubular portion thereof with a pin, and means for assembling the cup on said pin and rivetting the pin over the ends of the tubular extension.

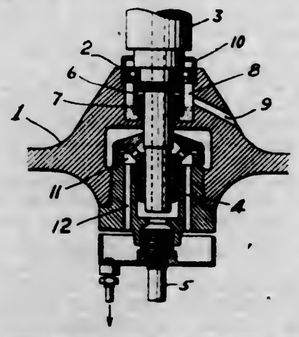
23. A method of forming a valve pin and gasket-supporting cup assembly which comprises forming a gasket-supporting member with a disc-like portion and a central tubular extension having an inner diameter somewhat larger than the diameter of the valve pin, mounting said member upon a valve pin and uniting said parts together by increasing the diameter of the pin within the tubular extension of the supporting member to fit therein to provide a joint between the members, which joint, at the disc-like portion of the supporting member, will be circumferentially spaced from the normal surface of the pin.

1,901,460. DROP TESTING MACHINE. ROBERT B. LEWIS, Philadelphia, Pa., assignor to Tinius Olsen Testing Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1930. Serial No. 444,895. 14 Claims. (Cl. 265—13.)



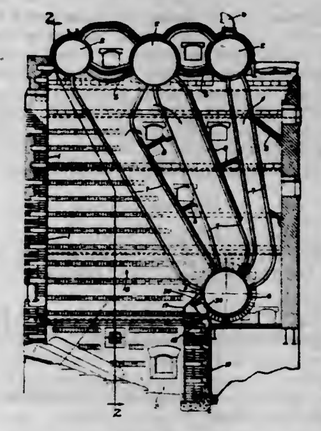
9. In a testing machine of the drop weight type, the combination of a weight, lifting devices movably mounted at opposite sides of said weight, supporting arms pivoted to said weight for respectively cooperating with said lifting devices, a relatively movable element carried by said weight and normally holding said arms spaced apart to be engaged by said lifting devices, means actuated at a predetermined point in the upward travel of said weight to remove said element from said arms and release said weight to fall by gravity, restoring means operated by the impact of said weight to replace said element for holding said arms in spaced relation, and means to catch and hold said weight elevated after each testing impact.

1,901,461. CENTRIFUGAL SEPARATOR MACHINE. HANS OLOF LINDGREN, Appelviken, Sweden, assignor to Aktiebolaget Separator, Stockholm, Sweden, a Corporation of Sweden. Filed Sept. 18, 1931, Serial No. 563,541, and in Sweden Nov. 8, 1930. 2 Claims. (Cl. 233—45.)



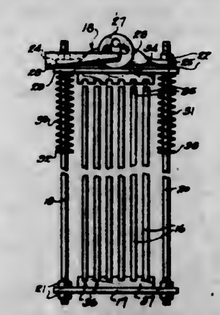
1. The combination, with a centrifugal bowl, a rotary spindle carrying the bowl and having an axial channel communicating with the interior of the bowl, a fixed pipe communicating with the spindle channel, a device positioned adjacent the end of the spindle communicating with the fixed pipe and adapted to maintain a substantially tight joint, and a bearing for the spindle between the bowl and said tightening device, of a collar between the bearing and said tightening device and rotating with the spindle, a stationary collar surrounding the spindle and surrounded by the rotary collar, and a third collar surrounding the spindle and arranged over the bearing and regulating the supply of oil thereto.

1,901,462. MUD-DRUM SEAL. MICHAEL LIPTAK, St. Paul, Minn. Filed Oct. 15, 1928. Serial No. 312,594. 9 Claims. (Cl. 122—302.)



1. In combination with a furnace including walls, a bridge wall having ends extending into two of the side walls, a channel iron upon the bridge wall having its channel side facing upwardly, said iron extending into the said side walls, a mud drum, blocks interlocked with the channel iron, and sealing elements swingably socketed in the blocks and engaging the drum.

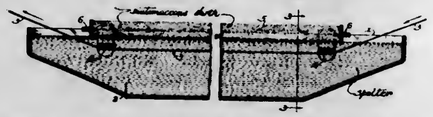
1,901,463. APPARATUS FOR HANDLING GLASS SHEETS. RAOUL J. LOUVIAUX, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 14, 1932. Serial No. 611,379. 13 Claims. (Cl. 51—217.)



1. A device for transferring a plurality of sheets of glass simultaneously from the discharge end of one edging machine to the receiving end of the same or a second edging machine, comprising a stationary member, a second member spaced from the stationary member and movable toward and away from the same, means for moving said movable member toward said stationary member to clamp

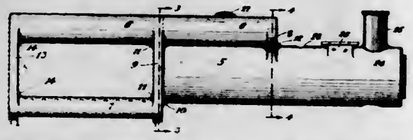
a plurality of glass sheets therebetween, and means carried by the stationary and movable members for maintaining the sheets in properly spaced relation relative to one another.

1,901,464. METHOD OF INSULATING ZINC SPELTER BATHS AND MEANS FOR EFFECTING THEIR PRACTICE. JOHN A. MORITZ, Crawfordsville, Ind. Filed Apr. 23, 1931. Serial No. 532,224. 2 Claims. (Cl. 91—70.2.)



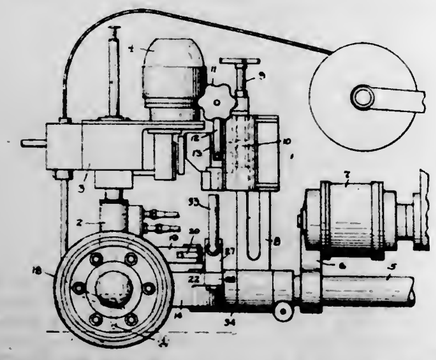
1. The method of preventing oxidization and the formation of oxides, ashes, skimmings and dross during the coating of iron or steel materials with molten zinc spelter, which consists in covering the surface of a molten metal bath with diatomaceous earth, passing the materials to be coated through such metal bath beneath that covered with such earth, and confining the earth to a defined area so as to prevent the materials coming into contact with the earth on entering and leaving the metal bath.

1,901,465. STEAM BOILER STRUCTURE. JOHN E. MUHLFELD, Scarsdale, N. Y. Filed May 11, 1929. Serial No. 362,273. 4 Claims. (Cl. 122—94.)



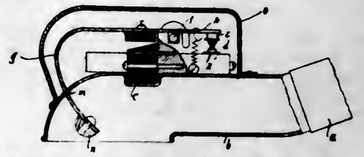
1. A unitary steam boiler structure comprising a boiler shell proper, upper and lower drums extending longitudinally of the boiler shell, and water and steam circulating conduits having their walls integrally formed with the walls of said boiler shell and the drums, and said integral connections consisting of joint forming wall section curved on a comparatively large radius to permit of relative movement between the walls of the conduits and the walls of said drums and boiler shell.

1,901,466. WELDING APPARATUS. SAMUEL C. OSBORNE, Cleveland Heights, Ohio, assignor to The Lincoln Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 16, 1931. Serial No. 515,982. 3 Claims. (Cl. 219—8.)



1. In a welding mechanism adapted to run on the work to be welded, a carriage, work engaging wheels supporting one end of said carriage, and means on said carriage adapted to present a welding electrode in arcing relation to the work on the shortest line on the work surface connecting the work areas engaged by said wheels.

1,901,467. VACUUM CLEANING APPARATUS. CARL OTTO, Essen-Bredeney, Germany. Filed Feb. 8, 1930, Serial No. 427,017, and in Germany Feb. 19, 1929. 6 Claims. (Cl. 15—18.)

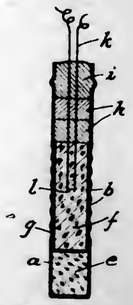


1. In a vacuum cleaner, a tubular mouthpiece adapted to be connected with a vacuum device, a rockable arm on the mouthpiece and having a free lashing end, beating means on the rockable arm mounted within the mouthpiece for acting on a surface to be cleaned, and a magnetic hammer break for operating said rockable arm, the free lashing end of said rockable arm having a curved portion extending through an opening and into the interior of said mouthpiece.

1,901,468. METHOD OF PRODUCING PHOTOGRAVURE PLATES. AXEL A. PEARSON, Kansas City, Mo. Filed July 13, 1931. Serial No. 550,662. 8 Claims. (Cl. 95—5.7.)

1. The process of producing photogravure printing plates which comprises twice photographing the image to be reproduced to make a continuous tone negative and a screened negative; producing a transparent positive from each negative; exposing the presensitized printing plate to light passing through the screened positive; developing said plate to establish an acid-resisting coating; sensitizing said printing plate directly over the coating; exposing said last sensitizing coating to light passing through the continuous tone positive, with the images on the plate and continuous tone positive in register; and then etching said printing plate in a solution of copper dissolvent.

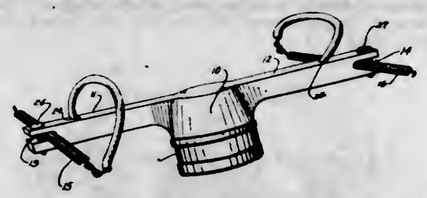
1,901,469. BLASTING CAP. JEAN PICCARD, Marshallton, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 12, 1932. Serial No. 610,758. 8 Claims. (Cl. 102—9.)



1. A blasting cap including in combination a casing provided with an opening, an explosive charge within the casing and a water soluble closure for said opening.

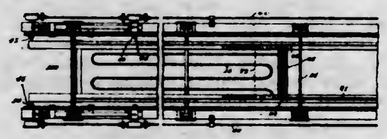
1,901,470. ELECTRICAL SOCKET DEVICE. BERT H. PLISKE, Cleveland, Ohio. Filed July 27, 1931. Serial No. 553,265. 1 Claim. (Cl. 173—358.)

An electrical socket device comprising a single cast body and integral arms of insulating material, the body having a socket with terminals molded therein and the arms having conductors molded therein and leading to the terminals, the outer ends of the conductors being exposed for



connection to line wires and the inner ends of the conductors and the socket and terminals being sealed by the molded material against the leakage of water around the same.

1,901,471. ROTARY CONVEYER SYSTEM AND APPARATUS THEREFOR. KURT T. POTTHOFF, Brooklyn, N. Y. Filed Oct. 19, 1928. Serial No. 313,515. 52 Claims. (Cl. 266—7.)



1. In combination, a tank for liquid; a closed basket; intermittent means for conveying the basket downwardly into the liquid of the tank and upwardly out of the liquid near the discharge end of the tank; the intermittent means coming to rest after the basket is thus raised; and means for rotating the basket when thus brought to rest.

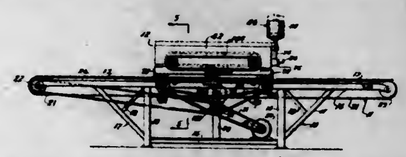
1,901,472. REFLECTOR FOR CHRISTMAS TREES. LAMBERT L. RAYMOND, Minneapolis, Minn. Filed Mar. 16, 1931. Serial No. 522,940. 7 Claims. (Cl. 240—103.)



1. A reflector for a Christmas tree or similar decorative use, comprising a sheet of material having a flat central portion with an aperture therein for receiving the plug portion of a lamp bulb, said sheet being slitted to form a plurality of radially extending tongues, and a plurality of radially extending tongues disposed respectively between said first mentioned tongues and curved forwardly out of the surface occupied by said first mentioned tongues, thus forming spaces between the front of the first mentioned tongues and said second mentioned tongues through which light may be reflected, all of said tongues extending from and being integral with said flat central portion.

1,901,473. STENCILING MACHINE. WILLIAM R. REPPSS, Grassmere, Staten Island, N. Y., assignor to Nas-Dar Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1930. Serial No. 461,229. 20 Claims. (Cl. 101—123.)

1. A stenciling machine for printing sheet stock and the like comprising, a bed plate, a stencil, a stencil supporting frame mounted for free vertical movement relative to said bed plate, a squeegee, including a wiping element for moving a batch of paint over the stencil, and means for advancing the squeegee across the face of the stencil when said frame is in the lowered position



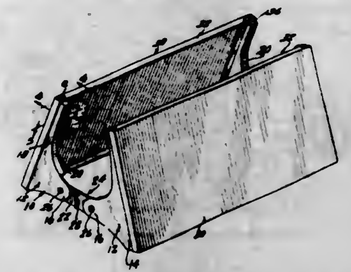
on the bed plate, said means being operable to return the squeegee from the forward edge of the stencil along an endless path back into printing position at the rear edge of the stencil preparatory to the printing of the next succeeding sheet.

1,901,474. MOTOR SUPPORT. JAMES A. RODGERS, St. Louis, Mo., assignor to The Emerson Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed May 31, 1932. Serial No. 614,891. 14 Claims. (Cl. 248—16.)



1. A motor support comprising a pair of resilient bars, means intermediate the ends of the bars for attaching them to the frame of the motor symmetrically with reference to a central vertical plane passing axially through the motor and parallel to such plane, a base having upstanding lugs, clamping means for securing the bars to the lugs, and shock absorbing elements interposed between the bars and the lugs.

1,901,475. FOLDING TIRE DISPLAY HOLDER. EDWIN A. SHANK, New Rochelle, N. Y. Filed May 1, 1931. Serial No. 534,263. 7 Claims. (Cl. 211—24.)

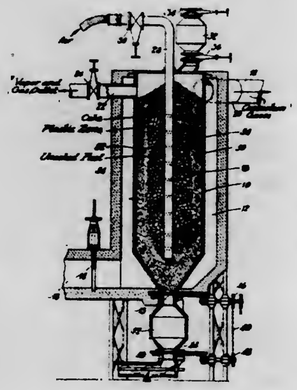


1. In a folding tire support two tire clamps each comprising half-clamps pivotally connected to clamp a tire by its weight, said half-clamps also pivotally connected to fold with their outer faces toward one another, and clamp connecting means to which the clamps are pivotally attached.

1,901,476. PROCESS OF CARBONIZING COAL. THEODOR EBERHARDT WERNER SCHUMANN, Elisabeth, N. J., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Mar. 7, 1929. Serial No. 345,026. 10 Claims. (Cl. 202—6.)

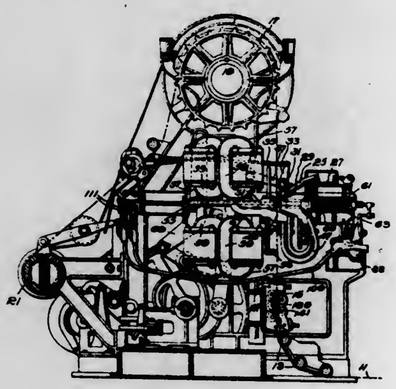
4. The process of carbonizing solid bituminous fuel comprising heating a body of fuel indirectly from an external source so as to progressively carbonize the fuel

mass in a direction away from said source of heat and to form a plastic layer between the carbonized fuel and the yet uncarbonized fuel, and supplying and dis-



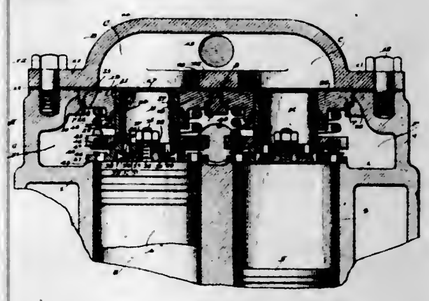
tributing an oxygen-containing fluid to the said plastic layer only on that side thereof adjacent the uncarbonized fuel.

1,901,477. FABRIC WELDING MACHINE. WILLIAM S. SOUTHWICK, Lynn, Mass., assignor to Thomson-Gibb Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed June 7, 1930. Serial No. 459,804. 17 Claims. (Cl. 219—4.)



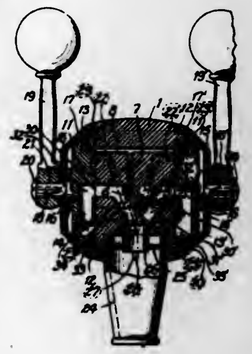
1. In a machine for electrically welding wire fabric, the combination with a series of stationary welding jaws, of a series of movable welding jaws, the same presenting successive pairs of cooperating, relatively movable jaws for welding a series of strand wires and transverse stay wires, means for moving said movable jaws toward the stationary jaws to effect a weld, supports extending transversely the machine on which said jaws are adjustably mounted to permit the adjustment of the spacing of successive pairs, and means for circulating cooling fluid through successive jaws, comprising means for supplying said fluid to inner members of each series, flexible conduits connecting successive members to cause the fluid to circulate outwardly in opposite directions through the series from the inner members to the outer members thereof.

1,901,478. COMPRESSOR AND VALVE THEREFOR. GROVER C. SUTTON and PETER H. WITSCHGE, Spokane, Wash., assignors to General Machinery Company, Spokane, Wash., a Corporation of Washington. Filed Mar. 29, 1932. Serial No. 601,746. 8 Claims. (Cl. 230—230.)



6. In a non-return passage valve structure for compressors, a hollow valve shell having ingress and egress ports, closures therefor, and said shell having a stop shoulder, an abutment ring slidable along said shell, and a safety release spring adapted normally to hold said abutment ring against said shoulder.

1,901,479. FAUCET. JOHN M. TRAVIS, St. Louis, Mo. Filed May 5, 1930. Serial No. 449,901. 7 Claims. (Cl. 225—26.)

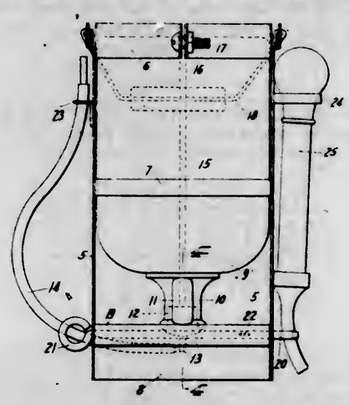


1. A faucet including a main body embodying independent supply passages and having a delivery passage for one of said supply passages and having separate delivery passages for the other of said supply passages, means for interconnecting one of said supply passages with the first-named delivery passage and for interconnecting the other of the supply passages with one of the separate delivery passages, and other means for interconnecting the first-named delivery passage with the supply passage connected therewith and for interconnecting the said other supply passage with the other of the separate delivery passages.

1,901,480. LIQUID DISPENSING APPARATUS. EDGAR W. VAHLE, Dayton, Ohio, assignor to The Huffman Manufacturing Campany, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 444,207. 12 Claims. (Cl. 221—25.)

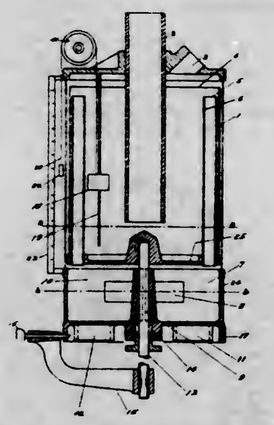
11. In a portable liquid dispensing apparatus, a container having a discharge spout, a frame adapted to be supported on the floor with either end uppermost and

to receive said container through one end thereof and support the same with said spout directed either upwardly or downwardly, a transverse member supported at its ends by said frame and arranged normally beneath and in the path of a part of said container to positively



hold said container against downward movement with relation to said frame when said container is positioned with its spout directed downwardly, said member being movable into and out of the path of said part while said container is supported in said frame.

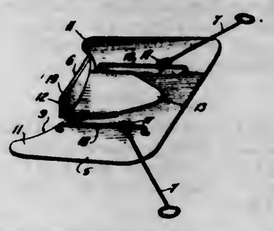
1,901,481. DISTRIBUTOR FOR LIQUIDS. ROBERT H. VAN SCHAACK, Jr., Evanston, Ill., assignor to Van Schaack Bros. Chemical Works, Inc., Chicago, Ill., a Corporation of Illinois. Filed Feb. 25, 1929. Serial No. 342,359. 7 Claims. (Cl. 137—166.)



1. A distributor for liquids comprising a plurality of tubes which may be so placed by rotation of the vessel containing them that any number of them will deliver liquid to one receptacle and the remaining tubes will deliver liquid to another receptacle.

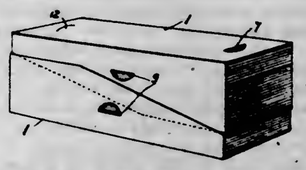
1,901,482. ROLL HANDLING DEVICE. FREDERICK VON DER HORST, Chicago, Ill., assignor to The Tribune Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 1, 1930. Serial No. 499,242. 4 Claims. (Cl. 214—130.)

1. A portable device for handling rolls of paper comprising a flat base plate adapted to be slid over a supporting surface into position adjacent the roll, and a cradle hingedly connected to said base plate adjacent one edge thereof, said cradle having a lip adapted to engage under the end of a roll with the latter standing on end and an arcuate portion at right angles to said lip adapted to



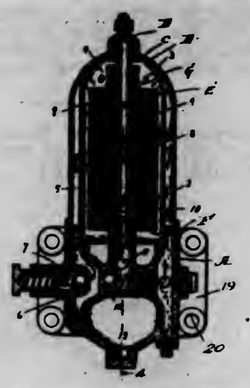
engage the side of the roll and to support the latter as the same is being turned from vertical to horizontal position on the same level.

1,901,483. DISPLAY BOX. JOHN H. WARE, Jr., Oxford, Pa. Filed Jan. 23, 1931. Serial No. 510,758. 4 Claims. (Cl. 206—44.)



4. A display device comprising a box having one end higher than the other, a plurality of packages covering the bottom wall of said box, additional packages arranged on said first mentioned packages and on each other in stepped relation, the end wall of said box at the lower end being of a height equal to the height of one of the packages, and the end wall at the higher portion of said box being of a height which is approximately a multiple of the height of one of said packages, the side walls of said box having a portion equal in height to said higher end wall and extending the distance of the width of one of said packages, and said side walls of said box having a portion cut away diagonally from said higher height to said lower height, whereby said box and the packages therein may interfit detachably with a similar box and packages to form an object rectangular in outline.

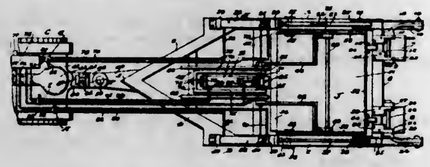
1,901,484. OIL FILTER. CHARLES A. WINSLOW, Vallejo, and ELBERT J. HALL, Berkeley, Calif. Filed Jan. 27, 1926. Serial No. 84,234. 7 Claims. (Cl. 210—165.)



4. A filter comprising a body member, a shell member detachably secured in respect to the body member, which members constitute the filter casing proper that provides

therein a sump, a filtering medium within the casing and extending above the sump, said body member having a flange portion with inlet and outlet openings therethrough into and from which oil to be filtered and filtered oil passes, said flange portion also having openings in the same face with the aforesaid openings for receiving means for attaching the filter in place.

1,901,485. TRACTOR SCOOP STRUCTURE. HARRY M. WIRT, Spokane, Wash., assignor to March Construction Co., composed of George H. March and Harry M. Wirt. Filed Aug. 25, 1931. Serial No. 559,178. 8 Claims. (Cl. 37—129.)

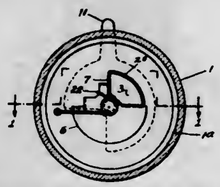


7. In a scoop structure adapted to be drawn by a tractor, a frame having side members and provided at its front end with a swivelled draft coupling adapted to support the front end of said frame and permit the latter to be tilted, a pair of supporting wheels at the rear end of said frame, a scoop disposed between and pivotally mounted on said side members to swing free from interference therewith and disposed rearwardly of said frame and relatively close to said wheels to dispose the major weight of the load on the latter, means for shifting and holding said scoop into dirt scooping, carrying, dumping, road scraping or road shaping positions, and mechanism for independently changing the relation of either or both of said wheels with respect to said frame to raise or lower the latter in horizontal planes, or tilt said frame from the horizontal and thereby alter the position of said scoop or afford clearance of the latter from the road surface, in accordance with any of the functions being performed by said scoop.

1,901,486. PURE ANHYDROUS ALUMINIUM CHLORIDE. CARL WURSTER, Ludwigshafen-on-the-Rhine, and MAX GRUBER, Mannheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 10, 1931, Serial No. 514,907, and in Germany Feb. 14, 1930. 4 Claims. (Cl. 23—92.)

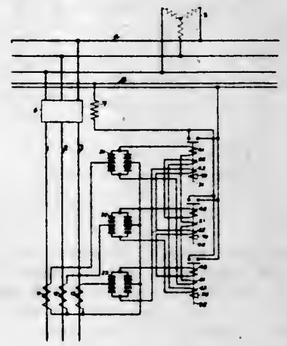
1. A process of producing pure anhydrous aluminium chloride, which comprises bringing crude aluminium chloride containing iron chloride into contact with a melt containing aluminium chloride and a chloride of a metal selected from the group consisting of alkali and alkaline earth metals, kept at a temperature at which aluminium chloride sublimes, in the presence of a reducing agent, and withdrawing the subliming aluminium chloride.

1,901,487. DISPENSING DEVICE. EGBERT ALEXANDER, Los Angeles, Calif. Filed Apr. 26, 1932. Serial No. 607,553. 6 Claims. (Cl. 221—116.)



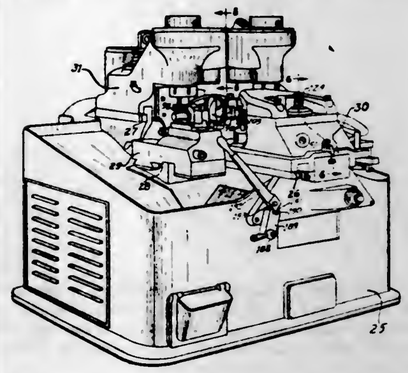
1. A dispensing device of the kind described comprising, in combination, a container, a cap member secured to said container and forming a closure therefor, said cap member having a dispensing opening, and a manually operable dispensing element rockably mounted upon said cap member to repeatedly dispense measured quantities of material from said container through said opening in the cap, said cap member having a bent plate provided with wings which form two of the side walls of the dispensing recess, the middle portion of said bent plate forming a bearing for the pivot of the manually movable parts.

1,901,488. ELECTRIC CIRCUIT PROTECTIVE SYSTEM. LINDSAY M. APPLEGATE, Seattle, Wash. Filed Apr. 5, 1930. Serial No. 441,962. 5 Claims. (Cl. 175—294.)



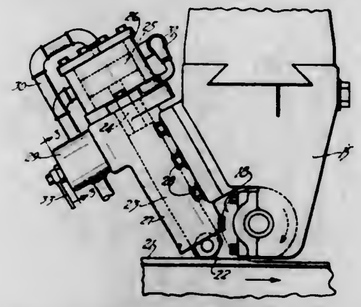
1. An electric system comprising a polyphase circuit, means for obtaining a unidirectional current proportional to each of the phase currents of said polyphase circuit, and relays each having a single magnetic circuit and a plurality of coils operatively arranged on said single magnetic circuit, the system being arranged so that the operation of said relays will be a function of the inequalities of said phase currents.

1,901,489. MACHINE TOOL. WALTER D. ARCHEA, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 6, 1929. Serial No. 412,243. 20 Claims. (Cl. 90—15.)



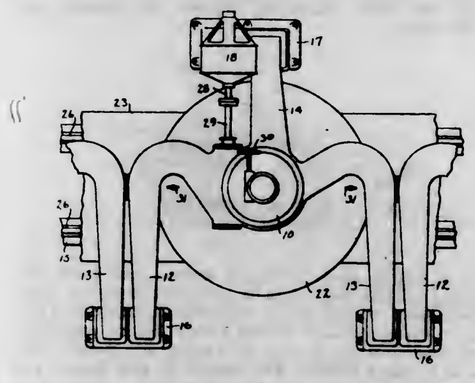
1. In a milling machine the combination of a bed, a plurality of slides carried by the bed movable toward and from one another, rotating cutter tools carried by the slides, a work table carried by the bed intermediate the slides and movable transversely of the slides, a common means for effecting rotation of the tools and movement of the slides and work table in timed sequential cyclic order to effect a milling operation, and means automatically effective at the completion of said operation to return the movable parts to a starting position.

1,901,490. MILLING MACHINE. WALTER D. ARCHEA, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 2, 1930. Serial No. 449,181. 4 Claims. (Cl. 90—11.)



1. A milling machine having a column, a reciprocating table supported thereby, a cutter arbor journaled in the column, an overarm carried by the column and extending parallel to said arbor, a pendent adjustably mounted on the overarm for journaling the outboard end of said arbor, a work holder mounted on the table, means to exert a clamping pressure on work mounted in the holder comprising a housing attached to the pendant, a cylinder formed therein having a piston, roller means attached to the end of the piston for contacting the work, a source of fluid pressure and valve means for controlling the admission of pressure to opposite ends of the cylinder to cause movement of the roller to or from the work.

1,901,491. GLASS MACHINERY. THEODORE S. BERSON, Hamilton, Ohio, assignor, by mesne assignments, to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed July 25, 1929. Serial No. 380,925. 7 Claims. (Cl. 51—110.)



1. In a glass grinding machine having a glass supporting table, a runner rotatably supported thereabove, and supporting means for said runner comprising a unitary three-point supporting member comprising a hub, and three arms extending laterally therefrom, a plurality of pedestals upon which the ends of said arms respectively rest, said laterally extending arms being arranged as to their ends to give a stable three point support for said runner and so shaped throughout their extent that a portion of each arm lies on a given side of an axis of gravity of the runner to permit lateral removal of said runner while supported by a vertically positioned removing means.

1,901,492. COMBINED RUBBER AND LEGGING. CHARLES F. BURRY, Boston, Mass. Filed Nov. 11, 1930. Serial No. 494,903. 1 Claim. (Cl. 36—7.3.)



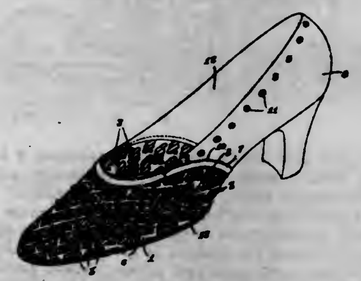
As a new article of manufacture, a wading boot consisting of a rubber shoe having a high upper adapted to enclose the entire foot of a wearer and having hermetically secured to said upper well above the sole of the shoe a tubular leg covering composed of seamless stretchable material adapted to fit closely over the leg of the wearer and provided with an inturned upper end in which an elastic garter is loosely confined.

1,901,493. SWITCH CONTACT. AUGUSTUS JESSE BOWIE, San Francisco, Calif. Filed Nov. 20, 1929. Serial No. 408,486. 16 Claims. (Cl. 200—48.)



1. In an electric switch a plurality of independent switch poles, simultaneously operated by a common mechanism, each pole consisting of a pair of relatively movable contactors adapted to move into full engagement with each other, means for continued motion of said contactors while maintaining said full engagement, and a spring adapted to increase the pressure between said contactors during said continued motion.

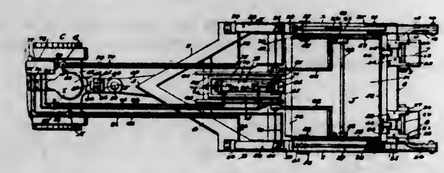
1,901,494. JEWELED SHOE AND METHOD OF MAKING SAME. CLAUDE H. DANIELS, Newton Center, Mass. Filed June 24, 1931. Serial No. 546,510. 4 Claims. (Cl. 41—10.)



1. A boot or shoe of the kind described, comprising an upper section having apertures therethrough at predetermined intervals, brilliant retaining members located in

therein a sump, a filtering medium within the casing and extending above the sump, said body member having a flange portion with inlet and outlet openings therethrough into and from which oil to be filtered and filtered oil passes, said flange portion also having openings in the same face with the aforesaid openings for receiving means for attaching the filter in place.

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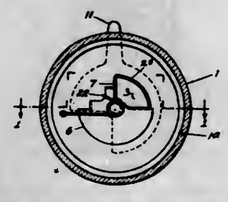


7. In a scoop structure adapted to be drawn by a tractor, a frame having side members and provided at its front end with a swivelled draft coupling adapted to support the front end of said frame and permit the latter to be tilted, a pair of supporting wheels at the rear end of said frame, a scoop disposed between and pivotally mounted on said side members to swing free from interference therewith and disposed rearwardly of said frame and relatively close to said wheels to dispose the major weight of the load on the latter, means for shifting and holding said scoop into dirt scooping, carrying, dumping, road scraping or road shaping positions, and mechanism for independently changing the relation of either or both of said wheels with respect to said frame to raise or lower the latter in horizontal planes, or tilt said frame from the horizontal and thereby alter the position of said scoop or afford clearance of the latter from the road surface, in accordance with any of the functions being performed by said scoop.

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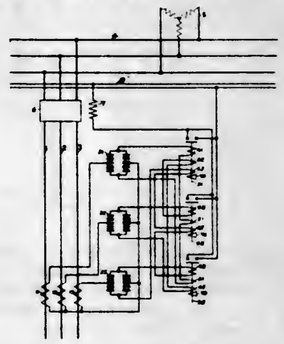
1. A process of producing pure anhydrous aluminium chloride, which comprises bringing crude aluminium chloride containing iron chloride into contact with a melt containing aluminium chloride and a chloride of a metal selected from the group consisting of alkali and alkaline earth metals, kept at a temperature at which aluminium chloride sublimes, in the presence of a reducing agent, and withdrawing the subliming aluminium chloride.

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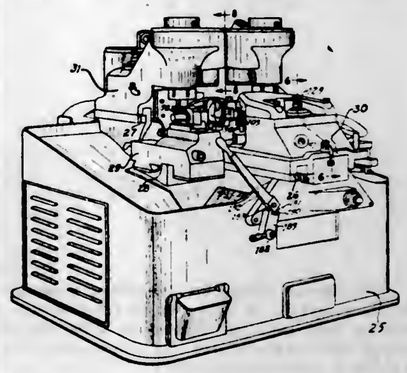
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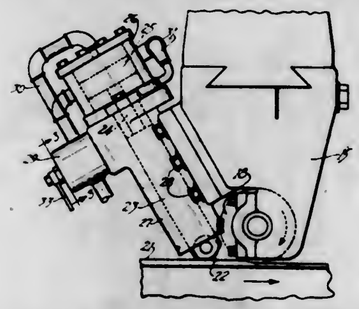
1. An electric system comprising a polyphase circuit, means for obtaining a unidirectional current proportional to each of the phase currents of said polyphase circuit, and relays each having a single magnetic circuit and a plurality of coils operatively arranged on said single magnetic circuit, the system being arranged so that the operation of said relays will be a function of the inequalities of said phase currents.

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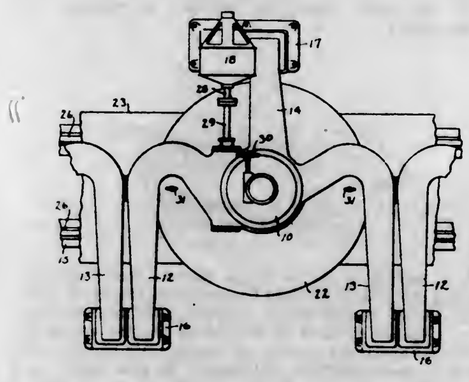
1. In a milling machine the combination of a bed, a plurality of slides carried by the bed movable toward and from one another, rotating cutter tools carried by the slides, a work table carried by the bed intermediate the slides and movable transversely of the slides, a common means for effecting rotation of the tools and movement of the slides and work table in timed sequential cyclic order to effect a milling operation, and means automatically effective at the completion of said operation to return the movable parts to a starting position.

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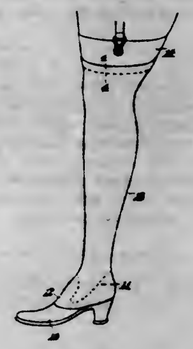
1. A milling machine having a column, a reciprocating table supported thereby, a cutter arbor journaled in the column, an overarm carried by the column and extending parallel to said arbor, a pendent adjustably mounted on the overarm for journaling the outboard end of said arbor, a work holder mounted on the table, means to exert a clamping pressure on work mounted in the holder comprising a housing attached to the pendant, a cylinder formed therein having a piston, roller means attached to the end of the piston for contacting the work, a source of fluid pressure and valve means for controlling the admission of pressure to opposite ends of the cylinder to cause movement of the roller to or from the work.

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1. In a glass grinding machine having a glass supporting table, a runner rotatably supported thereabove, and supporting means for said runner comprising a unitary three-point supporting member comprising a hub, and three arms extending laterally therefrom, a plurality of pedestals upon which the ends of said arms respectively rest, said laterally extending arms being arranged as to their ends to give a stable three point support for said runner and so shaped throughout their extent that a portion of each arm lies on a given side of an axis of gravity of the runner to permit lateral removal of said runner while supported by a vertically positioned removing means.

1,901,492. COMBINED RUBBER AND LEGGING. CHARLES F. BERRY, Boston, Mass. Filed Nov. 11, 1930. Serial No. 494,903. 1 Claim. (Cl. 36—7.3.)



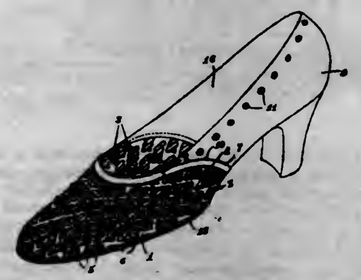
As a new article of manufacture, a wading boot consisting of a rubber shoe having a high upper adapted to enclose the entire foot of a wearer and having hermetically secured to said upper well above the sole of the shoe a tubular leg covering composed of seamless stretchable material adapted to fit closely over the leg of the wearer and provided with an inturned upper end in which an elastic garter is loosely confined.

1,901,493. SWITCH CONTACT. AUGUSTUS JESSE BOWIE, San Francisco, Calif. Filed Nov. 20, 1929. Serial No. 408,486. 16 Claims. (Cl. 200—48.)



1. In an electric switch a plurality of independent switch poles, simultaneously operated by a common mechanism, each pole consisting of a pair of relatively movable contactors adapted to move into full engagement with each other, means for continued motion of said contactors while maintaining said full engagement, and a spring adapted to increase the pressure between said contactors during said continued motion.

1,901,494. JEWELED SHOE AND METHOD OF MAKING SAME. CLAUDE H. DANIELS, Newton Center, Mass. Filed June 24, 1931. Serial No. 546,510. 4 Claims. (Cl. 41—10.)

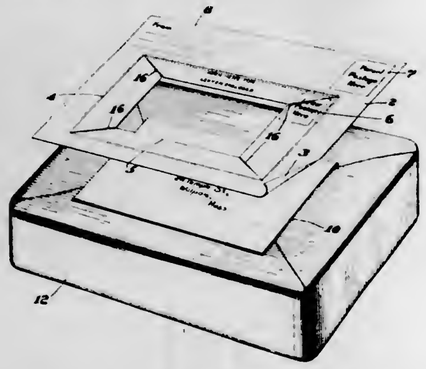


1. A boot or shoe of the kind described, comprising an upper section having apertures therethrough at predetermined intervals, brilliant retaining members located in

predetermined apertures and fixed to said upper section, brilliants fixed in said retaining members, and strips of material separate from said upper section woven through other predetermined perforations, certain of said strips constituting backing means for said brilliant retaining members.

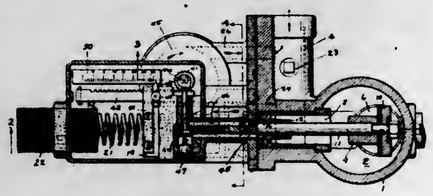
3. The improved method of manufacturing boots or shoes, which includes the steps of perforating a plurality of apertures through an upper section, positioning brilliant retaining members in predetermined apertures, securing said members to said upper section, then clamping brilliants in said retaining members, and then weaving strips of material separate from said upper section through other predetermined apertures in such a manner that certain of said strips will constitute backing means for said brilliant retaining members.

1,901,495. LABEL. LAWRENCE DAVIS, Walpole, Mass. Filed Nov. 17, 1931. Serial No. 575,538. 3 Claims. (Cl. 40—10.)



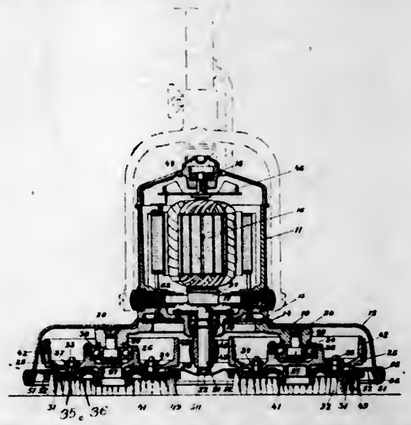
1. An article of character described comprising a package, a label adhesively secured to said package, a letter held on said package by said label, the label surrounding the letter and being adhesively united to both the margins of the letter and the adjacent surface of the package but having a window through which the address on the letter is exposed, whereby said address also serves as the address for the package.

1,901,496. SPRINKLER FLOW TIMING APPARATUS. DONALD ELDER, Berkeley, Calif. Filed Apr. 1, 1930. Serial No. 440,748. 15 Claims. (Cl. 137—144.)



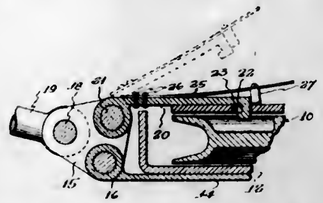
1. A water flow timing apparatus comprising a housing provided with a main water chamber having an inlet, an outlet passage and a second outlet, associated valves, one for closing each outlet, automatically operated means for opening one valve and closing the other, water operated means for reversing the position of the valves, a controlling valve for said water operated means, timing gears operated by flow of water arranged to open said controlling valve at a predetermined time interval, and rack and pinion means for changing the setting of said timing gears.

1,901,497. FLOOR POLISHER. AXEL OLOF ENGBERG and TORD ERIK DANIEL BILDE, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland, a Corporation of Switzerland. Filed June 19, 1928, Serial No. 286,663, and in Germany Nov. 27, 1926. 7 Claims. (Cl. 15—49.)



1. A machine for polishing floors comprising a motor casing, an electric motor mounted in said casing comprising a vertical shaft, a frame attached to said casing, a plurality of carrier discs rotatably mounted on said frame to rotate about axes parallel to said shaft, said carrier discs having pulley surfaces, a driving pulley mounted on the motor shaft, a belt passing in contact with the driving pulley and said pulley surfaces, said belt passing around a plurality of said discs and between another of said discs and said shaft.

1,901,498. SNATCH BLOCK. ALFRED B. ESSELTINE, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 21, 1930. Serial No. 445,949. 12 Claims. (Cl. 254—193.)

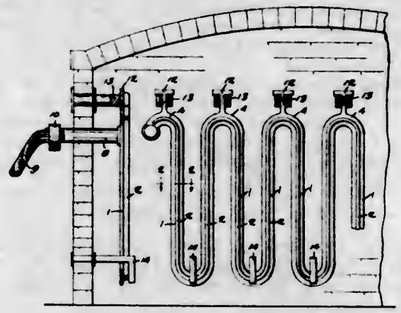


7. A snatch block having a sheave, means for permitting said snatch block to be selectively opened or closed with respect to said sheave comprising an apertured portion, a closure member having means thereon engageable with said apertured portion for holding said closure member in a closed position with respect to said sheave, and means for positively locking said closure member in a closed position with respect to said sheave comprising a yieldable member having a stop thereon adapted to engage said closure member and aperture in said apertured portion.

1,901,499. ELECTRIC FURNACE. FRANK A. FAHRENWALD, Chicago, Ill. Original application filed May 19, 1924, Serial No. 714,289. Divided and this application filed Mar. 31, 1930. Serial No. 440,267. 4 Claims. (Cl. 13—25.)

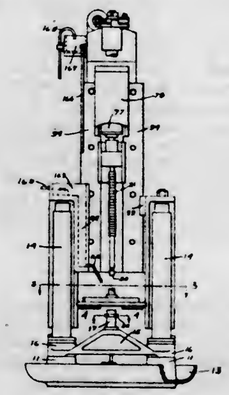
1. In an electric furnace, the combination with the furnace wall of an electric resistance heating element

of serpentine shape cast of high temperature resistant alloy having a plurality of spaced limbs which are longitudinally ribbed on one face only and are connected at



alternate ends by curved loops, integral fingers projecting from the top of certain of said loops, and metallic elements carried by the furnace wall having recesses which receive said fingers and thereby support said heating element.

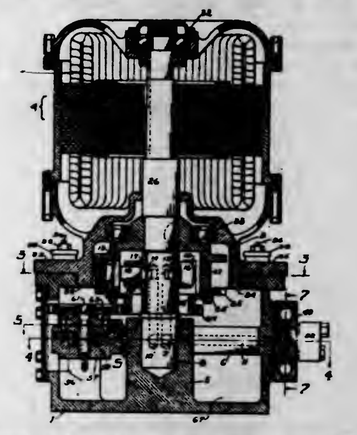
1,901,500. BROACHING MACHINE. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 18, 1929. Serial No. 414,905. 21 Claims. (Cl. 90—33.)



1. A broaching machine, comprising a stationary tool head, means for securing a broaching tool to said tool head upon one side thereof, a work support arranged upon the same side of said tool head for sustaining the pressure of the work, and power means arranged upon the same side of said tool head and alongside said broaching tool for moving said work support toward and from said tool head.

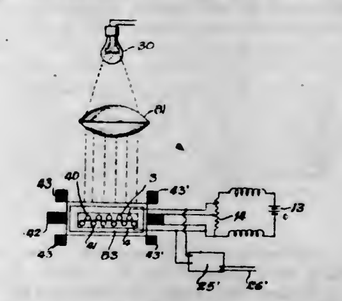
1,901,501. PUMP. WALTER FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 9, 1931. Serial No. 549,664. 10 Claims. (Cl. 103—161.)

1. A variable displacement pump, comprising a casing, a pintle arranged within said casing and fixed in a stationary position therein, a cylinder barrel journaled upon said pintle and having pistons fitted in its cylinders, two parallel guides carried by said casing and extending transversely of said pintle upon opposite sides thereof, a sliding head closely fitted between said guides to slide transversely of said pintle and restrained by said guides from movement transversely of said guides, a driving shaft carried by said head and movable therewith, a driver connected to said shaft for rotating said cylinder barrel and reciprocating said pistons, and means for moving said



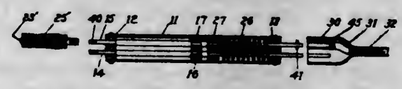
head along said guides to move the axis of said driver toward and from the axis of said pintle to thereby change pump displacement.

1,901,502. LIGHT MODULATOR AND METHOD OF CONSTRUCTING THE SAME. REGINALD A. FESSENDEN, Chestnut Hill, Mass. Original application filed Aug. 21, 1922, Serial No. 583,271. Divided and this application filed Jan. 8, 1927. Serial No. 159,940. 12 Claims. (Cl. 88—61.)



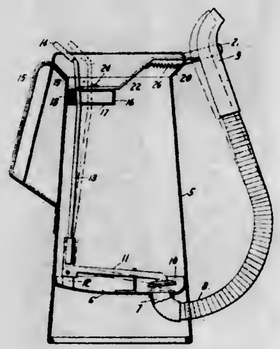
3. In the art of transmitting radiant images or vision, a method of constructing a light modulator which comprises arranging abutting one another elements having a removable coating of one half the desired thickness of the ultimately desired space between elements of the light modulator, and then removing the coating after the elements have been fixed in position.

1,901,503. ROTARY BRUSH. REGINALD A. FESSENDEN, Chestnut Hill, Mass. Filed Sept. 27, 1928. Serial No. 308,795. 1 Claim. (Cl. 15—23.)



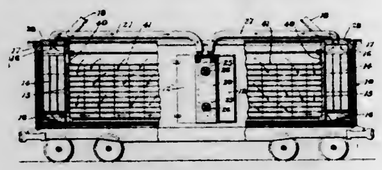
In a motor driven brush, a handle, a shaft journaled in said handle, a plate closing the brush end of said handle and providing a bearing for said shaft, said shaft provided with a shoulder on the inner side of said plate, and means including a spring for maintaining said shoulder firmly against the inner surface of said plate.

1,901,504. LIQUID DISPENSING CAN. PAUL D. FULTON, Dayton, Ohio, assignor to The Huffman Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 9, 1930. Serial No. 419,605. 19 Claims. (Cl. 221—16.)



1. In a liquid dispensing can comprising a receptacle, a tiltable spout leading from the lower portion of said receptacle, and a valve to control the discharge of liquid through said spout, means arranged to be engaged by said spout when the latter is moved to an upright position to cause said valve to be closed and to retain said spout in said upright position.

1,901,505. APPARATUS FOR PRECOOLING REFRIGERATOR CARS. FRED E. GREENE, Escalon, Calif., assignor to A. B. Humphrey Company, Mayhews, Calif., a Corporation of California. Filed July 31, 1929. Serial No. 382,311. 3 Claims. (Cl. 62—24.)



1. In combination with a refrigerator car having a side opening, ice bunkers at opposite ends of the car, said car being formed with lower air passageways between the interior of the car and the bottom of the ice bunkers and upper air passageways between the interior of the car and the top of the bunkers, means for temporarily closing the upper air passageways, an air circulating apparatus communicating with the interior of the car through the side opening and with the upper ends of the bunkers from the exterior thereof, said air circulating apparatus being capable of creating a continuous circulation of air from the interior of the car upwardly through the ice bunkers and thence into the car through the side opening.

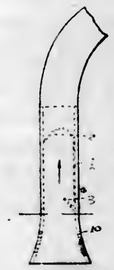
1,901,506. WETTING AGENT. FRITZ GÜNTHER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Aug. 10, 1925, Serial No. 49,447, and in Germany July 11, 1924. Renewed July 29, 1932. 5 Claims. (Cl. 252—1.)

1. As a composition of matter suitable for use as a wetting agent a mixture comprising an organic liquid practically insoluble in water and a sulfonated aromatic hydrocarbon containing more than one butyl radical and an aqueous liquid.

1,901,507. MIXTURES OF SULPHONATED ALKYLATED NONDYEING AROMATIC CARBOCYCLIC COMPOUNDS AND THEIR SALTS. FRITZ GUENTHER, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Aug. 4, 1931, Serial No. 555,070, and in Germany July 11, 1924. 10 Claims. (Cl. 260—159.)

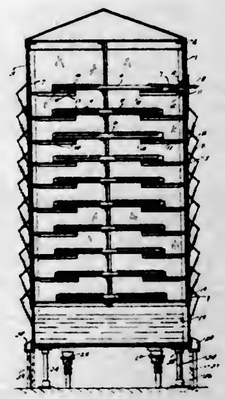
1. Sulphonic acid compositions selected from the group consisting of mixtures of sulphonic acids of a mixture of non-dyeing aromatic carbocyclic compounds, containing from 2.3 to about 4 butyl radicles per each molecular proportion of said carbocyclic compound, and salts of said sulphonic acid mixtures.

1,901,508. TELEPHONE TICKET DISTRIBUTION SYSTEM. CHARLES J. GUTBERLET, Philadelphia, Pa. Filed May 31, 1930. Serial No. 458,298. 3 Claims. (Cl. 302—2.)



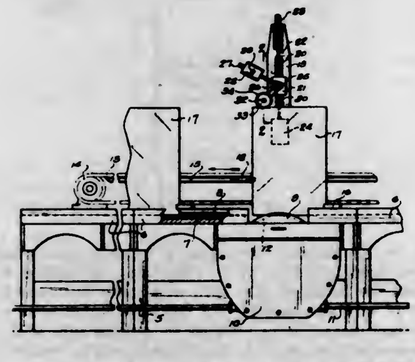
1. In a telephone ticket distribution system, wherein tickets containing memoranda are transmitted through pneumatic tubes rectangular in cross section, a ticket having a main body, a sail, and an air deflector, the sail and air deflector being hinged at the top and bottom of the body of the ticket, the sail being of sufficient width to extend across the width of the inside of the tube, and allow a portion of its end to lie against the inside of the tube opposite to that on which the body of the ticket rests and the deflector being deflectable upward under the impulse of the air current in the tube.

1,901,509. COMBINATION TRAY HEATING AND REFRIGERATING CABINET. CHARLES G. HALL, Boise, Idaho, assignor to Automatic Food Machinery Corporation, Boise, Idaho, a Corporation of Idaho. Filed Mar. 17, 1930. Serial No. 436,543. 2 Claims. (Cl. 312—176.)



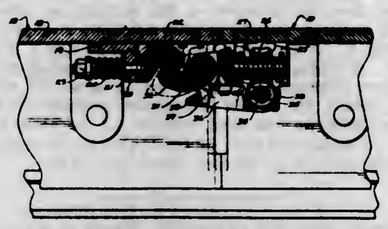
2. A cabinet of the class described comprising a frame made of a plurality of ribs, side and end walls disposed about the frame, beams disposed transversely within the cabinet and in spaced relation with each other, a plurality of inwardly swingable doors secured to each of the side walls, an arm extending outwardly from each of the doors, a retracting spring secured to each of the arms and to a side wall, and a plurality of tray supporting bars secured to the beams, said bars being spaced from the doors sufficiently to allow clearance for them and being adjacent to and parallel with the doors when opened.

1,901,510. EDGING APPARATUS. HENRY J. HAMANN, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 13, 1932. Serial No. 611,090. 8 Claims. (Cl. 51—74.)



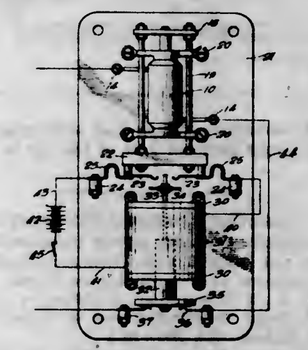
1. In a machine for grinding an edge of a plate of glass, the combination of grinding means upon which the glass is partially supported on edge while being ground, means cooperating with the grinding means for guidingly supporting said plate of glass during grinding thereof, a roller engaging the upper edge of the glass plate for maintaining it in a vertical position and in engagement with the grinding means, and means for preventing free rotation of said roller.

1,901,511. COUPLER FOR GLASS SUPPORTING TABLES. LE ROY L. HANDY, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed June 28, 1929. Serial No. 374,550. 12 Claims. (Cl. 51—240.)



1. In the apparatus of the character described, a plurality of tables arranged end to end, a stationary hook carried at one end of each table, a movable hook carried at the adjacent end of the adjoining table and adapted for engagement with said stationary hook to hold the ends of said tables in firm abutting relation, means for moving the movable hook forwardly, a stationary tripping member engaging a projecting portion on the hook for tripping said hook during its forward travel to disengage it from said stationary hook, and spring means also engaging the projecting portion on the movable hook and normally acting to return the movable hook into engagement with the stationary hook upon the release of said movable hook from said tripping member.

1,901,512. RECLOSING CIRCUIT INTERRUPTER. FORD W. HARRIS, Los Angeles, Calif., assignor to Pacco, Inc., Los Angeles, Calif., a Corporation of California. Filed July 10, 1931. Serial No. 549,829. 11 Claims. (Cl. 175—294.)



1. In an electrically energized device, the combination of: an electrically energized element; a switch for controlling the flow of electrical energy through said element; a heat storage device having a member which moves from a primary position to a secondary position whenever said heat storage device has received a definite amount of heat; an electrically driven reset; means by which said reset operates said switch; means by which said movement of the member in said heat storage device from said primary position to said secondary position actuates said reset; and means by which said reset when actuated by said means returns said member to its primary position.

1,901,513. ROTARY JAR. FORD W. HARRIS, Los Angeles, Calif., assignor to Pacco, Inc., Los Angeles, Calif., a Corporation of California. Filed Jan. 18, 1932. Serial No. 587,280. 7 Claims. (Cl. 255—27.)

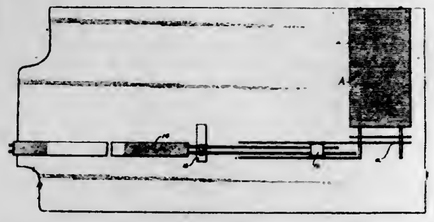


1. A rotary jar comprising: a driven member adapted to be attached to a bit; a driving member adapted to be attached to the drilling string; positive driving means by which said driving member drives said driven member; means for normally holding said driving member in positive engagement with said driven member, said driving member being disengaged from said driven member whenever there is an upward pull on the drilling string; and means by which said driving member intermittently strikes an upward blow on said driven member when the drilling string is rotated with the driving means in said disengaged position.

1,901,514. METHOD OF PRODUCING WIRE RODS. WILLIAM HERMAN and WILLIAM H. SOMMER, Peoria, Ill. Filed Sept. 11, 1930. Serial No. 481,144. 16 Claims. (Cl. 80—63.)

1. The method of continuously producing wire rods from a multiplicity of commercial length billets, which consists in placing the billets end to end in juxtaposed relation and while moving the billets in such relation, butt welding

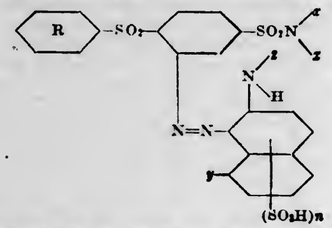
their abutting ends to produce a continuous length of bar and thereafter, by a series of operations on the bar and without interrupting the movement of said bar succes-



sively and alternately rolling and stretching said bar, whereby the cross-sectional area of the bar is reduced to rod size.

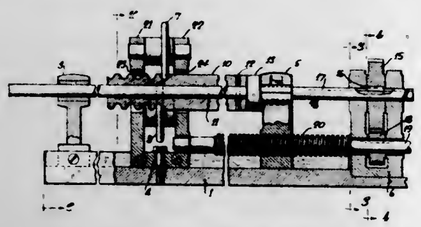
1,901,515. DIARYLSULPHONE-AZODYESTUFFS. WINFRID HENTRICH, Erlangen, ANTON OSSENBECK, Cologne-Mulheim, and ERNST TIETZE, Cologne-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 19, 1931, Serial No. 538,628, and in Germany May 24, 1930. 5 Claims. (Cl. 260—92.)

1. The azodyestuffs of the probable general formula:



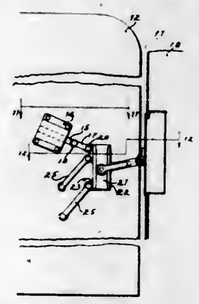
wherein x stands for hydrogen or an alkyl group, y stands for hydrogen or a hydroxy group, z stands for hydrogen or an alkyl group, n stands for one of the numbers one and two, and wherein the benzene nucleus R may be substituted by monovalent substituents selected from the group consisting of halogen, an alkyl-, an alkoxy-, the hydroxy- and the carboxylic acid group, being in the form of their alkali metal salts generally dark red powders, soluble in water and dyeing wool from an acid bath generally red shades of good fastness properties.

1,901,516. METHOD AND MACHINE FOR ROLLING FINS ON TUBES. ROBERT K. HOPKINS, St. George, N. Y., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 14, 1929. Serial No. 407,041. 8 Claims. (Cl. 80—13.)



1. In a machine for forming integral radiating fins of substantial height upon a tube or the like, a plurality of rolls positioned about said tube for forming said fins, all of said rolls forming and operating in the same track, means for rotating said tube about its longitudinal axis, means for providing relative motion between said rolls and said tube longitudinally of the latter and simultaneously with said rotary motion, the rolling action of said rolls being imparted thereto by the movement of said tube.

1,901,517. SWING DOOR INCLOSURE INTERLOCK. LUDWIG G. JACOBSON, Jamestown, N. Y., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed June 13, 1929. Serial No. 370,553. 22 Claims. (Cl. 187—31.)



1. In an elevator structure, a locking mechanism for swing door inclosure units comprising extendible means within the frame of said unit, withdrawable means in the door of said unit and further means mounted upon a cab, said last means being adapted to actuate said withdrawable means through said extendable means to control opening said door.

1,901,518. CLEANING DEVICE. LEONARD W. JOHNSON, Batavia, Ill. Filed Dec. 9, 1929. Serial No. 412,692. 5 Claims. (Cl. 15—104.19.)



5. A scraping tool for small diameter openings, such as the guide openings for the valve stems of internal combustion engines, comprising a stem and a scraper head carried thereby, the over all diameter of the stem and the head where the latter is connected to the stem being slightly less than the diameter of the opening for which the tool is designed, thereby to give maximum strength and a working fit for the tool, the head comprising a plurality of scraper blades having their ends lying against the stem and their intermediate portions bulged outwardly from the stem, means for fixedly connecting corresponding ends of the blades to the stem, and means for confining the other corresponding ends of the blades to the stem while enabling slidable movements thereof on the stem.

1,901,519. VACUUM CLEANER. HENRY M. KEITH, Harrisburg, Ill. Filed Nov. 5, 1931. Serial No. 573,221. 1 Claim. (Cl. 15—17.)

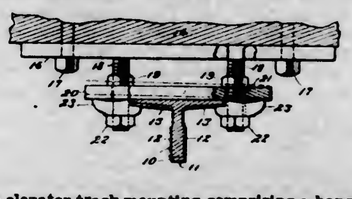
A machine of the class described comprising a carriage having a rotatable work-performing member, a drum rotatably mounted on said carriage and having a driving connection with said rotatable member, a cable wound on said drum and adapted to be unwound for rotating said drum in a direction to drive said member, a spring wound by drum-rotating in said direction for later rotating said drum in cable rewinding direction, a handle for moving said carriage forwardly and rearwardly while holding the rear end of said cable fixedly, and a foot-plate on the

rear end of said cable upon which the operator stands to hold the cable end; whereby said cable and drum will drive said rotatable member and wind said spring each



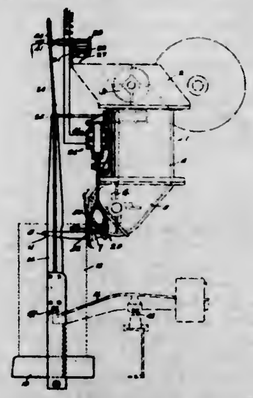
time the carriage is pushed forwardly, and the wound spring, drum and cable will assist in rearwardly returning said carriage.

1,901,520. ELEVATOR TRACK MOUNTING. LE ROY H. KINSLING, Brooklyn, N. Y. Filed July 17, 1931. Serial No. 551,888. 3 Claims. (Cl. 187—95.)



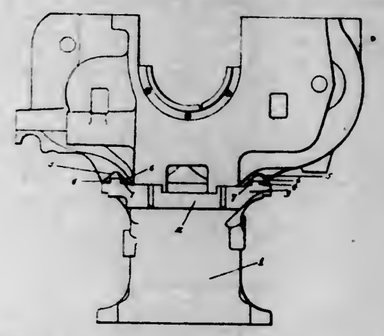
1. An elevator track mounting comprising a hanger plate on the shaft wall, horizontally spaced threaded posts projecting inwardly from the plate, a cross bar having apertures fitting said posts, a vertical track member bearing on the inner side of the bar, threaded nuts on said posts outside of and bearing on said cross bar, and threaded nuts on said posts inside of and bearing on said track member and bar to hold them in rigid relation.

1,901,521. ELECTRICAL VALVE CONTROL FOR PACKING MACHINES. KARL H. KOLHEDE, San Andreas, Calif. Filed July 27, 1931. Serial No. 553,471. 5 Claims. (Cl. 249—60.)



1. An electrically controlled valve comprising a solenoid adapted for mounting on a packer including a discharge, said solenoid having a plunger, a valve mounted for closing the discharge and formed with an abutment plate thereon, a member connected to the plunger and having rollers bearing against the abutment plate, and means for energising the solenoid for moving the valve into closed position.

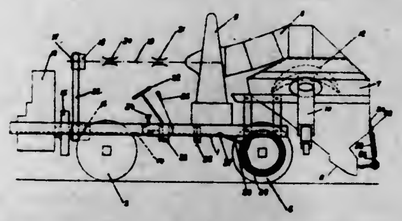
1,901,522. MACHINE TOOL CONSTRUCTION. CHARLES MEISE and THEODORE A. WETTIG, Cincinnati, Ohio, assignors to The Acme Machine Tool Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 11, 1929. Serial No. 399,045. 6 Claims. (Cl. 82—82.)



1. In the construction of a V slideway for a machine tool the steps which include machining a V piece formed with upper surface portions of hardening metal and inner body portions of non-hardening soft metal, subjecting the piece to a treatment to harden the upper surface portions, and then machining the soft metal body for the reception of attaching means.

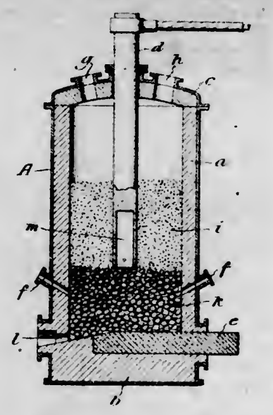
6. A bearing surface element for a machine tool comprising, in unitary relation, a bearing surface portion of hardening steel, and a portion for attaching said element to a machine tool bed, composed of non-hardening soft metal adapted to be machined after hardening of the bearing surface portion.

1,901,523. AUTOMATICALLY LOADING MACHINE FOR DISTRIBUTING SAND, GRAVEL, AND THE LIKE. EUGENE JUSTIN NESTOR MILLET, Paris, France. Filed June 6, 1930, Serial No. 459,490, and in France June 18, 1929. 6 Claims. (Cl. 94—44.)



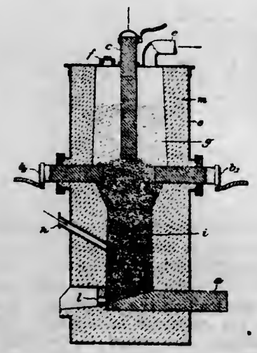
1. A machine for distributing sand, gravel or the like material comprising a motor vehicle frame, a reservoir carried thereby adapted to receive and to contain the material between the front and rear axles of the vehicle frame, a pipe for loading the material, a rotatable turret forming with the reservoir an airtight receptacle provided with bellows into which the loading pipe opens, a horizontal beam pivotally secured to the frame, a carriage slidably carried by the said beam and carrying the free end of the pipe, a fan for creating a vacuum in the reservoir and means for distributing the material from the reservoir on to the road.

1,901,524. CHLORINATING APPARATUS. WILHELM MOSCHEL, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Original application filed Sept. 13, 1929, Serial No. 392,462, and in Germany Oct. 4, 1928. Divided and this application filed Dec. 2, 1930. Serial No. 499,606. 6 Claims. (Cl. 13—20.)



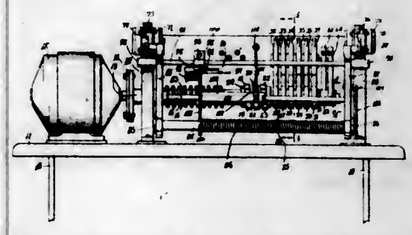
1. A chlorinating apparatus comprising a closed shaft provided with a fire-proof lining, a tapping hole in the proximity of the bottom of said shaft, at least one gas inlet in the lower part of said shaft but above said tapping hole, a layer of coarse pieces of mechanically resistant and chemically inert carbon in the bottom of said shaft extending upwards somewhat beyond said gas inlet, a feeding aperture and a gas outlet in the ceiling of said shaft, a free reaction space in the upper part of said shaft, an electrode in the bottom of said shaft and in contact with said carbon layer and at least one rod-shaped electrode vertically inserted in the ceiling of said shaft and extending through said free reaction space so as to contact with said carbon layer.

1,901,525. APPARATUS FOR PERFORMING REACTIONS BETWEEN MOLTEN SUBSTANCES AND GASES. WILHELM MOSCHEL, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Aug. 19, 1931, Serial No. 558,182, and in Germany Aug. 25, 1930. 5 Claims. (Cl. 13—23.)



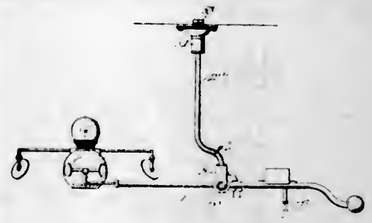
1. Apparatus for carrying out reactions between molten substances and gases comprising a closed shaft, an irrigation layer of electrically conductive material in the lower part of said shaft, an electrode in the vicinity of the bottom of said shaft contacting with said irrigation layer, an electrode extending from the ceiling into the upper part of said shaft into contact with said irrigation layer, and at least one other electrode contacting with the upper part of said irrigation layer.

1,901,526. SYNCHRONOUSLY OPERATED TIMING DEVICE. ARTHUR MUTSCHELLER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed Aug. 5, 1930. Serial No. 473,221. 23 Claims. (Cl. 161—1.)



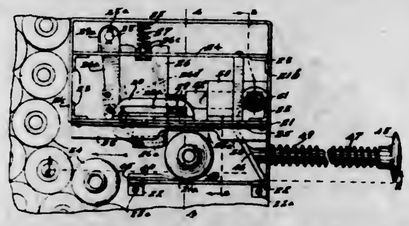
1. In a synchronously operated timing device the combination, with a synchronous motor of a revoluble shaft driven by said motor, a plurality of contact sectors carried by said revoluble shaft and insulated therefrom and from each other, said contact sectors being disposed end to end in the form of a thread, a contact brush for engaging said sectors in succession as said contact sectors are turned by the rotation of said shaft, mechanism for shifting said brush and maintaining it in engagement with said contact sectors in succession as said shaft is turned, a circuit to be timed, said circuit being normally open, and mechanism controllable by the operator for completing said circuit through said contact brush and through a predetermined number of said contact sectors as brought successfully into engagement with said contact brush.

1,901,527. UNIVERSAL JOINT AND SUPPORTING STRUCTURE FOR ILLUMINATING DEVICES. PATRICK A. NIEDLINGER, CLARENCE D. NIEDLINGER, and EDWARD M. MILLER, Chicago, Ill., assignors, by direct and mesne assignments, to Operay Laboratories, Inc., Madison, Wis., a Corporation of Wisconsin. Filed Dec. 2, 1930. Serial No. 499,552. 6 Claims. 240—52.)



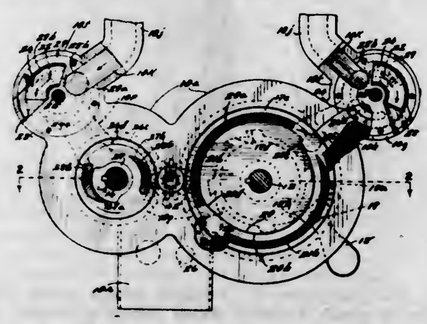
5. A support for a lighting unit comprising a rod having a vertically disposed upper end portion journaled for rotation on a vertical axis in a ceiling bracket and a vertically disposed lower end portion laterally offset from said upper portion and connected thereto by an intermediate portion including an off-set curve, a bracket mounted on said lower end of said rod for rotation with respect thereto on a vertical axis, a substantially horisontal arm carried by said bracket and having a lighting unit mounted on one end thereof, whereby said lighting unit may be moved in a substantially horisontal straight-line direction by combined rotation of said rod in said ceiling bracket and said arm bracket on said lower end of said rod.

1,901,528. BOTTLE RECEIVING AND COIN DISPENSING DEVICE. HENRY OLSEN, Minneapolis, Minn. Filed Mar. 7, 1931. Serial No. 520,806. 18 Claims. (Cl. 194—4.)



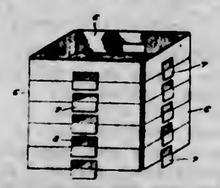
14. A mechanism adapted to be operated by a container such as a bottle having a particular contour, comprising a series of movable members adapted to be engaged by the surface of said container and be moved into a certain definite relation thereby, said members being fixed against movement with said container, and a member movable relatively to said series of members only when they are in said definite relation and engageable therewith to be stopped thereby when said members are not in said definite relation, means for moving said container into engagement with said series of members, said last mentioned member forming an actuating means.

1,901,529. COIN HANDLING MACHINE. HENRY OLSEN, Minneapolis, Minn. Filed Mar. 23, 1931. Serial No. 524,505. 18 Claims. (Cl. 194—84.)



1. A coin operated device having in combination, a casing, a member freely movable in said casing and adapted to actuate a dispensing mechanism, said casing having a wall adapted to retain a coin and provided with inlet and outlet passages for said coin, a second member having a surface spaced from and parallel to said wall to define a runway for said coin, and a third member having a portion movable in said runway to engage the edge of said coin therein and move said first mentioned member thereby, said second member being means thereon for causing said coin to move toward said outlet passage.

1,901,540. SHIPPING CONTAINER. OTIS A. PELLYMOUNTER, San Francisco, Calif. Filed Mar. 16, 1931. Serial No. 523,081. 2 Claims. (Cl. 206—9.)

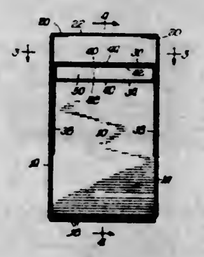


2. A tray for a shipping container comprising a flat body section having flanges rising from all the edges thereof to form an all-around wall and having small flaps turned downward to prevent telescoping of one tray into a lower one.

1,901,581. ELECTRODEPOSITION OF PLATINUM. ALAN RICHARD POWELL and ARTHUR WILLIAM SCOTT, London, England, assignors to Johnson-Matthey & Company Limited, London, England. Filed Jan. 22, 1932, Serial No. 588,235, and in Great Britain Mar. 12, 1931. 7 Claims. (Cl. 204—1.)

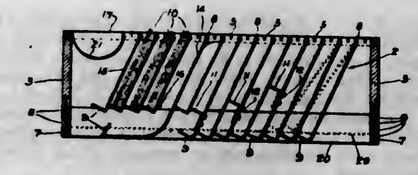
1. A process for the electrodeposition of platinum in the form of a bright plate in which the electrolyte comprises a solution containing an alkali metal platinate, a conducting salt, a stabilizing salt and an alkali metal hydroxide in an amount equivalent to less than 2.5 per cent of free sodium hydroxide.

1,901,582. FOLDING CARTON. HENRY K. POWELL and ADOLF G. BALLENBERG, Chicago, Ill., assignors to Morris Paper Mills, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1931. Serial No. 508,573. 5 Claims. (Cl. 229—17.)



1. A folded carton including side walls, a spacer folded from one of said walls, a partition folded from said spacer, and locking wings folded from said partition, a partition spacer also folded from said partition and a lower partition folded from said partition spacer.

1,901,583. FILING RECEPTACLE. GEORGE H. PERRINE, San Francisco, Calif. Filed Oct. 11, 1930. Serial No. 488,089. 4 Claims. (Cl. 129—43.)

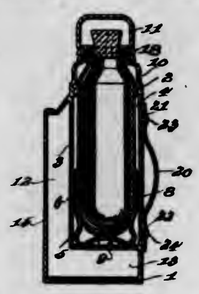


4. A receptacle comprising a frame having sides provided with notches at their top edges, a plurality of partitions having pivots supported in said notches for swingably supporting the partitions and strips overlying the top edges for holding the pivots in the notches.

1,901,584. COMBINATION LUNCH BOX AND BOTTLE. CLYDE S. REDFIELD, Shortsville, N. Y. Filed Jan. 23, 1932. Serial No. 588,473. 4 Claims. (Cl. 206—4.)

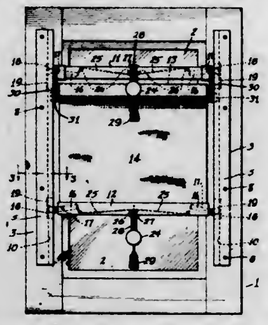
1. In a lunch box the combination of a cell on one side thereof adapted to hold a round bottle, an opening on the end of said cell, the mouth of said bottle extending through said opening and being adapted to receive a cork therein, a screw cap on the outside of the box

for closing the end of said cell, said box having a compartment at one side and at the bottom of the cell adapted to hold solid foods, an opening in the side of the box, a



door adapted to close said opening, said door extending parallel to the axis of the round bottle adapted to be held by the cell.

1,901,535. ADJUSTABLE SHADE ROLLER MOUNTING. ROBERT SAA, Auburn, Calif. Filed Mar. 2, 1932. Serial No. 596,315. 6 Claims. (Cl. 156—27.)



5. In combination, a pair of guides S-shaped in cross section, a tube extending between the guides, guide-gripping members pivotally carried by the tube, spring means for urging the members into gripping positions and manually-controlled means for moving the gripping members into released position.

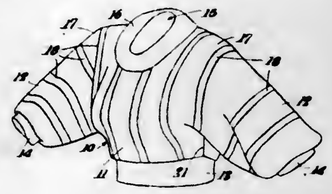
1,901,536. MANUFACTURE OF TANNING SUBSTANCES. JOSEF SCHÄFER, Basel, Switzerland, assignor to the Firm of J. R. Geigy S. A., Basel, Switzerland. Filed Oct. 9, 1931, Serial No. 567,985, and in Germany Nov. 10, 1930. 5 Claims. (Cl. 260—3.)

1. A process for the manufacture of tanning substances, consisting in heating in acid solution a dihydroxydiarylsulphone with formaldehyde in presence of an aromatic sulphonic acid.

3. A process for the manufacture of tanning substances, consisting in heating in acid solution a dihydroxydiarylsulphone with formaldehyde in presence of a condensation product of an aromatic sulphonic acid with sulphur chloride.

1,901,537. SWEATER. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 3, 1933. Serial No. 649,873. 3 Claims. (Cl. 2—90.)

1. In a knitted garment to be worn by females, a body portion having a longitudinal over-all width measuring from cuff to cuff of the arms of the female when the same are in a horizontal outstretched position, and having a vertical length substantially uniform throughout the width of the garment, the wales of the body portion running in the same horizontal direction, said garment having front and back portions and a defined neck opening, the body portion being of such width as to extend from the shoulders to below the bust of the wearer, the front and



back portions of the garment being joined together at the bottom defining sleeve portions of a width substantially equal to the width of the garment.

1,901,538. BOBBIN AND BOBBIN CLUTCHING SPINDLE. WALLACE I. STIMPSON, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Feb. 23, 1932. Serial No. 594,643. 7 Claims. (Cl. 242—46.5.)



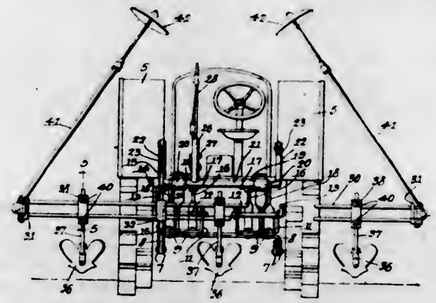
1. The combination of a rotatable spindle having a plurality of clutch segments which incline outwardly and upwardly away from the axis of the spindle, with a bobbin having a metal bushing in a bore in the butt thereof, serving to house the clutch segments, said bushing being provided with an inwardly projecting locking ledge, of less diameter than the remainder of the bushing, the ledge engaging the inclined clutch segments below the tops thereof and locking the bobbin against rising on the spindle.

6. A bobbin for use with rotatable spindles having locking members, said bobbin having a cylindrical bore in the butt thereof, and a metal bushing secured in the said bore, the said bushing being substantially cylindrical and provided, intermediate its ends, with an inwardly projecting annular flange the upper edge of which flange constitutes a locking ledge for engaging the locking members of the spindle to hold the bobbin down on the spindle.

1,901,539. AGRICULTURAL MACHINE. JOHN W. TAPP, Glendale, Ariz. Filed Sept. 12, 1931. Serial No. 562,567. 1 Claim. (Cl. 97—47.)

The combination with a tractor, of a shovel support comprising a frame embodying a pair of horizontal spaced bars, depending brackets and upstanding brackets, secured to the tractor frame, pivoted bars connected with the depending brackets, rods connected to the upstanding brackets, vertical bars to which the pivoted bars and rods are connected, clamps having elongated openings

to accommodate the vertical bars and embrace the horizontal bars, securing the horizontal bars to the tractor, means for securing shovels to the shovel supporting frame,



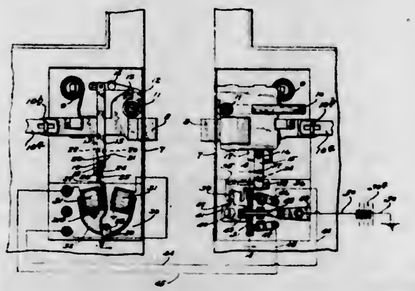
and means connected with the verical bars for moving the frame vertically to adjust the depth of operation of the shovels.

1,901,540. BUMPER. GEORGE W. VEALS, Cleveland Heights, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 31, 1931. Serial No. 572,419. 5 Claims. (Cl. 293—55.)



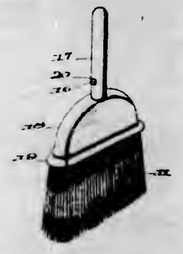
1. In a bumper end construction, a front bar having an eye at its end, a slot in the inner side of said eye, a rear bar projecting through said slot, resilient blocks engaging the interior of said eye and the end of said rear bar, a bolt and nut, washers on said bolt, said bolt and nut cooperating to clamp said blocks in position.

1,901,541. DOORLOCK ACTUATING MECHANISM. CARL J. ULRICH, Minneapolis, Minn., assignor, by direct and mesne assignments, to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Aug. 1, 1929. Serial No. 382,640. 12 Claims. (Cl. 70—50.)



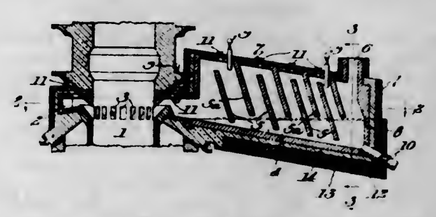
1. A plurality of door locks having outside and inside operating handles, lock dogs operative when set to hold said outside handles against lock releasing movements, key-controlled means operative manually from the outer side of one of said locks to mechanically retract the lock dog of that lock, and electrically actuated means controlled by said key-actuated lock to automatically retract the lock dogs of the other of said locks substantially simultaneously with the lock dog with the key-actuated lock.

1,901,542. BRUSH. WILLIAM B. WANSOR, Locust Valley, N. Y. Filed July 18, 1931. Serial No. 551,753. 4 Claims. (Cl. 15—171.)



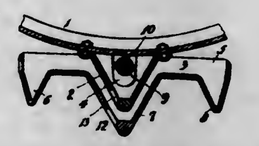
1. The combination of a handle, a thimble at the end of the handle, a brush head, a clamp consisting of flared jaws conforming to and engaging against the opposite sides of the brush head, and a resilient bridge connecting said jaws and yieldable prongs connected to said bridge and housed within the handle to normally retain the clamp in position in the handle, said clamp having means to engage the brush head when in position in the handle to rigidly hold said head against movement relative to the handle.

1,901,543. METALLURGICAL CONDENSER. GEORGE F. WEATON, Beaver, Pa., assignor to St. Joseph Lead Company, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1932. Serial No. 595,365. 5 Claims. (Cl. 266—17.)



1. A metallurgical condenser comprising a chamber, a plurality of inclined baffles spaced from the top of said chamber and extending below the normal level of liquid metal in said chamber, and a plurality of inclined baffles alternating with said first-named baffles and extending from the top of said chamber to a level above the normal level of liquid metal in said chamber.

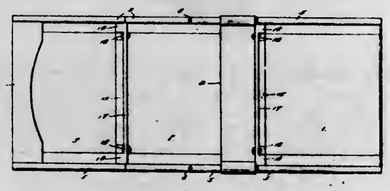
1,901,544. TRACTION WHEEL. WILLIAM MURRAY WELSFORD, Meringur, Victoria, Australia. Filed Nov. 26, 1930, Serial No. 498,474, and in Australia Dec. 9, 1929. 1 Claim. (Cl. 305—13.)



A two-part traction lug for wheels comprising a hollow, substantially V-shape plate, said V-shape plate having aligned, elongated slots in its opposite side walls, a hol-

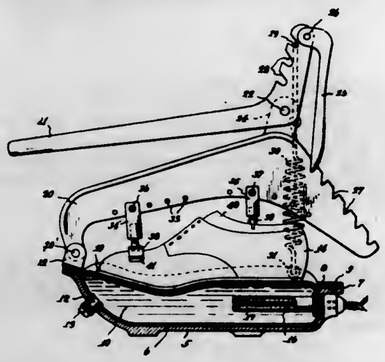
low gripping element formed with a substantially V-shape central, depending, hollow ground-engaging extension forming a pocket to receive the hollow V-shape plate, said pocket being of larger volume than the hollow V-shape plate to permit movement of the gripping element, the V-shape gripping element having hollow, depending end extensions of less depth than the central V-shape extension, a bolt connecting the side walls of the hollow gripping element and extending through the elongated slots, a roller mounted on the bolt whereby to permit the hollow gripping element to have a sliding and a pivotal movement on the V-shape plate, the side walls of the elongated slots engaging the roller in the movement of the gripping element.

1,901,545. BOAT. JOHN M. WOOD, Carrollton, Ky. Filed Sept. 9, 1931. Serial No. 561,914. 1 Claim. (Cl. 9—2.)



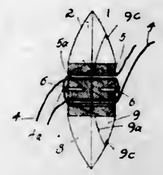
A boat comprising a plurality of sections, and means for detachably connecting the sections together in assembled relation, said means including pairs of coacting bars secured to adjacent ends of the sections, said bars comprising oppositely extending interlocking flanges, said bars further including parallel, abutting flanges, and bolts extending through the abutting flanges for positively securing the bars together.

1,901,546. SHOE BOTTOM ATTACHING APPARATUS. GEORGE HEINERICH BARGE, Brooklyn, N. Y., assignor to Barge Electric Shoe Cement Press, Inc., a Corporation of New York. Filed Nov. 20, 1931. Serial No. 576,387. 15 Claims. (Cl. 12—33.)



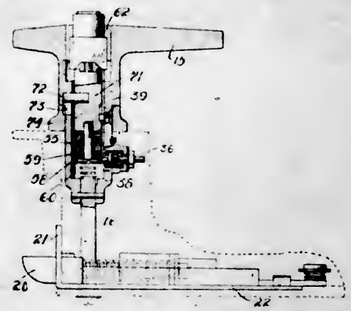
1. A shoe bottom attaching apparatus including, in combination, a base member, a flexible cushion carried by said base member, spring means for exerting pressure on a shoe positioned on the cushion, means including a hand operable lever to tension the spring pressure means, and means acted upon by said pressure means for distributing the pressure over the length of the shoe, the pressure on the entire shoe being exerted solely by the tensioned spring pressure means.

1,901,547. WHIRL-WHISTLE. JAMES HENRY BRADY, Louisville, Ky. Filed Jan. 16, 1932. Serial No. 587,033. 1 Claim. (Cl. 46—14.)



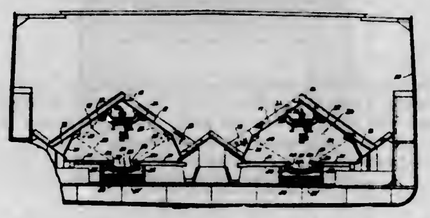
In a multi-toned whirl-whistle: a main circular compartment made up of two concaved discs whose concaved faces have been fastened together in an air-tight seam at their rims, forming a hollow, globular shell; two pairs of adjacent whistle-apertures in one of said discs made diametrically opposite each other near the rim of the disc and adapted to produce a whistling sound when the shell is rotated rapidly on its axis; a cubical block securely fastened in the central portion of said shell and bearing tightly against the inner sides thereof, the angles of said block being adapted to act as a fan to force the interior air from the central regions to the periphery zone of the hollow shell when the shell is rotated rapidly on its axis, as in normal operation; a secondary compartment within the main compartment, having one concave disc whose edges are fastened in an air-tight seam to the inner surface of the concaved disc opposite said whistle-apertures of the main compartment shell, the central part of the secondary compartment disc being cut and adapted to fit tightly about the sides of the central cubical block of the main compartment; two pairs of adjacent whistle-openings diametrically opposite each other made through the contiguous wall of the main compartment and leading directly into the secondary compartment near its periphery and adapted to produce a whistling sound of a higher pitch than the whistle-apertures of the larger main compartment when the main globular shell is rapidly rotated on its axis; and means adapted for spinning said main shell by torsion force with the twisting and untwisting of attached string-loops.

1,901,548. AUTOMOBILE DOORLOCKING SYSTEM. FAY BEAL, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Oct. 21, 1929. Serial No. 401,053. 9 Claims. (Cl. 70—50.)



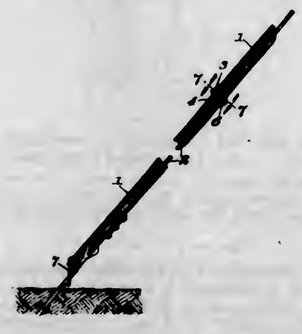
1. Door locking means for simultaneously locking and unlocking several doors, comprising in combination with manual door operating mechanisms, means in each door adapted to be interposed in said mechanisms to prevent the operation thereof, a source of electrical energy, solenoids cooperating with said means to shift the same into locking or unlocking position, detent means associated with said first mentioned means, a solenoid connected in series with said shifting solenoids for releasing said detent means, a master lock, and means associated therewith adapted to momentarily complete the circuit from said source of electrical energy to all of said solenoids selectively when the master lock is correspondingly actuated.

1,901,549. SELF-UNLOADING SHIP. CHARLES H. BRADLEY, University Heights, Ohio, assignor to The American Ship Building Company, Cleveland, Ohio, a Corporation of New Jersey. Filed Mar. 27, 1931. Serial No. 525,788. 14 Claims. (Cl. 214—15.)



1. In a self-unloading vessel, the combination of a cargo hold having a hopper bottom with a plurality of discharge openings and a longitudinally extending ridge, a tunnel beneath said ridge, a conveyor extending longitudinally in said tunnel, means extending near said openings for supporting material discharged therethrough in substantially a condition of repose adjacent said conveyor, a scraping device having an angularly disposed deflecting portion, and means for moving said scraping device along said tunnel for deflecting the material laterally of said supporting means onto said conveyor.

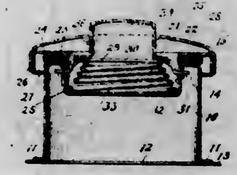
1,901,550. GUY SHIELD. FRED N. BIERCE, Cincinnati, Ohio. Filed Feb. 12, 1930. Serial No. 427,793. 1 Claim. (Cl. 189—31.5.)



A shield for guy rods and cables, comprising, an elongated channel-shaped member adapted to overlie a portion of the guy, a guy engaging clip fixed to and extending from one longitudinal end of the channel member constituting a plate having a notch at one edge inwardly providing a throat to receive the guy therethrough and clinch thereto when the clip is disposed at an acute angle to the guy.

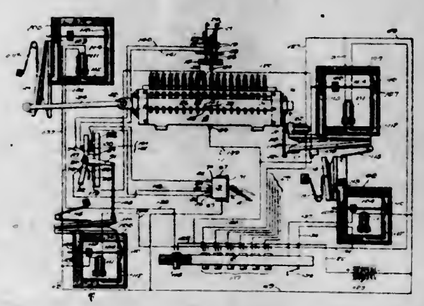
1,901,551. CLOSURE. ANTHONY H. CIPULLO, Cleveland, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 18, 1929. Serial No. 379,222. 5 Claims. (Cl. 220—40.)

1. A closure for a tubular member comprising a hollow closure body, a locking member in said hollow closure body and rotatable therewith, said locking member having portions adapted to engage in locking recesses provided in said tubular member for retaining the closure thereon, means in said hollow closure body for yieldingly pressing



said portions into said recesses, and means accessible from the exterior of the closure body for moving said portions out of said locking recesses against the action of said yielding means.

1,901,552. COMBINATION BOX FOR ELECTRO-PNEUMATIC PIPE ORGANS. CHRISTOPHER CHARLES DARGIS, Atlantic City, N. J. Filed June 1, 1931. Serial No. 541,483. 7 Claims. (Cl. 84—345.)

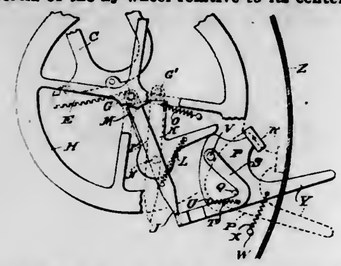


7. Stop-selector-actuating mechanism for organs comprising stop actuators manually movable to select a desired stop combination, electrical operating means for selectively moving said actuators to "on" and "off" positions, circuits for said operating means, a plurality of banks of switches, each bank containing a switch for each operating means, said switch being normally positioned to actuate the operating means and place the actuator in "off" position, means for moving said switches to the "on" position comprising a member for each actuator and common to the switches associated with said actuator in all of said banks, means for preventing operation of the switch-moving means until the associated bank has been bodily moved, means for bodily moving a selected bank, means for connecting the selected switch-operating means to a movable member to be actuated thereby, and a common means for shifting a selected bank and for supplying current to the switches of the bank, and means for controlling operation of the last-named means to determine in which of its capacities it is effective.

1,901,553. AUTOMATIC BRAKING DEVICE FOR PHONOGRAPHS AND THE LIKE. RAUL ORZÁBAL DE LA QUINTANA, Buenos Aires, Argentina. Filed Jan. 31, 1930, Serial No. 424,989, and in Argentina May 10, 1929. 6 Claims. (Cl. 192—118.)

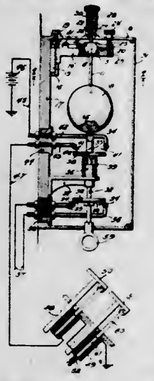
1. A braking device particularly for phonographs, comprising a rod mounted on an acoustic arm of the phonograph; a pivoted lever cooperating with said rod; a pivotally-mounted brake lever adapted to brake a turn-table of

the phonograph; and means including a fly-wheel cooperating with said pivoted lever and the brake lever whereby, due to the inertia of the fly-wheel relative to its center of rota-



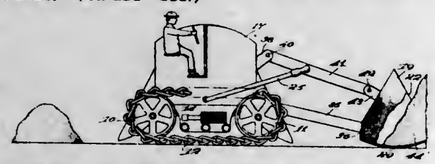
tion, the brake lever is set against the turn-table when the acoustic arm has attained a small sudden increase in its angular speed.

1,901,554. SAFETY CONTROL FOR MOTOR VEHICLES. FREDERICK P. DE WILDE, Sheboygan, Wis. Filed Oct. 11, 1929. Serial No. 398,856. 8 Claims. (Cl. 180—82.)



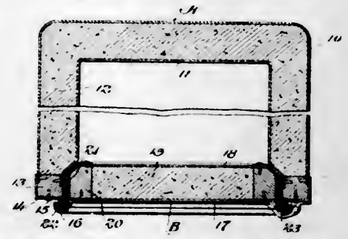
4. In a control device for motor vehicles the combination of a support for mounting on a vehicle, an element movable thereon in response to an abrupt change in vehicle movement, said element having a socket therein, a reciprocable member cooperating with said socket to yieldably retain said element in one position, said member being movable upon movement of said element from said position, and means controlled by said member for affecting the operation of the vehicle.

1,901,555. MECHANICALLY-OPERATED BUCKET. VANCE S. FIRESTONE, Freeport, Ill., assignor to Arcade Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed Feb. 27, 1932. Serial No. 595,619. 12 Claims. (Cl. 214—131.)



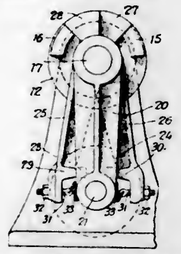
1. Material-moving apparatus comprising a support, a bucket, a member rotatable on said support, means hingedly connecting said bucket with said member eccentric of the axis about which said member rotates, a second member rotatable on said support, a link pivotally connected to said bucket and to said second-member eccentrically of the axis of rotation of the latter, and spring means cooperating with said first-named member operating to resist the movement of said first-named member during a part of the movement of the latter to one position and resisting the movement of said first-named member during a part of the movement of the latter in the opposite direction, said first-named member being movable automatically alternately into the two positions stated in the movement of the bucket toward filling position and toward dumping position, respectively by reversed movements of said rotatable member.

1,901,556. REFRIGERATOR. LIONEL J. GOTTSCHALK, New Orleans, La. Filed Sept. 17, 1929. Serial No. 393,176. 3 Claims. (Cl. 220—9.)



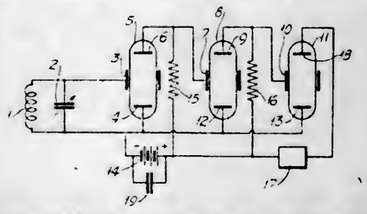
2. A refrigerator box comprising inner and outer sheathings and insulation between the sheathings, each of the sheathings and the insulation being in the form of one piece dished member, a frame extending between the sheathings in abutting relation to the insulation member, and means securing the sheathings to the frame.

1,901,557. BELT TIGHTENER. JOHN W. HOMER, Greencastle, Pa., assignor to T. B. Wood's Sons Company, Chambersburg, Pa. Filed Aug. 9, 1930. Serial No. 474,251. 10 Claims. (Cl. 64—5.)



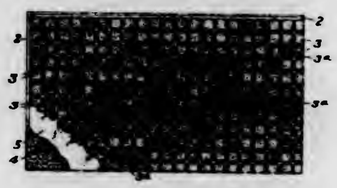
1. A belt tightener comprising an angularly adjustable plate member, a pulley arm pivoted to the member, pivoted levers engaging opposite sides of said arm, spring means urging the levers against the arm and stop means to detain one lever when the other lever is deflected by the arm.

1,901,558. CASCADE AMPLIFIER. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 22, 1930. Serial No. 469,805. 3 Claims. (Cl. 179—171.)



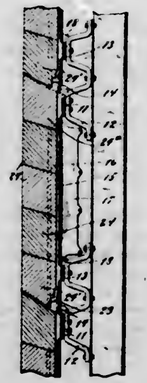
1. An amplifier system comprising, an input circuit, a plurality of photoelectric cells, each of which includes an interior anode, an interior cathode, and an exterior grid; and an output circuit, said photoelectric cells being directly connected in tandem from plate to grid.

1,901,559. SURFACE COVERING SUCH AS LINOLEUM. CHARLES F. HUMPHREYS, Lancaster, Pa., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed May 7, 1929. Serial No. 361,095. 8 Claims. (Cl. 154—49.)



1. As a new article of manufacture, a surface covering comprising a base made up of a fabric web and a substantially continuously extending layer of linoleum mix thereover and pattern elements of linoleum mix overlying and secured to the base, the base being exposed between at least some of the pattern elements.

1,901,560. SECTIONAL FURNACE WALL. DAVID S. JACOBUS, Jersey City, N. J., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Jan. 18, 1925, Serial No. 2,081. Renewed Jan. 5, 1932. 15 Claims (Cl. 110—1.)

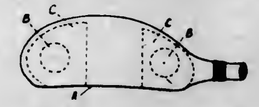


1. A furnace wall comprising a plurality of fixed vertically disposed supports, horizontal supporting members connected to said fixed supports and spaced apart vertically thereon, a group of tile supports for each horizontal supporting member and arranged side by side thereon across the wall, and tile supported on and by each of said groups to constitute an independent section of the wall, each tile support including a rectangular backing plate with each of its edges adjacent an edge of an adjacent backing plate to form a continuous backing plate for the wall.

1,901,561. METHOD OF DEHYDRATING NITROCELLULOSE AND THE PRODUCT THEREOF. ARTHUR LANGMEIER, Dover, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed May 24, 1927. Serial No. 193,954. 8 Claims. (Cl. 260—148.)

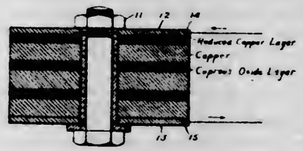
1. The method of treating nitrocellulose, which comprises passing amyl alcohol through a mass of damp nitrocellulose for the removal of water therefrom and removing the excess of said alcohol from the mass by mechanical means.

1,901,562. GOLF CLUB. NORMAN STEWART MAIN, Linlithgow, Scotland. Filed Dec. 26, 1928, Serial No. 328,859, and in Great Britain Dec. 30, 1927. 6 Claims. (Cl. 273—77.)



1. A golf club head comprising a heavier heel and toe portion than central portion to increase the moment of inertia of the club head about its vertical axis of rotation under impact, in combination with a striking face curved about a vertical axis.

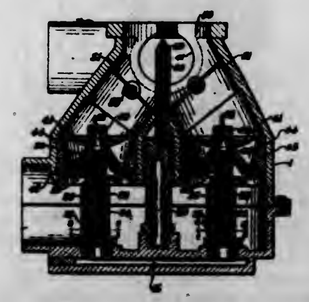
1,901,563. COPPER OXIDE RECTIFIER. GEORGE F. MARTIN, Jr., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 16, 1926. Serial No. 135,899. 29 Claims. (Cl. 175—366.)



1. The step in the method of preparing a unidirectional current-carrying device which comprises quenching a hot oxidized metal electrode in oil.

17. The combination with a contact rectifier comprising, as one element thereof, an oxide of a metal, of means for making a contact with said oxide, said means comprising a layer of reduced metal from the metal oxide on the oxide.

1,901,564. CARBURETOR. HARVEY V. MCCARTY, Canton, Ohio. Filed May 25, 1928. Serial No. 280,465. 5 Claims. (Cl. 261—44.)

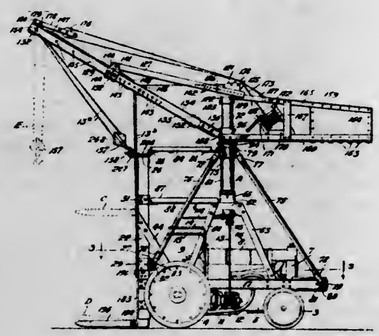


1. A carburetor including a jet, a cone associated with the jet, and a reduced neck at the apex of said cone, said neck having apertures therethrough communicating between the jet and the exterior of the cone.

1,901,565. AMIDES OF D-GLUCONIC ACID. RICHARD PASTERNACK and CLINTON P. AMMERMAN, Brooklyn, N. Y., assignors to Charles Pfizer & Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed July 19, 1930. Serial No. 469,264. 13 Claims. (Cl. 260—124.)

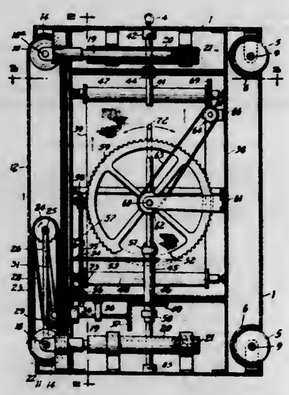
1. d-gluceno p-phenetid.

1,901,566. ARTICLE HANDLING DEVICE. OTIS F. PRESSNEY, Brooklyn, N. Y. Filed Mar. 26, 1927, Serial No. 178,690. Renewed Aug. 9, 1932. 9 Claims. (Cl. 214—95.)



1. In combination with hoisting means, a plurality of lifting devices, one of which is movable in a circle about the other, and a single flexible connection constantly articulating said hoisting means with each of the lifting devices.

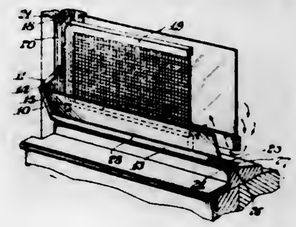
1,901,567. APPARATUS FOR SURVEYING DRILL HOLES. HENRY ROGATZ, Amarillo, Tex. Filed Oct. 17, 1929. Serial No. 400,202. 16 Claims. (Cl. 234—1.)



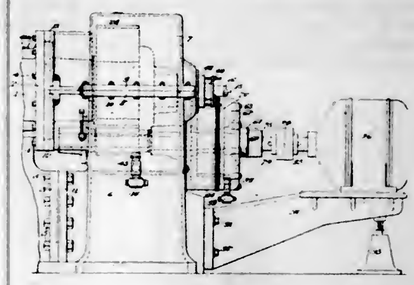
1. Apparatus for surveying drill holes comprising a swingable plumb, means to guide circularly the motion of said plumb, a longitudinally movable tape shaped substantially cylindrically about an axis which is longitudinally with respect to the length of said tape, and means for recording the position of the plumb on said recording tape.

1,901,568. WINDOW VENTILATOR. ELI J. SALTZMAN, Philadelphia, Pa. Filed Sept. 26, 1931. Serial No. 565,238. 4 Claims. (Cl. 98—99.)

1. A window ventilator comprising side members secured to side portions of the window frame, each of said side members comprising a unitary piece of wood, a bottom member extending over the lower window sash stop, and a glass plate positioned adjacent the lower portion of the lower sash by said side and bottom members, the side members having grooves for the reception of the ends of the glass plate and having integral leg portions extending upwardly from the body portions thereof along the side sash stops, the bottom member having an inclined upper surface and a lip portion along its inner edge for positioning the lower edge of the glass plate, and the lower ends of the side members being shaped complementally to the upper surfaces of the bottom member.

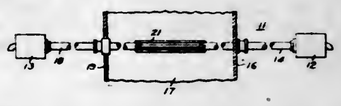


1,901,569. GEAR CASING FOR TUBING MACHINES. VERNON ROYLE, Paterson, N. J. Filed Mar. 3, 1928. Serial No. 258,891. 6 Claims. (Cl. 74—56.)



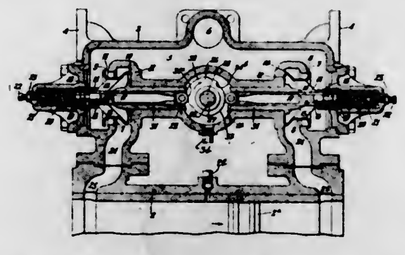
1. In a tubing machine, the combination with the cylinder, screw and driving mechanism therefor, of a housing comprising two separable sections, one section serving as a base for the machine and supporting the cylinder, screw and driving mechanism on one vertical wall thereof, said driving mechanism being housed within the section, and the other section being carried by the opposite vertical wall of the first named section for encasing the reduction gearing.

1,901,570. SMOKE INDICATOR. EDWIN H. VEDDER and ELLIS O. ERICKSON, Wilkinsburg, Pa., assignors to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 9, 1928. Serial No. 318,297. 5 Claims. (Cl. 88—14.)



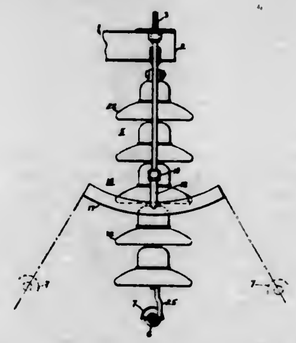
1. In a smoke indicating device, in combination, a light-unit box, a tubular member secured thereto, a light-receiving-unit box, a tubular member secured thereto and coaxially aligned with said first named tubular member, the two opposing ends of the tubes being spaced apart, and means for maintaining the alignment of said tubular members while permitting smoke to pass freely between the exposed ends of the tubes, said means comprising a skeleton frame operatively rigidly engaging the opposing ends of the two tubular members.

1,901,571. STEAM ENGINE. HARRY S. VINCENT, Ridgewood, N. J., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 6, 1927. Serial No. 211,051. 5 Claims. (Cl. 121—142.)



1. In valve mechanism of the character described, a poppet valve, a stem therefor, and an oscillatory actuating cam engaging the stem, said cam having its engaging surface constructed with three stepped portions at respectively different distances from the cam axis, one of which portions holds the valve in full open position during a portion of the cam's oscillation, the next of which portions holds the valve partially open during the next succeeding portion of the cam's oscillation, and the third of which portions permits complete closure of the valve during the next succeeding portion of the cam's oscillation.

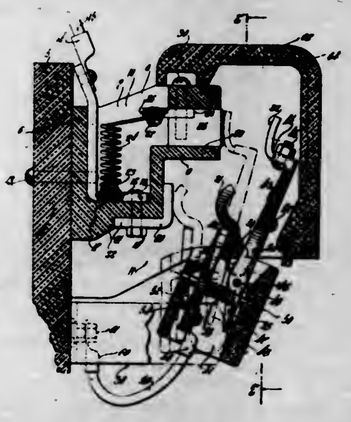
1,901,572. TRANSMISSION LINE DEVICE. CHARLES F. WAGNER, Swissvale, and LAWRENCE R. GOLLADAY, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 27, 1928. Serial No. 257,268. 9 Claims. (Cl. 175—30.)



1. In combination in a high-voltage transmission-line device, a main ground support, a suspension insulator depending therefrom for supporting a line conductor, and means rigidly depending from the ground support in substantially parallel relation to the insulator including an arcuate arc-gap terminal cooperating with an element at the other end of the insulator to provide a gap of smaller break-down value than the flash-over value of the insulator and to compensate for the swing of the conductor to maintain said gap of constant length.

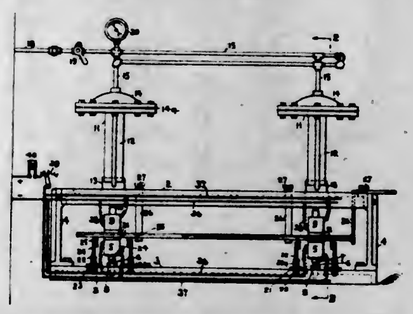
9. In a transmission-line device, a support, an insulator supported thereby, means on the insulator for supporting a line cable, a fuse of substantial length compared to the length of the insulator and disposed in series relation to a gap parallel to the insulator, and means supporting the fuse substantially entirely at a single local position thereon at the end spaced from the gap.

1,901,573. ELECTRIC SWITCH. GUSTAV O. WILMS, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 21, 1928. Serial No. 320,866. 16 Claims. (Cl. 200—146.)



1. In an electric switch, a mounting member adapted to be connected with a support panel and having a compartment divided into separated chambers by a division wall, stationary contacts carried by the division wall and disposed on one side thereof to be within one chamber, a resistance element disposed on the other side of the division wall within the other chamber and electrically bridging the stationary contacts, and contactors substantially within the first-mentioned chamber and movable to engagement with the stationary contacts.

1,901,574. METHOD FOR MAKING LAMINATED GLASS. ARTHUR G. WORRALL, Philadelphia, Pa., assignor to Louis J. Kolb, Philadelphia, Pa., trading as Safetee Glass Company. Filed Sept. 6 1929. Serial No. 390,666. 2 Claims. (Cl. 49—81.)

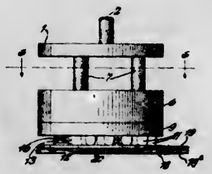


1. The herein described method which consists in assembling sheets of glass and celluloid to form a sandwich, "spot welding" the sheets of glass and celluloid to physically connect them at intervals in respect to their surfaces whereby they may be handled as a unit and thereafter subjecting the "spot welded" unit to heat and pressure and subsequent cooling to form a laminated glass structure.

1,901,575. CUTTING AND ORNAMENTING DIE. ARTHUR W. ALTVATER, St. Louis County, Mo. Filed Apr. 11, 1929. Serial No. 354,332. 5 Claims. (Cl. 69—2.)

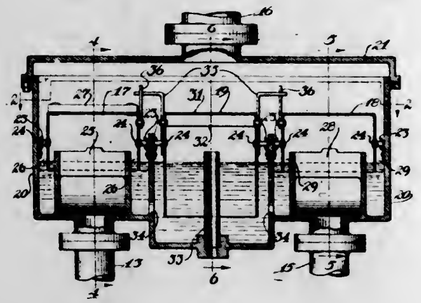
1. A die for operating on work having a portion projecting beyond the surface of the work that is toward

the die and comprising a rigid body, die elements rigid with and projecting from said body and having cutting ends, a unitary gage and stripper plate having openings therethrough for the passage of said die elements and having an edge adapted to be engaged by said projecting portion of said work to locate the work in proper position for operation of said die elements, means nor-



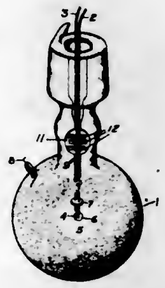
mally supporting said plate by said body in a relationship in which the outer surface of said plate is beyond said cutting ends of said die elements, means for permitting the discharge of fragments of the work through said body, and ornamenting devices supported by and projecting beyond said plate at a distance from said openings through which said die elements operate.

1,901,576. PREVENTION OF EVAPORATION LOSSES. HAROLD V. ATWELL, Whiting, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Apr. 25, 1927. Serial No. 186,478. 14 Claims. (Cl. 220—85.)



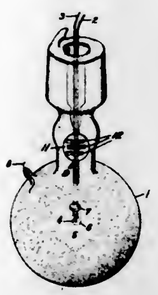
12. A storage system for volatile liquids which comprises a liquid storage tank having a vapor space therein, a vapor receiver, a conduit from said vapor space to said vapor receiver, means in said conduit for permitting and controlling the flow of gases therein in both directions, a pivoted member having its opposed sides exposed to different pressures, means for pivoting said member off its center of pressure, means for exposing one side of said member to atmospheric pressure, means for exposing the other side of said member to the pressure in said vapor space, and connections between said member and said control means whereby the flow of gas in the conduit is regulated and controlled in both directions in accordance with the difference between the pressure in the storage tank and the atmospheric pressure upon the outside of said tank.

1,901,577. PHOTO-ELECTRIC TUBE. KENNETH T. BAINBRIDGE, New York, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1928. Serial No. 244,533. 12 Claims. (Cl. 250—27.5.)



12. A light sensitive tube comprising a container, electrodes mounted in said container, one of said electrodes including a foundation material, a coating of alkali metal on the foundation material, all of said alkali metal being bound to the foundation material at the volatilising temperature of said metal by an adsorbed gas layer.

1,901,578. METHOD OF PREPARING PHOTO-ELECTRIC TUBES. KENNETH T. BAINBRIDGE, Swarthmore, Pa., assignor to General Electric Company, a Corporation of New York. Original application filed Jan. 4, 1928, Serial No. 244,533. Divided and this application filed July 8, 1932. Serial No. 621,499. 7 Claims. (Cl. 250—27.5.)

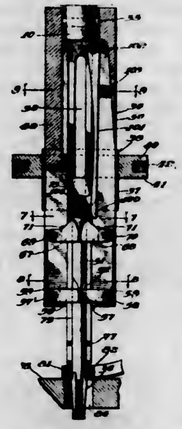


2. The method of preparing a light-sensitive coating to a metallic surface, which comprises applying a light-sensitive metal to said surface and then heating the surface in a container and at a temperature sufficiently high to remove substantially all excess light-sensitive metal from the container while said container is being evacuated.

1,901,579. CHUCK FOR NUT TAPPING MACHINES. SHERMAN BARBER, Maywood, Ill. Filed July 25, 1930. Serial No. 470,681. 7 Claims. (Cl. 10—133.)

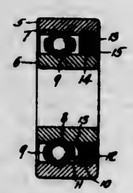
2. In combination, a chuck for a nut tapping machine which comprises, a body, means for rotating said body, a plurality of sets of openable jaws disposed in said body for holding the shank of a tap with its threaded end downwardly, means for moving a threaded nut from the upper portion of the tap along the shank of the tap

and successively opening and closing each set of jaws, said latter means comprising a plurality of bars slidably disposed within said body, a spring actuated finger pos-



tioned at one end of each of said bars, and means for moving said bars longitudinally at a differential speed with respect to said body.

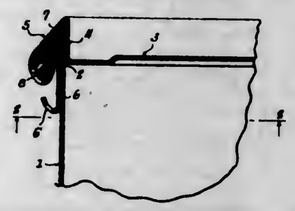
1,901,580. ANTIFRICTION BEARING. GEORGE R. BOTT, Stamford, Conn., assignor to Norma-Hoffmann Bearings Corporation, Stamford, Conn., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,226. 3 Claims. (Cl. 308—187.)



1. In an anti-friction bearing, inner and outer bearing rings, and anti-friction bearing elements between said rings; one of said rings in axially spaced relation to one end thereof being provided in one of its circumferential faces with a shallow annular groove having radially disposed shoulders at its opposite edges, and means for sealing the space between the bearing rings at one side of said elements, said means including an annular gasket of compressible absorbent material engaged at one of its edges upon the opposed circumferential face of the other bearing ring and having its other edge disposed within said groove, and a relatively narrow split expansible and contractible metallic ring at each side of said gasket extending at one of its edges into said groove adapted to contact with the respective shoulders, said rings holding the gasket under compression and being thereby urged in relatively opposite directions into frictional binding engagement with the respective shoulders, and the other edges of said rings being radially spaced from the corresponding edge of the gasket and in clearance relation to the other bearing ring.

1,901,581. CLOSURE FOR CONTAINERS. ALFRED J. CHAMBERLAIN, Milwaukee, Wis. Filed Sept. 30, 1929. Serial No. 396,086. 6 Claims. (Cl. 220—59.)

1. The combination with a container having an outwardly extending surrounding flange at its upper end, of a closure for the container having its marginal portion formed to provide a flange to overlie the container flange and extend toward the outer edge thereof on applying the closure to the container, a gasket to be compressed between said flanges, bendable lugs connected with the closure flange and extending below the same to be bent under the container flange for locking the closure to the

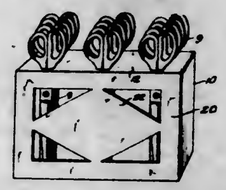


container and compressing the gasket between said flanges, and gasket retainer clips connected with the closure flange and extending into the space between said flanges for connecting the gasket to the closure and for holding the gasket at all times in position for compression between said flanges on locking the closure to the container.

1,901,582. VULCANIZATION OF RUBBER. CLYDE COLEMAN, Passaic, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Sept. 5, 1931. Serial No. 561,503. 31 Claims. (Cl. 18—58.)

1. A process of treating rubber which comprises vulcanizing rubber in the presence of the reaction product formed by the reaction of equi-molecular proportions of a mercaptobenzothiazole, formaldehyde, and a primary aromatic amine.

1,901,583. SHIPPING AND DISPLAY CABINET FOR SHEARS. JOHN J. CONWAY, Bridgeport, Conn., assignor to The Acme Shear Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 12, 1929. Serial No. 385,443. 5 Claims. (Cl. 206—65.)

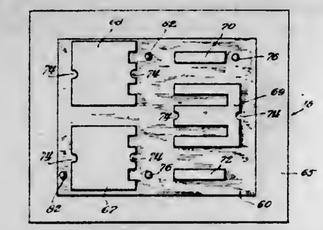


1. In a device of the character described for shipping and displaying shears, a closed cabinet open at the front, a shelf fixed in said cabinet spaced below the top wall and above the bottom wall, said top wall and shelf being provided with aligned substantially rectangular parallel spaced openings to position and display the shears with their handles in parallel planes, and short tongue means at the ends of said openings yieldable downwardly when sears are inserted in the openings to grip the edges of the shears to retain them against longitudinal movement.

1,901,584. MEANS FOR MAKING CORE LAMINÆ. JAMES C. DALEY, Chicago, Ill., assignor to Jefferson Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1930. Serial No. 461,434. 11 Claims. (Cl. 164—18.)

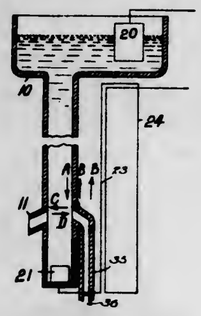
1. In combination, a die having three die openings, one being E-shaped and two being substantially square, the latter having projections, the E-shaped die having the three leg portions extending towards the other two die openings and its base opposite said two openings, the intermediate leg of said E-shaped die having a width equal

to the width of the space between the other two die openings and the outer legs of said E-shaped die opening being adjacent and directly opposite certain of said pro-



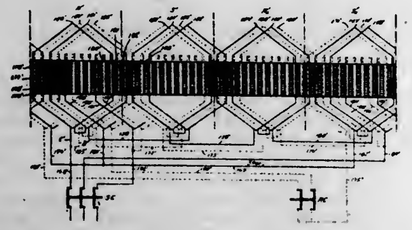
jections, and a cooperating punch having complementary punch portions movable into and out of the die openings of said die.

1,901,585. METHOD AND MEANS FOR PURIFYING MOLTEN METAL. HARCOURT C. DRAKE, Hempstead, N. Y., assignor, by mesne assignments, to Sperry Products, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 28, 1929. Serial No. 417,162. 6 Claims. (Cl. 75—225.)



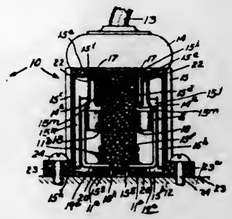
1. A method of purifying molten metal which consists in passing current therethrough along a given axis to establish an electro-magnetic field and passing current through a conductor along an axis substantially parallel to said first axis and adjacent thereto to produce attraction or repulsion of said metal.

1,901,586. DYNAMO-ELECTRIC MACHINE. RUPERT N. EARLY, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Dec. 4, 1930. Serial No. 499,917. 8 Claims. (Cl. 172—274.)



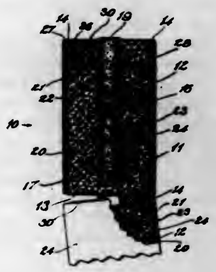
1. The combination of an electric motor comprising a primary magnetic structure having a plurality of slots therein, a polyphase primary winding on said magnetic structure comprising a plurality of winding sections forming at least two similar polyphase circuits with the impedance of one circuit alone greater than that of both circuits in parallel, said circuits respectively comprising coils having at least one of their corresponding coil sides, disposed in separate slots in said magnetic structure, and starting means for the motor comprising means for connecting one of said circuits to a source of polyphase current and switching means for connecting the other circuit in parallel with said first circuit whereby the motor may be started on one circuit with relatively low starting current by initially connecting said first circuit alone to a source of current and thereafter connecting the second circuit in parallel with said first circuit whereby both circuits become energized by said source of current.

1,901,587. ELECTRIC CURRENT TAPPING DEVICE. REUBEN ECKSTEIN, New York, N. Y. Filed Jan. 2, 1929. Serial No. 329,720. 3 Claims. (Cl. 173—334.)



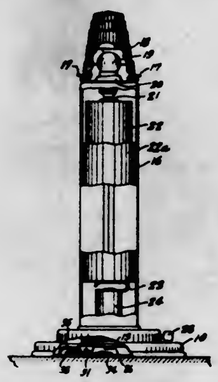
1. An electric circuit tap fitting comprising a one-piece relatively thin-walled shell structure closed at one end and open at the other, said closed end having spaced openings communicating with the interior of said structure adapted to receive terminal blades of a conventional cap plug, current carrying members fitted into said structure in register with said openings for contacting with said plug blades, a stanchion integrally formed to extend centrally through said structure, and means on the casing and stanchion for retaining the current carrying members in fitted position, said stanchion having a recessed peripheral portion adjacent one end thereof formed to serve as a strain relief adapted to engage with flexible conductor wires.

1,901,588. BATTERY. REUBEN ECKSTEIN, New York, N. Y. Filed June 26, 1930. Serial No. 463,889. 4 Claims. (Cl. 136—132.)



1. A battery of the character described, comprising a metallic tubular casing having a rim edge portion and means for insulating said portion, said means comprising an insulating tubular member receiving said casing and a flexible insulating member glued to the outside of said insulating member and having a portion folded over said rim edge portion.

1,901,589. PICK-UP CANDLE LIGHT. GILES C. FULLMER, Bridgeport, Conn., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 18, 1931. Serial No. 551,778. 11 Claims. (Cl. 240—10.64.)



1. In a portable electric light, a bulb, a battery, a contact, a switch element adapted to automatically move to engage said contact and thereby close a circuit between the battery and bulb on the light being raised off a support, a manually operable switch element, and said manually operable switch element operable to engage and move the automatic switch element from the contact and to itself engage the contact to close the circuit between the battery and bulb.

1,901,590. ART OF SILK MANUFACTURE. WILLIAM H. FURNESS, National Park, N. J., assignor, by mesne assignments, to Furness Corporation, Philadelphia, Pa., a Corporation of New Jersey. Filed Dec. 12, 1927. Serial No. 239,615. 1 Claim. (Cl. 18—54.)

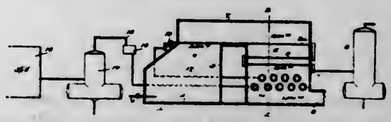
The method of preventing precipitation of copper during precipitation of suproammonium silk thread, which includes spinning the thread in a precipitating bath containing about 1% of glycerin and about 10% of caustic soda.

1,901,591. SAFETY RAZOR. CLARENCE A. GODSHALK, Ardmore, Pa. Filed Mar. 14, 1932. Serial No. 598,681. 6 Claims. (Cl. 30—12.)



5. In a razor, the combination of a handle, a rigid blade supporting member fixedly secured to said handle and projecting laterally transverse to the axis of said handle, a cover, a pivotal connection between said cover and said blade supporting member, a blade retaining member normally resting on said blade supporting member, means to fixedly hold a razor blade in said retaining member with the cutting edge of the blade projecting forwardly therefrom, means connecting said cover and said blade retaining member and operative to slide said retaining member and the blade carried thereby forwardly on said blade supporting member to bring the cutting edge of said blade forwardly clear of and beyond the front edge of said blade supporting member when said cover is being raised and to retract said blade retaining member and said blade carried thereby to bring the cutting edge of said blade into shaving relationship with respect to the front edge of said blade supporting member when said cover is being closed.

1,901,592. METHOD FOR HEATING OIL. AUDLEY E. HARNSBERGER and CLYDE L. SMITH, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 29, 1929. Serial No. 335,834. 5 Claims. (Cl. 196—61.)

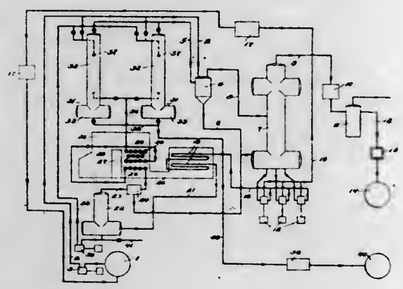


1. The method of cracking oil in the vapor phase, which consists in heating a continuously moving elongated stream of oil of restricted cross-sectional area to a temperature at which portions thereof will vaporise without molecular decomposition, passing the heated oil to an enlarged zone and therein separating said vaporized product from the portions which do not vaporise without molecular decomposition, then passing said vapors through an intermediate heating zone in an elongated stream of restricted cross-sectional area whereby the temperature of the vapors is raised sufficiently to bring the vapors to a substantially dry gaseous condition without appreciable cracking thereof, and finally passing said dry vapors in an elongated stream of restricted cross-sectional area materially less than that of the intermediate zone to raise the temperature of the dry vapors to a cracking temperature in excess of substantially 1000° F.

1,901,593. METHOD OF CONVERTING HEAVY HYDROCARBONS INTO LIGHTER HYDROCARBONS. AUDLEY E. HARNSBERGER and CLYDE L. SMITH, Chicago, Ill., assignors to Gyro Process Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1929. Serial No. 407,534. 1 Claim. (Cl. 196—60.)

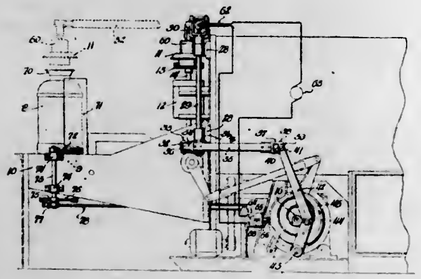
A process for converting heavy hydrocarbons into lighter hydrocarbons, which comprises continuously passing a stream of such heavy hydrocarbons through a primary heating zone wherein said heavy hydrocarbons are subjected to temperatures sufficiently high to effect vaporisation of the lighter compounds therein without material cracking, then passing such hydrocarbons into a separating zone to separate the said hydrocarbons into a vaporous fraction and a liquid fraction, continuously passing the vaporous fraction through a highly heated conversion zone wherein the vapors are heated to cracking temperatures in excess of 1000° F., continuously passing the cracked vapors from said conversion zone into a supplemental cracking zone, continuously introducing the liquid fraction obtained from said separation zone into direct contact with the cracked oil vapors present in the supplemental cracking zone, controlling the rate of flow of the liquid fraction into said supplemental cracking zone to permit the self contained heat

present in the cracked oil vapors to raise the temperature of said liquid fraction sufficiently to partially crack the same without reducing the temperature of the cracked oil vapors below 850° F., passing the oil vapors remaining at such latter temperature into a shock chilling zone



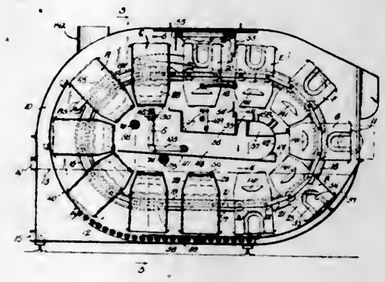
wherein said vapors are brought into contact with quantities of liquid oil to effect a substantially instantaneous reduction in temperature thereof to a non-reacting temperature not in excess of 600° F., and then fractionating the vapors present at said latter temperature.

1,901,594. CAN COVERING APPARATUS. JOSEPH HAUK, Milwaukee, Wis., assignor to Hauk Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1930. Serial No. 446,687. 9 Claims. (Cl. 29—84.)



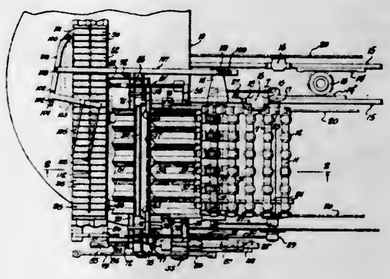
1. In an apparatus of the character described, the combination with the can and cover-delivery station of a can-washing machine, of cover-handling means receiving the cover from the cover-delivery station including an oscillatory arm movable in a substantially horizontal plane, a cover-holding electromagnet mounted on said arm and adapted to suspend a cover therefrom and carry the same for deposit on the can at the can-delivery station of the machine, means for energizing said electromagnet, and control switch mechanism controlled by the machine for controlling said energizing means.

1,901,595. CAN WASHING MACHINE. JOSEPH HAUK, Shorewood, Wis., assignor to Philip C. Read, Milwaukee, Wis. Filed Dec. 13, 1930. Serial No. 502,176. 6 Claims. (Cl. 141—7.)



1. In a can washing machine, the combination of a tank adapted to contain washing fluid, a power driven conveyor for intermittently and progressively immersing and conveying cans through said tank, and means for weighting the cans with washing fluid to assist their immersion in the fluid in said tank.

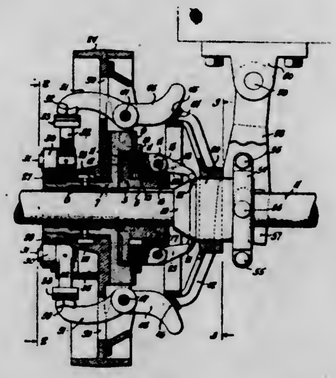
1,901,596. BOTTLE HANDLING MACHINE. JOSEPH HAUK, Shorewood, Wis., assignor to Philip C. Read, Milwaukee, Wis. Filed Oct. 10, 1931. Serial No. 568,029. 12 Claims. (Cl. 214—91.)



1. In a bottle unloading apparatus, the combination of a conveyor having bottle holding pockets arranged in rows and carrying the bottles in inverted position, articulated carriers including plungers engageable with the bottles to lift the same out of said pockets and turnable with said bottles to an inclined position, and mechanism for removing the bottles from said plungers, and turning them to upright position.

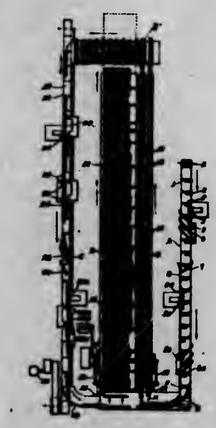
9. In a bottle washing machine, the combination with a conveyor having bottle holding pockets arranged in rows, a plurality of delivery conveyors, unloading mechanism for removing the bottles from said pockets and depositing them on one of said delivery conveyors, and mechanism coordinatively actuated by said pocketed conveyor for removing some of the bottles deposited on the first delivery conveyor from said conveyor onto another delivery conveyor.

1,901,597. CLUTCH CONTROL MECHANISM. JOSEPH HAUK, Shorewood, Wis., assignor to Philip C. Read, Milwaukee, Wis. Filed Oct. 31, 1931. Serial No. 572,262. 6 Claims. (Cl. 192—56.)



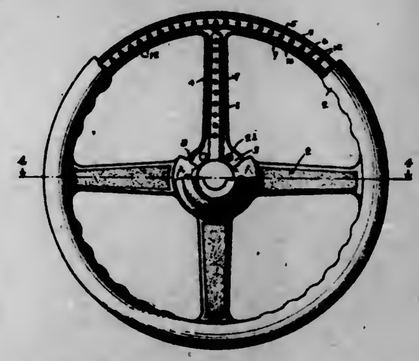
1. The combination with a drive member, a driven member, a clutch for connecting said members together, and means for operating said clutch and maintaining the drive between said members including a shiftable control member, of a power transmitting member mounted to rotate with and relative to said driven member, a locking and release cam connected to said driven member, and means on said power transmitting member operable by said cam on relative movement between said last named member and said driven member to shift said shiftable control member to release said clutch.

1,901,598. MACHINE FOR MAKING PANEL CORE STOCK FROM MILL CLIPPINGS AND THE LIKE. JOHN L. HERZOG, Saginaw, Mich., assignor to John L. Herzog Co., Saginaw, Mich., a Corporation of Michigan. Filed May 28, 1930. Serial No. 456,484. 19 Claims. (Cl. 144—2.)



1. A horizontal conveyor having transverse flights for forwarding pieces of wood lengthwise the conveyor, a trimming saw and a hold-down arranged at one side of the conveyor, said saw adapted to trim the ends of pieces thereon, a glue spreader positioned for coating the trimmed ends, a guide bar positioned in the path of travel of the pieces and extending transversely above the conveyor, for shifting the advancing pieces to the opposite side of the conveyor, and a guide, a trimming saw, a hold-down and a glue spreader operatively arranged at the opposite side of said conveyor toward its delivery end, means for deflecting end-glued pieces of work away from the conveyor flight and for positioning them with all of their glued ends extending in the same direction, a ribbon press including a guideway, a mechanically operated pusher, means yieldingly pressing the material against the guideway at spaced intervals along the length of the guideway sufficient to produce adequate intensity of glueing pressure at the joints of the work during the forward movement of the pusher, the length of the guideway being sufficient to accommodate the travel of the glued joints until they have set sufficiently to be safely handled, means for dividing the glued ribbon emerging from the guideway into appropriate board lengths, a second conveyor having operatively associated therewith two saws, two shaper-heads, and two glue spreaders, one of each operatively arranged at each side of the conveyor, holding-down means for the work adjacent said saws and shaper heads, means for shifting the work from one side of the conveyor to the other during its forward progess, guiding devices engaged by the edge-glued boards and arranged to deflect them into position for feeding to a panel press, said panel press including a power-actuated pusher bar, a longitudinally extending bed, work-pressing pads above said bed near the pusher bar, a plurality of individual spring-pressed members distributed along the length of the bed and adapted to yieldingly press upon the work during its passage along the bed, the pressure of said pads and said spring-pressed members being adapted to maintain appropriate intensity of glueing pressure at the glued joints while they are being subjected to the forward pressure of the pusher bar.

1,901,599. STEERING WHEEL. HARRY A. HUSTED, Cleveland, Ohio, assignor to The H. A. Husted Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 11, 1927. Serial No. 167,387. 13 Claims. (Cl. 74—33.)

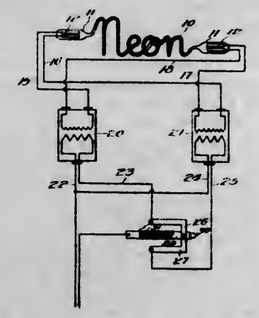


1. A steering wheel for automotive vehicles comprising a metal spider and a rim of molded composition characterized by a palm engaging portion of relatively hard rubber and a finger grip portion of the rim formed of relatively soft yielding rubber composition.

1,901,600. GAS TUBE, ELECTRODE, ETC. GEORGE S. JAMES, Battle Creek, Mich., assignor, by mesne assignments, to James Neon Double Electrode Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 18, 1929. Serial No. 340,776. 7 Claims. (Cl. 176—124.)

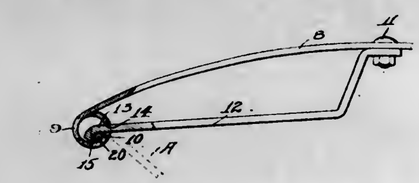
1. An apparatus of the character described including a tube, two pairs of electrodes extending into said tube,

leads connected to each of said pairs of electrodes, a pair of transformers, the high tension terminals of which are



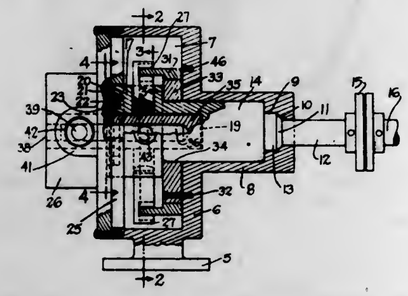
respectively connected to said leads and means for alternately energizing such transformers to alternately energize terminals of different pairs.

1,901,601. BUMPER WITH CUSHIONED ENDS. HERBERT S. JANDUS and HAROLD LEE BROOKS, Detroit, Mich., assignors to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 8, 1931. Serial No. 567,620. 14 Claims. (Cl. 293—55.)



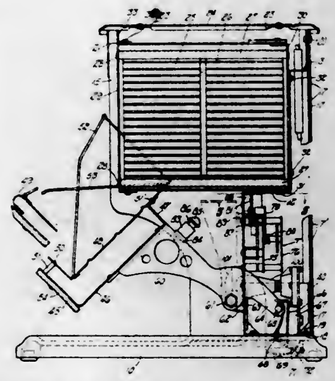
1. As an article of manufacture, a bumper construction comprising impact bar means and back bar means having wedged interconnected portions with cushioning means between the portions.

1,901,602. ROTARY PLUNGER PUMP. SVEN A. JOHNSON, Brooklyn, N. Y. Filed Dec. 31, 1930. Serial No. 505,702. 1 Claim. (Cl. 103—161.)



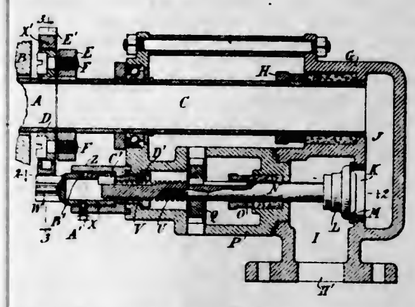
In a pump, a housing, a rotor in the housing, cooperating bevelled annular portions at one end of the rotor and housing, a sealing ring carried in one end of the rotor and engaging a wall of the housing to provide a pressure chamber, pumping means in the rotor for creating a pressure in the chamber to maintain said bevelled portions in close contact, and fluid inlet and outlets in the housing.

1,901,603. ELECTRIC TOASTER. FRED W. JUENGST and OSCAR M. ANDERSON, New Britain, Conn., assignors to Landers Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Feb. 11, 1932. Serial No. 592,274. 12 Claims. (Cl. 53—5.)



1. An electric toaster having an oven provided with a compartment open at its front and at its bottom, a toast rack having a holder open at its top and positioned within said compartment when the rack is in operative position, said rack being pivoted at a point below said oven for forward and downward swinging movement, means for latching said rack in upright operative position, and time controlled means for controlling said latching means.

1,901,604. BOILER CLEANER. FREDERICK W. LINAKER, Brooklyn, N. Y. Filed July 3, 1929. Serial No. 375,772. 6 Claims. (Cl. 122—392.)

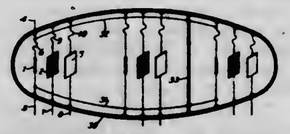


1. In a boiler cleaner, a rotary cleaner element, a steam valve, and a common means for opening the valve and rotating the cleaner element, such means operating to first open the valve, and then to rotate the cleaner in one direction, and upon reversal of said means to rotate the cleaner toward its original position with the valve still open, and during the end of the return movement of the cleaner to positively close the valve by mechanically forcing it again its seat.

1,901,605. MULTIPLE BOOSTER OR MULTIPLE VIBRATION GENERATOR. SIEGMUND LOEWE, Berlin, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 26, 1921, Serial No. 495,777, and in Germany Mar. 8, 1917. Renewed July 27, 1932. 5 Claims. (Cl. 250—27.5.) (Granted under the provisions of the act of Mar. 3, 1921, 41 Stat. L., 1313.)

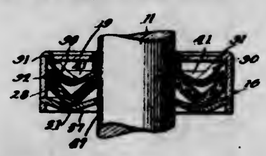
1. A vacuum device comprising a plurality of sets of electrodes, each set including a thermal electrode and

cold electrodes distinct from the electrode of the remaining sets, an evacuated container surrounding all of said electrodes and a partition separating part of said sets



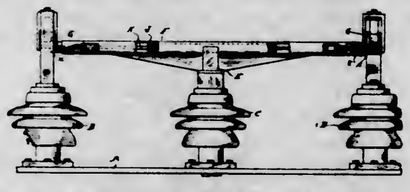
from the remainder, the parts of said container on opposite sides of said partition having different degrees of vacuum.

1,901,606. OIL SEAL. CHARLES W. MARSH, Muskegon, Mich. Filed Aug. 3, 1931. Serial No. 554,841. 5 Claims. (Cl. 288—1.)



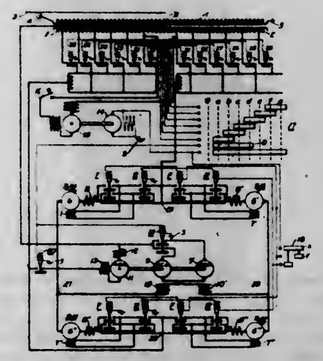
3. An oil seal comprising a metal casing formed with an aperture for passing a shaft, an annular expansion member surrounding said shaft and located in said casing, said annular expansion member being provided with a convex annular surface, a V-shaped leather packing having a pair of frusto-conical flanges joined along the line of a circle located about said shaft in said casing, said packing flanges being engaged by said expansion member on the inside of said packing adjacent its outer edges and a second expansion member engaging the annular apex of said V-shaped packing, whereby the packing is fed edgewise into engagement with the shaft, and a corrugated washer spring confined between said first expansion member and said casing for resiliently urging said expansion members together.

1,901,607. OUTDOOR SWITCH CONTACT. GEORGE A. MATTHEWS, Detroit, Mich., assignor to Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa. Original application filed Jan. 18, 1929, Serial No. 333,362. Divided and this application filed May 31, 1930. Serial No. 458,862. 9 Claims. (Cl. 200—48.)



1. In a switch, a rotatably mounted rigid arm carrying a conductor pivoted on the end thereof, a yieldably mounted conductor located at a suitable point for contact against a downwardly-facing surface thereof by the conductor on the end of said arm upon rotation thereof, further rotation of said arm rotating said pivotally mounted conductor against yielding pressure of the mounting for said other conductor whereby extraneous matter is ground away and proper electrical contact established, said pivoted conductor upon said arm swinging past the vertical line through the points of contact upon said yieldably mounted conductor, whereby said yielding means tends to continue rotation of said arm, and a stop for said arm immediately beyond said vertical line whereby a locking means is provided for said conductor.

1,901,608. CONTROL SYSTEM. STANLEY G. NOTTAGE, Murrysville, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1930. Serial No. 461,273. 9 Claims. (Cl. 172—276.)



1. In combination, a series commutator motor of such design to normally operate by alternating current, a source of alternating current, a source of direct current, a manually operable controller, means responsive to operations of the controller for initially and simultaneously automatically connecting low voltages of both said sources of current to the motor, means responsive to operations of the controller for successively and simultaneously automatically increasing the voltages impressed on the motor, and means for automatically disconnecting the source of direct current from the motor when the voltage of the alternating current impressed on the motor has increased to a predetermined value.

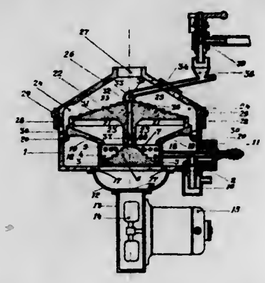
3. The method of operating a series commutator electric motor which consists in initially and simultaneously supplying the motor with direct current and alternating current to start the motor and thereafter increasing the voltages of these currents to accelerate the motor.

1,901,609. ARC INTERRUPTER. RALPH R. PITTMAN, Pine Bluff, Ark. Filed Sept. 12, 1930. Serial No. 481,437. 6 Claims. (Cl. 200—115.)



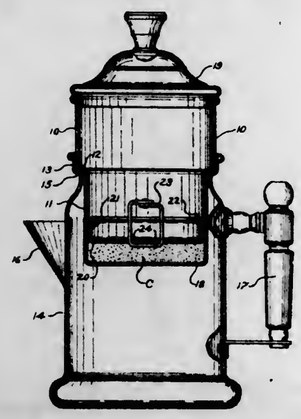
1. In an arc interrupter, the combination of a hollow tube of insulating material, a metal cap disposed over one end of said tube and forming an electrode, a metal plug rigidly secured to the tube at a considerable distance therein and entirely closing the opening of the tube, a fusible element connecting said cap with said plug, and a metal tube forming a third electrode in spaced relation to said plug within the tube.

1,901,610. BURNER FOR HEAVY OIL. DECIO PIZZI, Barcelona, Spain. Filed Dec. 4, 1929, Serial No. 411,643, and in Spain Oct. 14, 1929. 6 Claims. (Cl. 158—91.)



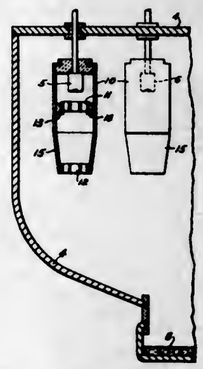
1. A burner for heavy oil, comprising in combination a cylindrical casing having a plate across one end thereof, spaced apertures in said plate, a blower mounted under said casing operable to force air through the apertures in said plate, an aperture in said casing, a removable cup shaped element having an annular channel adapted to be filled with light oil for starting up the burner and to be inserted through said last mentioned aperture into said casing supports on the inner wall of said casing, a circular partition plate resting on said supports and having a central aperture corresponding to the diameter of the wall of said cup shaped element, supports on said partition plate, a main evaporator resting on said supports, a cover resting on the edge of said casing having an aperture for the escape of the flame and a second aperture laterally to the flame escapement aperture, a fuel supply tube extending through the second aperture of said cover to the centre of said main evaporator, a vertical passage extending through said main evaporator and terminating at a short distance above the bottom of said cup-shaped element, and a tap at the outer end of said fuel supply tube to regulate the supply of fuel to said evaporator.

1,901,611. DRIP COFFEE MAKER. KIRK E. PORTER, Wooster, Ohio, assignor to The Buckeye Aluminum Company, Wooster, Ohio, a Corporation of Ohio. Filed Feb. 5, 1931. Serial No. 513,545. 3 Claims. (Cl. 53—3.)



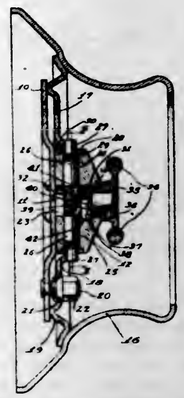
1. A drip coffee maker including a tubular container open at its upper end and having a perforated bottom wall, the said upper end of the container constituting a water receiving compartment and the said lower end constituting a ground coffee receiving compartment, a reversible, perforated pressure plate adapted to be disposed between the water receiving compartment and the ground coffee compartment and arranged to be placed in one position to contact directly with the ground coffee, means upon the pressure plate for spacing said pressure plate above the ground coffee when placed in the reverse position, and a handle slidably located through the pressure plate and adapted to be moved to position upon either side of the pressure plate.

1,901,612. MERCURY ARC RECTIFIER. MORITZ SCHENKEL, Berlin-Charlottenburg, Germany, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 23, 1929, Serial No. 357,434, and in Germany Apr. 28, 1928. 3 Claims. (Cl. 250—27.5.)



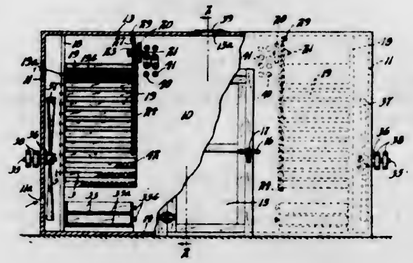
1. In a multi-anode mercury-arc rectifier, the combination, with each anode, of an insulatingly mounted conductive anode shield having an outwardly flaring lower end terminating in an open mouth, means for deionising the space within the shield closest to the anode, and a baffling grid extending across the mouth of the shield for impeding the entrance of vapor-pressure blasts.

1,901,613. SPARE WHEEL CARRIER AND LOCK. FREDERICK A. SMITH, North Chicago, Ill., assignor to Oakes Products Corporation, North Chicago, Ill., a Corporation of Michigan. Filed July 2, 1931. Serial No. 548,397. 1 Claim. (Cl. 70—90.)



In a spare wheel carrier structure, the combination of a carrier plate and a head extending forwardly therefrom, said plate forming an abutment for the inner transverse wall of a wheel hub and said head being adapted to extend through an opening in such wall, said head having a bore therethrough closed at its rear end by said plate, a cam hub journalled in the front end of said bore and supporting a cam at its rear end in said bore, latch pins extending through said head for engagement by said cam to be projected to be in front of the transverse wall of a wheel hub to thereby prevent removal of a wheel from the carrier structure, a handle on the front end of said cam hub whereby it may be turned, and lock mechanism within the front end of said cam hub operable to lock said cam hub to said head when said latch pins are in locking position, said hub and said cam and handle being an integral structure.

1,901,614. INCUBATOR. EARL H. SNOW, Sleepy Eye, Minn. Filed Feb. 24, 1930. Serial No. 430,508. 2 Claims. (Cl. 119—35.)



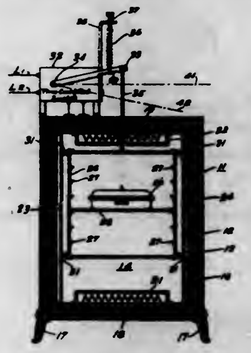
1. An incubator having in combination, a substantially rectangular chamber, a plurality of tiers of superposed spaced egg-containing trays along each side of said chamber leaving an open space at the central portion of said chamber, said chamber having a series of inlet openings in the side walls thereof at the lower portion of said walls and a pair of fans of comparatively large diameter between said trays and said side walls constructed and arranged to draw air in said openings and direct it between said trays, a row of pipes for containing a heating medium and a row of pipes for containing a cooling medium at each side of said chamber adjacent the top and the inner ends of said trays, said chamber having spaced outlet openings in the top thereof between said pipes at either side thereof.

1,901,615. METHODS OF PREPARING BROM-ISATIN. CHARLES J. STROSACKER, CHESTER C. KENNEDY, and EARL L. PELTON, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Aug. 23, 1926. Serial No. 131,114. 8 Claims. (Cl. 260—47.)

1. In a method of preparing bromisatin, the step which consists in reacting upon indigo in the presence of water with bromine in less than the theoretical molecular proportion required for the formation of dibromisatin.

1,901,616. AUTOMATIC COOKING DEVICE. VICTOR G. VAUGHAN, Mansfield, Ohio, assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed May 31, 1930. Serial No. 458,087. 5 Claims. (Cl. 219—35.)

2. A cooking device including a heating element, a switch controlling the energization of the heating element, means for biasing the switch to its open position, means for closing the switch by the weight of material to be operated on by the heating element and a time device controlling the switch and effective to open the same after a period of time dependent on the initial weight of the material and independent of its final weight.



1,901,617. TIME LIMIT RELAY. PATRICK C. WARD, Homeville, Pa. Original application filed Dec. 7, 1928, Serial No. 324,543. Divided and this application filed Nov. 1, 1929. Serial No. 404,065. 7 Claims. (Cl. 200—97)

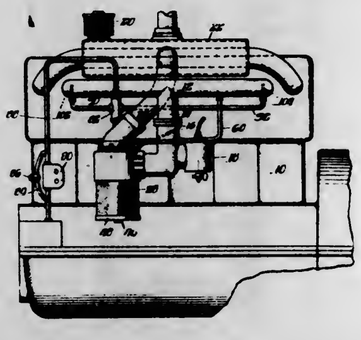


1. In a time-limit relay, in combination, a switch-actuating plunger, a coil for raising the plunger, said plunger being disposed to fall freely under the influence of the force of gravity when released by the coil, an air dash-pot being provided with a piston disposed to retard the plunger when falling under the influence of gravity, said dash-pot being provided with a rotatable cap member for regulating the flow of air into the dash-pot, and pressure actuated means disposed to permit a ready escapement of air from the dash-pot when the piston is moved upwardly, said means being closed by the force of gravity when the piston is stopped in any position.

1,901,618. INTERNAL COMBUSTION ENGINE. HARRY H. WATERS and RUDOLPH F. GAGG, Clinton, Iowa, assignors to Climax Engineering Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 22, 1930. Serial No. 422,644. 10 Claims. (Cl. 123—198.)

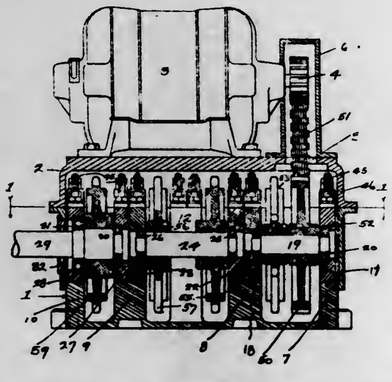
1. That improvement in methods of carburetting fuel for internal combustion engines which comprises mixing fuel with cold air and a predetermined amount of hot

air when the engine is carrying its heaviest load, mixing the fuel with a quantity of cold air and a proportionately greater amount of hot air when the engine is carrying rela-



tively lighter loads, and supplying the mixture under relatively heavy loads with a quantity of fluid to decrease detonation.

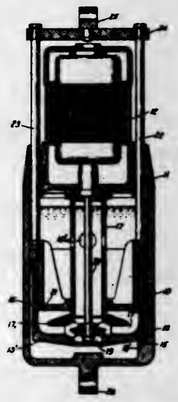
1,901,619. SPEED REDUCTION TRANSMISSION AND ADJUSTABLE BEARINGS THEREFOR. FRANCIS C. WILLIAMS, Detroit, Mich. Filed Mar. 23, 1932. Serial No. 600,809. 8 Claims. (Cl. 74—21.)



1. A device such as described comprising a housing; plural rows of pairs of bearings arranged within said housing; a separate shaft rotatably mounted in each pair of bearings in the plural rows, whereby all the separate shafts in one row of bearings will be parallel to all of the separate shafts in the other rows of bearings; means to adjust the pairs of bearings supporting each separate shaft to move said shaft parallelly relative to the shafts in the other rows; a pair of related sprockets on each of the separate shafts registering with a pair of independent sprockets adjoining separate shafts on opposite rows; a drive chain connecting each of the registering pairs of sprockets on opposite rows; a power means to drive one of the shafts; and a driven unit to be connected to one of said shafts.

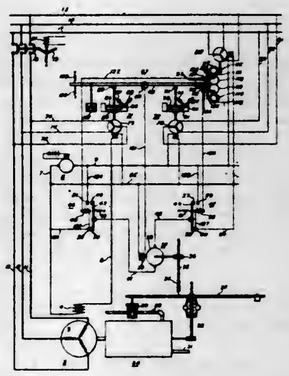
1,901,620. HYDRAULIC OPERATOR. WILLIAM J. WOODS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 30, 1930. Serial No. 485,474. 20 Claims. (Cl. 60—52.)

1. A hydraulic operator including a fluid casing, a piston operable in the casing, and a pump immersed in the fluid and having its inlet and outlet passages connected to create a differential in the fluid pressure on the opposite sides of the piston to move said piston, a



housing for said pump, and a fluid guide tube extending through the piston, said tube providing a fluid inlet to said pump housing.

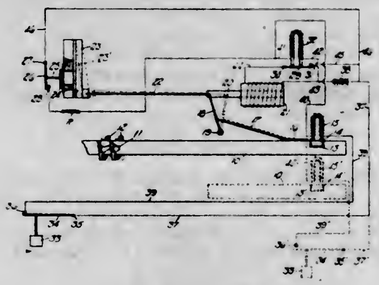
1,901,621. REGULATOR SYSTEM. JOHN H. ASHBAUGH, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1930. Serial No. 471,672. 10 Claims. (Cl. 290—4.)



1. In a speed-matching system, in combination, a dynamo-electric machine, a speed-reference means associated with the dynamo-electric machine, means for controlling the speed of the dynamo-electric machine comprising two centrifugal devices operated, respectively, in accordance with the speed-reference means and the speed of the dynamo-electric machine, means responsive to the two centrifugal devices for actuating means to operate the speed-varying means.

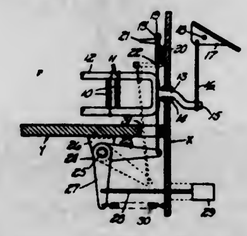
1,901,622. COMBINATION ORGAN STOP ACTION. JOHN T. AUSTIN, Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed May 7, 1932. Serial No. 609,828. 11 Claims. (Cl. 84—345.)

1. Organ stop operating mechanism comprising stop pulling means, means for actuating said stop pulling means, manually controlled means for initiating operation of said actuating means, and means for automatically



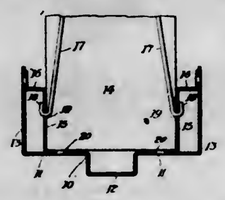
continuing the operation of said actuating means initially started by said manually controlled means after the latter has been released.

1,901,623. COMBINATION ORGAN STOP MECHANISM. JOHN T. AUSTIN, Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed May 7, 1932. Serial No. 609,829. 7 Claims. (Cl. 84—345.)



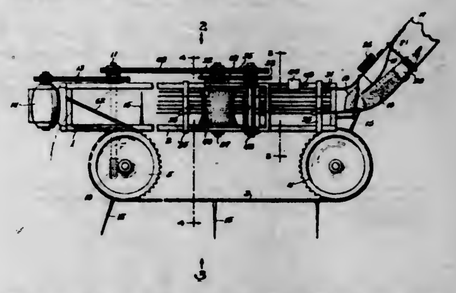
1. A mechanism for capturing a combination of organ stops comprising a plurality of rollers adapted to pull said stops, traces having adjustable cams thereon for independently engaging and moving said rollers, and common means for holding all of said rollers against movement while a trace is being drawn, whereby the cams on the drawn trace will be set in accordance with the positions of said rollers.

1,901,624. REENFORCED METAL JAMB. ISAAC A. BAUM, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 442,243. 5 Claims. (Cl. 189—46.)



5. In combination with a masonry wall, a metallic frame structure, said structure comprising a metal channel-shaped jamb having substantially straight flanges adapted to embrace said wall, the side plane of the flanges adapted to lie coincident with the plane of a plaster portion of the wall, a flanged filler member rigidly secured to said jamb member and disposed in close engagement with an unplastered portion of said wall.

1,901,625. FISH SCALING DEVICE. CLARENCE BIRDSEYE, Gloucester, Mass., assignor, by mesne assignments, to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 3, 1928. Serial No. 266,935. 16 Claims. (Cl. 17—5.)

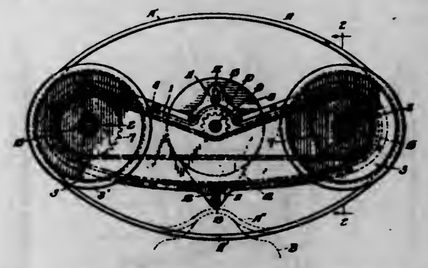


1. A machine of the character described comprising a chute for receiving fish, means for stopping a fish at a predetermined position in said chute, means for automatically engaging said fish while at said predetermined position and thereupon carrying the fish forward, and means for scaling the fish while being carried forward.

1,901,626. METHOD OF REFINING ROSIN. JOSEPH N. BORGLIN, Kenvil, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 24, 1930. Serial No. 423,273. 22 Claims. (Cl. 87—2.)

1. The method of refining rosin which includes treating rosin in solution in a solvent therefor with a solution of resorcinol in an aliphatic alcohol the rosin solvent being characterized by the fact that it is capable of immiscibility with the aliphatic alcohol, separating the rosin-solvent solution from the resorcinol-alcohol solution and recovering refined rosin from the rosin-solvent solution.

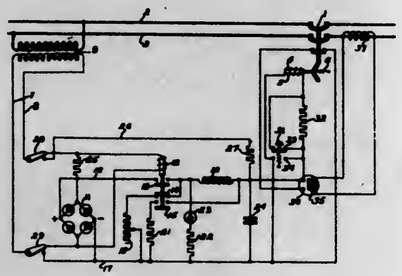
1,901,627. PORTABLE ABRADING AND POLISHING MACHINE. TRACY F. BRACKETT, Highland Park, Mich. Filed Aug. 28, 1931. Serial No. 559,993. 2 Claims. (Cl. 51—170.)



1. In a device of the class described, a housing having fixed bearings therein, shafts journaled in said bearings and disposed in spaced relation and extending beyond said housing, sprockets fast on said shafts in said housing, an endless chain directed about said sprockets, mounting means on said housing intermediate said bearings, a driving motor, a sprocket on the shaft of the motor and meshed with said chain, means adjustably securing said motor on said mounting means whereby said motor may be moved to tension said chain, said motor driving said chain to impart rotative movement to said shafts, flanged pulleys fast on the portions of said shafts extending beyond said housing, and an endless flexible belt directed about said pulleys and of greater length than required to be stretched taut around the pulleys, said belt having an abrading surface on the outer face thereof, said belt

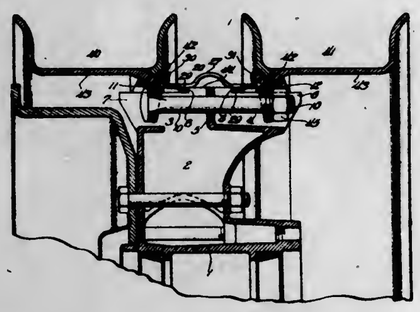
being bowed outwardly by the centrifugal force developed during movement imparted to the belt whereby the abrading surface on the bowed portion of the belt may be engaged with and conformed to a surface to be abraded.

1,901,628. UNDERVOLTAGE DEVICE. MAURICE W. BRAINARD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,859. 22 Claims. (Cl. 175—294.)



1. The combination with a circuit interrupter for an alternating-current circuit, of a device therefor energized from the said circuit and releasable to trip the circuit interrupter when the voltage of the circuit has decreased to a predetermined value, means in the circuit of the device to convert the alternating current to a direct current, and means for retaining the direct current for an interval above the drop-out value of the tripping device after the alternating current has decreased to a predetermined lower value.

1,901,629. DUAL WHEEL. FREDERICK W. BURGER, Niles, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Dec. 19, 1930. Serial No. 503,433. 29 Claims. (Cl. 301—13.)



1. The combination of a felloeless wheel, a plurality of spokes in said wheel, a central disposed wall on the end of each spoke and in the plane of said wheel, a bolt projecting through each of said walls, a pair of wedges on each of said bolts, one on each side of the wall through which the bolt projects, a pair of rims having gutters against which said wedges press, and a single piece spacing ring engaging said rims and the ends of said spokes with portions on opposite sides of said walls to align the rims on said wheel.

1,901,630. METHOD OF HYDROGENATING ABIETIC ACID ESTER. ROLLIN J. BYRKIT, Jr., Marshalltown, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 597,636. 28 Claims. (Cl. 260—98.)

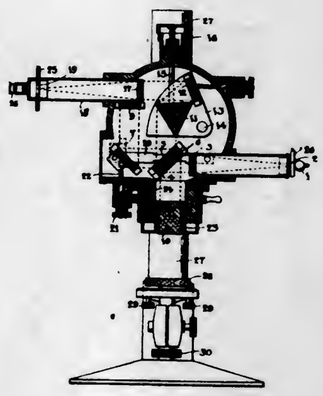
1. The method of hydrogenating a rosin ester which includes heating an abietic acid ester under pressure in the presence of hydrogen and a metal chromite adapted to promote the addition of hydrogen to the unsaturated bonds of the rosin ester.

1,901,631. DIAPHRAGM. RICHARD W. CARLISLE, Oaklyn, N. J., and ROLAND W. NYE, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1930. Serial No. 428,646. 8 Claims. (Cl. 181—32.)



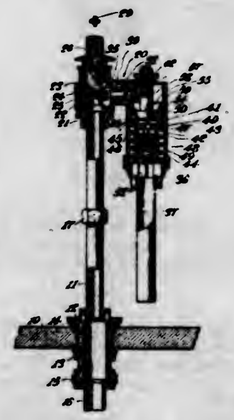
1. A sound diaphragm of molded material, at least one of the surfaces of said diaphragm being irregular and each surface of said diaphragm being covered by a layer of stiff material.

1,901,632. INTERFEROMETER. CLARK W. CHAMBERLAIN, East Lansing, Mich. Filed Sept. 5, 1929. Serial No. 390,552. 13 Claims. (Cl. 88—14.)



1. The method of optically measuring lengths which comprises the steps of separating a beam of white light into two interfering beams, which are ultimately reunited to form a continuous spectrum having dark bands in various numbers in definite relationship to the differences in length of the paths of such interfering beams, and adjusting the relative lengths of the paths of such interfering beams in relation to the length being measured, whereby the number of bands appearing in the spectrum indicate the length being measured.

1,901,633. BALL-COCK. HERBERT D. CLEMMONS, Sturgis, Mich., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 4, 1929. Serial No. 368,290. 12 Claims. (Cl. 137—104.)



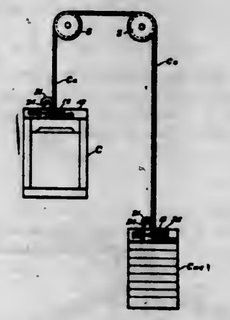
1. In a ball-cock, in combination, a valve body or casing in the general shape of the letter U, said body being formed in two parts joined by a nipple and sealed together along the connecting bar of the U, a float controlled stop valve in one stem of the U, float actuated mechanism for operating said stop valve, said mechanism being disposed to leave clear the space above the other or outlet stem of the U, a throttle valve for restricting the flow of water from said stop valve, said throttle valve including a stem threaded through the cover of the body and a head disposed in the outlet portion of the body, a partition in said outlet having a conical grooved seat cooperating with said valve head, a plurality of juxtaposed oppositely directed spiral silencing passages receiving water from said throttle valve, a flow rectifying device including a series of radial plates receiving water from said spiral passages, and a refill channel opening into the body alongside said spiral passages.

1,901,634. REMOVABLE CHILL RING. DON G. DAWKINS, Huntington Park, Calif. Filed May 17, 1932. Serial No. 611,868. 2 Claims. (Cl. 113—102.)



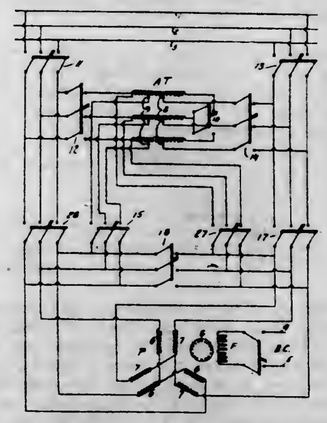
1. A removable chill ring for welding circumferential pipe joints, comprising: a ring of heat-conducting metal having an outside diameter slightly less than the inside diameter of the pipe to be welded; a rod having one end attached to and swiveled within said ring; a fulcrum adapted to fit within said pipe and to support said rod at an intermediate point, and sufficient weight in connection with said rod beyond said fulcrum to hold said ring in contact with the upper inner portion of said pipe.

1,901,635. SLACK CABLE TAKE-UP DEVICE. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed May 31, 1930. Serial No. 457,966. 3 Claims. (Cl. 187—1.)



1. In a slack cable take-up device for elevators, an elevator car, a hoist cable for supporting the car, a movable pulley carried by the elevator car, a spring for biasing the pulley into deflecting relation with the tensioned hoist cable, said spring having insufficient strength to displace said cable while it is normally tensioned by the weight of the car, a pawl or latch carried with the movable pulley, stationary rack teeth cooperating with said pawl or latch to prevent movement of the pulley in a direction in opposition to the biasing spring by the tension of the cable, and a stationary idler pulley mounted to engage the hoist cable on the opposite side and above the movable pulley.

1,901,636. ELECTRIC MOTOR STARTING SYSTEM. RUPERT NUCKOLLS EARLY, Minneapolis, Minn., assignor to Electric Machinery Manufacturing Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 8, 1930. Serial No. 465,572. 14 Claims. (Cl. 172—274.)

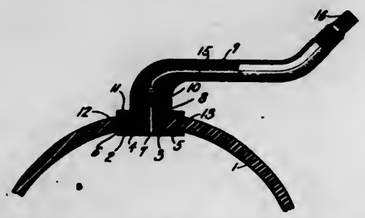


1. The method of starting an electric motor having a primary winding comprising at least two separately energizable winding sections which comprises successively supplying increasing reduced terminal voltages alternately to the winding sections and successively supplying full terminal voltage to the winding sections.

7. The combination of an electric motor having a primary winding comprising a plurality of separately energiz-

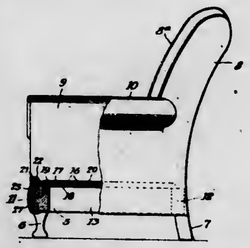
able winding sections, a source of alternating current, a voltage changing device, means for connecting said device to said source, separate means for selectively supplying voltages other than full voltage from said device to the terminals of each of said winding sections, and means for selectively supplying full voltage from said source to the terminals of each of said winding sections.

1,901,637. INTERCHANGEABLE TIRE VALVE. ERNST EGER, Detroit, Mich., assignor to Morgan & Wright, Detroit, Mich., a Corporation of Michigan. Filed Apr. 16, 1930. Serial No. 444,859. 5 Claims. (Cl. 152—12.)



1. A valve for inner tubes comprising a base portion having a flange adapted to contact with the inner wall of the inner tube and a stud portion adapted to project through and clear of the wall of the inner tube, in combination with a stem portion adapted to be attached to said base portion, said stem portion having a flange adapted to cooperate with the flange of said base portion to clamp the two portions in service position on the inner tube, the tube contacting surface of at least one of said flanges having spaced projections, each projection extending outwardly from a central passageway to near the edge of said flange or flanges for preventing rotation in service of said flange with respect to said tube in at least one direction, and a raised rib surrounding said projections for preventing fluid leakage around said valve.

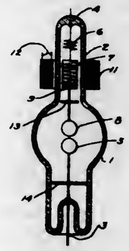
1,901,638. FURNITURE. ALBERT ERNEST, Chicago, Ill. Filed Dec. 5, 1929. Serial No. 411,915. 5 Claims. (Cl. 155—184.)



1. In furniture, in combination, a substantially horizontal underframe comprising front, end and rear rails forming a structure adapted to be supported at a predetermined height above the floor, a netting secured to the top surfaces of said rails and extending across the underframe at substantially the same height as said top surfaces and privided with a retaining roll, and a removable spring filled cushion member supported on said rails and netting and retained by said retaining roll, said cushion being of a depth substantially equal to the height of said underframe from the floor.

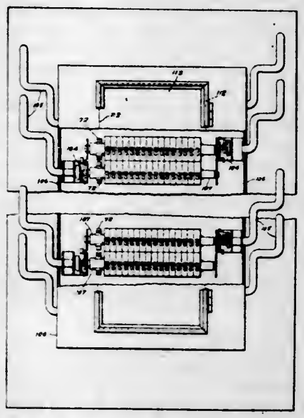
4. In furniture, a frame comprising spaced side and end rails, a netting spanning the space between said rails, a bottom lining secured to the top of one of said rails beneath said netting, a fabric roll blind tacked to the top of said rail and extending to said netting, and a top lining over said netting, and blind tacked, together with the inner edge of said fabric roll, adjacent to the rear edge of said rail.

1,901,639. VACUUM CIRCUIT BREAKER. OTTO H. ESCHHOLZ, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1923, Serial No. 630,266. Renewed Aug. 11, 1932. 2 Claims. (Cl. 200—144.)



1. A circuit interrupter comprising a vacuum-tight container and a pair of separable contact members comprising one of the materials calcium, magnesium.

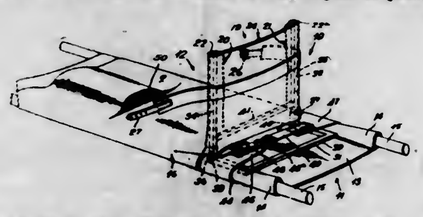
1,901,640. THEATER SWITCH PANEL. BERT F. FULLER, Burlingame, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Original application filed July 14, 1923, Serial No. 651,658, now Patent No. 1,760,943, dated June 3, 1930. Divided and this application filed Apr. 23, 1930. Serial No. 446,677. 9 Claims. (Cl. 175—298.)



1. Switch mechanism comprising a plurality of parallel conductors, a movable conductor extending transversely of the other conductors, a group of contact members adapted to be simultaneously engaged by the movable conductor and separate switches for selectively connecting the contact members to the parallel conductors.

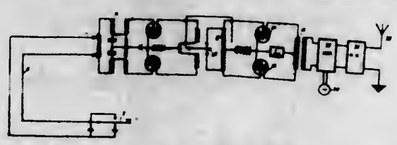
1,901,641. STRETCHER. LOUIS E. GOLDBLATT, Brooklyn, N. Y. Filed June 19, 1931. Serial No. 545,444. 7 Claims. (Cl. 5—82.)

1. In combination with a stretcher comprising an elongated flexible sheet having parallel sleeves at the side edges thereof, and poles within said sleeves and extending from the outer ends thereof and forming handles for carrying the stretcher, said stretcher being adapted to support a person lying thereon, and means on said stretcher for retaining the upper portion of the body of a person carried on said stretcher in upright position, said means comprising a frame having a portion resting on said flexible sheet and between said poles, and an upright portion pivoted to said first portion and having a pair of parallel



upstanding arms, a flexible sleeve disposed about said stretcher, straps extending from said sleeve disposed about said first portion of said frame for attaching said frame to said stretcher, and a flexible back-rest having sleeve portions at the ends thereof for removably receiving said arms.

1,901,642. SIGNALING. CLARENCE W. HANSELL, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 23, 1929. Serial No. 416,058. 12 Claims. (Cl. 250—8.)



1. The method of signaling which includes transmitting carrier energy modulated with signal phase displaced, low frequency energy, collecting a portion of the transmitted carrier energy, synchronising locally generated energy with the low frequency component of the collected energy by utilising even numbered multiple harmonics of the energies to be synchronised and utilising the synchronised energy and the low frequency component for translation.

1,901,643. DRILL BIT. GEORGE G. HARRINGTON, Houston, Tex., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed May 8, 1928. Serial No. 275,997. 9 Claims. (Cl. 255—61.)



1. A drill bit head having a groove extending through the bottom thereof, the side walls of said groove being convergent in opposite directions from the periphery of said head toward the longitudinal axis of said head, and convergent from the bottom of said head toward the bottom of said groove.

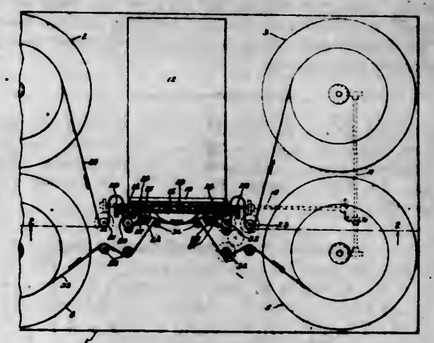
1,901,644. DUPLEX PICTURE HANGER. CLARENCE W. HARSIN, Pasadena, Calif. Filed June 22, 1932. Serial No. 618,669. 4 Claims. (Cl. 40—145.1.)

1. A device of the class described, comprising a sheet metal body having tangs struck out of the body and extending laterally from opposite sides thereof, one tang being bent on a fold line at its top and the other tang being bent on a fold line at its bottom, said fold lines being parallel, the centers of the fold lines being in verti-



cal alignment, each tang being longer than half the distance between the fold lines, and the openings formed by the struck out tangs extending from the fold lines of their own respective tangs toward the opposite fold lines.

1,901,645. FILM PRINTING MACHINE. ADOLF HEINE, Berlin-Lichtenberg, and FRIEDRICH WILHELM DUSTMANN, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed Oct. 30, 1930, Serial No. 492,328, and in Germany Oct. 30, 1929. 2 Claims. (Cl. 95—75.)



1. A film printing machine comprising a member having a convex surface having therein an exposing window means for drawing a record film and a print film over said surface, guiding means for one of said films, means for adjusting the position of said member and said guiding means laterally with respect to the other film and a motor connected to drive said films.

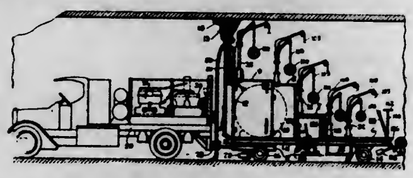
1,901,646. TOOTHBRUSH. HARRY W. HICKS, Brookline, Mass. Filed Apr. 8, 1931. Serial No. 527,377. 2 Claims. (Cl. 15—167.)



1. A tooth brush comprising a plurality of rows of bristles, the bristles in the central row being relatively short and of substantially uniform length from one end of the row to the other, the bristles in the outer rows being varied in length from a maximum near the middle of the brush to minima at its ends, presenting arcuate contours on the side faces of the brush to facilitate rock-

ing of the brush around the inner arcuate surface of the row of teeth in each jaw, the arrangement and trim of the bristles being such as to provide simultaneous end-bristle contact with the grinding and side surfaces of one or more teeth and portions of the gum surfaces adjacent thereto.

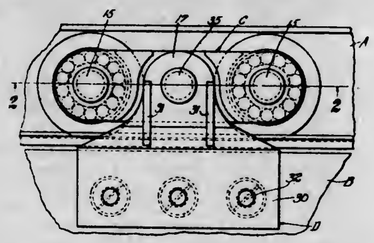
1,901,647. CLEANING MACHINE. WERNER T. HOWALD, EUGENE H. KLINGELFUSS, and FREDERICK P. KENNY, Brooklyn, N. Y. Filed June 22, 1929. Serial No. 372,974. 11 Claims. (Cl. 15—21.)



1. In a machine of the character described, a body, platforms in stepped formation on the body, surface engaging members supported on said stepped platforms and movable relatively thereto, and means for supplying a liquid to said members.

4. A machine for operating upon a ceiling surface comprising a wheeled body, a frame on the body, a frame support, means for raising and lowering the frame in the support, a plurality of ceiling engaging brushes carried by the frame, and yieldable members interposed between said frame and support.

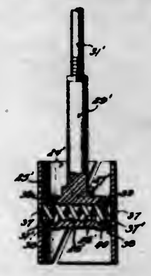
1,901,648. DOOR HANGER. FRANK E. HOWARD, Hartford, Conn., assignor to James L. Howard & Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 10, 1931. Serial No. 529,027. 3 Claims. (Cl. 16—98.)



1. In a door hanger, the combination of a carriage having a link provided with a centrally disposed rearwardly extending boss, said link also having a recess at its central portion and in its forward face, said boss having a through opening, there being provided a rabbet at the forward end of said opening, pins connected to the respective ends of said link and extending rearwardly therefrom, sheaves carried by said pins, an attaching plate having an ear positioned in the recess of said carriage, a pin secured to said ear and having a flange engaging the rear face of the ear and a threaded body portion extending rearwardly from the flange, said flange engaging in said rabbet and said threaded body portion extending into said boss, a bushing screwed onto the threaded portion of said pin and journalled in said boss, and means on said bushing for preventing withdrawal of the pin and bushing from the boss.

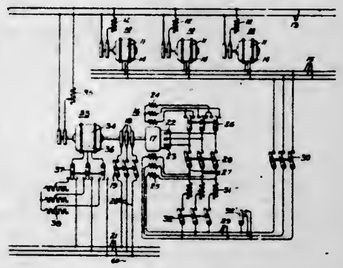
1,901,649. VALVE. ORLANDO B. HUBBS, Milwaukee, Wis. Filed Dec. 29, 1930. Serial No. 505,324. 5 Claims. (Cl. 251—78.)

2. The combination of a cylindrical valve chamber having a port in the wall thereof, a hollow cylindrical valve within said chamber for controlling said port, said valve being longitudinally split to permit expansion thereof into sealing contact with the walls of said chamber, a coil



spring fixed in said valve and extending across the same, and an operating stem mounted on said spring and flexibly connected to said valve through said spring.

1,901,650. SPEED CONTROL. JOHN I. HULL, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 7, 1931. Serial No. 507,211. 18 Claims. (Cl. 172—274.)



1. In combination, an alternating current motor having relatively rotatable windings, one of which constitutes its primary winding, and means connected to the primary winding for impressing on said primary winding a variable frequency voltage which has one component of a substantially constant value for overcoming the resistance drop in the primary winding and another component whose value is substantially directly proportional to the frequency for overcoming the reactive drop and the counter-electromotive force in the primary winding.

11. The method of operating an alternating current motor at variable speed with a substantially constant value of primary current in said motor at all speeds including zero speed, the said method consisting of impressing on the primary winding of said motor a variable frequency voltage which has one component of a substantially constant value to overcome the resistance drop in the primary winding and another component whose value is substantially directly proportional to the impressed frequency to overcome the reactive drop and the counter electromotive force in the primary winding.

1,901,651. NONREFILLABLE CONTAINER FOR POWDER. LEOPOLD KAHN, Mannheim, Germany, assignor to Paul Peter Muelhens, doing business as Eau de Cologne- & Parfümerie-Fabrik "Glockengasse No. 4711" Gegenüber der Pferdpost von Ferd. Mülhens, Cologne-on-the-Rhine, Germany. Filed Feb. 8, 1932, Serial No. 590,625, and in Germany Sept. 9, 1931. 1 Claim. (Cl. 132—83.)

A non-refillable face powder container comprising a receptacle hollowed out to contain powder, a cover piece around said receptacle and having an inturned top flange bordering said hollowed out part of the receptacle, a flexible

sieve resting on said inturned flange, a retaining band around said cover, an inturned flange on the upper end of said retaining band and extending over the border of the



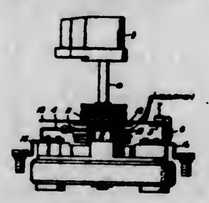
sieve to retain the same in place during use and an inturned flange on the lower part of said retaining band and embracing the bottom of the cover piece.

1,901,652. LIQUID PURIFICATION. ROBERT H. KEAN, Chicago, Ill., assignor to General Zeolite Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 25, 1928. Serial No. 302,011. 11 Claims. (Cl. 204—25.)



1. A process of electro-osmotically treating a liquid by causing a body of said liquid to flow between positive and negative electrodes, impressing upon said liquid an electro-motive force by means of said electrodes, separating said body of liquid being treated from said electrodes by means of diaphragms and other bodies of liquid, flowing said last mentioned bodies of liquid between and in contact with said diaphragms and said electrodes, and maintaining the surfaces of said body of liquid being treated at a substantially higher level than the surfaces of said bodies of liquid flowing between and in contact with said diaphragms and said electrodes.

1,901,653. ELECTRIC SWITCH. LESLIE A. KEMPTON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1931. Serial No. 559,958. 4 Claims. (Cl. 200—7.)



1. An electric switch comprising a base of insulating material, three stationary contacts secured to said base 90° apart and having contact surfaces in the same plane, a polepiece having three radial projecting arms and adapted to engage the contact surfaces of said three stationary contacts in different combinations, a fourth stationary contact secured to the base opposite one of the three stationary contacts with its contact surface in a different plane from the common plane of the three stationary contacts, an auxiliary stationary contact secured adjacent the fourth stationary contact having a resilient arm projecting over the contact surface of said fourth stationary contact, and a disc of insulating material separating said fourth and auxiliary contacts except in one position.

1,901,654. CUTTING TOOL AND PROCESS OF MAKING IT. THOMAS KEAR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 31, 1929. Serial No. 336,551. 11 Claims. (Cl. 76—101.)

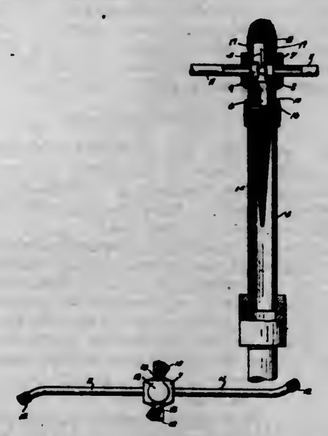


1. In combination, a tool comprising a shank portion and a cutting tip, said tip consisting largely of a carbide of metal from a group consisting of tungsten and molybdenum but containing an appreciable amount of an element of the iron group, the juxtaposed surfaces of said tip and shank being in substantially parallel planes, said tip being welded to said shank only at the exposed edge portions of said tip.

8. The method of securing a tool tip, consisting largely of a carbide of metal from a group consisting of tungsten and molybdenum but containing an appreciable amount of an element of the iron group, to a supporting shank, which comprises placing the tip on the shank so that the juxtaposed surfaces of the tip and shank are in substantially parallel planes, and locally heating the shank and tip at their contact edges to a welding temperature.

9. The method of securing a tool tip, consisting of a carbide of metal from a group consisting of tungsten and molybdenum but containing an appreciable amount of an element of the iron group, to a tool shank, which comprises providing a recess in the shank, mounting the tip in the shank so that the juxtaposed surfaces of the tip and shank are in substantially parallel planes, locally heating the adjacent edge portions of the shank and tip to a welding temperature and applying molten metal to the junction of the tip and shank.

1,901,655. LAWN SPRINKLER. JOHN H. KEYS, Dayton, Ohio. Filed Apr. 1, 1929. Serial No. 351,510. 8 Claims. (Cl. 299—69.)



6. In a rotary sprinkler, a rotary sprinkler head, a stationary trunnion upon which said head is mounted and extending through said head, an annular flange upon the

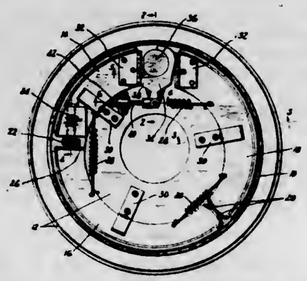
head surrounding the trunnion, and a cap member stationarily secured to the trunnion and including a dependent flange overlapping the flange upon said head within which the enclosed portion of the head is relatively revoluble.

7. A rotary sprinkler, including a rotary distributor head, reaction jet arms having nozzles carried thereby for transmitting rotary motion to the head, the reactions of the jet arms producing a torque having its axis concentric with the axis of rotation, and inclined jet nozzles carried by said head, the reactions of which produce a torque concentric with said axis but unequally opposed to the torque of said jet arms, the inclination of which to the horizontal is variable so as to change the torque of the same, and means for supplying water under pressure to the rotary head.

1,901,656. STABLE SUSPENSIONS. OSKAR KRAMER, Oppau, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 16, 1931, Serial No. 523,201, and in Germany Mar. 29, 1930. 5 Claims. (Cl. 252—6.)

2. As new articles of manufacture stable suspensions, of which the solid phase comprises at least one material capable of forming metal carbonyl and the liquid phase comprises a liquid metal carbonyl and water.

1,901,657. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,129. 9 Claims. (Cl. 188—78.)



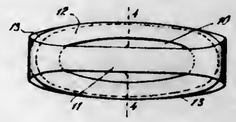
1. A brake comprising three segmental shoes arranged end to end and extending substantially a full circumference, two of the shoes having parts in disconnected thrust engagement with each other, and the third having a part adjustably mounted thereon and having disconnected thrust engagement with one of the first two shoes.

1,901,658. PROCESS OF TREATING SPINNERETS. JEAN LADRETTE, Peage de Roussillon, France, assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1931. Serial No. 523,937. 4 Claims. (Cl. 18—54.)

1. A method of bringing a spinneret employed in the dry spinning process into proper spinning condition, either substantially immediately prior to the beginning of spinning or at any necessary time during spinning, which comprises applying to the face of the spinneret in spinning position a non-solvent for the solute in the spinning solution and wiping the face of said spinneret.

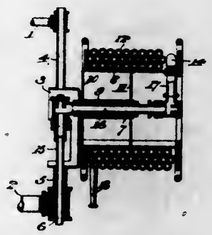
1,901,659. INSTEP PROTECTOR. FRANK A. LARACK, New York, N. Y. Filed May 11, 1931. Serial No. 536,425. 2 Claims. (Cl. 2—61.)

1. A continuous flat elastic band adapted to surround the foot comprising a widened portion arranged to overlie the instep of the foot to cover the part thereof which underlies the instep band of a low cut shoe and a single narrow portion arranged to pass under the foot, a layer



of similar material over the widened portion of the band with its edges affixed thereto, the central portion of said layer being cut away to form an elongated pocket.

1,901,660. HOSE REEL. RUDOLPH O. LUND, New York, N. Y., assignor to Croker Fire Prevention Corp., New York, N. Y., a Corporation of New York. Filed May 11, 1932. Serial No. 610,544. 12 Claims. (Cl. 299—78.)



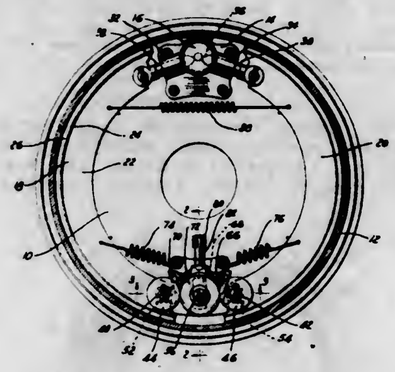
1. In a hose reel, a hose carrying drum, a support therefor including a hollow laterally disposed member on which the drum is rotatably mounted, and an independent fluid supply line extending through said laterally disposed member and connected to the hose wound on the drum.

1,901,661. REFLECTIVE DISPLAY DEVICE. WINTHROP D. MACCOURT, TOM F. WALSH, and FRANK H. RASMUSSEN, Chicago, Ill., assignors to Magill-Weinsheimer Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1931. Serial No. 527,274. 6 Claims. (Cl. 40—126.)



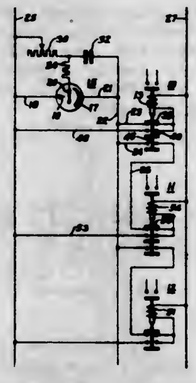
1. In a display device, a flat display member having illustrative material on the forward and rear faces thereof, and a reflective member positioned to the rear of said display member and adapted to reflect, to the eye of an observer, the rear face of the display member, both the direct and the reflective images being simultaneously observable by the observer, and combined spacing and supporting means adapted to maintain the display member and the reflective member in spaced relationship, and additional means for maintaining the reflective member in upright position.

1,901,662. BRAKE. JOHN P. MAHONEY, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Apr. 27, 1931. Serial No. 533,237. 2 Claims. (Cl. 188—78.)



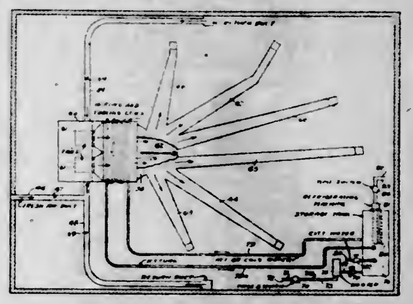
1. A brake of the type having a drum and a backing plate at the open side of the drum and shoes within the drum having an operating wedge movable between their ends radially of the drum, and having a conduit fixed at its end to the backing plate and an operating cable extending therethrough and means operated by the cable for operating said wedge.

1,901,663. CONTROL SYSTEM. WILLIAM A. MINKLER, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931. Serial No. 530,926. 17 Claims. (Cl. 175—320.)



1. A control system, in combination, a supply of electrical energy for the control system, an electric-discharge device having a plurality of electrodes connected in circuit relation with the supply of electrical energy, a timing circuit associated with the electrodes to control the operation of the discharge device, a current-responsive means connected in circuit with the discharge device and controlled thereby, means operated by the current-responsive means to disconnect it from the discharge device, and a holding circuit, whereby the current-responsive means is energized independently of the discharge device.

1,901,664. COOLING COIL, STORAGE TANK, AND MEANS FOR COOLING THE WATER IN THE TANK. CLARK T. MORSE and EDWARD L. HOGAN, Detroit, Mich., assignors to American Blower Corp., Detroit, Mich., a Corporation of Delaware. Original application filed Feb. 12, 1931, Serial No. 515,368. Divided and this application filed Dec. 4, 1931. Serial No. 579,092. 3 Claims. (Cl. 62—129.)



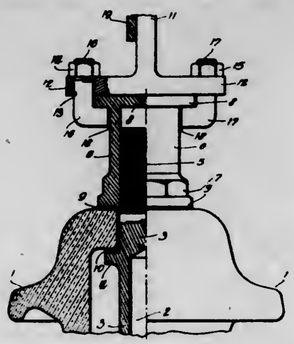
2. In combination, cooling coils, an air circulation system enclosing said coils, through which air is delivered to and from an enclosure, a storage tank for liquid, means for cooling the liquid in said storage tank, and means for modifying the temperature of the liquid in the cooling coils by the use of the storage liquid, without direct contact between the liquid in the storage tank and the cooling coils.

1,901,665. FLEXIBLE CONNECTER FOR CABLE TERMINATORS. JOSEPH RAH, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1930. Serial No. 422,535. 1 Claim. (Cl. 173—358.)



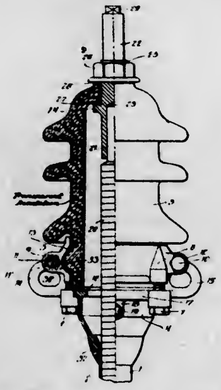
The combination with a cable terminator having a stud member extending therefrom and constituting the conducting terminus of a cable, means for establishing an electrical connection between said stud member and a bus bar, said means comprising a cooperating conducting member adapted to be secured to the stud in firm electrical engagement therewith, a flexible braided conductor secured at one end to the conducting member, and a terminal secured to the opposite end of the flexible conductor, said terminal being flat on its opposite sides, said sides constituting clamping surfaces to facilitate clamping of the terminal to a bus bar, the flexible conductor comprising the sole mechanical connection between the conducting member and the terminal thereby permitting complete freedom of movement of the terminal with respect to the conducting member within the limits of the length of the flexible conductor.

1,901,666. CABLE TERMINATOR CAP ASSEMBLY. JOSEPH RAH, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 22, 1930. Serial No. 422,536. 1 Claim. (Cl. 173—353.)



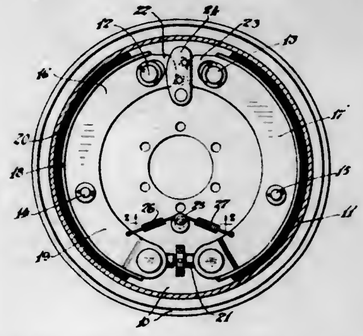
In combination, a hollow body of insulation having a top portion provided with an opening, a conducting stud provided with a peripheral flange intermediate its ends, said stud being externally threaded on one side of the flange and provided with an internal longitudinal bore on the other side of the flange for receiving the end of a cable conductor, the threaded end of the stud being projected outwardly through the opening in said top portion, a gasket on the flange, said gasket bearing against the inside of the top portion and providing a sealing closure for said opening, a conducting bushing threaded on the stud and bearing on the outside of said top portion to prevent the withdrawal of the stud through the opening, said bushing having a seating surface at its end remote from the body of insulation, a terminal member seated on said seating surface and freely movable thereon in a plane normal to the axis of the stud and having a flat contact making portion at right angles to said plane, and means for clamping the terminal member in position on said seating surface for adjustably fixing the position of the flat contact making portion of the terminal.

1,901,667. CABLE TERMINATOR. JOSEPH C. RAH, Chicago, Ill., assignor to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1930. Serial No. 500,455. 4 Claims. (Cl. 173—353.)



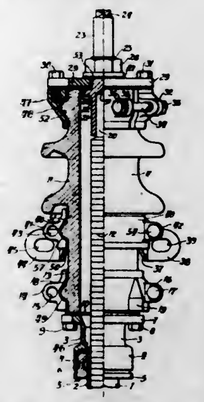
4. In a device for establishing a cable connection, a hollow insulator open at both ends and having adjacent one end but spaced therefrom an integrally formed peripheral bead merging with the body of the insulator in continuous curves free of sharp corners both above and below the bead, a split clamp surrounding the bead and of an internal curvature mating with the curvature of the bead and embracing the upper and lower continuously curved surfaces thereof whereby the clamp is permitted a limited degree of angular adjustment longitudinally of the insulator along the upper and lower continuously curved surfaces merging the bead with the body of the insulator.

1,901,668. BRAKE. HERBERT W. POEHLMAN, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 26, 1930. Serial No. 438,964. 4 Claims. (Cl. 188—78.)



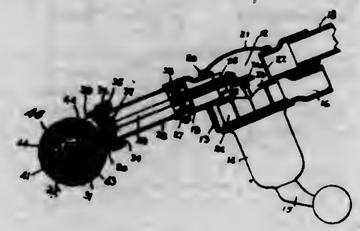
1. A brake comprising a backing plate, a drum associated therewith, braking elements positioned on the backing plate adapted to co-operate with the drum, springs for returning the braking elements to the off position and means including an eccentric connected between the springs for balancing the tension of the springs.

1,901,669. CABLE TERMINATOR PROVIDED WITH MEANS FOR INSULATING ENDS OF CABLE SHEATHS. JOSEPH RAH, Chicago, Ill., assignor to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 8, 1930. Serial No. 426,815. 11 Claims. (Cl. 173—353.)



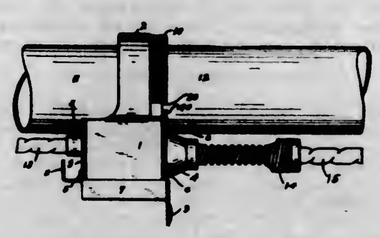
2. In a device for establishing a cable connection, a hollow insulator open at both ends and having flat seating surfaces at each end, and having adjacent said seating surfaces but spaced therefrom peripheral beads formed integrally with and merging with the body of the insulator in continuous curves free of sharp corners both above and below the beads, split clamps surrounding said beads and of an internal curvature mating with said beads whereby each clamp is permitted a limited degree of angular adjustment longitudinally of the insulator along the upper and lower continuously curved surfaces merging its bead with the body of the insulator.

1,901,670. FLOOR POLISHER. FREDERICK RIEBEL, Jr., and DEWEY M. DOW, Toledo, Ohio, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Aug. 27, 1929. Serial No. 388,769. 8 Claims. (Cl. 15—49.)



1. In combination with a motor and handle assembly including a gear casing and a motor driven shaft projecting into said casing; a shank extending from said casing, a transmission shaft extending longitudinally through said shank and projecting into said casing, co-acting gears on said transmission shaft and motor shaft respectively, and a rotatable polishing member journalled in the end of said shank and geared to said transmission shaft for rotation around its own axis and the axis of the transmission shaft.

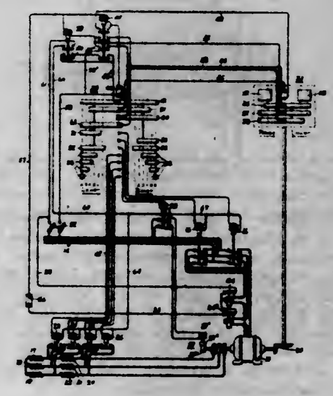
1,901,671. ELECTRIC SWITCH. FREDERICK RIEBEL, Jr., and DEWEY M. DOW, Toledo, Ohio, assignors to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed June 3, 1931. Serial No. 541,784. 13 Claims. (Cl. 200—52.)



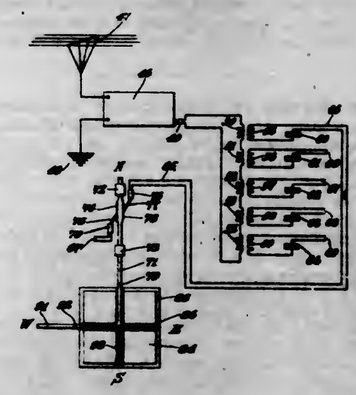
1. In combination with a handle, a supporting ring encircling said handle and thereby supported, a switch housing carried by said ring and projecting from one side of the handle, and a switch actuator ring oscillatorily mounted on said supporting ring and encircling the handle.

1,901,672. MOTOR CONTROL SYSTEM. JOSEPH A. SPITZER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1931. Serial No. 556,599. 14 Claims. (Cl. 172—239.)

1. In a motor control system, the combination with an electric motor, of control means for connecting said motor to a supply source and disconnecting said motor therefrom, means for stopping said motor at a predetermined limit of operation, means for continuing the operation of said motor beyond said limit, and means insuring the disconnection of said motor from said source prior to the operation beyond said limit.

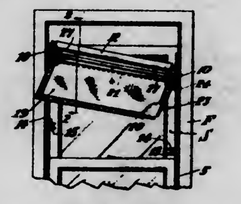


1,901,673. ELECTRICAL CONTROLLING APPARATUS. MILTON BLAKE SLEEPER, New York, N. Y., assignor, by mesne assignments, to Television Products, Inc. Filed Nov. 15, 1928. Serial No. 319,521. 7 Claims. (Cl. 178—18.)



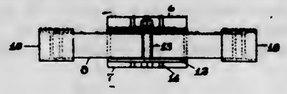
1. In combination, means for producing graphic subjects, a radiographic transmission apparatus connected thereto adapted to operate by transmitting different audio frequencies according to the movements of the producing means, means for registering the transmitted radiographic subject, and a radiographic receiving apparatus for actuating the same from the transmitting apparatus by means of the different audio frequencies received from the transmitting apparatus, the receiving apparatus comprising a filter for separating the transmitted audio frequencies, a separate audio frequency being provided for each direction of movement of the apparatus in the three dimensions in the production of the two dimensional subject transmitted.

1,901,674. ADJUSTABLE MOUNTING FOR WINDOW SHADES. NATHAN SLOBOTKIN, Brooklyn, N. Y. Filed Feb. 9, 1932. Serial No. 591,802. 3 Claims. (Cl. 156—27.)



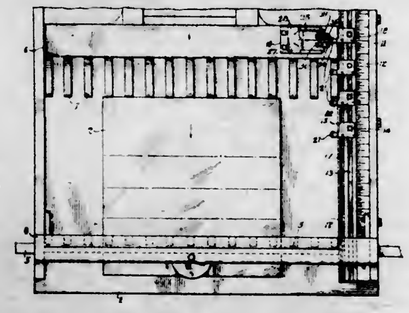
1. In a device of the character described, a guide adapted to be attached to one side of a window frame to extend vertically thereof, a supporting bracket, manually adjustable means vertically movable along said guide, and means connecting said bracket with said manually adjustable means normally supporting the bracket in parallel relation to the guide and cooperating with the bracket and the guide to support said bracket for movement to and from a laterally inclined position out of parallel relation with the guide.

1,901,675. SIDE BEARING. FRANS JOEL SUNDHOLM, Bellevue, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 493,774. 10 Claims. (Cl. 105—4.)



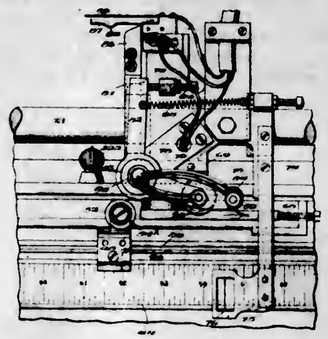
10. A side bearing for an articulated unit comprising a base member, a member common to both adjacent connecting bodies and resilient means between said members.

1,901,676. PAPER CUTTER. ARTHUR KIRKBRIDE TAYLOR, Baltimore, Md., assignor to United States Printing and Lithograph Co., Baltimore, Md., a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 416,013. 28 Claims. (Cl. 164—48.)



28. In a cutting machine, a cutter, a pusher for feeding material to the cutter, means for intermittently actuating the pusher, means for actuating the cutter, means spaced in any predetermined relation corresponding to the length of material to be cut and arranged stationarily upon the machine, and stopping means for the said pusher actuating means including coacting means movable in predetermined relation with the pusher, and responsive to said spaced means, said coacting means being adapted to overrun said spaced means when the pusher actuating means resumes operation after a cut has been made.

1,901,677. MATERIAL FORWARDING MECHANISM. ARTHUR K. TAYLOR, Baltimore, Md. Filed Dec. 8, 1930. Serial No. 500,796. 20 Claims. (Cl. 164—48.)

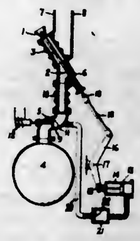


1. A sheet cutting machine including means for cutting sheet material, means for forwarding the sheet material relatively to the cutting means, means to stop said forwarding means at any predetermined point including members movable in a path proportionately to the travel of said forwarding means coacting with a stop means settable along said path at any predetermined point, said stop means coacting successively with said movable members to first slow down and then stop said forwarding means.

1,901,678. METHOD OF MAKING TEXTILE MATERIAL PERMANENTLY FLEXIBLE, WEATHERPROOF, AND FIRE RESISTANT. HARRY W. TURNER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 25, 1932. Serial No. 601,304. 1 Claim. (Cl. 91—68.)

A method for treating textile material which consists in singeing the surfaces thereof, incorporating powdered talc into the pores thereof, impregnating the material so treated with degelled linseed oil, air drying the material and again incorporating powdered talc therewith.

1,901,679. GAS BLAST CIRCUIT BREAKER. WERNER UHLEMUTH, Oberschoneweide, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 8, 1932, Serial No. 597,585, and in Germany Mar. 10, 1931. 5 Claims. (Cl. 200—148.)



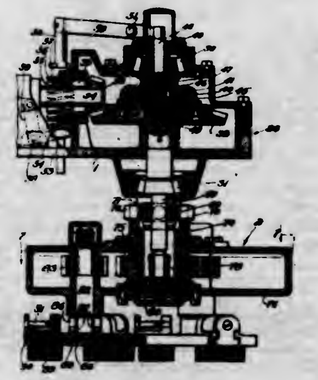
1. A gas blast circuit breaker comprising relatively movable contacts, a source of gas pressure, a valve controlling flow of gas from said source for extinguishing arcing between said contacts and for causing separation thereof, and means for completing separation of said contacts after closure of said valve.

1,901,680. BALANCED RAILROAD CROSSING GATE. GEORGE VARCHETTA, Brooklyn, N. Y. Filed Sept. 4, 1931. Serial No. 561,167. 12 Claims. (Cl. 246—293.)



1. In automatically operated railroad crossing gates, gates at the crossing, a whistle at the crossing, gate operating mechanism positioned ahead of the crossing, whistle operating mechanism positioned ahead of the gate operating mechanism, a train, means on said train for operating said whistle operating mechanism to blow the whistle and for operating said gate operating mechanism to lower the gates and silence the whistle, locking means holding said gate operating mechanism with the gates lowered, and means releasing said locking means as the train leaves the crossing, said operating mechanism operating to raise the gates as the locking means is released.

1,901,681. FLOOR SURFACING MACHINE. JOHN J. VICHNZI, Boston, Mass. Filed Oct. 10, 1929. Serial No. 398,682. 5 Claims. (Cl. 51—177.)



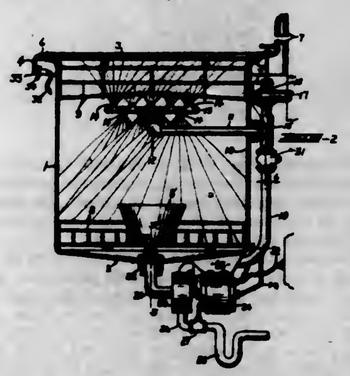
1. A machine of the character described comprising a truck including a body; a motor mounted on said body; a rotatable head for operating upon the floor including a frame carrying a plurality of vertically disposed spindles journaled on said frame each of which is provided at its lower end with a floor engaging tool; means through which said motor rotates said head including a vertical shaft journaled on and supported by said truck body; a universal joint connecting the lower end of said shaft with said head so that the latter can tilt laterally in all directions relatively thereto and through which said shaft rotates said head, and gearing carried by said head for rotating said spindles on their own axes as said head is rotated, said gearing including a master gear that is concentric with respect to the axis of said head, and a universal joint connecting said master gear with said body by which said master gear is held against rotating with said head and by which one end of said body is supported.

1,901,682. BOTTLE CLOSURE. ALBIN H. WARTH, Baltimore, Md., assignor to Crown Cork & Seal Company, Inc. New York, N. Y., a Corporation of New York. Filed Apr. 4, 1930. Serial No. 441,461. 8 Claims. (Cl. 215—39.)



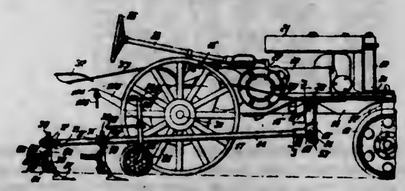
1. A bottle closure embodying therein a metal shell, and a cushion disk formed of cork provided with a thin transparent coating of non-absorbent, acid resisting, infusible, non-oxidizing material having inherent resiliency and elasticity.

1,901,683. MECHANICAL DISHWASHER. JOHN H. WENDMAN, Marcellus, N. Y. Original application filed Mar. 29, 1927, Serial No. 179,249. Divided and this application filed Apr. 21, 1930. Serial No. 446,011. 1 Claim. (Cl. 299—69.)



In a mechanical dishwasher, a rotatable water-receiving and distributing head provided with a series of spaced discharge nozzles in opposite sides thereof, the nozzles in one side being inclined to the plane of rotation and those in the other side being perpendicular to said plane, the nozzles of each series having their mouths elongated in parallel planes diagonal to the direction of movement of the head to produce parallel spaced fan-shaped jets, and means for introducing water in said head under pressure.

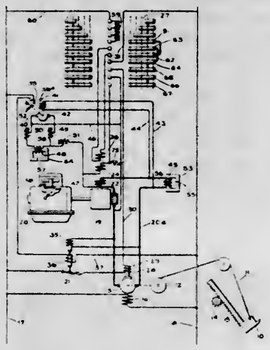
1,901,684. CULTIVATOR. CHARLES H. WHITE and FRANK T. COURT, Moline, Ill., assignors to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,754. 19 Claims. (Cl. 97—47.)



1. The combination with a tractor including front and rear wheels, of a cultivator attachment comprising a plurality of independently vertically movable rig beams sup-

porting soil working devices disposed substantially back of the position of said rear traction wheels, steerable individual supporting wheels for said rig beams, means pivotally connecting said beams with said tractor, and means operable to steer said supporting wheels to cause the rig beams to swing laterally relatively to said tractor.

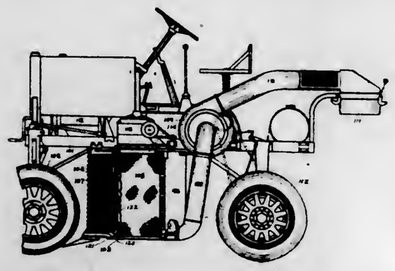
1,901,685. CONTROL SYSTEM. MAX A. WHITING, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 13, 1931. Serial No. 550,405. 19 Claims. (Cl. 172—239.)



1. The combination with a dynamo electric machine having a variable power output, means for absorbing power from said dynamo electric machine and means responsive to the rate of change of said power output for controlling said power absorbing means.

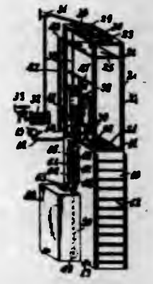
12. The combination with a generator driven by a prime mover, of a motor energized by said generator, said motor being connected to drive an overhauling load, a relay responsive to the rate of change of load on said motor, a brake for said motor, an operating coil for releasing said brake, a switch in the circuit of said coil, a coil for opening said switch controlled by said relay and a second coil for said switch energized in accordance with the motor voltage.

1,901,686. COTTON HARVESTING MACHINE. LOUIS E. WIRTH, Pittsburgh, Pa., assignor to Cotton Harvester Corporation of America, a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,255. 29 Claims. (Cl. 56—14.)



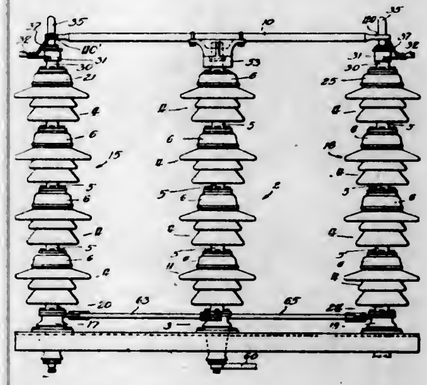
1. In a cotton harvester the combination of a revolubly mounted needle carrier, a tubular carrier supporting structure rigidly connected with said carrier and concentric with the axis of revolution thereof, driving means, and means attached to said tubular carrier supporting structure yieldingly engaging said driving means for revolving the carrier.

1,901,687. MACHINE FOR MEASURING BODY VOLUME. DOTT E. ZOOK, Chicago, Ill. Filed Apr. 25, 1931 Serial No. 532,883. 5 Claims. (Cl. 234—1.)



1. A machine for measuring body volume by water displacement, comprising a tank for holding a liquid, a platform for a person to stand on slidably supported over said tank, means for lowering said platform into said tank, means for compensating for the displaced water due to lowering said platform, and means for measuring and recording water displaced by a person standing on said platform as it is lowered in relation to the depth of submersion.

1,901,688. HORIZONTAL BREAK DISCONNECTING SWITCH. ALFRED ALSAKER, WELDON O. HAMPTON, and CHARLES A. KOERNER, Chicago, Ill., assignors to The Delta-Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed April 30, 1930. Serial No. 448,510. 21 Claims. (Cl. 200—48.)

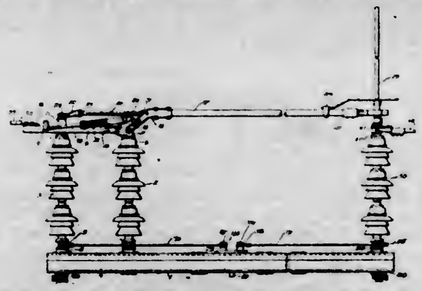


1. An electric switch including a pair of rotary insulators, a contact member mounted on one of the insulators and including contacting portions on the opposite sides of the axis of rotation of the insulator, a cooperating switch blade pivotally mounted on the other insulator about a pivot coincident with the axis of rotation of said other insulator, and having a limited amount of motion with reference thereto, and means on the blade for establishing engagement with the portions of the contact on the opposite sides of the axis of rotation of the contact.

1,901,689. SWITCH. ALFRED ALSAKER, WELDON O. HAMPTON, and CHARLES A. KOERNER, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed May 4, 1931. Serial No. 534,712. 18 Claims. (Cl. 200—88.)

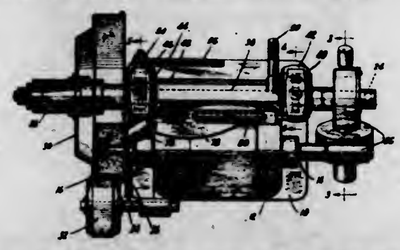
1. The method of operating a switch having a short contact and a comparatively long blade movable into and

out of engagement therewith which comprises locking the blade against operation and imparting a twisting mo-



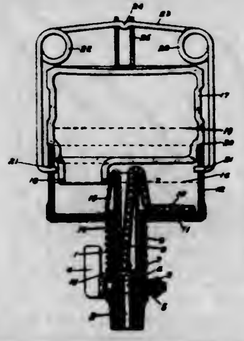
tion to the contact to break the bind between it and the blade, then locking the contact against movement and releasing the blade and swinging it away from the contact.

1,901,690. DRUM-GRINDING MACHINE. WILLIAM J. ANDREW, South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 18, 1929. Serial No. 348,097. 9 Claims. (Cl. 51—105.)



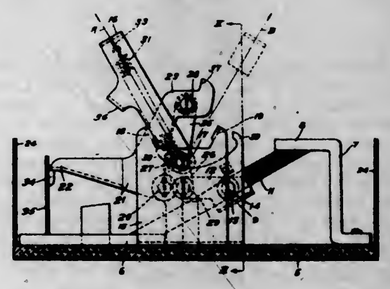
1. A machine for truing brake drums or the like comprising, in combination, a motor with a high-speed armature shaft having a tool at one end, reduction gearing at the other end of the armature shaft, and a shaft generally paralleling the armature shaft and driven at one end by said gearing and having at its other end a work support adapted to traverse the work past said tool, together with an angularly adjustable eccentric bearing for said second shaft operable to adjust the work bodily with respect to the tool.

1,901,691. WICK OILER. JESSOMS J. AULL, Cincinnati, Ohio, assignor to The Lunkenheimer Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 6, 1930. Serial No. 418,575. 4 Claims. (Cl. 184—64.)



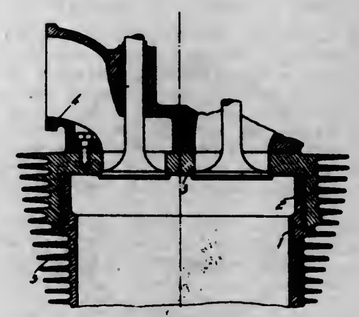
1. In combination, a cup, a stem leading from the cup to the part to be lubricated, means on said stem extending above the bottom of the cup, a wick located in the bottom of the cup and extending over and into said means extending above the stem and the bottom of the cup, an inverted reservoir resting on and forming a closure for said cup and closed save for an open spout which communicates with said cup at a point below the top of the means extending into the cup above the stem and a spring bail for detachably locking said reservoir on said cup.

1,901,692. CIRCUIT BREAKER. HAROLD G. BAXTER, Baldwin, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 18, 1931. Serial No. 523,477. 5 Claims. (Cl. 200—116.)



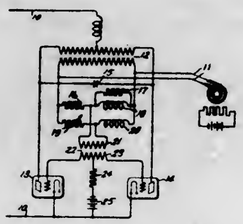
1. The combination with a circuit-breaker having a base, a movable switch member thereon, a cradle and a toggle cooperating with the switch member and the cradle for releasably retaining the switch member in closed position, of a latch member on the cradle movable toward the base when the cradle is released, and a current-responsive member cooperating with the latch member for releasably retaining it in latched position.

1,901,693. AIR-COOLED CYLINDER. ERNST BECKER, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Nov. 19, 1930, Serial No. 496,685, and in Germany Nov. 19, 1929. 2 Claims. (Cl. 123—171.)



1. An air cooled cylinder particularly for internal combustion engines, having a ribbed steel cylinder portion, a cylinder top of a beryllium alloy of high tensile strength and good heat conductivity, shrunk onto one end of said steel cylinder, and a light-metal cylinder head attached to said top, said top containing the engine valve seats and said head containing the gas ducts leading to and from said seats.

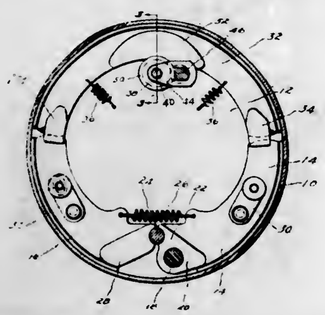
1,901,694. PHASE SHIFTING CIRCUITS. BURNICE D. BEDFORD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1930. Serial No. 478,163. 19 Claims. (Cl. 172—238.)



1. In an electrical control system including an electric valve provided with an anode, a cathode, and a control grid, a source of periodic anode potential and means for impressing upon said grid a potential variable in phase with respect to said source comprising a plurality of impedance elements serially connected across said source for producing dephased potentials, a plurality of other impedance elements one of which is variable, serially connected in parallel to said first first mentioned impedance elements for producing other dephased potentials, and a grid circuit including a potential derived from intermediate points of said parallel circuits.

17. In combination with a source of periodic potential, apparatus for producing a potential variable in phase with respect to that of said source comprising a plurality of impedance elements serially connected across said source for producing dephased potentials, one of said elements being variable and the junction of the component potential vectors across said elements describing a predetermined locus with variations of said variable element, a plurality of other serially connected impedance elements connected in circuit with said source for producing other dephased potentials, the junction of the component potential vectors across said last mentioned elements lying within said locus, and an output circuit connected between the junction points of said series circuits.

1,901,695. BRAKE. VINCENT BENDIX, Chicago, Ill., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 19, 1928. Serial No. 247,798. 11 Claims. (Cl. 188—78.)



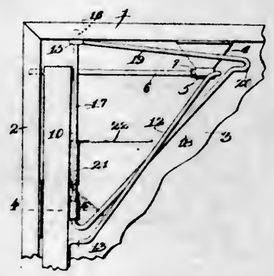
1. A brake comprising, in combination, an anchor, a first shoe engaging the anchor and having its friction face on one side of the anchor and having a thrust portion extending on the opposite side of the anchor, a second shoe acting on said thrust portion to apply the first shoe, and servo friction means for actuating the second shoe.

1,901,696. BRAKE BLOCK AND MEANS OF ATTACHING. ALFRED V. BODINE, Fairfield, Conn., assignor to Raybestos-Manhattan, Incorporated, Passaic, N. J., a Corporation of New Jersey. Filed Nov. 7, 1931. Serial No. 573,583. 7 Claims. (Cl. 188—234.)



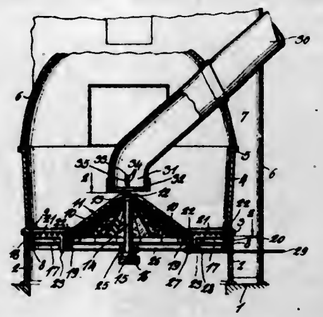
1. In a brake, a shoe, a friction element of fibrous material, a metal bridge element embedded in the fibrous material and comprising a body portion and prongs projecting laterally therefrom and resting on the surface of the shoe, and a securing bolt passing through said body portion for securing the friction element to the shoe.

1,901,697. TABLE LEG SUPPORT. WILLIAM MICKEL BOENNING, Manitowoc, Wis., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed July 11, 1930. Serial No. 467,241. 7 Claims. (Cl. 45—11.)



1. A table leg support including hingedly, mounted supporting members carried by the table, means for connecting one of said members to the table leg, each of said supporting members having inclined brace portions with an offset shoulder at the upper end of one inclined part and a U-shaped part in the other brace member adapted to cooperate with the offset shoulder for retaining said supporting members in an upright position.

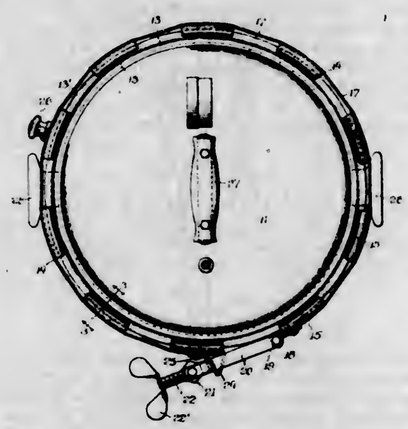
1,901,698. GRATE. OLIVER S. BOWMAN, Colorado Springs, Colo. Filed May 4, 1931. Serial No. 534,851. 3 Claims. (Cl. 126—182.)



1. A grate for a coal burning device comprising, a central conical portion having its apex at the top, said conical portion being composed of a number of sectors provided

at their lower ends with projections extending in a plane perpendicular to the axis of the conical part, each projection having two radially spaced bearings, a segment of an annular grate portion rockably supported on each pair of radial bearings and means for simultaneously rocking the segmental portions.

1,901,699. COVER CLAMP FOR PRESSURE COOKING VESSELS. FRANK W. BURPEE, Wilmette, Ill., assignor to Burpee Can Sealer Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,202. 4 Claims. (Cl. 220—61.)



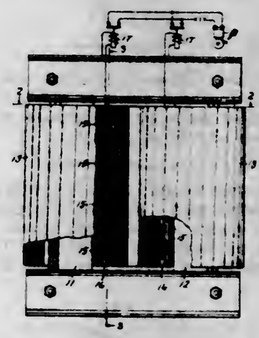
1. A cover clamp for a pressure cooking vessel, comprising a one-piece circular flexible and resilient metal band formed at uniformly spaced intervals therearound with pairs of integral inwardly directed divergent marginal flanges adapted to wedgingly embrace opposed transversely beveled annular ribs on the body and cover of the vessel, the portions of said band between said pairs of flanges being sufficient in number and length to enable said band to be sufficiently expanded to clear said ribs when applying and removing the same, and means for tightly drawing together the ends of said band around said ribs.

1,901,700. SHRUB PROTECTOR. EDWARD W. CARPENTER, Fairfield, Conn., assignor to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 6, 1931. Serial No. 548,741. 7 Claims. (Cl. 47—23.)



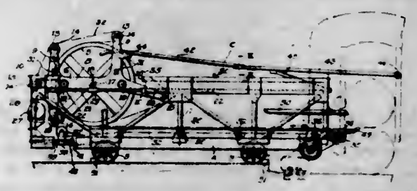
1. In a shrub protector, a support, a plurality of wires each having an end anchored to said support, each of said wires including a bowed intermediate portion extending outwardly and upwardly from said support and a free end portion extending from the intermediate portion and radially and outwardly of the support.

1,901,701. TRANSFORMER FAULT DETECTOR. DAVID D. COFFIN, Camden, N. J., assignor to General Electric Company, a Corporation of New York. Filed Sept. 30, 1932. Serial No. 635,591. 4 Claims. (Cl. 175—356.)



1. A transformer including a magnetic core having a winding leg, a winding surrounding said winding leg, a plurality of coils between said winding leg and said winding, each coil being disposed at one side of the winding leg with its axis at the right angle to that of the winding leg, and an instrument connected to said coils.

1,901,702. WORK HANDLING MECHANISM. MARK F. COOK and GEORGE T. BRNISCH, Niagara Falls, N. Y., assignors to Aluminum Company of America, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 15, 1931. Serial No. 530,818. 10 Claims. (Cl. 60—43.)



2. A sheet handling mechanism comprising a main frame, a movable carriage supported upon said frame, nuts fixedly mounted on the side frames of said carriage, horizontal lead screws threaded in to said nuts, bearings for said lead screws mounted on the main frame, a pair of gears fixedly mounted upon the lead screws in mesh with a pair of gears fixedly mounted upon a shaft rotatably supported on the main frame, and means for driving said second-named shaft to impart movement to said carriage.

8. A mechanism of the character described, comprising a main frame in combination with a movable carriage mounted for reciprocatory movement thereon, a receiving platform, a conveyor system mounted on said frame, said conveyor system being adapted to cooperate with said carriage to deliver material to said receiving platform.

1,901,703. INSULATING SPACER. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Company, Inc., West Orange, N. J., a Corporation of New Jersey. Filed Apr. 9, 1931. Serial No. 528,720. 2 Claims. (Cl. 250—27.5.)

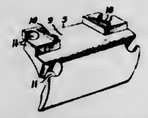
2. In an electron discharge device the combination including an electrode and a cathode and an insulator in-

terposed therebetween and in contact therewith for holding them in spaced relation, the cathode passing through the insulator, the cathode having a different cross-sectional shape than the opening in the insulator to provide



supporting contact surfaces of limited area and the periphery of the insulator being of different shape than the cross-sectional shape of the electrode to provide supporting surfaces of limited contact.

1,901,704. METHOD OF MANUFACTURING BLADE RING STRUCTURES. WILLIAM J. DELLES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,296. 5 Claims. (Cl. 29—156.8.)



1. The method of manufacturing blade ring structures which comprises assembling partition members having thickened ends with spacers between them, the thickened ends extending beyond the spacers, casting metal around the thickened ends, and then machining the cast ends to the desired dimensions.

1,901,705. EGG TRAY. ANSON W. DE VOUT and RICHARD W. REGENSBURGER, Chicago, Ill., assignors, by mesne assignments, to Industrial Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,781. 2 Claims. (Cl. 65—13.)

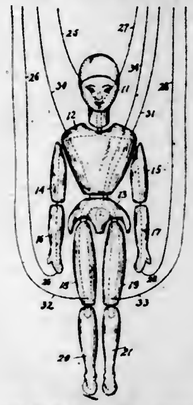


1. An egg cup of one piece of material that is shaped so as to provide a body portion and a bottom portion and which in any horizontal cross section is circular but which in vertical cross section gradually decreases in passing from top of the cup to the bottom portion thereof and which cup is provided with a handle composed of a flat strip of material bent back upon itself intermediate its ends to form a relative short handle projecting above the mouth or top of the cup, the outer bent back portion being slightly spaced from the upstanding portion of the handle, the lower end of the upstanding portion of the handle being secured to the outside of the body portion of the cup, the lower end of the outer bent back portion of the handle terminating near the upper edge portion of the cup, the handle being shaped so that no portion thereof in horizontal plan extends substantially beyond intersecting lines tangent to the upper exterior part of the body portion of the cup and which lines are perpendicular to each other.

1,901,706. PRODUCTION OF PULP. THOMAS LEONIDAS DUNBAR, Watertown, N. Y., assignor to Chemipulp Process, Incorporated, Watertown, N. Y., a Corporation of New York. Filed Apr. 16, 1932. Serial No. 605,696. 12 Claims. (Cl. 92—11.)

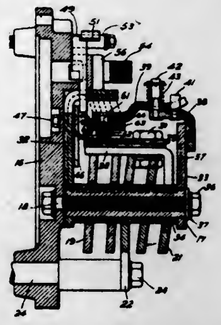
1. A process for the production of pulp which comprises soaking fibrous material in heated bisulphite liquor under a pressure of approximately 50 pounds until the extractives are substantially removed therefrom and the liquor has penetrated the chips, draining the bisulphite liquor from the fibrous material and mingling said liquor with fresh liquor for reuse, digesting the fibrous material under heat and pressure in bisulphite liquor until the lignin is substantially removed therefrom, withdrawing bisulphite liquor from the material and mingling it with fresh liquor for reuse, and cooking the fibrous material in alkaline liquor until the incrustants of the cellulose are substantially removed.

1,901,707. TOY. LOUISE M. DUNN and WINIFRED H. MILLS, Cleveland, Ohio. Filed Oct. 31, 1931. Serial No. 572,362. 1 Claim. (Cl. 46—40.)



A toy having the shape of the human body, said toy consisting of a plurality of molded sections and including a head section, an upper trunk section, a lower trunk section, arms composed of upper and lower sections, and legs composed of thigh and lower leg sections, said sections being spaced apart and freely movable in all directions relative to each other, strings embedded in said sections and extending across the spaces between the sections to flexibly secure the sections together, a plurality of strings spaced apart laterally being provided for the joints between the trunk sections, between the thigh and lower trunk sections, and at the knee joints, and providing for universal ariculation between the sections so connected but normally holding said sections in their normal relation.

1,901,708. INVAR RELAY. WILLIAM M. ELLINGSON, Fargo, N. Dak., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 11, 1931. Serial No. 574,317. 8 Claims. (Cl. 175—336.)



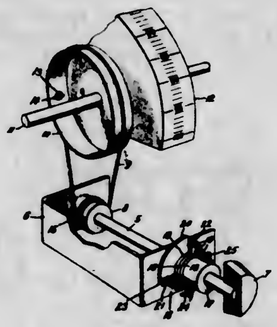
1. A thermal relay including a source of magnetomotive force, a flux-carrying structure therefor including a movable armature, said structure providing two parallel related flux paths and means for manually varying the reluctance of one of said parallel related flux paths.

1,901,709. METHOD FOR DRIVING INTERNAL COMBUSTION ENGINES. RUDOLF ERREN, Berlin, Germany. Filed Mar. 15, 1930, Serial No. 436,252, and in Germany June 1, 1929. 3 Claims. (Cl. 123—39.)



1. A method of driving two-stroke internal combustion engines on oxyhydrogen gas, comprising the steps of keeping the valves closed during 10% of the admission stroke so as to create a rarefaction of air in the cylinder, then opening the admission valve and keeping said valve open during further 20% of the stroke, closing said valve and letting the piston move further 10% of the stroke until ignition takes place, and opening the exhaust valve near the end of said stroke.

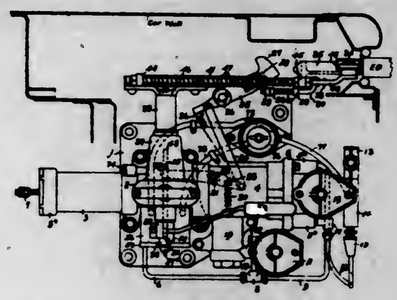
1,901,710. STOP MEANS FOR ROTARY SHAFTS. MARK FLAHERTY, Haddon Heights, N. J., assignor to General Electric Company, a Corporation of New York. Filed Mar. 26, 1930. Serial No. 439,235. 5 Claims. (Cl. 94—7.)



1. The combination with a mechanical drive mechanism including a rotatable control shaft, a movable driven element having a desired range of movement between predetermined limits, a flexible cord arranged to connect said shaft and element for transmitting a moving force from said shaft to said element, said control shaft requiring at least 360° of rotation to carry said driven element between said limits, of a stop means for limiting the movement of said element to a desired range, said stop means being connected directly with said shaft whereby a moving force applied to said shaft and received by said stop means is prevented from being transmitted through said cord.

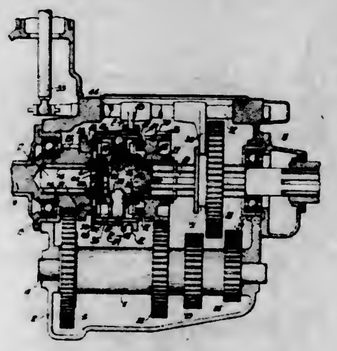
1,901,711. CLOSURE OPERATING AND LOCKING DEVICE. PARIS R. FORMAN, Rahway, N. J., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Original application filed Oct. 22, 1930, Serial No. 490,459. Divided and this application filed July 24, 1931. Serial No. 552,902. 11 Claims. (Cl. 268—50.)

1. In a combination as described, a movable door, a motive device having an operating member for operating the door, connecting links between the operating member of the motive device and the door movable to a position when the door is closed for preventing opening of the door when pressure is applied directly thereto, means for locking the door in closed position, and manual means con-



nected to said operating member and locking means for unlocking the door and moving the links sufficiently to permit the opening of the door.

1,901,712. MOTOR VEHICLE TRANSMISSION MECHANISM. JOHN M. CHRISTMAN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 16, 1930. Serial No. 489,085. 8 Claims. (Cl. 192—53.)

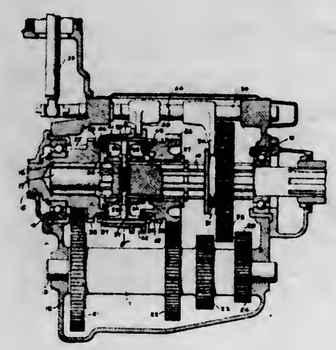


1. In a motor vehicle transmission having driving and driven members, a positive clutch device having an element secured to one member and a cooperating element slidably mounted in driving relation on the other member, means connected to slide said positive clutch element, a friction clutch between said members having a sliding element, yieldable means connecting said sliding element and independent of said positive clutch sliding means to engage said friction clutch upon preliminary movement of the positive clutch element toward engaging position, and spring means associated to automatically disengage the friction clutch upon yielding of said connecting means.

1,901,713. TRANSMISSION MECHANISM. JAMES G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1930. Serial No. 466,418. 19 Claims. (Cl. 192—53.)

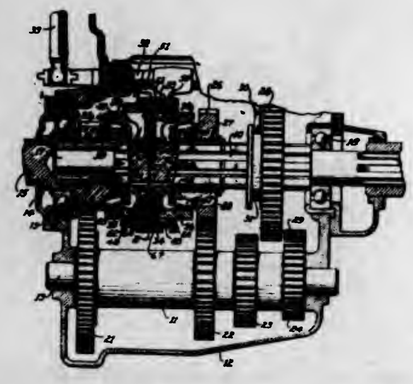
1. In a motor vehicle transmission having driving and driven members, positive clutch means slidable to con-

nect said members, a friction clutch between said members engageable in advance of the positive clutch means,



and radially displaceable levers operable by movement of the positive clutch means to engage the friction clutch.

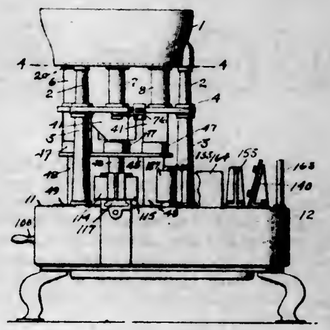
1,901,714. CLUTCH MECHANISM. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 2, 1930. Serial No. 499,514. 14 Claims. (Cl. 192—47.)



14. In a transmission having a driving and a driven member, a clutch device including a clutch element movable axially of said members, an operating member telescoping the clutch element, radially extending oscillatory levers anchored to said driven member and connecting said operating member to said clutch element, and a latch device yieldably connecting said operating member and said clutch element in clutch engaged position.

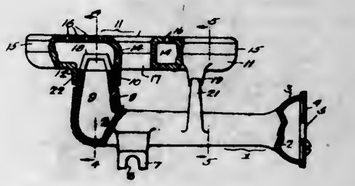
1,901,715. COIN COUNTING AND WRAPPING MACHINE. WILSON T. YOUNG, Oakmont, Pa., assignor to The Farrell Company, a Corporation of Delaware. Filed Sept. 8, 1929. Serial No. 390,073. 9 Claims. (Cl. 29—5.)

1. In a machine for counting and packaging coins and like articles, means for counting the coins, means for packaging the counted coins, driving means and means for automatically connecting the counting mechanism and the packaging mechanism alternately with the driving means so arranged that on completion of the counting operation the counting mechanism will stop and the packaging



mechanism will start to operate and upon the completion of the packaging operation the packaging mechanism will stop and the counting operation will resume operation.

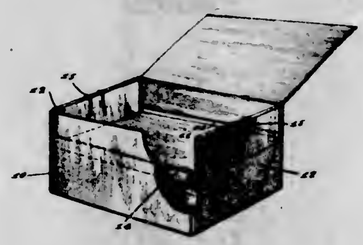
1,901,716. GAS BURNER. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 29, 1931. Serial No. 547,731. 1 Claim. (Cl. 158—116.)



The combination in a gas burner, of a lower and an upper section, the lower section forming a mixing chamber and having an upturned neck, the end of the neck being tapered and ground, said neck having a bridge piece located above the tapered portion, the upper section forming the burner proper and having a hollow hub and hollow perforated arms communicating with the hub and also having a depending portion fitting over the ground extension of the neck, the inner surface of the projection being ground to form a gas-tight joint between the two sections; means for securing the depending portion of the upper section to the neck; and means for supporting the upper section some distance from the neck.

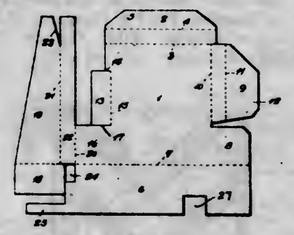
1,901,717. DISPLAY DEVICE. WILLIAM O. ALLEN, Glendale, Ky. Filed Dec. 29, 1931. Serial No. 583,756. 1 Claim. (Cl. 206—44.)

A device for the purpose indicated for serving as a false bottom in a box or carton, the same comprising a substantially inflexible flat member dimensioned according to the plan dimensions of the box in which it is to be used, and flexible sheets secured to the top and bottom faces thereof and extending beyond the ends and secured together to provide tongues or flaps for folding over the edges of the carton to be secured thereto to selectively position the false bottom at any point in the height of the carton, the sheets being extended beyond the side edges of the board



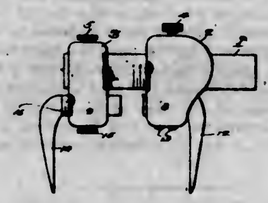
to provide long narrow flaps at the front and rear edges of the same for dust excluding contact with the front and rear walls of the box.

1,901,718. METHOD OF MAKING LATCHES FOR RAIL SWITCHES AND BLANKS FOR THE SAME. BENJAMIN R. BARNES, Jacksonville, Fla. Filed Apr. 1, 1932. Serial No. 602,541. 4 Claims. (Cl. 113—116.)



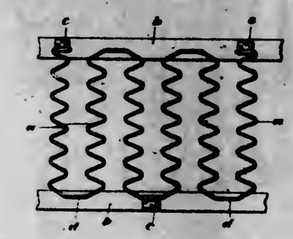
1. A blank for the fabrication of a latch stand, comprising a metallic section foldable to form one-half of the body portion of the stand and an outstanding securing lip, the section being divided vertically from the upper edge but not extending to the lower edge, said divided portions being folded relative to each other to form right-angled sections to provide an abutment.

1,901,719. MEASURING DEVICE. SANTE BARONI, Philadelphia, Pa. Filed Dec. 15, 1931. Serial No. 581,247. 5 Claims. (Cl. 33—3.)



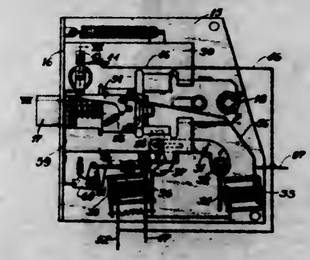
4. In a gauge for footwear, the combination with a bar having width and length scale markings grouped thereon, of movable means on said bar arranged to cooperate with each of said scales, and a movable arm carried by one of said movable means the said arm having a scale marked thereon arranged to cooperate with said movable means in conjunction with the other movable means and the other scale on said bar to determine the measurements of certain parts of footwear having a definite relation to the length and width thereof.

1,901,720. UPHOLSTERING SPRING. MORITZ BIENWINKEL, Ohrdruf, Germany. Filed July 10, 1930. Serial No. 467,035. 4 Claims. (Cl. 155—179.)



8. A spring device comprising a continuous spring member and a supporting frame therefor, said spring member including an arched portion having each of its opposite ends free to give under stress, and arched members anchored to the frame extending in opposite directions one from each of said ends.

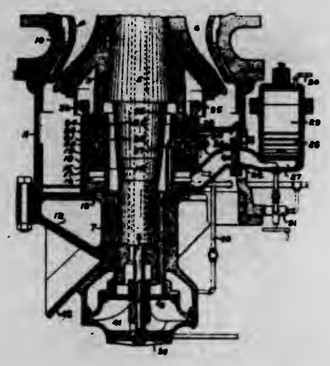
1,901,721. ELECTRIC DOORLOCK. FAY BEAL, Kokomo, Ind., assignor to Klagston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Jan. 27, 1930. Serial No. 423,682. 4 Claims. (Cl. 70—50.)



1. In combination with a plurality of door locks for an automobile, each of said locks including a latch element, an outside and an inside operating handle therefor, a source of electrical energy, interlock means adapted when set to operably disconnect said outside handles from said latches to prevent latch releasing movement thereby, means for electrically actuating said interlock means to set and released positions, a master lock, means associated with said master lock for temporarily connecting the electrically actuating means to the source of electrical energy when the master lock is actuated, means operably connecting the inside handles to the latch elements whereby each latch may be individually retracted when said outside handles are operably disconnected from said latches.

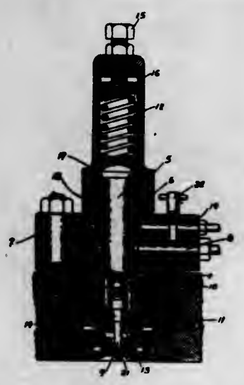
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1,901,722. PACKING STRUCTURE. GEORGE D. BECKER, West Allis, and RAY C. NEWHOUSE, Wauwatosa, Wis., assignors to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,268. 18 Claims. (Cl. 74—109.)



1. In combination, an annular plunger having segregated, radially spaced annular packings, a rigid ring coacting with each of said packings, and means for applying equal pressures to both of said packings through said rings.

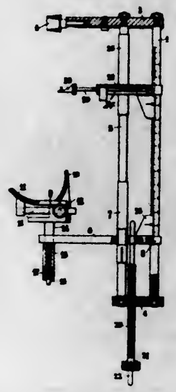
1,901,723. INTERNAL COMBUSTION ENGINE. PAUL BELYAVIN, London, England. Filed Jan. 27, 1930, Serial No. 423,823, and in Great Britain Jan. 28, 1929. 9 Claims. (Cl. 297—107.5.)



3. In an internal combustion engine, a fuel injection valve including a spring-loaded plunger arranged to be reciprocated by the rise in fuel pressure, a valve normally held closed by the plunger, and a spring operable upon the valve to open the same when the plunger is removed therefrom.

1,901,724. MEASURING APPLIANCE. NORMAN GODFREY BENNETT, London, England. Filed June 13, 1929, Serial No. 370,687, and in Great Britain July 28, 1928. 5 Claims. (Cl. 33—174.)

1. A device for facial measurement comprising an oblong framework, a member fixed to and extending laterally of said framework, a plastic material receiving cup swivelly mounted on the free end of said fixed member, a member mounted near the other end of the framework and longitudinally slidable thereon, means for measuring



the displacement of the slidable member relative to the cup, and a chin engaging member yieldingly mounted on the projecting end of the slidable member.

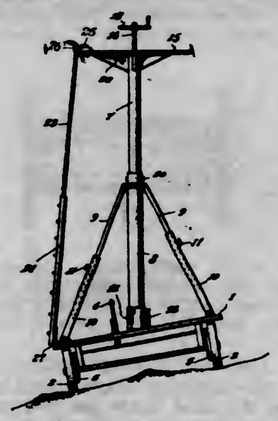
1,901,725. SCARF. WILSON L. BLAYNEY, Chicago, Ill., assignor to Marshall Field & Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 26, 1932. Serial No. 630,598. 4 Claims. (Cl. 41—17.)



4. As a new article of manufacture, scarf goods from which unit V-shaped scarf areas may be cut for sale purposes, a continuous piece of scarf material with longitudinal selvage edges, and having upon the material a series of V-shaped unit areas longitudinally extending with respect to said scarf goods, the arms of each V-shaped unit extending substantially on the bias of the material and having side border portions on each arm in mutual close relation whereby a line of cut is indicated between each of said areas.

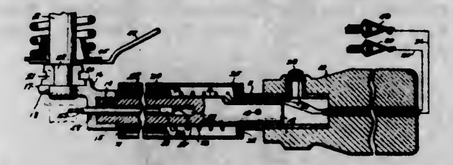
1,901,726. SCAFFOLD. CLEMENT BONNET, Menominee, Ill. Filed May 29, 1930. Serial No. 457,225. 8 Claims. (Cl. 304—9.)

1. A scaffold comprising a mast including telescoping sections, a platform carried by the upper section, an elevating screw within the mast swiveled to the upper section, a nut fixed within the lower section and engaging



the elevating screw, and means above the platform for rotating the elevating screw for raising or lowering the platform as required.

1,901,727. VALVE SPRING RETAINER TOOL. CHARLES W. BOZLAND, Maywood, Ill. Filed May 12, 1932. Serial No. 610,947. 8 Claims. (Cl. 81—3.)



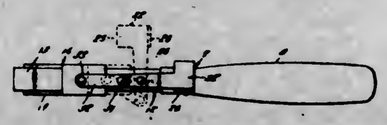
1. A device as described comprising a handle, a keeper supporting member supported by the handle, means for magnetizing the member, a guide means below the member, and frictional means for maintaining the guide means in adjusted position relative to the handle.

1,901,728. FINISH REMOVER. THEODORE F. BRADLEY, Westfield, N. J., assignor to Chadeloid Chemical Company, New York, N. Y., a Corporation of West Virginia. Filed Dec. 2, 1927. Serial No. 237,342. 10 Claims. (Cl. 87—5.)

1. A finish remover containing tertiary butyl alcohol as the essential wax solvent, and wax dissolved therein.

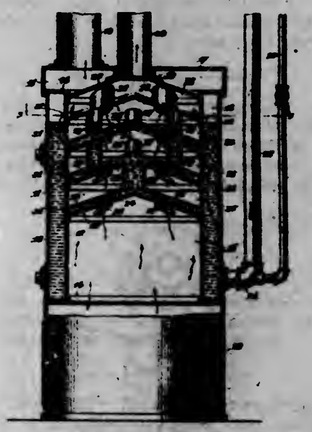
10. A finish remover containing a wax and containing a tertiary alcohol, said tertiary alcohol being present in an amount sufficient to dissolve substantially all of said wax if the two were present in a composition consisting solely of said wax and said alcohol.

1,901,729. LIFTER. JOHN F. BREWER, Ossining, N. Y., assignor of one-half to Arthur Greenfield, New York, N. Y. Filed May 14, 1932. Serial No. 611,420. 10 Claims. (Cl. 294—81.)



1. A pot lifter comprising a handled jaw member for engaging the interior of the pot, another jaw member slidable on the handled jaw member and engageable with the exterior of the pot, a laterally swingable operating lever pivoted upon one side of the handled jaw member, a link pivoted to the lever and to the other jaw member.

1,901,730. BOILER. BUFORD M. BROOKS, Dover, N. J. Filed Mar. 10, 1932. Serial No. 598,625. 6 Claims. (Cl. 122—165.)



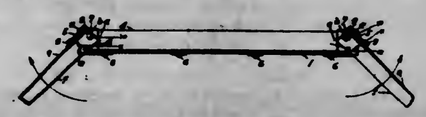
1. In a boiler, a shell, a plurality of spaced superposed walls arranged within and secured to said shell to define therewith alternate water spaces and heat spaces, water tubes secured to said walls in such manner as to establish communication between said water spaces, a water jacket having an inlet, said jacket being in direct communication with each of said water spaces, and fines secured to said wall in such manner as to establish communication between said heat spaces.

1,901,731. CYSTOSCOPE AND THE LIKE. LEO BUERGER, New York, N. Y. Filed May 9, 1932. Serial No. 610,269. 11 Claims. (Cl. 128—7.)



1. In a cystoscope having a window near one end and a telescope comprising a tube with an objective lens fixed in one end and an eye-piece in the other end, means for moving the telescope and thus the objective lens along the length of the window.

1,901,732. FOLDING GAME TABLE. EDWARD A. CLARK, Saline, Mich. Filed June 16, 1931. Serial No. 544,780. 8 Claims. (Cl. 45—11.)



2. A folding table adapted for playing parlor games, comprising a flat table top board having side bars mounted on opposite sides thereof positioned at right angles thereto, said side bars being projected beyond the board edges

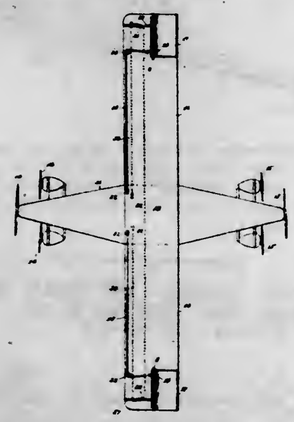
at both ends thereof, an attaching plate with slotted recesses formed therein fixedly mounted on the inner faces of said side bars at the projected ends thereof, pairs of rigidly connected support legs mounted between said side bar attaching plates, said pairs of legs having pairs of pin attaching members mounted thereon positioned to engage the respective slotted recesses of the attaching plates and capable of allowing rotation of said pairs of support legs about one set of support pins to various positions with the table top and to lock rigidly therewith when the pairs of support legs are at right angles with said table top by a lateral displacement of said leg pins within the attaching plate slots.

1,901,733. UNCURLER GUIDE FOR SEWING MACHINES. GROVER C. COOPER, Collingswood, N. J., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 10, 1930. Serial No. 451,418. 10 Claims. (Cl. 112—20.)



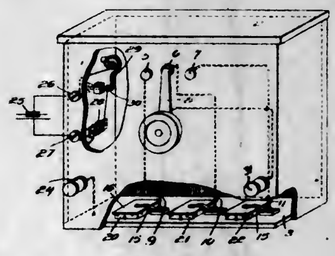
1. A fabric guiding and uncurling device for sewing machines comprising a plurality of independent uncurling members located one in rear of the other and operating in succession on the fabric sections for uncurling the edges thereof.

1,901,734. AIRCRAFT. STEPHANOS COTROUMPAS, Brooklyn, N. Y., assignor, by mesne assignments, of one-half to Charles H. Sullivan, Northport, N. Y. Filed Jan. 22, 1931, Serial No. 510,564. Renewed Nov. 18, 1932. 3 Claims. (Cl. 244—29.)



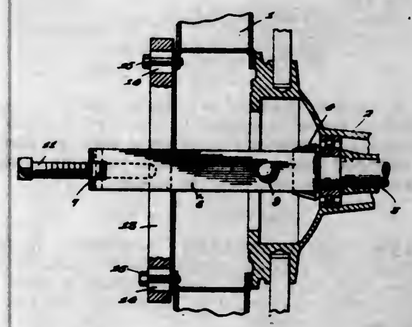
1. In an airplane, in combination, a fuselage, laterally extending wings on the fuselage approximately at the top center thereof, and rudder and stabilizer fins mounted on said wings respectively for movement to different angles of incidence, and separate control means for each of said fins to operate it to change the angle of incidence thereof.

1,901,735. PIEZO ELECTRIC CRYSTAL SYSTEM. ALFRED CROSSLEY, Washington, D. C., assignor, by mesne assignments, to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed July 15, 1925. Serial No. 43,861. 17 Claims. (Cl. 171—327.)



18. In a device for sustaining constant frequency oscillations in an electron to high frequency generator, the combination of a piezo electric quarts crystal capable of being set into oscillations, a hermetically sealed housing for said quarts crystal and means within said housing for heating the interior thereof over a given range of temperature for maintaining said quarts crystal at a selected temperature sufficiently high to prevent the condensation of water vapor upon the surfaces of said crystal.

1,901,736. DRIVE SHAFT AND PINION ASSEMBLY PULLER. JAMES W. CRUMPACKER, Hutchinson, Kans. Filed June 17, 1932. Serial No. 617,857. 1 Claim. (Cl. 29—85.)

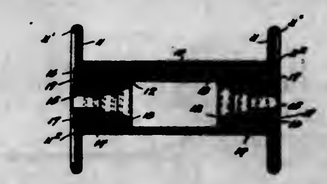


A puller for removing a pinion from an assembled drive shaft comprising a head, an adjusting bolt threaded to said head, elongated arms hinged at one end to the ends of the head and having their opposite ends curved towards each other to engage a pinion by the arms extending through a differential housing, a fastener adjustably connecting said arms adjacent the curved ends thereof, and an anchoring bar having a recess to receive the adjusting bolt and provided with slots to receive fasteners of the differential housing, said bar extending between the arms.

1,901,737. SPOOL. CHARLES K. DUNLAP, Hartsville, S. C., assignor to Sonoco Products Company, Hartsville, S. C., a Corporation of South Carolina. Filed May 18, 1932. Serial No. 612,111. 2 Claims. (Cl. 242—119.)

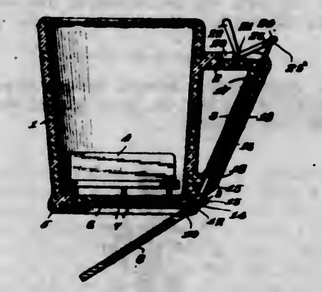
1 In a spool of the type described, in combination, a cylindrical body, plugs secured in the ends of said body, said plugs being centrally apertured, disc-like heads at the ends of said body and centered on the axis thereof, said heads being axially perforated, eyelets projecting

through the registering apertures of the plugs and heads respectively to secure the heads to the plugs, and a plurality of securing members disposed around each eyelet,



each such member being positioned in part in the associated plug and in part in the adjacent head, thus preventing relative rotation of the head and plug.

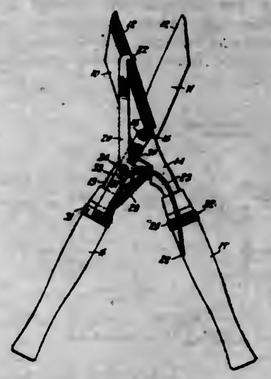
1,901,738. BARBER MUG. ELMER HAYNE, Batesville, Miss. Filed Feb. 26, 1932. Serial No. 595,233. 1 Claim. (Cl. 45—136.)



A shaving mug having a handle defining an upper straight portion and an outer angle portion which is provided with a bore that enters from its lower end and an upper opening that communicates with the bore, said mug having its lower portion provided with an annular rim and its bottom apertured, a flap valve received in the rim for normally contacting the bottom of the mug to close the apertures therein and said valve having a lug extension which is pivoted to the rim and which has its outer portion slotted longitudinally and transversely and which projects beyond the rim, a rod having its ends headed and aperture received through the bore and the opening in the outer end of the handle and the lower head being received in the longitudinal notch of the lug on the valve, a pin passing through said head and through the transverse aligning openings in the lug, a stop element on the rod, a coiled expansion spring in the bore of the handle contacting with the upper wall of said bore and with the stop element, and an angle lever pivotally secured in the upper element of the handle and having its lower and horizontal arm slotted and said slot receiving therethrough a pin on the upper head of the rod.

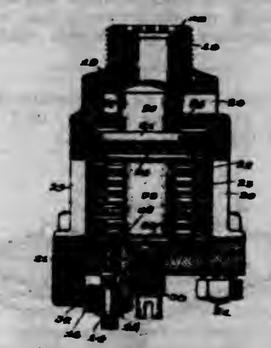
1,901,739. ATTACHMENT FOR SHEARS. KARL ESTEL, New York, N. Y. Filed Dec. 2, 1931. Serial No. 578,812. 2 Claims. (Cl. 30—11.)

1. A work holding attachment for shears including a member having a pair of angularly related arms fulcrumed at their juncture to a fixed point with reference to one of the blades between the pivotal connection of the blades and the handle of said blade, one of said arms extending beyond the pivotal connection of the blades and having a hooked work engaging terminal and a guide on the handle of the other blade cooperating with the other arm of said member to cause the first mentioned arm to move with and relative to the shear blades and spring



means acting upon the member to normally swing the first mentioned arm past the cutting edge of the first mentioned blade when the shears are closed.

1,901,740. BELLOWS CHECKED CYLINDER COCK. MATTHEW R. FERREY, Scranton, Pa., and CHARLES SCHAU, Jersey City, N. J., assignors to Ashco Manufacturing Company, Hoboken, N. J., a Corporation of Delaware. Filed June 28, 1931. Serial No. 546,404. 4 Claims. (Cl. 121—124.)

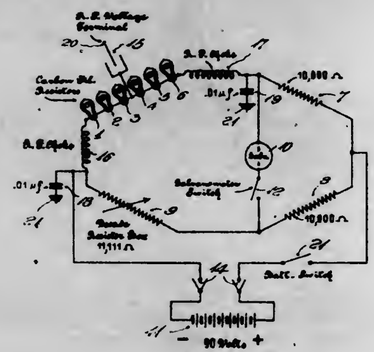


1. An improved cylinder cock, comprising a casing adapted for connection at one end to the bottom port of a locomotive cylinder, a valve mounted in said end of the casing for controlling the exhaust from the cylinder, a sealed expansible element mounted in the casing and engaging the valve, means for supplying pressure to the interior of the expansible element for normally seating the valve, positive mechanical means carried by the casing for maintaining the valve closed upon failure of the pressure, and checking means between the expansible element and said pressure supplying means and controlled by said positive mechanical means for withholding pressure from the expansible element.

1,901,741. HIGH FREQUENCY VOLTMETER. JOSEPH T. FERNEM, Jr., Washington, D. C. Filed Feb. 12, 1930. Serial No. 427,974. 10 Claims. (Cl. 175—183.)

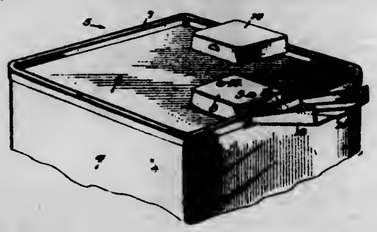
1. A high frequency voltmeter comprising a Wheatstone bridge circuit including a multiplicity of arms, fixed resistance elements disposed in adjacent arms, a

variable resistance calibrated for indicating different voltage values disposed in another arm of said Wheatstone bridge, a thermally variable resistance disposed in the other arm of said Wheatstone bridge and having terminals for the energization thereof by radio frequency currents for correspondingly changing the resistance thereof and effecting the balance of said Wheatstone bridge circuit, radio frequency choke coils disposed



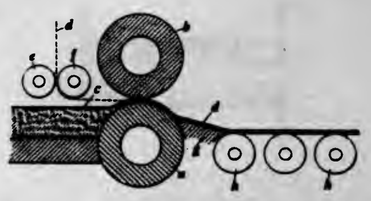
between said thermally variable resistance and the fixed and variable resistance elements in the other arms of said bridge, and a voltage source for normally energizing said Wheatstone bridge, said Wheatstone bridge circuit having an indicating device for determining the balanced or unbalanced condition of said Wheatstone bridge in accordance with the effect of radio frequency currents on said thermally variable resistance and in accordance with the adjustments on said variable resistance.

1,901,742. CONTAINER. CHAMPE GERALDINE FITZHUGH, Washington, D. C. Filed Mar. 21, 1932. Serial No. 600,287. 5 Claims. (Cl. 220—85.)



1. An end closure for a container comprising an end wall portion adapted to close the end of the container, and outstanding marginal portion adapted for securement to the edges of the container sides, a punched-out portion adjacent said outstanding marginal portion raised above the level of said end wall portion and having a pouring orifice therein, and a spout portion flexibly connected to said marginal portion adjacent the position of said punched-out portion and adapted to normally overlie said punched-up portion in a position substantially parallel with said end wall portion but to be bent to a position wherein it extends outwardly from said end wall portion at an angle thereto so as to form a pouring spout for the contents of said container pourable through said orifice in the punched-out portion, all of said portions being formed out of an integral piece of material.

1,901,743. MANUFACTURE OF WIRED GLASS. ALFRED LINDSAY FORSTER, Glasgow, Scotland, assignor to Chance Brothers and Co. Limited, West Smethwick, England. Filed Oct. 28, 1931, Serial No. 570,739, and in Great Britain Nov. 17, 1930. 1 Claim. (Cl. 49—82.)



In apparatus for use in the manufacture of wired glass, the combination of a pair of sheet forming rolls the lower one of which forms one side of a molten glass pool and has its upper surface above the level of the glass in the pool, and an adjustable wire guide situated above the pool at the entrance side of the rolls and adapted to engage the wire with the glass at an acute angle to the surface thereof immediately before the latter enters the rolls, the positioning of the wire in the glass being effected by adjusting the tension thereof.

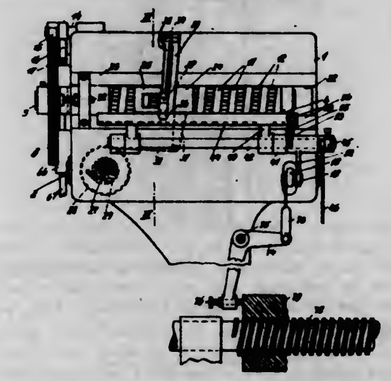
1,901,744. NUT LOCK. EDWARD GILMER GLOVER, Pineville, N. C. Filed Aug. 28, 1929. Serial No. 389,034. 1 Claim. (Cl. 151—7.)



A nut lock comprising a bolt having a threaded shank formed with a longitudinally extending groove, a nut threaded upon said shank and having its outer face formed with radiating seats, a locking washer fitted about said shank against said nut and formed on its lower face with a radial rib to fit in a seat of the nut and an integral lug extending longitudinally of its bore to seat in the groove of the bolt to secure the nut in a set relation to the bolt, a tongue extending radially from said washer, the washer being split radially intermediate the width of the tongue to provide spring arms the opposed faces of which are beveled and are smooth and straight to form a lap joint throughout their entire length, one of said arms springing outwardly and the outer corner of its beveled edge forming a tooth, and a second nut screwed upon said shank and having its inner face formed with teeth, each having a straight cut radial front face and a sloping face leading from the end of the tooth to the straight cut face of an adjacent tooth and constituting a cam surface whereby the

teeth of the second nut may flatten the spring arm of the washer and pass over the same into position to prevent retrograde rotation of the second nut when tightened, the side faces of the arms being parallel and said arms projecting outwardly from the nut a sufficient distance to be grasped under pressure to release the second nut.

1,901,745. ROW COUNTER FOR FLAT KNITTING MACHINES. WOLDEMAR HEINITZ, Chemnitz, Germany, assignor to Schubert & Salzer Maschinenfabrik Aktiengesellschaft, Chemnitz, Germany. Filed Nov. 14, 1931, Serial No. 575,110, and in Germany Aug. 29, 1929. 12 Claims. (Cl. 66—167.)

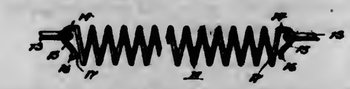


1. A row counter for flat knitting machines comprising a rotary cylinder having a helical ridge with marks corresponding to the numbers of rows being knitted, means for rotating said cylinder, a member adapted to be positively connected to the helical ridge of said cylinder so as to be shifted as the cylinder rotates, means on said member for indicating the marks on said ridge which correspond to the rows being knitted at a given relative position of said member and said cylinder, means for returning said cylinder and said member to their initial positions, means for locking said cylinder against the action of said returning means, and automatic means for releasing said locking means.

1,901,746. PROCESS FOR PREPARING CAMPHENE. CLYDE O. HENKE, South Milwaukee, Wis., and GUSTAV ETTEL, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 30, 1932. Serial No. 602,102. 16 Claims. (Cl. 260—167.)

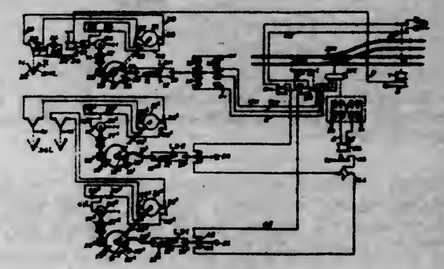
1. A process for preparing camphene which comprises reacting upon bornyl chloride in an aqueous medium with an alkaline agent in the presence of a water-soluble compound of abietene-sulfonic acid.

1,901,747. HELICAL CONNECTER. WILLIAM A. HOLT, Mebane, N. C. Filed Oct. 5, 1929. Serial No. 397,610. 2 Claims. (Cl. 5—269.)



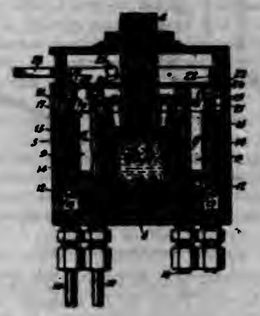
2. A connecter for bed bottoms comprising a helical spring portion, and a hook formed at each end of said portion, said hook terminating in a nose directed outwardly and away from said spring portion to form a hump on the hook, said hook and nose lying wholly within the projected diameter of the connecter.

1,901,748. INTERLOCKING SYSTEM FOR RAILROADS. WINTHROP K. HOWE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed July 31, 1930. Serial No. 472,051. 11 Claims. (Cl. 246—135.)



1. In a power interlocking system, the combination with a power-operated track switch and signals governing train movement over said switch, power-operated control devices for said switch and signals, mechanical interlocking between said control devices, and manually operable levers one for each control device for governing the power operation of said control devices individually.

1,901,749. VALVE CONTROLLING MEANS FOR FLUID DISTRIBUTING DEVICES. ALBERT JOHNSON, New York, N. Y. Filed Aug. 26, 1930. Serial No. 477,880. 1 Claim. (Cl. 184—82.)

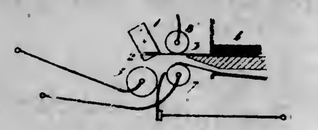


In a fluid distributing device, a reservoir having a plurality of outlets arranged in a circle, a valve for each outlet having their stems arranged in a circle with the ends disposed in a common plane, means for normally seating the valves to close the outlets and a common means adapted to act upon said stems for unseating the valves in unison to open the outlets, said means comprising a thrust ring engaging the valve stems, an annular rotatable actuator contacting with the thrust ring and having circumferentially spaced cam portions and stationary devices with which the cam portions engage for imparting movement to the thrust ring.

1,901,750. MACHINE FOR MANUFACTURING BOXES. BROR ANDERS EMIL JOHNSON, Alsten, Sweden, assignor to Aktiebolaget Gerh. Arskms Mekaniska Verkstad, Stockholm, Sweden, a Corporation of Sweden. Filed July 11, 1931, Serial No. 550,160, and in Germany Apr. 22, 1930. 8 Claims. (Cl. 93—40.)

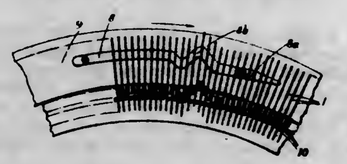
1. In a machine for manufacturing boxes and similar articles from veneer and the like, the combination of a mandrel adapted to have the veneer wound thereon, a roller for pressing the veneer against the mandrel, a second roller and a counter roller coacting to fix a pasted

paper strip to the veneer, the strip being wound around the box for keeping the same together, and means for shifting the position of the second mentioned and coun-



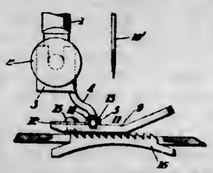
ter rollers with relation to the mandrel at the end of the winding of the veneer to guide and prevent reverse bending of the latter.

1,901,751. KNITTING MACHINE SINKER. THOMAS HENRY JONES, Woodthorpe, England. Filed Mar. 8, 1929, Serial No. 345,521, and in Great Britain Mar. 8, 1928. 4 Claims. (Cl. 66—102.)



1. In a knitting machine, reciprocally mounted bearded needles, a plurality of sinker elements arranged to be projected between said needles, needle presser devices arranged to be actuated in unison with the sinker elements, means for laying threads on the needles while they are in their upper position and the sinkers are in normal retracted position and means constructed to cause (1) said sinker elements and said presser devices to be projected from their normal retracted positions toward the needles whereby the presser devices are caused to press the beards and permit casting off of old loops during downward movement of the needles, (2) then to cause retraction of the sinker elements while the needles are down, (3) then to again project the said elements to press the new loops forward and hold the fabric clear of the needle beards during the upward movement of the needles, and finally (4) to return the sinker elements to their retracted position as the needles attain their uppermost position.

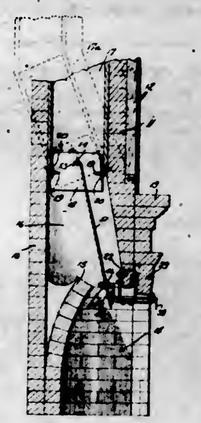
1,901,752. SEWING MACHINE PRESSER-FOOT. JOHN D. KARLE, Roselle Park, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 14, 1931. Serial No. 575,022. 5 Claims. (Cl. 112—235.)



1. A sewing machine presser-foot comprising a shank, a member depending from said shank having its lower end curved both transversely of and in the direction of the line of seam-formation, a sole-plate, and means for retaining said sole-plate on said depending member.

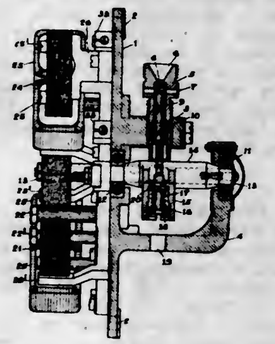
1,901,753. FIREPLACE DAMPER CONSTRUCTION. JOSEPH KOBERLING, San Francisco, Calif. Filed July 26, 1932. Serial No. 624,859. 6 Claims. (Cl. 126—238.)

1. In a fireplace damper construction, a key stone for the fireplace, a pivotally mounted damper and operating means therefor including an adjustable frame to accommodate mounting of the frame on key stones and fireplaces of different sizes, a damper operating rod rotatably supported on the frame and a link rod between the operating



rod and damper including a universal joint comprising an arm with the universal joint at the outer end of the arm and said link rod being adjustably positioned with respect to the universal joint.

1,901,754. TRAIN CONTROL SYSTEM. RICHARD C. LEAKE, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Feb. 27, 1930. Serial No. 431,769. 8 Claims. (Cl. 137—139.)

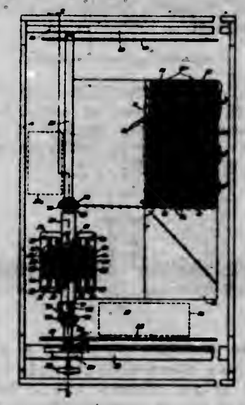


1. In a valve for automatic train control systems, in combination, a support plate, a spindle pivoted in the plate, a valve housing on the plate, a valve in the housing, a stem on the valve, biasing means for biasing the valve to open position, a cup member carried by the spindle, a separate spring pressed plunger in the cup member with one end bearing against the stem on said valve for operating the valve, and electro-magnetic structure for operating the spindle.

1,901,755. MEANS FOR USE IN NAVIGATING AND LIKE OPERATIONS. CLAUDE DE VINCHELEZ LE SUEUR, Richmond, England. Filed Dec. 9, 1930, Serial No. 501,158, and in Great Britain Jan. 8, 1930. 5 Claims. (Cl. 33—79.)

1. A navigational apparatus comprising a plotting table having thereon a "fore and aft" line and a plurality of

lines radiating from a fixed point on said "fore and aft" line and a plurality of concentric circles and intersecting parallel lines indicating distances, a plurality of indexes



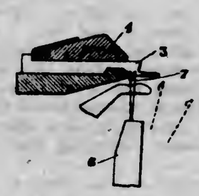
movable longitudinally and transversely of the table, and means for maintaining said indexes always in parallelism with the "fore and aft" line.

1,901,756. ALTERNATING CURRENT RECTIFYING ELEMENT. JOHN G. H. LINDSAY, Cincinnati, Ohio, assignor, by mesne assignments, to The Union Switch & Signal Company, a Corporation of Pennsylvania. Filed Apr. 22, 1927. Serial No. 185,911. 6 Claims. (Cl. 175—366.)

1. The process of making a rectifying element comprising coating the edges of a copper plate with a non-conducting material adapted to adhere thereto, coating the center of said plate with copper oxide and reducing the surface of said coating to metallic copper.

6. The process of making rectifying elements of the class described comprising the step of oxidizing one surface of a copper element at a temperature just below the melting point of copper, cooling said element substantially to room temperature, then bringing said element to a temperature below the melting point of red copper oxide but not substantially below 1050° F., and reducing the surface of said copper oxide coating to copper at said temperature.

1,901,757. PROCESS FOR MAKING FULL FASHIONED STOCKINGS. KARL RICHARD LIEBERKNECHT, Oberlungwitz, Germany, assignor to Karl Lieberknecht G. m. b. H., Oberlungwitz, Germany. Filed Aug. 22, 1931, Serial No. 558,811, and in Germany Oct. 9, 1930. 4 Claims. (Cl. 66—82.)



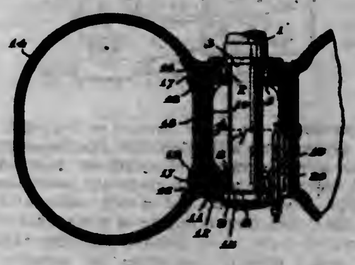
1. In a process for knitting a full fashioned stocking, the steps of knitting a plurality of courses to constitute part of the heel caps and simultaneously preventing press-off of the stitches on the instep needles, then moving the instep needles out of the knitting line and beyond the range of the sinkers and knocking-over bits and knitting the remainder of the heel caps.

1,901,758. DOOR ELEVATING ARRANGEMENT. CARL LUTZ, Hammond, Ind., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 7, 1931. Serial No. 507,076. 11 Claims. (Cl. 16—99.)



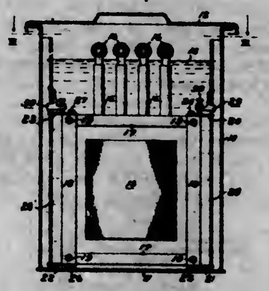
7. In a house car in combination, a track, a door frictionally supported on said track in lowered position and means for elevating said door, said means comprising a plurality of transversely inclined rollers eccentrically connected to said door and means adapted to rock said rollers transversely to elevate said door.

1,901,759. AIRPLANE LANDING WHEEL. ALGER G. MARANVILLE, Akron, Ohio, assignor to The General Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Jan. 18, 1930. Serial No. 421,695. 18 Claims. (Cl. 152—29.)



1. An airplane landing wheel comprising a hub, an annular tire having the form of an endless tube and having a circumferentially and transversely continuous wall at the interior thereof formed to fit on said hub, a metal reinforcing band embedded in the wall of the tire, and means forming a rigid connection between the hub and reinforcing band for positively holding the tire against circumferential movements on the hub.

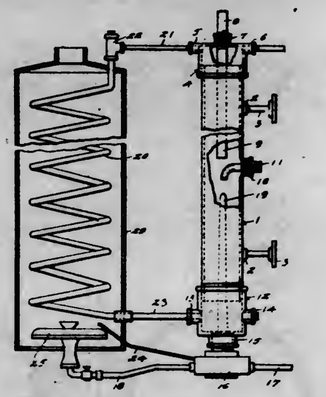
1,901,760. CLAMPING DEVICE. WILLIAM ELMER MCCLINTOCK, Bellevue, Pa., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 14, 1931. Serial No. 568,695. 8 Claims. (Cl. 175—361.)



1. In combination, a casing having a side wall, a pair of stationary flanged bars arranged in parallel spaced relation within said casing and attached to said side wall,

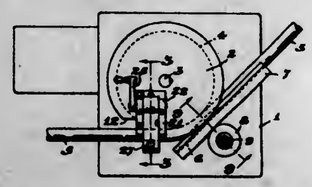
a removable device having a plurality of guide members slidably cooperating with said flanged bars, and locking means engaging said flanged bars for preventing the removal of said device from said casing.

1,901,761. HOT WATER HEATER ATTACHMENT. WILMER E. MCCORQUODALE, Orange, Tex., assignor to Mrs. Gladys McCorquodale Ready, Orange, Tex., and Dr. W. H. Bennett, Humble, Tex. Filed June 2, 1928. Serial No. 282,449. 1 Claim. (Cl. 236—20.)



An attachment for water heaters employing a coil or similar element and a heating unit associated therewith including a water casing of relatively small diameter disposed adjacent to and approximately parallel with the coil, a pipe connecting one end of said casing with the intake of the coil, a cross-over pipe of a diameter less than the interior diameter of the coil and unobstructed throughout its length directly connecting the opposite end of the water casing with the draw-off end of the coil, valve means controlling the flow of fuel to the heating element, means for discharging water into the casing intermediate the ends thereof and below the cross-over pipe and in a direction away from the end of the cross-over pipe whereby to obtain an injector effect operating in conjunction with the resistance of the small diametered cross-over pipe to maintain a circulation of water through the coil and out of the discharge end thereof when the heater is in use, and a heat sensitive element operatively connected with and controlling said valve means and disposed at a point where the water entering the casing intermediate the ends thereof will come in intimate contact with said heat sensitive element.

1,901,762. BENDING APPARATUS. FRANK H. MEYER, Warren, Ohio, assignor to The American Welding & Manufacturing Co., Trumbull, Ohio, a Corporation of Ohio. Filed Feb. 6, 1931. Serial No. 513,851. 10 Claims. (Cl. 153—40.)



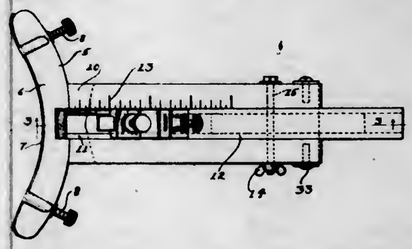
1. In a bending apparatus having a rotatable bending roll, means for clamping the article to be bent to said roll comprising a support secured to said roll and having an article engaging recess therein, an arm pivoted to said support transversely of the axis of said roll and having an article engaging recess therein, means for pivoting said arm, and means for bodily moving said arm radially of said roll to releasably clamp the article to be bent against said support.

1,901,763. INTAKE MANIFOLD. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 19, 1927. Serial No. 234,417. 25 Claims. (Cl. 123—52.)



1. An intake manifold comprising a hollow member having an opening intermediate the ends thereof for supplying a fuel charge thereto, and including branches of unequal length having passages open at the outer ends thereof to permit of the egress of said charge from the manifold; the passages of the longer of said branches decreasing in cross-sectional area from the inner ends thereof to intermediate points thereof and increasing in cross-sectional area from said points to the outer ends thereof; and the cross-sectional area of the most constricted portions of said longer branches being substantially equal to the cross-sectional area of the shorter of said branches at the entrance thereto.

1,901,764. HAT BRIM TRIMMING TOOL. JOHN MOSCA, Brooklyn, N. Y. Filed Feb. 16, 1931. Serial No. 516,262. 2 Claims. (Cl. 223—24.)



1. In a hand tool for trimming hats, a hat crown engaging member, a hat brim engaging member, connected to and extending at right angles to said hat crown engaging member, said hat brim engaging member having a longitudinal slot and longitudinal tongues extending inwardly from the sides of said slot, a slide adjustably mounted in said slot and having grooves receiving said tongues, said slide being provided with a transverse slot intermediate its upper and lower sides, a securing element extending through said last-named slot and hat brim engaging member for securing said slide in an adjusted position, and a cutter supporting block carried by said slide.

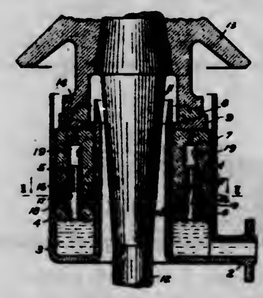
1,901,765. DRUM HEAD TIGHTENER. SIDNEY H. NEWBERRY, Philadelphia, Pa. Filed May 16, 1932. Serial No. 611,660. 5 Claims. (Cl. 84—411.)

1. In a drum head tightener, the combination with a drum body, of a drum head stretched over the drum body, a flesh hoop engaged with the drum body and about said flesh hoop and with which the drum head is engaged, a plurality of tightener hoop retainers mounted on the body circumferentially thereof at spaced intervals, said retainers having guides, drum head tightening rings or hoops engaged between the guides and the flesh hoop, the adjacent edges of said tightening rings or hoops being toothed, said teeth including substantially elongated



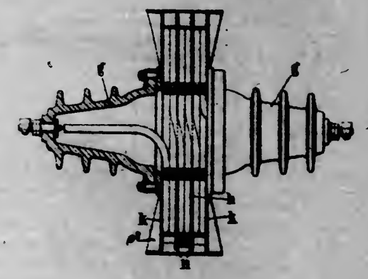
camming edges, and a printers' quoin connection between certain diametrically opposite camming edges of the teeth of the tightening rings or hoops, and means for adjusting said quoin connections for rotating one of the tightening rings or hoops.

1,901,766. PACKING. RAY C. NEWHOUSE, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 7, 1930. Serial No. 465,805. 10 Claims. (Cl. 74—109.)



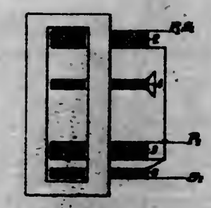
1. In combination, an annular cylindrical casing, a sleeve piston therein, provided with a recess, a compression plate carrying means received in said recess, an annular hydraulic body between the opposed walls of said cylinder, said plate carried means cooperating with said casing and with said piston and compression plate located therein to provide, when said piston is loaded, in said hydraulic body a unit pressure differing from the unit pressure acting externally on said compression plate, said plate carried means presenting transverse channels therethrough in the plane of the hydraulic body and thus permitting the flow of the hydraulic body from points first subjected to pressure by the contact of said piston therewith, due to unavoidable differences in the thickness of said hydraulic body, to provide a self-adjusting equalizing packing for effectively simultaneously sealing the opposed walls of said cylinder.

1,901,767. LIGHTNING OR SURGE ABSORBER. ERIC DOUGLAS TOBIAS NORRIS, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Oct. 19, 1929, Serial No. 400,957, and in Great Britain Dec. 6, 1928. 5 Claims. (Cl. 175—360.)



1. A lightning or surge absorber including a primary element comprising a substantially flat spiral winding for connection in series with the line subject to lightning or other electrical surges disposed between two flat metal flexible surfaces forming part of the secondary element casing for the purposes set forth.

1,901,768. REGULATION OF THE VOLTAGE OF AN ALTERNATING CURRENT CIRCUIT. ERIC DOUGLAS TOBIAS NORRIS, Hollinwood, England, assignor to Ferranti Inc., New York, N. Y. Filed Dec. 3, 1931, Serial No. 578,755, and in Great Britain Mar. 23, 1931. 2 Claims. (Cl. 171—119.)

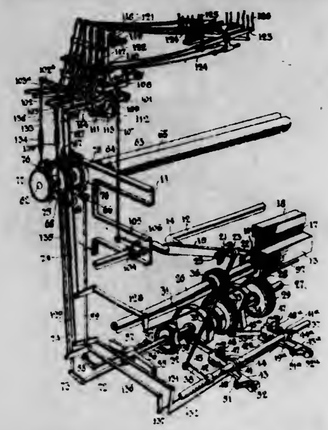


1. An auto-transformer, one circuit of which comprises two windings electrically connected in series and possessing considerable leakage reactance, a short-circuited winding inductively associated with said windings and movable in relation thereto, the other circuit of which comprises one of said first-mentioned windings and a third winding closely associated electromagnetically with the other of said first-mentioned windings but serving to produce a voltage opposed thereto, said third coil being connected to the junction between the first-mentioned windings.

1,901,769. LOOM. SAMUEL PINKNEY PARKER, Franklinton, N. C. Filed Feb. 1, 1932. Serial No. 590,215. 18 Claims. (Cl. 139—25.)

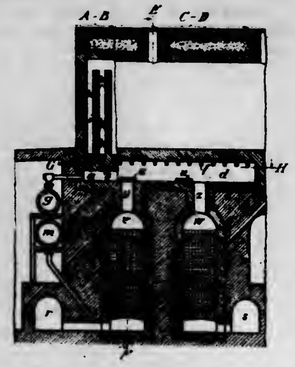
1. The combination with a terry loom of the type in which the reed is shiftable to vary the effective range of its excursions during the beating up of the lay and in

which the extent and timing of such shifting are controlled by a cam mechanism; of a second cam mechanism similar to the first-named cam mechanism but arranged



to give a different extent of shifting; and means for rendering said cam mechanisms effective selectively to control the reed.

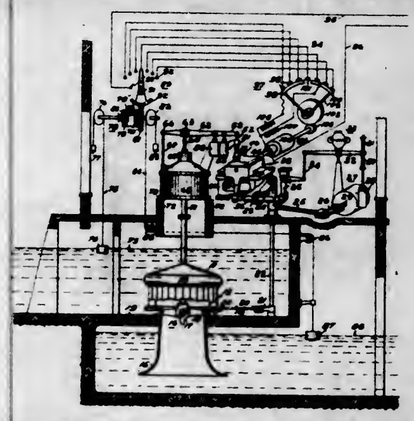
1,901,770. GAS-FIRED FURNACE. HERMAN PETSCH, Recklinghausen, Germany, assignor to the Firm: Carl Still, Recklinghausen, Germany. Filed Dec. 17, 1926, Serial No. 155,477, and in Germany Dec. 28, 1925. 2 Claims. (Cl. 202—135.)



1. In a gas-fired furnace, the combustion chamber, an air regenerator communicating by means of a channel with the combustion chamber at points spaced from each other along the combustion chamber, a second regenerator, a conduit communicably connecting the second regenerator with the channel at a point between the air regenerator and the points of communication of the channel with the combustion chamber, a separate conduit communicably connecting the second regenerator with the combustion chamber, and separate means for introducing fuel gas into the combustion chamber.

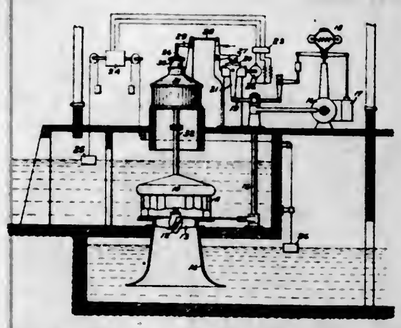
1,901,771. HYDRAULIC TURBINE CONTROL SYSTEM. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 23, 1931. Serial No. 552,639. 10 Claims. (Cl. 253—148.)

1. In combination, a hydraulic energy translating device having tiltable rotor blades and movable guide vanes, a topographic cam movable in one direction in accordance with the motion of said guide vanes, means comprising an electric motor responsive to the effective hydraulic head for moving said cam transversely of said



direction, and means responsive to the variation in altitude of said cam for controlling the tilt of said rotor blades to maintain maximum efficiency of said translating device.

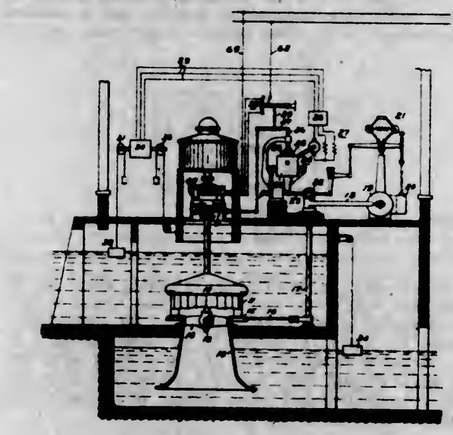
1,901,772. FLUID PRESSURE SERVO-MOTOR FOR TILTING PROPELLER BLADES. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 23, 1931. Serial No. 552,640. 7 Claims. (Cl. 253—143.)



1. In combination, a rotatable shaft, a servo-motor cylinder member attached to said rotatable shaft for rotation therewith, an operating rod co-axial of said rotatable shaft, a piston having an orifice therethrough and dividing said cylinder member into two chambers, means including a slip ring member for maintaining oil under constant pressure in one of the chambers in said cylinder members whereby oil flows through said orifice into the other of said chambers, means for controlling the flow of oil from said other chamber to control the position of said piston relative to said cylinder, and means comprising a stationary trough for conducting oil away from said servo-motor.

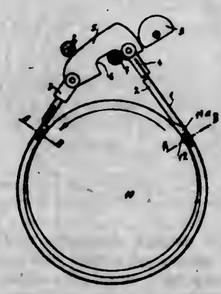
1,901,773. PROPELLER BLADE ADJUSTING SYSTEM. ARNOLD PFAU, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Aug. 22, 1931. Serial No. 558,723. 13 Claims. (Cl. 253—143.)

1. In combination, a propeller shaft, tiltable propeller blades carried by said shaft, a rod for tilting said propeller blades, means including an electric motor for operating said blade tilting rod, a control switch movable from a neutral position to control the energization and



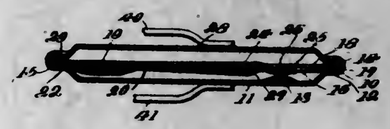
direction of rotation of said motor, and means including a traveling nut member on said motor shaft for restoring said switch to said neutral position.

1,901,774. BRAKE BAND APPARATUS. ERICH FRIEDRICH PULS, Eisenach, Germany, assignor to the Firm Pulsgetriebe Gesellschaft mit beschrankter Haftung, Eisenach, Germany. Filed Jan. 18, 1929, Serial No. 333,863, and in Germany Jan. 27, 1928. 1 Claim. (Cl. 188—77.)



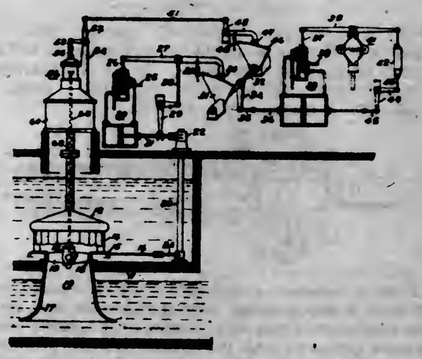
In a change speed gear, improved braking means comprising a drum having a cylindrical periphery and inclined flanges, a brake band having a lining and adapted to fit said periphery and to engage said flanges, means normally tending to urge the bands to engage the drum about its periphery, the said brake band or its lining having a gap formed near one end thereof, the said gap having a leading abrupt boundary and being so shaped that when the drum is rotated in one direction, the leading abrupt edge acts as a scraper to expel lubricant from the periphery of the drum, the other end of the band being continued slightly beyond the periphery of the drum so that it contacts tangentially therewith and so that when the drum is rotating in the opposite direction a film of the lubricant is imprisoned between the said drum and band, which film automatically raises the said band from the periphery of the drum, which band is ordinarily urged against the drum about its periphery by the said means.

1,901,775. THERMOSTATIC SWITCH UNIT. LEWIS REICHOLD, Winsted, Conn., assignor to The Fitzgerald Manufacturing Company, Winsted, Conn., a Corporation of Connecticut. Filed Oct. 19, 1931. Serial No. 569,793. 5 Claims. (Cl. 200—138.)



1. In a thermostatic switch unit, a cup member and a cover member, said members including a peripheral seam to hold them fixedly together, insulation in said seam for holding the said members electrically insulated and including a portion extending inwardly between said members, an intermediate element located between said members and in electrical contact with one member and held by said inwardly extending portion against electrical contact with said other member, a contact on said other member, and a thermostatically responsive device fixed to said intermediate element and including a contact for cooperating with said first contact.

1,901,776. TURBINE CONTROL SYSTEM. JOSEPH J. RING, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 7, 1932. Serial No. 603,732. 16 Claims. (Cl. 253—148.)

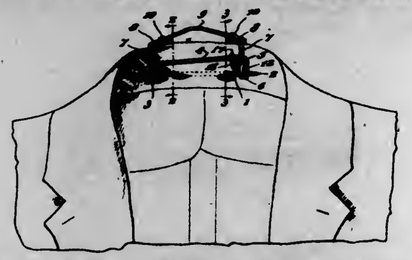


1. In combination, a hydraulic energy translating device having tiltable rotor blades and movable guide vanes, a servo-motor for tilting said rotor blades, a second servo-motor for moving said guide vanes, a cam for controlling the actuation of said rotor blade tilting servo-motor, another cam for controlling the actuation of said guide vane moving servo-motor, and means responsive to the speed of said translating device for controlling the actuation of said cams.

1,901,777. GARMENT HANGER. ROSE J. RINK, Staples, Minn. Filed June 20, 1932. Serial No. 618,225. 2 Claims. (Cl. 2—271.)

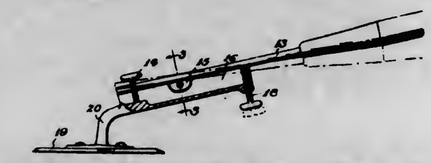
1. A garment hanger comprising a garment-engaging member having a piercing portion and a keeper portion

to retain the piercing portion in engagement with a garment, a keeper hook depending from the keeper portion, a brace forming a connection between the keeper



hook and keeper portion, hanger loops engaged with the garment-engaging member, and a strap attached to and extending between the loops.

1,901,778. HOE. HIRAM P. SCHLAG, Fortuna, Calif. Filed Sept. 27, 1930. Serial No. 484,867. 4 Claims. (Cl. 306—11.)



1. A hoe including a handle shank, a rod carried by the handle shank, a yoke adjustably connected with the rod, a blade connected with the yoke, a shank connecting the blade with the yoke, and means carried by the yoke and cooperating with the rod for adjusting said yoke with respect to said rod.

1,901,779. POWER HAMMER. LEWIS SKEEL and FRANK P. MILLER, Meadville, Pa., assignors to McCrosky Tool Corporation, Meadville, Pa., a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,955. 6 Claims. (Cl. 125—34.)



1. In a hammer, a cylinder, a driven element in the cylinder, a reciprocating driving piston in said cylinder and serving to alternately compress and rarify the air between the same and the driven element whereby the reciprocation of the driving piston is imparted to the driven element, said cylinder being provided with means spaced from the driving piston and uncovered by the driven element only upon reaching the forward portion of the forward stroke of the driving piston and as a preliminary to the rear stroke of the driving piston by which the supply of air between the driving piston and said driven element is replenished during a short portion only of the strokes of the driving piston and the driven element.

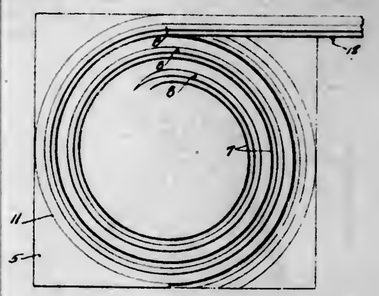
1,901,780. WEATHER STRIP. MYRON O. SLEEPER, Hanson, Mass., assignor to George A. Clapp, Brookline, Mass., and CARL F. WOODS, Winchester, Mass., receivers of E. H. Clapp Rubber Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1931. Serial No. 568,405. 1 Claim. (Cl. 296—44.5.)

In combination with a window frame member having a longitudinal, inwardly projecting abutment, a cushion-ing weather strip for the top of a sliding window pane, comprising a tubular, four-sided cushion strip of resilient material having its rear wall engaging the under surface of the frame and one side wall engaging said abutment, the rear wall having an integral, laterally projecting flange providing a longitudinal channel, and a molding strip fastened to the under surface of the frame and hav-



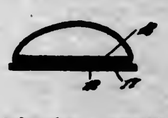
ing a rearwardly directed flange extending along the opposite side wall of the cushion strip and having its free edge engaging in said channel to clamp the cushion strip against the frame, the bottom of the frame having a recess extending longitudinally of the cushion strip and the flange of said strip having a rearwardly projecting portion received in said recess thereby to prevent lateral displacement of the strip.

1,901,781. PROCESS OF MAKING SHOE WELTING. MYRON O. SLEEPER, Hanson, Mass., assignor to George A. Clapp, Brookline, Mass., and CARL F. WOODS, Winchester, Mass., receivers of E. H. Clapp Rubber Company, Boston, Mass., a Corporation of Massachusetts. Filed July 13, 1932. Serial No. 622,226. 5 Claims. (Cl. 12—146.)



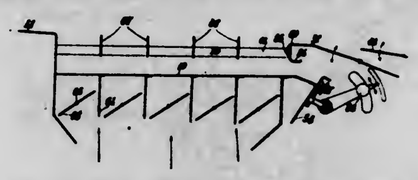
1. A method of making composite welting which consists in uniting blanks of rubber and leather in superposed relation, forming a spiral line in the surface of the resulting sheet thereby to define welting coils of substantially uniform width, and cutting along said line to produce, a continuous strip of welting.

1,901,782. SHOE AND METHOD OF MAKING SAME. MAURICE C. SMITH, JR., and EUGENE C. HEILHECKER, Bristol, R. I.; said Heilhecker assignor to said Smith. Filed July 19, 1932. Serial No. 623,312. 6 Claims. (Cl. 12—142.)



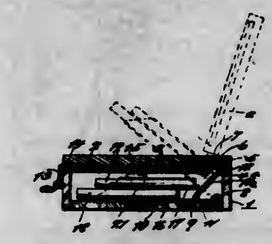
6. The method of forming a cemented shoe which consists in bringing together the fabric surface of an insole and the fabric surface of a vulcanized rubber outsole with lasted edges of a fabric upper between them and cementing the said fabric surfaces together.

1,901,783. APPARATUS FOR THE PNEUMATIC SEPARATION OF MATERIALS OF DIFFERENT DENSITIES. PAUL SOULARY, Bruay-en-Artois, France. Filed Feb. 19, 1931, Serial No. 517,091, and in France Feb. 26, 1930. 2 Claims. (Cl. 209—466.)



1. In a box for an apparatus for pneumatically sorting materials of different densities and of the kind described, transverse partitions arranged in the box and the lower edge of which is at a certain level above the bottom of the said box for retaining a layer of non-sorted materials, a fixed sill at the end located on the down side of the box for providing an outlet of definite height above the bottom of the box, a transverse damper arranged on the down side of the said bottom, means for adjusting the height of the upper edge of the said damper above the said bottom, a damper movable in front of the said sill, a wall above the said sill for forming an extension of the said damper and movable with the latter for constituting an adjustable weir for the materials of the lowest density, an adjustable damper arranged above the down side portion of the said wall.

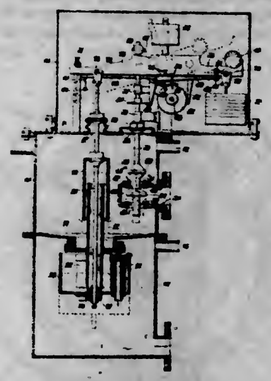
1,901,784. CIGARETTE BOX AND DISPLAY. EDWARD SUBE, Philadelphia, Pa. Filed Apr. 5, 1930. Serial No. 441,941. 3 Claims. (Cl. 206—41.)



1. In a cigarette box and display, the combination with a base section having a ledge at its rear portion provided with notches, of a lid having lugs hingedly mounted in the notches, latching means for the lid, and a spring tensioned cigarette container hingedly mounted in base section at its rear, whereby upon releasing the latching means, the container moves to an inclined position and throws the lid open, and separately attached means carried by the container and sliding against the lid, thereby preventing the lid from marring the tips of the cigarettes.

1,901,785. APPARATUS COMPRISING SIPHONS. NORMAN SWINDIN, Acton, London, England. Filed June 24, 1930, Serial No. 463,517, and in Great Britain Jan. 6, 1930. 16 Claims. (Cl. 73—28.)

1. A siphon meter comprising a measuring chamber, a down flow pipe extending into the lower portion of said chamber, a bucket associated with the lower end of said pipe to form a liquid seal therefor and adapted to be lowered by the weight of a predetermined quantity of liquid therein, a siphon mounted in the bucket for emptying the bucket, a bell enclosing the upper end of the down flow pipe to form a siphon, an operative connection between the bucket and bell whereby the bell is raised and lowered with the bucket, a fulcrumed lever, said operative connection having an extension connected to one arm of said lever, a counterweight carried by the other arm of said lever, a closure for the measuring chamber and a tube open to atmosphere extending into the upper portion of said measuring chamber, the arrangement being such that



the end of the tube within the chamber is adapted to be closed by the liquid rising in the chamber, whereby the quantity of liquid necessary to provide the required head in the chamber may be determined with accuracy.

1,901,786. COVER FOR USE IN TESTING VEHICLE WHEELS FOR MISALIGNMENT. GEORGE H. TABER, Binghamton, N. Y. Filed Feb. 9, 1931. Serial No. 514,405. 4 Claims. (Cl. 33—203.)

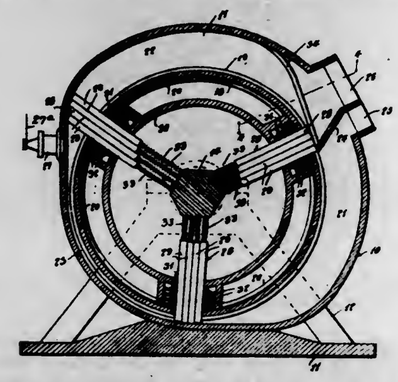


4. A cover for use in the testing of a pneumatic vehicle wheel as to alignment or misalignment, which cover comprises a band of non-yielding material adapted to be mounted on the periphery of the vehicle tire and constructed so as to be held in place on the tread portion of the casing of the tire when applied to the tire in a manner such that the casing presses outwardly against the band and also in a manner such that the band transmits correctly the action of the wheel to which the band is applied, the outer portion of the band being relatively uniform whereby when said outer portion of the band moves in engagement with the proper member of a testing machine during the rotation of the wheel there is communicated to said member of the testing machine the correct plane of the wheel movement or motion relative to the wheel axis.

1,901,787. INTERNAL COMBUSTION ROTARY MOTOR. HERBERT A. WHITE, Belton, Tex. Filed May 21, 1931. Serial No. 539,046. 3 Claims. (Cl. 123—16.)

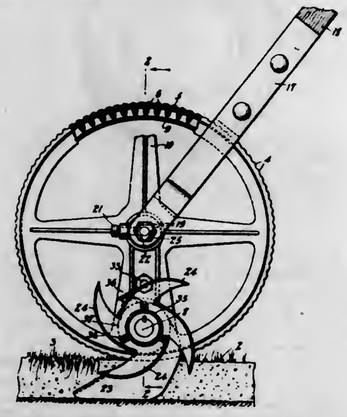
2. A rotary engine having a stator, a rotor operable therein, said parts providing therebetween a combustion chamber and a compression chamber and a restricted space between them, a partition between said chambers,

an exhaust port in communication with the combustion chamber, a series of pistons carried by the rotor and movable radially thereof through contact with the stator wall, firing means for the combustion chamber, means to cause retraction of the vanes to enable exhaust of spent gases, said rotor having inner and outer peripheral walls, the inner wall enclosing an oil reservoir, walls con-



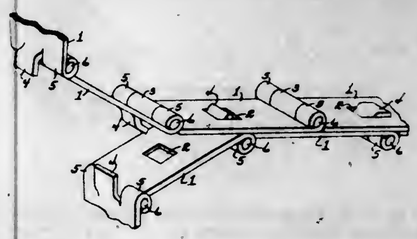
necting the inner and outer peripheral walls and forming chambers about the pistons, packing means arranged in said chambers about the vanes to prevent undue escape of lubricant, and expansive spring means in said chambers abutting the walls therein and abutting said packing means, said packing means comprising metallic bars engaging the vanes.

1,901,788. LAWN TRIMMER. JAMES M. WILLIS, Scotia, N. Y. Filed Dec. 14, 1932. Serial No. 647,271. 4 Claims. (Cl. 56—255.)



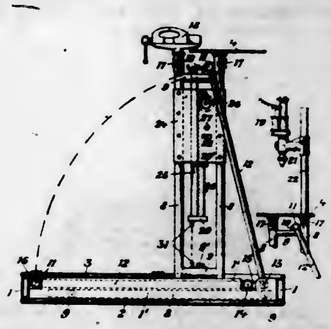
1. A lawn trimmer comprising a ground wheel, a covering plate projecting into the ground wheel, a handle, means for rigidly securing the covering plate to the handle, means for rotatably mounting said wheel to rotate around said covering plate, said ground wheel having an internal gear, a pinion meshing with said gear, said covering plate having an apertured enlargement adjacent said pinion, a shaft extending through said enlargement, means for rigidly securing said shaft to said pinion, a stationary shearing blade rigidly clamped to said enlargement and a rotating shearing blade having a plurality of shearing extensions rigidly secured to said shaft and positioned to coact with the stationary shearing blade to produce a shearing action as the ground wheel and associated parts are moved along.

1,901,789. ROD. CALVIN H. WIMBERLEY, New Braunfels, Tex. Filed Oct. 19, 1931. Serial No. 569,765. 3 Claims. (Cl. 59—78.)



1. A device comprising a pair of opposed chains including links, each provided with an opening, cooperating hinge barrels formed with the links, means passing through the cooperating hinge barrels to hingedly secure the links together, and tongues formed with the links and being arranged in the openings of opposed links of the chains to secure the latter in contacting engagement with each other to provide a rigid rod.

1,901,790. PORTABLE WORK BENCH. GERHARD WOLFRAM, Dessau, Germany. Filed Apr. 4, 1931, Serial No. 527,817, and in Germany Apr. 11, 1930. 5 Claims. (Cl. 29—1.)



1. A portable work bench comprising a smooth sided and shallow box-like base member to be placed on a horisontal surface; and a plurality of pillars and struts adapted to be secured to the base member when in use to form the work bench and which are collapsible so that the pillars and struts may be placed in the base member when the bench is knocked down for transport or when not in use and said base member acting as a platform for an operator of the work bench.

5. A portable work bench comprising a shallow rectangular base frame having side walls and a central rib, a collapsible frame for supporting bench equipment, means for securing said frame to the central rib of the base frame, means hinged to said base frame near an end thereof for bracing the equipment supporting frame when it is erected, said brace means and equipment frame being capable of being lowered into the base frame, a bottom for the base frame, and a top cover for the base frame capable of forming a platform for an operator working at the erected bench, said base frame with its bottom and top cover forming a shallow smooth-sided box into which the equipment frame, brace means and any desired equipment can be completely enclosed in their collapsed and disassembled condition.

1,901,791. MEANS FOR REMOVING DUST SUCH AS FROM PLANT FIRED BY PULVERULENT FUEL. WILLIAM ARMSTRONG WOODESON, Gateshead-on-Tyne, England, assignor to Clarke Chapman & Company, Limited, Gateshead-on-Tyne, England. Filed Oct. 17, 1930, Serial No. 489,466, and in Great Britain Apr. 1, 1930. 14 Claims. (Cl. 302—15.)

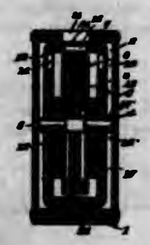


1. In a dust removing apparatus, an ejector comprising a housing having a passage therein receiving dust laden air and a passage therein receiving water under pressure, a venturi in said water passageway, the air passageway provided with a tubular extending portion having an end of a diameter less than the smallest diameter of said venturi extending into said venturi a distance sufficient to assure that the dust laden air is discharged into the water passageway at a point beyond the greatest constriction of the venturi, for the purpose described.

1,901,792. BITUMINOUS AND LIKE COMPOSITIONS. GEORG ZIMMERMANN, Mannheim-Rheinau, Germany, assignor to Prodorite S. A., Geneva, Switzerland. Filed Aug. 2, 1926, Serial No. 126,737, and in Germany Aug. 6, 1925. 1 Claim. (Cl. 106—32.)

A composition of matter of great toughness and high tensile strength comprising a mixture of a hard brittle pitch which retains its hardness substantially unchanged by temperatures up to 40 degrees C. under a Brinell hardness test, with ten to fifteen percent of asbestos fibres, and mineral dust.

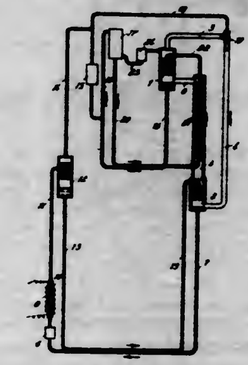
1,901,793. ANGLE DETECTOR. WILLIAM D. ALLEN, Evansville, Ind. Filed Aug. 3, 1931. Serial No. 554,887. 5 Claims. (Cl. 32—216.)



1. An angle detector comprising a body having an opening, a scale bearing member fixed to the body within the opening, a mounting having a hair line and movably secured in the opening of the body and forming a closure for the scale bearing member and having sight openings, and a weight for said mounting.

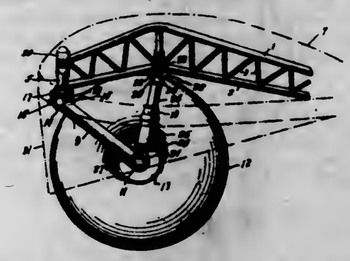
1,901,794. ABSORPTION REFRIGERATING MACHINE. EDMUND ALTENKIRCH, Neuenhagen, near Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Jan. 18, 1929, Serial No. 333,376, and in Germany Jan. 26, 1928. 9 Claims. (Cl. 62—119.5.)

1. In an absorption refrigerating machine, consisting of a boiler, a reabsorber, an evaporator and an absorber, containing an absorption solution and a working medium partly gaseous and partly in a condensed fluid phase, and furthermore containing an inert gas admixed with the gaseous working medium in the evaporator and the absorber, connecting pipes between the absorber and the evaporator, which permit circulation of the mixture of working medium and inert gas, a connecting pipe between the reabsorber and the evaporator for conveying the absorp-



tion solution enriched in the reabsorber into the evaporator for the purpose of liberating gaseous working medium from the solution into the admixed inert gas, means for cooling said enriched solution to a temperature lower than that prevailing in the reabsorber during operation and means for effecting a heat interchange between the said rich absorption solution and the mixture of gaseous working medium and inert gas flowing from the absorber into the evaporator.

1,901,795. AIRPLANE LANDING GEAR. GIUSEPPE M. BELLANCA, New Castle, Del. Filed Aug. 10, 1931. Serial No. 556,254. 10 Claims. (Cl. 244—2.)

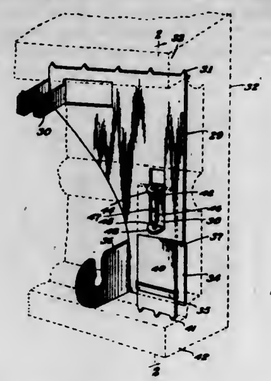


4. In an airplane landing gear, a wing rib, a pair of struts pivoted at one end to the rib, the other ends of the struts being pivotally connected, and being associated with a journal for receiving the axle of a landing wheel, and one of the struts being an oleo strut.

1,901,796. CURTAIN AND SHADE FIXTURE. MIKE BELL, Kansas City, Kans. Filed Aug. 17, 1931. Serial No. 557,634. 1 Claim. (Cl. 156—94.)

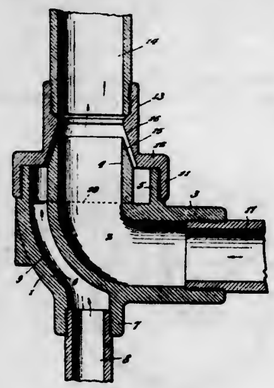
A combination drapery and curtain bracket, comprising a plate which has an offset portion at one of its edges and from one of its ends, and the transverse shoulder afforded by said offset portion having a rectangular opening therethrough, a strap arranged transversely of the offset portion and having angle ends secured to the plate, said plate adjacent to the shoulder being provided with a longitudinally arranged elongated slot, an ear projecting from the plate at the end of the slot next to the shoulder, a second and smaller plate guided through the opening in

the shoulder and through the strap of the first named plate, said smaller plate having an offset ear that freely passes through the elongated slot in the first named plate



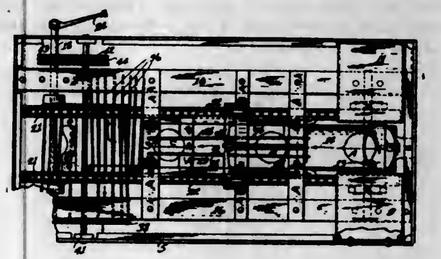
and adjustable means between and connected to the ears of the respective plates for longitudinally adjusting the plates with respect to each other.

1,901,797. EJECTOR. RUSSELL BLACK, Huntington, W. Va., assignor to Commercial Patents Development Company, Huntington, W. Va., a Corporation of West Virginia. Filed Sept. 15, 1931. Serial No. 562,966. 1 Claim. (Cl. 103—263.)



An ejector comprising a body member having a side arm to receive a water inlet pipe and provided with a nipple on its under side to receive a steam inlet pipe, the body being further formed with a concentric nozzle in the upper side through which the indrawn water may flow, the body having an L-shaped bore extending through the side arm and through the nozzle, the upper end of the nozzle being exteriorly tapered downwardly along straight lines, the body having a steam passage rising from the nipple on the bottom of the body and terminating at the base of the nozzle exteriorly thereof, the body having an annular outer wall exteriorly threaded and disposed concentric with the nozzle to form an annular steam passage at the base of the nozzle, and a cap member threaded on to said annular outer wall and closing the upper open end of said annular steam passage, said cap having a collar rising therefrom in alignment with the nozzle to receive an outlet pipe, the inner circumference of said collar being downwardly tapered along straight lines to present a tapered surface concentric and parallel with the tapered end of the nozzle.

1,901,798. NUT HULLING MACHINE. FRANK BOOMER, Berkeley, Calif. Filed Jan. 5, 1932. Serial No. 584,851. 2 Claims. (Cl. 146—10.)

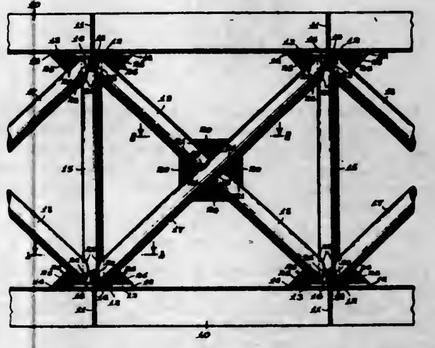


1. In a device of the character described, a conveyor mechanism including spaced chains, a plurality of pusher plates connected to said chain and extending therebetween, a trough positioned between said chains, means for feeding nuts to said trough, guide wires positioned adjacent one end of said trough, whereby nuts engaged by said pusher plates will be moved from said trough onto said guide wires, a plurality of hulling fingers radially arranged with respect to the path of movement of said nut, said fingers having pointed extremities for engaging the hulls on the nuts as they pass said fingers.

1,901,799. PRESERVATIVE COMPOSITION. JAMES H. BROOKS and JACOB GOLDSTONE, Portland, Oreg., assignors of one-fourth to Fred W. Taplin and one-fourth to Donald Richards, Portland, Oreg. Filed July 23, 1929. Serial No. 380,453. 2 Claims. (Cl. 134—1.5.)

2. A combined ink repellant and preservative for printing press blankets comprising a liquid body for coating the blanket in a film like form, said body consisting of five pounds of a coloring substance, six-tenths of a pound of beeswax, eight gallons of long China wood oil varnish, three-quarters of a gallon of a drier, two gallons of pure gum spirits of turpentine and one and one-quarter gallons of mineral turpentine, said body possessing the characteristics of uniting with and preserving the blanket when applied to the latter without destroying or injuring the elasticity, pliability or resiliency of the blanket, and said body possessing pliable, elastic, flexible, soft, smooth, nonporous ink-repellant, and impervious characteristics.

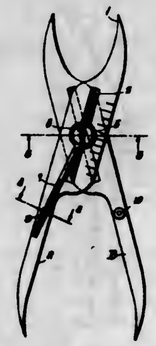
1,901,800. WELDED CONSTRUCTION. FRANCIS S. BUSBEY, Brooklyn, N. Y. Filed Nov. 21, 1930. Serial No. 497,328. 3 Claims. (Cl. 189—37.)



3. A structure having the combination of upper and lower structural elements having flanges arranged at an angle with respect to each other and in the same plane,

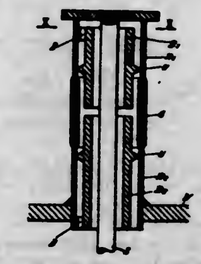
plates for said upper and lower structural elements and each plate being laid against the related flanges, vertical tubular posts whose opposite ends are in contact with upper and lower plates respectively and welded thereto, and tubular braces welded together and arranged between said posts and welded to said posts.

1,901,801. PROPORTIONAL DIVIDER. CHARLES CATTANEO, South Norwalk, Conn. Filed Apr. 1, 1929. Serial No. 351,739. 1 Claim. (Cl. 33—150.)



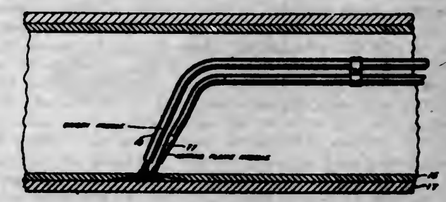
A pair of dividers comprising leg members each having a longitudinal slot, a headed bolt extending through the slots, the diameter of the bolt being equal to the transverse breadth of the slots, a nut threaded to the bolt, eye bolts extending through the members, rods slidable in the eye bolts and having apertured ends to receive said headed bolt and nuts threaded upon the eye bolts to lock said bolts against rotation relative to the members and to clamp the rods against the surfaces of the leg members.

1,901,802. LEADING-IN DEVICE FOR METALLIC VACUUM-DISCHARGE CONTAINERS. WALTER DÄLLENBACH, Zurich, Switzerland. Filed Mar. 18, 1929, Serial No. 347,965, and in Germany Apr. 2, 1928. 2 Claims. (Cl. 250—27.5.)



1. In a vacuum discharge vessel of metal containing a rarefied fluid, the combination of a leading-in conductor, an insulator sealing said leading-in conductor in said vessel, and conducting parts covering that portion of the surface of said insulator adjoining the vacuum, said conducting parts being slightly spaced from the insulator, one conducting part being electrically connected with said leading-in conductor, the other conducting part being electrically connected with said vessel, these conducting parts being separated by a narrow gap in which the drop in potential between said vessel and said leading-in conductor is concentrated, said gap being located from the points of contact of said insulator and the conducting parts in the vacuum at a distance forming a multiple of its width, and fused electrically conductive connections holding said conducting parts in position.

1,901,803. METHOD OF DECARBONIZING OIL REFINING APPARATUS. WILLIAM T. DAVIS, Huntington Park, Calif. Filed July 1, 1930. Serial No. 465,942. 3 Claims. (Cl. 196—69.)



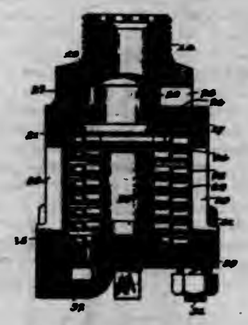
1. Method of decarbonising the interior of an oil refining apparatus which comprises heating the coke-like residue to such a temperature that it will burn in an atmosphere containing more oxygen than normal and supplying an atmosphere rich in oxygen to the vicinity of said heated residue, said atmosphere being supplied at a high velocity and in such a manner that it detaches pieces of unburned coke from the walls of the apparatus.

1,901,804. PROCESS FOR REMOVING CARBON FROM TUBES. WILLIAM T. DAVIS, Southgate, and CHARLES E. RHEIN, San Francisco, Calif., assignors to The Linde Air Products Company, a Corporation of Ohio. Filed Dec. 12, 1930. Serial No. 501,962. 3 Claims. (Cl. 196—69.)



3. Method of burning combustible deposits from the interior of a tube which comprises igniting said deposit, delivering a gas richer in oxygen than air obliquely against said deposit and delivering compressed air axially of the tube and in the same direction with respect to the length of the tube as the oxygen containing gas.

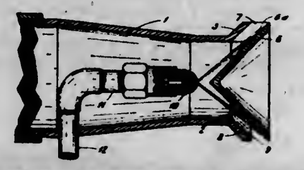
1,901,805. BELLOWS OPERATED SAFETY CYLINDER COCK. MATTHEW R. FINLEY, Scranton, Pa., and CHARLES STERN, Jersey City, N. J. Filed Apr. 8, 1930. Serial No. 444,489. 3 Claims. (Cl. 121—134.)



1. An improved cylinder cock, comprising a casing having a reduced threaded neck for engagement in the bottom port of a locomotive cylinder and provided with a downwardly facing seat at the base of said neck and an enlarged exhaust chamber beneath said seat and opening horizontally through the side of the casing, said casing be-

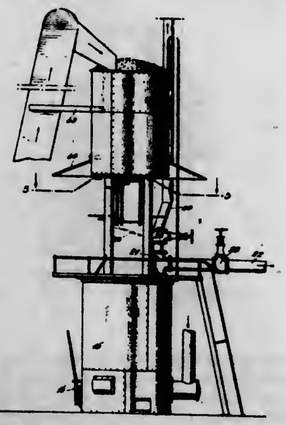
ing hollow at its lower end to provide a cylinder and with a top wall between the cylinder and said enlarged exhaust chamber, said casing having slots in its sides for venting the cylinder, a valve slidably fitted through said top wall in axial alignment with the seat and having an enlarged base disc freely movable in the cylinder, a bellows closed at its upper end located in the cylinder against the under side of said disc and having a base ring at its lower end overlapping the lower end of the casing, a cap plate secured against the lower end of the casing for closing the cylinder and engaging said base ring of the bellows for binding the ring between the casing and the cap plate to seal the bellows thereagainst and anchor the bellows in the cylinder, said cap plate having at one side an air supply port leading to the interior of the bellows for supplying pressure thereto to expand the bellows and raise said valve to its seat, and a cap stop screw threaded through said cap plate and extending upwardly into the bellows for limiting the contraction thereof and adapted to be adjusted for engagement against the upper end of the bellows to maintain the valve to its seat.

1,901,806. ATOMIZER. THOMAS J. FULTON, Fresno, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed June 22, 1932. Serial No. 618,735. 7 Claims. (Cl. 299—140.)



1. An atomizing nozzle comprising an air conducting casing having a discharge port, a deflecting baffle disposed centrally of said port and having divergent sides extending from an apex directed inwardly of the casing, said divergent baffle sides being spaced from the casing whereby to provide for the passage of air therebetween, a liquid atomiser nozzle disposed within the casing adjacent the apex of the baffle for discharging atomised liquid against the baffle sides, and conduits connected with the liquid atomiser nozzle and casing for supplying liquid and air respectively thereto under pressure.

1,901,807. GAS PRODUCER. ALBERT LEET GALUSHA, Caldwell, N. J. Filed Dec. 27, 1927. Serial No. 242,751. 9 Claims. (Cl. 48—86.)



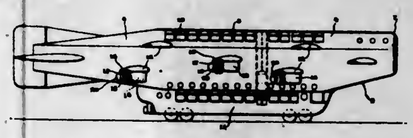
3. In combination with a gas producer, a feed bin over said producer and spaced therefrom, normally filled feed chutes extending directly therefrom through the head of the producer and opening to the interior of the latter substantially below the head of the producer to provide a gas accumulating space between the head of the producer and the top of the fuel bed maintained by the solid stream fuel feed through the feed chutes.

1,901,808. WASTE RECEPTACLE. SAMUEL HAMMER, Brooklyn, N. Y. Filed Sept. 3, 1932. Serial No. 631,645. 11 Claims. (Cl. 220—32.)



1. A receptacle, a cover therefor, means connecting the cover with the receptacle including a hinge member connected at one of its ends to the cover, and means for mounting said member at its other end upon the receptacle body interiorly thereof and within the area enclosed by said cover, said member lying in close parallel relation to a wall of the receptacle body and intermediate of its ends having bearing contact upon a vertical wall of the receptacle when the cover is in open position to sustain said cover out of contact with the receptacle wall and in laterally spaced relation to the open top of the receptacle.

1,901,809. AIRSHIP. OWEN A. HAVILL, New York, N. Y., assignor to Hans O. Schundler, New York, N. Y. Filed Feb. 4, 1930. Serial No. 425,886. 1 Claim. (Cl. 244—6.)

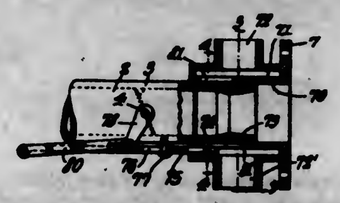


A lighter than air aircraft comprising an elongated bag of polygonal cross section throughout substantially its entire length and having a plane unobstructed platform along its top extending from the end of its nose toward the trailing end of the bag and forming an aeroplane runway, airfoils extending from opposite sides of the bag, the airfoils being arranged in series at each side of the bag, the airfoils of each series being arranged one behind the other and in staggered formation, gondolas carried by the airfoils, engines housed by the gondolas, propellers driven by the engines and arranged beneath and protected by the airfoils, a main rudder for the bag, and auxiliary rudders positioned rearwardly of the propellers.

1,901,810. AIR CONTROLLING MEANS FOR CARBURETORS. WILLIAM A. HEIDE, Detroit, Mich. Original application filed Apr. 25, 1928, Serial No. 272,739. Divided and this application filed June 10, 1929. Serial No. 369,814. 2 Claims. (Cl. 48—180.)

1. In a carburetor a tubular member having a passage for the flow of gas of a rich mixture, a counterbore in

one end of the member, a butterfly valve spaced from the counterbore, a Venturi tube slidable in the counterbore, inlet ports in the counterbore circumferentially disposed and longitudinally spaced from one end of the counterbore, lever and link connections between the butterfly valve and the Venturi tube whereby both are adjusted



simultaneously, said Venturi tube being movable outwardly of the counterbore to admit air to the counterbore between the butterfly valve and the Venturi tube, for thinning the said rich mixture, and a hot air chamber surrounding a portion of the tubular member adjacent the air inlet ports.

1,901,811. MEASURING AND DISPENSING DEVICE FOR CONTAINERS. CHARLES HOCHSTATTER, Ozone Park, N. Y. Filed Apr. 11, 1932. Serial No. 604,621. 9 Claims. (Cl. 221—98.)



1. In a measuring dispenser for granular substances including a dispensing tube, a terminal member at the inlet end of said tube and angularly related blades at the outer end of the terminal member, said blades being disposed in planes coinciding with the axis of the terminal member.

1,901,812. DISHWASHING TOOL AND SPRAY. HELEN THOMAS HUEY, Stonehurst, Pa. Filed Mar. 14, 1931. Serial No. 522,692. 1 Claim. (Cl. 15—128.)

In a dish washing tool and spray, the combination with a hollow handle, of a tube fitting telescopically through the handle and provided with a head at one end to enter one end of a rubber supply hose, which also fits partially into the rear end of the handle, the interior of the handle at its other end having a tapered portion constituting a socket and provided with exterior diametrically opposite longitudinal grooves merging into notches at their rear ends, a brush provided with opposite spring arms engaging said grooves and having their terminals fitting the notches, a sleeve fitting the exterior of the forward end of the handle and provided with bayonet connections with the handle and said sleeve adapted to be partially rotated to override the spring arms of the brush to hold them in the grooves and their terminals in the notches, said sleeve having an end wall adjacent the extremity of the handle, said end wall having a notch, a spray nozzle provided with a broad flat perforated spray face, flatwise toward the brush, said nozzle merging into a tubular shank fitting



within the socket of the handle and provided with a longitudinal exterior rib to engage the notch of said end wall of the sleeve, thereby holding the flat face of the nozzle flatwise in register with the brush.

1,901,813. OIL WELL TESTING DEVICE. MONROCA O. JOHNSTON, Glendale, Calif., assignor of one-third to Gilson M. Jones and one-third to Francis C. Van Deinse, Los Angeles, Calif. Filed Sept. 7, 1932. Serial No. 632,048. 1 Claim. (Cl. 166—1.)

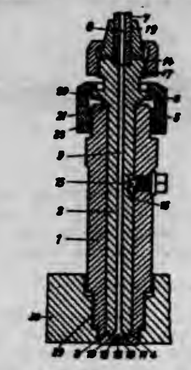


In a well testing device provided with a packer, adapted to be used in a well cavity, a valve housing rigidly attached above the packer, a valve comprising a piston head and an elongated sleeve having a central passageway therethrough mounted to slide in the housing, open ports cut through the elongated sleeve to connect with the central passageway, a packing carried in said housing to encase the lower portion of the elongated sleeve, and mask said ports when the piston head is moved downwardly, a compression gland secured to said housing whereby to compress the packing and permit movement of the elongated sleeve, the said gland having a recess cut therein to register with the ports when the piston head is moved upwardly, a perforated plate secured to the top of the gland whereby to permit communication between the recess and the well cavity and allow movement of the sleeve therethrough, and means for engaging the perforated plate and said elongated sleeve to return the piston head to raised position.

1,901,814. FUEL INJECTION DEVICE FOR INTERNAL COMBUSTION ENGINES. HUGO JUNKERS, Dessau, Germany. Filed Jan. 14, 1932, Serial No. 586,862, and in Germany Jan. 17, 1931. 10 Claims. (Cl. 299—107.6.)

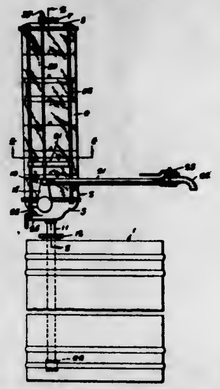
1. A solid-injection fuel admitting device for internal combustion engines comprising a casing, a needle with a

fuel passage inserted in said casing, co-acting seating faces on said needle and said casing, means anchored on one of said members for exerting thrust on the other



member so as to apply their seating faces onto each other, and means for limiting the relative movement of the free ends of said members under the action of the thrust.

1,901,815. OIL AND LIQUID DISPENSING DEVICE. HENRY M. KEITH, Harrisburg, Ill. Filed Feb. 23, 1932. Serial No. 594,627. 3 Claims. (Cl. 221—100.)

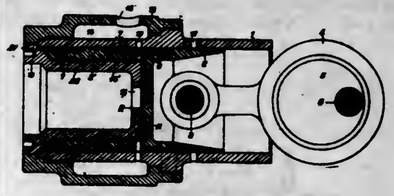


1. A liquid dispensing device comprising a visible measuring receptacle, means connecting said receptacle to a liquid supply, means for admitting air pressure to either the liquid supply or the receptacle, and a dispensing means for said receptacle and capable of actuating the means for admitting air pressure to the liquid supply or the receptacle.

1,901,816. ABSORPTION OF OXIDES OF NITROGEN. EMIL LÜSCHER, Basel, Switzerland, assignor to the Firm Lonza Elektrizitätswerke und Chemische Fabriken Aktiengesellschaft, Basel, Switzerland. Filed Aug. 30, 1930, Serial No. 479,095, and in Switzerland Sept. 13, 1929. 6 Claims. (Cl. 23—157.)

6. The process for the absorption of oxides of nitrogen from gases, such as may be obtained in known manner by burning ammonia in oxygen-rich gases, which comprises successively subjecting said gases to the action of nitric acid of such concentration that substantial elimination of the moisture content of the gases takes place, then to the action of nitric acid of relatively increased concentration whereby oxidation of the lower nitrogen oxides to a higher state of oxidation takes place, and finally to the action of nitric acid of still higher concentration whereby absorption of the higher nitrogen oxides takes place.

1,901,817. COMPRESSOR. GEORG NEIDL, Berlin, Germany. Filed Oct. 8, 1931, Serial No. 567,681, and in Germany Dec. 5, 1930. 3 Claims. (Cl. 230—190.)



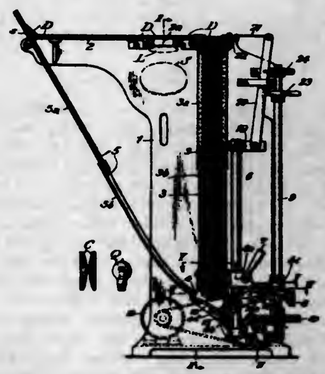
1. In a reciprocating pump having a cylinder, a piston mounted to slide in said cylinder, and inlet and delivery ports adapted to be controlled by said piston; a member on said piston adapted to move in a chamber which permanently communicates with the compression and expansion space of the cylinder through a passage whose free sectional area is small as compared with the piston surface.

1,901,818. PRINTING PRESS ROLLER. LUTHER C. OKERSERO, Elk City, Okla. Filed June 23, 1931. Serial No. 546,371. 1 Claim. (Cl. 91—67.8.)



A printing press roller comprising a plurality of cylindrical metallic sections removably mounted on a printing press shaft, composition material covering the sections, some of said sections having bevelled ends and the other sections each having one end bevelled and the other end straight, said sections arranged on the shaft with the bevelled ends in engagement and with the sections having straight ends located on the shaft with the straight ends next to the ends of the shaft, and collars detachably secured to the shaft and having straight sides to engage the straight ends of the last named sections and having their opposite faces bevelled to engage the bevelled ends of the sections when the sections having the straight ends are removed from the shaft.

1,901,819. PROJECTOR COMPRISING AUTOMATIC PICTURE CHANGING MEANS. ALFRED OSCHWALD, Zurich, Switzerland. Filed Sept. 17, 1932, Serial No. 633,667, and in Germany Sept. 24, 1931. 12 Claims. (Cl. 88—28.)



1. In a projector comprising automatic picture changing means, in combination, a frame, a gate for the projecting light rays carried by said frame, a supply shaft for receiving a number of pictures in superimposed relationship connected to said frame, a feed device associated with one end of said supply shaft for feeding the uppermost pictures of the stack in said supply shaft towards said gate, means for gravitatively returning the exposed pictures towards the other end of said supply shaft, a passageway leading from said supply shaft to said picture returning means and across the gate for receiving the pictures delivered by said feed device in a closed up row, a resetting device for reconveying the returning pictures into said supply shaft, and means for actuating said feed device and said resetting device in timed relationship for positively maintaining a continuous circulation of all the pictures inserted in the projector.

1,901,820. SOLDER FITTINGS AND METHOD OF SOLDERING. ARTHUR L. PARKER, Cleveland, Ohio. Filed Dec. 22, 1931. Serial No. 582,594. 8 Claims. (Cl. 113—112.)

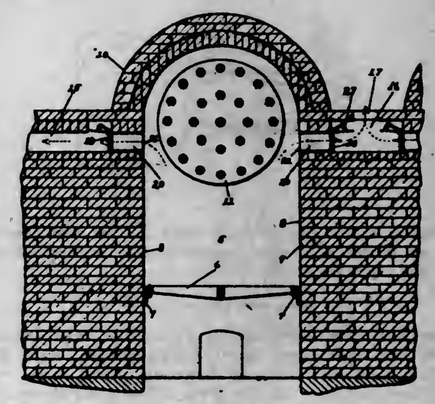


1. A solder fitting for metal tubes including a sleeve adapted to receive the end of the tube, said sleeve in the region of the tube end being dimensioned so as to provide a uniform clearance space only sufficient to permit the free insertion of the tube in said sleeve, said sleeve at the inner end of the clearance space being tapered inwardly and dimensioned so that the end of the tube contacting with said tapered portion will be frictionally gripped and held centered in said sleeve, the inner surface of said sleeve having applied thereto a viscous solder bonding mixture which adheres to the wall of the sleeve and contains sufficient solder and flux for effecting a solder bond when heat is applied to the fitting.

7. The method of attaching solder fittings to tubes comprising forming a sleeve fitting adapted to receive the end of the tube which is to be attached thereto and dimensioning said sleeve fitting so as to provide a uniform clearance space only sufficient to permit the free insertion of the tube in said sleeve, and a tapered surface at the inner end of the clearance space which is so dimensioned as to grip and center the tube in the clearance space in said sleeve, applying to the inner surface of the sleeve of the fitting a viscous adhering coating containing solder and flux, subsequently inserting the tube into said sleeve into gripping contact with said tapered surface, and applying heat sufficient to melt the solder and bond the tube to the fitting.

1,901,821. FURNACE CONSTRUCTION. FIRMIN PROVINCIAL, Woonsocket, R. I. Filed Dec. 16, 1930. Serial No. 502,818. 1 Claim. (Cl. 110—173.)

In a brick work furnace having a combustion chamber, a metal housing placed in a side wall of the chamber with its inner end in communication with the upper part of the chamber and said wall having a passage therein leading from the outer end of the housing to the atmosphere, said passage having an enlarged portion in its top wall located adjacent the outer end of the housing, a gravity door hingedly connected at its upper edge with the upper part of the housing at the outer end of the housing and moving into the enlarged part of the passage upon opening movement of the door, an arm connected with the top part of the outer end of the housing and extending outwardly and upwardly therefrom and located in the enlarged part



of the passage and a spring depending from the outer end of the arm and engaged by the door when the same is swung upwardly.

1,901,822. FOUNTAIN BRUSH. GEORGE REISINGER, Rochester, N. Y. Filed Sept. 28, 1931. Serial No. 565,515. 6 Claims. (Cl. 15—186.)

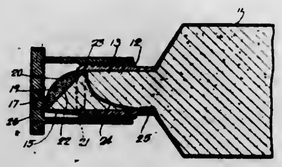


1. In a fountain brush the combination of a hollow handle, a brush removably attached to the inner end of said handle, said hollow handle having a valve opening in the inner end thereof leading into said brush and a filler opening to one side of said valve opening adapted to be held closed by said brush, a valve in said valve opening, a flexible closure at the outer end of said hollow handle and a valve stem rigidly attached to said flexible closure with one end thereof and attached to said valve with the other end thereof to normally hold said valve in a closed position to simultaneously open said valve and extrude a portion of the contents of the handle under pressure thru said valve opening on the depression of said flexible closure.

1,901,823. COLLAPSIBLE TUBE CLOSURE. MALCOLM BOURNE ROBINSON, Woodbridge, Conn. Filed Apr. 11, 1931. Serial No. 604,548. 4 Claims. (Cl. 221—60.)

1. In combination with a collapsible tube having a discharge orifice, a closure member pivotally mounted within said discharge orifice, the inner face of the end wall of said closure member being flat while the outer face of the same is curved on an arc struck from the axis of

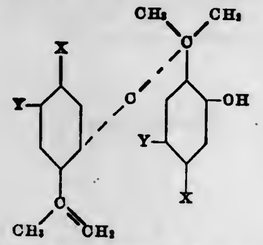
its pivot, the radius of the curved face being equal to the width of the orifice and a spring acting upon said closure member to hold the same in sealing engagement with the



walls of said discharge orifice with the flat face disposed at an acute angle with respect to the longitudinal axis of said discharge orifice.

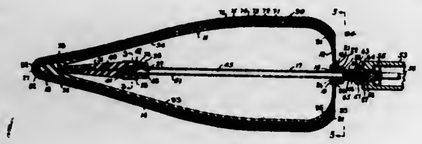
1,901,824. PRODUCTION OF PHENOLIC COMPOUNDS. WALTER SCHOELLER, Berlin-Charlottenburg, HANS JORDAN, Berlin-Steglitz, and REINHARD CLEBC, Berlin, Germany, assignors to the Firm Schering-Kahlbaum Aktiengesellschaft. Filed Feb. 23, 1928, Serial No. 256,480, and in Germany Mar. 11, 1927. 8 Claims. (Cl. 260—154.)

1. The method of decomposing condensation products obtained by acting with acetone on a cresol of the group consisting of m- or p-cresol in the presence of hydrochloric acid gas at a temperature slightly above room temperature and which have the formula:



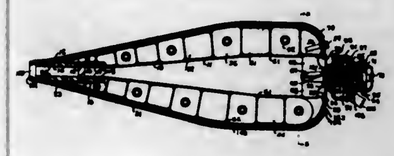
wherein, in both nuclei, when X is H, Y may be CH_3 or, when X is CH_3, Y may be H, comprising heating such products in the vapor phase at a temperature of about 300° C.

1,901,825. APPLICATOR FOR TREATING SURFACES. CARL F. SEIBERT, Hamilton, and ELMER J. SEIBERT, Cincinnati, Ohio. Filed June 12, 1929. Serial No. 370,192. 12 Claims. (Cl. 15—97.)



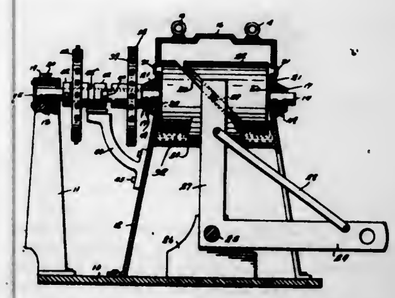
1. In a device of the character described, the combination of a cushion bag, a drive-shaft for rotating said bag, said drive-shaft extending into said bag from one end of said bag, a resilient shank connected with the other end of said bag and extending axially in said bag, and a drive connection in said bag between said drive-shaft and said resilient shank.

1,901,826. APPLICATOR FOR TREATING SURFACES. CARL F. SEIBERT, Hamilton, and ELMER J. SEIBERT, Cincinnati, Ohio. Filed June 24, 1929. Serial No. 373,901. 20 Claims. (Cl. 15—103.)



1. In an applicator of the character described, the combination of a rotatable tube, a flexible cover about said tube having connections at its ends with said tube, and a pneumatic cushion member between said tube and said flexible cover.

1,901,827. PUMPING UNIT. ROBERT H. STOKES and JAMES B. STOKES, Lufkin, Tex. Filed June 6, 1931. Serial No. 542,604. 1 Claim. (Cl. 74—14.)

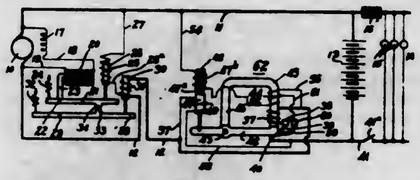


A well pumping unit of the character described comprising a base, a standard mounted on the base, a shaft rotatably mounted on the standard, a drum secured to said shaft, said drum having a cam groove therein, a pitman shaft, a pitman mounted at one end on said pitman shaft and having the opposite end disposed beyond one edge of the base, an oscillatable arm mounted on said pitman shaft and adapted to oscillate with said pitman shaft, an inwardly extending pin carried by said arm and extending into said cam groove whereby to oscillate said arm upon rotation of said drum, a casing disposed about said drum, wipers carried by the casing and engaging each end of the drum, the casing having outwardly directed lubricating channels receiving a lubricant from the wipers to lubricate the shaft, a driven wheel mounted on said shaft outwardly of said casing, a power takeoff member rotatable on said shaft, coacting clutch elements carried by said driven wheel and said power takeoff member, a drive shaft rotatably carried by said standard, a drive wheel mounted on said drive shaft, a flexible member engaging said drive wheel and said driven wheel, and braking means carried by said drive shaft whereby to stop rotation of said driven shaft upon declutching thereof.

1,901,828. ELECTRICAL SYSTEM OF DISTRIBUTION. WILLEM C. BROEKHUYSEN, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Feb. 14, 1925. Serial No. 9,144. 19 Claims. (Cl. 171—314.)

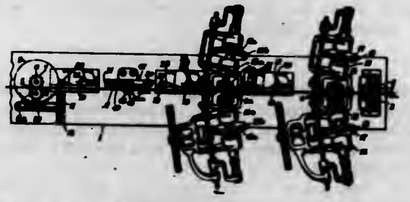
1. In apparatus of the character described, in combination, a generator, a storage battery, a pivoted member substantially balanced mechanically and having its center of mass substantially coincident with its axis and adapted upon movement in one direction to connect said generator to said battery, and two electromagnetic means exerting

opposed tractive efforts upon said member, one tending to move said member in circuit-closing direction and the other tending to oppose such movement, said two electromagnetic



means being arranged to permit the said one to preponderate over the said other substantially when the generator voltage equals the battery voltage.

1,901,829. METAL ALIGNING DEVICE. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 247,528. 18 Claims. (Cl. 51—112.)



1. Means for aligning a strip of metal while traveling comprising means to propel the strip, a movable support to engage edges of the strip to support and align it as fed by said means, means guiding said support to travel in the direction of the strip, means additional to said movable support cooperative with the strip to cause said support to be propelled by and with the strip in one direction, means to move the support in another direction, and means to cause the support to engage and release the edges of the strip.

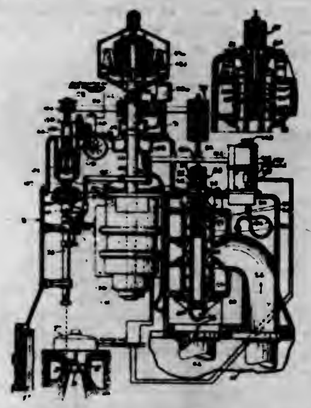
1,901,830. BLADE CLIP. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Original application filed Nov. 26, 1928, Serial No. 321,798. Divided and this application filed Mar. 30, 1931. Serial No. 526,351. 5 Claims. (Cl. 206—16.)



1. A clip for a stack of double-edged razor blades having spaced sides to receive the blades therebetween with their edges opposing and spaced from said sides, connecting means between said sides, and fingers on said sides extending inwardly toward one another, said connecting means being provided with means to engage a blade to keep the blade edges out of contact with said sides.

1,901,831. GOVERNOR. SAMUEL LOGAN KERR, Philadelphia, Pa., assignor to I. P. Morris & De La Vergne, Incorporated, a Corporation of Delaware. Filed Aug. 22, 1928. Serial No. 301,874. 36 Claims. (Cl. 290—40.)

1. In a governor for controlling a prime mover having power control mechanism, a speed responsive device having provision for being driven in synchronism with said prime mover, means adapted to be responsive to said synchronized relation and means controlled thereby adapted automatically upon failure of said synchronized driving relation to effect closure of said control mechanism below speed no load position and thereafter to open the same to speed no load position.



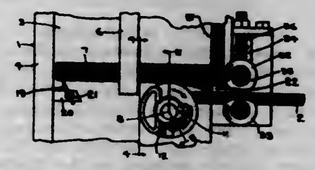
14. In a governor, the combination comprising a speed responsive device, a control valve, means for operatively connecting said device and valve, including a floating lever and an associated mechanism, and means for adjusting the normal space relation between said mechanism and lever comprising a rotatable screw having threaded engagement with a non-rotatable nut carried by said lever, a fixed support, a motor secured thereon, and a slidable connection between said motor and screw.

21. In a governor, the combination comprising a speed responsive device, a control valve, and means for actuating said valve comprising a lever, and a cam movable on an axis angularly disposed to the axis of said lever for effecting adjustment thereof.

30. In a governor, the combination comprising a base of relatively large vertical extent and in plan view being substantially fan shaped, a speed responsive device supported by said base, a fluid distributing valve and passages disposed in the large end of said base, means for controlling said distributing valve by said speed responsive device and other mechanism disposed in the smaller end of said base, including a synchronous motor for driving said device.

35. In a governor, the combination comprising a base having a fluid distributing valve and passage arrangement therein, governor operating mechanism therefor, an emergency control valve, and a throw-over valve adapted to render said governor or emergency valve alternatively operable, including an operating throw-over handle adapted when the throw-over valve is in one position to extend outwardly through an opening in said base to provide a visible indicator, and when said throw-over valve is in another position said handle is within said base.

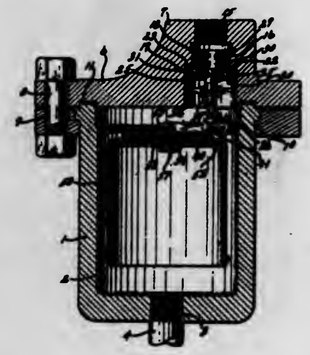
1,901,832. STARTER MECHANISM FOR FEEDING BLANKS OR THE LIKE. MICHAEL J. MILMOE, Chicago, Ill., assignor to F. B. Redington Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 10, 1930. Serial No. 434,616. 18 Claims. (Cl. 271—41.)



1. Feeding mechanism comprising a magazine for receiving blanks, a needle upon which a portion of the

blanks rest, a starting roll, a shaft upon which said starting roll is mounted, yielding connection between said shaft and starting roll for driving the latter, and a friction surface on a portion only of the cylindrical surface of said starting roll, said connection between said shaft and starting roll being such as to permit said roll to be retarded when said portion which has a high coefficient of friction engages one of said blanks.

1,901,833. STEAM TRAP. LESLIE P. STRONG, Cleveland, Ohio, assignor to The Clark Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 28, 1931. Serial No. 553,508. 7 Claims. (Cl. 137—103.)



1. A steam trap, comprising a chambered casing having an inlet and an outlet, a valve for controlling said outlet, an inverted bucket in the chamber of said casing, operating means for said valve connected thereto and also having a lost motion connection with said bucket, said bucket being provided with a vent opening, and valve means carried by said operating means for controlling said bucket vent opening.

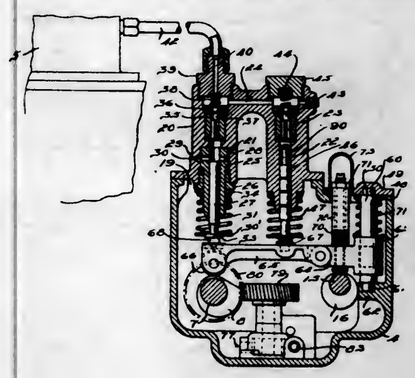
1,901,834. WICK. PAUL BARGER, Greenfield, Mass. Filed Mar. 12, 1932. Serial No. 598,499. 8 Claims. (Cl. 67—69.)



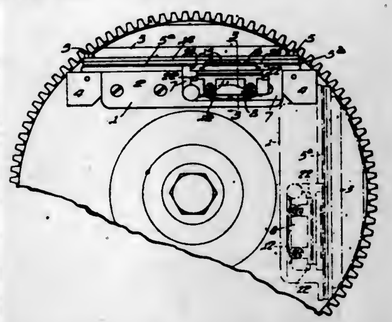
3. A wick for a hydrocarbon burner, said wick comprising a rectangular thin flexible body of absorbent noncombustible material and a plurality of separated and independent metallic clips secured thereto and extending beyond and free of an edge of said rectangular body.

1,901,835. FUEL FEED MECHANISM. HORACE T. THOMAS, Lansing, Mich., assignor to Reo Motor Car Company, a Corporation of Michigan. Filed Nov. 22, 1930. Serial No. 497,346. 5 Claims. (Cl. 103—41.)

1. In a high pressure fuel pump, a housing having a fuel pump and a valve for controlling the volume of the pump discharge, a cam shaft rotatable in the housing, a fulcrum block slidably mounted in the housing, a cam lever for opening the valve pivoted in the block and riding on the cam shaft, a central shaft having an eccentric, an adjusting screw threaded through the block and a spring pressing on the block to hold the end of the screw in contact with the eccentric so that general adjustment of the pump may be accomplished by rocking the central shaft and differential adjustment by changing the setting of the screw.



1,901,836. TYPOGRAPHICAL MOLD. RANSOM H. TURNER, Auburndale, N. Y., assignor to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 6, 1931. Serial No. 555,575. 9 Claims. (Cl. 199—55.)



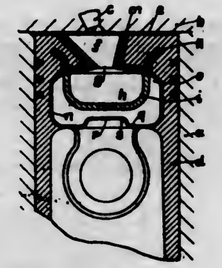
1. A typographical mold comprising opposed members spaced apart to form a casting cavity, and means to extend longitudinally in said cavity and divide it into a plurality of compartments of a width at least as great as the width of the space between the mold members, said compartments having means of communication connecting them exteriorly of one of the faces thereof which define the thickness of the slug cast therein, and said dividing means being retractable from said cavity.

1,901,837. PLATE SURFACE. CLINTON BATSHOLTS, Hoosick Falls, N. Y., assignor to Specialty Insulation Manufacturing Company, Inc., Hoosick Falls, N. Y., a Corporation of New York. Filed July 18, 1929. Serial No. 379,192. 3 Claims. (Cl. 65—15.)



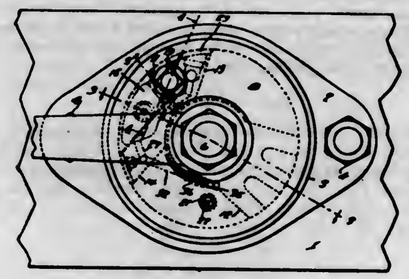
3. A dish comprising a body of synthetic organic molded material, inherently stiff and constituting the body of the dish, and a surfacing plate of glass, held directly by the body material; said body material being molded into a concholdal surface of mutual contact, of glass and material at the edge of the glass, whereby the glass plate is secured on the face of the body.

1,901,838. PISTON FOR INTERNAL COMBUSTION ENGINES. OTTMAR BAUR, Stuttgart, Germany, assignor to Acro Aktiengesellschaft, Kussnacht-on-Rigi, Switzerland. Filed Mar. 1, 1929, Serial No. 343,725, and in Germany July 13, 1928. 2 Claims. (Cl. 123—193.)



1. A piston of an internal combustion engine comprising cylindrical side walls, a perforated end wall adapted to form one bounding surface of the cylinder chamber of the internal combustion engine, a shell cast at its edges only in the perforated end wall of said piston to form a pocket with said perforation and a guard shell cast at its edges only with the edges of said first mentioned shell in said perforated end wall of said piston, and an extension of said guard shell adapted to closely follow the inner surface of said cylindrical wall of said piston.

1,901,839. SHOCK ABSORBER. EUGENE L. BESCHER, East Cleveland, Ohio, assignor to The Gabriel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 4, 1930. Serial No. 486,892. 5 Claims. (Cl. 188—89.)



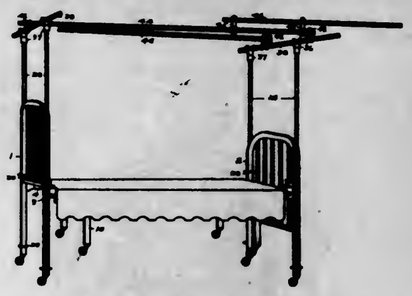
1. A shock absorber comprising in combination a liquid containing chamber, a piston in said chamber, a partition in said chamber toward and from which the said piston is moved, said partition being provided with a chamber intermediate the sides thereof, means including a metering port in said partition for permitting the flow of liquid from one end of the first mentioned chamber through said partition and through the chamber in said partition to the opposite end of the first mentioned chamber, a slide valve movable across the said port, there being ports communicating with said second chamber and subjecting the opposite ends of the slide valve to the pressure of the liquid therein, and a thermostat located in the second chamber and connected with said valve.

1,901,840. REVERSIBLE TUFT PILE CARPET OR RUG. WELLESLEY B. COOPER and ERNEST T. PHOENIX, Amsterdam, N. Y., assignors to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Filed Mar. 28, 1932. Serial No. 601,560. 4 Claims. (Cl. 139—401.)



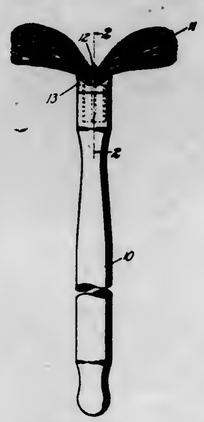
1. A carpet or rug including a ground fabric having a tuft pile surface and a cushion or padding back permanently secured to the ground fabric and comprising soft padding weft shots laid side by side in contacting relation and concealing the threads of the overlying ground fabric to form a tread surface, smaller hard twisted weft shots extending along with the padding weft shots, pile forming tufts looped about top surface anchoring weft shots and having their loops resting upon the padding weft shots, and binder warps arranged to bind the padding weft shots and pile forming tufts to the ground fabric so that the carpet or rug has a top pile tread surface and a back padding tread surface and is reversible for use of either uppermost.

1,901,841. HOSPITAL BED. JOE J. ETTINGER, Warsaw, Ind., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Original application filed Aug. 2, 1928, Serial No. 296,950, now Patent No. 1,823,890, dated Sept. 22, 1931. Divided and this application filed Nov. 1, 1930. Serial No. 492,650. 1 Claim. (Cl. 128—84.)



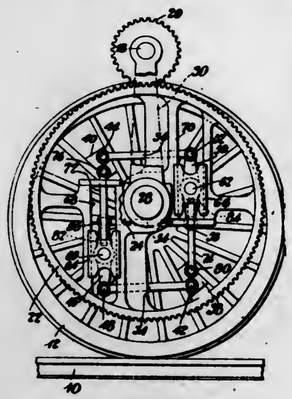
An overhead suspension and extension frame for hospital beds including a set of four corner posts each adapted to be connected to a respective leg of a bed, yokes on top of said posts, cross-bars each resting in the yokes of a pair of the posts at a respective end of the bed, means to secure said cross-bars in said yokes, swivel members slidably mounted on and extending upwardly from said cross-bars and having their upper portions constituting yokes, means to secure said swivel members in adjusted position on the cross-bars, a longitudinal bar resting in swivel yokes on respective cross-bars, means to secure the longitudinal bar in said swivel yokes, other yokes slidably mounted on the longitudinal bar and extending upwardly therefrom, means to secure the last mentioned yokes in adjusted position on the longitudinal bar, an extension bar resting in the last mentioned yokes and projecting beyond the end of the longitudinal bar to support a pulley, and means to secure the extension bar in said yokes.

1,901,842. MOP. HAROLD L. FIRTION, Warehouse Point, Conn., assignor to The Montgomery Company, Windsor Locks, Conn., a Corporation of Connecticut. Filed Oct. 25, 1930. Serial No. 491,122. 2 Claims. (Cl. 15—228.)



1. In a mop, a handle having an annular groove at one end, a head applied to the grooved end of the handle, and a resilient staple having its arms outwardly divergent, the over all distance between the arms adjacent their free ends being greater than the outside diameter of the groove, whereby said arms will bind against the outer wall of said groove when the staple is driven home in the groove, said annular groove facilitating assembly of the handle and staple without particular angular adjustment of the handle relative to the staple.

1,901,843. COUPLING DEVICE. PHILIP C. GORDON, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,128. 10 Claims. (Cl. 64—27.)

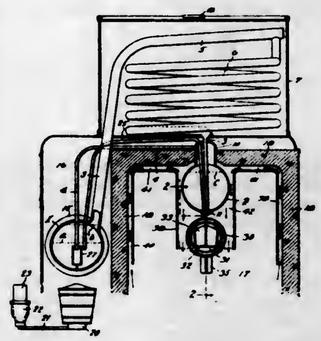


1. The combination of a rotary driving member, a rotary driven member, and a coupling intermediate said members, said coupling including a pair of rods pivotally connected directly to one of said members, levers pivotally connected to said rods and pivoting on the other of said members, means for transferring stresses from one of said levers to the other, and means for shifting the pivot points of said levers with respect to said other member with changes in eccentricity between the axes of said members.

1,901,844. TREATING THIOCYANATES. CHRISTIAN J. HANSEN, Essen-on-the-Ruhr, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Aug. 9, 1928, Serial No. 298,617, and in Germany Apr. 14, 1928. 8 Claims. (Cl. 23—119.)

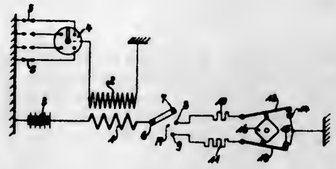
1. The method of decomposing thiocyanates and of producing ammonium compounds therefrom, comprising heating an aqueous solution of thiocyanates in the presence of a compound containing the radical SO_2 and maintaining the reaction mixture at an elevated temperature until substantially all the thiocyanates are decomposed.

1,901,845. THERMAL SHIELD FOR THE FREEZING SPACE OF REFRIGERATION APPARATUS. DAVID F. KEITH, Cleveland Heights, Ohio, assignor to Perfection Stove Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 27, 1929. Serial No. 358,441. 10 Claims. (Cl. 62—95.)



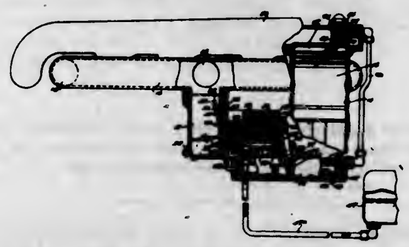
1. In refrigeration apparatus, in combination with a structure enclosing a refrigeration compartment, a cooling unit situated within said compartment, a holder for a substance whose temperature is to be reduced to or maintained at a substantially given value by heat interchange with said unit, a double wall receptacle spaced from the cooling unit and whose inner wall encloses said holder, and a liquid in the space between the inner and outer walls of the receptacle whose freezing point is below the said given temperature value and above the lowest temperature of the cooling unit.

1,901,846. IGNITION DEVICE FOR AIRCRAFT ENGINES. ERICH KLAIBER, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed July 13, 1931, Serial No. 550,535, and in Germany Oct. 7, 1930. Renewed July 19, 1932. 11 Claims. (Cl. 123—148.)



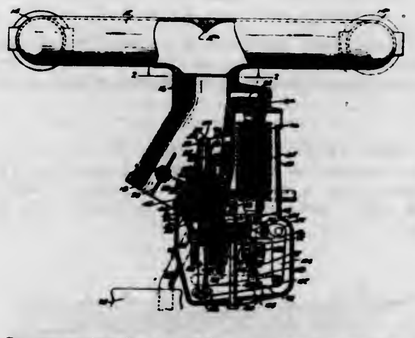
1. An ignition devce for aircraft engines comprising a battery, an induction coil connected to said battery, a make and break device set in the retarded ignition position, a second make and break device set in the advanced ignition position, a change-over switch, connected to said ignition coil, a resistance connected in series between said first make and break device and one pole of the switch and a second resistance of less ohmic resistance connected in series between said second make and break device and the other pole of the switch.

1,901,847. SUPPLYING AND MIXING CHARGES FOR INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed May 24, 1928. Serial No. 280,205. 54 Claims. (Cl. 123—119.)



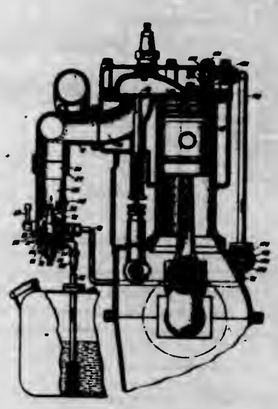
1. In an internal combustion engine, an intake manifold, a mixing chamber in open communication therewtih, a throttle valved air inlet to said mixing chamber, a fuel conduit having a discharge orifice in said mixing chamber, a conduit for cylinder gases varying in pressure with the control of the air leading to said mixing chamber, and terminating in inductive relation to said discharge orifice, the inductive effects of the cylinder gases varying directly with the variation in the air flow and substantially in inverse relation to the variations in intake depression to vary the fuel flow in inverse relation to the variations thereof induced by intake depression and means actuated by variations in the pressure drop in the mixing chamber coextensively with the variations in air supply resulting from the control thereof for metering fuel through the fuel conduit in inverse relation to the amount of pressure drop acting thereon.

1,901,848. CHARGE FORMING APPARATUS FOR INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Sept. 5, 1928. Serial No. 304,040. 21 Claims. (Cl. 123—131.)



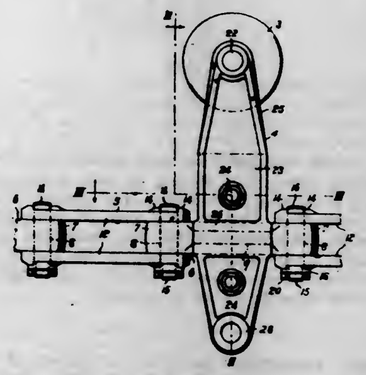
1. In apparatus for supplying and mixing charges for internal combustion engines, an intake conduit, an air throttle therein, a fuel nozzle beyond the air throttle, means for discharging gaseous fluid in injective and disruptive relation to the fuel nozzle outlet, a fuel valve, means for operating the fuel valve comprising an elastic air bellows subjected to the differential between atmospheric and intake pressures, means for limiting the bellows movement within its elastic limits, and spring means for opposing bellows movement due to said pressure differential, whereby to render the bellows responsive within the limits of movement thereof to pressure differences that in the absence of said spring means would cause the bellows to exceed its elastic limits.

1,901,849. FUELING INTERNAL COMBUSTION ENGINES. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignmens, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 7, 1928. Serial No. 317,750. 46 Claims. (Cl. 123—131.)



1. The method of fueling an internal combustion engine which comprises controlling fuel delivery directly with and by variation in intake pressure, and throughout the load range of the engine, restraining the action of intake pressure variation from causing such direct fuel variation beyond the range of fuel requirements.

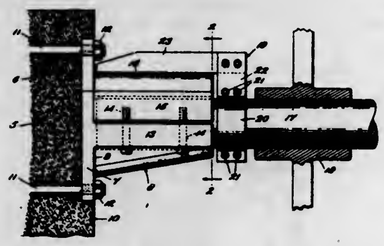
1,901,850. TROLLEY CONVEYER. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 16, 1931. Serial No. 551,243. 2 Claims. (Cl. 198—177.)



2. In a trolley conveyer, the combination of a power chain formed of articulated links, certain of which are of single piece construction, the mid-portions of which are of reduced size as compared with the ends to form central waist portions, and a supporting trolley adapted to run on

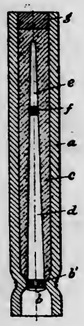
an overhead track, including a frame formed of parts adapted to closely embrace the said waist portion of the one piece links, and means to hold together the trolley frame pieces.

1,901,851. SCRAPER FOR SHAFT BEARINGS. ROBERT T. STEINDORF, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 2, 1931. Serial No. 572,694. 9 Claims. (Cl. 308—37.)



1. In a settling tank for sewage and the like having a wall, a bearing bracket secured to said wall, provided with an extension projecting into said tank which is subject to the deposit of solids thereon; a shaft journalled in said bracket; and means carried by said shaft for removing any solids which may deposit on said bracket.

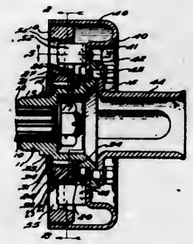
1,901,852. ROCKET. HERMANN STOLFA and RUDOLF ZWERINA, Vienna, Austria. Filed July 23, 1931, Serial No. 552,654, and in Austria July 28, 1930. 9 Claims. (Cl. 102—23.)



1. A rocket comprising an outer casing and a body of combustible composition divided to form a plurality of chambers of varying cross-sections, the successive burning of the composition forming each chamber being effective to maintain the pressure within the combustion space in approximate proportionate relation to the gradually increasing combustion surface, whereby an increase in the energy yield from the rocket is obtained.

1,901,853. VIBRATION DAMPER. ARCHIBALD A. WARNER, Dearborn, Mich. Filed May 7, 1931. Serial No. 535,667. 5 Claims. (Cl. 74—6.)

1. A vibration damper comprising a driven hub member, an inertia member rotatably mounted on and in concentric relation to the hub member, a disc member secured to the hub member, rollers between the inertia member and one of the other members, and a spring connecting the inertia member to the disc member, said rollers being disposed in slots formed in the inertia member and hub member for positively limiting their rotary movement relatively, said rollers contacting with both members to provide a metallic bearing contact between them.



1,901,854. WHIPSTOCK. JAMES S. ABERCROMBIE, Houston, Tex. Original application filed May 17, 1928, Serial No. 278,414. Divided and this application filed Sept. 10, 1932. Serial No. 632,582. 4 Claims. (Cl. 255—1.)



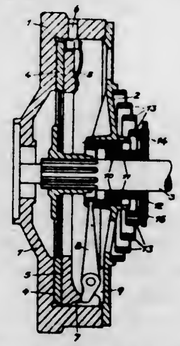
1. A whipstock, comprising an elongated body having a cutter deflecting upper face, and having a vertical course therethrough adapted for communication with a string of pipe.

1,901,855. AERIAL BANNER. MARK S. DU PONT, Darby, Pa., assignor to Kellett Autogiro Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 10, 1932. Serial No. 637,114. 10 Claims. (Cl. 40—127.)



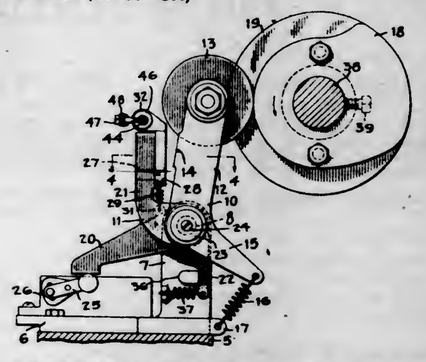
4. An aerial banner including a plurality of generally parallel stringers extending longitudinally of the banner, a plurality of spacer bars suitably spaced with respect to each other and extending generally transversely of said stringers and secured thereto at their points of intersection;—there being a spacer bar along the leading edge of said banner and another spacer bar near the trailing edge thereof, a tow line adapted to be attached to an aircraft, a bridle intermediate said tow line and said leading spacer bar, said bridle including an upper and a lower line extending generally from the upper and lower ends, respectively, of said leading spacer bar, to a common juncture with said tow line for transmitting the towing forces to the uppermost and lowermost stringers, respectively, said upper bridle line being inclined upwardly with respect to said stringers when the bridle is taut, and said juncture being above the line of the upper stringer and a diagonal tension member operatively interconnecting the upper bridle line with the lower end of an intermediate spacer bar, and a plurality of symbols formed of webbing, mounted upon the said stringer.

1,901,856. ADJUSTABLE DISK CLUTCH. MAX GOLDSCHMIDT, Frankfort-on-the-Main, Germany, assignor, by direct and mesne assignments, to the Firm Fichtel & Sachs A. G., Schweinfort-on-the-Main, Germany and Mecano Gesellschaft mit beschrankter Haftung, Frankfort-on-the-Main, Germany. Filed July 7, 1930, Serial No. 466,232, and in Great Britain Apr. 30, 1930. 1 Claim. (Cl. 192—110.)



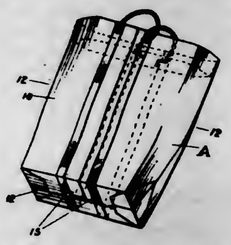
An adjustable disk clutch, comprising a fly wheel disk, a clutch disk, a pressure ring, a cover for the fly wheel disk having a hub portion, pressure levers pivoted to the inner surface of the cover and adapted to act upon the clutch disk through the pressure ring and thereby move the clutch disk against the fly wheel disk and close the clutch, a sliding sleeve consisting of two parts, one of which engages the pressure levers, and is slidably and non-rotatably connected with the hub of the cover while the other part is provided with a flange positioned exteriorly of the cover, a clutch spring arranged between the outer face of the cover and the flange of the other part of the sliding sleeve for acting upon the pressure levers collectively through the two parts of the sliding sleeve, screw threads on the two parts of the sliding sleeve enabling the two parts to be axially adjusted relatively to one another by rotating the part engaged by the clutch spring, and cooperative engaging means on the clutch spring and the flanged part of the sliding sleeve engaged thereby for hindering relative rotation of these two members.

1,901,857. KNITTING MACHINERY. ROBERT REINER, New York, N. Y. Filed May 6, 1931. Serial No. 535,457. 5 Claims. (Cl. 66—89.)



1. A flat knitting machine having in combination, a cam shaft, a switch for controlling the speed of said machine, a cam roller lever, a lever mounted adjacent said cam roller lever, an abutment member carried by said lever, and means for moving said abutment member in the path of said cam roller lever so that a cam on said cam shaft will cause said lever to operate said switch.

1,901,858. BAG AND METHOD OF MAKING THE SAME. HOWARD L. FISCHER, St. Paul, Minn., assignor to Walter H. Deubener, St. Paul, Minn. Filed Feb. 18, 1926. Serial No. 89,085. 8 Claims. (Cl. 93—35.



1. The method of making bags consisting in passing the material adapted to make the bag into position to be cut and folded and in attaching reinforcing means to the material as it passes into said position, folding said reinforced material and cutting the folded material.

Patents Nos. 1,901,859 to 1,902,808

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Trade-Marks	197—No.	301,857 to No.	302,053, inclusive.
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Labels	22—No.	41,850 to No.	41,871, inclusive.
Prints	54—No.	14,070 to No.	14,123, inclusive.
Reissues	6—No.	18,769 to No.	18,774, inclusive.
Plant Patents	2—No.	57 to No.	58, inclusive.
Designs	65—No.	89,479 to No.	89,543, inclusive.
Patents	950—No.	1,901,859 to No.	1,902,808, inclusive.
Total	1,331		

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,785,787, C. L. Rayfield, Thermostatically operated device, decided February 20, 1933, claims 1, 2, 3, 4, and 5.

Pat. 1,790,240, Ernest Lionne, Shoe stiffener, decided February 28, 1933, claims 9 and 11.

Notice

Relative to Payment of Fees

Receipt is acknowledged of your letter of ———— containing a check on ———— for $————.

The Patent Office is accepting this check and conditionally entering the fee as paid with the understanding that if the check is not honored and you do not immediately make the payment good otherwise, the date of payment on the applicant's file will be canceled.

If the check is in payment of the final fee, the entry will be made on the file and the issue deferred until it is seen whether the check is honored. If the check is not honored and not made good immediately, the entry of payment in the file will be canceled and the application may thereby become "forfeited."

To avoid complications, particularly if it is necessary for the patent to issue by a certain date, you are advised to make your future remittances to this office by money order, express money order, or money telegraphed to the Patent Office.

THOMAS E. ROBERTSON,
Commissioner of Patents.

U. S. Court of Customs and Patent Appeals

MONDAY, MARCH 6, 1933.

It is ordered that time for the deposit of fee for printing transcript, not due prior to March 1, 1933, be extended for thirty days without application therefor.

It is further ordered that time for filing briefs will be extended on special application therefor, during the present emergency, or until otherwise ordered by the court, in all cases where briefs were not due prior to March 1, 1933.

Attest:

ARTHUR B. SHELTON,
Clerk.

U. S. Court of Customs and Patent Appeals

Rules—Amendment

TUESDAY, MARCH 7, 1933.

The following amendment to the rules of the United States Court of Customs and Patent Appeals is hereby adopted, effective March 7, 1933:

Add a new paragraph to Rule I as follows:

4. The office of said clerk shall be open for the transaction of business on every day except Sundays and legal holidays from 9.00 o'clock a. m. to 4.30 o'clock p. m., except on Saturdays, when it shall be open from 9.00 o'clock a. m. to 1.00 o'clock p. m.

NOTE.—In connection with the above rule, arrangements have been made whereby parties or attorneys desiring to file papers when the office of the clerk may be closed, may deliver the same at the office of the Captain of the Guard, at the main entrance of the Internal Revenue Building on Constitution Avenue, where they will be retained and delivered to the clerk, and filed as of the date of their receipt in the said office of the Captain of the Guard.

Attest:

ARTHUR B. SHELTON,
Clerk.

Condition of Applications Under Examination at Close of Business March 3, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 54,466; Trade-Mark Division, 1,024. Oldest new case, Oct. 5, 1932; oldest amended, Oct. 5, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Oct. 19	Oct. 19	672
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 4	Nov. 4	943
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Dec. 8	Dec. 9	656
7063	4. MERRITT, A. D., Conveyors; Hoists; Handling Apparatus; Excavating	Nov. 28	Dec. 6	487
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 5	Dec. 22	481
4606C	6. LEWERS, A. M., Carbon Chemistry	Oct. 18	Oct. 19	1,091
5726	7. JARBOE, C. G., Optics; Photography	Nov. 8	Nov. 8	1,066
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 10	Dec. 15	576
4694	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 5	Dec. 20	592
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 22	Nov. 22	532
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 18	Oct. 10	655
7701	12. HENRY, C. O., Machine Elements	Nov. 19	Nov. 23	566
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 18	Nov. 17	806
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Dec. 10	Dec. 12	575
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 4	Nov. 4	1,323
5612	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 8	Dec. 8	572
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 15	Oct. 15	1,163
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 5	†Jan. 5	350
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 14	Oct. 13	1,252
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 6	†Jan. 3	331
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 4	Nov. 4	909
5734	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Nov. 5	Nov. 5	800
7902	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 6	Oct. 19	657
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 5	†Jan. 9	430
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Oct. 27	Oct. 25	1,197
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Nov. 17	Nov. 19	509
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 5	Dec. 5	635
4626	28. BENSON, A. R., Internal-Combustion Engines	Oct. 6	Oct. 6	987
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Oct. 17	Oct. 29	463
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 7	Dec. 6	620
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Oct. 28	Oct. 26	1,244
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 6	Dec. 6	663
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 20	Oct. 20	1,347
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Oct. 7	Oct. 10	981
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 14	Oct. 15	868
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 5	Oct. 5	1,434
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 19	Nov. 14	667
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Nov. 2	Nov. 4	721
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 21	Oct 21	989
7880	40. OBERLIN, J. J., Receptacles	Nov 5	Nov. 5	1,602
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Oct. 20	Oct. 25	660
5882	42. CUTTING, H. O., Electric Signaling	Oct. 10	Oct. 6	1,111
4586B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 12	Oct. 12	1,134
4067B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 25	Oct. 25	796
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	Dec. 27	Dec. 27	526
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Nov. 4	Nov. 4	607
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Oct. 26	Oct. 22	1,396
5721	48. ROEPKE, O. B., Electricity, General Applications	Oct. 31	Oct. 31	702
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 5	Oct. 5	974
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 8	Oct. 12	1,191
5628	51. BACKUS, C. D., Radiant Energy	Nov. 25	Nov. 25	915
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Nov. 25	Nov. 25	588
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 4	†Jan. 4	443
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 21	Oct. 21	931
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Dec. 8	Dec. 5	317
	{Designs	†Feb. 2	†Feb. 14	285
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Oct. 24	Oct. 24	1,000
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 7	Nov. 9	543
5605	58. DOWELL, E. F., Abrading; Typewriting	Nov. 4	Nov. 4	579
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Oct. 25	Oct. 25	714
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Oct. 15	Oct. 15	1,100
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 26	Oct. 21	844
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 7	Nov. 7	1,221
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 12	Oct. 12	1,224
4706	64. NASH, P. M., Acetylene: Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 7	Nov. 7	998
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Oct. 11	Oct. 13	1,263
2000B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks	†Jan. 27	†Feb. 16	864
	{Labels and Prints	†Feb. 4	†Feb. 18	160

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Raleigh

No. 3,013. Decided December 27, 1932

Patentability—Thermostatic Wafers.

Claims for a thermostatic wafer and claims for the method of making such wafers *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Mr. Albert G. McCaleb, Mr. Elwood Hansmann, Mr. Robert H. Wendt, and *Mr. James H. Littlehales* for Raleigh.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Graham, *P. J.:*

Application has been made in the United States Patent Office for a patent on improvements in thermostatic wafers, such as are ordinarily used in the control of automobile radiator shutters.

Claims 13, 14, 15, 16, 19, 20, and 21 were finally rejected by the Board of Appeals, and appellant has brought the matter here for review. These claims were rejected on the following references: Sonneborn, 1,158,576, Nov. 2, 1915; Lowell, 1,420,718, June 27, 1922; Post, 1,542,088, June 16, 1925.

Claims 13 and 20 seem to be fairly illustrative of the claims as regards the matters here in issue, and are as follows:

13. A thermostatic wafer comprising a pair of flexible metal members of substantially cup shape, one of said members having a curled flange with outwardly and inwardly extending portions, and the other of said members having a curled flange embracing said first mentioned curled flange and terminating between said outwardly and inwardly extending portions.

20. The method of making a thermal cell which consists in forming a circular side member provided with an annular offset shoulder and a peripheral flange extending away from said offset shoulder to encircle the flange of the second side member hereinafter mentioned, forming a second side member provided with an annular offset shoulder and a peripheral flange turned back from said last mentioned offset shoulder to lie within and parallel with the flange of the first side member when the side members are nested together, nesting the said side members one within the other with said shoulders in contact, simultaneously curling the nested flanges into interlocked engagement, then squeezing said curled flanges by pressure applied outside the chamber defined by the side members, filling said chamber with a fluid having a high coefficient of thermal expansion and sealing said chamber.

Appellant's device consists of a thermostatic cell in the shape of a round, flattened disk, suitable for containing some thermal fluid and made of some suitable metal. The device and its method of construction is thus described by appellant in his specification:

In constructing the wafer shown in the drawings, I first form the circular parts indicated at A and B, these parts being conveniently formed by a drawing operation in a punch press. It will be noted that the part A is conformed to provide a circular side wall A—1, an annular offset A—2, an annular shoulder A—3, and an annular flange A—4, the shoulder A—3 occupying a plane substantially parallel to the plane of wall A—1 and flange A—4 being disposed at right angles to said wall. Wall A—1 is preferably provided with an annular indentation A—5 to facilitate its flexure. I have found that the bend where the side wall A—1 merges into the offset A—2 should be appreciably rounded as indicated at A—6, because an abrupt angle at this point would be very apt to cause early fatigue of the metal. The bend where offset A—2 merges into shoulder A—3 should also be slightly rounded, although the elimination of an abrupt angle at this point is perhaps not quite so essential as is the elimination of such an abrupt angle between the side wall A—1 and the offset A—2.

Part B is conformed to provide the circular side wall B—1, the annular offset B—2, the annular shoulder B—3, and the annular flange B—4 which is turned back from the shoulder B—3 at right angles to the plane of the side wall B—1. Side wall B—1 is provided with the annular indentation B—5 to facilitate its flexure, and the bend B—6 where the side wall B—1 merges into the offset B—2 is definitely rounded as and for the same reason that the metal of the part A is rounded at A—6. The bend where offset B—2 merges into shoulder B—3 is also slightly rounded as illustrated.

The annular flange B—4 is of such external diameter that the wafer part B may be nested very snugly within the wafer part A with the shoulders A—3 and B—3 contacting to define the fluid chamber C.

With the parts B and A nested one within the other as illustrated in Fig. 3, the nested annular flanges A—4 and B—4 are simultaneously curled into interlocking engagement as illustrated in Fig. 4, this curling operation preferably being accomplished in a punch press by means of suitable dies, which need not be here illustrated. The inter-curled flanges are then tightly squeezed together along their entire circumference by force applied externally of the chamber C and at right angles to the normal planes of the side walls A—1 and B—1, this squeezing operation being preferably, but not necessarily, accomplished in a punch press.

The Lowell reference patent is upon thermostatic cells used in steam traps. This cell is of the same general type as that of applicant here, and a round portion of each side of the cell next the center is depressed. Post also shows a thermostatic cell used in steam traps, of similar construction, but with three annular areas of depression in the sides of the cell. Each of these is a device patent, with no method claims. Each shows the two sides of the cell joined by a rolled or folded joint. The only apparent difference between these joints and the one disclosed by appellant herein, is in the fact that the references show but one refolding of the margins of the sides, instead of the two shown by appellant.

The Board has held that this feature is supplied by Sonneborn. Sonneborn shows a metal radiator formed of two pieces of material, joined together at their outer extremities by flanges or extensions of said sides rolled or folded into seams having substantially the same degree of folding or rolling as shown by appellant's completed device. Sonneborn's patent is for a method of seaming. In his claims he recites, as in claim 1, his method:

1. The method of seaming sheet metal hollow articles, which consists in applying to each other two dished body sections with projecting edge portions, one of said sections being larger than the other but having its body portion of lesser width, and then rolling up the projecting edge portions of the two sections to form a several-walled seam and thereby drawing the body portion of the larger section outwardly to substantially the dimension of the body portion of the smaller section.

It is argued first, by appellant, that Sonneborn's patent is not in an analogous art. We are not able to agree with this contention. Both the appellant and Sonneborn are engaged in the art of making fluid tight seams in metal of the same general character. As stated in *In re Schneider*, 18 C. C. P. A. (Patents) 1114, 47 F.(2d) 970, 410 O. G. 3, the test is:

• • • Is the patentable conception in Reich in an art so remote and nonanalogous to the concept in applicant's art as to require invention to make the necessary substitution?

It is our opinion that no invention is involved in utilizing Schneider's seam and method in constructing appellant's thermostatic cell.

These conclusions as to analogous arts are in harmony with our former decisions on this subject. *In re Molyneaux*, 17 C. C. P. A. (Patents) 573, 35 F.(2d) 68, 388 O. G. 785; *In re Bennett*, 17 C. C. P. A. (Patents) 1113, 40 F.(2d) 755, 398 O. G. 708; *In re Voorhees*, 17 C. C. P. A. (Patents) 1162, 40 F.(2d) 773, 399 O. G. 7; *In re Metzger*, 18 C. C. P. A. (Patents) 808, 45 F.(2d) 918, 404 O. G. 3.

It is vigorously insisted by appellant that the method disclosed by Sonneborn will result in an entirely different joint than if made by appellant's method, for this reason: That Sonneborn shows his flanges to be pressed into angular shapes, instead of rounded or curved shapes, as shown by appellant; that because of said angles, the seam, when folded, will develop lines of weakness at the points of coincidence of the lines of said angles; that this is avoided by appellant's curves and his method of *curling*.

This distinction is not apparent to us. In his article claims, appellant must rely upon his finished product. This finished product is the result not only of *curling*, but of pressing in a stamp press, which, it would appear, would develop similar lines of weakness in appellant's seam. In any event, the seams, when completed, seem to be substantially the same in Sonneborn and applicant.

Special reference is made to rejected claim 19, in which the metal joint is described as made by thus engaging the flanges of the members:

> * * * the flange of one member being enclosed within the flange of the other, and both flanges extending *outward, inward and outward again* to form a gas tight joint * * * (Italics ours.)

It is said that in Sonneborn but one flange extends outward the second time. This feature, both tribunals of the Patent Office agree, is not inventive over Sonneborn, in view of the finished condition of the said joints. The appellant, in his specification, states that the preferred form of his said joint is finished by the application of solder thereto. In view of this fact, and in further view of the suggestions made by the Board of Appeals on this point, we are of opinion nothing inventive over Sonneborn is shown by appellant in this feature.

As to the method, there does not appear to be any substantial difference between the *rolling* of Sonneborn and the *curling* of appellant.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BARSKY

No. 3,036. Decided December 27, 1932

PATENTABILITY—REFRIGERATING SYSTEMS.

Claims for a refrigerating system of the absorption type *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. H. C. Bierman, Mr. Ellis S. Middleton, and *Mr. Ivan P. Taskof* for Barsky.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner denying all of the claims, 19 to 23, inclusive, in appellant's application for a patent for an alleged invention relating to improvements in a refrigerating system of the absorption type.

Claims 20 and 21 are illustrative. They read:

> 20. In a system of refrigeration comprising a chamber for an absorbent and absorbed refrigerant and means for vaporising, condensing, expanding and absorbing said refrigerant, the improvement which includes the application of methylamine as refrigerant and air as cooling medium.
>
> 21. A system of refrigeration which consists in vaporising liquid methylamine in proximity to a substance to be cooled, conducting said gas away from the substance to be cooled, then subjecting the gas to the cooling action of air to liquefy the same, collecting the liquid methylamine and repeating the cycle of operations.

The references are: Amundsen (French), 594,433, June 20, 1925; Herdman et al., 1,233,056, July 10, 1917.

Appellant's application discloses and claims the use of methylamine as a refrigerant, calcium chloride or other suitable substance as an absorbent, and air as a condensing medium in a refrigerating system of the absorption type.

The French patent to Amundsen relates to a refrigerating apparatus of the absorption type. The patentee disclosed the use of methylamine as a refrigerant, calcium chloride as an absorbent, and water as a condensing medium.

The patent to Herdman et al. relates to an absorption refrigerating system, and discloses the use of ammonia as a refrigerant and air as the condensing medium.

The record contains an affidavit of the applicant. It appears therefrom that, although the use of air as a condensing medium in absorption refrigerating systems in "large installations where plenty of space is available for a multiplicity of cooling pipes" was considered possible in the art, it had been considered impossible to use air as a condensing medium in such refrigerating systems of the household type, due to the fact that "the refrigerator is placed in a confined position, with very little circulation of air and the cooling pipes are small, closely spaced and usually enclosed in the refrigerator," and that it was universally believed that air could not be used as the condensing medium, regardless of the *refrigerant* used where the "machine was for household use or other confined space." Applicant was of opinion, therefore, that the use of methylamine as a refrigerant and air as the condensing medium in such systems of refrigeration of the household type involved invention.

The Primary Examiner stated that it was admittedly recognized that air was not customarily used as a condensing medium in connection with ammonia as a refrigerant due to the high pressure that would develop within the system. He stated, however, that the patent to Herdman et al. disclosed such a system. He further stated that, as it was well known that methylamine developed a lower pressure than ammonia and other refrigerants, it would be obvious to one skilled in the art to use air as a condensing medium, in combination with methylamine as a refrigerant.

In affirming the decision of the Primary Examiner, the Board of Appeals held that the use of air, instead of water, as a condensing medium, in combination with methylamine as a refrigerant was merely a matter of choice and did not involve invention.

It is contended by counsel for appellant that the patent to Herdman et al. is not a valid reference, because the apparatus disclosed therein is inoperative.

The Board of Appeals disposed of this contention by stating that, although the Herdman et al. apparatus might have some defects, they were not such as to render it inoperative.

Counsel for appellant has, with considerable elaborateness, discussed the reasons why he thinks that the particular apparatus disclosed in the patent to Herdman et al. is inoperative. He does not argue, however, that the defects in it could not be corrected by the exercise of ordinary mechanical skill. If it could be so corrected, assuming that certain defects do, in fact, exist, the patent is, nevertheless, a valid reference. *Pickering et al.* v. *McCullough et al.*, 104 U. S. 310, 21 O. G. 73; *Robbins* v. *Steinhart*, 19 C. C. P. A. (Patents) 1069, 57 F.(2d) 378, 421 O. G. 229.

The question of the patentability of the alleged invention may be disposed of without much discussion.

In his affidavit appellant asserted that the use of air as a condensing medium in absorption refrigerating systems in "large installations where plenty of space is available for a multiplicity of cooling pipes" was considered possible in the art prior, it must be assumed, to the filing of his application. He asserted, however, that it had been considered impossible to use air as a condensing medium in such refrigerating systems of the *household type*. Stated differently, appellant claims that, although it would not amount to invention to use air as a condensing medium in combination with any known refrigerant, for example, ammonia or methylamine, in large installations, no one had deemed it possible to use that combination in small compact refrigerators of the household type.

Assuming, for the purposes of this case, that appellant, an authority upon the subject, is right, it, nevertheless, may be observed that the appealed claims relate broadly to the use of air as a condensing medium in combination with methylamine as a refrigerant, and are not limited to refrigerating systems of the small compact household type. Nor may such limitations be read into them. Accordingly, the question of whether invention would be involved in successfully using air as a condensing medium in combination with methylamine as a refrigerant in small compact absorption refrigerators of the household type is not before us for consideration.

Appellant has broadly claimed the use of air as a condensing medium in combination with methylamine as a refrigerant in absorption refrigerating systems. In view of the references of record, we must hold that the tribunals of the Patent Office reached the right conclusion, and that the claims are devoid of patentability.

It is contended by counsel for appellant that the decision of the Board of Appeals, in the case at bar, should be reversed on the authority of the decision of this court in the case of *In re Weisblad*, 19 C. C. P. A. (Patents) 1175, 58 F.(2d) 418, 422 O. G. 309, because, it is argued, the court there held that the substitution of air cooling for water cooling in refrigerating systems of the absorption type, "where novelty, usefulness, and a distinct advancement in the art is admitted," involved invention.

That is not a correct statement of the holding of the court in that case.

The court there held that, considering the novelty and usefulness of the apparatus involved and the distinct advancement it made in the art, *in connection with the references of record*, the claims were patentable.

The issues in each case must be disposed of in accordance with the facts presented by the record.

For the reasons hereinbefore stated, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MATZNER

No. 3,047. Decided December 27, 1932

PATENTABILITY—RADIO RECEIVING SETS.

Certain claims for a radio receiving set *Held* patentable over the prior art.

APPEAL from the Patent Office. Modified.

Mr. Clyde A. Norton and *Mr. William S. Hodges* for Matzner.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting claims 1 to 3, inclusive, and 5 to 19, inclusive, of appellant's application, filed January 14, 1930, which application was for a reissue of Letters Patent No. 1,674,606. Claim 4 was also rejected by the Examiner but was allowed by the Board.

Claims 2, 14, and 15 are illustrative of the claims in issue and read as follows:

> 2. A dial for radio receiving sets including an electrical indicator adapted to be rendered active only when the dial is set to tune in a station, a normally open circuit in which said indicator is arranged, and circuit closing means carried by the dial, said circuit closing means including a plurality of contact members carried by the dial and disposed in circuit closing position only when the dial is set to tune in a station.
>
> 14. The combination with a radio receiver having a signal selector, of an indicator arranged to carry station identifying indicia in station indicating position, a lamp positioned so as to render said station identifying indicia more easily visible, a circuit for energizing said lamp, said circuit comprising a make and break contactor for controlling the illumination of said lamp, and means movable with said signal selector to effect closure of said circuit when said selector is set to receive signals from a previously chosen transmitting station.

15. The combination with a radio receiver having a signal selector, of a lamp and circuit controlling means for causing said lamp to give a light signal when said selector is set to receive signals from any one of a previously selected group of stations, a portion of said means being selectively positionable to provide said signal at each setting of said selector at which one of said group of stations is received.

The references are: Morton (British), 159,628, March 4, 1921; Townsend, 1,455,458, May 15, 1923; Ford, jr., 1,618,921, February 22, 1927; Shapiro, 1,639,618, August 16, 1927; Lawton, 1,648,410, November 8, 1927; Neal et al., 1,601,141, September 28, 1926; Langley, 1,631,687, June 7, 1927; Roth, 1,724,371, August 13, 1929; Mitchell et al., 1,058,320, April 8, 1913; Pollen et al., 1,077,965, November 4, 1913; Barkhausen et al., 1,123,067, December 29, 1914; Wood, 1,312,602, August 12, 1919; O'Malley, 1,276,563, August 20, 1918; O'Neal et al., 1,693,663, December 4, 1928; Rhodes, 1,010,802, December 5, 1911; Stalnaker, 1,099,865, June 9, 1914; Ehret, 707,056, August 12, 1902; Harlow, 1,419,561, June 13, 1922; Williams, 1,606,329, November 9, 1926; and "Radio," September, 1926, Advertising, page 7.

In the statement of the examiner no references were cited, but attention was called to letters of the examiner appearing in the record, citing the nineteen patents and one publication listed above and relied upon by the examiner in rejecting the claims.

The Board of Appeals in its decision cited no references, but in its statement the board said:

• • • We shall not list the numerous references of record in the case but we believe, after a consideration of the various communications and appellant's brief that we understand in substance the issue, and we shall therefore undertake to discuss it in broad terms.

We do not here deem it necessary to discuss the large number of references in the record for the reason that we do not find that any of them anticipate or suggest the alleged invention, involved in the claims here in issue, upon which appellant relies for patentability.

The claimed invention relates to radio receivers and consists, in addition to the controlling means in such receivers, of a means for giving an electrical indication when the dial controlling the movable member of the condenser is in position to tune the receiver for a particular station. Appellant discloses a radio provided with an electrical indicator in the form of a lamp, a normally open circuit for supplying current to said lamp, and contacts for closing that circuit to light the lamp only when the dial has been rotated to those positions at which the set is tuned to receive various broadcasting stations, the lamp at such times serving both as an indicator of tuned position and also to illuminate a transparent dial displaying station letters or other indicia. Another feature disclosed by appellant is means whereby the operator, at his option, may place said circuit closing means in operating condition so as to light said lamp only when the dial has been rotated to predetermined tuning positions.

We agree with the Board of Appeals and the Examiner that the claims are entirely too numerous, and also that many of them are not sufficiently definite to properly distinguish appellant's alleged invention from the prior art disclosed in the references. It is our opinion that claims 2, 7, 11, 12, 14, 15, and 17 fully embrace the subject matter of appellant's application, and we think all of the other claims either fail to claim distinctly the alleged invention or constitute mere duplications of one or another of those above indicated.

With respect to said claims 2, 7, 11, 12, 14, 15, and 17, we have carefully examined all of the large number of references cited, and we do not find that either singly or in combination do they disclose or suggest the invention embodied in said claims. The gist of appellant's invention is the combination and provision of means for quickly securing station adjustments in a radio receiver without the necessity of closely watching the dial. Appellant conceived the use of a stop light which would flash to the operator a stop signal when the proper adjustment for stations had been reached, and further providing a means whereby said stop signal might be limited so as to flash only when the receiver was in proper adjustment to tune any one of a number of predetermined stations.

The Board of Appeals held that such a signal involved utility and, when accomplished by the use of contact pins upon the dial, was patentable because, as the Board found, such contact pins were not shown in any of the references. On this theory the Board allowed claim 4, which reads as follows:

4. A radio dial including a stationary housing, a dial rotatable in the housing, a signal lamp in the housing arranged under a window therein, a normally open lamp controlling circuit, and circuit closing means carried by the dial comprising contact pins selectively positioned on the dial in accordance with the dial settings necessary to tune in broadcasting stations.

We are of the opinion that the references do not show or suggest the useful result secured by appellant, either by the use of contact pins or in any other manner, and we therefore hold that appellant should not be restricted to the use of contact pins, but that he is entitled to a broader protection irrespective of whether the lamp circuit is closed by means of contact pins.

With respect to certain of the claims the Board of Appeals held that they were limited to having the lamp light only when the dial is rotated to tune a single station and at no other setting of the dial, and that a structure so limited would not embody anything patentable over the prior art. In discussing this point the Board referred to claim 1 and said:

• • • As previously stated, in our opinion the use of a single signal would not be patentable nor do we consider that merely including a plurality of contacts broadly, properly defines invention over the prior art; in claim 1, for instance, reference is made to a plurality of circuit closing means but only one station is specifically set forth in the claim. The use of the other circuit closer is therefore not defined. • • •

Said claim 1 included the following language:

1. A dial for radio receiving sets including a single electrical indicator adapted to be rendered active *only when the dial is set to tune in a station*, • • • (Italics ours.)

Claim 2, hereinbefore quoted, includes similar language limiting the closing of the lamp circuit to the time "only when the dial is set to tune in a station." We think that the Board has given too narrow a construction to the last quoted language; having in mind that in any tuned position a radio receiver is capable of picking up but one station, or is limited to stations on the tuned frequency, we believe the language of the claims should be interpreted to mean that circuit closure is effected *whenever* the set is tuned to receive a station, and inasmuch as the set is so tuned whenever it is adjusted to any one of the many broadcast frequencies, the language of the claims is not limited to the setting of the receiver for a single station, but contemplates any setting of the receiver which tunes it to a broadcast frequency. At *any* tuned frequency, the dial is set to tune in a station, as called for by the claims, and we believe the claims should be so construed on this point.

It is our opinion that claims 2, 7, 11, 12, 14, 15, and 17 will give to appellant the protection to which he is entitled by his invention, and that said claims should be allowed.

The decision of the Board of Appeals is affirmed as to claims 1, 3, 5, 6, 8, 9, 10, 13, 16, 18, and 19, and reversed as to claims 2, 7, 11, 12, 14, 15, and 17.

Modified.

CARNEGIE LIBRARY OF ATLANTA

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,180,159, I. Langmuir, Incandescent electric lamp; 1,410,499, A. Pacz, Metals and their manufacture; 1,423,956, Mitchell & White, Tipless incandescent lamp; 1,687,510, M. Pipkin, Electric lamp bulb, D. C. Oreg. (Portland), Doc. E 9355, *General Electric Co.* v. *B. F. Sinsheimer.* Decree for plaintiff Jan. 16, 1933.

1,193,093, B. Weinberger, Garment pressing machine, D. C., E. D. N. Y., Doc. E 6458, *U. S. Hoffman Machinery Corp.* v. *Modern Pressing Appliance, Inc.* Consent decree for plaintiff Jan. 26, 1933.

1,223,180, C. F. Kettering, Ignition system; 1,641,874, W. A. Chryst, Induction coil; 1,647,417, W. G. Schneider, same, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6796, *Delco-Remy Corp.* v. *O. Borodkin et al.* Same, D. C., S. D. N. Y., Doc. E 74/3, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.*

1,231,764, F. Lowenstein, Telephone relay, filed Dec. 27, 1932, D. C. Minn., 4th Div., Doc. 2598, *Western Electric Co., Inc., et al.* v. *Ultraphone Sound System, Inc., et al.* Consent decree dismissing bill on the merits and with prejudice Jan. 17, 1933.

1,247,335, H. W. Russ, Wood heel turning machine, filed Jan. 28, 1933, D. C., S. D. Ohio, W. Div., Doc. E 845, *United Shoe Machinery Corp.* v. *Vulcan Corp.*

1,253,471. (See Re. 17,961.)

1,268,473, W. O. Kennington, Distributor cap for ignition apparatus; 1,351,714, A. E. Berdon et al., Distributer head for ignition devices; 1,372,065, O. F. Conklin, Distributer device for ignition apparatus, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6790, *Delco-Remy Corp.* v. *Esmco Auto Products Corp.* Doc. E 6795, *Delco-Remy Corp.* v. *O. Borodkin et al.* Same, D. C., S. D. N. Y., Doc. E 74/2, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.*

1,272,056, C. F. Kettering, Ignition system; 1,286,803, H. G. Schwarze, Hydrocarbon motor; 1,305,165, W. H. Ratcliff, Circuit breaker; 1,556,901, C. E. Berkdoll, Ignition device; 1,557,207, 1,593,339, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720, J. T. Fitzsimmons, Ignition timer; Re. 18,276, C. H. Kindl, same, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6789, *Delco-Remy Corp.* v. *Esmco Auto Products Corp.* Doc. E 6794, *Delco-Remy Corp.* v. *O. Borodkin et al.* Same, D. C., S. D. N. Y., Doc. E 74/1, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.*

1,286,803. (See 1,272,056.)

1,301,029, I. M. Bean, Bath cabinet, filed Sept. 6, 1932, D. C., E. D. Va., Doc. 281, *American Metallic Shower Bath Co.* v. *Richmond Engineering Co., Inc.*

1,305,165. (See 1,272,056.)

1,305,165, W. H. Ratcliff, Circuit breaker; 1,556,901, C. E. Berkdoll, Ignition device; 1,557,207, 1,593,339, F. C. Kroeger, same; 1,687,040, W. D. Schrope, same; 1,825,720, J. T. Fitzsimmons, Ignition timer; Re. 18,276, C. H. Kindl, same, filed Jan. 24, 1933, D. C., S. D. N. Y., Doc. E 74/8, *Delco-Remy Corp.* v. *J. A. Fischer Co., Inc.*

1,350,605, W. E. Greenawalt, Flotation apparatus; 1,374,446, 1,374,500, same, Apparatus for treating liquids with gases, C. C. A., 10th Cir., Doc. 661, *The Stearns-Roger Mfg. Co.* v. *W. E. Greenawalt.* Decree reversed (notice Jan. 26, 1933).

1,351,714. (See 1,268,473.) 1,372,065. (See 1,268,473.)

1,374,446. (See 1,350,605.) 1,374,500. (See 1,350,605.)

1,381,770, W. H. Vibber, Terminal ground clamp, D. C., E. D. Pa., Doc. 5253, *Gillette-Vibber Co. et al.* v. *Heinemann Electric Co.* Consent decree for plaintiff Jan. 26, 1933.

1,410,499. (See 1,180,159.) 1,423,956. (See 1,180,159.)

1,441,217, R. Daae, Gas producer, C. C. A., 3d Cir., Doc. 4966, *R. Daae* v. *Allegheny Steel Co.* Decree affirmed Jan. 30, 1933.

1,468,595, W. Ferris, Broaching machine, appeal filed Jan. 28, 1933, C. C. A., 2d Cir., Doc. 12548, *The Oilgear Co.* v. *The J. N. Lapointe Co.*

1,486,883, E. P. Halliburton, Method of hydrating cement; 1,500,385, same, Method and apparatus for mixing materials, filed Jan. 24, 1933, D. C., N. D. Tex. (Ft. Worth), Doc. E 732, *E. P. Halliburton et al.* v. *Rhoads Drilling Co.*

1,500,385. (See 1,486,883.)

1,526,127, F. B. Flick, Coating aluminum articles, filed Jan. 25, 1933, D. C., E. D. N. Y., Doc. E6814, *Aluminum Colors, Inc.*, v. *U. S. Research Corp. et al.*

1,526,982, E. W. Hill, Stencil sheet, filed Jan. 25, 1933, D. C., S. D. N. Y., Doc. E 74/24, *A. B. Dick Co.* v. *J. Ghear.* Consent decree for plaintiff (notice Jan. 30, 1933). Same, filed Jan. 30, 1933, D. C., E. D. N. Y., Doc. E 6830, *A. B. Dick Co.* v. *A. L. Lefner.* Same, filed Feb. 1, 1933, D. C., S. D. N. Y., Doc. E 74/98, *A B. Dick Co.* v. *State Office Supply Co., Inc., et al.*

1,556,901. (See 1,272,056 and 1,305,165.)

1,557,207. (See 1,272,056 and 1,305,165.)

1,593,339. (See 1,272,056 and 1,305,165.)

1,601,146 (a), J. B. Replogle, Electric switch; 1,693,998, W. A. Chryst, same; 1,835,019, H. D. Dawson, same, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6792, *Delco-Remy Corp.* v. *Esmco Auto Products Corp.* Doc. E 6798, *Delco-Remy Corp.* v. *O. Borodkin et al.*

1,601,146 (b), J. B. Replogle, Electric switch; 1,693,998, W. A. Chryst, same; 1,798,751, H. E. Norviel, same; 1,835,019, H. D. Dawson, same, filed Jan. 24, 1933, D. C., S. D. N. Y., Doc. E 74/5, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.*

1,641,874. (See 1,223,180.)

1,645,370, W. E. Callison, Amusement device, D. C., N. D. Okla. (Tulsa), Doc. E 716, *W. E. Callison* v. *T. J. Dean et al.* Dismissed Jan. 12, 1933.

1,647,417. (See 1,223,180.)

1,668,490. (See Re. 17,131.)

1,679,266, B. C. Place, Fastener, filed Jan. 25, 1933, D. C., N. D. Ohio, E. Div., Doc. E 4584, *G. E. Gagnier et al.* v. *Cuyahoga Spring Co. et al.*

1,687,040. (See 1,272,056 and 1,305,165.)

1,687,510. (See 1,180,159.)

1,693,998. (See 1,601,146 (a) and (b).)

1,697,563. (See Re. 17,361.)

1,710,073, 1,714,191, S. Ruben, Electrical condenser, D. C., S. D. N. Y., Doc. E 71/289, *Ruben Condenser Co. et al.* v. *J. Wanamaker, N. Y.* Consent and order of discontinuance (notice Jan. 24, 1933). Doc. E 71/290, *Ruben Condenser Co. et al.* v. *Davega, Inc.* Decree as above. Doc. E. 60/128, *Ruben Patents Co. et al.* v. *Insuline Corp. of America.* Consent order of discontinuance Feb. 1, 1933.

1,714,191. (See 1,710,073.)

1,740,345. (See Re. 17,361.)

1,750,107. (See Re. 17,861.)

1,776,140, G. T. Balfe, Gasket, filed Jan. 25, 1933, D. C. Md., Doc. E 2155, *Detroit Gasket & Mfg. Co.* v. *J. R. Hunt et al.*

1,787,186, J. A. Barkeij, Inlet manifold for a straight eight internal combustion engine, D. C., S. D. Calif. (Los Angeles), Doc. E U-38-C, *J. A. Barkeij* v. *E. C. Anthony, Inc., et al.* Doc. E U-50-C, *J. A. Barkeij* v. *Howard Automobile Co. et al.* Doc. E U-51-H, *J. A. Barkeij* v. *Greer-Robbins Co. et al.* Doc. E U-52-J, *J. A. Barkeij* v. *W. M. Murphy Motors Co. et al.* Dismissed on plaintiff's motion Jan. 20, 1933, in each of above cases.

1,789,901, F. Hotchner, Electrode, D. C., W. D. Wash., N. Div., Doc. 886, *Q. R. S. Neon, Inc., et al.* v. *G. Zamberlin et al.* Consent decree for plaintiff Jan. 26, 1933.

1,796,855, R. H. Ahlers, Electric condenser; 1,815,496, W. A. Chryst, Ignition apparatus; 1,830,907, C. H. Kindl, Electrical condenser, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6791, *Delco-Remy Corp.* v. *Esmco Auto Products Corp.* Doc. E 6797, *Delco-Remy Corp.* v. *O. Borodkin et al.* Same, D. C., S. D. N. Y., Doc. E 74/4, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.*

1,798,751. (See 1,601,146 (b).)

1,801,128, A. E. Waller, Finding for a clasp, D. C., S. D. N. Y., Doc. E 61/346, *A. E. Waller* v. *Apollo Die Tool & Metal Stamp Corp.* Patent sustained, injunction granted (notice Jan. 23, 1933). Doc. E 62/225, *A. E. Waller* v. *M. Sonshine, Inc.* Decree as above.

1,807,567, 1,819,871, H. A. Clark, Oil seal; 1,807,569, same, Oil retainer, filed Jan. 19, 1933, D. C., E. D. Mich. (Detroit), Doc. 5739, *Chicago Rawhide Mfg. Co.* v. *Automobile Equipment Co.*

1,807,569. (See 1,807,567.) 1,815,496. (See 1,796,855.)

1,819,871. (See 1,807,567.)

1,825,720. (See 1,272,056 and 1,305,165.)

1,830,907. (See 1,796,855.)

1,835,019. (See 1,601,146 (a) and 1,601,146 (b).)

1,840,757, H. B. Watkins, Package, D. C., S. D. Ohio (Dayton), Doc. E 331, *The Kilgore Mfg. Co.* v. *Midwest Fireworks Co. et al.* Consent decree sustaining bill Jan. 28, 1933.

1,864,459. (See Re. 18,498 (a) and (b).)

1,864,460. (See Re. 18,498 (b).)

Re. 17,131, O. S. Caesar, Heating apparatus for automotive vehicles, appeal filed Jan. 20, 1933, C. C. A., 2d Cir., Doc. 12,534, *Tropic-Aire, Inc.* v. *E. A. Wildermuth.*

Re. 17,361, P. J. McInerney, Art of building concrete surfacing structure; 1,697,563, J. N. Heltzel, Concrete surfacing joint and means for and method of forming same; 1,740,345, same, Traffic line and joint machine; 1,750,107, same, Joint producing machine, filed Jan. 24, 1933, D. C., E. D. Mich. (Detroit), Doc. 5753, *J. N. Heltzel* v. *W. H. Knapp et al.*

Re. 17,961, F. H. Ellison, Game apparatus, filed Jan. 23, 1933, D. C., N. D. Okla. (Tulsa), Doc. E 830, *Pajo Amusements, Inc.* v. *N. Rogers.* Patent held valid and infringed Feb. 6, 1933.

Re. 18,276. (See 1,272,056 and 1,305,165.)

Re. 18,498 (a), H. E. Norviel, Ignition apparatus; 1,864,459, same, Switch, filed Jan. 24, 1933, D. C., E. D. N. Y., Doc. E 6800, *Delco-Remy Corp.* v. *P. & D. Mfg. Co., Inc.*

Re. 18,498 (b), H. E. Norviel, Ignition apparatus; 1,864,459, same, Switch; 1,864,460, same, Switch and coil unit, filed Jan. 24, 1933, D. C., S. D. N. Y., Doc. E 74/7, *Delco-Remy Corp.* v. *National Ignition Sales Co., Inc.* Doc. E 74/25, *Delco-Remy Corp.* v. *K. E. M. Mfg. Co., Inc.*

Des. 84,811, R. de Boer, Combination ash receiver and electric lighter, filed May 14, 1932, D. C., W. D. Mich. (Grand Rapids), Doc. E 2550, *Grand Rapids Metalcraft Corp.* v. *Sears, Roebuck & Co.* Dismissed Jan. 30, 1933.

Des. 88,457, Des. 88,459, A. J. Heinke, Textile fabric, filed Jan. 24, 1933, D. C., S. D. N. Y., Doc. E 74/10, *H. R. Mallinson & Co., Inc.* v. *M. Schwarz Textile Corp.*

Des. 88,459. (See Des. 88,457.)

T. M. 291,713, D. W. Howe, Glazed pecans, pecan candy, etc., filed Jan. 23, 1933, D. C., S. D. Mich., S. Div., Doc. E. 435, *D. W. Howe et al.* (*Pecan Candy Shoppe*) v. *M. J. Eldred et al.*

Notice

Removal of Foreign Patent Offices

BUDAPEST, *January 23, 1933.*

SIR: I am directed by the President of the Royal Hungarian Patent Court to inform you that the postal address of the Royal Hungarian Patent Court will change the 1st of February, 1933, to

Budapest 5.
Postafiók 123. Hungary.

I am, sir, your obedient servant,

REICHÓRDA,
Chief Clerk.

COMMONWEALTH OF AUSTRALIA
MELBOURNE, C. 1, *22nd December, 1932.*
DEPARTMENT OF PATENTS, PATENT OFFICE.
581–585 Bourke Street.

REMOVAL OF PATENT OFFICE, TRADE-MARKS, DESIGNS AND COPYRIGHT OFFICES FROM MELBOURNE TO CANBERRA, F. C. T.

The COMMISSIONER OF PATENTS,
Patent Office, Washington, U. S. A.

SIR: I have to advise you that the Patent Office, Trade Marks, Designs, and Copyright Offices of the Commonwealth of Australia will be removed from Melbourne, Victoria, to Canberra, Federal Capital Territory (F. C. T.), early in 1933.

I should be glad therefore if you would arrange after receipt of this notification to despatch all matter which is sent through the post to—

Commissioner of Patents,
Commonwealth Patent Office,
Canberra, F. C. T.,
Australia.

All matter which is forwarded other than through the post should be similarly addressed.

Immediately I am in a position to do so, I shall notify you of the actual date of the establishment of the offices mentioned in Canberra.

In the meantime it would be appreciated if you publicly announce the intended transfer in your OFFICIAL GAZETTE.

B. WALLACH,
Commissioner of Patents.

TRADE-MARKS

OFFICIAL GAZETTE, MARCH 21, 1933
[VOL. 428. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 334,530. GROOM COAL CO., Belleville, Ill. Filed Feb. 1, 1933.

KINTLIN

For Coal.
Claims use since Jan. 21, 1932.

CLASS 2

Receptacles

Ser. No. 330,911. WÜRTTEMBERGISCHE METALLWAREN-FABRIK, Geislingen-Steige, Germany. Filed Oct. 3, 1932.

IKORA-METALL

The word "Metall" is disclaimed apart from the mark as shown on the drawing.

For Boxes, Cartons, and Cases Made of Paper, Fiber, Pyroxylin and Other Cellulosic Substances, Synthetic Resin, and Base Metal for General Purposes.
Claims use since Sept. 22, 1930.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 332,568. MORRIS, MANN & REILLY, INC., Chicago, Ill. Filed Nov. 28, 1932.

UNITED *foreign* SHOPS

For Ladies' Hand Bags and Vanity Bags.
Claims use since Feb. 9, 1932.

Ser. No. 334,707. THE HARLIC BAG COMPANY, South Norwalk, Conn. Filed Feb. 7, 1933.

"PIGRA"

For Ladies' Hand Bags.
Claims use since Mar. 22, 1932.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 332,779. MCEWEN, DENBY & HART-BRIGGS LIMITED, Sunbury-on-Thames, England. Filed Dec. 5, 1932.

COROLON

For Abrasive Preparations in Solid and/or Powdered Form for Polishing and Grinding.
Claims use since Nov. 7, 1930.

Ser. No. 333,895. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 13, 1933.

CRAFTSMAN

For Sharpening Stones and Grinding Wheels.
Claims use since May 9, 1931.

Ser. No. 334,421. DRUGGISTS' SUPPLY CORPORATION, New York, N. Y. Filed Jan. 27, 1933.

Hostess

For Soap.
Claims use since June 28, 1932.

Ser. No. 334,512. WESCO PRODUCTS, INC., Buffalo, N. Y. Filed Jan. 31, 1933.

NU-NESS

For Composition Used in Dry Cleaning of Garments, Hats, Draperies, and Other Fabrics.
Claims use since Dec. 10, 1932.

Ser. No. 334,659. BERNARD WILMSEN, doing business as B. Wilmsen, Philadelphia, Pa. Filed Feb. 4, 1933.

SKRAM

For Metal Sponges for Scouring Pots, Pans, Glassware, China, Aluminum, Copper, Earthenware, Ovens, Etc.
Claims use since Jan. 31, 1933.

Ser. No. 334,829. ANDREW C. CAMPBELL, INC., Bridgeport, Conn. Filed Feb. 10, 1933.

HUDORDISC

For Abrasive Wheels.
Claims use since Jan. 16, 1933.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 326,247. AUSTRALIAN ESSENTIAL OILS LIMITED, Sydney, Australia. Filed Apr. 16, 1932.

TI-TROL

For Antiseptic Oil.
Claims use since Jan. 3, 1929.

Ser. No. 326,368. HOME SANITATION COMPANY, INC., doing business as Sani-Moth, Inc., Waterloo, Iowa. Filed Apr. 22, 1932.

Sani-Moth

For Para-Dichlorobenzene Sanitation Crystals.
Claims use since Apr. 11, 1932.

Ser. No. 328,068. MOUNTAIN VARNISH & COLOR WORKS, INC., doing business as M. V. C. Laboratories, Toledo, Ohio. Filed June 17, 1932.

KLENALE

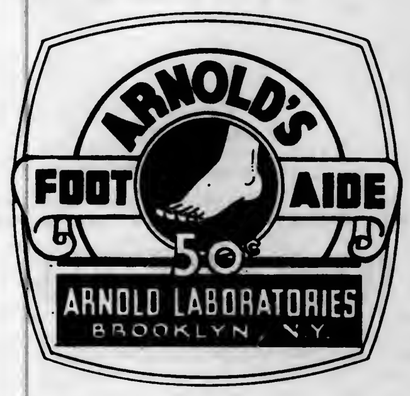
For Pharmaceutical or Toilet Preparation Used as a Protecting Coating for the Skin Around Finger Nails.
Claims use since Apr. 2, 1932.

Ser. No. 330,115. LUIS & ENRIQUE LEMOS, Buenos Aires, Argentina. Filed Sept. 3, 1932.



For Vaccines, Serums, and Ferments for the Treatment of Human Maladies.
Claims use since Apr. 28, 1927.

Ser. No. 330,670. LILLIAN SEIDON, doing business as Arnold Laboratories, Brooklyn, N. Y. Filed Sept. 26, 1932.



The words "50¢" and "Brooklyn, N. Y.," and "Foot Aide" are disclaimed apart from the mark as shown in the drawing.
For An Ointment to Relieve Foot Ailments in General.
Claims use since Sept. 15, 1931.

Ser. No. 330,891. MAX FACTOR & CO., Los Angeles, Calif. Filed Oct. 3, 1932.

TELEVISION



For Theatrical Make-Up and Cosmetics—Namely, Powder Foundation Cream; Make-Up Foundation, a Face Cream Used as a Powder Base; Grease Paints; Colors to Line the Face for Theatrical and Expressive Effects; Liquid Body Make-Up, Face Powders, Cold Creams, Lip Sticks, Liquid Make-Up Remover, Nose Putty, Moist Rouge, Dry Rouge, Brilliantine Liquid and Paste; Skin Freshener, a Cooling Face Lotion; Blackhead Cream, Shampoo, Perfumes, Deodorants, Hair Tonics, Eau de Cologne, Toilet Water; Bleach Mask, a Face Bleach Cream, Restorative Cream, a Cream to Remove Crowsfeet and Line Wrinkles; Circulation Cream, a Cream to Stimulate Circulation About the Face; Liquefying Cream, a Quick Melting Face Cream; Body Powder, Cleansing Cream, Lemon Cream, Skin and Tissue Cream, Make-Up Blender, a Lotion in Colors for Arms, Neck, and Shoulders to Make the Respective Parts to Harmonize with Color of the Face; Hand Lotion, Lip Pomades; Eye Shadows, a Colored Soft Cream to Shadow the Eyelids; Eyebrow Pencils, Eyelash Make-Up, a Mascaro Form of Cosmetic Applied the Same as Regular Mascaro; Mascaro, Astringent, Honeysuckle Cream, a Lotion with Astringent Value, Also Used as a Powder Base; Lip Rouge, Liquid Make-Up.
Claims use since July, 1930.

Ser. No. 331,245. CHEMISCHE FABRIK HELFENBERG A. G. VORM. EUGEN DIETERICH, Helfenberg near Dresden, Germany. Filed Oct. 14, 1932.

Enatin

For Medicines, Chemical Products, Pharmaceutical Drugs—Namely, Preparations for the Treatment of Gall, Liver, and Kidney Diseases, and Gall, Kidney, and Ureter Stones; Chemical Means for Extirpating Animals and Plants; Disinfectants and Chemical Food Preservatives.
Claims use since August, 1932.

Ser. No. 331,280. MAX FACTOR & CO., Los Angeles, Calif. Filed Oct. 15, 1932.

Brownette

For Theatrical Make-Up and Cosmetics—Namely, Powder Foundation Cream; Make-Up Foundation, a Face Cream Used as a Powder Base; Grease Paints; Colors to Line the Face for Theatrical and Expressive Effects; Liquid Body Make-Up, Face Powders, Cold Creams, Lip Sticks, Liquid Make-Up Remover, Nose Putty, Moist Rouge, Dry Rouge, Brilliantine Liquid and Paste; Skin Freshener, a Cooling Face Lotion; Blackhead Cream, Shampoo, Perfumes, Deodorants, Hair Tonics, Eau de Cologne, Toilet Water; Bleach Mask, a Face Bleach Cream; Restorative Cream, a Cream to Remove Crowsfeet and Line Wrinkles; Circulation Cream, a Cream to Stimulate Circulation About the Face; Liquefying Cream, a Quick Melting Face Cream; Body Powder, Cleansing Cream, Lemon Cream, Skin and Tissue Cream, Make-Up Blender, a Lotion in Colors for Arms, Neck, and Shoulders to Make the Respective Parts to Harmonize with Color of the Face; Hand Lotion, Lip Pomades; Eye Shadows, a Colored Soft Cream to Shadow the Eyelids; Eyebrow Pencils, Eyelash Make-Up, a Mascaro Form of Cosmetic Applied the Same as Regular Mascaro; Mascaro, Astringent, Honeysuckle Cream, a Lotion with Astringent Value, Also Used as a Powder Base; Lip Rouge, Liquid Make-Up.
Claims use since Sept. 15, 1932.

Ser. No. 331,746. MERCEDES L'OFFICIAL, New York, N. Y. Filed Oct. 31, 1932.

Madam L'official

The name "Madam L'official" as displayed in the drawing is as written by the applicant.
For Preparation for Tuberculosis, Muscular Rheumatism, Kidney Troubles, Coughs, Grippe, Headache, Nervousness, Impotency, Antiseptic, Burns, Slight Cuts, Scalds, Growing Hair, Damp Feet, Eye Trouble, Skin Troubles, Tumors, and Pimples.
Claims use since Sept. 26, 1932.

Ser. No. 331,964. URE DRUGGIST, INC., Cleveland, Ohio. Filed Nov. 7, 1932.

Silver Line

For Aspirin, Bay Rum Imported, Buchu and Juniper Compound, Digestive Tonic, Laxative Salts, Liquid Antiseptic, Milk of Magnesia, Phenolphthalein Laxative Wafers, Rubbing Alcohol Compound, Sodium Phosphate, Syrup Cocillana Compound, and Syrup of Tar and Menthol Compound.
Claims use since Oct. 25, 1932.

Ser. No. 332,689. DOLS' VOLATALISE FLANNEL, LIMITED, Huddersfield, England. Filed Dec. 2, 1932.

Volatalise

For Medicated Flannel for Human Use and Portions Thereof Cut to Fit Special Parts of the Body.
Claims use since Oct. 20, 1921.

Ser. No. 332,920. E. W. HELLWIG CO., INC., New York, N. Y. Filed Dec. 9, 1932.

Baspirin

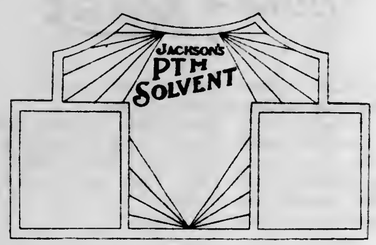
No claim being made to the exclusive use of the word "Aspirin" apart from the mark shown in the drawing.
For Aspirin Tablets.
Claims use since Dec. 3, 1932.

Ser. No. 333,289. HAROLD E. HOGAN, doing business as The Gauze Products Company, Vernon, N. Y. Filed Dec. 22, 1932.

GAUZOYL

For Medicated Oil Gauze Bandage.
Claims use since Nov. 8, 1932.

Ser. No. 333,480. MARCELLUS C. JACKSON, doing business as P T H Laboratory, Morgantown, W. Va. Filed Dec. 29, 1932.



Registration of the word "Solvent" is not claimed apart from the mark shown.

For Preparation Used in the Treatment of Pyorrhea, Trench Mouth, Halitosis, Sore and Bleeding Gums.

Claims use since June, 1928.

Ser. No. 333,538. TERRI COSMETICS CORPORATION, New York, N. Y. Filed Dec. 30, 1932.

Fenwicke

For Cold Cream, Vanishing Cream, Face Cream, Massage Cream, Bleaching Cream and/or Lotions, Deodorants, Depilatories, Face Powder, Toilet Water, Perfumes, Antiseptic Solutions, Camphor Ice, Lip and Face Rouge, Eye Brow Pencil.

Claims use since Apr. 4, 1931.

Ser. No. 333,639. MARY SCOTT ROWLAND, LTD., Jersey City, N. J. Filed Jan. 4, 1933.

SINLESS PASSION

For Perfumes, Toilet Waters, and Powders for the Face and Body.

Claims use since Dec. 23, 1932.

Ser. No. 333,648. J. ELLIOTT WILEY, doing business as Blurex Mfg. Co., Philadelphia, Pa. Filed Jan. 4, 1933.

BLUREX

For Starching Compounds.

Claims use since Dec. 20, 1932.

Ser. No. 333,705. ALFRED E. JOHANSEN, St. Paul, Minn. Filed Jan. 6, 1933.



All wording of the mark aside from the word "Antayste" is disclaimed apart from the mark as shown.

For Preparation for Use in Killing Ants.

Claims use since May 2, 1932.

Ser. No. 333,888. LESQUENDIEU, INCORPORATED, New York, N. Y. Filed Jan. 13, 1933.

TUSSY

For Face Powder, Liquid Face Powder, Rouge, Lipsticks, Pomade, Cleansing Cream, Tissue Cream, Finishing Cream, Skin Lotion, Eyebrow Pencils, Eye Shadow, Mascara (Cosmetique), Vanity Cases Containing Powder and/or Rouge, and/or Lipsticks, and Refills for Vanities.

Claims use since Nov. 6, 1925.

Ser. No. 333,982. SHERKA CHEMICAL COMPANY, INC., New York, N. Y. Filed Jan. 16, 1933.



For Industrial and Pharmaceutical Chemicals—Namely, Thymol, Camphor, and Urea (Technical and Chemically Pure).

Claims use since Nov. 14, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 334,020. PARFUMERIE RIGAUD, INC., New York, N. Y. Filed Jan. 17, 1933.

PARADE

For Perfumes, Toilet Water, Face Powder.

Claims use since Dec. 29, 1932.

Ser. No. 334,024. PARFUMERIE ST. DENIS, New York, N. Y. Filed Jan. 17, 1933.

B 18
(Be Eighteen)

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hasel, Peroxide, Petroleum Jellies, Witch Hasel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Water.

Claims use since Dec. 10, 1932.

Ser. No. 334,893. ARKWRIGHT MERCHANDISING CORP., New York, N. Y. Filed Feb. 3, 1933.

FRANCHETTE

For Toilet Powder, Perfume, Talcum Powder, Lip and Face Rouge, After-Shaving Lotion, Hand and Face Cream, Lip Stick, Nail Polish, Preparation for Removing the Cuticle, Nail Bleach, Hair Tonic, Shampoos.

Claims use since Oct. 18, 1929.

Ser. No. 334,873. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfort-on-the-Main, Germany. Filed Feb. 11, 1933.

Supralin

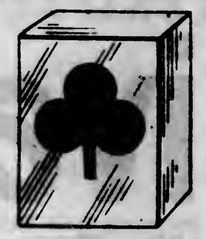
For Spirit for Facilitating the Starting of Internal Combustion Engines.

Claims use since Dec. 10, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 324,609. KAUFMANN BROS. & BONDY, INC., West New York, N. J. Filed Feb. 8, 1933.



The trade-mark consists of a clover-leaf imbedded in a representation of a cube of ice.

For Cigar Holders, Cigarette Holders, and Pipes.

Claims use since Feb. 6, 1933.

CLASS 11

Inks and Inking Materials

Ser. No. 324,018. THE STIMSON PRESS, Boston, Mass. Filed Feb. 9, 1932.

BRUSH TONE

For Printing Inks.

Claims use since Sept. 14, 1931.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 321,117. NEILAN CO., LTD., Los Angeles, Calif. Filed Nov. 18, 1931.



For Steam Pressure Control Devices and Regulators—Namely, Ball Bearing Reducing Regulators, Ball Bearing Excess Pressure Relief Regulators, Ball Bearing Back Pressure Regulators, Ball Bearing Liquid Level Controllers, Ball Bearing Boiler Gas Regulators, Ball Bearing Pump Governors, Ball Bearing Balanced Lever Valves, Vacuum Pump Governors, Vacuum Regulators, Gas Distribution Regulators, Gas Field Take-Off Regulators, Double Cushioned Noiseless Check Valves, Ball Bearing Diaphragm Control Valves, High Temperature Diaphragm Control Valves, Parabolic Gradual Opening Valves.

Claims use since May 5, 1926.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 334,516. THE AMERICAN STEEL AND WIRE COMPANY OF NEW JERSEY, Cleveland, Ohio; Pittsburgh, Pa.; Chicago, Ill.; New Yor N. Y.; Worcester, Mass.; and Hoboken, N. J. Filed Feb. 1, 1933.

Rival

For Wire and Particularly Spoke Wire,
Claims use since July 16, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 327,996. THE AULT & WIBORG VARNISH WORKS, INC., Cincinnati, Ohio. Filed June 15, 1932.

VICHROME
A VITREOUS-LIKE FINISH WITH CHROMIUM TOUGHNESS

No claim is made to the words "A Vitreous-Like Finish with Chromium Toughness" separate and apart from the drawing.

For Liquid Coating Composition, Particularly Lacquers, Lacquer Enamels, Paints, Paint Enamels, and Varnishes.
Claims use since Apr. 29, 1932.

Ser. No. 334,397. LA LAQUE FRANCAISE (SOCIÉTÉ À RESPONSABILITÉ LIMITÉE), Paris, France. Filed Jan. 27, 1933.

OENOLAC

For Lacquers for Casks and Other Containers for Liquids.
Claims use since Nov. 26, 1931.

CLASS 17

Tobacco Products

Ser. No. 334,720. UNITED STATES CIGAR CO. INC., York, Pa. Filed Feb. 7, 1933.

TRIPLE SPRINGS

For Cigars.
Claims use since Aug. 9, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 334,418. S. H. KRESS & Co., New York, N. Y. Filed Jan. 27, 1933.

LACROSSE PLAYING CARDS

No claim is made to the words "Playing Cards" apart from the mark as shown.
For Playing Cards.
Claims use since Dec. 1, 1932.

Ser. No. 334,527. DAVID FISHBACK, Wichita, Kans. Filed Feb. 1, 1933.

TECHNOCRACY

For Table Board Game Played with Pieces.
Claims use since Jan. 30, 1933.

Ser. No. 334,612. JACK MANOIL, doing business as Manoil Specialty Co., New York, N. Y. Filed Feb. 3, 1933.

OCTO

For Puzzle or Game Adapted to be Played with Pieces.
Claims use since Jan. 10, 1933.

Ser. No. 334,921. S. H. KRESS & Co., New York, N. Y. Filed Feb. 13, 1933.

BABY ROSE

For Dolls.
Claims use since July 25, 1932.

Ser. No. 334,922. S. H. KRESS & Co., New York, N. Y. Filed Feb. 13, 1933.

JO-AN

For Dolls.
Claims use since July 25, 1932.

Ser. No. 334,923. S. H. KRESS & Co., New York, N. Y. Filed Feb. 13, 1933.

SUZ-ANN

For Dolls.
Claims use since July 25, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 328,787. HELLER BROTHERS COMPANY, Newark, N. J. Filed July 14, 1932.



For Tools, Consisting of Anvil Tools, Battery Tools, Farriers' Tools; Heading Tools, Consisting of the Following Specifically Designated Tools—Rasps, Chisels, Files, File Holders, Punches, Lining-Up Bars, Knives; Element Pullers, Cotter Pin Pullers, Wrenches, Pincers, Nippers; Parers, Body Spoons, Pliers, Glass Removing Tool, Dolly Blocks, Bending Irons, Hoof Testers, Clinchers, Pritchels; Buffers, Fullers, Hardies, Punches, Swages, Flatters, Welding Dies, Hammers, and Tongs.
Claims use since April, 1907, on wrenches; since Jan. 29, 1899, on other enumerated goods.

Ser. No. 329,353. THE PARKER PEN COMPANY, Janesville, Wis. Filed Aug. 5, 1932.

PENGRAVER

PROPERTY
OF
THE PARKER PEN CO

All words in the drawing other than "Pengraver" are disclaimed per se.
For Engraving Machines and Parts Therefor.
Claims use since July 7, 1932.

Ser. No. 333,586. H. L. G. COMPANY, Kalamazoo, Mich. Filed Jan. 8, 1933.

VELVET

For Mechanical Water Softeners.
Claims use since Aug. 15, 1932.

Ser. No. 333,838. POWERMOR UTILITIES CORPORATION, New York, N. Y. Filed Jan. 11, 1933.

CRYSTACLEANER

The word "Cleaner" appearing on the drawing is disclaimed apart from the other features shown thereon.
For Spark Plug Cleaning Machine for Removing Carbon from the Electrode End Thereof.
Claims use since January, 1932.

Ser. No. 334,445. NORTHWEST BITUMINOUS CORPORATION, Des Moines, Iowa. Filed Jan. 28, 1933.

ROTOMIX

For Road Grading Machines and Attachments Therefor.
Claims use since Dec. 28, 1932.

Ser. No. 334,517. ATLAS HARDWARE CORPORATION, New York, N. Y. Filed Feb. 1, 1933.

ATCO

For Pipe Taps.
Claims use since Nov. 19, 1932.

Ser. No. 334,547. POTTER & JOHNSTON MACHINE COMPANY, Pawtucket, R. I. Filed Feb. 1, 1933.

CARBU-TROLER

For Carburetters and Gas Engine Control Devices.
Claims use since Nov. 11, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 334,606. HORTON MANUFACTURING COMPANY, Fort Wayne, Ind. Filed Feb. 3, 1933.

"Perfect"

No claim is made herein to the word "Perfect" apart from the mark shown in the drawing.
For Laundry Washing Machines.
Claims use since May 24, 1927.

Ser. No. 334,786. THE AMERICAN LAUNDRY MACHINERY COMPANY, Cincinnati, Ohio. Filed Feb. 9, 1933.

DRYTEX

For Drying Machines for Removing Moisture or Cleaning Fluids from Fabrics, Clothing, and the Like.
Claims use since Dec. 31, 1932.

CLASS 25

Locks and Safes

Ser. No. 334,448. SAV-A-CALL LOCK CO., INC., New York, N. Y. Filed Jan. 28, 1933.

SAV-A-CALL

For Locks.
Claims use since October, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 321,599. KEYSTONE VIEW COMPANY, Meadville, Pa. Filed Nov. 30, 1931.

TRUCOLOR PROCESS

The exclusive right to the words "Trucolor Process" is disclaimed.
For Lantern Slides.
Claims use since Sept. 4, 1931.

Ser. No. 332,844. ADAM HILGER, LIMITED, London, England. Filed Dec. 7, 1932.

DEKKOR

For Optical Gauging or Measuring Instruments, Optical Projection Comparators, Interferometers, Interferoscopes, and Optical Physico-Structure Analysers.
Claims use since Sept. 25, 1931.

Ser. No. 334,033. DOHERTY RESEARCH COMPANY, New York, N. Y. Filed Jan. 16, 1933.

CASAM

For Gas Analyzing Apparatus, Particularly Adapted for Analyzing Exhaust Gases Formed in Combustion.
Claims use since November, 1930.

CLASS 27

Horological Instruments

Ser. No. 324,155. DEUTSCH & MARKS, New York, N. Y. Filed Feb. 15, 1932.

du-mark

For Watches.
Claims use since June 25, 1931.

Ser. No. 331,766. WESTERN CLOCK COMPANY, Peru, Ill. Filed Oct. 31, 1932.

TWO VOICED

For Clocks.
Claims use since Oct. 26, 1932.

CLASS 33

Glassware

Ser. No. 334,069. OWENS-ILLINOIS PACIFIC COAST COMPANY, San Francisco, Calif. Filed Jan. 18, 1933.

ELECTRONEAL

For Glass Bottles, Glass Jars, and Glass Containers.
Claims use since Oct. 1, 1926.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 319,726. KRUSE & DEWENTER COMPANY, Indianapolis, Ind. Filed Oct. 5, 1931.

MONARCH

For Wood and Coal Hot Air Furnaces for Heating Buildings, and Parts Thereof.
Claims use since January, 1884.

Ser. No. 329,673. THE CLEVELAND HEATER COMPANY, Cleveland, Ohio. Filed Aug. 19, 1932.

Tankotrol

For Gas Water Heaters and Their Structural Parts.
Claims use since June, 1932.

Ser. No. 334,795. GENERAL FIRE EXTINGUISHER COMPANY, Providence, R. I. Filed Feb. 9, 1933.

HUMITHERM

For Air Conditioning Systems.
Claims use since Nov. 21, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 333,861. MICHELIN TIRE COMPANY, Milltown, N. J. Filed Jan. 12, 1933.



No claim is made to the word "Tire" appearing in the drawing.
For Pneumatic Tires for Automobiles.
Claims use since 1907.

Ser. No. 333,928. THE EDWARD VALVE AND MANUFACTURING CO., East Chicago, Ind. Filed Jan. 14, 1933.

EValpak

For Packing for Rods Subjected to Fluid Pressure—Namely, for Valve Operating Stems, Stuffing Boxes, Expansion Joints, Piston Rods, and Operating Rods.
Claims use since Dec. 19, 1932.

Ser. No. 334,411. SOUTHERN FRICTION FABRIC COMPANY, Charlotte, N. C. Filed Jan. 27, 1933.

SOUTHERN

For Brake Lining.
Claims use since Jan. 15, 1932.

Ser. No. 334,478. UNION ASBESTOS & RUBBER COMPANY, Chicago, Ill. Filed Jan. 30, 1933.

BLOC-TEX

For Brake Lining of the Flexible Molded Type Having a Fabric Base.
Claims use since Sept. 30, 1932.

CLASS 37

Paper and Stationery

Ser. No. 333,036. INLANDER-SEMINOLE PAPER COMPANY, Chicago, Ill. Filed Dec. 13, 1932.

GUARD YOUR HEALTH



The picture shown is fanciful. Registration of the words "Guard Your Health" is not claimed apart from the remainder of the mark.
For Toilet Paper.
Claims use since May 5, 1931.

Ser. No. 333,196. AUGUST ROSENBERG, doing business as Estatement System, New York, N. Y. Filed Dec. 19, 1932.

InsurEstate

For Looseleaf Binders and Partially Printed Looseleaf Forms Therefor Designed for Use in Keeping Insurance Records and the Like and Sold to the Trade as Such.
Claims use since Dec. 12, 1932.

Ser. No. 333,288. AUGUST ROSENBERG, doing business as Estatement System, New York, N. Y. Filed Dec. 20, 1932.

InsuRecord

No registration rights are claimed herein to the word "Record" apart from the mark as shown.
For Looseleaf Binders and Partially Printed Looseleaf Forms Therefor Designed for Use in Keeping Insurance Records and the Like and Sold to the Trade as Such.
Claims use since Dec. 12, 1932.

Ser. No. 334,491. PENINSULAR PAPER COMPANY, Ypsilanti, Mich. Filed Jan. 31, 1933.

NOTRE DAME INTAGLIO

For Cover Paper and Announcement Paper.
Claims use since March, 1932.

Ser. No. 334,573. THE RED BRIDGE BOOK CLOTH COMPANY, LIMITED, Bolton, England. Filed Feb. 2, 1933.

DRAFTEX

For Tracing Cloth and Tracing Paper.
Claims use since May 8, 1929.

Ser. No. 334,574. THE RED BRIDGE BOOK CLOTH COMPANY, LIMITED, Bolton, England. Filed Feb. 2, 1933.

GLACITEX

For Tracing Cloth and Tracing Paper.
Claims use since May 3, 1929.

Ser. No. 334,575. RED BRIDGE BOOK CLOTH COMPANY, LIMITED, Bolton, England. Filed Feb. 2, 1933.

PLANTEX

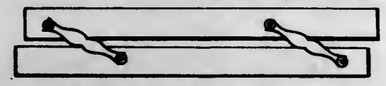
For Tracing Cloth and Tracing Paper.
Claims use since May 3, 1929.

Ser. No. 334,576. THE RED BRIDGE BOOK CLOTH COMPANY, LIMITED, Bolton, England. Filed Feb. 2, 1933.

TRACITEX

For Tracing Cloth and Tracing Paper.
Claims use since May 3, 1929.

Ser. No. 334,577. THE RED BRIDGE BOOK CLOTH COMPANY, LIMITED, Bolton, England. Filed Feb. 2, 1933.

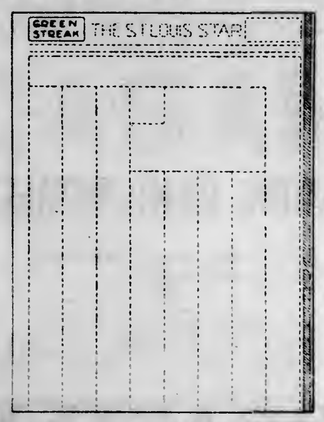


For Tracing Cloth and Tracing Paper.
Claims use since May 3, 1929.

CLASS 38

Prints and Publications

Ser. No. 324,406. STAR-CHRONICLE PUBLISHING COMPANY, St. Louis, Mo. Filed Feb. 23, 1932.



No claim is made to the diagrammatic representation in the drawing of a newspaper page, apart from the mark as shown. The mark is printed in green and the drawing is lined to indicate green.
For Daily Newspapers.
Claims use since Jan. 27, 1932.

Ser. No. 333,197. AUGUST ROSENBERG, doing business as Estatement System, New York, N. Y. Filed Dec. 19, 1932.

INSURETIES

For Looseleaf Books and Looseleaf Pages Therefor, Sold to the Trade as Such, Published from Time to Time, and Relating to Administration of Life Insurance Funds.
Claims use since Dec. 12, 1932.

Ser. No. 334,936. PHILIP L. SHEERR & SONS, Philadelphia, Pa. Filed Feb. 13, 1933.

SHEERFACTS

For Pamphlet Published Periodically.
Claims use since Jan. 2, 1933.

CLASS 39

Clothing

Ser. No. 322,236. SOCIÉTÉ À RESPONSABILITÉ LIMITÉE LUCIENNE RABATÉ & CIE., doing business as Caroline Reboux, Paris, France. Filed Dec. 17, 1931. Under ten-year proviso.

Caroline Reboux
23. RUE DE LA PAIX
PARIS

For Women's Hats, Bonnets, Berets, and Scarfs.
Claims use since 1870.

Ser. No. 324,746. JOE T. KOHN & COMPANY, INC., Cleveland, Ohio. Filed Mar. 3, 1932.

SHAMROCK

For Men's and Boys' Topcoats and Overcoats.
Claims use since Jan. 2, 1932.

Ser. No. 333,866. BELFIT BRASSIERE CO. INC., Brooklyn, N. Y. Filed Dec. 23, 1932.

MIDGETTE

For Corsets and Girdles.
Claims use since Nov. 1, 1932.

Ser. No. 333,880. CHICAGO MAIL ORDER COMPANY, Chicago, Ill. Filed Dec. 27, 1932.

WILL NOT R.F.D MARK FLOORS

The words "Will Not Mark Floors" form a part of the registration sought only in association with the other features of the mark shown in the drawing.
For Shoe Soles.
Claims use since June 6, 1932.

Ser. No. 333,920. CAMMEYER INC., New York, N. Y. Filed Jan. 14, 1933.

Snubs

For Women's Shoes Made of Leather or Fabric or a Combination of Leather and Fabric.
Claims use since Dec. 5, 1932.

Ser. No. 334,006. FRANC, STROHMENGER & COWAN, INC., Poughkeepsie, N. Y. Filed Jan. 17, 1933.

Uni-Tie

No registration rights are claimed in the word "Tie" apart from the mark shown in the drawing.
For Neckties, Cravats, and Scarfs.
Claims use since Jan. 6, 1933.

Ser. No. 334,014. LEVY, FORMAN & CO., INC., New York, N. Y. Filed Jan. 17, 1933.



No claim is made to the words "Base Ball Series Sweaters" and the representation of the goods apart from the mark shown in the drawing.
For Sweaters.
Claims use since Dec. 2, 1932.

Ser. No. 334,039. A. S. BECK SHOE CORPORATION, New York, N. Y. Filed Jan. 18, 1933.

Air-flex

For Boots, Shoes, and Slippers Made Wholly or in Part of Leather and Fabric.
Claims use since June 10, 1931.

Ser. No. 334,113. POIRETTE CORSETS, INC., New York, N. Y. Filed Jan. 19, 1933.

Telesco

For Foundation Garments.
Claims use since Dec. 20, 1932.

Ser. No. 334,144. CHAS. R. DEBEVOISE CO., Newark, N. J. Filed Jan. 20, 1933.

Debby-Bras.

For Brassières.
Claims use since Nov. 28, 1932.

Ser. No. 334,147. DUMARI TEXTILE CO., INC., New York, N. Y. Filed Jan. 20, 1933.

FAIRYSPUN

For Women's and Misses' Party Frocks, Dressing Gowns, Wrappers, Negligees, Kimonos, Waists, Scarfs.
Claims use since Nov. 5, 1932.

Ser. No. 334,226. THE MORAN SHOE COMPANY, INC., Carlyle, Ill. Filed Jan. 21, 1933.

TINY STEP

For Shoes Made of Leather and Fabric.
Claims use since Dec. 12, 1932.

Ser. No. 334,355. GARFINKEL & RITTER, New York, N. Y. Filed Jan. 26, 1933.

SUNDECK

For Ladies' Undergarments—Namely, Slips.
Claims use since Jan. 18, 1933.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 331,318. ROBERT T. PLATE, doing business as The Plate Mfg. Co., Detroit, Mich. Filed Oct. 17, 1932.



The drawing being lined for the color blue, and the portrait is merely a fanciful picture. No claim being made to the word "Kurlers" apart from the mark as shown.
For Non-Electrical Hair Curlers.
Claims use since June, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 326,820. INDUSTRIAL RAYON CORPORATION, Cleveland, Ohio. Filed May 6, 1932.

SPUN-LO

For Rayon Fabrics in the Piece.
Claims use since Sept. 15, 1931.

Ser. No. 333,570. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y. Filed Jan. 3, 1933.

SUPER

For Bagging Made from Vegetable Fibres Sold in the Form of Bales and Rolls and Intended to be Used for Covering Cotton.
Claims use since Dec. 19, 1932.

Ser. No. 333,716. RANLO MANUFACTURING COMPANY, Gastonia, N. C. Filed Jan. 6, 1933.

RANLO
MO-WEAR

No claim is made to the word "Wear" apart from the mark shown.
For Mohair Tapestry and Upholstery Piece-Goods and Such Piece-Goods in Which Mohair Predominates.
Claims use since Dec. 20, 1932.

Ser. No. 334,184. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Fenella

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,201. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Velfinette

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,203. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Jan. 21, 1933.

Vitta

For Woolen Piece Goods.
Claims use since Dec. 1, 1932.

Ser. No. 334,422. THE H. D. LEE MERCANTILE CO., Kansas City, Mo. Filed Jan. 27, 1933.

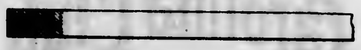
JELT

For Denims.
Claims use since Mar. 21, 1931.

CLASS 44

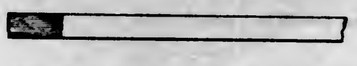
Dental, Medical, and Surgical Appliances

Ser. No. 332,519. COE LABORATORIES, INC., Chicago, Ill. Filed Nov. 28, 1932.



The mark consists of a green tipped end for wire. No claim is made to the representation of the piece of dental wire per se.
For Wire Composed of an Alloy of Precious Metals for Dental Purposes.
Claims use since June, 1931.

Ser. No. 332,520. COE LABORATORIES, INC., Chicago, Ill. Filed Nov. 28, 1932.



The mark consists of a blue tipped end for wire. No claim is made to the representation of the piece of dental wire per se.
For Wire Composed of an Alloy of Precious Metals for Dental Purposes.
Claims use since March, 1930.

Ser. No. 332,521. COE LABORATORIES, INC., Chicago, Ill. Filed Nov. 28, 1932.

The mark consists of a red tipped end for wire. No claim is made to the representation of the piece of dental wire per se.
For Wire Composed of an Alloy of Precious Metals for Dental Purposes.
Claims use since March, 1930.

Ser. No. 332,801. COE LABORATORIES, INC., Chicago, Ill. Filed Dec. 2, 1932.



The mark consists of a white tipped end for wire. No claim is made to the representation of the piece of dental wire per se.
For Wire Composed of an Alloy of Precious Metals for Dental Purposes.
Claims use since May 12, 1931.

Ser. No. 334,382. CENTRAL STATES DEPARTMENT STORES, INC., Chicago, Ill. Filed Jan. 27, 1933.

SWANAP

For Sanitary Napkins.
Claims use since Dec. 5, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 327,109. PHILIP SCHWARTZ, doing business as K-O-K Co., Springfield, Mass. Filed May 14, 1932.

K-O-K
(Kay) (Oh) (Kay)

For Non-Alcoholic Maltless Beverage Sold as a Soft Drink and Syrup Therefor.
Claims use since Feb. 5, 1932.

Ser. No. 334,446. PICKWICK PRODUCTS CO., INC., New York, N. Y. Filed Jan. 26, 1933.



For Nonalcoholic, Maltless Flavoring for Soft Drinks.
Claims use since Jan. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 319,176. HAWAIIAN PINEAPPLE COMPANY, LTD., San Francisco, Calif., and Honolulu, Hawaii. Filed Sept. 18, 1931.



The drawing is lined to show contrasting colors no claim being made to color as an essential feature. The notation "1" shown on the drawing is disclaimed.
For Canned Pineapple.
Claims use since Apr. 5, 1932.

Ser. No. 319,877. AMERICAN PISTACHIO, INC., New York, N. Y. Filed Oct. 9, 1931.



Applicant disclaims the lining on the drawing.
For Pistachio Nuts.
Claims use since Oct. 2, 1931.

Ser. No. 329,386. SAJOR & BUDENKO, INC., Brooklyn, N. Y. Filed Aug. 6, 1932.



The word "Brand" and the phrase "Pure Meat Products" are not claimed apart from the other features of the mark.
For Pork Sausage.
Claims use since June 1, 1932.

Ser. No. 329,821. CHAS. F. CATES & SONS, INC., Faison, N. C. Filed Aug. 24, 1932.



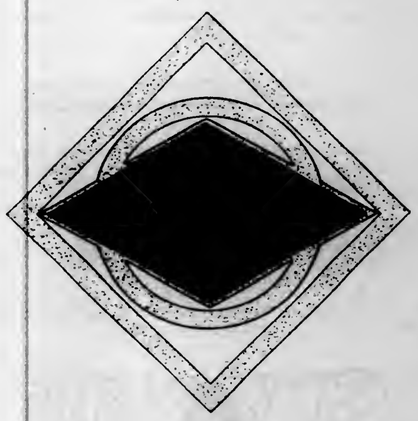
For Pickles, Fruit Preserves, Sweet and Sour Relish, Honey.
Claims use since January, 1931.

Ser. No. 330,526. STANDARD NUT MARGARINE CO., Indianapolis, Ind. Filed Sept. 20, 1932.



For Oleomargarine.
Claims use since Jan. 27, 1921.

Ser. No. 331,448. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Oct. 21, 1932.



The trade-mark consists of the characteristic design shown in the drawing irrespective of the color or colors in which said design is or may be printed and the stippling on the drawing is used merely to represent a contrasting background and is not intended to represent any particular color. No claim is made to the representation of a label per se apart from the mark as shown in the drawing.
For Dough Improver, i. e. a Composition or Compound Used as an Ingredient of Bread to Improve the Quality Thereof.
Claims use since 1924.

Ser. No. 331,449. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Oct. 21, 1932.



On the drawing the cross hatching represents the color orange which is particularly claimed. No claim is made to the representation of a label per se apart from the mark as shown in the drawing.
For Dough Improver, i. e. a Composition or Compound Used as an Ingredient of Bread to Improve the Quality Thereof.
Claims use since 1924.

Ser. No. 332,005. S. M. FLICKINGER CO., Buffalo, N. Y. Filed Nov. 9, 1932.

Meadowbloom

For Butter and Eggs.
Claims use since Apr. 24, 1930.

Ser. No. 332,009. J. MELVILLE LOEB, Brookline, Mass. Filed Nov. 9, 1932.



The drawing is lined for brown, blue and gold to conform to the specimen submitted but applicant does not limit the trade-mark to any color or combination of colors. Applicant disclaims the right to the exclusive use of the words "Private Blend" and "Tea" except in combination with the other features of the mark as shown in the drawing.
For Tea.
Claims use since Aug. 5, 1932.

Ser. No. 332,769. FRUIT INDUSTRIES, LTD., Los Angeles, Calif. Filed Dec. 5, 1932.

INVERTO

For Concentrated Grape Juice Used as an Ingredient in the Preparation of Foods.
Claims use since Apr. 7, 1932.

Ser. No. 332,892. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Dec. 8, 1932.

FUDGICLE

For Frozen Confections and Composition of Syrups, Extracts, and Concentrates Used in the Preparation Thereof.
Claims use since Oct. 3, 1932, on syrups, extracts, and concentrates used in the preparation of frozen confections; since Oct. 26, 1932, on frozen confections.

Ser. No. 333,013. RED BAND COMPANY, INC., Johnson City, Tenn. Filed Dec. 12, 1932.

REDDY MIXT

No claim is made to the words "Reddy Mixt" apart from the mark as shown on the drawing. The drawing is lined for the color red.
For Prepared Flour.
Claims use since Oct. 4, 1932.

Ser. No. 333,090. A. A. WALTER & COMPANY, Albany, N. Y. Filed Dec. 14, 1932.

KRINX

The horizontal lines surrounding the letters of the word indicate a blue color although it will of course be understood that the mark may be used in conjunction with any color.
For Pop Corn.
Claims use since Nov. 19, 1932.

Ser. No. 333,232. THE W. H. MARVIN COMPANY, Urbana, Ohio. Filed Dec. 20, 1932.

GEM

For Dried Currants.
Claims use since Nov. 1, 1892.

Ser. No. 333,781. BENJAMIN ZEIGERMAN, doing business as Mann Chemical Co., Chester, Pa. Filed Jan. 9, 1933.

KAVKURA

For Fermented Milk Preparation.
Claims use since Dec. 20, 1932.

Ser. No. 334,100. THE GOUDEY GUM CO., doing business as World Wide Gum Co., Boston, Mass. Filed Jan. 19, 1933.

JUNGLE GUM

The word "Gum" is disclaimed apart from the mark shown on the drawing.
For Chewing Gum.
Claims use since Jan. 4, 1933.

Ser. No. 334,283. GREYSTONE SWEETS, INC., New York, N. Y. Filed Jan. 24, 1933.

GREYSTONE

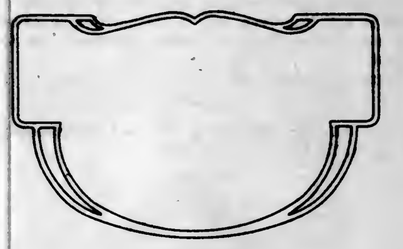
For Candy.
Claims use since Jan. 17, 1933.

Ser. No. 334,284. COPPER PRODUCTS OF AMERICA, INC., LTD., Los Angeles, Calif. Filed Jan. 27, 1933.

JASMINDIA

For Tea.
Claims use since Oct. 3, 1932.

Ser. No. 334,528. FLORIDAGOLD CITRUS CORPORATION, Lake Alfred, Fla. Filed Feb. 1, 1933.



For Canned Citrus Fruits and Juices.
Claims use since Dec. 1, 1925.

Ser. No. 334,620. SOUTHERN DAIRIES, INC., Washington, D. C. Filed Feb. 3, 1933.

SO·DA·ROL

For Ice Cream, Ices, Sherbets, and Frozen Confections.
Claims use since Jan. 25, 1933.

Ser. No. 334,718. SEACOAST CANNING COMPANY, Lubec, Me. Filed Feb. 7, 1933.



The drawing is lined to indicate shading. No claim is made to the word "Sardines".
For Canned Sardines.
Claims use since July 1, 1912.

CLASS 47

Wines

Ser. No. 334,799. JORDAN WINE COMPANY LIMITED, Jordan, Ontario, Canada. Filed Feb. 9, 1933.

BRANVIN

For Wines.
Claims use since July 15, 1932.

CLASS 48

Malt Beverages and Liquors

Ser. No. 309,370. BRAUHAUS WÜRZBURG, Aktiengesellschaft, Wursburg, Germany. Filed Dec. 27, 1930.



The lining of the drawing for blue is intended for shading purposes only.
For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since June 2, 1887.

Ser. No. 334,041. BRADLEETON & WOERZ, New York, N. Y. Filed Jan. 18, 1933.

EMPIRE BREWERY

No claim being made to the exclusive use of the word "Brewery" apart from the mark as shown.
For Malt Beverages Containing Not More Than the Legal Alcoholic Content.
Claims use since 1848.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 334,756. MACDONALD, GREENLEES LIMITED, Leith, Scotland. Filed Feb. 8, 1933.

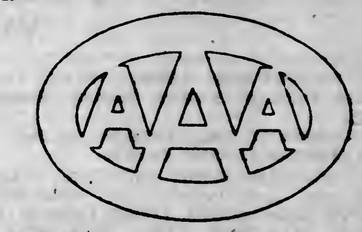
SANDY MAC

For Whisky.
Claims use since 1910.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 324,419. THE AMERICAN AUTOMOBILE ASSOCIATION, INCORPORATED, Washington, D. C. Filed Feb. 24, 1932.



For Road Signs Not Electrical, Emblems, and Badges.
Claims use since 1910.

Ser. No. 330,181. POSTUM PRODUCTS, INC., Chicago, Ill. Filed Sept. 8, 1932.

Jiffy

For Felt Letters and Numerals, Cut-Out Felt Designs and Decorative Pieces, Felt Window Trimmings for Display Purposes, Panels of Various Shapes and Sizes of Felt for Use in Display Purposes and Advertising; Display Pieces of Composition Material, Fabric, or Paper for Use in Decorative Displays.
Claims use since Aug. 2, 1932.

Ser. No. 330,446. CARRIER-GOUDIE MANUFACTURING CO., Kansas City, Mo. Filed Sept. 19, 1932.



The word "Shade" appearing as a part of the mark being disclaimed apart from the mark shown in the accompanying drawing.
For Awnings.
Claims use since Jan. 1, 1932.

Ser. No. 334,211. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Jan. 21, 1933.

SHUFLEX

For Middle Sole Material for Shoes Composed Primarily of Rubber Compound and Cotton Fibre.
Claims use since Dec. 19, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MARCH 21, 1933

301,857. PICTURE POST CARDS AND ART PRINTS. PIERRE PINCKNEY ALLSTON TRAPIER, Washington, D. C.
Filed November 21, 1932. Serial No. 332,350. PUBLISHED JANUARY 10, 1933. Class 38.

301,858. WRITING PAPER, INCLUDING TABLETS FOR INK AND PENCIL USE, COMPOSITION BOOKS, NOTE BOOKS, LOOSE LEAF FILLERS, LOOSE LEAF NOTE BOOKS, ENVELOPES, AND PAPETERIES. WESTERN TABLET AND STATIONERY CORPORATION, Dayton, Ohio.
Filed November 18, 1932. Serial No. 332,285. PUBLISHED JANUARY 3, 1933. Class 37.

301,859. BOND, LEDGER, PRINTING, WRITING, AND ENVELOPE PAPERS. BROWN COMPANY, Portland, Me., and Berlin, N. H.
Filed November 16, 1932. Serial No. 332,175. PUBLISHED JANUARY 10, 1933. Class 37.

301,860. ARTISTIC DRAWINGS FOR TEXTILE DESIGNS. ETHEL TRAPHAGEN (LEIGH), doing business as Traphagen School of Fashion, New York, N. Y.
Filed November 15, 1932. Serial No. 332,168. PUBLISHED JANUARY 10, 1933. Class 38.

301,861. NEWS COLUMNS AND SPECIAL ARTICLES APPEARING DAILY OR FROM TIME TO TIME. ANDREW R. PEARSON AND ROBERT S. ALLEN, Washington, D. C.
Filed November 11, 1932. Serial No. 332,072. PUBLISHED JANUARY 3, 1933. Class 38.

301,862. PRINTED BOOKS. THE SETTLEMENT COOK BOOK COMPANY, Milwaukee, Wis.
Filed November 10, 1932. Serial No. 332,047. PUBLISHED JANUARY 3, 1933. Class 38.

301,863. PERIODICAL PUBLICATION. TOPICS PUBLISHING COMPANY, INC., New York, N. Y.
Filed November 9, 1932. Serial No. 332,014. PUBLISHED JANUARY 3, 1933. Class 38.

301,864. PAINT ENAMEL AND PAINT AND VARNISH REMOVER. GAY-DAY CORPORATION, Chicago, Ill.
Filed November 7, 1932. Serial No. 331,952. PUBLISHED JANUARY 10, 1933. Class 16.

301,865. DRY, PASTE, AND READY MIXED PAINTS AND PAINT ENAMELS. COLUMBIA CHEMICAL COMPANY, Portland, Oreg.
Filed November 4, 1932. Serial No. 331,888. PUBLISHED JANUARY 10, 1933. Class 16.

301,866. INCOME SAVING STAMPS. CHARLES C. AZBELL, St. Louis, Mo.
Filed October 14, 1932. Serial No. 331,242. PUBLISHED JANUARY 3, 1933. Class 38.

301,867. PRINTED NEWS MESSAGES, PRINTED NEWS DISPATCHES, AND NEWSPAPERS. INTERNATIONAL NEWS SERVICE, INC., New York, N. Y.
Filed October 8, 1932. Serial No. 331,085. PUBLISHED JANUARY 3, 1933. Class 38.

301,868. PERIODICAL PUBLICATION. THE KANSAS COOPERATIVE WHEAT MARKETING ASSOCIATION, Wichita, Kans.
Filed May 20, 1932. Serial No. 327,281. PUBLISHED JANUARY 10, 1933. Class 38.

301,869. COMBINATION POCKET LIGHTER AND FLASHLIGHT. UNITED STATES ELECTRIC MFG. CORP., New York, N. Y.
Filed November 30, 1932. Serial No. 332,638. PUBLISHED JANUARY 10, 1933. Class 21.

301,870. LUBRICATING OIL. L. SONNEBORN SONS, INC., New York, N. Y.
Filed November 26, 1932. Serial No. 332,499. PUBLISHED JANUARY 10, 1933. Class 15.

301,871. AUTOMOTIVE ELECTRIC CONDUCTOR CABLES. CRESCENT BRAID, INC., Providence, R. I.
Filed November 21, 1932. Serial No. 332,333. PUBLISHED JANUARY 10, 1933. Class 21.

301,872. INCANDESCENT LAMPS OR BULBS. GUARANTEE LAMP CO., Brooklyn, N. Y.
Filed November 11, 1932. Serial No. 332,063. PUBLISHED JANUARY 10, 1933. Class 21.

301,873. ELECTRIC MOTORS, RHEOSTATS, ETC. ROBERT H. RUSSELL, Cleveland, Ohio.
Filed November 3, 1932. Serial No. 331,873. PUBLISHED JANUARY 3, 1933. Class 21.

301,874. GASOLINE, KEROSENE, LUBRICATING OILS, AND LUBRICATING GREASES. LINCOLN OIL REFINING COMPANY, Robinson, Ill.
Filed October 31, 1932. Serial No. 331,747. PUBLISHED JANUARY 3, 1933. Class 15.

301,875. GASOLINE. FITCH J. BAUMEISTER, Chicago, Ill.
Filed October 29, 1932. Serial No. 331,665. PUBLISHED JANUARY 3, 1933. Class 15.

301,876. ELECTRIC SAD IRONS. SAFETY ELECTRICAL APPLIANCES, INC., Detroit, Mich.
Filed October 28, 1932. Serial No. 331,653. PUBLISHED JANUARY 3, 1933. Class 21.

301,877. MOTORS, GENERATORS, SWITCHING EQUIPMENT AND SIGNAL DEVICES. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,700. PUBLISHED JANUARY 3, 1933. Class 21.

301,878. ELECTRIC MOTORS AND GENERATORS, SWITCHING EQUIPMENT, ETC. OTIS ELEVATOR COMPANY, Jersey City, N. J., and New York, N. Y.
Filed October 29, 1932. Serial No. 331,697. PUBLISHED JANUARY 3, 1933. Class 21.

301,879. ELECTRIC SAD IRONS. SAFETY ELECTRICAL APPLIANCES, INC., Detroit, Mich.
Filed October 28, 1932. Serial No. 331,652. PUBLISHED JANUARY 3, 1933. Class 21.

301,880. MOTOR FUEL AND LUBRICATING OIL AND FUEL OIL. LEWIS COAL & OIL CO. INC., Port Washington, N. Y.
Filed October 22, 1932. Serial No. 331,470. PUBLISHED JANUARY 10, 1933. Class 15.

301,881. STORAGE BATTERIES. THOMAS A. EDISON, INCORPORATED, West Orange, N. J.
Filed October 14, 1932. Serial No. 331,251. PUBLISHED JANUARY 3, 1933. Class 21.

301,882. LUBRICATING OILS. STANDARD OIL COMPANY OF CALIFORNIA, Wilmington, Del., and San Francisco, Calif.
Filed October 17, 1932. Serial No. 331,323. PUBLISHED JANUARY 10, 1933. Class 15.

301,883. CULTURED PEARLS. KOKICHI MIKIMOTO, Tokyo, Japan, and New York, N. Y.
Filed September 21, 1932. Serial No. 330,566. PUBLISHED JANUARY 10, 1933. Class 28.

301,884. PEARLS. TRIFARI, KRUSSMAN & FISHEL, INC., New York, N. Y.
Filed September 15, 1932. Serial No. 330,388. PUBLISHED JANUARY 3, 1933. Class 28.

301,885. GASOLINE, LUBRICATING OIL, KEROSENE, FUEL OIL, LUBRICATING GREASE, CYLINDER OIL, AND VEHICLE GREASE. MAJOR PETROLEUM COMPANY, Wilmington, Del., and Philadelphia, Pa.
Filed August 23, 1932. Serial No. 329,817. PUBLISHED JANUARY 10, 1933. Class 15.

301,886. FLOOR, FURNITURE, AND AUTOMOBILE WAXES. CRECO COMPANY, INC., Long Island City, N. Y.
Filed November 23, 1932. Serial No. 332,402. PUBLISHED JANUARY 10, 1933. Class 16.

301,887. WALL BOARD. CENTRAL FIBRE PRODUCTS CO., INC., Hutchinson, Kans.
Filed October 6, 1932. Serial No. 330,990. PUBLISHED JANUARY 3, 1933. Class 12.

301,888. THERMAL INSULATION MATERIALS. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed October 6, 1932. Serial No. 331,000. PUBLISHED JANUARY 3, 1933. Class 12.

301,889. ASPHALTIC COMPOUND FOR SEALING AND WATERPROOFING EXTERIOR SURFACES. ORVILLE V. MCGREW, doing business as McGrew Paint and Asphalt Co., Chicago, Ill.
Filed October 7, 1932. Serial No. 331,057. PUBLISHED JANUARY 3, 1933. Class 12.

301,890. BOOTS, SHOES, SLIPPERS, AND SANDALS, MADE OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. PERTH SHOE COMPANY LIMITED, Perth, Ontario, Canada.
Filed October 17, 1932. Serial No. 331,317. PUBLISHED DECEMBER 27, 1932. Class 39.

301,891. PERFUMES AND TOILET WATER. ORSA L. LEGRAND, INC., Wilmington, Del., and New York, N. Y.
Filed October 25, 1932. Serial No. 331,560. PUBLISHED DECEMBER 27, 1932. Class 6.

301,892. COAL-TAR DYES. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed October 26, 1932. Serial No. 331,577. PUBLISHED DECEMBER 27, 1932. Class 6.

301,893. MEDICINAL PREPARATION FOR TREATMENT OF CONSTIPATION, INDIGESTION, AND FOR NEUTRALIZATION OF GASTRIC HYPERACIDITY. CRAZY WATER HOTEL COMPANY, Mineral Wells, Tex.
Filed November 3, 1932. Serial No. 331,853. PUBLISHED JANUARY 10, 1933. Class 6.

301,894. PREPARATION FOR REDUCING WEIGHT. ARTHUR C. HANSON, doing business as Slimmers Company, Minneapolis, Minn.
Filed November 11, 1932. Serial No. 332,065. PUBLISHED JANUARY 10, 1933. Class 6.

301,895. PLASTIC NEUTRAL BASE FOR MONOLITHIC CONSTRUCTION COMPOSED OF CHROME ORE AND A SUITABLE PLASTICISING MATERIAL. QUIGLEY COMPANY, INC., New York, N. Y.
Filed November 15, 1932. Serial No. 332,160. PUBLISHED JANUARY 10, 1933. Class 12.

301,896. PERFUMERY. GEORG DRALLE, Hamburg, Germany.
Filed April 15, 1932. Serial No. 326,132. PUBLISHED DECEMBER 27, 1932. Class 6.

301,897. PERFUMERY. GEORG DRALLE, Hamburg, Germany.
Filed April 15, 1932. Serial No. 326,133. PUBLISHED DECEMBER 27, 1932. Class 6.

301,898. PERFUMERY. GEORG DRALLE, Hamburg, Germany.
Filed April 15, 1932. Serial No. 326,134. PUBLISHED DECEMBER 27, 1932. Class 6.

301,899. PERFUMERY. GEORG DRALLE, Hamburg, Germany.
Filed April 15, 1932. Serial No. 326,135. PUBLISHED DECEMBER 27, 1932. Class 6.

301,900. ANTISEPTIC VAGINAL TABLETS. JOHN NUNZIO MICELI M. D., doing business as Hyg-A-Tabs Laboratories, Brooklyn, N. Y.
Filed June 7, 1932. Serial No. 327,803. PUBLISHED DECEMBER 20, 1932. Class 6.

301,901. PERSPIRATION PREVENTATIVES OR DEODORANTS. THE DELATONE COMPANY, Chicago, Ill.
Filed June 15, 1932. Serial No. 328,001. PUBLISHED DECEMBER 27, 1932. Class 6.

301,902. APPARATUS IN THE NATURE OF A VENT OR PART THEREOF TO BE USED ON CONTAINERS OF EXPLOSIVE OR OTHER INFLAMMABLES, SUCH AS OIL AND GAS RECEPTACLES, CONDUITS, AND CONTAINERS TO PREVENT IGNITING AGENCIES FROM REACHING SUCH INFLAMMABLE CONTENTS. HENRY J. BUCKING, San Francisco, Calif.
Filed August 9, 1930. Serial No. 304,398. PUBLISHED JANUARY 10, 1933. Class 13.

301,903. SYRUPS FOR FOOD FLAVORING PURPOSES AND FRUIT JUICES FOR FOOD FLAVORING PURPOSES. JOHN MULHERN COMPANY, San Francisco, Calif.
Filed April 28, 1930. Serial No. 299,587. PUBLISHED DECEMBER 27, 1932. Class 46.

301,904. AIR-RELEASE VALVES, VACUUM VALVES, RATE OF FLOW CONTROLLERS, ETC. SIMPLEX VALVE AND METER COMPANY, Philadelphia, Pa.
Filed September 9, 1929. Serial No. 289,546. PUBLISHED NOVEMBER 26, 1929. Class 13.

301,905. MACHINERY FOR VULCANIZING AND RETREADING TIRES. ADVANX TY-RE-PAIR COMPANY LIMITED, Sydney, New South Wales, Australia.
Filed March 16, 1932. Serial No. 325,160. PUBLISHED JANUARY 10, 1933. Class 28.

301,906. CHEMICALS EMPLOYED IN THE TREATMENT OF WATER, SUCH AS FOR SOFTENING, PURIFYING, DESILICALIZING, CLARIFYING, STERILIZING, AND OTHERWISE IMPROVING THE SAME. NATIONAL ALUMINATE CORPORATION, Chicago, Ill.
Filed April 1, 1932. Serial No. 325,719. PUBLISHED MAY 31, 1932. Class 6.

301,907. TOILET WATER, HAIR TONIC, VANISHING CREAM, ETC. MRS. Z. B. HINKLE, doing business as Dixie Laboratories, Atlanta, Ga.
Filed April 14, 1932. Serial No. 326,101. PUBLISHED DECEMBER 27, 1932. Class 6.

301,908. CANNED FISH. WM. H. STANLEY, INC., New York, N. Y.
Filed May 16, 1932. Serial No. 327,172. PUBLISHED DECEMBER 20, 1932. Class 46.

301,909. PHARMACEUTICAL PREPARATION IN TABLET FORM, BEING SEDATIVE, SOPORIFIC, ANALGESIC, AND HYPNOTIC. H. R. NAPP LIMITED, London, England.
Filed July 9, 1932. Serial No. 328,670. PUBLISHED DECEMBER 27, 1932. Class 6.

301,910. POPOID IN POWDER, TABLETS, OR OTHER FORMS. JOHNSON & JOHNSON, New Brunswick, N. J.
Filed October 7, 1932. Serial No. 331,051. PUBLISHED JANUARY 10, 1933. Class 6.

301,911. PETROLATUM, WHITE (PETROLEUM JELLY), PETROLATUM, AMBER (PETROLEUM JELLY), RUBBING ALCOHOL COMPOUND, AND BAY RUM. SUPERIOR PRODUCTS COMPANY, Dallas, Tex.
Filed September 22, 1932. Serial No. 330,534. PUBLISHED DECEMBER 6, 1932. Class 6.

301,912. PERFUMERIES, LOTIONS FOR HANDS AND FACE TO BE USED AS AN AID FOR SOFTENING AND WHITENING THE SKIN, TOILET WATERS, FACE POWDERS, ROUGE, FACE CREAMS, AND ASTRINGENT. PARK & TILFORD, New York, N. Y.
Filed October 1, 1932. Serial No. 330,864. PUBLISHED JANUARY 10, 1933. Class 6.

301,918. AMYLOLYTIC OR STARCH-LIQUEFYING PREPARATION SUITABLE FOR USE AS A DESIZING AGENT IN THE TEXTILE INDUSTRY, AS AN INGREDIENT OF PASTES AND FINISHING COMPOSITIONS OR FILLERS FOR PAPER OR LEATHER, AND FOR LIKE PURPOSES. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed October 24, 1932. Serial No. 331,517. PUBLISHED JANUARY 10, 1933. Class 6.

301,914. DEPILATORY. HERB LABORATORIES, INCORPORATED, New York, N. Y.
Filed October 28, 1932. Serial No. 331,641. PUBLISHED DECEMBER 27, 1932. Class 6.

301,915. MEDICINE IN POWDER FORM USED AS A TREATMENT FOR HEADACHES, STOMACH DISORDERS, SEA SICKNESS. BROMO-PEP, INCORPORATED, St. Louis, Mo.
Filed November 3, 1932. Serial No. 331,848. PUBLISHED DECEMBER 27, 1932. Class 6.

301,916. LINIMENTS FOR EXTERNAL USE TO RELIEVE ALL RHEUMATIC PAINS. HARRY T. CHIANTIS, Boston, Mass.
Filed November 3, 1932. Serial No. 331,851. PUBLISHED JANUARY 3, 1933. Class 6.

301,917. COMPOUND FOR USE IN THE TREATMENT OF HEADACHES, NEURALGIA, TOOTHACHE, RHEUMATISM, AND SIMILAR COMPLAINTS. TROPONWERKE DINKLAGE & Co., Cologne-Malheim, Germany.
Filed October 31, 1932. Serial No. 331,764. PUBLISHED JANUARY 3, 1933. Class 6.

301,918. COLD CREAM, TISSUE CREAM, VANISHING CREAM, FORMATION CREAM, FACE POWDER, HAND LOTION, ASTRINGENT, LIQUID WHITENER. ALDA'S LABORATORIES, Long Beach, Calif., assignor to Alda H. Adams, Long Beach, Calif.
Filed October 31, 1932. Serial No. 331,719. PUBLISHED JANUARY 3, 1933. Class 6.

301,919. TONIC COMPOSED OF EXTRACTS OF PALMETTO AND CONCH JUICE. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,535. PUBLISHED JANUARY 3, 1933. Class 6.

301,920. TONIC COMPOSED OF EXTRACTS OF PALMETTO AND CONCH JUICE. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,534. PUBLISHED JANUARY 3, 1933. Class 6.

301,921. COMPOSITIONS FOR ELIMINATING OFFENSIVE BREATH ODORS. PHILIP KRUPIN, doing business as Proven Products Company, Newark, N. J.
Filed October 8, 1932. Serial No. 331,088. PUBLISHED JANUARY 3, 1933. Class 6.

301,922. RAT POISON. B. J. MOORE SONS' Co., Utica, N. Y.
Filed October 7, 1932. Serial No. 331,066. PUBLISHED JANUARY 3, 1933. Class 6.

301,923. MEDICINES FOR EPILEPTIC FITS. PARSAN CHEMICAL COMPANY, New York, N. Y.
Filed July 25, 1932. Serial No. 329,058. PUBLISHED JANUARY 10, 1933. Class 6.

301,924. SALVE, A PREPARATION INDICATED IN THE TREATMENT OF ATHLETIC FEET, SUNBURN, ULCERS, ECZEMA, AND PILES. ALBERTA HOLT, doing business as Holt Chemical Company, Memphis, Tenn.
Filed July 22, 1932. Serial No. 328,989. PUBLISHED JANUARY 10, 1933. Class 6.

301,925. NAIL POLISH, NAIL POLISH REMOVER, CUTICLE OIL, CUTICLE REMOVER IN LIQUID AND PASTE FORM, NAIL WHITE. LOUIS HEMBERG, Los Angeles, Calif.
Filed June 13, 1932. Serial No. 327,940. PUBLISHED JANUARY 3, 1933. Class 6.

301,926. BEAUTY PRODUCTS OF A CREAMY, PASTE-LIKE, JELLY-LIKE, OR FLUID CHARACTER FOR APPLICATION TO THE SKIN. ESTHER ALTOSS, Bellingham, Wash.
Filed March 11, 1932. Serial No. 325,630. PUBLISHED JANUARY 10, 1933. Class 6.

301,927. CORRESPONDENCE AND MAILING ENVELOPES. THE POSTAGE METER COMPANY, Stamford, Conn.
Filed December 2, 1932. Serial No. 332,781. PUBLISHED JANUARY 10, 1933. Class 37.

301,928. TAILOR'S MARKING CRAYONS. J. HIRSHKOWITZ, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,692. PUBLISHED JANUARY 10, 1933. Class 37.

301,929. TOILET PAPER. THE BILTMORE PAPER CO., INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,680. PUBLISHED JANUARY 10, 1933. Class 37.

301,930. NONALCOHOLIC, MALTLESS FRUIT JUICES SOLD AS SOFT DRINKS. TROPICAL JUICE CORPORATION, Miami and Titusville, Fla.
Filed November 30, 1932. Serial No. 332,687. PUBLISHED JANUARY 10, 1933. Class 45.

301,931. WIRE. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio.
Filed November 30, 1932. Serial No. 332,615. PUBLISHED JANUARY 10, 1933. Class 14.

301,932. INSECTICIDES. MAE C. BOWMAN, doing business as Southeastern Chemical Co., Alexandria, Va.
Filed November 8, 1932. Serial No. 331,965. PUBLISHED JANUARY 10, 1933. Class 6.

301,933. APPARATUS USED IN TREATMENT OF TEXTILE MATERIALS, MORE PARTICULARLY APPARATUS FOR TREATING RAW SILK TO RENDER IT MORE PLIANT FOR MANUFACTURE BY FORCING AN EMULSION OF OIL AND SOAP BACK AND FORTH THERETHROUGH. GATES-PFEIFFER ENGINEERING COMPANY, New York, N. Y.
Filed November 13, 1931. Serial No. 321,102. PUBLISHED JANUARY 10, 1933. Class 28.

301,934. HIGH PRESSURE HOSE MADE OF RUBBER, FIBRE, AND METALLIC REINFORCEMENT. UNITED STATES RUBBER COMPANY, New York, N. Y.
Filed November 11, 1931. Serial No. 321,042. PUBLISHED JANUARY 3, 1933. Class 35.

301,935. GENERAL SYSTEM TONIC. J. WALTER DAUGHERTY, doing business as Maltosa Distributing Company, Cincinnati, Ohio.
Filed November 2, 1931. Serial No. 320,721. PUBLISHED DECEMBER 29, 1931. Class 6.

301,936. BED SPRINGS. UNITED STATES BEDDING COMPANY, St. Paul, Minn.
Filed October 30, 1931. Serial No. 320,649. PUBLISHED JANUARY 10, 1933. Class 32.

301,937. PERFUMES. SOCIETE WORTH, Paris, France.
Filed October 29, 1931. Serial No. 320,608. PUBLISHED DECEMBER 27, 1932. Class 6.

301,938. PREPARATION IN POWDER FORM CONTAINING IODOACETIC ACID. AKTIEBOLAGET ASTRA APOTEKARNAS KEMISKA FABRIKER, Sodertalje, Sweden.
Filed October 17, 1931. Serial No. 320,147. PUBLISHED DECEMBER 27, 1932. Class 6.

301,939. CORD, BARE, INSULATED WIRE, CABLES, FOR GENERAL ELECTRICAL USES, AND RADIO ANTENNA WIRE. CONSOLIDATED WIRE & ASSOCIATED CORPORATIONS, Chicago, Ill.
Filed September 28, 1931. Serial No. 319,509. PUBLISHED JANUARY 3, 1933. Class 21.

301,940. INSECTICIDES. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed August 13, 1931. Serial No. 317,922. PUBLISHED NOVEMBER 24, 1931. Class 6.

301,941. WEATHER DIRECTION TRANSMITTER, ANEMOMETER, WIND DIRECTION TRANSMITTER, ETC. JULIEN P. FRIEZ & SONS, INC., Baltimore, Md.
Filed June 26, 1931. Serial No. 316,822. PUBLISHED AUGUST 4, 1931. Class 26.

301,942. A GENERAL CLEANSING PREPARATION FOR THE HANDS, FABRICS, PORCELAIN, PAINTED SURFACES, AND THE LIKE. O'CONNELL PRODUCTS COMPANY, Chicago, Ill.
Filed October 27, 1930. Serial No. 307,242. PUBLISHED JANUARY 10, 1933. Class 4.

301,943. PREPARATION IN LIQUID OR PASTE FORM FOR REMOVING TOBACCO AND NICOTINE STAINS FROM THE SKIN. NIK-O-KLEEN CO., doing business as Brossmer's Laboratories, San Francisco, Calif.
Filed March 9, 1932. Serial No. 324,968. PUBLISHED JANUARY 10, 1933. Class 6.

301,944. SHEEP DIP, CATHARTIC PILLS, TABLETS, ETC. SCOTT & GILBERT Co., San Francisco, Calif.
Filed January 4, 1932. Serial No. 322,714. PUBLISHED MAY 17, 1932. Class 6.

301,945. CHEMICAL COMPOSITION, USED AS A VEHICLE FOR PAINTS, AND/OR IN CONJUNCTION WITH OTHER VEHICLES, SUCH AS VARNISHES, ENAMELS, AND THE LIKE; ALSO USED AS A WALL PRIMER. THE PERRY ROBINSON CORPORATION, New York, N. Y.
Filed December 9, 1931. Serial No. 321,964. PUBLISHED JANUARY 10, 1933. Class 16.

301,946. MEDICINES—NAMELY, LIQUID PREPARATION FOR INFLAMMATORY CONDITIONS OF THE MUCOUS MEMBRANES, RECTAL SUPPOSITORIES, LAXATIVE, CAPSULES OF GELATINE ENCASING VAGINAL SUPPOSITORIES, CERATE, OINTMENT FOR APPLICATION TO INFLAMED AND INJURED SURFACES, IRON TONIC IN TABLET FORM, ELIXIR IRON TONIC IN LIQUID FORM. THE VIAVI COMPANY, San Francisco, Calif.
Filed December 21, 1931. Serial No. 322,838. PUBLISHED JANUARY 3, 1933. Class 6.

301,947. GLANDULAR SUBSTANCE IN GELATIN CAPSULES. GEORGE V. SHEA, doing business as George V. Shea & Co., Woodside, N. Y.
Filed December 5, 1931. Serial No. 321,827. PUBLISHED APRIL 26, 1932. Class 6.

301,948. SAPONACEOUS MATERIAL USED AS AN INGREDIENT OF SOAP. FISCHER'S SUDFA-SAVER, INC., Cincinnati, Ohio.
Filed November 18, 1931. Serial No. 321,243. PUBLISHED JANUARY 3, 1933. Class 4.

301,949. NEWSPAPER CARTOON. CENTRAL PRESS ASSOCIATION, INC., New York, N. Y.
Filed December 7, 1932. Serial No. 332,835. PUBLISHED JANUARY 10, 1933. Class 38.

301,950. CARTOONS PUBLISHED FROM TIME TO TIME. I. W. PHILLIPS, Chicago, Ill.
Filed November 23, 1932. Serial No. 332,414. PUBLISHED JANUARY 3, 1933. Class 38.

301,951. PERIODICAL PUBLICATION. HENRY A. SCHUBART, New York, N. Y.
Filed November 29, 1932. Serial No. 332,604. PUBLISHED JANUARY 3, 1933. Class 38.

301,952. PUBLICATION ISSUED PERIODICALLY. CHRISTMAS CLUB, New York, N. Y.
Filed December 3, 1932. Serial No. 332,710. PUBLISHED JANUARY 10, 1933. Class 38.

301,953. PERIODICAL. NATIONAL SHERIFFS' & POLICE ASS'N, INC., Denver, Colo.
Filed December 6, 1932. Serial No. 332,819. PUBLISHED JANUARY 10, 1933. Class 38.

301,954. INCENSE. TAY PERFUME CO., Detroit, Mich.
Filed October 10, 1932. Serial No. 331,129. PUBLISHED JANUARY 3, 1933. Class 6.

301,955. DANDRUFF REMOVER AND HAIR RESTORER. HOLLYWOOD LABORATORIES, Los Angeles, Calif.
Filed October 8, 1932. Serial No. 331,094. PUBLISHED JANUARY 3, 1933. Class 6.

301,956. INSECTICIDES. ABRAHAM L. GELBART, doing business as Geico Co., Brooklyn, N. Y.
Filed September 21, 1932. Serial No. 330,544. PUBLISHED JANUARY 3, 1933. Class 6.

301,957. DRY CLEANERS AND CLEANERS FOR WOOD, METAL AND THE LIKE. JOHN P. LABRIOLA, doing business as Ultralyn Essential Products Company, New York, N. Y.
Filed June 21, 1932. Serial No. 328,196. PUBLISHED JANUARY 3, 1933. Class 4.

301,958. SPEED OPERABLE FUEL CONTROL DEVICE FOR INTERNAL COMBUSTION ENGINES. THE PIERCE GOVERNOR COMPANY, Anderson, Ind.
Filed May 28, 1932. Serial No. 327,005. PUBLISHED JANUARY 10, 1933. Class 22.

301,959. SENSITIZED PHOTOGRAPHIC FILMS AND PLATES. ERNST LOSSEROW G. M. B. H., Berlin, Germany.
Filed May 18, 1932. Serial No. 327,225. PUBLISHED JANUARY 10, 1933. Class 26.

301,960. MOTION PICTURE PROJECTION MACHINES. CAMILLE CONSEIL, Paris, France.
Filed April 7, 1932. Serial No. 325,893. PUBLISHED JANUARY 10, 1933. Class 28.

301,961. WASHBOARDS. W. T. GRANT COMPANY, New York, N. Y.
Filed December 6, 1932. Serial No. 332,813. PUBLISHED JANUARY 10, 1933. Class 24.

301,962. ENAMEL PAINT. NATHAN SMUKLER, New York, N. Y.
Filed November 19, 1932. Serial No. 332,213. PUBLISHED JANUARY 3, 1933. Class 16.

301,963. DISPLAY AND SHIPPING CARDS FOR BACKINGS FOR ARTIFICIAL TEETH. THE COLUMBUS DENTAL MANUFACTURING CO., Columbus, Ohio.
Filed November 16, 1932. Serial No. 332,182. PUBLISHED JANUARY 10, 1933. Class 2.

301,964. LAXATIVES. FOLEY & COMPANY, Chicago, Ill.
Filed November 17, 1932. Serial No. 332,227. PUBLISHED JANUARY 3, 1933. Class 6.

301,965. PHARMACEUTICAL PRODUCT. SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland.
Filed November 11, 1932. Serial No. 332,077. PUBLISHED JANUARY 3, 1933. Class 6.

301,966. TOILET SOAP. GOLDBLATT BROS., INC., Chicago, Ill.
Filed November 5, 1932. Serial No. 331,925. PUBLISHED JANUARY 3, 1933. Class 4.

301,967. HERBACEOUS LAXATIVE. CHARM LABORATORIES, INC., New York, N. Y.
Filed November 1, 1932. Serial No. 331,771. PUBLISHED JANUARY 10, 1933. Class 6.

301,968. PREPARATION USEFUL FOR A MOUTH WASH, TOOTHPOWDER, ETC. GERMAL PRODUCTS COMPANY, INC., New York, N. Y.
Filed October 31, 1932. Serial No. 331,734. PUBLISHED JANUARY 3, 1933. Class 6.

301,969. TOOTH WHITENER IN THE NATURE OF A DENTIFRICE. THE SUNDAY COMPANY, New York, N. Y.
Filed October 14, 1932. Serial No. 331,269. PUBLISHED JANUARY 3, 1933. Class 6.

301,970. RUBBER SOLVENT. THE FIRESTONE TIRE & RUBBER COMPANY, Akron, Ohio.
Filed October 29, 1932. Serial No. 331,674. PUBLISHED DECEMBER 27, 1932. Class 6.

301,971. GASEOUS FUMIGATING MATERIAL. THE GUARDITE CORPORATION, Chicago, Ill.
Filed October 27, 1932. Serial No. 331,614. PUBLISHED DECEMBER 27, 1932. Class 6.

301,972. LAXATIVES. IRENE ROSS, doing business as Rosdex Health Products, Philadelphia, Pa.
Filed October 22, 1932. Serial No. 331,476. PUBLISHED DECEMBER 27, 1932. Class 6.

301,973. FOOT MEDICATIONS SUCH AS LOTIONS, CREAMS, AND DEODORANTS. KERATEXE, INC., East Orange, N. J.
Filed October 22, 1932. Serial No. 331,468. PUBLISHED DECEMBER 27, 1932. Class 6.

301,974. ALKALINE TABLETS FOR USE IN CORRECTING ACID CONDITIONS OF THE STOMACH. REED & CARNRICK, Jersey City, N. J.
Filed October 21, 1932. Serial No. 331,441. PUBLISHED DECEMBER 27, 1932. Class 6.

301,975. POWDER PREPARATION FOR ORAL THERAPY. MAX SCHWALB, Jackson Heights, N. Y.
Filed October 19, 1932. Serial No. 331,384. PUBLISHED DECEMBER 27, 1932. Class 6.

301,976. PREPARATION FOR COLORING BUTTER. WELLS & RICHARDSON COMPANY, INC., Burlington, Vt.
Filed October 18, 1932. Serial No. 331,352. PUBLISHED DECEMBER 27, 1932. Class 6.

301,977. OINTMENT FOR THE TREATMENT OF VARICOSE VEINS. MCCLELLAND'S OINTMENT CO., Butler, N. J.
Filed October 17, 1932. Serial No. 331,311. PUBLISHED DECEMBER 27, 1932. Class 6.

301,978. DEODORANT AND ASTRINGENT. CLYDE S. SMITH, doing business as O-Do Company, Dallas, Tex.
Filed October 6, 1932. Serial No. 331,012. PUBLISHED JANUARY 3, 1933. Class 6.

301,979. PLASTICIZER FOR USE IN CONNECTION WITH RUBBER. BINNEY & SMITH CO., New York, N. Y.
Filed September 29, 1932. Serial No. 330,775. PUBLISHED DECEMBER 27, 1932. Class 6.

301,980. TABLETS TO BE DISSOLVED IN WATER FOR MAKING A SOLUTION TO BE USED AS A MOUTH WASH AND GARGLE. STERILE PRODUCTS COMPANY, INC., San Diego, Calif.
Filed September 26, 1932. Serial No. 330,730. PUBLISHED DECEMBER 27, 1932. Class 6.

301,981. ANTISEPTIC AND GERMICIDAL PREPARATION. RARE CHEMICALS, INC., Nepera Park, N. Y.
Filed September 21, 1932. Serial No. 330,551. PUBLISHED JANUARY 10, 1933. Class 6.

301,982. HOG PREPARATION FOR THE TREATMENT OF WORMS, RICKETS, AND CHOLERA. WILLIAMS AND SMALE, Ashley, Ohio.
Filed September 19, 1932. Serial No. 330,500. PUBLISHED JANUARY 10, 1933. Class 6.

301,983. OINTMENTS OR SALVES FOR FLORIDA SORES, ITCH, POISON IVY, POISON OAK, AND CHRONIC SORES. HARRY J. SENAY, doing business as The Nedrox Manufacturing Co., West Palm Beach, Fla.
Filed September 13, 1932. Serial No. 330,358. PUBLISHED DECEMBER 27, 1932. Class 6.

301,984. LAXATIVE. GEORGE JUSTIN LIFTON, doing business as MacDonald Medicine Company of Canada, Detroit, Mich.
Filed September 12, 1932. Serial No. 330,268. PUBLISHED JANUARY 10, 1933. Class 6.

301,985. MEDICINES FOR HUMAN USE IN THE TREATMENT OF WHOOPING COUGH, NERVOUS DISEASES, NEURASTHENIA, AND INSOMNIA. GABAIL LIMITED, London, England.
Filed September 12, 1932. Serial No. 330,255. PUBLISHED JANUARY 10, 1933. Class 6.

301,986. AN ANTISEPTIC DRESSING FOR INFLAMMATORY CONDITIONS. DAVIS & LAWRENCE CO., New York, N. Y.
Filed September 7, 1932. Serial No. 330,160. PUBLISHED JANUARY 10, 1933. Class 6.

301,987. PREPARATION FOR A PROPHYLACTIC TREATMENT FOR THE PREVENTION OF VENEREAL DISEASES. FRANK HATTON, Miami, Fla.
Filed August 19, 1932. Serial No. 329,669. PUBLISHED JANUARY 10, 1933. Class 6.

301,988. HAIR TONICS AND SHAMPOO. ROCCO SANTOLINE, Basking Ridge, N. J.
Filed August 2, 1932. Serial No. 329,293. PUBLISHED JANUARY 10, 1933. Class 6.

301,989. FACE POWDERS, NAIL POLISH, HAIR TONIC, HAIR AND SCALP OINTMENTS, ASTRINGENTS, FINGER WAVE LOTIONS, HAND LOTIONS, FACE LOTIONS, AND HAIR BLEACH. MICHAEL SCHMIDT, INC., New York, N. Y.
Filed July 16, 1932. Serial No. 328,849. PUBLISHED DECEMBER 27, 1932. Class 6.

301,990. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF (½) OF ONE (1) PER CENT ALCOHOL BY VOLUME. GUY E. RIEGEL, Spokane, Wash.
Filed December 5, 1932. Serial No. 332,782. PUBLISHED JANUARY 10, 1933. Class 48.

301,991. COIN-OPERATED AMUSEMENT MACHINES. JOHN F. MEYER, doing business as The Exhibit Supply Company, Chicago, Ill.
Filed December 3, 1932. Serial No. 332,728. PUBLISHED JANUARY 10, 1933. Class 22.

301,992. BRAKE LININGS. THERMOID RUBBER COMPANY, Trenton, N. J.
Filed December 1, 1932. Serial No. 332,667. PUBLISHED JANUARY 10, 1933. Class 35.

301,993. CONSTRUCTION BUILDING SETS. THE CLEVELAND CONTAINER CO., Cleveland, Ohio.
Filed November 28, 1932. Serial No. 332,518. PUBLISHED JANUARY 10, 1933. Class 22.

301,994. RESILIENT VEHICLE TIRES AND INNER TUBES COMPOSED IN WHOLE OR IN PART OF RUBBER. THE KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y.
Filed November 26, 1932. Serial No. 332,491. PUBLISHED JANUARY 3, 1933. Class 35.

301,995. VALVES FOR RELIEVING BOILERS, TANKS, PUMPS, AND OTHER WATER CONTAINING VESSELS OF EXCESS PRESSURE. SAMUEL SKNER, doing business as Guardian Valve Company, New York, N. Y.
Filed November 25, 1932. Serial No. 332,470. PUBLISHED JANUARY 10, 1933. Class 13.

301,996. SEWING MACHINE NEEDLES. UNION SPECIAL MACHINE COMPANY, Chicago, Ill.
Filed November 22, 1932. Serial No. 332,388. PUBLISHED JANUARY 10, 1933. Class 23.

301,997. FORMED RAZOR SHARPENERS MADE OF FORMED GLASS. JOSEPH LEVINE, New York, N. Y.
Filed November 22, 1932. Serial No. 332,373. PUBLISHED JANUARY 10, 1933. Class 23.

301,998. RAZOR BLADES. TWENTY GRAND BLADE COMPANY, INC., Spencer, Ind., assignor to Herman B. Laymon, doing business under the name and style of Twenty Grand Blade Company, Spencer, Ind.
Filed November 21, 1932. Serial No. 332,358. PUBLISHED JANUARY 10, 1933. Class 23.

301,999. FILTER PLATES, FILTER TUBES, DIFFUSER PLATES, DIFFUSER TUBES, POROUS DIAPHRAGMS, LABORATORY WARE FOR FILTERING PURPOSES AND POROUS MEDIUMS. THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.
Filed November 19, 1932. Serial No. 332,292. PUBLISHED JANUARY 10, 1933. Class 81.

302,000. TYPEWRITING MACHINES. L. C. SMITH & CORONA TYPEWRITERS, INC., New York, N. Y.
Filed November 18, 1932. Serial No. 332,272. PUBLISHED JANUARY 10, 1933. Class 23.

302,001. LEVELS, MITER BOXES, SQUARES, TAPE LINES, AND RULES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed November 18, 1932. Serial No. 332,271. PUBLISHED JANUARY 10, 1933. Class 26.

302,002. COMBINATION LOCK WASHERS AND SCREW PRODUCTS—NAMELY, NUTS, BOLTS, CAP SCREWS, AND SCREWS. NATIONAL MACHINE PRODUCTS COMPANY, Detroit, Mich.
Filed November 18, 1932. Serial No. 332,268. PUBLISHED JANUARY 10, 1933. Class 13.

302,003. NONALCOHOLIC, MALTLESS CARBONATED BEVERAGES AND SYRUPS AND EXTRACTS FOR MAKING THE SAME. SHEDD PRODUCTS COMPANY, Detroit, Mich.
Filed November 17, 1932. Serial No. 332,238. PUBLISHED JANUARY 10, 1933. Class 45.

302,004. FOOD WARMER. LACY PRODUCTS CORPORATION, Chicago, Ill.
Filed November 16, 1932. Serial No. 332,190. PUBLISHED JANUARY 10, 1933. Class 34.

302,005. OPHTHALMIC FRAMES AND MOUNTINGS. CONTINENTAL OPTICAL COMPANY, Indianapolis, Ind.
Filed November 16, 1932. Serial No. 332,183. PUBLISHED JANUARY 10, 1933. Class 26.

302,006. TABLE GAMES. CHARLES R. FARGO, Beverly Hills, Calif.
Filed November 11, 1932. Serial No. 332,062. PUBLISHED JANUARY 10, 1933. Class 22.

302,007. REFRIGERATING COILS. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga.
Filed October 10, 1932. Serial No. 331,114. PUBLISHED JANUARY 10, 1933. Class 31.

302,008. MOVING PICTURE FILMS. MAJESTIC PICTURES CORPORATION, New York, N. Y.
Filed November 5, 1932. Serial No. 331,928. PUBLISHED JANUARY 10, 1933. Class 36.

302,009. GEAR PUMPS, PLUNGER PUMPS, STEAM TURBINES, RECIPROCATING ENGINES, EMULSIFYING MACHINES, AIR AND GAS COMPRESSORS, HOT OIL PUMPS, VACUUM PUMPS, AND BLOWING ENGINES. ROBERT H. RUSSELL, Cleveland, Ohio.
Filed November 3, 1932. Serial No. 331,872. PUBLISHED JANUARY 10, 1933. Class 23.

302,010. MACHINERY BEARINGS AND BEARING COLLARS. JOSEPH T. RYERSON & SON, INC., Chicago, Ill.
Filed October 26, 1932. Serial No. 331,659. PUBLISHED JANUARY 10, 1933. Class 23.

302,011. OIL BURNERS AND EQUIPMENT FOR RANGES. UNIVERSAL APPLIANCE COMPANY, Boston, Mass.
Filed October 26, 1932. Serial No. 331,600. PUBLISHED JANUARY 10, 1933. Class 34.

302,012. SAW GAGES, PARTICULARLY RIP GAGES. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis.
Filed October 14, 1932. Serial No. 331,250. PUBLISHED JANUARY 10, 1933. Class 26.

302,013. SAW GAGES, PARTICULARLY MITER GAGES. DELTA MANUFACTURING COMPANY, doing business as Delta Specialty Company, Milwaukee, Wis.
Filed October 14, 1932. Serial No. 331,249. PUBLISHED JANUARY 10, 1933. Class 26.

302,014. RAZORS AND RAZOR BLADES. PEYBRANDS, INC., Long Island City, N. Y.
Filed September 28, 1932. Serial No. 330,756. PUBLISHED JANUARY 10, 1933. Class 23.

302,015. WELL-DRILLING RIGS AND DERRICKS THEREFOR. A. H. KASHNER INC., Tulsa, Okla.
Filed July 7, 1932. Serial No. 326,611. PUBLISHED JANUARY 10, 1933. Class 23.

302,016. BRAKE-LININGS. FLOYD R. BIGGS, doing business as Pioneer Asbestos Company, St. Louis, Mo.
Filed June 15, 1932. Serial No. 327,966. PUBLISHED JANUARY 3, 1933. Class 35.

302,017. INDUSTRIAL FURNACES OF ALL DESCRIPTIONS HEATED BY GAS, OIL, OR COAL AND PARTS THEREOF AND FOR VENTILATING APPARATUS AND PARTS THEREOF. W. S. ROCKWELL COMPANY, New York, N. Y.
Filed June 3, 1932. Serial No. 327,707. PUBLISHED JANUARY 10, 1933. Class 34.

302,018. RADIO RECEIVING SETS, TELEVISION RECEIVING SETS AND COMBINATION RADIO AND TELEVISION RECEIVING SETS, RADIO TUBES. WALTER CECIL RAWLS, Norfolk, Va., assignor to W. C. Rawls & Company, Incorporated, Norfolk, Va.
Filed June 29, 1932. Serial No. 328,405. PUBLISHED JANUARY 3, 1933. Class 21.

302,019. INDUSTRIAL ELECTRIC FURNACES AND PARTS THEREOF. W. S. ROCKWELL COMPANY, New York, N. Y.
Filed June 3, 1932. Serial No. 327,708. PUBLISHED JANUARY 3, 1933. Class 21.

302,020. ESPECIALLY PREPARED FERTILIZING COMPOUND FOR AGRICULTURAL AND DOMESTIC USAGE. LOOK TSONG KEE, Honolulu, Hawaii.
Filed November 29, 1932. Serial No. 332,586. PUBLISHED JANUARY 10, 1933. Class 10.

302,021. PAPER TO BE USED FOR THE PRINTING OF BOOKS AND MAGAZINES. THE PERKINS-GOODWIN COMPANY, New York, N. Y.
Filed November 25, 1932. Serial No. 332,465. PUBLISHED JANUARY 3, 1933. Class 37.

302,022. CIGARS, CIGARETTES, SMOKING TOBACCO, CHEWING TOBACCO, AND SNUFF. BROWN & WILLIAMSON TOBACCO CORPORATION, Louisville, Ky.
Filed November 25, 1932. Serial No. 332,443. PUBLISHED JANUARY 10, 1933. Class 17.

302,023. CIGARS, CIGARETTES, AND TOBACCO. STEPHANO BROTHERS, Philadelphia, Pa.
Filed November 22, 1932. Serial No. 332,386. PUBLISHED JANUARY 10, 1933. Class 17.

302,024. TOILET PAPER, PAPER TOWELS, PAPER NAPKINS, AND COLORED CREPE PAPER. FORT HOWARD PAPER COMPANY, Green Bay, Wis.
Filed November 22, 1932. Serial No. 332,371. PUBLISHED JANUARY 3, 1933. Class 37.

302,025. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed November 18, 1932. Serial No. 332,325. PUBLISHED JANUARY 10, 1933. Class 37.

302,026. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed November 18, 1932. Serial No. 332,322. PUBLISHED JANUARY 10, 1933. Class 37.

302,027. EXPANDING FILES, EXPANDING ENVELOPES, FILE POCKETS, FOLDERS, AND POCKET WALLETS (FILING DEVICES), FOR HOLDING LETTERS, DOCUMENTS, AND THE LIKE. THE COOKE & COBB COMPANY, Brooklyn, N. Y.
Filed November 16, 1932. Serial No. 332,184. PUBLISHED JANUARY 3, 1933. Class 37.

302,028. WRITING, PRINTING, AND COVER PAPER. HOLYOKE CARD & PAPER COMPANY, Springfield, Mass.
Filed November 15, 1932. Serial No. 332,149. PUBLISHED JANUARY 3, 1933. Class 37.

302,029. COTTON FLOUR BAGS. FULTON BAG & COTTON MILLS, Atlanta, Ga.
Filed November 15, 1932. Serial No. 332,144. PUBLISHED JANUARY 10, 1933. Class 2.

302,030. WHISKEY. BLOCH BROS., Glasgow, Scotland.
Filed November 10, 1932. Serial No. 332,025. PUBLISHED JANUARY 10, 1933. Class 49.

302,031. TOILET TISSUE. PRATT-MALLORY COMPANY, Sioux City, Iowa.
Filed November 4, 1932. Serial No. 331,907. PUBLISHED JANUARY 3, 1933. Class 37.

302,032. TOILET PAPER. THE SEMINOLE PAPER CORPORATION, Chicago, Ill.
Filed November 2, 1932. Serial No. 331,686. PUBLISHED JANUARY 3, 1933. Class 37.

302,033. NICKEL-CONTAINING IRON CASTINGS. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed November 1, 1932. Serial No. 331,791. PUBLISHED JANUARY 10, 1933. Class 14.

302,034. WRAPPING PAPER IN SHEETS OR ROLLS. INTERNATIONAL PAPER COMPANY, New York, N. Y.
Filed October 22, 1932. Serial No. 331,466. PUBLISHED JANUARY 3, 1933. Class 37.

302,035. GREASEPROOF WRAPPING PAPER. RIEGEL PAPER CORPORATION, Riegelsville, N. J., and New York, N. Y.
Filed October 3, 1932. Serial No. 330,899. PUBLISHED JANUARY 3, 1933. Class 37.

302,036. PNEUMATIC RUBBER TIRES. TRIPLEX TIRE CO., LTD., Oakland, Calif.
Filed September 29, 1932. Serial No. 330,900. PUBLISHED JANUARY 3, 1933. Class 35.

302,037. LUNCH AND GAME BASKETS MADE OF METAL WITH AN ICE CHAMBER FOR KEEPING THE CONTENTS COOL. DWIGHT D. MCBRIDE, doing business as The Dwight McBride Co., Golden City, Mo.
Filed September 15, 1932. Serial No. 330,305. PUBLISHED JANUARY 10, 1933. Class 2.

302,038. BRACELET WATCHES AND THEIR ATTACHED BRACELETS. BULOVA WATCH COMPANY, INC., New York, N. Y.
Filed August 13, 1932. Serial No. 329,526. PUBLISHED JANUARY 3, 1933. Class 27.

302,039. FOUNTAIN PENS, FEEDS, CAPS, BARRELS, GOLD AND OTHER NIBS, AND PARTS THEREOF. THE ESTERBROOK STEEL PEN MANUFACTURING COMPANY, Camden, N. J.
Filed July 16, 1932. Serial No. 328,839. PUBLISHED JANUARY 3, 1933. Class 37.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,040. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CROXON, INC., New York, N. Y. Filed Feb. 3, 1932. Serial No. 323,778.

CROXON

For Depilatories.
Claims use since Jan. 2, 1932.

302,041. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PLEVILLS, Jersey City, N. J. Filed Jan. 12, 1932. Serial No. 322,941.

DIANA DEANE

For Cold Cream, Cream for Cleansing, Vanishing Cream for Powder Base, Cream of Almonds, Freshener for the Skin, Lotion for the Hands, Shampoo for the Hair, Brilliantine for the Hair, and Face Powder.
Claims use since Dec. 28, 1931.

302,042. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK C. GEPHART, New York, N. Y. Filed Jan. 29, 1932. Serial No. 323,577.

Louise Curtis

For Toilet and Cosmetic Creams and Lotions.
Claims use since Jan. 2, 1932.

302,043. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) APOTHECARIES HALL COMPANY, Waterbury, Conn. Filed Jan. 29, 1932. Serial No. 323,561.

99+ NUCAST NICKEL ANODE

For Anodes Used for Plating Metal.
Claims use since Jan. 21, 1932.

302,044. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ARTHUR L. PARKER, doing business as The Parker Appliance Company, Cleveland, Ohio. Filed Jan. 19, 1932. Serial No. 323,173.

INNERSEAL

For Solder Pipe Fittings.
Claims use since Dec. 18, 1931.

302,045. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) R-OWN LABORATORIES, INC., Brooklyn, N. Y. Filed Apr. 12, 1930. Serial No. 298,765.

℞-OWN

For Antiseptic Ointment.
Claims use since Feb. 19, 1930.

302,046. (CLASS 32. FURNITURE AND UPHOLSTERY.) MCCORD RADIATOR & MFG. CO., Detroit, Mich.
Filed Dec. 26, 1930. Serial No. 309,367.

ADJUST-A-HOOK

The word "Hook" is disclaimed apart from the mark as shown.
For Stocking and Display Fixtures, Racks, Boards, and Units and Parts Thereof for Merchandise and Articles.
Claims use since Nov. 21, 1930.

302,047. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WESTERN CLOCK COMPANY, Peru, Ill. Filed Feb. 8, 1933. Serial No. 334,782.

Sterling

For Clocks and Watches.
Claims use since Mar. 9, 1912.

302,048. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) UNITED STATES BRONZE POWDER WORKS, INC., New York, N. Y. Filed Jan. 30, 1933. Serial No. 334,479.

LUMINUS PASTE

UNITED STATES BRONZE POWDER WORKS

For Aluminum Bronze Powders and Aluminum Paint.
Claims use since Apr. 15, 1931.

302,049. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE CAPEHART CORPORATION, Fort Wayne, Ind. Filed Jan. 12, 1933. Serial No. 333,848.

Capehart

For Automatic and Semi-Automatic Disk Change Phonographs, and Automatic and Semi-Automatic Phonograph Record Changers, All Electrically Operated.
Claims use since March, 1928.

302,050. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JAMES BUCHANAN & CO. LD., London, England.
Filed Dec. 12, 1932. Serial No. 332,964.



For Liqueur Whisky.
Claims use since June 13, 1925.

302,051. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SAKMAR PERFUME CO. INC., New York, N. Y. Filed Dec. 10, 1932. Serial No. 332,963.

LE EGYPTIENNE STRAWBERRY PLASTIC CREME

For Plastic Cream.
Claims use since Jan. 27, 1928.

302,052. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) SIMSON & FENY, INC., New York, N. Y.
Filed July 8, 1932. Serial No. 328,649.

TRICOLORE

For Strings for Violins and Similar Musical Instruments.
Claims use since Jan. 1, 1905.

302,053. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) CRAWFORD MANUFACTURING CO., INC., Richmond, Va. Filed July 5, 1932. Serial No. 328,551.

FIBERKLOTH

For Seat Covers for Automobiles.
Claims use since Feb. 10, 1932.

TRADE-MARK REGISTRATIONS RENEWED

39,751. EYEGLASS AND SPECTACLE FRAMES OR MOUNTINGS. Registered February 10, 1903. AMERICAN OPTICAL CO. Renewed February 10, 1933, to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts, assignee.

39,763. SEED OILS AND SEED PRODUCTS. Registered February 10, 1903. THE PROCTER & GAMBLE CO., Cincinnati and Ivorydale, Ohio. Renewed February 10, 1933, to The Procter & Gamble Company, Cincinnati, Ohio, a Corporation of Ohio, assignee.

39,767. AN EFFERVESCENT CHEMICAL SUBSTANCE. Registered February 10, 1903. ALFRED BISHOP LIMITED, London, England, a Corporation of Great Britain and Northern Ireland. Renewed February 10, 1933.

39,977. CERTAIN NAMED CHEMICAL SUBSTANCES. Registered March 24, 1903. SOCIÉTÉ CHIMIQUE DES USINES DU RHONE ANCT. GILLIARD, P. MONNET & CARTIER, St. Fons, France. Renewed March 24, 1933, to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a Corporation of France, by change of name.

39,978. PHARMACEUTICAL PRODUCTS COMPOSED OF SALICYLIC ACID AND ACETIC ACID. Registered March 24, 1903. SOCIÉTÉ CHIMIQUE DES USINES DU RHONE ANCT. GILLIARD, P. MONNET & CARTIER, St. Fons, France. Renewed March 24, 1933, to Societe des Usines Chimiques Rhone-Poulenc, Paris, France, a Corporation of France, by change of name.

40,288. SEWING MACHINES, ATTACHMENTS AND PARTS THEREOF. Registered May 5, 1903. THE SINGER MANUFACTURING COMPANY, New York, N. Y. Renewed May 5, 1933, to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey.

86,997. CERTAIN PHARMACEUTICAL PREPARATIONS. Registered June 18, 1912. LEGGETT & BROTHER, New York, N. Y. Renewed June 18, 1932, to Interstate Chemical Mfg. Co., Jersey City, N. J., a Corporation of New Jersey, successor.

89,259. BOOTS AND SHOES MADE OF CERTAIN NAMED MATERIALS. Registered December 3, 1912. HOFHEIMER BROTHERS COMPANY. Renewed December 3, 1932, to Hofheimer's Inc., Norfolk, Va., a Corporation of Virginia, successor.

89,327. SHOULDER-BRACES AND SUSPENDERS. Registered December 10, 1912. P. BAILLY & CIE. Renewed December 10, 1932, to P. Bailly & Cie., Paris, France, a Corporation of France, successor.

89,704. A TONIC FOR THE BLOOD AND NERVOUS SYSTEM. Registered December 31, 1912. GIUSTINO SALLUSTO & Co., New York, N. Y. Renewed December 31, 1932, to Giustino Sallusto, doing business as Giustino Sallusto Company, Brooklyn, N. Y., successor.

90,289. CARBURETERS, BEING PARTS OF INTERNAL COMBUSTION ENGINES. Registered February 18, 1913. BROWN & BARLOW LTD. Renewed February 18, 1933, to Amal, Limited, Birmingham, England, a Corporation of Great Britain, assignee.

90,328. HATS AND CAPS. Registered February 18, 1913. THE HAT MANUFACTURERS SUPPLY CO. LTD., Chestergate, Stockport, England, a Corporation of Great Britain. Renewed February 18, 1933.

90,358. CERTAIN PAINTS, WAX AND COMPOUNDS FOR CERTAIN NAMED USES. Registered February 18, 1913. THE MARIETTA PAINT & COLOR CO., Marietta, Ohio, a Corporation of Ohio. Renewed February 18, 1933.

90,508. MEN'S LEATHER SHOES. Registered March 4, 1913. BURROW-JONES-AND DYER SHOE CO., St. Louis, Mo. Renewed March 4, 1933, to Craddock Terry Company, Lynchburg, Va., a Corporation of Virginia, successor.

90,510. CERTAIN NAMED PIECE GOODS AND CUT LENGTHS. Registered March 4, 1913. COLLINS & AIKMAN COMPANY, Montclair, N. J., and Philadelphia, Pa. Renewed March 4, 1933, to Collins & Aikman Corporation, Philadelphia, Pa., a Corporation of Delaware, assignee by mesne assignments.

90,524. RUBBER VEHICLE-TIRES. Registered March 4, 1913. FEDERAL RUBBER MANUFACTURING CO., Milwaukee and Cudahy, Wis. Renewed March 4, 1933, to Charles A. Dana and John B. Pierce, receivers of the Fisk Rubber Company, Chicopee Falls, Mass., assignee by mesne assignments.

90,567. CIGARS. Registered March 4, 1913. NILS & MOSER CIGAR CO., Kansas City, Mo., a Corporation of Missouri. Renewed March 4, 1933.

90,771. CANNED SALMON. Registered March 18, 1913. UNION FISHERMENS CO-OPERATIVE PACKING CO., Astoria, Oreg., a Corporation of Oregon. Renewed March 18, 1933.

91,518. SEWING MACHINE NEEDLES. Registered May 6, 1913. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed May 6, 1933.

91,556. PHENOL-METHYLENE LIQUID, SEMISOLID, AND SOLID PLASTIC COMPOUNDS. Registered May 13, 1913. CONDENSITE COMPANY OF AMERICA, Glen Ridge, N. J. Renewed May 13, 1933, to Bakelite Corporation, New York, N. Y., a Corporation of Delaware, assignee.

91,602. CARTRIDGES, CARTRIDGE SHELLS, CAPS, PRIMERS, BULLETS, SHOT AND WADS. Registered May 13, 1913. REMINGTON ARMS AND AMMUNITION COMPANY, as assignee of Remington Ammunition Co., Weehawken, N. J. Renewed May 13, 1933, to Remington Arms Company, Incorporated, Bridgeport, Conn., and Ilion and New York, N. Y., a Corporation of Delaware, assignee, by mesne assignments.

91,628. A PHARMACEUTICAL SOLUTION USED AS A CERTAIN REMEDY AND OPHTHALMIC. Registered May 20, 1913. AKTIENGESELLSCHAFT VORM. B. SIEGFRIED, Zofingen, Switzerland, a Corporation of Switzerland. Renewed May 20, 1933.

91,699. AMMONIA-WATER. Registered May 20, 1913. ROBINSON BROS., New York, N. Y. Renewed May 20, 1933, to Robinson Brothers Buffalo Ammonia, Inc., Brooklyn, N. Y., a Corporation of New York, successor.

91,813. SPOKES AND NIPPLES OF VEHICLES. Registered May 27, 1913. THE STANDARD COMPANY. Renewed May 27, 1933, to The Torrington Company, Torrington, Conn., a Corporation of Connecticut, assignee.

91,876. TYPE CASTING, SETTING, AND COMPOSING MACHINES. Registered June 3, 1913. INTERNATIONAL TYPESETTING MACHINE COMPANY, New York, N. Y. Renewed June 3, 1933, to Intertype Corporation, Brooklyn, N. Y., a Corporation of New York, assignee.

91,911. SEWING-MACHINES, PARTS THEREOF AND ATTACHMENTS THEREOF. Registered June 3, 1913. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed June 3, 1933.

91,994. LEATHER SHOES. Registered June 10, 1913. M. A. PACKARD COMPANY, Brockton, Mass., a Corporation of Massachusetts. Renewed June 10, 1933.

92,292. PULVERIZED GRAPHITE. Registered June 24, 1913. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich., a Corporation of Michigan. Renewed June 24, 1933.

92,293. PULVERIZED GRAPHITE. Registered June 24, 1913. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich., a Corporation of Michigan. Renewed June 24, 1933.

92,297. PULVERIZED GRAPHITE. Registered June 24, 1913. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich., a Corporation of Michigan. Renewed June 24, 1933.

92,300. PULVERIZED GRAPHITE. Registered June 24, 1913. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich., a Corporation of Michigan. Renewed June 24, 1933.

92,323. FLOWER, VEGETABLE, AND CEREAL SEEDS. Registered July 1, 1913. DAKOTA IMPROVED SEED COMPANY, Mitchell, S. Dak., a Corporation of South Dakota. Renewed July 1, 1933.

92,635. INTERNAL SECRETIONS TO SUPPLY DEFICIENT SECRETIONS OF CERTAIN NAMED ORGANS. Registered July 22, 1913. G. W. CARNRICK CO., New York, N. Y. Renewed July 22, 1933, to G. W. Carnrick Co., Newark, N. J., a Corporation of New Jersey, assignee.

92,724. CERTAIN DENTAL, MEDICAL AND SURGICAL APPLIANCES. Registered July 22, 1913. THE SEAMLESS RUBBER COMPANY. Renewed July 22, 1933, to The Seamless Rubber Company, Inc., New Haven, Conn., a Corporation of Massachusetts, assignee.

92,877. SUSPENDERS. Registered August 5, 1913. LAURA S. COONEY, New York, N. Y. Renewed August 5, 1933.

LABELS

REGISTERED MARCH 21, 1933

41,850.—*Title:* GUEST HAM—FAMOUS FOR FLAVOR. For Ham. ARNOLD BROS., INCORPORATED, Chicago, Ill. Published July 1, 1932.

41,851.—*Title:* PHILADELPHIA LEADER. For Cigars. FRANK J. FLORIO, Philadelphia, Pa. Published February 14, 1933.

41,852.—*Title:* GOLD MARK. For Mushrooms. ADOLPH GOLDMARK & SONS COAP., New York, N. Y. Published December 15, 1931.

41,853.—*Title:* GOOD HOUSEKEEPING. For Fruit Jar Rings. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Published January 29, 1932.

41,854.—*Title:* KOLB'S MARYLAND B-R-E-D. For Bread. KOLB'S BAKING COMPANY, Baltimore, Md. Published January 11, 1933.

41,855.—*Title:* INFANTS WEAR. For Infants Wear. MASTERKNIT MILLS, New York, N. Y. Published January 9, 1933.

41,856.—*Title:* BLACK REAPER. For Mothproofing Compound. MIDWEST HARDWARE COMPANY, doing business as Midwest Laboratories, Chicago, Ill. Published September 30, 1932.

41,857.—*Title:* NUTRO-LINKS. For Intensified Food. MODERN HEALTH PRODUCTS, Milwaukee, Wis. Published January 15, 1933.

41,858.—*Title:* ENCORE ASTRINGENT & DEODORANT MOUTH WASH. For Mouth Wash. NASSOUR BROTHERS INC. LTD., doing business as N. B. Laboratories, Los Angeles, Calif. Published January 12, 1933.

41,859.—*Title:* BELSON'S SOFTO TISSUE. For Tissue. NORTHERN PAPER MILLS, Green Bay, Wis. Published December 8, 1932.

41,860.—*Title:* SOFTO TISSUE. For Tissue. NORTHERN PAPER MILLS, Green Bay, Wis. Published December 8, 1932.

41,861.—*Title:* WESTERN CREPE TISSUE. For Crepe Tissue. NORTHERN PAPER MILLS, Green Bay, Wis. Published December 8, 1932.

41,862.—*Title:* SOFTO WHITE GENUINE CREPE. For Absorbent Crepe. NORTHERN PAPER MILLS, Chicago, Ill. Published December 8, 1932.

41,863.—*Title:* FLOSSINETTE CREPE TISSUE. For Tissue. NORTHERN PAPER MILLS, Green Bay, Wis. Published December 8, 1932.

41,864.—*Title:* MARIA-JOSEFA. For New Viennese Facial Preparation. MATHILDA PIKE, New York, N. Y. Published February 18, 1932.

41,865.—*Title:* FRINGS BROS. KINGS. For Cigars. PORT-VANA CIGAR CO., Dallastown, Pa. Published November 26, 1932.

41,866.—*Title:* POTOSI. For Brew. POTOSI BREWING COMPANY, Potosi, Wis. Published December 16, 1932.

41,867.—*Title:* WISCONSIN LAGER SUPREME. For Lager. POTOSI BREWING COMPANY, Potosi, Wis. Published December 16, 1932.

41,868.—*Title:* BIG NICKEL. For Gelatin Dessert. BAYARD S. SCOTLAND, doing business as Economy Co., Joliet, Ill. Published October 15, 1932.

41,869.—*Title:* SNELL-JONES TACK CORPORATION. For Nails, Staples, and Tacks. SNELL-JONES TACK CORPORATION, Brockton, Mass. Published December 19, 1931.

41,870.—*Title:* VICTORY. For Dog and Cat Food. VICTORY PACKING COMPANY, San Francisco, Calif. Published January 16, 1933.

41,871.—*Title:* KWIC KORN. For a Food Preparation for Making Corn Muffins, Corn Bread, Corn Pone, Corn Pan Cakes, Etc. ERNEST C. WATERHOUSE, doing business as Kwickorn Sales Company, Los Angeles, Calif. Published November 3, 1932.

PRINTS

REGISTERED MARCH 21, 1933

14,070.—*Title:* ELIZABETH ARDEN TELLS YOU HOW TO ACHIEVE LOVELINESS WITH ENONOMY. For Cleansing Cream and Skin Tonic. ELIZABETH ARDEN OF NEW YORK, LTD., doing business as Elizabeth Arden, New York, N. Y. Published January 29, 1933.

14,071.—*Title:* THE MARK OF MASTER WEAVERS. For Rugs and Carpets. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published February 1, 1933.

14,072.—*Title:* AW RED! LEAVE BILL ALONE—MY MOTHER GAVE ME HILLS BROS TOO—ADFORM 130. For Coffee. HILLS BROS., San Francisco, Calif. Published January 10, 1933.

14,073.—*Title:* HERE'S WHY HILLS BROS COFFEE HAS AND HOLDS SO MANY FRIENDS. For Coffee. HILLS BROS., San Francisco, Calif. Published December 11, 1932.

14,074.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'RE TASTING A FLAVOR NO OTHER COFFEE HAS. For Coffee. HILLS BROS., San Francisco, Calif. Published November 27, 1932.

14,075.—*Title:* HILLS BROS' PATENTED PROCESS "DOES RIGHT" BY THE RARE BLEND OF COFFEES. For Coffee. HILLS BROS., San Francisco, Calif. Published November 13, 1932.

14,076.—*Title:* THE FLAVOR THAT MAKES HILLS BROS COFFEE FAMOUS, IS THE SAME IN EVERY POUND. For Coffee. HILLS BROS., San Francisco, Calif. Published December 13, 1932.

14,077.—*Title:* YOU'LL NEVER KNOW WHAT "MATCHLESS, UNIFORM FLAVOR" MEANS, UNTIL YOU USE HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published October 30, 1932.

14,078.—*Title:* THEY CALL IT "THE WORLD'S FINEST COFFEE" . . . AND HERE IS THE REASON. For Coffee. HILLS BROS., San Francisco, Calif. Published October 16, 1932.

14,079.—*Title:* IT IS SURPRISING HOW DELICIOUSLY DIFFERENT HILLS BROS COFFEE TASTES. For Coffee. HILLS BROS., San Francisco, Calif. Published October 2, 1932.

14,080.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'LL REALIZE THE IMPORTANCE OF PERFECT ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published September 18, 1932.

14,081.—*Title:* ANY TWO POUNDS OF HILLS BROS COFFEE ARE PERFECT FLAVOR-TWINS. For Coffee. HILLS BROS., San Francisco, Calif. Published September 16, 1932.

14,082.—*Title:* LOOK FOR THE ARAB TRADE-MARK . . . THAT MEANS HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published August 14, 1932.

14,083.—*Title:* THERE IS FLAVOR SUCH AS YOU NEVER DREAMED OF IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published July 17, 1932.

14,084.—*Title:* IT'S A REVELATION TO YOUR TASTE TO DRINK A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published December 13, 1932.

14,085.—*Title:* IT'S A REVELATION TO YOUR TASTE TO DRINK A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published November 25, 1932.

14,086.—*Title:* THE FLAVOR THAT MAKES HILLS BROS COFFEE FAMOUS, IS THE SAME IN EVERY POUND. For Coffee. HILLS BROS., San Francisco, Calif. Published November 11, 1932.

14,087.—*Title:* WHY HILLS BROS COFFEE HAS AND HOLDS SO MANY FRIENDS. For Coffee. HILLS BROS., San Francisco, Calif. Published October 28, 1932.

14,088.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'RE TASTING A FLAVOR NO OTHER COFFEE HAS. For Coffee. HILLS BROS., San Francisco, Calif. Published October 14, 1932.

14,089.—*Title:* YOU'LL NEVER KNOW WHAT "MATCHLESS, UNIFORM FLAVOR" MEANS UNTIL YOU USE HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published September 16, 1932.

14,090.—*Title:* IT IS SURPRISING HOW DELICIOUSLY DIFFERENT HILLS BROS COFFEE TASTES. For Coffee. HILLS BROS., San Francisco, Calif. Published August 19, 1932.

14,091.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'LL REALIZE THE IMPORTANCE OF PERFECT ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published August 5, 1932.

14,092.—*Title:* ANY TWO POUNDS OF HILLS BROS COFFEE ARE PERFECT FLAVOR-TWINS. For Coffee. HILLS BROS., San Francisco, Calif. Published July 22, 1932.

14,093.—*Title:* THERE IS FLAVOR SUCH AS YOU NEVER DREAMED OF, IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published July 8, 1932.

14,094.—*Title:* LOOK FOR THE ARAB TRADE-MARK . . . THAT MEANS HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 24, 1932.

14,095.—*Title:* THE FLAVOR THAT MAKES HILLS BROS COFFEE FAMOUS IS THE SAME IN EVERY POUND. For Coffee. HILLS BROS., San Francisco, Calif. Published December 9, 1932.

14,096.—*Title:* IT'S A REVELATION TO YOUR TASTE TO DRINK A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published December 23, 1932.

14,097.—*Title:* HERE'S WHY HILLS BROS COFFEE HAS AND HOLDS SO MANY FRIENDS. For Coffee. HILLS BROS., San Francisco, Calif. Published November 25, 1932.

14,098.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'RE TASTING A FLAVOR NO OTHER COFFEE HAS. For Coffee. HILLS BROS., San Francisco, Calif. Published November 11, 1932.

14,099.—*Title:* HILLS BROS' PATENTED PROCESS "DOES RIGHT" BY THE RARE BLEND OF COFFEES. For Coffee. HILLS BROS., San Francisco, Calif. Published October 28, 1932.

14,100.—*Title:* YOU'LL NEVER KNOW WHAT "MATCHLESS, UNIFORM FLAVOR" MEANS UNTIL YOU USE HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published October 14, 1932.

14,101.—*Title:* THEY CALL IT THE WORLD'S FINEST COFFEE . . . AND HERE IS THE REASON. For Coffee. HILLS BROS., San Francisco, Calif. Published September 30, 1932.

14,102.—*Title:* IT IS SURPRISING HOW DELICIOUSLY DIFFERENT HILLS BROS COFFEE TASTES. For Coffee. HILLS BROS., San Francisco, Calif. Published September 16, 1932.

14,103.—*Title:* ANY TWO POUNDS OF HILLS BROS COFFEE ARE PERFECT FLAVOR-TWINS. For Coffee. HILLS BROS., San Francisco, Calif. Published August 12, 1932.

14,104.—*Title:* LOOK FOR THE ARAB TRADE-MARK . . . THAT MEANS HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published July 22, 1932.

14,105.—*Title:* THERE IS FLAVOR SUCH AS YOU NEVER DREAMED OF, IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published July 8, 1932.

14,106.—*Title:* IT'S A REVELATION TO YOUR TASTE TO DRINK A CUP OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published November 27, 1932.

14,107.—*Title:* THE FLAVOR THAT MAKES HILLS BROS COFFEE FAMOUS, IS THE SAME IN EVERY POUND. For Coffee. HILLS BROS., San Francisco, Calif. Published November 13, 1932.

14,108.—*Title:* HERE'S WHY HILLS BROS COFFEE HAS AND HOLDS SO MANY FRIENDS. For Coffee. HILLS BROS., San Francisco, Calif. Published October 30, 1932.

14,109.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'RE TASTING A FLAVOR NO OTHER COFFEE HAS. For Coffee. HILLS BROS., San Francisco, Calif. Published October 16, 1932.

14,110.—*Title:* HILLS BROS' PATENTED PROCESS "DOES RIGHT" BY THE RARE BLEND OF COFFEES. For Coffee. HILLS BROS., San Francisco, Calif Published October 2, 1932.

14,111.—*Title:* YOU'LL NEVER KNOW WHAT "MATCHLESS, UNIFORM FLAVOR" MEANS UNTIL YOU USE HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published September 18, 1932.

14,112.—*Title:* THEY CALL IT THE WORLD'S FINEST COFFEE . . . AND HERE IS THE REASON. For Coffee. HILLS BROS., San Francisco, Calif. Published September 4, 1932.

14,113.—*Title:* IT IS SURPRISING HOW DELICIOUSLY DIFFERENT HILLS BROS COFFEE TASTES. For Coffee. HILLS BROS., San Francisco, Calif. Published August 21, 1932.

14,114.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'LL REALIZE THE IMPORTANCE OF PERFECT ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published August 7, 1932.

14,115.—*Title:* ANY TWO POUNDS OF HILLS BROS COFFEE ARE PERFECT FLAVOR-TWINS. For Coffee. HILLS BROS., San Francisco, Calif. Published July 24, 1932.

14,116.—*Title:* THERE IS A FLAVOR SUCH AS YOU NEVER DREAMED OF, IN EVERY POUND OF HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published June 26, 1932.

14,117.—*Title:* LOOK FOR THE ARAB TRADE-MARK . . . THAT MEANS HILLS BROS COFFEE. For Coffee. HILLS BROS., San Francisco, Calif. Published July 10, 1932.

14,118.—*Title:* LARRO CALF MEAL. For Calf Meal Gruel, Calf Meal (Dry), and Dairy Feed (Dry). THE LARROWE MILLING COMPANY, Minneapolis, Minn. Published October 1, 1932.

14,119.—*Title:* MENTO-TWIN JR. For Menthol Inhalers. THE LOEL MANUFACTURING COMPANY, Middleboro, Mass. Published December 15, 1932.

14,120.—*Title:* MENTOLETTE. For Menthol Pencils. THE LOEL MANUFACTURING COMPANY, Middleboro, Mass. Published December 15, 1932.

14,121.—*Title:* HAPPY DAYS ARE HERE AGAIN. For Beer. ADAM SCHEIDT BREWING COMPANY, Norristown, Pa. Published December 7, 1932.

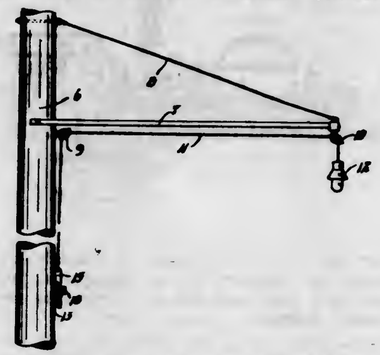
14,122.—*Title:* HEALTH COMFORT STYLE POISE. For Corsets. THE STAYFORM COMPANY, Chicago, Ill. Published December 19, 1932.

14,123.—*Title:* DEWAN'S PERMANENT HAIR REMOVER. For Hair Remover. J. L. YOUNGHUSBAND, Chicago, Ill. Published January 10, 1933.

REISSUES

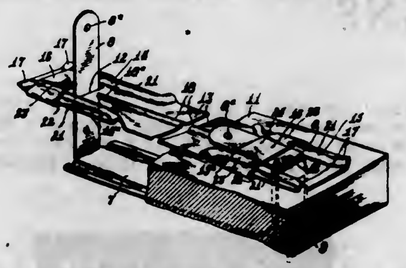
MARCH 21, 1933

18,769. STREET LAMP CABLE SECURING DEVICE. OTTO ANKLAM, Minneapolis, Minn. Original No. 1,871,023, dated Aug. 9, 1932, Serial No. 590,148, filed Feb. 1, 1932. Application for reissue filed Dec. 17, 1932. Serial No. 647,794. 11 Claims. (Cl. 240—68.)



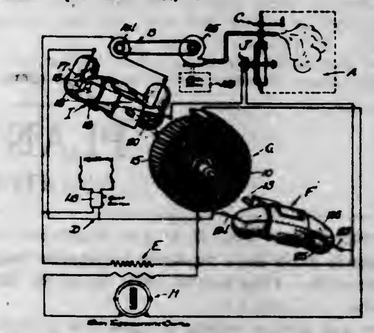
9. A street lamp cable anchoring device comprising a housing having front and side walls and an open back and within which housing the lower end of a cable may be received, said housing having a small passage through said side walls for the cable, means for securing the lower end of the cable within said housing and means for releasably connecting said housing to a post in such manner that the post will close the open back of said housing.

18,770. FASTENER. DANIEL A. BRENNAN, Chicago, Ill. Original No. 1,771,728, dated July 29, 1930, Serial No. 357,825, filed Apr. 24, 1929, and in Canada Mar. 19, 1929. Application for reissue filed May 23, 1932. Serial No. 613,126. 30 Claims. (Cl. 24—153.)



1. A paper fastener having, in combination, a base formed with two tongues, one at each end, said tongues being less in width than said base and each of said tongues having a small projection struck outwardly adjacent its free end, a keeper substantially coextensive in width with said base, and having spaced transverse perforations for said tongues to pass through, companion tracks, spaced to receive said tongues therebetween, arranged in pairs extending inwardly from the ends and stopping short of the medial portion of said keeper, all of the ends of said tracks curving outwardly to provide positive stops, the outer ends of said tracks gradually increasing in height toward the outer ends, guides formed along the longitudinal edges of the keeper co-extensive with said tracks and elevated from the plane of the bottom of the keeper, a longitudinal rib struck up therein, but of less height than said companion tracks, tapering downwardly at both ends toward and adjacent said apertures, two locks one slidably mounted over each pair of tracks, and having its ends bent under said guides, said locks being arranged to bend the tongues downwardly into the space between the tracks while being slid inwardly, said locks also being flared inwardly and upwardly, said flares diverging from the longitudinal axis to provide tongue aligning means, and said locks also having upturned portions on the outer edges overlying each track to facilitate their wedging to the outer ends of the tracks.

18,771. TEMPERATURE CONTROL APPARATUS. LOUIS A. M. PHELAN, Chicago, Ill., and CLIFFORD HOTCHKISS, Minneapolis, Minn., assignors, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Original No. 1,764,344, dated June 17, 1930, Serial No. 615,530, filed Jan. 29, 1923. Application for reissue filed Jan. 27, 1932. Serial No. 589,288. 27 Claims. (Cl. 158—28.)



26. In a burner control system, a room thermostat circuit, a burner motor started in response to closure of said circuit and stopped in response to opening thereof, an igniter and means for interposing a delay between successive motor energizations.

18,772. SHINGLE. NORMAN P. HARSHBERGER, Scarsdale, N. Y., assignor to Bakelite Building Products Company, Inc., New York, N. Y., a Corporation of Delaware. Original No. 1,718,933, dated June 25, 1929, Serial No. 63,608, filed Oct. 20, 1925. Application for reissue filed June 25, 1931. Serial No. 546,877. 9 Claims. (Cl. 108—7.)



1. A shingle having a lug extending from the corner of one edge thereof, and a slit extending part way between said lug and the body of the shingle on the side of the lug most remote from the edge, and a second slit in the said edge near the opposite end of the shingle and adapted to coact with the lug on an adjacent shingle, and a raised portion on the shingle immediately at one side of said second slit.

18,773. CABLE CONNECTER. GEORGE C. THOMAS, Jr., Elizabeth, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Original No. 1,833,956, dated Dec. 1, 1931, Serial No. 336,052, filed Jan. 30, 1929. Application for reissue filed Dec. 22, 1932. Serial No. 648,491. 6 Claims. (Cl. 247—1.)

4. A connecter comprising a connecter member adapted to receive a cable to be clamped therein, a clamp car-

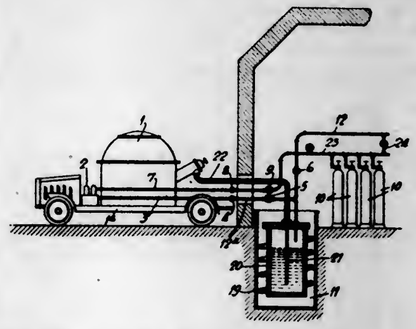
ried by the connecter member including, parallel plates disposed parallel to and upon either side of the axis of the cable to be clamped within the connecter, a cable clamping foot formed upon the end of each parallel



plate and directed inwardly from the plates, and operating means carried by the connecter member and engaging the clamp to force the clamp into the connecter member and clamp the cable therein.

18,774. TRANSFERRING LIQUEFIED GASES. CHRISTIAN WILHELM PAUL HEYLANDT, Berlin-Britz, Germany, assignor to Fliiga Aktiengesellschaft, St. Moritz, Switzerland, a Corporation of Switzerland. Original No. 1,786,159, dated Dec. 23, 1930, Serial No. 338,653, filed Feb. 9, 1929, and in Germany Feb. 16, 1928. Application for reissue filed Apr. 23, 1932. Serial No. 607,208. 11 Claims. (Cl. 62—1.)

1. The method of supplying a low boiling point gas at predetermined pressure, which comprises charging a transport container with a charge of liquefied gas where it is maintained at relatively low pressure when transported, thereafter transferring liquefied gas from said container to a second vessel, vaporizing the transferred



liquefied gas to cause the same to generate gas at a relatively high pressure by self-compression, and discharging said compressed gas to a consuming device at the desired pressure.

PLANT PATENTS

GRANTED MARCH 21, 1933

57. APPLE TREE. JOHN H. DICKEY, Wenatchee, Wash., assignor to Stark Bro's Nurseries & Orchards Company, Louisiana, Mo. Filed May 23, 1932. Serial No. 613,053. 1 Claim. (Cl. 47—1.)

A new and distinct variety of apple tree as described, characterized by the early coloring brilliant red of its fruit before ripening, as herein shown.

58. CHRYSANTHEMUM. ALEXANDER CUMMING, Jr., Bristol, Conn., assignor to Bristol Nurseries, Inc., Bristol, Conn. Filed Nov. 17, 1932. Serial No. 643,105. 1 Claim. (Cl. 47—1.)

The variety of perennial chrysanthemum as shown and described, characterized particularly by its profusion of single flowers of a "nopal red" to "ox blood red" color, and by its distinctive foliage.

DESIGNS

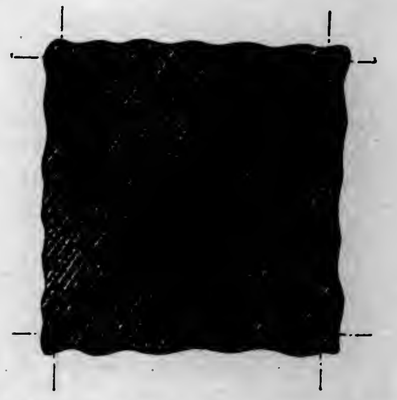
MARCH 21, 1933

89,479. COFFEE DISPENSER. JOHN W. BELL, Chicago, Ill. Filed Oct. 22, 1932. Serial No. 45,502. Term of patent 7 years.



The ornamental design for a coffee dispenser, as shown and described.

89,480. TEXTILE FABRIC OR SIMILAR ARTICLE. MICHEL BRODSKY, Paris, France, assignor to William Willhelm Co., Inc., New York, N. Y. Filed Nov. 19, 1932. Serial No. 46,066. Term of patent 3½ years.



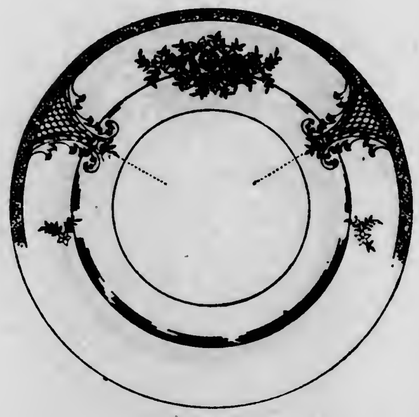
The ornamental design for a textile fabric or similar article as shown and described.

89,481. SHEET OF PAPER. RALEIGH B. BURRAIRD, Washington, D. C. Filed Feb. 28, 1931. Serial No. 38,876. Term of patent 3½ years.



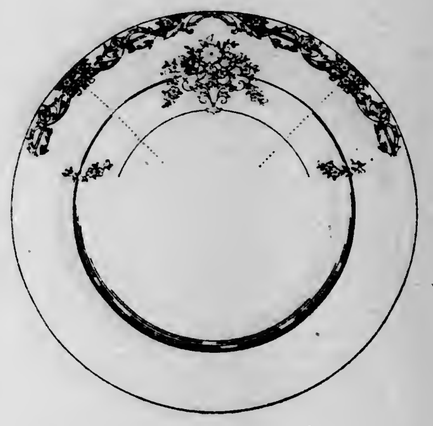
The ornamental design for a sheet of paper substantially as shown.

89,482. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,163. Term of patent 7 years.



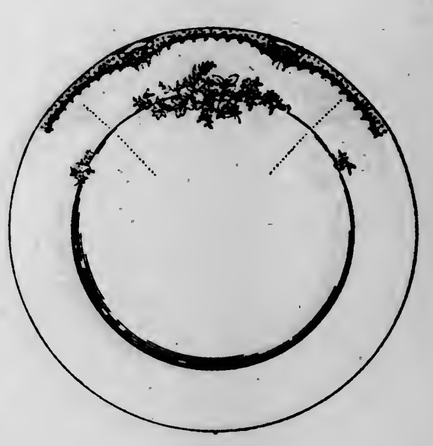
The ornamental design for a plate or similar article, as shown and described.

89,483. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,164. Term of patent 7 years.



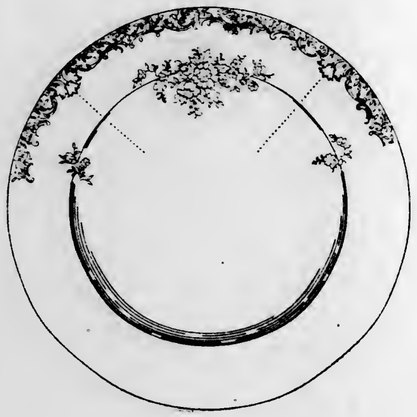
The ornamental design for a plate or similar article, as shown and described.

89,484. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,165. Term of patent 7 years.



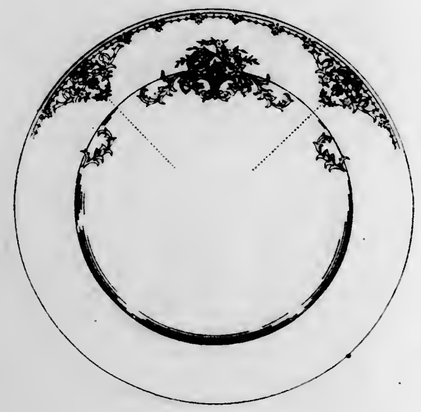
The ornamental design for a plate or similar article, as shown and described.

89,485. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,166. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

89,486. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,167. Term of patent 7 years.



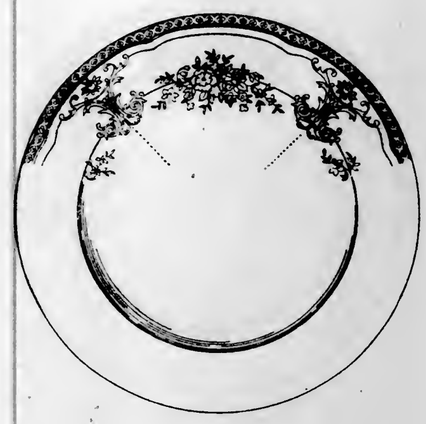
The ornamental design for a plate or similar article, as shown and described.

89,487. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,168. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

89,488. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,169. Term of patent 7 years.



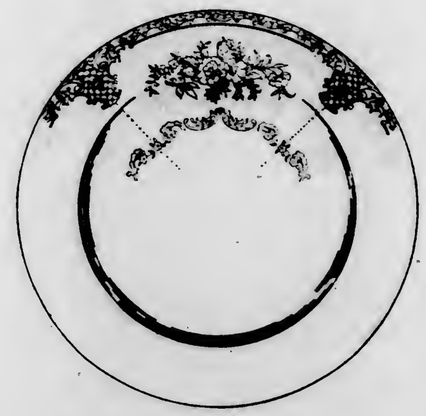
The ornamental design for a plate or similar article, as shown and described.

89,489. COFFEEPOT OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,170. Term of patent 7 years.



The ornamental design for a coffee pot or similar article, as shown.

89,490. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,171. Term of patent 7 years.



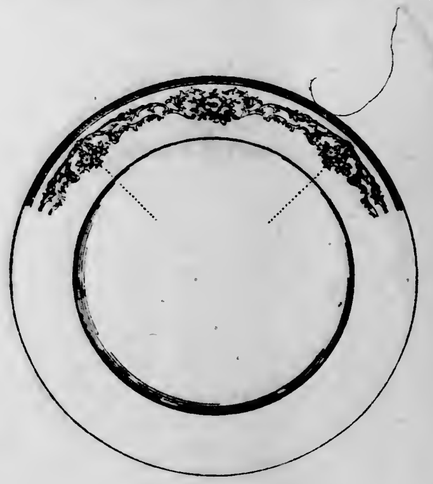
The ornamental design for a plate or similar article, as shown and described.

89,491. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,172. Term of patent 7 years.



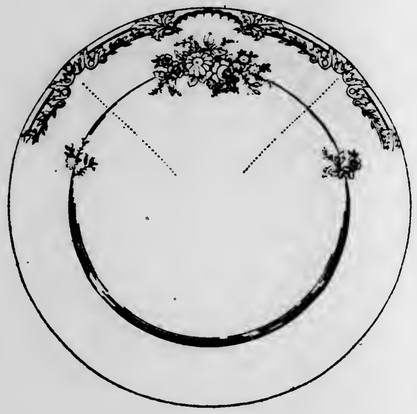
The ornamental design for a plate or similar article, as shown and described.

89,492. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,173. Term of patent 7 years.



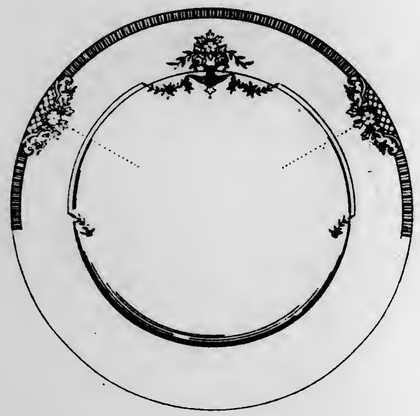
The ornamental design for a plate or similar article, as shown and described.

89,493. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,174. Term of patent 7 years.



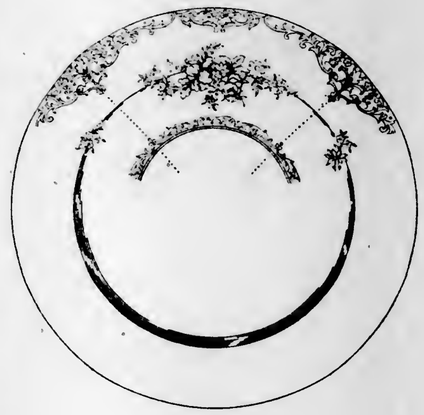
The ornamental design for a plate or similar article, as shown and described.

89,494. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26. 1932. Serial No. 46,175. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

89,495. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,176. Term of patent 7 years.



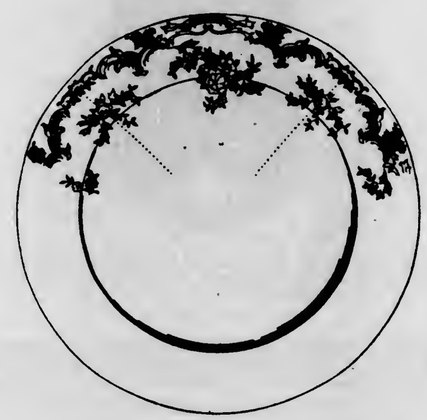
The ornamental design for a plate or similar article, as shown and described.

89,496. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,177. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown and described.

89,497. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,178. Term of patent 7 years.



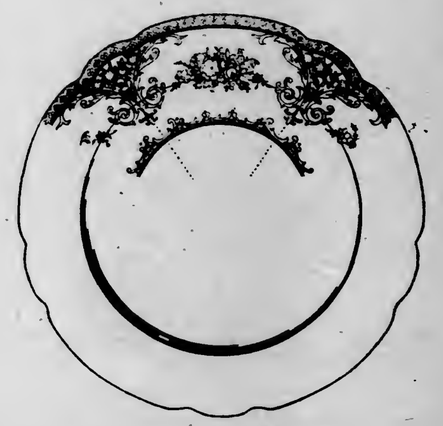
The ornamental design for a plate or similar article, as shown and described.

89,498. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,179. Term of patent 7 years.



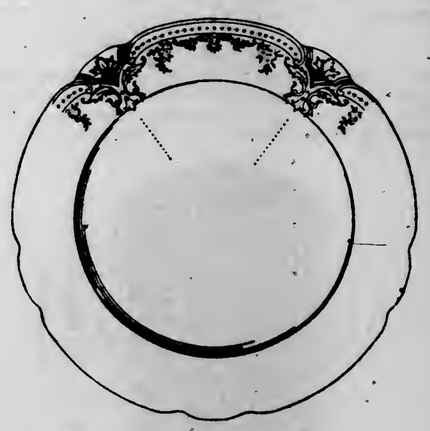
The ornamental design for a plate or similar article, as shown and described.

89,499. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,180. Term of patent 7 years.



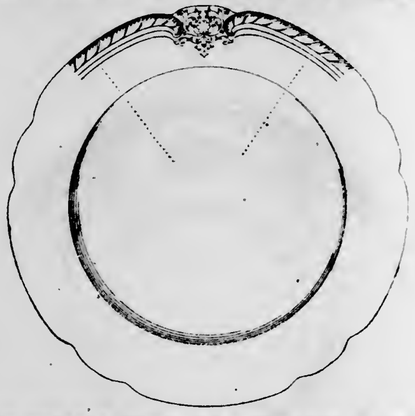
The ornamental design for a plate or similar article, as shown and described.

89,500. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,182. Term of patent 7 years.



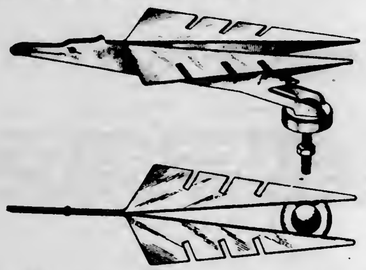
The ornamental design for a plate or similar article, as shown and described.

89,501. PLATE OR SIMILAR ARTICLE. YUKIO BUMA, New York, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,183. Term of patent 7 years.



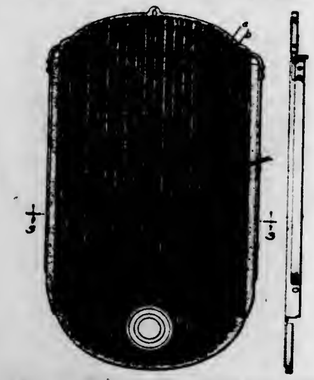
The ornamental design for a plate or similar article, as shown and described.

89,502. RADIATOR CAP ORNAMENT. WILLARD F. CLARK, Chicago, Ill. Filed Dec. 30, 1932. Serial No. 46,666. Term of patent 3½ years.



The ornamental design for a radiator cap ornament substantially as shown.

89,503. RADIATOR SHUTTER. KINGSTON FORBES, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 4, 1931. Serial No. 41,626. Term of patent 3½ years.

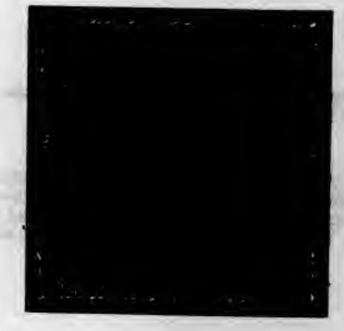


89,503—Continued.



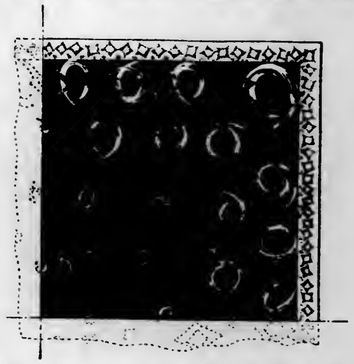
The ornamental design for a radiator shutter substantially as shown and described.

89,504. TEXTILE FABRIC OR SIMILAR ARTICLE. JOSEPH M. GOTTESMAN, Paris, France, assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 1, 1932. Serial No. 46,221. Term of patent 3½ years.



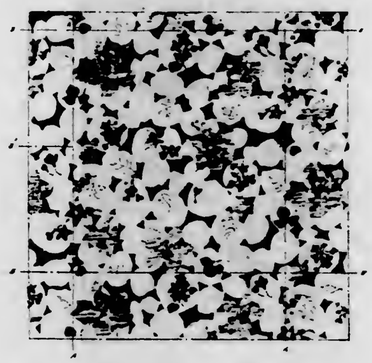
The ornamental design for a textile fabric or similar article as shown.

89,505. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Feb. 13, 1933. Serial No. 47,193. Term of patent 3½ years.



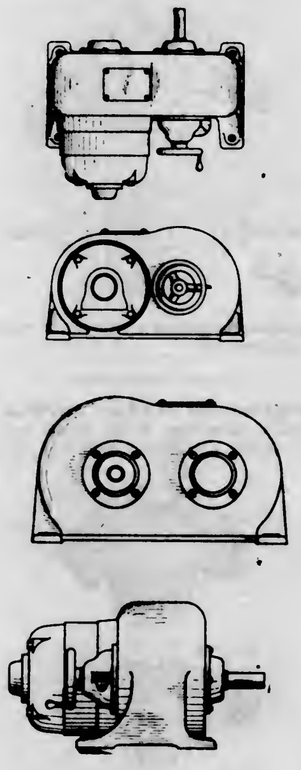
The ornamental design for a textile fabric or similar article as shown and described.

89,506. TEXTILE FABRIC OR SIMILAR ARTICLE OF MANUFACTURE. ALFRED J. HEINKE, Towaco, N. J., assignor to H. R. Mallinson & Co. Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 3, 1932. Serial No. 45,725. Term of patent 3½ years.



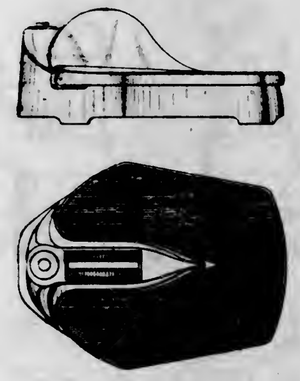
The ornamental design for a textile fabric or similar article of manufacture substantially as shown and described.

89,507. FRAME FOR A POWER UNIT. DON HEYER, Los Angeles, Calif. Filed Oct. 28, 1932. Serial No. 45,611. Term of patent 7 years.



The ornamental design for a frame for a power unit, substantially as shown.

89,508. SCALE. HENRIK HOYER, New York, N. Y., assignor to The Jacobs Bros. Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,930. Term of patent 7 years.



The ornamental design for a scale, as shown.

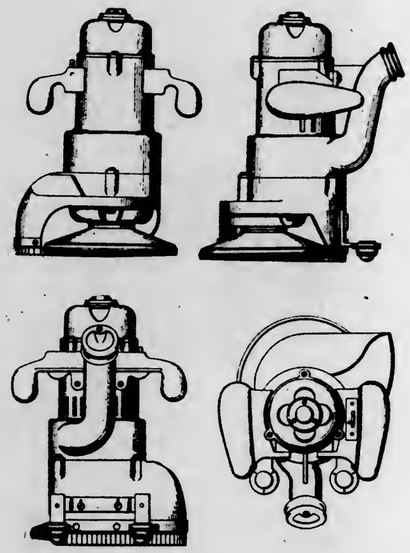
89,509. COMBINED BRIDGE BID INDICATOR AND CONTAINER. EARL JACOBS, Brooklyn, N. Y. Filed Dec. 23, 1932. Serial No. 46,573. Term of patent 14 years.



The ornamental design for a combined bridge bid indicator and container substantially as shown and described.

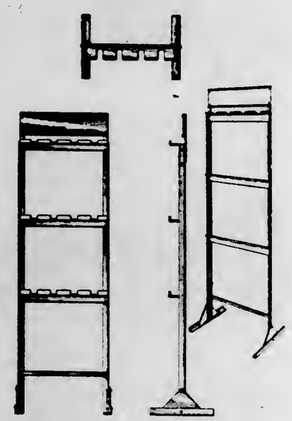
89,510. [WITHDRAWN.]

89,511. ROTARY DISK EDGING MACHINE. HARRY L. MYERS, Toledo, Ohio, assignor to The American Floor Surfacing Machine Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 3, 1933. Serial No. 46,684. Term of patent 14 years.



The ornamental design for a rotary disk edging machine as shown.

89,512. UPRIGHT DISPLAY RACK. WARREN M. SAMPLE, Muncie, Ind. Filed May 26, 1932. Serial No. 43,906. Term of patent 3½ years.



The ornamental design for an upright display rack, as shown.

89,513. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 12, 1932. Serial No. 45,915. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,514. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,952. Term of patent 3½ years.



The ornamental design for a sweater or similar article as shown and described.

89,515. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,953. Term of patent 3½ years.



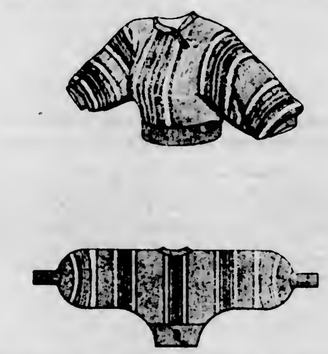
The ornamental design for a sweater or similar article as shown and described.

89,516. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,954. Term of patent 3½ years.



The ornamental design for a sweater or similar article as shown and described.

89,517. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,955. Term of patent 3½ years.



The ornamental design for a sweater or similar article as shown and described.

89,518. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,956. Term of patent 3½ years.



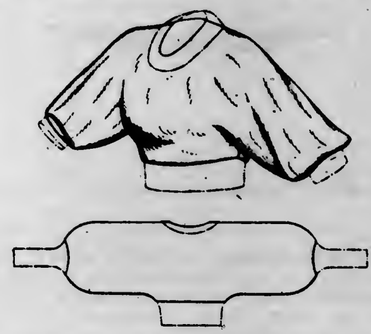
The ornamental design for a sweater or similar article as shown and described.

89,519. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 24, 1933. Serial No. 46,957. Term of patent 3½ years.



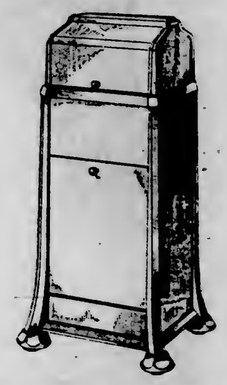
The ornamental design for a sweater or similar article as shown and described.

89,520. SWEATER OR SIMILAR ARTICLE. SAMUEL SHEINDELMAN, Lawrence, N. Y. Filed Jan. 26, 1933. Serial No. 46,999. Term of patent 3½ years.



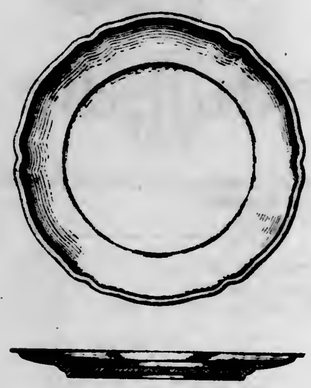
The ornamental design for a sweater or similar article as shown.

89,521. DICTATING MACHINE CABINET. BRUNO M. SMITH, West Orange, SAM G. LANGLEY, Maplewood, and GUSTAV F. BRAUN, Elizabeth, N. J., assignors to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 26, 1933. Serial No. 47,005. Term of patent 14 years.



The ornamental design for a dictating machine cabinet, substantially as shown.

89,522. PLATE OR SIMILAR ARTICLE. GEORGE WEBB, New York, N. Y., assignor to The Rosenthal China Corporation, New York, N. Y., a Corporation of New York. Filed July 19, 1932. Serial No. 44,381. Term of patent 7 years.



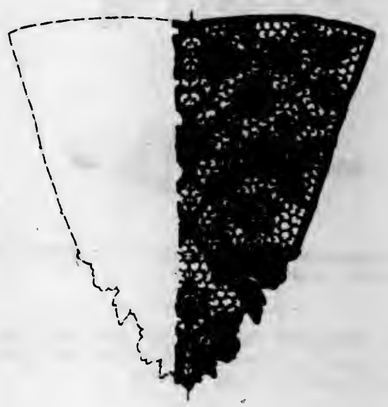
The ornamental design for a plate or similar article as shown.

89,523. EMBROIDERED TEXTILE FABRIC TRIMMING. EMIL G. ZULLIG, Bergenfield, N. J., assignor to Samuel Ellen, New York, N. Y. Filed Jan. 26, 1933. Serial No. 46,995. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric trimming substantially as shown and described.

89,524. EMBROIDERED TEXTILE FABRIC TRIMMING. EMIL G. ZULLIG, Bergenfield, N. J., assignor to Samuel Ellen, New York, N. Y. Filed Jan. 26, 1933. Serial No. 46,996. Term of patent 3½ years.



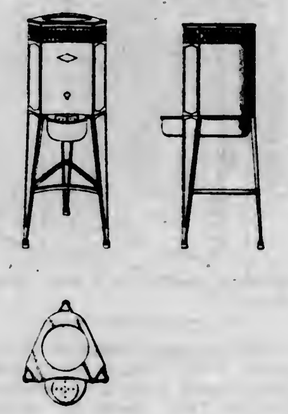
The ornamental design for an embroidered textile fabric trimming substantially as shown and described.

89,525. PITCHER OR SIMILAR ARTICLE. CURTIS B. ILGENFRITZ, York, Pa., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1933. Serial No. 46,810. Term of patent 7 years.



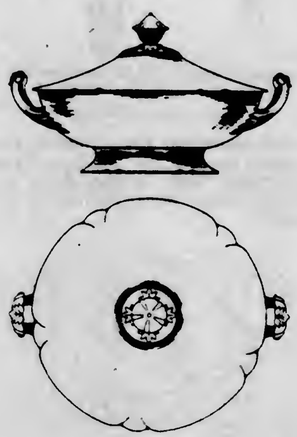
The ornamental design for a pitcher or similar article, substantially as shown.

89,526. STAND FOR BOTTLED WATER OR THE LIKE. MAX ALEX, Alhambra, Calif., assignor to York Water Corporation, Ltd., a Corporation of Nevada. Filed Jan. 16, 1933. Serial No. 46,856. Term of patent 14 years.



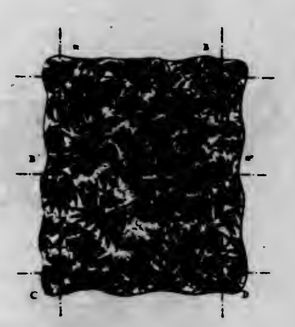
The ornamental design for a stand for bottled water or the like, as shown.

89,527. CASSEROLE OR SIMILAR ARTICLE. CHARLES KAISER, Great Neck, N. Y., assignor to Morimura Bros. Inc., New York, N. Y., a Corporation of Japan. Filed Nov. 26, 1932. Serial No. 46,159. Term of patent 7 years.



The ornamental design for a casserole or similar article as shown.

89,528. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOMUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Dec. 19, 1932. Serial No. 46,499. Term of patent 3½ years.



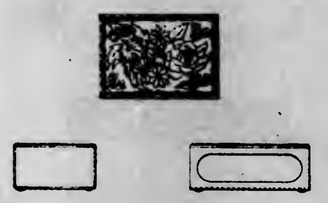
The ornamental design for a textile fabric or similar article as shown and described.

89,529. CREAM PITCHER OR ANALOGOUS ARTICLE. HARRY NEGBAUR, New York, N. Y., assignor to H. Negbaur & Co., Inc., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,923. Term of patent 3½ years.



The ornamental design for a cream pitcher or analogous article as shown.

89,530. MATCH BOX HOLDER OR ARTICLE OF ANALOGOUS NATURE. HARRY NEGBAUR, New York, N. Y., assignor to H. Negbaur & Co., Inc., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,924. Term of patent 3½ years.



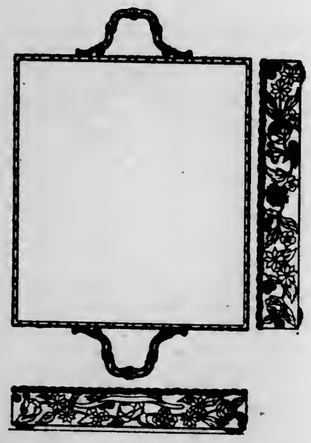
The ornamental design for a match box holder or article of analogous nature as shown.

89,531. SUGAR BOWL OR ARTICLE OF ANALOGOUS NATURE. HARRY NEGBAUR, New York, N. Y., assignor to H. Negbaur & Co., Inc., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,925. Term of patent 3½ years.



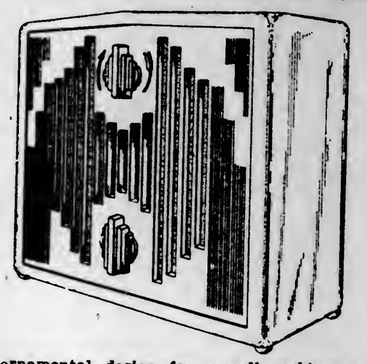
The ornamental design for a sugar bowl or article of analogous nature as shown.

89,532. SMOKER'S TRAY OR ARTICLE OF ANALOGOUS NATURE. HARRY NEGBAUR, New York, N. Y., assignor to H. Negbaur & Co., Inc., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,926. Term of patent 3½ years.



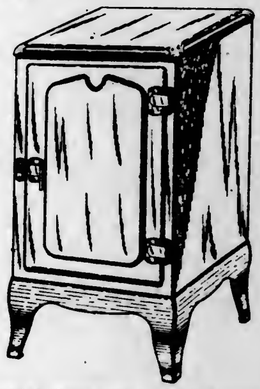
The ornamental design for a smoker's tray or article of analogous nature as shown.

89,533. RADIOCABINET. GEORGE W. OEHLSEN, Jr., Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Dec. 30, 1932. Serial No. 46,669. Term of patent 7 years.



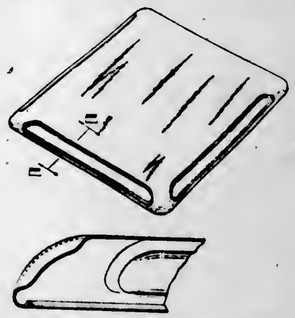
The ornamental design for a radio cabinet substantially as shown.

89,534. REFRIGERATOR CABINET. JOHN R. REPLOGLE, Detroit, Mich., assignor to Copeland Products, Inc., Mount Clemens, Mich., a Corporation of Michigan. Filed June 24, 1932. Serial No. 44,184. Term of patent 7 years.



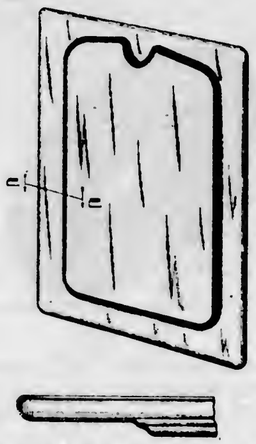
The ornamental design for a refrigerator cabinet, as shown.

89,535. REFRIGERATOR TOP. JOHN R. REPLOGLE, Detroit, Mich., assignor to Copeland Products, Inc., Mount Clemens, Mich., a Corporation of Michigan. Filed June 24, 1932. Serial No. 44,185. Term of patent 7 years.



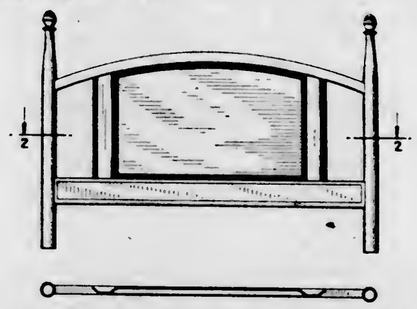
The ornamental design for a refrigerator top, as shown.

89,536. REFRIGERATOR DOOR. JOHN R. REPLOGLE, Detroit, Mich., assignor to Copeland Products, Inc., Mount Clemens, Mich., a Corporation of Michigan. Filed June 24, 1932. Serial No. 44,186. Term of patent 7 years.



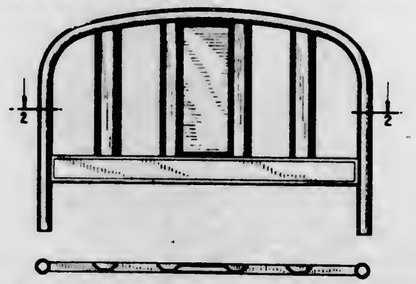
The ornamental design for a refrigerator door as shown.

89,537. FOOTBOARD FOR A BEDSTEAD OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, Brooklyn, N. Y. Filed Dec. 8, 1932. Serial No. 46,332. Term of patent 7 years.



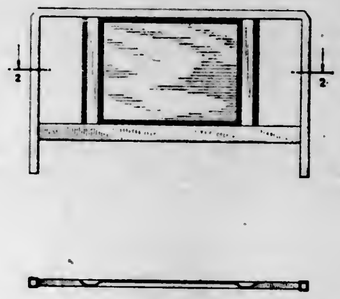
The ornamental design for a footboard for a bedstead or similar article, as shown.

89,538. FOOTBOARD FOR A BEDSTEAD OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, Brooklyn, N. Y. Filed Dec. 8, 1932. Serial No. 46,333. Term of patent 7 years.



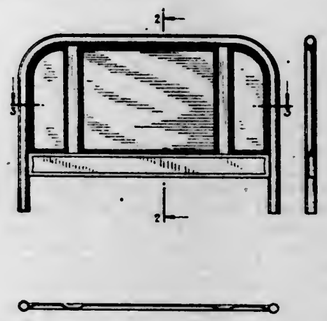
The ornamental design for a footboard for a bedstead or similar article, as shown.

89,539. FOOTBOARD FOR A BEDSTEAD OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, Brooklyn, N. Y. Filed Dec. 8, 1932. Serial No. 46,334. Term of patent 7 years.



The ornamental design for a footboard for a bedstead or similar article, as shown.

89,540. FOOTBOARD FOR A BEDSTEAD OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, Brooklyn, N. Y. Filed Dec. 8, 1932. Serial No. 46,335. Term of patent 7 years.



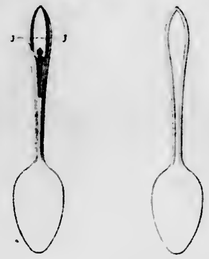
The ornamental design for a footboard for a bedstead or similar article, as shown.

89,541. SHOE. CLARENCE H. STEMMONS, Kansas City, Mo. Filed Jan. 9, 1933. Serial No. 46,778. Term of patent 3½ years.



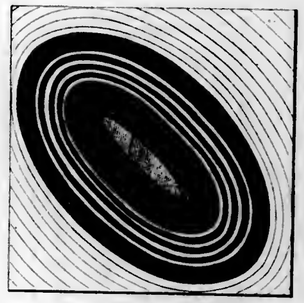
The ornamental design for a shoe as shown.

89,542. SPOON OR SIMILAR ARTICLE. WILLIAM S. WARREN, Meriden, Conn., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn., a Corporation. Filed Jan. 17, 1933. Serial No. 46,867. Term of patent 14 years.



The ornamental design for a spoon or similar article as shown.

89,543. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,911. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

PATENTS

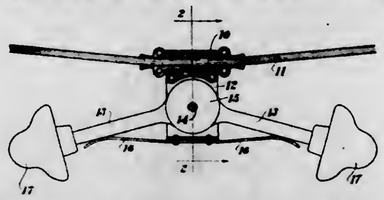
GRANTED MARCH 21, 1933

1,901,859. LIFE PRESERVER SUIT. MAURICE ANDERSON, Mason City, Iowa. Filed Mar. 21, 1932. Serial No. 600,265. 8 Claims. (Cl. 9—20.)



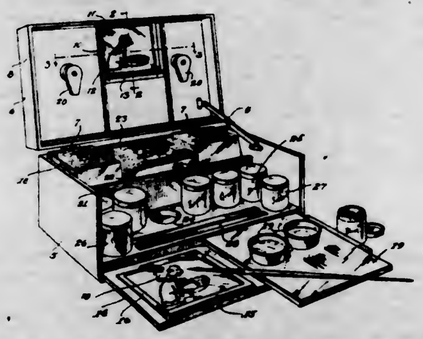
1. A life preserver suit, comprising a flexible body portion, a helmet interfitting in the upper end of the body portion, said body portion and helmet having walls composed of laminated layers including a layer of "Cellophane."

1,901,860. TRANSMISSION LINE. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Original application filed Apr. 2, 1928, Serial No. 266,584, Patent No. 1,773,659, dated Aug. 19, 1930. Divided and this application filed July 18, 1930. Serial No. 468,970. 10 Claims. (Cl. 178—18.)



7. The combination with a transmission line, of weighted spring-supported arms having frictional engagement with each other arranged to be moved by vibration of said line to absorb energy of vibration of said line.

1,901,861. ARTIST'S KIT. IDA S. BAKER, Indianapolis, Ind. Filed Feb. 20, 1932. Serial No. 594,341. 10 Claims. (Cl. 41—4.)



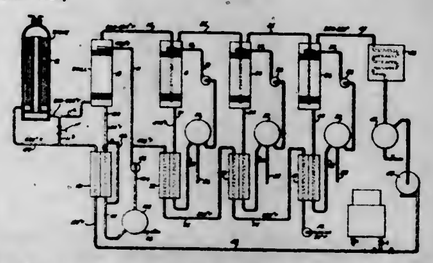
10. In an artist's kit, a cabinet, top and front members hinged to said cabinet, a rack on said cabinet to accommodate artist's supplies, said top comprising an easel and having an opening therein, a rack adjacent to said opening, means on said front to receive and hold artist's materials, a palette and means on said top to hold said palette over said opening.

1,901,862. PNEUMATIC TIRE. FELIX FRIDTJOV ANDERSEN, Oslo, Norway. Filed Nov. 16, 1932. Serial No. 642,826, and in Sweden May 30, 1931. 2 Claims. (Cl. 152—10.)



1. A pneumatic tire including two halves, each of which has a straight intermediate portion and end portions lying to one side of the plane of the straight intermediate portion, said halves being assembled with their intermediate straight portions parallel to form an annular air chamber having an inner closed end and an opening between the outer ends of the halves, and an annular member fitting between said halves, said annular member having an outer tread portion extending outwardly between and beyond the open outer ends of said halves and forming an air-tight fit therewith, said member also having an inner piston-portion making an air-tight fit with the straight parallel sides of said halves whereby the chamber formed by said halves is divided by said piston portion into an inner annular compression chamber and an outer vacuum chamber.

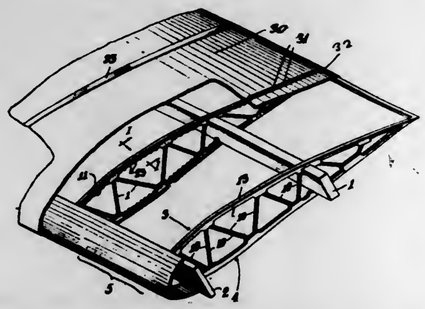
1,901,863. METHOD FOR DISTILLING MINERAL OILS. EDWIN W. BEARDSLEY and DRUS M. EVANS, Texas City, Tex., assignors to Petroleum Conversion Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 6, 1928. Serial No. 317,548. 5 Claims. (Cl. 196—88.)



1. In the process of distilling oils containing a lubricating oil traction, the steps which consist in maintaining a quantity of said oil undergoing distillation in a cham-

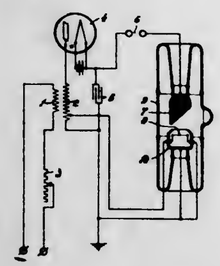
ber, heating up an inert, substantially non-condensible heat-carrier gas to above a predetermined distillation temperature, mingling said gas with the oil undergoing distillation in a distillation zone, said gas containing sufficient heat-units to accomplish the vaporizing of the desired components of the oil but insufficient to crack same, withdrawing the produced vapor together with the gas from said chamber and subjecting such mixture to condensing conditions, controlling the temperature in the distillation chamber by withdrawing a regulated quantity of the oil undergoing distillation therein, cooling same by heat interchange with a relatively cold gas which is to be used in said heating step in which its temperature is raised to above the distillation temperature and reintroducing at least a portion of the cooled oil back into the distillation chamber to control the temperature therein.

1,901,864. AEROPLANE WING CONSTRUCTION. GIUSEPPE M. BELLANCA, Wilmington, Del. Filed June 30, 1931. Serial No. 547,882. 8 Claims. (Cl. 244—31.)



1. In an aeroplane wing structure of the type including a fabric airfoil surface carried by wood ribs, which ribs contain strips and stiffening members of greater depth than said strips secured to the sides of said strips, thereby forming built up channel beam ribs defining the upper and lower surfaces of said wing, a fabric tape extending longitudinally of a rib, embracing the outer surface and sides of said rib, and secured to the said rib.

1,901,865. X-RAY INSTALLATION. ALBERT BOUWERS, Eindhoven, Netherlands, assignor to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands, a Limited Liability Company. Filed Feb. 25, 1928, Serial No. 257,044, and in the Netherlands Mar. 26, 1927. 4 Claims. (Cl. 250—84.)



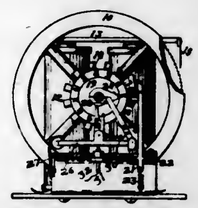
1. An X-ray installation for making short X-ray exposures, comprising a storage condenser, means for charging said condenser, an X-ray tube connected across said condenser, and a discharge circuit for causing an abrupt excitation of the X-ray tube, the said discharge circuit including a spark gap connected in series with the X-ray tube and the condenser, the said condenser instantaneously discharging across the spark gap and X-ray tube immediately after the charge of the condenser exceeds the break down voltage of the spark gap.

1,901,866. TOOTHBRUSH. HAMILTON V. BRYAN, U. S. Navy. Filed Oct. 28, 1931. Serial No. 571,613. 1 Claim. (Cl. 15—167.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



A tooth brush, comprising a bristle holding portion in one flat plane, bristles extending therefrom at right angles thereto, and a relatively wide handle portion in a flat plane in parallelism with said bristles, said handle portion being at least substantially as wide as the bristle holding portion, the entire plane of the handle portion being at an oblique angle axially, vertically and horizontally to the entire plane of the bristle holding portion whereby the handle portion serves to hold the bristle holding portion with substantial rigidity during use.

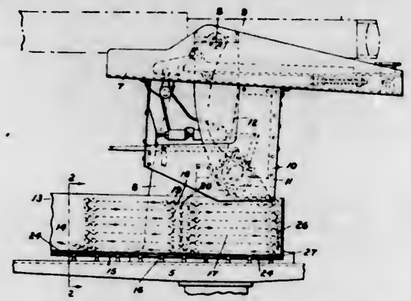
1,901,867. SELECTIVE SYSTEM. HENRY BURTON, Gardena, Calif. Filed Jan. 25, 1929. Serial No. 335,041. 14 Claims. (Cl. 179—30.)



1. A signal system comprising in combination a plurality of stations to be signalled, transmission means including a circuit common to said stations, means for impressing upon said common circuit a special current of pulsation character to form code signals, signal means associated with said stations normally disconnected from the common circuit adapted to be actuated by said special current therein when connected therewith, selector mechanism associated with each signal means permanently connected to the common circuit responsive only to said special current therein, adapted to connect its associated signal means to the common circuit in response to a predetermined number of applications of said special current at a predetermined time after cessation thereof to automatically return to its normal state and disconnect its signal means from the common circuit at another predetermined time after cessation of the special current therein.

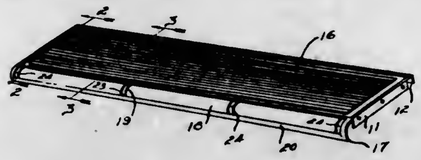
1,901,868. METHOD AND MEANS FOR SUPPLYING CARTRIDGE BELTS TO A FEED MECHANISM. AUGUST DABRASKY, Washington, D. C. Filed Sept. 15, 1930. Serial No. 482,009. 8 Claims. (Cl. 89—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

7. In combination, a container having a common entrance and exit, a flexible element carrying the contents of the container and folded upon itself with the upper end portion turned over to extend across the folds and a removable closure for the container.



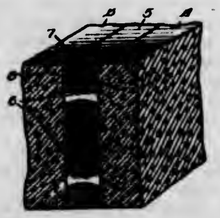
8. A method of presenting a series of ammunition belts to a gun feed mechanism which consists in folding each belt upon itself with one end turned over across the folds and attaching the turned over end of one belt to the folded end of an adjoining belt.

1,901,869. RUNNING BOARD TRIM AND SECURING MEANS. TOM I. DUFFY, Flint, Mich., assignor, by mesne assignments, to Young Motor Trunk Company, Flint, Mich., a Corporation of Michigan. Filed Oct. 13, 1930. Serial No. 488,240. 10 Claims. (Cl. 280—163.)



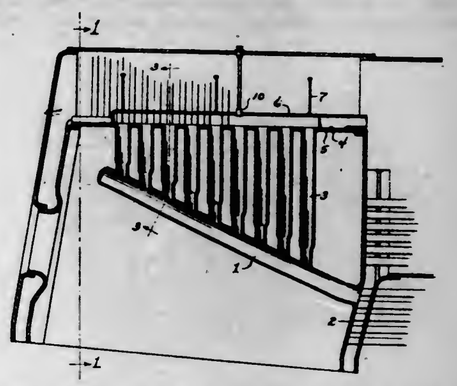
1. In a running board assembly: a plate having a rounded nosing element at an edge thereof; and a longitudinally extending trim element rounded similarly to, and provided with means for its retention in engagement with said nosing element,—said last-mentioned means comprising clips and one of said elements being provided with openings for the reception of said clips.

1,901,870. EXPANSION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Aug. 21, 1926, Serial No. 130,683. Renewed May 9, 1932. 7 Claims. (Cl. 94—18.)



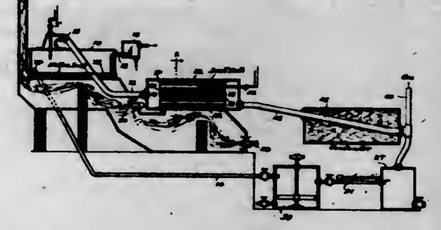
1. A rubber-like expansion joint having perforations in the thickness thereof, said perforations being deformable upon the application of pressure to the joint, and cooperating with the material of the joint as a cushioning means for compensating for expansion and contraction in the concrete construction in which the joint is installed.

1,901,871. CIRCULATING SYSTEM. JORDAN A. GROSOFF, Harbin, China. Filed May 31, 1930. Serial No. 458,155. 2 Claims. (Cl. 122—68.)



1. In combination with a locomotive boiler having a fire box, a crown sheet and a throat sheet, a casing having its sides and rear end closed, and its forward end opened and extending longitudinally of said crown sheet above the same and terminating adjacent the forward end thereof, and a thermic siphon comprising a diagonally disposed tubular portion connected at its lower end to said throat sheet, and having a plurality of vertically arranged tubes extending from said tubular portion and arranged to open into said casing.

1,901,872. METHOD FOR TREATING TAR AND LIKE OILS. WILLIAM HIGBURG and PETER C. REILLY, Indianapolis, Ind.; said Higburg assignor to said Reilly. Filed Jan. 12, 1926. Serial No. 80,792. 7 Claims. (Cl. 196—50.)

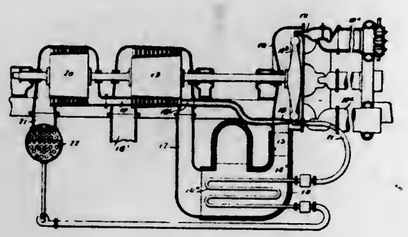


2. A process of lowering the sulphonation residue of water gas tar distillates containing a substantial amount of sulphonation residue, which comprises vaporising a volatile portion of the same and thereafter superheating such vaporised portion sufficiently to convert a large part of said unsulphonatable constituents into sulphonatable constituents and gases, condensing the product thus produced and mixing the same with the distillation residue of the first step.

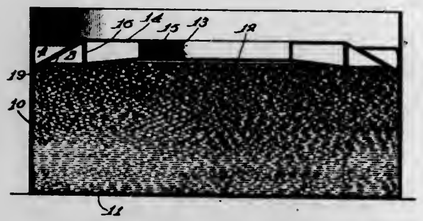
1,901,873. MULTISTAGE CONSTANT VOLUME EXPLOSION PROCESS AND APPARATUS. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Aug. 17, 1926. Serial No. 129,738. 10 Claims. (Cl. 60—49.)

1. A multistage explosion gas turbine comprising a plurality of explosion chambers into which charges of fuel and air are intermittently fed and exploded and from which the explosion gases are discharged at high velocity in intermittent puffs, a turbine against which the high

velocity gases are charged and in which the kinetic energy of the gases is converted into mechanical energy, the gases exhausting from such turbine in puffs at comparatively low velocity, an exhaust chamber arranged to receive the gases exhausting from said turbine and of sufficient size to equalize the pressure of the exhaust puffs of gas, and a low pressure stage driven by the gases discharged by said pressure equalizer exhaust chamber, said equalizer chamber charging said exhaust gases at substantially uniform pressure to the low pressure stage.



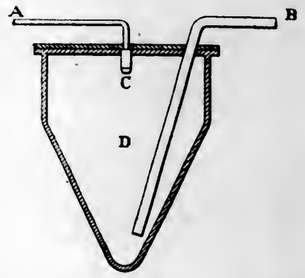
1,901,874. FLOATING ROOF AND SEALING MEANS THEREFOR. GEORGE T. HORTON, Chicago, Ill., assignor to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 14, 1931. Serial No. 508,744. 2 Claims. (Cl. 220—26.)



1. A floating roof and means for sealing the space between the wall of a cylindrical tank and the periphery of said roof, said means including an outer ring of radially movable members with beveled inner surfaces and an inner ring with an outer cooperating beveled surface, one of said rings being made buoyant and adapted to float on liquid in the tank, the buoyancy of said ring and the weight of the other ring urging the beveled surfaces of the two rings into sliding contact, the inner surface of the inner ring and the outer peripheral surface of the floating roof being provided with co-operating beveled surfaces, said beveled surfaces being oppositely inclined from the cooperating beveled surfaces of the rings.

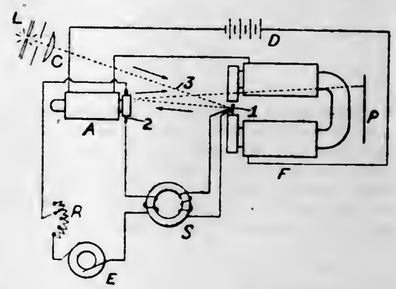
1,901,875. EVAPORATION OF NITRIC ACID. WILLIAM E. KIRST, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 14, 1928. Serial No. 319,250. 8 Claims. (Cl. 23—160.)

1. The process of vaporising nitric acid, which comprises bringing the acid into contact with a dry surface of chromium steel maintained at a temperature substantially above the boiling point of the acid, and collecting the vapors of acid.



8. The process of vaporizing nitric acid, which comprises bringing the acid into contact with a surface of chromium steel maintained at a temperature between 250° F. and 1650° F., and collecting approximately 99% of the nitric acid free from decomposition.

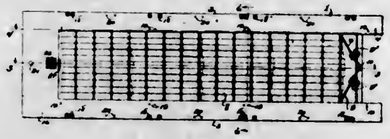
1,901,876. METHOD AND APPARATUS FOR PHOTOGRAPHING MAGNETIC CURVES. HENRY LEHDE, Forks, N. Y. Filed Sept. 5, 1928. Serial No. 304,010. 9 Claims. (Cl. 234—5.5.)



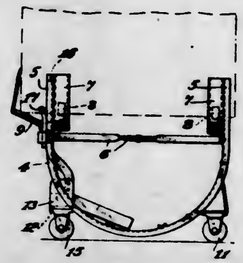
1. An instrument for recording a magnetic curve of a magnetized element comprising an ammeter responsive to the magnetizing force applied to the magnetized element, a highly damped ballistic galvanometer responsive to the flux induced in said magnetized element by said magnetizing force, and means responsive to the combined action of said elements for directing a beam of light to traverse a surface.

1,901,877. LOG CARRYING BARGE. WILLIAM J. MOLONEY, Seattle, Wash. Filed Nov. 5, 1931. Serial No. 573,189. 1 Claim. (Cl. 114—73.)

A log carrier comprising a hull having one end opened and its opposite end permanently closed and provided with a log cargo chamber communicative with the opened end of said hull, a plurality of compartments arranged at the sides and under the cargo chamber within said hull, outwardly swinging gates for opening and closing the opened end of the hull to permit logs to be floated into and out of said chamber, and means to admit and exhaust water to said compartments for causing partial submerging of the hull in the water and floating thereof to its normal draft so that logs may be floated into and out of the chamber without the use of hoisting means, and valves in said gates whereby water may be admitted to the cargo chamber for aiding in submerging the hull and to equalize the water pressure on both sides of the gates and to drain water from the cargo chamber after the raising of said hull.

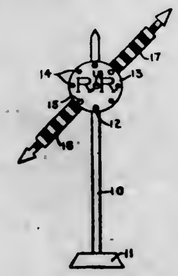


1,901,878. PORTABLE STAND AND TILTER FOR BARRELS AND THE LIKE. LADISLAS W. SCHWENK, Flushing, N. Y. Filed Sept. 14, 1929. Serial No. 392,626. 2 Claims. (Cl. 280—49.)



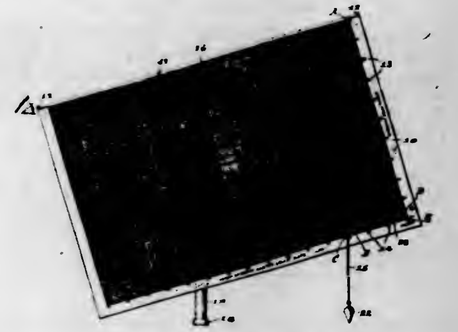
1. A loading, transporting, tilting and unloading apparatus comprising a pair of rigidly connected rockers having barrel rests at each end in combination with a rigid bracket fixed at one end to the rockers and having floor rollers thereon, pivoted frame located at the opposite end of the rockers and having floor rollers thereon, and formed with a latching arm and a rigidly attached foot lever with a roller on the floor end and the other end free to be depressed by the foot and weight of the operator, a stop for the foot lever arm to hold it and the pivoted roller frame, the roller bracket in normal position and a latch engaging the latch arm.

1,901,879. RAILROAD CROSSING SIGN. ROBERT P. SCHIFFMANN, Chicago, Ill. Filed Nov. 11, 1931. Serial No. 574,281. 2 Claims. (Cl. 40—145.)



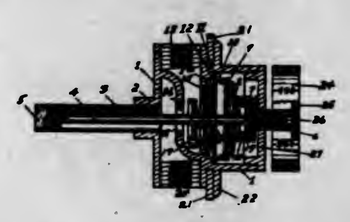
1. A railroad sign comprising a support, a plate fixed to said support, an arm rotatably mounted between said plate and support, and means for fastening said arm to said plate at adjustable angles.

1,901,880. DEVICE FOR DETERMINING ALTITUDES AND TRIGONOMETRIC FUNCTIONS THEREOF. CARL N. SHUSTER, West Orange, N. J., assignor to Lafayette Instruments, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 17, 1930. Serial No. 482,594. 1 Claim. (Cl. 33—71.)



A device for determining altitudes and the trigonometric functions thereof, comprising a chart board having on its face transverse and longitudinal intersecting lines with corresponding consecutively increasing indexes along the transverse and longitudinal marginal portions of the chart board with reference to the forward end thereof, said chart board also having concentric spaced arcuate lines intersecting the longitudinal and transverse lines and with their radii struck from a common center at the forward upper portion of the chart board, front and rear sights carried upon the upper edge of the chart board at the forward and rear corners thereof for determining the angular position of the chart board in a vertical plane with respect to the height of an object, scaled supporting means pivotally connected to the chart board for supporting the same and determining the height of the chart board from the horizontal supporting surface of the device, and a plumb line secured to the upper forward corner of the chart board and suspended across the face of said board for intersecting the transverse, longitudinal and concentric lines of the chart board when the latter is tilted when aligned with an object whereby to indicate on said chart board distances, height and trigonometric sines of triangles formed between the lines of the chart board and the plumb line.

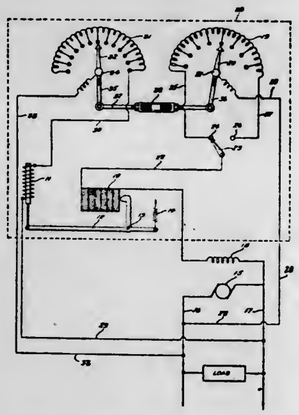
1,901,881. THERMOSTAT. SIDNEY P. VAUGHN, U. S. Navy, Ackerman, Miss., assignor to Grayson Heat Control, Inc., Lynwood, Calif., a Corporation of California. Filed Dec. 1, 1930. Serial No. 499,243. 23 Claims. (Cl. 236—48.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. In a thermostat, the combination of a thermal responsive element arranged to have movement in event of temperature variation, an adjustment member operated thereby, means arranged to amplify any movement of said adjustable member, a valve or other element arranged to be actuated by said amplification means,

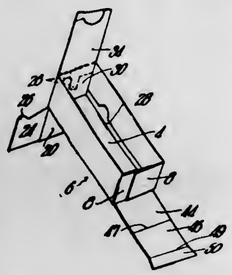
means to limit the movement of said valve or other element, and yielding means intermediate said adjustment member and said valve or other element which will permit movement of said adjustment member after said valve or other element has been actuated by said adjustment member to its limit.

1,901,882. SYSTEM AND APPARATUS FOR ELECTRIC REGULATION. LOUIS H. VON OHLSEN, New Haven, Conn., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Mar. 20, 1930. Serial No. 437,429. 12 Claims. (Cl. 171—229.)



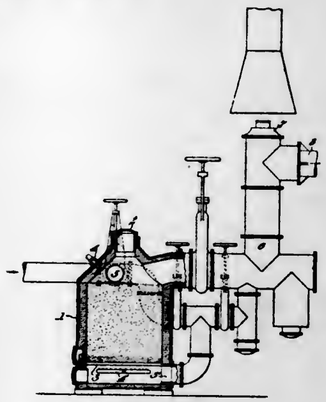
1. In an electrical system, in combination, a source of current, a carbon pile for regulating a function of the output of said source, a coil responsive to a function of the output of said source for controlling said carbon pile, a variable resistance in series with said carbon pile for changing the range of action of said pile, a variable resistance in series with said coil for changing the standard of operation thereof, means for conjointly varying said variable resistances, and means connecting one of said resistances in its circuit whereby its action in its circuit may be reversed.

1,901,883. CARTON. EARL B. WHITEHEAD, Norwich, Conn., assignor to Atlantic Carton Corporation, Norwich, Conn., a Corporation of Connecticut. Filed Dec. 8, 1930. Serial No. 499,660. 2 Claims. (Cl. 206—44.)



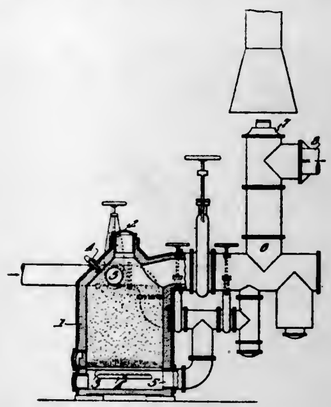
1. A carton comprising in combination, a bottom, sides and ends, said sides comprising inner and outer plies, said bottom having slots located adjacent the respective sides, the inner plies having notches formed in the free edges thereof in alignment with the respective slots, an easel forming flap extending downwardly from the rear end of the bottom, bendable easel forming tabs extending from the sides of said flap, ears formed on the tabs for disposition through the respective slots whereby the carton is supported in a display position, said ears being receivable in the respective notches in the inner plies of the side walls for disposition in the same plane with the inner plies.

1,901,884. PROCESS FOR THE PRODUCTION OF HYDROGEN-NITROGEN GAS MIXTURES. JAMES A. YUNKER, Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 13, 1927. Serial No. 212,774. 5 Claims. (Cl. 23—7.)



1. Process for the production of hydrogen-nitrogen gas mixtures which comprises contacting a natural gas hydrocarbon and an oxygen-nitrogen mixture with coke heated to a temperature of at least 1200° C. and mixing the resulting gases.

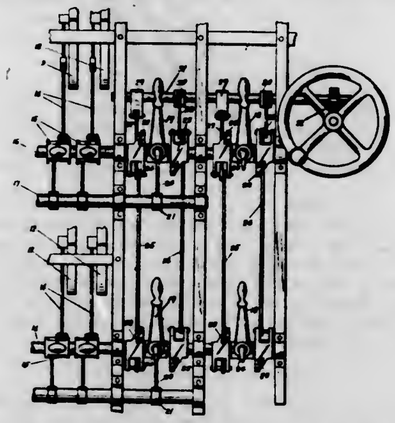
1,901,885. PROCESS FOR THE MANUFACTURE OF INDUSTRIAL HYDROGEN. JAMES A. YUNKER, Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y., a Corporation of Delaware. Filed July 8, 1930. Serial No. 466,560. 5 Claims. (Cl. 23—212.)



1. Process for the production of hydrogen which comprises blasting an ignited bed of coke with an oxygen containing gas to a temperature of at least about 1200° C., purging the bed of coke with steam and passing a hydrocarbon containing gas through the bed of coke in the direction opposite to that of the steam.

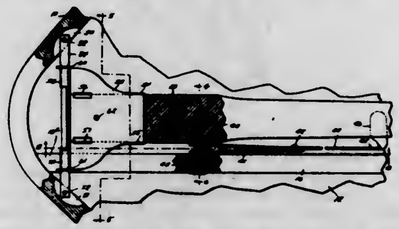
5. Process for the direct production of carbon black and a gas mixture containing as high as 95% of hydrogen and substantially less than 1.75% of methane which comprises the series of steps (1) blasting an ignited bed of coke with air to a temperature above about 1200° C., (2) purging the bed with steam, and (3) passing a hydrocarbon in gaseous form through the bed until its temperature falls to about 1200° C., continuously repeating said series of steps with an occasional substitution of steam for hydrocarbon in step (3), separating and collecting carbon black from the resulting gases and separately collecting the gases resulting from step (3).

1,901,886. LIGHTING CONTROL APPARATUS. FREDERICK B. ADAM, St. Louis, Mo. Filed Apr. 26, 1929. Serial No. 358,281. 15 Claims. (Cl. 175—312.)



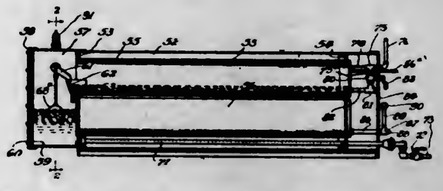
1. In a lighting control system, a bank of dimmers, disposed in substantially parallel rows, with the dimmer axes of each row in substantial alignment, means, including rotatable elements extending along each dimmer row, for operatively associating any selected number of said dimmers into groups, and means coacting with said associating means, for simultaneously operating the groups of dimmers, in opposite directions, irrespective of whether any of said groups includes dimmers within the same, or in different rows.

1,901,887. FOLDING TABLE. CLETUS N. ALLERDING, Metropolis, Ill. Filed Mar. 5, 1930. Serial No. 433,275. 10 Claims. (Cl. 45—11.)



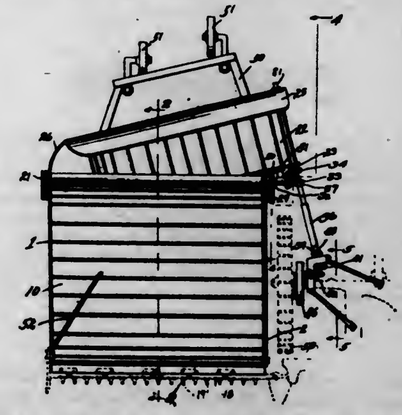
1. A folding brace for a folding table leg including a strip having an opening near one end thereof and a stop means near the other end, a second strip pivoted to said first strip at a point halfway between said opening and said stop means, an opening in said second strip spaced from said pivot a distance equal to one-half the distance between said first opening and said stop means, a headed pin extending through said last opening for attachment to a table member, and a headed pin having a concavity in the head thereof extending through said first opening for attachment to a cooperating table member.

1,901,888. HUMIDIFYING APPARATUS. FRANK A. ANETSBERGER and WILLIAM ANETSBERGER, Chicago, Ill. Filed June 28, 1928. Serial No. 289,060. 6 Claims. (Cl. 299—87.)



6. Apparatus of the class described comprising a casing, headers in said casing supporting a plurality of water holding tubes, said tubes being closed at one end, a well secured to said casing in communication with the open ends of said tubes, a water inlet conduit for delivering water to said upper tube, a member over the lower portion of the open end of said tube to retain water therein, an adjusable overflow tube in said member for permitting water to flow from said tube into said well, a valve fitting connecting said inlet conduit to a source of water supply, said valve having a float arm passing through said inlet conduit into said well for controlling the level of water in said well and lower tubes, and a removable closure member for one wall of said well providing access to the latter and to the tubes and float arm.

1,901,889. WINDROWING MACHINE. LAURIE C. BADGLEY, Boise, Idaho, assignor of one-half to Robert C. Chattin, Boise, Idaho. Filed Mar. 20, 1930. Serial No. 437,326. 8 Claims. (Cl. 56—183.)

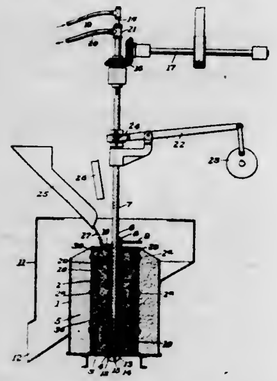


1. In a device of the character described, the combination with means for cutting a forage crop, of an endless apron having transverse bars providing a conveyor for carrying the cut material rearwardly of the cutting means, a roller lying parallel with the discharge end of the apron and providing a means for carrying the material from the apron to beyond the discharge end of the apron and a second endless apron positioned below and at an angle to the roller at the discharged end of the first apron for discharging the cut material in the form of a windrow.

1,901,890. CEMENTITIOUS COMPOSITION. GEORGE E. BARNHART, New Brighton, and HARRY E. PFAFF, Warren, Pa., assignors to James M. Guthrie and William B. Wharton, trustees, Pittsburgh, Pa. Filed May 2, 1928. Serial No. 274,672. 7 Claims. (Cl. 106—27.)

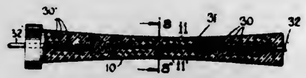
1. A glaze forming and waterproofing composition for cementitious material comprising a sulphate of an alkali metal, aluminum sulphate, and magnesium sulphate.

1,901,891. TREATMENT OF SLAG. TRACY BARTHOLOMEW, Pittsburgh, Pa. Filed June 4, 1929. Serial No. 368,358. 12 Claims. (Cl. 49—77.5.)



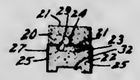
1. The process of treating molten slag containing a gas in supersaturated solution, which comprises agitating the slag to release the contained gas to form a foam, and retaining at least a part of the gas during the setting of the slag to form a foam-like cellular structure.

1,901,892. HAIR CURLER. GEORGE EDWARD BJORKMAN, Djursholm, Sweden, and JOHN GELOSO, New York, N. Y. Filed Dec. 7, 1929. Serial No. 412,325. 3 Claims. (Cl. 219—24.)



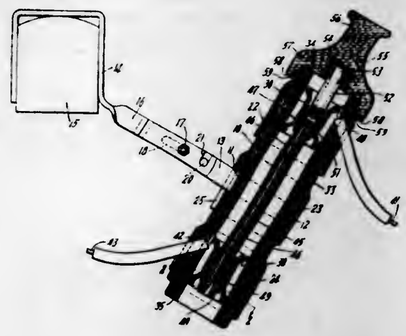
1. A curler comprising a shell formed of a phenolic condensation product, and having imbedded therein a ribboned resistance element, the ends of said resistance element being undulations therefor to introduce a higher resistivity at the ends thereof to an electrical current than the center thereof, whereby to produce a heat effect varying in intensity along the length of said resistance element, the shell being so formed with respect to the resistance therein contained as to cause the distribution of an even heating effect to hair wound thereon.

1,901,893. ELECTRICAL PROTECTOR DEVICE. GEORGE H. BRODIE, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 30, 1930. Serial No. 492,198. 7 Claims. (Cl. 175—30.)



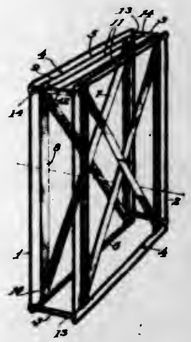
1. In an electrical protector device, a block having a groove therein defining an arcing surface, insulating material disposed upon said block around and within a portion of said groove, and a block having a plain surface spaced from said insulating material.

1,901,894. FUSE CUT-OUT. EDMUND BURKE, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 25, 1930. Serial No. 484,286. 3 Claims. (Cl. 200—127.)



1. In a line fuse cut-out, a casing including a section of waterproofed fiber tube, a lining element secured within said tube, the ends of the lining element being spaced inwardly from the ends of said tube, a pair of radially expansible metal contact rings each having a radial flange resting against one end of said lining element, and means for holding said flanges in place against the respective ends of said liner element.

1,901,895. PACKING FRAME FOR AUTOMOBILE TRUNKS AND SUITCASES. SARAH E. CHENEY, Los Angeles, Calif. Filed Feb. 15, 1930. Serial No. 428,744. Renewed June 25, 1932. 8 Claims. (Cl. 190—41.)



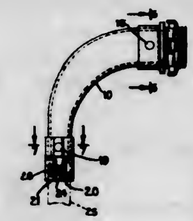
1. A device for holding garments in a suit case or trunk, having a box form skeleton frame removable bodily from the trunk, said frame having a pair of oppositely disposed presser frames, said presser frames having oppositely disposed end bars, and having tension members connecting the end bars so that the tension members of one presser frame cooperate with the tension members of the opposite presser frame to exert pressure upon the garments on opposite sides and hold the garments immovable between the same.

1,901,896. GLASS DRAWING APPARATUS. HENRY F. CLARK, New Kensington, Pa., assignor to American Window Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 19, 1930. Serial No. 453,556. 7 Claims. (Cl. 49—17.)



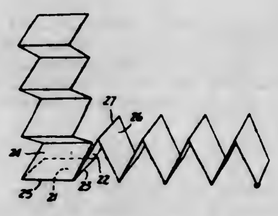
7. In combination with a floater for glass drawing, a plurality of posts for depressing the floater, depressing means for equally and simultaneously adjusting the several posts in a vertically extending direction, and means for individually adjusting at least one of said posts comprising a block slidable relatively to the post, and means for adjusting the position of the block relative to the post, the aforesaid depressing means being connected to the block.

1,901,897. ELBOW FITTING FOR ELECTRICAL SYSTEMS. MARTIN M. CLAYTON, Baden, Pa., assignor to National Electric Products Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1931. Serial No. 521,751. 6 Claims. (Cl. 247—31.)



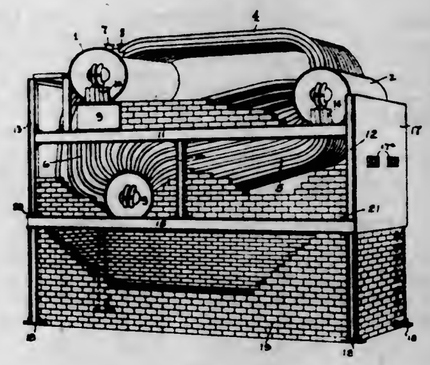
1. A fitting for an electrical wiring system for connecting oval shaped ducts to a part having a round opening therein, said fitting comprising an elbow which gradually changes throughout its bent length from an oval section at one end to a round section at the other, and has a cross-sectional area throughout at least as great as the area of said oval section at one end.

1,901,898. SOUND TRANSLATING DEVICE. HARRY R. CLARKE, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,721. 5 Claims. (Cl. 179—180.)



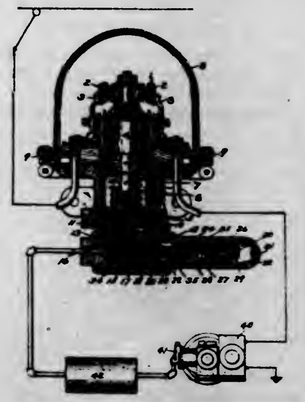
2. A damping element for vibrating devices comprising two interwoven sets of thin leaves hinged at alternate edges, the hinges of the two sets being at right angles to one another.

1,901,899. WATER TUBE BOILER. LAWRENCE E. CONNELLY, Cleveland Heights, Ohio, assignor, by mesne assignments, to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1929. Serial No. 382,788. 2 Claims. (Cl. 122—302.)



1. In a water tube boiler and frame support assembled unit, the combination of a lower frame, the latter including a pair of longitudinally extending base beams, an upper frame including side beams supported on said lower frame, a water and steam drum supported on said upper frame adjacent the rear end thereof, a water drum supported on said upper frame adjacent the front end thereof, said drums connected by steam and water conduits, and a mud drum connected to said first-named drums by means of conduits and supported thereby, said mud drum positioned above the base plane of said lower frame.

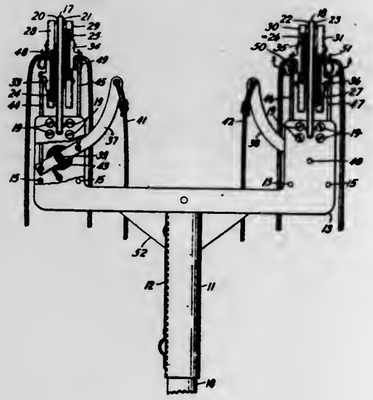
1,901,900. FLUID PRESSURE REGULATOR. GASTON DAUX, Sevran, France, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed July 24, 1930, Serial No. 470,295, and in France Jan. 10, 1930. 7 Claims. (Cl. 121—38.)



1. In a motor control, the combination with a pump, of a motor for operating said pump, a device for controlling the operation of said motor, a cylinder, a piston in said cylinder for actuating said device, a spring, valve mechanism subject to pump pressure and the pressure of said spring for admitting fluid under pressure to and for releasing fluid under pressure from said cylinder, a housing operative to adjust the pressure of said spring, a spring in said housing, means in said housing subject to a predetermined pump pressure and the opposing pressure of

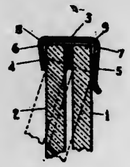
the last mentioned spring for controlling the operation of said valve mechanism to admit fluid under pressure to said cylinder, and means carried by said housing for adjusting the pressure of the last mentioned spring.

1,901,901. TESTING OF ELECTRICAL CONTACTS. JOHN B. DIXON, Red Bank, and EDWARD M. HONAN, West Orange, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,785. 9 Claims. (Cl. 175—183.)



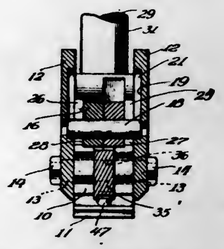
1. A device for testing joints in a transmission line comprising a handle, a supporting member adapted to span the joint under test, a contact arm comprising a plurality of contact members mounted on each end of said supporting member and mechanically operated means associated with said contact members for causing relative movement between said contact members and said line for insuring contact therebetween whereby the resistance of the line between said members may be determined.

1,901,902. METAL BINDING. ERNEST E. DRAPER, Scarsdale, N. Y., assignor to The Perser Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 29, 1930. Serial No. 439,892. 2 Claims. (Cl. 40—154.)



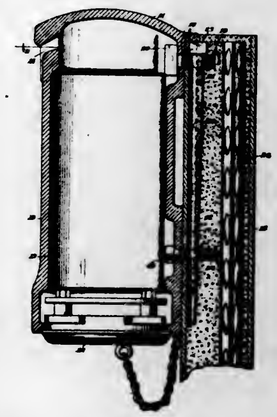
1. The combination with glass plates to be bound together, of bars of metal channels for opposite edges one pair being longer than the edges of the plates to which they are applied, the shorter pair being longer than the edges of the plates to which they are applied thereby spacing the bottom of said channels from the edges of the plates, said channels having one wide and one narrow side wall, the space intermediate said walls at the top of the narrow wall being less than the thickness of the plates, the face of the channels being wider than the thickness of the plates, whereby said channels are spaced from the corners of the edges of said plates and from the edges thereof when in position.

1,901,903. SEALING TOOL. RUSSELL T. EDWARDS, Chicago, Ill., assignor to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed July 19, 1930. Serial No. 469,125. 6 Claims. (Cl. 81—9.1.)



1. In a tool of the class described, in combination, cooperating work engaging jaws, plates on the sides of said tool having opposed guide grooves therein, bolts pivotally securing said jaws to said plates, actuating elements for said jaws, arms on said jaws, pivot pins securing said arms to said actuating elements, a hinge pin securing said actuating elements to each other and extending into the guide grooves in said plates, said pivot pins being at all times confined in place by engagement at their ends with said plates, a pressure block disposed between said jaws and rigidly fixed to said plates, and two parallel work engaging ribs on said pressure block extending entirely across the face thereof, and a third rib, together with the parallel ribs, constituting an H-shaped formation.

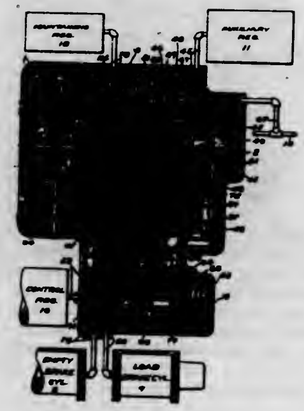
1,901,904. SAFE. WILLIAM EHRLICH, Chicago, Ill. Filed Aug. 18, 1926. Serial No. 129,888. 8 Claims. (Cl. 109—1.)



1. The combination with a receptacle, of an anchorage member to which said receptacle is secured, means for attaching said receptacle to said anchorage member, and integral flanges on the receptacle overlapping the edges of the contacting surfaces between said receptacle and anchorage member.

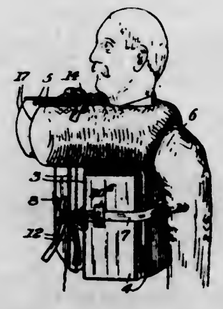
1,901,905. FLUID PRESSURE BRAKE. CLYDE C. FARMER, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1929. Serial No. 346,296. 17 Claims. (Cl. 303—74.)

1. In a fluid pressure brake, the combination with a brake cylinder, a valve means operative to supply fluid under pressure to the brake cylinder in effecting an emergency application of the brakes, a triple valve device operative to emergency position and then to emergency lap position in effecting a service application of



the brakes, and means controlled by said triple valve device for preventing the operation of said valve means to supply fluid under pressure to the brake cylinder when said triple valve device is in emergency position in effecting a service application of the brakes.

1,901,906. LIFE PRESERVER. JOHN A. FARMER, Lancaster, and HENRY A. FICHTER, Pittsburgh, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Sept. 10, 1929. Serial No. 391,548. 10 Claims. (Cl. 9—17.)



1. A life preserver comprising a jacket-like garment, buoyant portions adapted to lie in front of the shoulders of the wearer and projecting beyond the front of the garment proper, and tie means spaced from the front ends of such buoyant portions, said tie means lying at the top of the buoyant portions and centrally thereof.

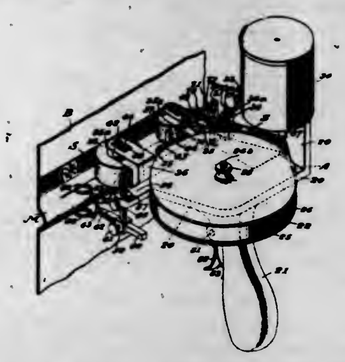
1,901,907. CHECK PROTECTOR. WILLIAM C. HIBBING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Mar. 13, 1931. Serial No. 522,227. 1 Claim. (Cl. 101—3.)

A check protector for comprising a pair of hingedly connected plates, one of said plates being provided with struck-up projections, the other plate being provided with aligned apertures adapted to receive said projections and being further provided with a marginal reinforcing flange on the outer face thereof having a longitudinal guard offset adjacent to and in alignment with said apertures to receive the tips of said projections after they have passed



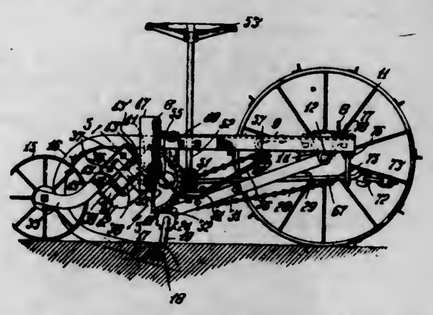
through said apertures, when the plates are pressed together, the plates being further provided with marginal recesses to facilitate separation of the plates.

1,901,908. BODY STRIPING. ERNESTO J. HOYOS, Boston, Mass., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 18, 1928. Serial No. 278,810. 9 Claims. (Cl. 41—22.)



1. The process of applying a stripe or band design to a painted body which consists in forming a strip of thin cellulose derivative with a predetermined color stripe or design, treating said strip and pressing it against the body to weld the strip and body paint leaving the design or stripe visible on the body.

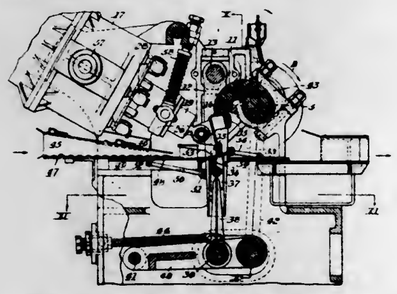
1,901,909. AGRICULTURAL IMPLEMENT. CHRISTIAN E. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 12, 1928. Serial No. 312,001. 29 Claims. (Cl. 97—42.)



1. In a rotary rod weeder, the combination of a frame, a pair of supporting wheels disposed adjacent to the sides of said frame, a transversely extending rotary rod supported by said frame and adapted to penetrate the ground, means for driving said rotary rod, a wheel mount-

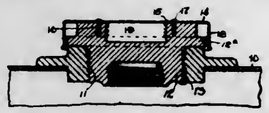
ing member supported on said frame for fore and aft swinging movement for raising and lowering said frame, a castor wheel swivelled on said mounting member for lateral swinging movement, the castering characteristic of said wheel increasing with the raising of said frame, a worm wheel sector operatively connected with said mounting member, a worm meshing with said sector, means for revolving said worm, and means for adjusting said worm relatively to said worm sector.

1,901,910. SHEAR. LANE JOHNSON, Ingram, and JOHN A. SMITMANS, Pittsburgh, Pa., assignors to United Engineering & Foundry Company, a Corporation of Pennsylvania. Filed Nov. 9, 1928. Serial No. 318,264. 21 Claims. (Cl. 164—49.)



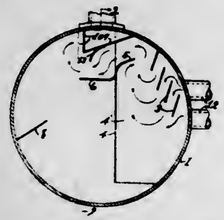
1. In a flying shear, a blade carrier, a power means for moving said carrier in a direction opposite to the direction of feed, a piston having a piston rod pivotally connected to said carrier, and spring means cooperating with said piston for moving the carrier in the direction of the feed.

1,901,911. CONTAINER SEALING DEVICE. ISAAC THEODORE KAHN, Cleveland Heights, Ohio. Filed Sept. 17, 1930. Serial No. 482,470. 4 Claims. (Cl. 220—39.)



1. A metal container having a relatively small outlet, metallic closure-means therefor, a sheet-metal sealing member superposable over and encompassing said closure-means and of a shape to be destroyed on applying a removing-wrench to the closure-means, and securing means for said sealing member drivable therethrough into the metal beneath.

1,901,912. STEAM DRUM BAFFLE. HOWARD J. KERR, Westfield, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Aug. 23, 1928. Serial No. 301,456. 11 Claims. (Cl. 122—491.)



2. In a steam and water drum, a plurality of spaced inclined plates near the steam inlet to said drum, and a vertically disposed plate on the other side of said plates from the steam inlet, the upper edge of said plate extending towards the steam inlet.

1,901,913. FLAT AND FILLER FOR EGG HOLDING CASES. FERDINAND KRONENBERGER, Brooklyn, N. Y. Filed Apr. 18, 1929, Serial No. 356,016. Renewed Aug. 5, 1932. 2 Claims. (Cl. 217—27.)

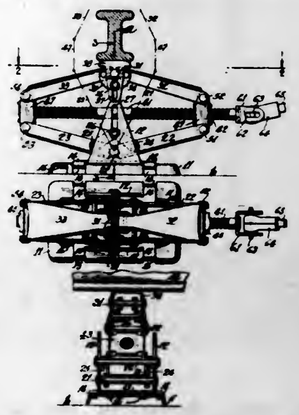


1. In combination an egg flat formed of sheet material and comprising rows of successive inverted egg holders, the holders being bounded by transverse rows of intersecting channels each of wavy formation, and a filler unit for coaction therewith, each unit comprising transversely extending filler pieces each piece having its top and bottom edges of wavy formation corresponding with the formation of one of said channels whereby endwise movement of the piece is resisted.

1,901,914. MANUFACTURE OF MALEIC ACID. JOHN W. LIVINGSTON, Kirkwood, Mo., assignor to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed May 8, 1931. Serial No. 536,085. 8 Claims. (Cl. 202—52.)

1. The method of refining maleic acid, which consists in evaporating an aqueous solution thereof below atmospheric pressure whereby maleic acid in solid phase is produced while avoiding complete solidification of the charge, continuing the evaporation at a relatively lower degree of vacuum until substantially all of the water is evolved while maintaining a liquid phase in the still and, finally, increasing the degree of vacuum and distilling the acid product.

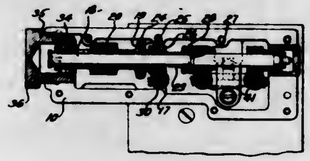
1,901,915. LIFTING JACK. MATTHEW H. LOUGHRIDGE, Bogota, N. J. Filed June 23, 1930. Serial No. 463,110. 4 Claims. (Cl. 254—126.)



1. In a lazy-jack type of lifting jack, the combination, two pairs of opposed channel shaped, pivoted arms, a pair of vertical links, spaced connections on said links connecting the outer ends of said opposed arms through the sides of the channels, each link comprising a punching from sheet stock having its outer ends turned over at a right angle to the body of the stock parallel with the sides of said channels to form the connections, a nut

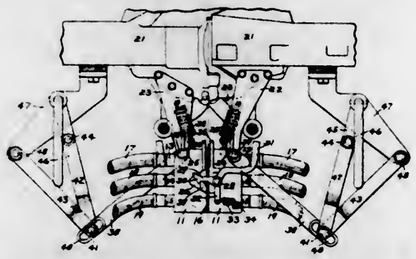
abutting on each body substantially midway between said connections and clamped in place by said stock and a right and left screw engaging said nuts to raise and lower said arms.

1,901,916. POWER TRANSMISSION DEVICE. CLARENCE E. MCCOY, Western Springs, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 15, 1930. Serial No. 420,852. 3 Claims. (Cl. 74—29.)



1. In a constant torque clutch, a driving shaft, a friction disk keyed thereto for driving purposes, a friction disk driven by the driving friction disk, a spiral gear secured to the driven friction disk, the spiral gear and the driven friction disk being slidably mounted on the driving shaft, a shaft to be driven, a spiral gear splined to the shaft to be driven and meshing with the aforementioned slidable spiral gear and tending to thrust it and the driven friction disk away from the driving disk, and a resilient member opposing this thrusting action to maintain the driving and driven disks in engagement.

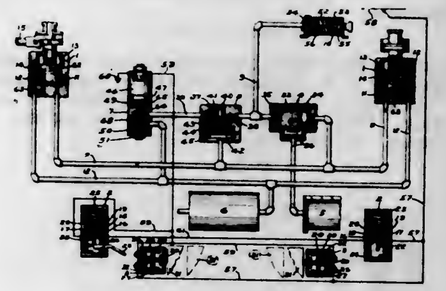
1,901,917. TRAIN PIPE COUPLING. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Mar. 25, 1929. Serial No. 349,540. 17 Claims. (Cl. 285—58.)



1. The combination with a car coupler, of a train pipe coupling movably mounted relatively to the car coupler and spaced from a counterpart coupling when the car coupler is coupled to a counterpart car coupler, and manually operated means for positively moving the train pipe coupling to couple the same with a counterpart coupling after the car couplers are coupled.

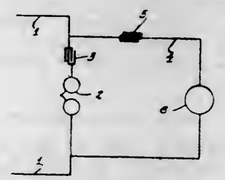
1,901,918. SAFETY CAR EQUIPMENT. JOSEPH C. MCCUNE, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 21, 1930. Serial No. 445,859. 8 Claims. (Cl. 303—6.1.)

1. In a safety car control equipment, the combination with a brake cylinder, of a safety control pipe through which fluid under pressure is adapted to be supplied to and released from the brake cylinder to apply and release the brakes, a straight air pipe through which fluid under pressure is adapted to be supplied to and released from the brake cylinder to apply and release the brakes, means subject to fluid under pressure supplied through one of said pipes for closing communication from the brake cylinder to the other of said pipes, and a valve operative by



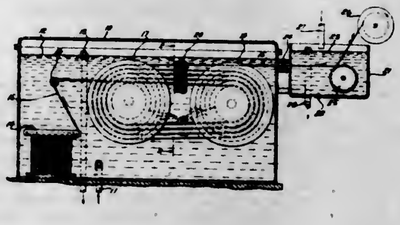
fluid under pressure supplied through said straight air pipe for preventing the flow of fluid through said safety control pipe to said means.

1,901,919. ART OF TELEPHONY SIGNALING. CLARENCE A. MCKEE, Bronx, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 21, 1929. Serial No. 372,586. 1 Claim. (Cl. 179—84.)



In a telephone signaling system, the combination of an alternating current ringing circuit, a condenser and an audible signaling device included in series in said circuit, and a circuit connected to the ringing circuit and shunting said condenser and audible signaling device, said shunt circuit including a condenser and a visual signaling device.

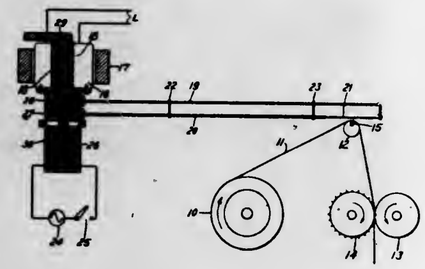
1,901,920. METHOD OF AND APPARATUS FOR DRAWING WIRE. SAMUEL MCMULLAN, Downers Grove, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 1, 1930. Serial No. 417,841. 3 Claims. (Cl. 205—16.)



1. A device of the type described, comprising a treating tank containing a heated fluid, means disposed in the fluid in said tank for rotatably supporting a reel of

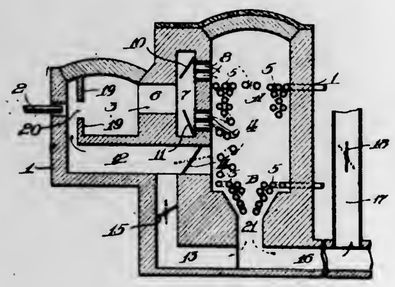
wire, a die disposed in the fluid in said tank, a cooling means associated with said treating tank, and means whereby the wire may be drawn from said reel through said die while within the fluid in said treating tank and into said cooling means before exposing the wire to the atmosphere.

1,901,921. ELECTRICAL METER. WINTHROP J. MEANS, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,272. 6 Claims. (Cl. 234—1.5.)



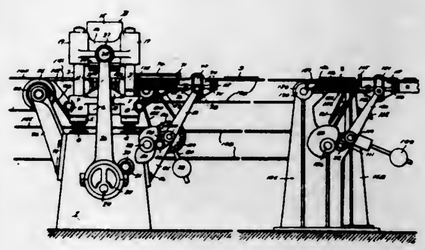
1. The method of recording electrical variations which consists in transmitting a strip of heat sensitive material over a guide member having a longitudinal slot so that a narrow section of said material becomes progressively exposed over the slot and applying heat steadily to the exposed narrow section to cause a permanent impression upon said material.

1,901,922. FURNACE. LEV A. MEKLER, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Oct. 22, 1927. Serial No. 228,016. 8 Claims. (Cl. 122—356.)



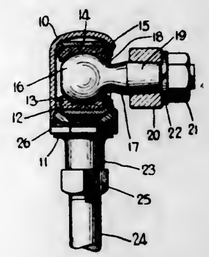
1. A furnace comprising in combination, a heat generating zone, a heating zone communicating therewith through which material to be heated is passed, means for introducing and controlling the introduction of the heated gases generated in the heat generating zone into said heating zone comprising separated valve controlled flues communicating with said heating zone at separated points, means for recirculating regulated portions of the gases from the heating zone to the heat generating zone, and means for controlling such recirculation comprising a plurality of recirculating flues independently controlled communicating with said heating zone at separated points.

1,901,928. APPARATUS FOR MANUFACTURING CERAMIC ARTICLES. HILMAR MUELLER, Trenton, N. J., assignor to The Mueller Machine Company, Trenton, N. J., a Corporation of New Jersey. Filed May 5, 1931. Serial No. 535,253. 27 Claims. (Cl. 25—105.)



1. In a machine of the character described, the combination of a support for material to be cut, a cutter movable through the material to a position beyond the material-sustaining surface of the support, and means for removing the cut material from the support while the cutter is in the aforesaid position.

1,901,924. FLEXIBLE JOINT. JOHN M. NALLE, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,480. 8 Claims. (Cl. 287—90.)

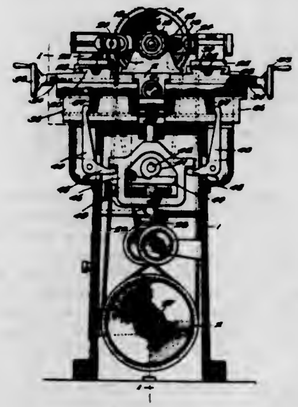


1. A flexible joint, comprising a casing closed at one end and open at the other and having an aperture at one side thereof, a plug adapted to close the open end of the casing, the plug and the closed end of the casing providing a pair of opposed seats, a pair of bearing members seated in said seats, and a drag member consisting of a head journaled between the bearing members and a shank projecting through said aperture, the aperture being too small to pass the head but being so disposed with relation to the open end of the casing that the drag member may be introduced through said open end and the shank passed through the aperture from the inside of the casing.

1,901,925. PROCESS FOR REMOVING CHLORINE FROM ZINC SULPHATE SOLUTIONS. WILLIAM J. O'BRIEN, Cleveland, Ohio, and JOSEPH E. DRAPEAU, Jr., New York, N. Y., assignors to The Glidden Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 6, 1931. Serial No. 535,570. 1 Claim. (Cl. 23—125.)

The process of removing chlorine from a zinc sulphate solution consisting in heating said zinc sulphate solution to a temperature ranging from 140° to 200° Fahrenheit, adding sulphuric acid in sufficient quantity to bring the acidity of the zinc sulphate solution within a range of .3% to 1.5%, adding sufficient copper sulphate to combine with the chlorine present and adding sufficient copper powder to convert the chlorine in the presence of the copper sulphate into insoluble cuprous chloride which is removed by filtration.

1,901,926. HOB GRINDING MACHINE. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Feb. 16, 1928. Serial No. 254,776. 24 Claims. (Cl. 51—95.)



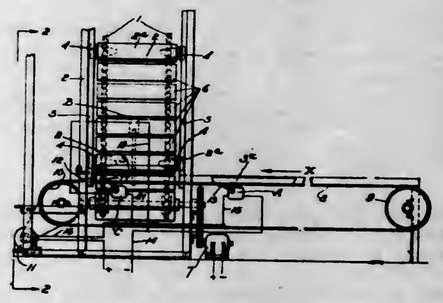
1. In material working apparatus of the class described having a lead screw for actuating a work support and means for rotating the screw, threaded means for receiving the lead screw, and means for superimposing a compensating movement upon the lead screw during the rotation thereof within the threaded means.

1,901,927. LOCK WASHER. CARL G. OLSON, Chicago, Ill., assignor to Shakeproof Lock Washer Company, Chicago, Ill., a Corporation of Delaware. Filed Sept. 10, 1930. Serial No. 480,860. 4 Claims. (Cl. 151—35.)



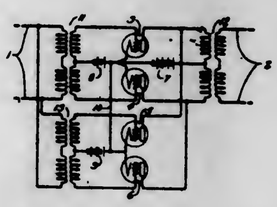
1. A lock washer construction including a pair of juxtapositioned lock washer sections, each of said sections including an annular body portion and a plurality of work engaging prongs spaced along and extending from one margin thereof, the prongs of one washer section adapted to be positioned within the spaces between the prongs of the other section, said prongs being warped out of the bounding planes of their respective body portions so as to present work engaging teeth on opposite sides of the combined lock washer sections.

1,901,928. AUTOMATIC SPACER. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed May 18, 1931. Serial No. 538,031. 6 Claims. (Cl. 198—21.)



1. The combination of two conveyors, one arranged to feed load units to the other, a motor connected for driving the feeding conveyor, and two circuits-in-parallel in which said motor is energized, and normally closed switches-in-parallel controlling said parallel circuits respectively, the other conveyor being driven independently of said motor and having permanently associated therewith as part thereof and disposed at regular intervals in its longitudinal extent, switch-operating means cooperating with one of said switches-in-parallel arranged for encountering and passing said switches in the movement of said other independently driven conveyor, for interrupting one of said circuits-in-parallel while said switch-operating means is passing said last mentioned switch, the other switch-in-parallel having its operable member positioned for encounter and operation by a load carried by the feeding conveyor arriving at said other switch concurrently with said passing of said last mentioned switch-operating means, whereby said concurrent arrival causes the motor to be interrupted until said switch-passing movement is completed.

1,901,929. VOLTAGE LIMITING SYSTEM. EUGENE PETERSON, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1930. Serial No. 433,567. 9 Claims. (Cl. 250—6.)

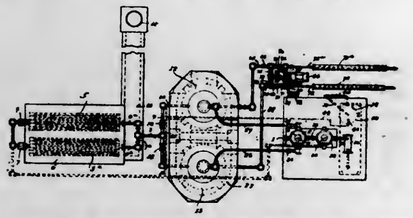


1. The method of limiting the voltage impressed on an outgoing circuit from an incoming circuit comprising impressing voltages between said two circuits through a normal transmission path including a space discharge device, impressing on the output circuit of said device opposing voltages only at such instants of time as the voltages in the incoming circuit exceed the normal maximum, and controlling the magnitude of the opposing voltage to limit the voltages impressed on the outgoing circuit to substantially constant maximum value.

1,901,930. DISTRIBUTING BINDER OVER FIBROUS MATERIALS. ERNEST J. PIPER, Lancaster, Pa., DILLON F. SMITH, Pensacola, Fla., and CLARENCE C. VOGT, Lancaster, Pa., assignors to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Continuation of application Serial No. 236,359, filed Nov. 28, 1927. This application filed Aug. 2, 1930. Serial No. 472,752. 6 Claims. (Cl. 92—21.)

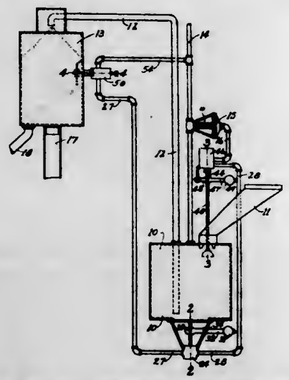
1. The process of distributing binding material in liquid form through a fibrous material, which comprises forming a fluid suspension of the fibrous material and a binding material and a solvent therefor, in a suspending liquid in which the binder and the solvent are substantially non-soluble, and stirring the suspension to distribute the liquid solution of the binder on the fibers.

1,901,931. PROCESS AND APPARATUS FOR TREATING OIL. ROBERT T. POLLOCK, Cambridge, Mass., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 22, 1920. Serial No. 411,913. 10 Claims. (Cl. 196—58.)



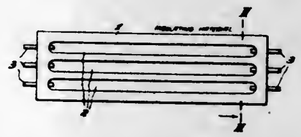
1. A continuous process for the treating of heavy oils, consisting in feeding the oil in a constricted stream through a heating zone, directing the heated oil to one of a plurality of enlarged expansion tanks outside of the heating zone, permitting the cracking reaction to take place in said expansion tank and when an excessive amount of carbon has collected therein, diverting a portion of the residuum from said expansion tank and uncondensible gas, to a second expansion tank to bring the same to approximately operating temperature and pressure, then cutting the tank, having the excessive collection of carbon, out of the system and thereafter vaporizing the oil in the second expansion tank, dephlegmating, condensing and collecting continuously the generated oil vapors and maintaining a regulated pressure during operation.

1,901,932. AIR CURRENT CONVEYER. JAMES BENTON SCHAUB, Wilmette, Ill. Filed Sept. 18, 1930. Serial No. 482,740. 10 Claims. (Cl. 302—17.)



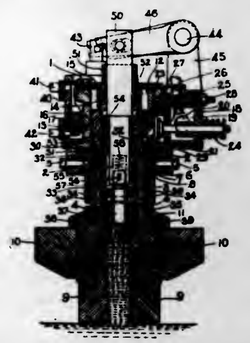
1. In a conveyer of the class described, a forwarding chamber having a discharge conduit and a compressed air supply conduit connected thereto, an inlet for filling the forwarding chamber, a valve for said inlet, that has an actuating means a piston operating in a pressure chamber, a valve having a pressure chamber control, intercepting said compressed air supply conduit, a three-way valve operatively connected to a flexible segment of wall of forwarding chamber, and a compressed air supply conduit intercepted by said three-way valve and connected to the pressure chambers of the aforesaid valves.

1,901,933. MICROPHONE. HELMUT SELL, Berlin-Siemensstadt, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt near Berlin, Germany, a Corporation of Germany. Filed Apr. 6, 1929, Serial No. 353,211, and in Germany Apr. 7, 1928. 7 Claims. (Cl. 179—127.)



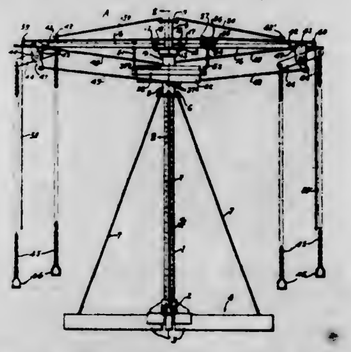
4. A microphone of the character described, comprising a body of insulating material having a plurality of narrow and shallow troughs provided in its surface, each trough having a length at least five times its width, said troughs being filled with granular conductive material, and each being arranged to conduct the microphone current lengthwise through the material only, and a thin foil diaphragm pasted on said insulating body closely adjacent to the trough rims and closing said troughs individually, whereby the individual diaphragm portions are adapted to oscillate above their respective troughs, said diaphragm portions contacting with the granulated material in their respective troughs, the oscillating parts of said diaphragm having a ribbon-like shape similar to that of said troughs, said diaphragm being sufficiently narrow to raise the natural frequency of the transverse oscillations above the normal musical tone frequency range.

1,901,934. METHOD OF FORMING PARISONS. ALGY J. SMITH, Bloomfield, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Nov. 9, 1929. Serial No. 406,004. 8 Claims. (Cl. 49—80.)



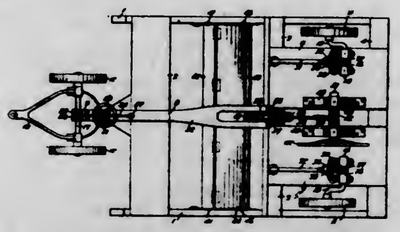
1. The method of gathering and imparting a preliminary shape to a charge of glass which comprises, lowering a suction gathering unit which includes a blank mold, a neck mold, and a plunger in the neck mold, into contact with a pool of molten glass, filling said molds with glass from the pool by the application of suction, thus forming an exterior neck finish on, and a blowing cavity in, the charge of glass by such application of suction, thereafter severing the tail of glass from the charge in said unit, and moving the severed end of the charge of glass upwardly above the severing plane while retaining the plunger in engagement with the glass to preserve the blowing cavity.

1,901,935. ROTARY AMUSEMENT DEVICE. SWAN J. SWANSON, St. Louis, Mo. Filed Oct. 21, 1929. Serial No. 401,034. 4 Claims. (Cl. 272—33.)



1. A device comprising a stationary supporting portion and a rotatable portion, an element fixed to said stationary supporting portion, and means for imparting movement to said rotatable portion, said means including a pair of alternately operable gripping devices, means for guiding said gripping devices in a straight line, said gripping devices being movable with said rotatable portion and being arranged to alternately grip said element, and means associated with said gripping devices for imparting rotary movement to the rotatable portion of the device when the gripping devices are in engagement with said element.

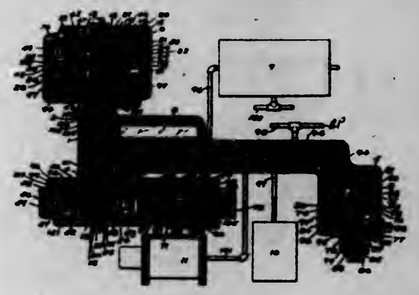
1,901,936. LEVELER. CHARLES W. THARP, Watsonville, Calif. Filed Jan. 25, 1930. Serial No. 423,848. 7 Claims. (Cl. 37—126.)



3. A leveler comprising a frame, a scoop pivotally mounted on said frame; said scoop including a pair of side wings and a blade, means for pivoting said scoop, and means for adjustably positioning said blade relative to said wings whereby the pivotal range of said scoop is altered.

1,901,937. FLUID PRESSURE BRAKE. THOMAS H. THOMAS, Edgewood, Pa.; Mabel M. Thomas, executrix of said Thomas H. Thomas, deceased, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 22, 1929. Serial No. 365,027. 8 Claims. (Cl. 303—74.)

1. In a fluid pressure brake, the combination with a brake pipe, brake cylinder, and a main reservoir, of a control reservoir, a valve mechanism subject to the opposing pressures of the brake pipe and said control reservoir for supplying fluid under pressure from the main reservoir to said control reservoir and for maintaining the pressure in said control reservoir constant except in emergency, and



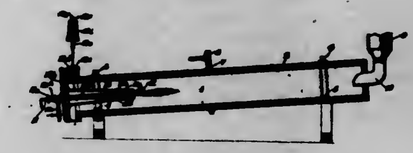
a valve device subject to the opposing pressures of the brake pipe and said control reservoir for controlling the supply of fluid under pressure to the brake cylinder.

1,901,938. METHOD OF AND MEANS FOR TAPPING A CONDUCTOR. WILLIAM C. TITUS, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 6, 1930. Serial No. 418,892. 1 Claim. (Cl. 173—269.)



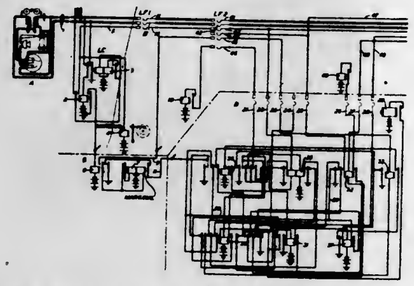
In a cylindrical inductance coil having a closely spaced winding, a tap connection comprising a short length of thin stiff metallic ribbon wrapped about the wire of the coil and conductively fastened thereto over substantially the entire circumference of the wire, the ends of the ribbon being joined together flatwise to form a fin projecting in a direction perpendicular to the axis of said coil, and a connector having a socket at one end and a tip at the other, said connector being placed with the socket end over the fin and the jaws of the socket portion being flattened to engage the fin and conductively fastened thereto.

1,901,939. PROCESS OF PRODUCING CHROMATES. JOSEPH J. VETTER, Hackensack, N. J., assignor to Natural Products Refining Co., Jersey City, N. J., a Corporation of Delaware. Filed July 3, 1930. Serial No. 465,683. 4 Claims. (Cl. 23—56.)



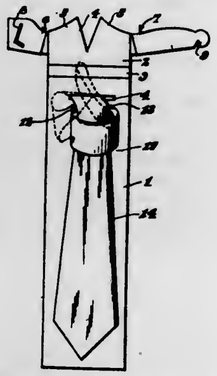
4. The process which comprises roasting chrome ore with a basic refractory material and an alkali carbonate, re-roasting the said unleached product and recovering the alkali chromate therefrom by leaching, filtration and evaporation.

1,901,940. TELEPHONE EXCHANGE SYSTEM. ESMOND P. G. WRIGHT, Croydon, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930, Serial No. 495,062, and in Great Britain Dec. 18, 1929. 16 Claims. (Cl. 179—9.)



1. In a telephone system, subscribers' lines, means including an automatic switch for use in establishing a connection between a calling and a called line, means associated with said switch for receiving impulses, a group of trunks connected to terminals in the bank of said switch, means for advancing the brushes of said switch to said group of trunks in response to a train of impulses corresponding to any one of a plurality of different numerical digits, another group of trunks connected to terminals in the bank of said switch, and means for advancing the brushes of said switch to said other group only in response to a train of impulses corresponding to a single numerical digit.

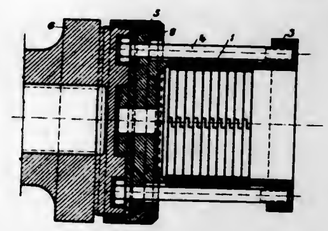
1,901,941. NECKTIE DISPLAY HOLDER. CARL R. YORK, North Tonawanda, N. Y. Filed May 10, 1928. Serial No. 276,694. 4 Claims. (Cl. 206—79.)



2. A mercantile package comprising a card or holder and a necktie, said holder having three slots, one of which is transversely related to and adjacent the ends of the remaining two slots, the necktie having a portion threaded through the first mentioned slot and another portion threaded through the latter two slots and across the first mentioned portion, the slots which receive said second mentioned portion being located adjacent the sides of the first mentioned portion.

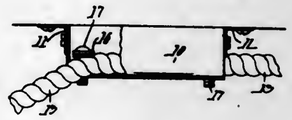
1,901,942. DEVICE FOR TURNING PISTON RINGS. ALEXANDER ABRAMSON, Prague, Czechoslovakia. Filed July 8, 1931, Serial No. 549,430, and in Germany July 17, 1930. 5 Claims. (Cl. 82—40.)

1. Means for assembling piston rings in order to turn their arcuate outer and inner faces, including the combination of a pair of clamping rings adapted to clamp between them the end faces of a series of piston rings intermediate the arcuate outer and inner faces thereof, which pair of clamping rings are adapted to be temporarily secured together with the intermediately clamped piston rings into an assembled unit, and in which pair, one clamping ring is provided exteriorly with means adapting the ring to fit centrally upon a face plate on a lathe and be secured thereto for turning the interior of said series of



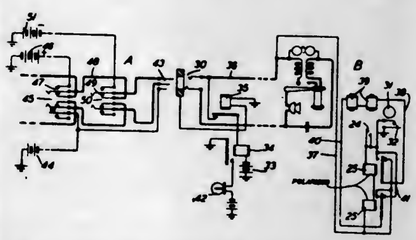
piston rings, the other clamping ring having a clearance opening therein providing for the entrance of a tool and escape of turnings, and means upon said first clamping ring adapting the same when said assembled unit is axially reversed and passed in upon a flanged mandrel interchangeable with said face plate, to be secured to the end of said mandrel and thereby clamp said other clamping ring against the flange upon said mandrel, whereupon said piston rings are adapted to be exteriorly turned.

1,901,943. JUNCTION BOX. JOHN A. ADELL, Orange, Mass. Filed May 9, 1927. Serial No. 189,784. 3 Claims. (Cl. 247—26.)



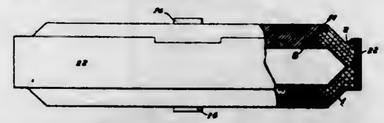
1. In a sheet metal junction box, the combination with an integral bottom and end walls and a removable L-shaped knock-out extending about half way into both the end wall and the bottom of the box, of a fastening device for the cable inside the box located against the end of the box for gripping the cable against the inner edge of the hole in the bottom of the box from which the knockout is removed.

1,901,944. TELEPHONE SYSTEM. LAWRENCE H. ALLEN, Summit, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 10, 1932. Serial No. 610,326. 8 Claims. (Cl. 179—6.3.)



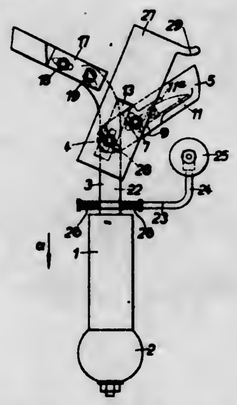
1. In a prepayment telephone system, a coin box, a coin disposal magnet, means for actuating said magnet to refund coins deposited in said coin box and electromagnetic means responsive to an unstandard condition within said coin box for causing said magnet to collect coins deposited in said coin box upon the operation of said means.

1,901,945. CUSHIONING DEVICE. EDWARD S. AVERY, East Hampton, N. Y. Filed July 29, 1931. Serial No. 553,879. 2 Claims. (Cl. 267—63.)



1. A rubber cushioning device for sustaining a load by the resistance of the rubber to deformation, having a center portion of any given thickness which in transverse section remains rectangular under varying loads, a connecting deformable portion which is angularly disposed with respect to the center portion and which under varying loads, is in transverse section always a parallelogram and at maximum deformation approaches a rectangle, an offset outer portion of the same thickness as the center portion and which in transverse section remains rectangular under varying loads, a frame which encases the entire outer surface of the outer portion for resisting lateral deformation, the entire device under maximum deformation being substantially in the same plane and rectangular in any transverse section.

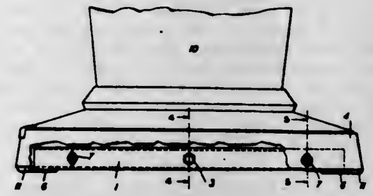
1,901,946. TREE-PLANER FOR CUTTING OR WORKING OUT RESIN-PASSAGES IN TREES. WALTER BARK, Annaburg, Germany. Filed Nov. 22, 1930, Serial No. 497,518, and in Austria Nov. 23, 1929. 6 Claims. (Cl. 47—18.)



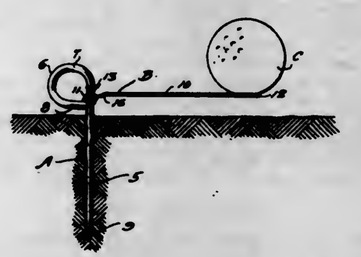
1. Tree-planer for working out and cutting resin-passages in trees, comprising a shaft, a U-shaped plane-iron carried by said shaft, a universally adjustable tongue embraced by the said plane iron and disposed in the cutting direction and in back of the cutting edge of the plane iron, the cutting depth depending on the adjustment of the said tongue.

1,901,947. SUPPORTING DEVICE. EDWIN A. BESCHERER, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 1, 1931. Serial No. 554,511. 3 Claims. (Cl. 45—139.)

2. A detachable device for supporting an article of furniture, said device comprising in combination, a bracket, at least one securing member for securing the bracket to the article of furniture which is to be supported, a bar having flat plates at its ends suitable for resting upon the surface of a floor, and a pivoting member for pivotally attaching the bar to the bracket.

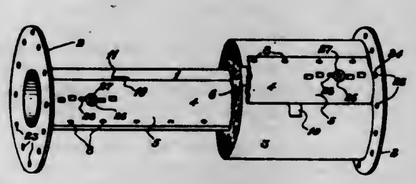


1,901,948. FOLDING GOLF TEE. WILLIAM E. BOCK, West Palm Beach, Fla. Filed July 31, 1931. Serial No. 554,347. 5 Claims. (Cl. 273—33.)



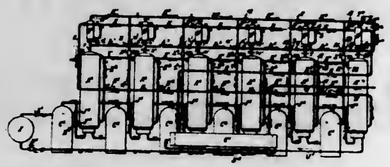
1. A golf ball tee comprising, a peg member formed of wire including a shank and an eye forming bend at the upper end portion thereof, and a supporting arm including a golf ball supporting eye at the free end thereof and a sleeve portion at the other end thereof encircling and slidable along said shank and eye forming bend, whereby the free end of said peg member may engage said eye.

1,901,949. FASTENING MEANS FOR SECURING THE ENDS OF A LENGTH OF MATERIAL TO A REEL. GEORGE E. CLARK, Windsor Locks, Conn., assignor to The George P. Clark Company, Windsor Locks, Conn., a Corporation of Connecticut. Filed Dec. 20, 1930. Serial No. 503,784. 17 Claims. (Cl. 242—74.)



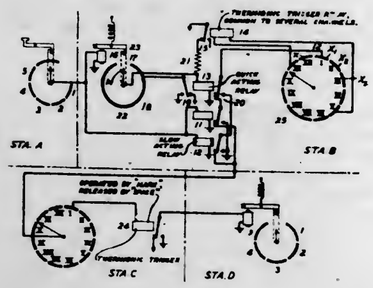
11. A wrapper bar comprising sheet material folded upon itself and having sections cut from its folded edge to leave tongues for attaching the bar to a reel.

1,901,950. APPARATUS FOR TREATING PETROLEUM AND OTHER HYDROCARBONS. CARBON P. DUBBS, Wilmette, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Continuation of application Serial No. 609,876, filed Dec. 30, 1922, since abandoned, which in turn is a division of application Serial No. 176,588, filed June 23, 1917, now Patent No. 1,440,772, which in turn is a division of application Serial No. 133,527, filed Nov. 27, 1916, now Patent No. 1,231,509. This application filed Nov. 1, 1928. Serial No. 316,566. 2 Claims. (Cl. 196—106.)



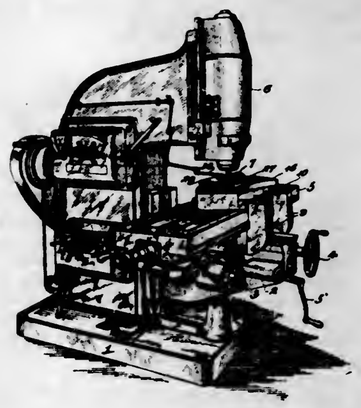
1. An apparatus for cracking oil comprising a plurality of retorts adapted to each receive bulk supplies of oil, means for connecting said retorts in series whereby the oil successively passes through said series of retorts, means for heating the oil to a cracking temperature in said retorts, a dephlegmator for each retort, means for discharging the vapors generated in each retort to its dephlegmator and for returning reflux condensate to the retort from which the vapors were discharged, means for passing the uncondensed vapors from said dephlegmators successively through other retorts in the series, and means for maintaining a superatmospheric pressure on the oil undergoing distillation.

1,901,951. MULTIPLEX TELEGRAPH DISTRIBUTOR. CARLTON R. DUNHAM and ALLEMAN H. ROCHE, Aldwych, London, England, assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 31, 1931, Serial No. 572,244, and in Great Britain Apr. 1, 1931. 17 Claims. (Cl. 178—52.)



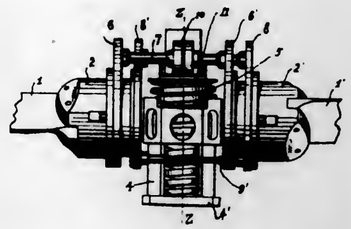
1. In a signal transmission system, transmitting devices, a distributor adapted for continuous operation and cooperating in unison with said transmitting devices, a line for receiving signals from said distributor, a plurality of means for transmitting a signal unit or impulse from one of said transmitters to said line at either of two different moments during each revolution of said distributor whereby the sending of the signals from the transmitters through the distributor to the line can be effected irrespective of the position of the distributor in its cycle.

1,901,952. VARIABLE RADIUS ATTACHMENT FOR MILLING, PLANING, GRINDING, OR SCRAPING MACHINES. VICTOR LEE EMERSON, Philadelphia, Pa. Filed July 16, 1931. Serial No. 551,251. 5 Claims. (Cl. 90—13.)



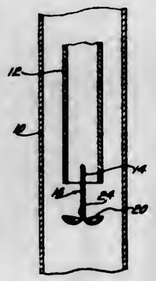
1. The combination with a milling machine comprising a frame and a reciprocatory table mounted thereupon, of a radius milling attachment comprising a work holding member fixedly connected to said table, a wedge hold-down and radius plate engaging said work holding member, and means for fixedly connecting said work hold-down and radius plate to the frame of the milling machine.

1,901,953. PROPELLER WITH AUTOMATIC REGULATION. ACHILLE FERRARIO, Milan, Italy. Filed July 8, 1931, Serial No. 549,421, and in Italy May 27, 1931. 11 Claims. (Cl. 170—162.)



1. A motive, propulsive or tractive propeller, including the combination with means for mounting the same, of a pair of opposite rotatable blades having a common axis of rotation, and means for determining the amount of such rotation and thus the pitch of said blades by the effect of centrifugal force during revolution of said propeller, including a compression spring coaxially mounted with the axis of revolution of the propeller, a dead head associated with each blade and swingable outward about the longitudinal axis thereof thereby tending to directly rotate the blade, and a plate upon said spring beneath said dead heads depressible by the same upon centrifugal swinging outward thereof, whereby to compress said spring and determine the balance between the compression thereof and the centrifugal effect of said dead heads.

1,901,954. LIQUID SPRAY DEVICE. HAL F. FRUTH, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1930. Serial No. 501,225. 3 Claims. (Cl. 299—121.)



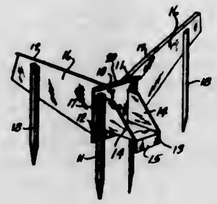
3. A liquid spray device comprising a pipe having a slotted end and a sheet metal baffle having abutting semi-circular portions and integral side strips folded to form supports, the bights of said folds being secured in said slots.

1,901,955. METHOD OF MAKING COMMUTATORS. CHARLES V. GIAIMO, Irvington, N. J., assignor to The Lionel Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 21, 1931. Serial No. 517,417. 6 Claims. (Cl. 29—155.5.)



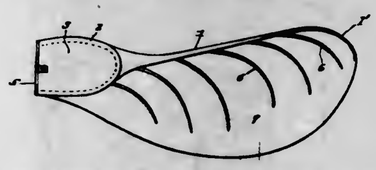
1. In commutator manufacture, the method which comprises forming a piece of sheet metal into an annular body with radial slots which partially sever it into segments, forming integral prongs at the periphery of each segment and at the inner edge of each segment, bending all the prongs out of the plane of the body so that they project in the same direction, then placing an annular disk of insulating material against the metal body, and folding the prongs against the disk to secure it to the metallic body.

1,901,956. WEIR STRUCTURE. TILMON I. GILBERT, Mount Vernon, Ill. Filed Oct. 21, 1932. Serial No. 638,839. 1 Claim. (Cl. 61—29.)



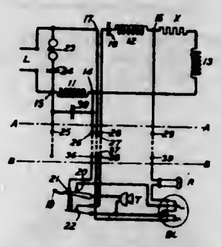
A weir structure for checking soil erosion in drainage canals and the like, comprising a plate having an aperture of restricted size, adapted to be anchored centrally of the canal, said plate having anchoring posts fixedly secured thereto, a channeled spout projecting from one face of the plate, and positioned to receive water flowing through the aperture in the plate, the floor of said spout being spaced above the lower edge of said plate and adapted to lie flush with the bed of the canal, said aperture in said plate being spaced a distance above the floor of said spout, a depending flange formed on the forward margin of the floor of said spout, said flange being adapted to penetrate the bed of the canal; wings secured for pivotal adjustment at opposite ends of said plate, an anchoring post near the outer end of each wing, and means pivotally securing the anchor posts to said wings.

1,901,957. REVOLVING PARACHUTE. KENNET J. GIRDWOOD, Montreal, Quebec, Canada. Filed July 16, 1932. Serial No. 622,954. 2 Claims. (Cl. 244—21.)



1. A parachute of the class described comprising a body somewhat in the form of a single propeller blade and composed of a stem forming member having an enlarged base part, a blade member having one edge fixed to the stem forming member and formed of a sheet of material, curved ribs fastened at one face of the blade member and each having one end firmly united with the stem forming member, said ribs being exposed and acting to stiffen the member and together with the proper center of gravity of the device gives the device a rotating movement as it descends through the air and a chamber formed in the base of the stem.

1,901,958. SUBSTATION CIRCUIT. JOHN W. GOODERHAM, Larchmont, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,406. 6 Claims. (Cl. 179—81.)

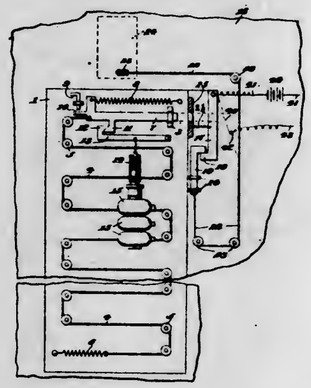


1. A signaling circuit including in series four components, the first of said components including a line, the second of said components including a winding of a transformer, the third of said components including a receiving instrument in parallel with a series arrangement of a balancing impedance means and a second winding of said transformer, the fourth of said components including a third winding of said transformer, a transmitting instrument connected in shunt with a series connection of said first and second components, said three windings being terminated on four terminals and having a common magnetic field, a contact common to said transmitting instrument, said receiving instrument and two of said transformer windings, a shunt circuit for said transmitting instrument, an impulse sending device and contacts controlled by said device for opening the circuit of said receiving instrument and closing the shunt circuit whenever said device is moved from normal.

1,901,959. SYSTEM FOR PROTECTING BANKS, STORES, AND THE LIKE, AGAINST ROBBERY, BY GAS AND SMOKE. BYRON C. GOSS, Cleveland, Ohio. Filed May 6, 1931. Serial No. 535,528. 7 Claims. (Cl. 109—6.)

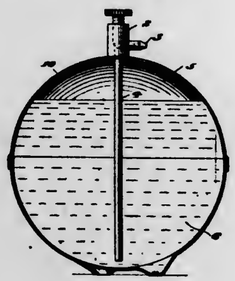
3. A system for gas and smoke protection for vaults and the like as described, comprising a gas and smoke bomb

discharge device located inside of the vault, a gas and smoke bomb discharge device located outside of said vault, a first actuating mechanism to operate said inside bomb discharge device, a secondary actuating mechanism adapted to operate said outside bomb discharge device, said sec-



ondary mechanism normally actuated by the operation of said first mechanism, said secondary mechanism also constructed to be manually operated from within the vault and thereby rendered effective to discharge said outside bomb device independently of the operation of said first mechanism and while said first mechanism is restrained.

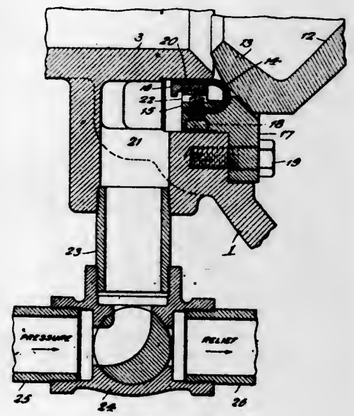
1,901,960. INSECTICIDAL SOLUTION. BYRON C. GOSS, Cleveland, Ohio. Filed Oct. 1, 1931. Serial No. 566,382. 6 Claims. (Cl. 167—17.)



1. An insecticide composition for the protection of woolen goods and the like comprising a volatile solvent containing a soluble fluoride, bile salts, and carbon dioxide dissolved therein to saturation under sufficient pressure to cause penetration of the insecticide into the goods.

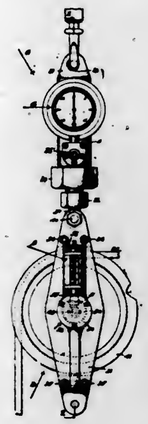
1,901,961. ROTARY VALVE. WILLIAM F. GRANT, Newport News, Va., assignor to Newport News Shipbuilding and Dry Dock Company, a Corporation of Virginia. Filed Jan. 19, 1932. Serial No. 587,459. 5 Claims. (Cl. 251—113.)

1. In a rotary valve having a housing and a tubular valve member rotatable on a transverse axis within said housing, the improvement which comprises a sealing device including a flexible sealing ring of thin sheet material surrounding a passage in said valve, means for holding one margin of said flexible ring in position, and means



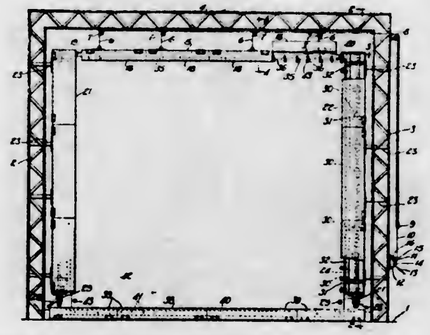
for moving the opposite margin of said flexible ring transversely, to cause the central portion of same to contact under pressure with its opposed part.

1,901,962. DEVICE FOR INDICATING TENSION AND LENGTH OF LINES IN OIL WELLS. HASKELL M. GREENE, Whittier, Calif. Filed June 14, 1930. Serial No. 461,238. 2 Claims. (Cl. 33—124.)



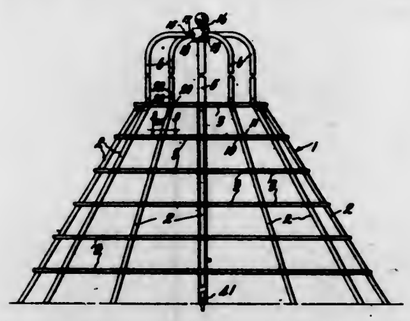
1. An organization of the character described embodying: a tension indicating gauge; a sheave adapted to support a line; means associated with said sheave for operating said gauge to indicate on said gauge tension in the line, said means including, a piston mounted in a cylinder, and adapted to be supported therein by a noncompressible fluid operably connected with said gauge; separate means operably connected to said sheave for indicating the length of line run over said sheave, said last mentioned means including a footage indicator; and gears operably connecting said indicator to said sheave.

1,901,963. SUPPORT AND STRETCHING MECHANISM FOR MOTION PICTURE SCREENS. JOHN P. HANSEN, Elmhurst, N. Y. Filed Mar. 6, 1931. Serial No. 520,736. 5 Claims. (Cl. 45—24.)



1. A device of the class described comprising vertically extending bars, vertically sliding hooks on said bars for securing a motion picture screen thereto, and means for moving said bars laterally to stretch said screen.

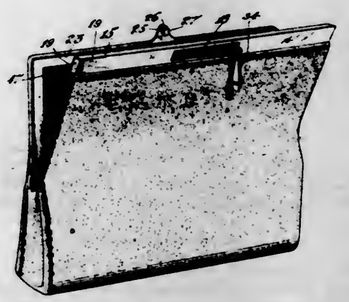
1,901,964. PLAYGROUND DEVICE. WILLIAM E. HASKELL, Springfield, Mass. Filed Jan. 13, 1932. Serial No. 586,311. 5 Claims. (Cl. 272—57.)



1. A playground structure comprising a substantially vertical pole-like member, a frame operably connected to and surrounding said member and so positioned with respect to said member as to afford a plurality of paths to the top of said member, said frame being spaced from said member to afford a rapid unobstructed descent on said member from the top of the frame wholly within the confines of the frame.

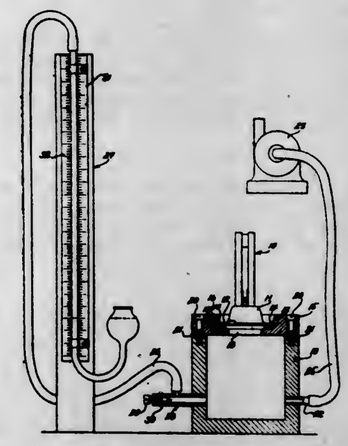
1,901,965. BAG FRAME FASTENER. WILLIAM C. HIMMING, Newark, N. J., assignor to J. E. Mergott Company, Newark, N. J., a Corporation of Delaware. Filed Sept. 11, 1931. Serial No. 562,272. 4 Claims. (Cl. 292—145.)

1. In combination with a pair of U-shaped frame members, a fastening device, comprising a tubular, rectangular casing attached to one of the frame members, said casing having an aperture in one side and a longitudinal slot in the opposite side, a plate attached to the other frame member, a flanged head projecting from the plate and positioned to enter the aperture when the frame members are brought together, a member slidably mounted in the casing, said member having a side wall provided with a slot having a portion of less width than the diameter



of the head and a portion of greater width, and a means projecting through the slot in the casing and attached to the slidable member to move the latter.

1,901,966. APPARATUS FOR GAUGING MATERIAL. RAGNAR ERIC HOFFMAN, Elmwood Park, and CHRISTIAN PAULSON, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 28, 1928. Serial No. 250,135. 6 Claims. (Cl. 73—51.)

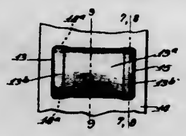


6. In an apparatus for gauging material, a chamber having an opening therein, a rim surrounding the opening having a plane surface thereof adapted to engage a surface under test, means for exhausting air from the chamber at a uniform rate, and means for indicating the pressure of air in the chamber to thereby indicate the fit between the surface under test and the surface of the rim.

1,901,967. ANTIFRICTION BEARING. RAY B. HOOVER, Oak Park, Ill., assignor to Shafer Bearing Corporation, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1931. Serial No. 555,707. 8 Claims. (Cl. 308—218.)

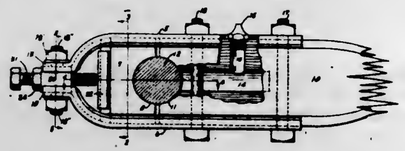
1. An antifriction bearing comprising a plurality of bearing members, bearing rollers cooperating therebetween and having bearing portions with concave surfaces

intermediate their ends and guiding portions at their ends, and an apertured retaining member for said rollers, the apertures in said retaining member receiving said



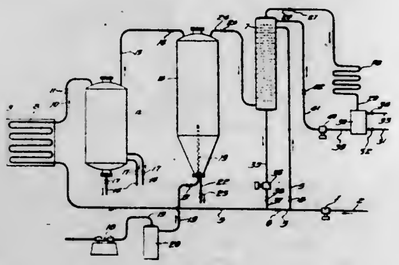
rollers and being of such shape that the edges thereof contact with said guiding portions of the rollers but not with said bearing portions thereof.

1,901,968. PITMAN FOR AGRICULTURAL IMPLEMENTS. EDWIN F. HUDDLE, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Oct. 9, 1931. Serial No. 567,850. 1 Claim. (Cl. 287—93.)



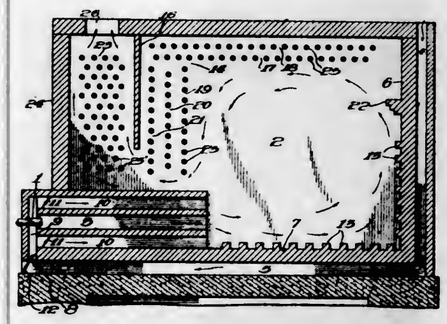
A pitman comprising an arm, a bearing-block adjacent thereto, straps overlapping the outer sides of the arm and block and terminating in converging ends adjacent the block, means for securing the arm and straps together, an internally threaded socket member between said converging ends having shanks thereon passing through the ends, means on the shanks for securing the socket member and converging strap ends together, and a screw follower in the socket for adjusting the bearing-block.

1,901,969. PROCESS FOR HYDROCARBON OIL CONVERSION. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 3, 1928. Serial No. 244,108. 1 Claim. (Cl. 196—61.)



A process for conversion of hydrocarbon oil, which consists in heating the oil to a cracking temperature under superatmospheric pressure in a heating zone, discharging the heated oil into an enlarged zone of reaction wherein vapors are evolved and heavier constituents are withdrawn as a liquid residue, passing the vapors so freed of heavier constituents to a zone of vapor phase cracking, and supplying heat for the vapor phase cracking by burning a sufficient amount of said vapors within said zone, to maintain a vapor phase cracking temperature.

1,901,970. FLUID HEATING APPARATUS. LYMAN C. HUFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 27, 1930. Serial No. 484,753. 6 Claims. (Cl. 122—356.)



5. In combination, a furnace comprising a combustion chamber, a heating zone communicating with said combustion chamber, means for introducing combustible fuel into said combustion chamber and passing the hot products of combustion into the heating zone along the floor and against the opposite wall thereof, and means for removing the substantially spent products of combustion from the heating zone at a point adjacent the point of entrance of said hot products into said heating zone.

1,901,971. FOUNTAIN PEN. ADRIAN J. IORIO, Randolph, Mass. Filed Sept. 25, 1931. Serial No. 565,080. 4 Claims. (Cl. 120—47.)

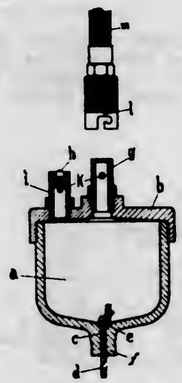


1. A fountain pen comprising hollow telescoping members providing an ink reservoir, a pen point mounted in the outer end of one of said members, the outer end of the other member having an ink inlet opening, a valve in said other member adapted to sink in the ink in said reservoir, and a valve seat for said valve adjacent said inlet opening.

1,901,972. WICK OILER. HANS KREIDEL, Wiesbaden, Germany. Filed June 7, 1929, Serial No. 369,161, and in Germany Feb. 20, 1929. 4 Claims. (Cl. 184—105.)

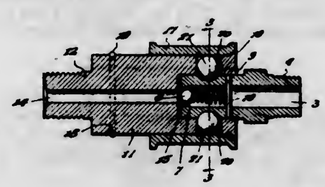
1. A wick oiler comprising a lubricant container, means on said container for making a quick detachable connection with a source of lubricant under pressure, said means being located adjacent the highest point of said container

and forming a duct for free flow in both directions, means for securing said container to a part to be lubricated, said means having a passageway therein, a wick in said passageway for conducting the lubricant from said con-



tainer to the part to be lubricated by capillary attraction, and a check-valve fitting for making a quick detachable connection with a source of lubricant under pressure for filling said container.

1,901,973. LUBRICATOR FITTING. EUGENE J. MACEY, Rosholt, S. Dak. Filed Jan. 6, 1932. Serial No. 585,117. 1 Claim. (Cl. 285—96.)



Apparatus of the type set forth comprising a tubular body having an external annular groove near one end, an inwardly opening check valve fitted in said end, a second tubular body having one end adapted to fit around the grooved and valved end of the first mentioned body and provided at said end with radial openings and an external annular flange, the inner face of which is beveled outwardly, balls disposed in said radial openings and adapted to engage the groove in the first mentioned body to hold the bodies together, a locking sleeve slidably mounted on the second mentioned body to extend over the radial openings therein and retain the balls in engagement with the groove in the first mentioned body and having its inner surface at one end thereof beveled to correspond with the beveled face of the annular flange, the ball locking movement of the sleeve being limited by engagement of said beveled faces, and an abutment on said body limiting the ball releasing movement of the sleeve with the beveled end of the sleeve overhanging the radial openings whereby a limited outward movement of the balls within the openings is permitted and withdrawal of said balls prevented.

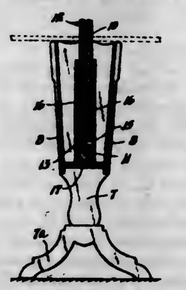
1,901,974. SASH LATCH. WALTER C. MACY, South Dartmouth, Mass. Filed Oct. 7, 1932. Serial No. 636,756. 4 Claims. (Cl. 292—340.)

1. A device of the class described including a base plate, a hook member mounted in the base plate and provided with a hook adapted to engage a portion of a cam fastener, and means extending through the base



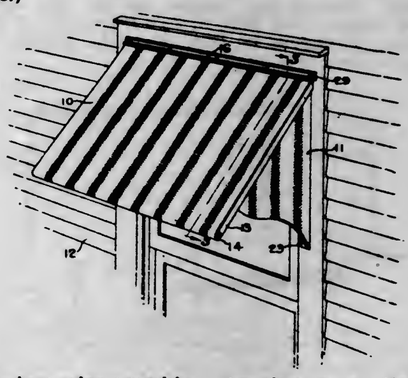
plate locking the hook member in the plate and, said means cooperating with the hook member for locking said plate to the mid rail of the sash.

1,901,975. COMBINATION TABLE. CARL A. MAGNUSON and CARL H. UGGLA, Minneapolis, Minn. Filed Feb. 2, 1931. Serial No. 512,915. 3 Claims. (Cl. 45—116.)



1. A combination table comprising an upright frame, said frame having vertical guides in opposite ends thereof, a bar having its ends slidably disposed in said guides, a pair of table leaves hingedly connected at their inner longitudinal edges, said frame including supporting means at the upper portion thereof spaced outwardly from said guides and a connection between one of said table leaves and said bar permissive of oscillatory movement of said leaves on a vertical axis to permit said leaves, when said bar is elevated in said guides and said leaves are unfolded to horizontal position, to be swung through 90 degrees for engagement with said supporting means of said frame.

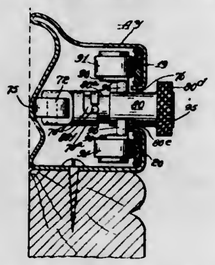
1,901,976. AWNING OF METAL OR LIKE RIGID MATERIAL. JEAN A. MARTIN, Buffalo, N. Y. Filed Jan. 14, 1931. Serial No. 508,736. 3 Claims. (Cl. 189—55.)



1. An awning comprising a top piece, means along the upper edge of the top piece for securing the same to a

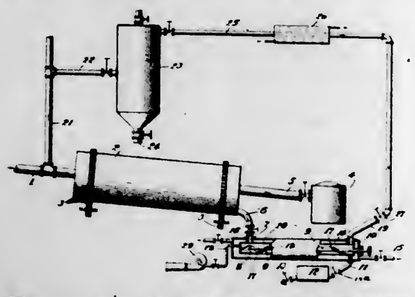
building, and a downwardly extending reversed flange along the outer edge of the top piece, a side piece for engagement with the top piece, said side piece being formed with a reversed flange along its upper edge for stationary interlocking engagement with the said flange of the top piece.

1,901,977. ELECTRIC CIRCUIT CONNECTION. MICHAEL W. MCARDLE, Chicago, Ill. Filed Feb. 18, 1928. Serial No. 253,801. 3 Claims. (Cl. 247—3.)



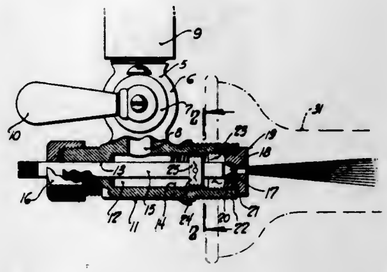
1. A construction for the purpose indicated comprising a longitudinally hollow casing member having at one side a longitudinally extended slot and having two parallel longitudinally extending electrically conductive strips insulatedly mounted within said casing, the casing having means at some point in its length for connecting said conductive strips in circuit with a source of current; a contact carrier having an insulating body adapted to be introduced into the casing and to be guided in the slot for movement longitudinally of the casing; electrical contacts mounted on said carrier in position for bearing on the conductive strips respectively as the carrier is moved along the slot, the means for mounting the contacts respectively on the carrier body consisting of short rockers rotatably mounted in the carrier body positioned and dimensioned for entering through the casing slot, and having each a short transverse projecting inner end terminal also dimensioned for entering through the slot when the rocker is turned to align the terminal with the slot, said transverse terminals comprising the contacts mounted insulatedly in the rockers respectively, said rockers having each a portion exteriorly exposed for manual operation to turn the rocker in the carrier body to project the transverse terminals transversely of the slot and carry the contacts thereof into contact with the conducting strips respectively; whereby said rocker adapts the carrier for entering into the casing through the slot and serves also for locking it in the casing when thus entered.

1,901,978. MANUFACTURE OF POWDERS. ALBERT J. MEIER, Glendale, Mo., assignor to The New Jersey Zinc Company, New York, N. Y., a Corporation of New Jersey. Filed June 14, 1929. Serial No. 370,799. 16 Claims. (Cl. 134—78.)



1. The process of making a pigment which consists in calcining suitable material in a kiln out of contact with air, removing the calcined material out of contact with air, and while still out of contact with air cooling it with a stream of gas substantially non-reactive to the hot pigment which is brought in direct contact with the hot calcined material.

1,901,979. GAS COCK. EUGENE E. MEUSY, Milwaukee, Wis., assignor to Milwaukee Gas Specialty Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 5, 1932. Serial No. 627,573. 8 Claims. (Cl. 251—43.)



3. In a valve, a valve body, a needle valve movable axially in said valve body, an integral one-piece plug having a bore to snugly receive and firmly hold the needle valve for movement along a fixed axis, said plug also having a discharge orifice outwardly of the bore receiving the needle valve, a valve seat between the orifice and said bore with which the needle valve point cooperates, and means to conduct fluid from the interior of the valve body substantially past the bore receiving the needle valve.

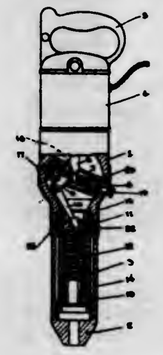
1,901,980. LOOSE LEAF ASSEMBLY. LYMAN MIDDLEDITCH, New York, N. Y., assignor to L. Middleditch Company, New York, N. Y., a Corporation of New York. Filed June 20, 1929. Serial No. 372,248. 6 Claims. (Cl. 40—120.)



1. The combination with a backing member for a loose-leaf assembly, of hollow clamping means extending through the backing member and engaging opposite faces of said backing member, a hollow supporting leg carried by said clamping means below the backing member, and an upstanding post frictionally held within the clamping means and extending above the backing member.

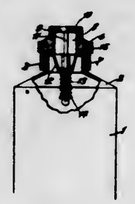
1,901,981. MOTOR-DRIVEN MECHANICAL HAMMER. MATS GÖSTA HARRY OUSBÄCK, Stockholm, Sweden, assignor to Ragnar Erfass, Stockholm, Sweden. Filed Jan. 11, 1932, Serial No. 585,857, and in Sweden Jan. 12, 1931. 5 Claims. (Cl. 125—33.)

1. A motor-driven hammer, comprising a driving shaft, means for rotating said shaft, a cross-head connected with and rotated by said shaft in an oblique plane with respect to said shaft, a reciprocating striking member, means including a link member for connecting said striking member and said cross-head, and means for simultaneously



adjusting the position of said cross-head with respect to said shaft, and the position of said tool-holder with respect to said striking member.

1,901,982. CLOSURE FOR RECEPTACLES. JOHN L. PARDUE, St. Louis County, Mo., assignor of one-third to Theodore M. Pardue and one-third to William A. Pardue, St. Louis County, Mo. Filed Sept. 26, 1931. Serial No. 565,241. 7 Claims. (Cl. 221—60.)



1. A collapsible and compressible container having a threaded discharge nozzle at one end, a tubular body screwed on said nozzle and having a valve seat at its outer end, a guide beyond and attached to the inner end of said body and leaving the opening in said tubular body unobstructed thereby, a valve movable to and from position against said valve seat, a stem attached to said valve and extending inwardly through and beyond said tubular body and through said guide, and a spring connected with the inner end of said stem inwardly beyond and cooperating with said guide to hold said valve yieldingly in closed position against said seat and to move said valve to closed position after said valve has been opened.

1,901,983. OIL BURNER. CHRISTEN J. PETERSON, Chicago, Ill. Filed Aug. 8, 1928. Serial No. 297,800. 3 Claims. (Cl. 158—77.)

2. A discharge head for an oil burner comprising a rotatable disk having holes therethrough and having circumferentially arranged blades, each of said blades being pitched at an angle to the plane of the disk and having its outer end curved upwardly, and an annular receptacle

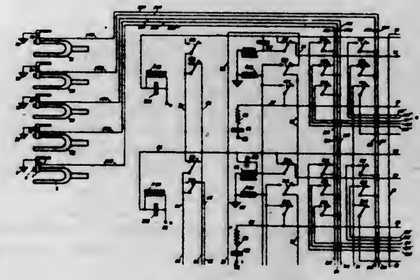


depending from the disk with its outer wall diverging toward the top and coinciding with the outer edges of said holes.

1,901,984. PROCESS OF MAKING HEAT INSULATING BODIES. ERNEST J. PIEPER, DILLON F. SMITH, and CLARENCE C. VOGT, Haddonfield, N. J., assignors to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1927. Serial No. 225,890. 7 Claims. (Cl. 18—47.5.)

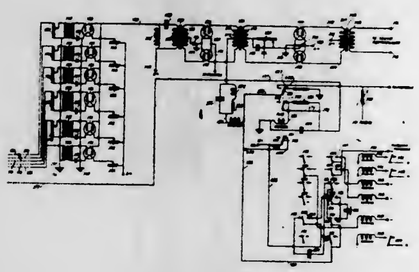
7. The process of making a heat insulating unit, which comprises mixing mineral fibers with a binder in liquid solution in a volatile solvent, shaping the mass, evaporating the solvent with sufficient rapidity to withdraw a substantial portion of the dissolved binder from the interior of the unit to its surface, whereby the unit is formed with a relatively open porous interior and a relatively hard dense surface.

1,901,985. ELECTRICAL MUSIC SYSTEM. RICHARD HOWLAND RANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Dec. 30, 1929. Serial No. 417,466. 126 Claims. (Cl. 84—1.)



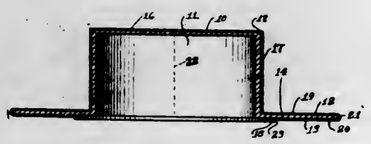
1. In an electrical music system, a plurality of tone generators, a plurality of sound reproducers of a number less than the number of tone generators, and means for coordinating one of said sound reproducers with tone generators for a single note only at any instant.

1,901,986. ELECTRICAL MUSIC SYSTEM. RICHARD HOWLAND HANGER, Newark, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 28, 1931. Serial No. 577,795. 11 Claims. (Cl. 84—1.)



6. In an electrical music system having a series of alternators for producing electrical frequencies corresponding to the consecutive notes of a musical scale, a plurality of amplifiers for amplifying the various produced frequencies in accordance with a predetermined selection thereof, means for controlling the intensity of each of the frequencies impressed upon said amplifiers in accordance with the tone quality desired, capacity means associated with the amplifying systems for supplying definite voltages thereto during periods when each amplifier is rendered operative and providing for a gradual dissipation of energy from the amplifier during said periods, and a sound reproducer coordinated with each of said amplifying systems for converting the amplified energy into audible energy.

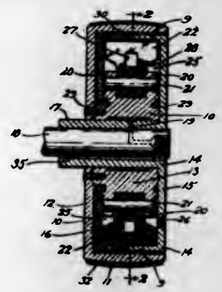
1,901,987. HAT PROTECTOR. THOMAS E. RODERICK, Bronx, N. Y. Filed July 21, 1931, Serial No. 552,111, and in Canada July 26, 1930. 1 Claim. (Cl. 2—187.)



In a waterproof hat protector, an elastic sheet cover tautly and smoothly conformable on the bottom side of the brim of a hat, and corrugations on the inner marginal edge of the sheet cover on the bottom of said brim for simultaneously producing tension to prevent sagging of the cover away from the brim and having edge portions out of contact with the brim for convenience in gripping.

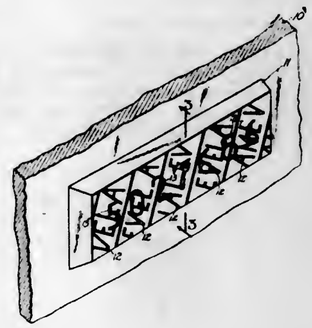
1,901,988. POWER TRANSMISSION. CARL AUGUST RUDQVIST, Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland, a Corporation of Switzerland. Continuation of application Serial No. 278,271, filed May 16, 1928, and in Sweden Jan. 9, 1928. This application filed May 14, 1930. Serial No. 452,389. 26 Claims. (Cl. 192—58.)

1. A clutch comprising coaxially mounted relatively rotatable driving and driven members forming a chamber for the reception of finely divided material and means for establishing a driving relation between the driving and driven members comprising elements movable with one of said members and projecting into said chamber,



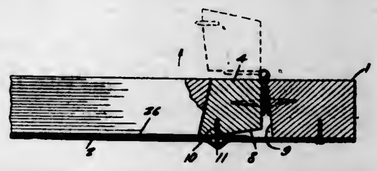
said elements being movable due to pressure thereagainst of the finely divided material to permit the driven member to rotate faster than the driving member.

1,901,989. METHOD OF AND MEANS FOR PROTECTING INSCRIPTIONS. EVERETT J. SCHWANTES, Chicago, Ill. Filed Jan. 18, 1932. Serial No. 587,890. 7 Claims. (Cl. 40—2.2.)



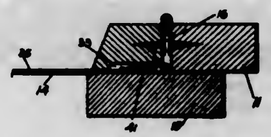
1. The method of protecting inscriptions against effacing, which consists in providing a surface with inscription characters thereon having faces spaced to one side of the plane of said surface and then forming other characters in said surface by means of grooves which cut into said surface and through the faces of said inscription characters.

1,901,990. ADVERTISING FRAME. WENZEL J. SIMANEK, Racine, Wis. Filed Feb. 24, 1931. Serial No. 517,966. 10 Claims. (Cl. 40—156.)



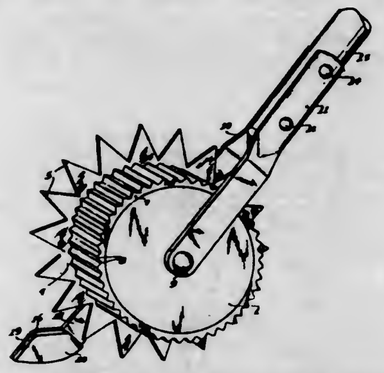
6. A frame for posters or the like having top, side and bottom strips hingedly secured to the inner edges thereof, all of said strips having their inner edges beveled, said side strips having beveled upper ends to engage the beveled inner edge of the top strip when in closed position, impinging elements on all of the strips and the frame having depressions to receive the impinging elements therein, all of said strips having their inner faces beveled from a point adjacent their inner edges to their outer edges, and means for locking the lower strip to the frame.

1,901,991. FRAME. WENZEL J. SIMANEK, Racine, Wis. Filed Oct. 12, 1931. Serial No. 568,475. 14 Claims. (Cl. 40—156.)



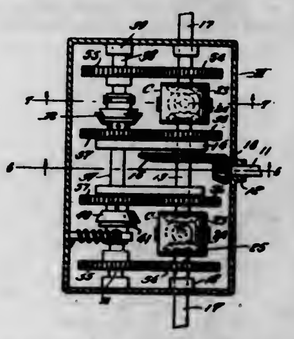
1. A frame adapted to receive a poster and the like, comprising a plurality of hinged strips, each of said strips having a plurality of spaced, flexible clips secured thereto, said clips in the closing movement of said strips engaging a poster positioned in said frame and drawing said poster to position smoothly within said frame.

1,901,992. LAWN EDGER AND TRIMMER. D. MONTGOMERY SMITH, Portland, Oreg. Filed Aug. 14, 1931. Serial No. 557,095. 5 Claims. (Cl. 56—256.)



1. In a device of the class described, the combination of a cylindrical drum, formed of a single piece having a side wall disposed upon one side of the cylinder portion, and a flange disposed upon the oppositely disposed side, a toothed blade made of hardened material secured to the flanged side of the drum by counter-sunk screws, a tire band of corrugated rubber secured to the outer surface of the drum, a journal bolt passing through the axis of revolution of the drum and the blade, handle receiving side bars journaled about the bolt, a handle receiving socket disposed upon the outer end of the side bars, and a handle removably disposed therein and secured thereto by fastening bolts, a feeding finger terminating the outer end of one of the side bars, said feeding finger being upset upon its outer end to form a protector for the teeth of the blade and to act as a guide for the grass to be cut, the side bar carrying the feeding finger being spaced apart from the blade for the greater portion of its length and the oppositely disposed side bar being spaced apart from the side wall of the drum by a spacing washer, an offset on the finger carrying side bar adapted to engage the toothed blade at the outer circumference of the untoothed portion of the toothed blade between the handle and the journal bolt, a similar offset engaging the toothed blade on the side diametrally opposite the handle and adapted to coact with the blade and its teeth, a cutting edge disposed upon the portion of the offset adapted to coact with the teeth, both offsets being adapted to maintain the proper alignment of the toothed blade with the cutting edge.

1,901,993. CULTIVATOR TRACTOR. NORMAN S. SMITH, Eastaboga, Ala. Filed July 22, 1930. Serial No. 469,741. 2 Claims. (Cl. 180—17.)



1. In a device of the character described, the combination of a transmission mechanism including a sectional drive shaft and a sectional lay shaft, differential planetary mechanisms connecting the sections of the drive shaft, clutch mechanisms connecting the sections of the lay shaft, a rock shaft, each of the first-named mechanisms including a lever, means operatively connecting said lever with said rock shaft, each of said second-mentioned mechanisms including a control lever, and means operatively connecting said last-mentioned lever with said rock shaft, and gearing located on either side of said differential and clutch mechanisms for connecting the sections of the drive shaft with the corresponding sections of the lay shaft.

1,901,994. COVERED JOINT HINGE. JOSEPH SOSS, Roselle, N. J. Filed May 8, 1931. Serial No. 535,815. 8 Claims. (Cl. 16—162.)

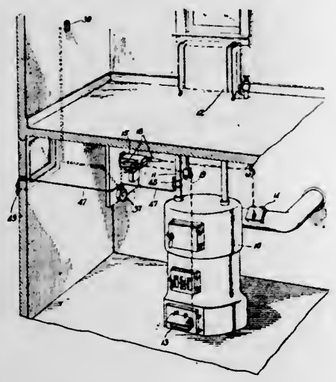


1. A hinge of the class described comprising a stationary butt member including pintle bearings at one end thereof and two movable butt members, each of said movable butt members including curved hood portions arranged in abutting relation with respect to each other when the hinge is assembled, forming means for concealing the joint of the hinge in the several positions of said butt members with respect to each other, means on the stationary butt member permitting the movement of the hood portions of the other butt members with respect thereto and for limiting the movement of the second named butt members, and each of the second named butt members including wall portions disposed at one side of the hood thereof, cooperating with the hood of the companion butt member to form a neat and finished appearance therebetween.

1,901,995. CONTROL FOR HEATING SYSTEMS. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Dec. 19, 1930. Serial No. 503,364. 7 Claims. (Cl. 236—9.)

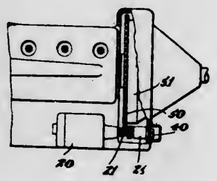
1. In combination with a system for distributing heating fluid, a fuel burner for heating said fluid, electromag-

netic means controlling the operation of said burner, a thermostat responsive to temperature changes within the building to be heated and having switching means, two mercury tubes each having switches at opposite ends respectively closed upon tilting of the tube in opposite directions relative to a horizontal position, a thermosensitive element arranged to tilt said tubes in opposite directions as the temperature of said fluid rises and falls, said tubes being inclined relative to each other so that one of said switches will be opened and closed and a second switch will be closed and opened respectively as the



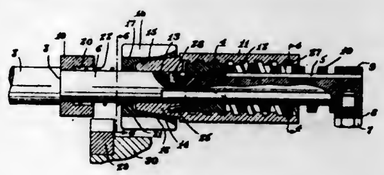
fluid temperature rises above and falls below a minimum limit, a third switch being opened and closed and the fourth switch being closed and opened respectively as the fluid temperature rises above and falls below a maximum limit, a circuit controlling said electromagnetic means including said switching means and said second and third switches, a circuit including said first switch and controlling said electromagnetic means to initiate burner operation independently of said thermostat, and a circuit controlling said electromagnetic means to interrupt operation of the burner and arranged to be completed by closure of said fourth switch.

1,901,996. STARTING DEVICE FOR INTERNAL COMBUSTION ENGINES. GEORGE A. TAYLOR, Hyde Park, Mass. Filed Jan. 24, 1929. Serial No. 334,656. 12 Claims. (Cl. 74—7.)



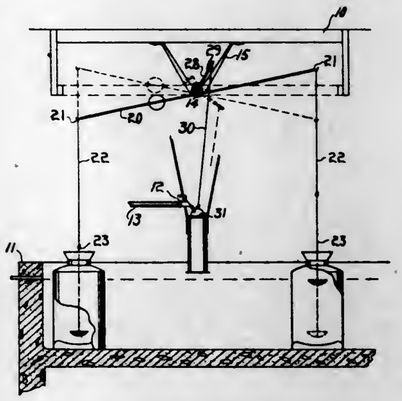
1. A starting device for an internal combustion engine, comprising in combination, means adapted to move axially into and out of engagement with an engine part, an electric motor having means adapted upon energization of the motor to move the first said means axially into engagement with said engine part and transmit rotation thereto, the second said means comprising a slit connection, light resilient means preventing slip when the motor is originally energized, a heavy coil spring adapted to prevent slip during engagement and application of the normal load but designed to permit slip upon backfire of the engine, said heavy resilient means becoming ineffective on the slip connection after the engine starts and before the first said means moves out of engagement with the engine part.

1,901,997. ENGINE STARTING DEVICE. GEORGE A. TAYLOR, Hyde Park, Mass. Filed Sept. 26, 1931. Serial No. 565,237. 24 Claims. (Cl. 78—7.)



1. An engine starting device comprising an armature shaft, a sleeve mounted for rotary and longitudinal movement relative to said shaft, a pinion carried by said sleeve and adapted to be moved into and out of mesh with an engine gear, stop means to limit engine gear engaging movement of said pinion, a friction clutch interposed between the said sleeve and the said pinion, and means cooperating with said stop means to progressively develop a predetermined torque on said pinion.

1,901,998. AGITATOR. BENNETT E. THOEN, Orfordville, Wis., assignor, by mesne assignments, of one-half to Orrin B. Ovestrud, Orfordville, Wis. Filed Aug. 7, 1931. Serial No. 555,697. 1 Claim. (Cl. 259—70.)



A fluid actuating device comprising in combination a portable frame adapted to be secured to the ceiling of a building over a trough; a shaft rotatably mounted in said frame and extending longitudinally thereof over said trough; arms extending from said shaft; an agitator fixed to the end of said arms and adapted to extend into fluid containers; an actuating rod extending from one of said arms; a compensating weight on the opposite side of the shaft from said actuating rod; a bucket on the end of said actuating rod and vertically extending guides for said bucket; a valve in the bottom of said bucket, said valve being actuating at the lower-most position of said bucket in said guides to empty accumulated water in said bucket, and means whereby the filling and emptying of said bucket will cause the said shaft to rotate in a clockwise and anti-clockwise direction successively thus causing the agitators to be raised and lowered in the container.

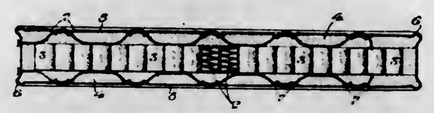
1,901,999. INSULATING MATERIAL AND METHOD OF MAKING THE SAME. CHARLES A. UPSON, Lockport, N. Y., assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Mar. 28, 1930. Serial No. 439,793. 22 Claims. (Cl. 154—28.)



1. Flexible heat insulating material for walls, comprising a filling of loosely associated fibrous material and a liner on each side of said filling of fibrous material, each of said liners comprising a plurality of layers of cellulosic material held together by a layer of asphaltum chemically treated to reduce the inflammability of said asphaltum.

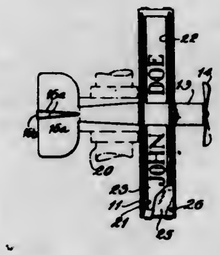
21. The method of making an insulating bat which comprises subjecting jute fibres substantially in the form of a textile fabric to the action of a fireproofing liquid, disintegrating the treated fabric and picking the fibres, forming the picked fibres into a bat filling, and applying a liner to said bat filling.

1,902,000. MATTRESS. WILLIAM VAN SLYCK, Brooklyn, N. Y. Filed Nov. 22, 1930. Serial No. 497,865. 3 Claims. (Cl. 5—356.)



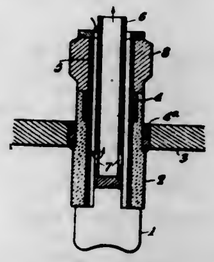
2. The method of making a mattress which consists in providing a series of coiled springs, then completely covering the springs with a layer of filling material, then applying a cover around the filling material, the springs separating the filling material into a pair of layers, then lacing the cover to its juxtaposed layer of filling material by rows of longitudinally extending lacings subsequent to the application of the filling material and cover to the springs, with the ends of the lacing exposed at the edge of the mattress with the exposed portions of the lacing in each row closer together than are the rows of lacings.

1,902,001. OWNERSHIP IDENTIFICATION DEVICE. MAX WASSERBERG, Brooklyn, N. Y. Filed Aug. 27, 1932. Serial No. 630,629. 11 Claims. (Cl. 40—126.)



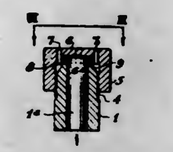
1. An identification device of the class described, of a contour representing a multiple wing aeroplane, said device having a projecting bracket portion by means of which the same may be mounted in connection with a suitable support, means for supporting a characterised strip in connection with one wing of the device to permit the transmission of light through the strip so supported, and another wing of said device having a closed wall arranged in spaced and angular relation with respect to said first wing and including a reflector surface on which the characters of said strip may be seen.

1,902,002. MERCURY VAPOR ANODE. MAX WELLAUER, Oerlikon, near Zurich, Switzerland, assignor to Maschinenfabrik Oerlikon, Oerlikon, Switzerland, a Corporation of Switzerland. Filed Aug. 31, 1931, Serial No. 560,476, and in Switzerland June 27, 1930. 2 Claims. (Cl. 250—27.5.)



1. A vapor anode having therefor a cylindrical insulator, a tube of low thermal conductivity located within said insulator, a tube of high thermal conductivity located within said tube, and leaving an air convecting space between the tubes leading to the exterior atmosphere, and said high conductivity tube having its bore leading to the exterior atmosphere and in its wall a passageway joining the inner spaces of both of said tubes.

1,902,003. DISCHARGE NOZZLE. JOHN F. WERDER, Lakewood, Ohio. Filed Mar. 9, 1931. Serial No. 521,230. 5 Claims. (Cl. 221—4.)

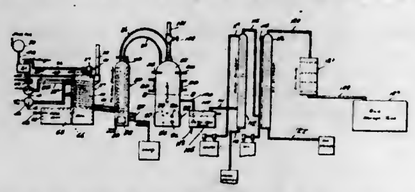


5. A discharge nozzle, comprising rotatably interengaging companion members adapted for permanent operative association with each other and having openings therethrough which are adapted for communication upon partial disengagement of said members so as to permit discharge therethrough, one of said members having a conical seat portion, and the other of said members having an annular edge portion, said portions being adapted for seating and sealing engagement with each other in such manner as to completely cut off communication through the openings of said members, and constituting the only closure means during shipment, storage and usage of the container to which applied, and at least one of said portions consisting of semi-soft material of such degree of hardness as to be only slightly deformed so as to provide sealing seat engagement between said members and permit repeated use of the same in such manner.

1,902,004. PROCESS OF MAKING OIL GAS. RICHARD EUGENE WHITLOCK, Camarillo, Calif., assignor to Whitlock Gas Process Company, Inc., Dover, Del., a Corporation of Delaware. Filed July 2, 1929. Serial No. 375,823. 10 Claims. (Cl. 48—214.)

1. A process of making oil gas comprising injecting oil and water simultaneously in an atomised condition

into and downwardly through heated coils having catalytic members within the lower portion of the coils, and thereby generating oil vapors and gases, then removing entrained solid carbon particles by passing the mixture of vapors upwardly and downwardly through a heated separating chamber having baffles for baffling the mix-

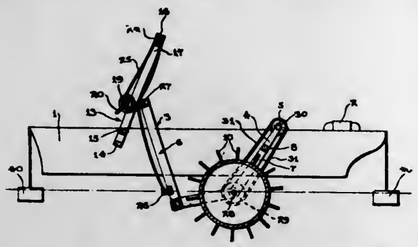


ture, then expanding the mixture of oil vapors and gases and fixing the vapors by passing through a heated checker work chamber at a temperature of about 1200° F., then cooling and scrubbing the gas with water by passing through a scrubber and removing sulphur from the oil gas by passing through a gas purified containing iron oxide.

1,902,005. PRESERVATION OF RUBBER. IRA WILLIAMS, Woodstown, N. J., and ARTHUR MORRILL NEAL, Wilmington, Del., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 12, 1932. Serial No. 598,538. 26 Claims. (Cl. 18—50.)

1. The method of increasing the age-resisting properties of rubber which comprises incorporating in the rubber a compound obtainable by reacting boric acid with an ortho dihydroxy aromatic body and a basic salt-forming substance.

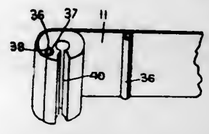
1,902,006. BOAT. CHARLES LEONARD WOODS, Alton, Ill. Filed Apr. 28, 1931. Serial No. 532,330. 3 Claims. (Cl. 115—1.)



1. A boat, comprising a hull, power means positioned in said hull, rotatable drums on either side of said hull, propulsion blades on said drums, pivotal arms supporting said drums, and means for oscillating said pivotal arms to depress and elevate said drums for raising and lowering said boat, consisting of members pivotally mounted to said arms, hoisting frames secured to the hull, drums secured to said hoisting frames, pulleys secured to said hoisting frames, endless flexible members secured at their ends to said pivotally mounted members and trained about their respective pulleys, and drums, means for rotating said drums, and means for securing said drums in a desired position.

1,902,007. PRINTING RIBBON. GEORGE R. WOOD, Toronto, Ontario, Canada, assignor to International Business Machines Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 17, 1927, Serial No. 233,979, and in Canada Sept. 15, 1927. 6 Claims. (Cl. 197—151.)

1. An attachment for printing ribbons in time clocks and the like, comprising a printing ribbon, a pair of spaced cylindrical sleeves having slots formed in their walls, a pair of ribbon holders adapted to press the ribbon against the inner walls of the sleeves, one of said sleeves being positioned at the extreme end of the ribbon to form an anchoring means and the other sleeve being spaced



from said end for operating a ribbon reversing gear, a winding roll for the ribbon, a groove in said roll to receive the cylindrical sleeve at the extreme end of the ribbon and a slot in proximity to said groove adapted to receive the other sleeve and allow the ribbon to contact with the surface of the winding roll.

1,902,008. CONDUCTOR CLAMP. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 12, 1929. Serial No. 346,384. 31 Claims. (Cl. 173—251.)



5. In combination a clamp for supporting a conductor, said clamp having a seat extending along said conductor and having graded resiliency for gradually taking up the load on said conductor, and frictional means comprising relatively slidable frictionally engaging surfaces for damping movements of said seat imparted thereto by said conductor.

1,902,009. CONDUCTOR ATTACHMENT. ARTHUR O. AUSTIN, near Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 29, 1929. Serial No. 351,056. 6 Claims. (Cl. 173—251.)

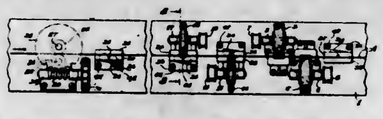


1. The combination with a strand, of a pair of channel shaped spring members nested together with said strand disposed in the channel on the inner one of said members, and means for holding said spring members against transverse movement at one portion thereof to cause said members to be flexed when said strand is vibrated.

1,902,010. STRIP-SUPPORTING MECHANISM. LOUIS W. ANDERSON, Elizabeth, N. J., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed July 14, 1931. Serial No. 550,710. 7 Claims. (Cl. 51—74.)

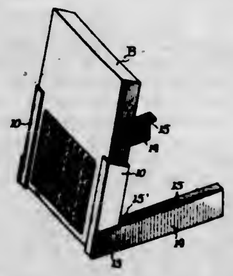
2. A machine of the character described comprising means to propel a perforated continuous strip, and a support for the strip pivotally supported adjacent said strip, said support having spaced projections to enter perforations in the strip, said support having a recess between said projections to receive portions of the strip between

perforations therein, said projections having inclined edges to be engaged by said portions of the strip for rocking the support during travel of the strip, an inclined edge of one



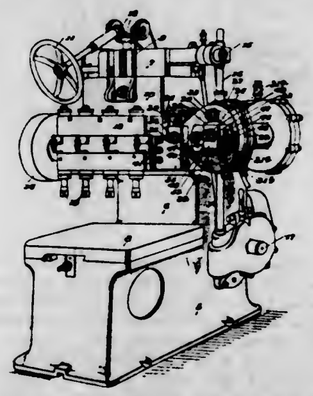
projection extending toward an end of the support and an inclined edge of the other projection extending toward the pivot.

1,902,011. COLLAPSIBLE HOLDER. KENNETH E. BREWER, Chicago, Ill., assignor to Chas. A. Brewer & Sons, Chicago, Ill., a Partnership consisting of Nelson C. Brewer, Kenneth E. Brewer and Everett R. Brewer. Filed Sept. 24, 1932. Serial No. 634,709. 4 Claims. (Cl. 211—160.)



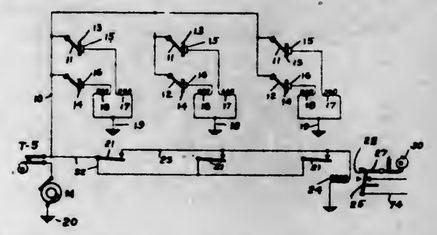
1. A collapsible holder of the character described, comprising a pair of strips adapted to overlie opposite edges of an article to be held, means for attaching said strips to said article, and a pair of legs pivoted at one end thereof to the lower end portions of said strips and adapted to swing between a folded position overlying and substantially parallel with said strips and an extended position wherein they are adapted to rest lengthwise on a table, counter, or other like support; said legs formed with stops cooperating with said strips to maintain the article in substantially upright position.

1,902,012. MACHINE TOOL. ROBERT N. BROWN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 8, 1928. Serial No. 274,863. 14 Claims. (Cl. 90—15.)



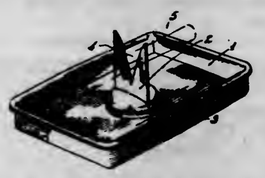
1. In a device of the class described, a rotatable cam member of fixed contour, a slide, a link pivoted to the slide at one end and provided with means at its other end engaging the cam whereby a constant rotation of the cam will intermittently swing the link about its pivot, and means comprising a slotted member carried by said link and a block member coaxial with said cam and housed within said slotted member for converting said intermittent swinging of said link about its pivot into intermittent reciprocation of said link and slide.

1,902,013. CONTROLLING DEVICE FOR RECORD-CONTROLLED MACHINES. JAMES W. BRYCE, Bloomfield, N. J., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Apr. 16, 1925. Serial No. 23,719. 26 Claims. (Cl. 235—92.)



20. In an automatic control system for record controlled machines, a single sensing element for each of a plurality of records, means whereby one or other of the elements detects the presence of a designation on one of the records subsequent to the sensing of corresponding designations on the plurality of records, and a machine control device controlled by said means for controlling the operation of the machine.

1,902,014. ASH TRAY. GUY OUSELEY CAMPBELL, West Grinstead, Horsham, England. Filed Aug. 29, 1931, Serial No. 560,165, and in Great Britain Sept. 10, 1930. 1 Claim. (Cl. 131—51.)

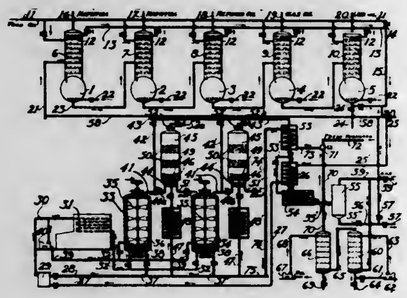


A combined cigarette holder and tray, including a tray proper, having upwardly extended edges, a boss centrally disposed on the bottom of the tray, a vertically disposed flat element supported by and projecting upwardly from the boss, said element extending up beyond the horizontal plane of the upper edge of the tray, said flat element having a V-shaped notch open through the upper end, the maximum width of the notch materially exceeding the diameter of the cigarette, the minimum width of the notch being materially less than the diameter of the cigarette, whereby when the cigarette is arranged in the notch the side walls thereof grip the cigarette at substantially opposing points at the sides of the cigarette, leaving the top and bottom portions of the cigarette wholly free of contact.

1,902,015. METHOD AND APPARATUS FOR HYDROGENATION AND DISTILLATION. EDGAR M. CLARK, Greenwich, Conn., assignor to Standard-I. G. Company. Filed Jan. 26, 1928. Serial No. 249,584. 13 Claims. (Cl. 196—53.)

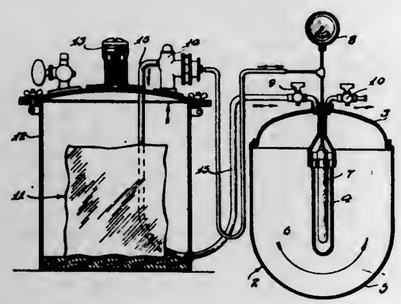
1. Process for obtaining valuable products from hydrocarbon oil, comprising forcing a mixture of the oil and hydrogen under high pressure through a heating zone, discharging the heated mixture into a reaction zone, maintained at a temperature in excess of about 750° F. and

under a pressure above about 100 atmospheres, withdrawing a mixture of gases and vapors substantially free of liquid therefrom, cooling the same under full pressure, separating the condensate from the uncondensed gases, expanding said separated condensate into the first of a series of distillation zones, distilling under substantially atmospheric pressure, removing distillates from the distillation zones, and returning the undistilled residue to the reaction zone.



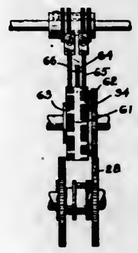
3. Continuous hydrogenation and distillation apparatus, comprising a heating coil adapted to raise oil under pressure in excess of 50 atmospheres to a temperature at which it reacts with hydrogen, a reactor, means for passing the hot oil into the reactor, means for supplying hydrogen at high pressure and temperature to the reactor for intimate admixture with the oil therein, means for segregating gases and normally liquid products from the reactor, means for expanding said liquid products to low pressure means for distilling lower boiling fractions from said liquid products under substantially atmospheric pressure, and means for continuously returning residual liquid products with hydrogen to the heating coil and thence to the reactor.

1,902,016. REFRIGERATING APPARATUS. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Laboratories Company, Flint, Mich., a Corporation of Michigan. Filed Feb. 12, 1932. Serial No. 592,572. 8 Claims. (Cl. 62—91.5.)



1. A refrigerating system for the application of cold in medicinal and surgical uses, comprising a cold applying unit, a circulating conduit within said unit, a container for receiving a charge of solid CO_2, means for conducting the vaporised CO_2 gases into the circulating conduit of the cold applying unit, and means for controlling the escape of gas from said container to maintain a relatively small amount of pressure in the system.

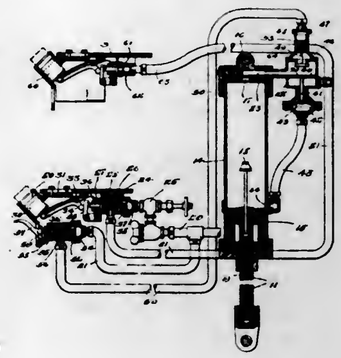
1,902,017. TABULATING MACHINE FOR NONDECIMAL SYSTEMS. GEORGE F. DALY and RALPH E. PAGE, Endicott, N. Y., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Nov. 30, 1926. Serial No. 151,670. 9 Claims. (Cl. 235—92.)



7. An accounting machine for the entry of a progression of units divisible to represent pence of the English monetary system including control mechanism and adding elements controlled thereby, said adding elements comprising selectively operable counters one of which is adapted to register a number of pence by setting operations of equal increments and having provision for accumulating a number of pence less than nine prior to transfer to the second counter.

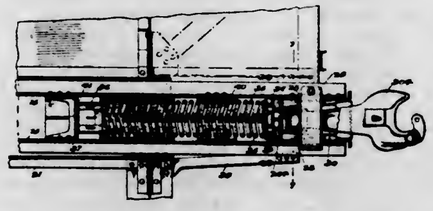
8. An accounting machine, comprising a printing mechanism and means for listing items and the totals of said items, said printing mechanism including a type carrying bar having type for item printing, other type for total printing and another type common to both item and total printing.

1,902,018. ACTUATING MECHANISM FOR PRESSING MACHINES. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Dec. 2, 1926, Serial No. 152,276. Renewed Nov. 22, 1930. 6 Claims. (Cl. 121—38.)



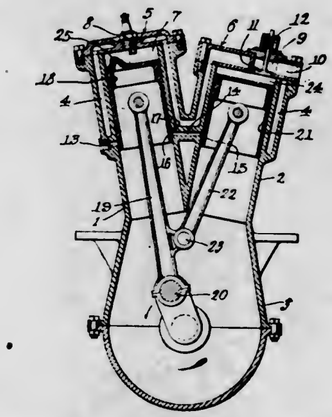
1. An actuating mechanism comprising a cylinder, a piston movable in the cylinder, a supply conduit system for a motive fluid connected to the cylinder and including a feed pipe and a pipe leading to the cylinder and serving as an intake and exhaust pipe, a valve casing connecting the pipes, a spring returned combined intake and exhaust valve in said casing normally arranged with the intake closed and the exhaust open, manual means for operating the combined intake and exhaust valve, a normally open valve in said conduit system, pressure operated means for closing the last mentioned valve when the piston has traveled a predetermined distance on its power stroke, a normally closed exhaust valve in said conduit having means tending to close it, means for opening the normally closed exhaust valve including a pressure chamber having a movable member therein connected to the normally closed exhaust valve, a valve casing connected to the feed pipe and to said pressure chamber, and a normally closed manually operable intake valve in the last mentioned casing having means for normally closing it.

1,902,019. CAR CONSTRUCTION. OTHO C. DURYEA, Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del., a Corporation of Delaware. Filed Oct. 29, 1927. Serial No. 229,767. 21 Claims. (Cl. 213—8.)



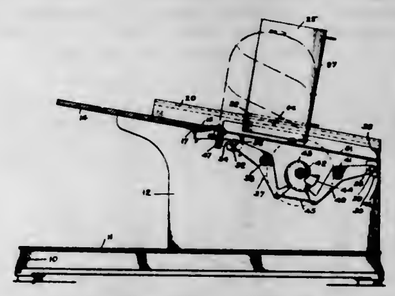
20. In railway draft rigging, sills movably mounted with respect to an associated underframe, resilient means mounted between said sills, follower means for said resilient means, stop means for said follower means mounted between said sills, stop means on the underframe cooperating with said follower means upon movement of the sills with respect to the underframe, a coupler, the stem of which extends between said sills, a key extending through said stem and sills, said sills being formed with elongated slots receiving said key and permitting limited movement thereof longtudinally of the sills, and a block disposed adjacent the rear of said coupler stem for transmitting force to the resilient means upon inward movement of the coupler.

1,902,020. INTERNAL COMBUSTION ENGINE. HERBERT O. EWING, Middleport, Ohio. Filed July 28, 1927. Serial No. 207,915. 1 Claim. (Cl. 60—32.)



In a two-cycle internal combustion engine the combination with a power cylinder and a vacuum cylinder disposed at a relatively small angle to each other, of an intake port opening into the power cylinder, a valved exhaust port in the head of the vacuum cylinder, a relatively short passage connecting the cylinders at a point between their lower ends, a piston in the power cylinder for successively opening the cylinder to the passage and to the intake port during the explosion stroke and successively closing the intake port and the passage during the compression stroke, a piston in the vacuum cylinder, a crank shaft, a pitman connection between the crank shaft and the piston in the power cylinder, and a shorter pitman connection between the pitman of the power piston and the piston in the vacuum cylinder, said pitmen and crank shaft cooperating to actuate the vacuum piston to move from a zero clearance and create a vacuum during the explosion stroke of the power piston and thereafter to open and close the cylinder to the passage, said passage being adapted to be closed by the vacuum piston prior to the compression of gases in the vacuum cylinder and before the closing of the intake port by the piston in the power cylinder.

1,902,021. SLICING MACHINE. EUGENE A. FORD, Scarsdale, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Dec. 30, 1927. Serial No. 243,496. 18 Claims. (Cl. 146—151.)



1. A slicing machine comprising an article feeder, a knife element for slicing said article, a driving element connected to the knife element for actuating the same, and means for actuating one of said elements in a direction transverse to a plane which includes the cutting plane of the knife element to effect release of the connection between them.

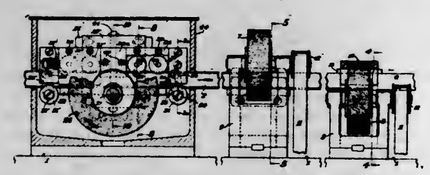
5. A slicing machine comprising a gage plate, a knife for slicing an article engaging said plate, a frame, a plurality of members pivoted on said frame, a shaft rotatably journalled in said frame, a plurality of cams fixed to said shaft, each cam engaging an end of one of said members, the other end of a member being pivoted to said plate, and means for rotating said shaft to actuate said members for adjusting the distance between said plate and said knife.

8. A slicing machine comprising an article feeding through a reciprocatably mounted frame provided with a guide slot having a cross-section wider at the rear than at the forward end, the latter end being open, a knife of similar cross-section to that of the slot seated in said slot and having the knife edge projecting through and past the open forward end of the slot for slicing the article fed thereto by the trough, and means for reciprocating the knife to facilitate the cutting action thereof.

1,902,022. METAL SHARPENING MACHINE. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Apr. 11, 1929. Serial No. 354,421. 12 Claims. (Cl. 51—80.)

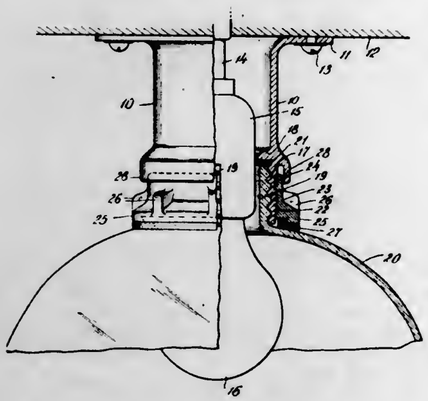
1. A metal sharpening machine comprising means to bevel and sharpen an edge portion of a strip providing facets thereon, means to propel said strip, a sharpening disk spaced from said means, a support opposed to said disk, and a guide block carried by the support adjacent

to said disk and having a guiding groove for the facets of the traveling strip, said groove being narrower than the thickness of the strip with the edge portions of the groove in position to engage said facets of the sharpened



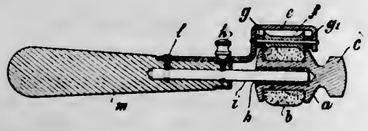
portion of the strip to resist thrusts of the disk against an opposite edge portion of the strip, the groove being of sufficient depth to prevent the block from engaging said sharpened edge of the strip.

1,902,023. SHADE HOLDER FOR LIGHTING FIXTURES. VINCENT J. GALLAGHER, Pelham, N. Y., assignor to Cox, Nostrand and Gunnison, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 19, 1931. Serial No. 576,064. 5 Claims. (Cl. 240—132.)



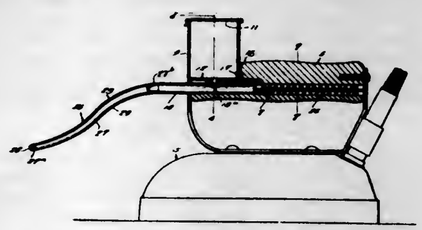
1. A shade holder for lighting fixtures comprising a shell, a shade threaded on said shell, and a collar threaded on said shell and adapted to engage said shade to lock it to said shell, the thread on said collar being of opposite pitch to the thread on said shade.

1,902,024. TYPE CLEANING INSTRUMENT. BESSIE ELLIS GERLACH, NÉE PARKER, and HUGO GERLACH, London, England. Filed July 8, 1929, Serial No. 376,695, and in Great Britain Aug. 3, 1928. 5 Claims. (Cl. 15—97.)



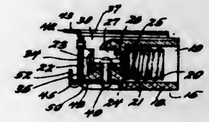
4. A type-cleaning device combining a handle, a rotatable type-cleaning member mounted on the handle and having a plastic material thereon and means mounted on said handle adapted on rotation of the cleaning member to reform the plastic and thereby present fresh surfaces of the plastic for application to the type.

1,902,025. SADIRON. SOLOMON GRAUER, Brooklyn, N. Y. Filed June 30, 1932. Serial No. 620,255. 5 Claims. (Cl. 68—26.)



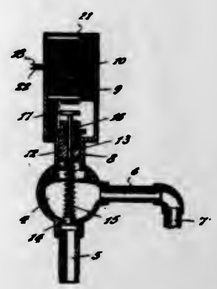
1. In combination with the handle of a sadiron, a receptacle mounted on said handle and provided in its bottom with an outlet, a tube mounted to reciprocate within a longitudinal bore provided in the handle and having an inlet aperture on its top side normally alined with said outlet but movable out of alinement with said outlet when the tube is shifted, a plunger fixed with respect to said handle and mounted in said bore and normally arranged within the inner end of said tube, spring means normally urging said tube outwardly with respect to said bore, a spray nozzle on the outer end of said tube, and manual means for shifting said tube against the action of said spring means.

1,902,026. REFLECTOR SOCKET. NELSON WARD HALL, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 7, 1930. Serial No. 487,043. 10 Claims. (Cl. 240—6.)



1. In a lighting unit, in combination, a tubular reflector open on one side, a lamp socket shell of insulating material carried by said reflector and adapted to hold a lamp extending axially of said reflector, a hinge member having one part secured to the bottom of said reflector and one part to the socket whereby the socket may be swung away from the reflector for inserting a lamp, and means to directly engage the insulating material of and clamp the socket in operative position.

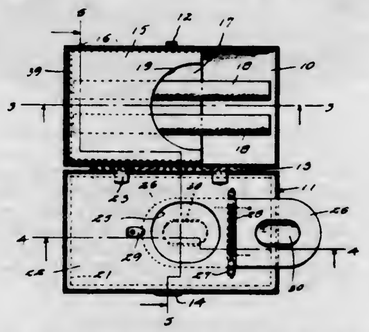
1,902,027. RELIEF VALVE. NORMAN F. HENKEL, Sheboygan, Wis. Filed Nov. 19, 1931. Serial No. 576,189. 2 Claims. (Cl. 137—139.)



1. A device of the class described comprising a substantially spherical casing having an inlet in its bottom and having its upper portion reduced to form an

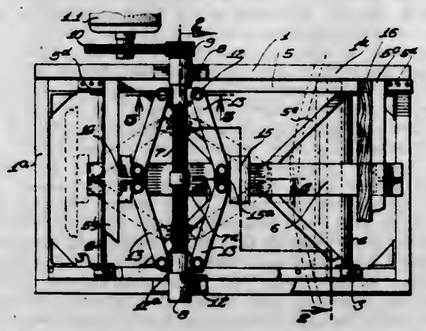
externally threaded neck defining an annular stop shoulder, a bonnet engaging the threads on the neck and bearing against said stop shoulder, the upper end of the bonnet being enlarged to form a housing, an outlet leading from one side of the casing, a valve within the casing seated in the inlet, an adjustable plug mounted in the bonnet, a stem rising from the valve and passing loosely through said plug, an expansion spring coiled about the stem between the plug and valve, an electro-magnet disposed within the housing, and a disk on the upper end of the valve stem and constituting an armature for the magnet.

1,902,028. COMBINATION CIGARETTE HOLDER AND ASH TRAY. RUSHIE F. HEYWOOD, Fulton, Ky. Filed May 7, 1932. Serial No. 609,921. 3 Claims. (Cl. 206—38.)



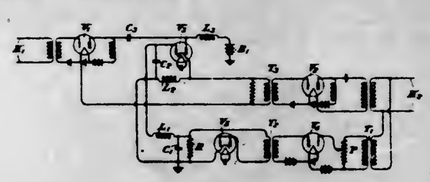
1. An ash tray comprising a member having an open top, a top plate for the member having an ash receiving opening therethrough, means for hinging the plate to said member, a closure for said opening, means for hingedly mounting said closure for swinging movement over said opening, resilient means constantly urging said closure into open position, releasable locking means for holding the closure in closed position, and a transversely curved member carried by the closure and swingable within said opening upon swinging of the closure into closed position.

1,902,029. PIPE STRAIGHTENING APPARATUS. GLEN C. HOLBERT, San Diego, Calif. Filed Dec. 2, 1931. Serial No. 578,534. 6 Claims. (Cl. 153—53.)



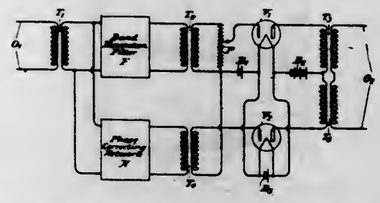
1. In a pipe straightening apparatus, a rectangular fixed frame, a rectangular carriage frame reciprocally mounted in said fixed frame, including end portions protruding above said fixed frame, one of said end portions forming a clamp jaw, a second clamp jaw provided with a groove for receiving work, a screw member extending across said carriage frame and supported from said fixed frame, traveler members associated with said screw member, and links extending from each of said traveler members to said carriage frame and said second jaw.

1,902,030. GAIN CONTROL APPARATUS. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Dec. 16, 1930. Serial No. 502,824. 4 Claims. (Cl. 178—44.)



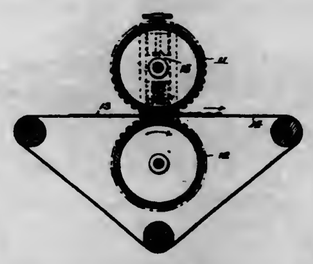
1. In a gain control system, the combination of a circuit transmitting signals, a tube having elements forming a space discharge path and a control electrode, the elements forming the space discharge path being connected directly in series in said circuit, and means responsive to variations in the level of the energy transmitted through said circuit to continuously produce a rectified potential and thereby vary the potential applied to the control electrode of said tube, the control electrode of said tube being affected solely by the rectified potential.

1,902,031. FILTERING APPARATUS. WILLIAM H. T. HOLDEN, Brooklyn, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 6, 1931. Serial No. 506,960. 5 Claims. (Cl. 178—44.)



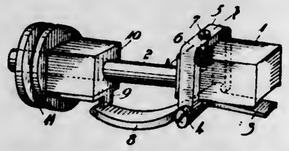
1. Band pass filtering apparatus comprising a band elimination filter, two amplifying circuits coupled, respectively, to the input and output circuits of the filter, both amplifying circuits having equal gains, and a pair of transformers connected to said circuits and coupled so as to be in opposition.

1,902,032. METHOD OF AND APPARATUS FOR MAKING FLEXIBLE VENEER. IRVING HOSKINS, Louisville, Ky., assignor to The Mengel Company, Louisville, Ky., a Corporation of New Jersey. Filed Aug. 8, 1931. Serial No. 554,886. 13 Claims. (Cl. 144—309.)



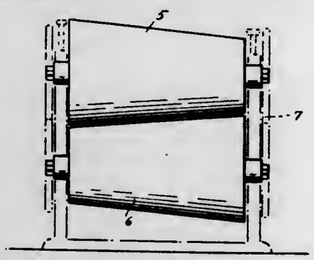
1. Apparatus for producing pliable wood veneer comprising a pair of cooperating toothed rolls between which the veneer is passed; and means for applying a fabric backing to the veneer after it is passed between said rolls.

1,902,033. WINDING DEVICE FOR THE MANUFACTURING OF BOXES, FOR INSTANCE THE OUTER CASINGS OF PUSH BOXES AND SIMILAR ARTICLES. BROR ANDERS EMIL JOHNSON, Alsten, Sweden, assignor to Aktiebolaget Gerh. Arehns Mekaniska Verkstad, Stockholm, Sweden, a Corporation of Sweden. Filed June 16, 1932, Serial No. 617,679, and in Germany Jan. 30, 1931. 2 Claims. (Cl. 93—81.)



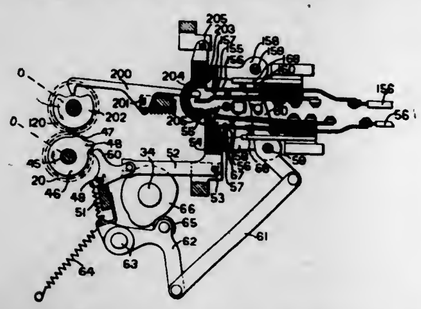
1. In a winding device for the manufacturing of boxes for instance the outer casings of push boxes and similar articles the combination of a mandrel, a jamming member for holding the blank of the box, and a carrier for the said jamming member, which carrier, is slidably and yieldably mounted on the mandrel, transversely of the same.

1,902,034. ROLL FOR USE IN STRIP AND SHEET MILLS. CLARENCE F. KNIGHT, Warren, Ohio, assignor of one-fourth to Melvin R. Hazel, Youngstown, Ohio, and one-fourth to Francis M. Comstock, Warren, Ohio. Filed Feb. 20, 1932. Serial No. 594,297. 3 Claims. (Cl. 29—17.)



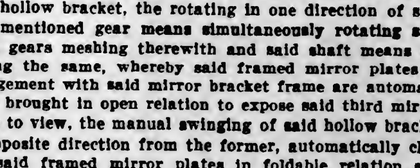
1. A rolling mill comprising plural rotatable rolls, each pair of rolls defining a pass, said rolls having their axes of rotation in the same plane, and each roll tapering in the opposite direction from the other roll with a uniform pitch coextensive with its working surface.

1,902,035. TRANSFER MECHANISM. CLAIR D. LAKE, Binghamton, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed July 18, 1925, Serial No. 44,452. Divided and this application filed Feb. 29, 1928. Serial No. 257,873. 8 Claims. (Cl. 235—133.)



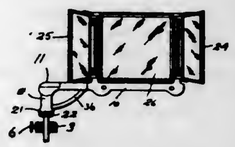
1. An accounting machine adapted for adding promiscuous positive and negative amounts and means for electrically controlling the same, said accounting machine comprising a set of accumulator elements in combination with transfer mechanism therebetween, a positively actuated member, contacts settable by the conjoint action of said accumulator elements and said positively actuated member to control said transfer mechanism for borrowing operations and means for causing a movement of the accumulator elements in a direction reverse to that employed for additive transfers whereby said contacts effect borrowing operations.

1,902,036. SPRING. ERIC G. LINDHE, Hastings upon Hudson, N. Y. Filed Feb. 8, 1932. Serial No. 591,653. 10 Claims. (Cl. 267—2.)



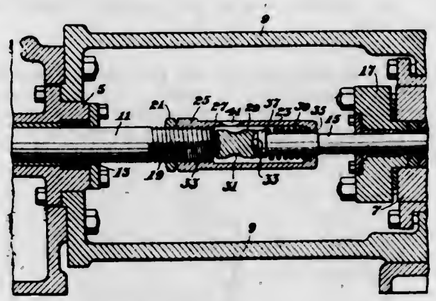
1. A vehicle spring device which comprises a spring leaf element, and a plurality of spaced compression plates supported on said element in a direction substantially at right angles thereto, and resilient material disposed between said compression plates, said plates and said material extending substantially throughout the major portion of the length of said spring leaf element.

1,902,037. SELF OPENING AND CLOSING THREE-WAY MIRROR. EDMUND J. LOEFFLER, Glendale, Calif. Filed July 20, 1932. Serial No. 623,511. 5 Claims. (Cl. 45—99.)



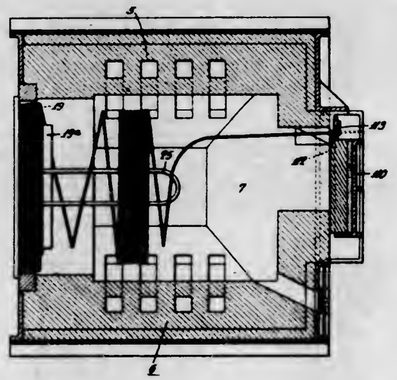
2. In a device of the class described, in combination with a plurality of framed mirror plates comprising separate reflecting surfaces, a movably disposed hollow bracket comprising a support for a mirror bracket frame, gear means mounted in said hollow bracket, two of said plurality of framed mirror plates in engagement with said movably disposed bracket and adapted to be compactly foldable and extensible over the reflecting surface of the third of said plurality of framed mirror plates, said mirror bracket frame comprising a means for securing a third mirror plate, bearing means in engagement with said mirror bracket frame, shaft means engaging said bearings, said shaft means extending within said hollow bracket, bevel gears on said shaft means, said bevel gears meshing with said gear means mounted in said hollow bracket, means within said hollow bracket for rotating said last mentioned gear means upon manually swinging said hollow bracket, the rotating in one direction of said last mentioned gear means simultaneously rotating said bevel gears meshing therewith and said shaft means engaging the same, whereby said framed mirror plates in engagement with said mirror bracket frame are automatically brought in open relation to expose said third mirror plate to view, the manual swinging of said hollow bracket in opposite direction from the former, automatically closing said framed mirror plates in foldable relation and extensible against said third mirror plate so as to hide same from view.

1,902,038. CONNECTER. RAYMOND C. MCALLISTER, Painted Post, N. Y., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 6, 1932. Serial No. 609,753. 6 Claims. (Cl. 287—86.)



4. A connecter comprising a casing adapted to be attached to a driving member and having a bore therethrough, a driven member extending into the bore, convex ends on the driving member and the driven member, an intermediate member having concave sockets in engagement with the convex ends of the driving and driven members, and means to hold the driven member against axial movement with respect to the casing.

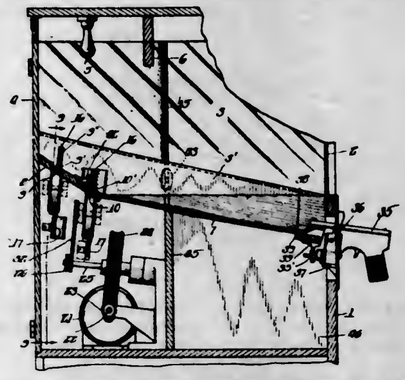
1,902,039. METAL HEATING METHOD AND APPARATUS. JOHN JOSEPH MCLAUGHLIN, North Tonawanda, N. Y. Filed May 9, 1932. Serial No. 610,058. 2 Claims. (Cl. 263—3.)



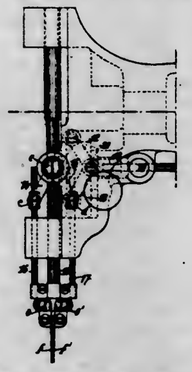
1. In apparatus for heating continuous lengths of rod-like metal for forging and the like, a reverberatory furnace and an uncooled support therein, arranged for sliding the rod-like material along the same in small area contact therewith, the uncooled support being of metal having a softening point higher than the intended temperature of a heating medium in the furnace and approximating the higher forging temperatures for the rod-like metal.

1,902,040. AMUSEMENT MACHINE. JOHN F. MEYER, Chicago, Ill. Filed Mar. 23, 1929. Serial No. 349,355. 12 Claims. (Cl. 273—101.)

1. The combination of a cabinet having a pistol range therein, a pistol mounted in the cabinet at the front of said range, an inclined support at the rear end of said range and having a groove trackway therein, an endless carrier neatly fitted in and traveling through said trackway and held against movement other than in the direction of its travel, means moving said carrier through said trackway, and targets pivotally mounted on said carrier.



1,902,041. SEWING MACHINE. FELIX MOREL, Fayettas, Par Razac-sur-l'Isle, France, assignor to Anciens Etablissements R. Cornely & Cie (Societe Anonyme), Paris, France. Filed July 20, 1926, Serial No. 123,759, and in France Mar. 23, 1926. 10 Claims. (Cl. 112—81.)

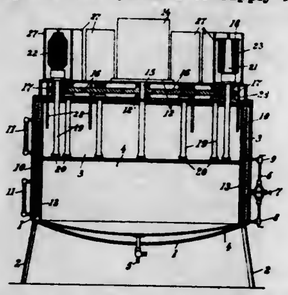


1. In a sewing machine of the type described having a main operating shaft and an operating cam driven thereby, the combination of a pivoted lever reciprocated by said cam, a second pivoted lever parallelly disposed to said first mentioned lever, a link pivotally connecting the free ends of said levers, means for changing one of the pivot points of said link, a pair of needle oscillating rods and a toggle mechanism operatively connected to said second lever slidingly engaging said needle oscillating rods.

1,902,042. MACHINE FOR DYEING, BLEACHING, AND THE LIKE OF LOOSE YARNS OR BOBBINS. JOHANN JAKOB MÜLLER, Basel, Switzerland, assignor to Dr. F. G. Schumacher, Basel, Switzerland, and Hans Keyser, Aarau, Switzerland. Filed July 26, 1929, Serial No. 381,106, and in Switzerland June 12, 1929. 4 Claims. (Cl. 8—19.)

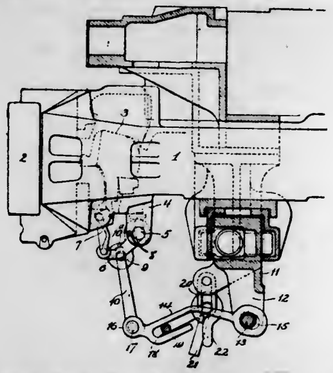
1. A machine for dyeing, bleaching and the like of loose yarns or bobbins, comprising upper and lower vessels, the lower for heating the dyebath and the upper for washing and drying a double cover plate on said upper vessel, rotatable tubes extending from said upper vessel to above said cover plate the projecting portions of said tubes designed to hold bobbins or perforated drums with loose material, driving means for rotating said tubes,

means connecting said lower vessel to said upper vessel, a collecting glass cylinder for each bobbin or drum, said tubes opening into the cylinders to supply liquid to the



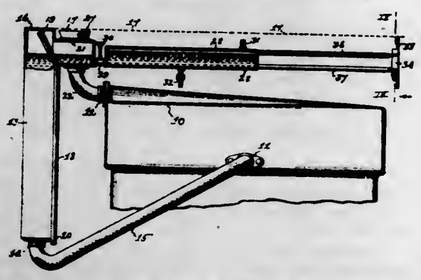
bobbins or drums, and a discharge pipe leading from each glass cylinder to said upper vessel for returning the dye bath or washing liquid to the upper vessel.

1,902,043. CAR COUPLING. GEORGE M. MURPHY, Columbus, Ohio, assignor to The Buckeye Steel Castings Company, Columbus, Ohio. Filed Apr. 5, 1928. Serial No. 267,611. 6 Claims. (Cl. 213—166.)



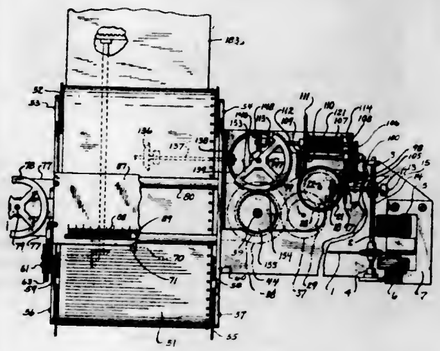
1. The combination with a coupler head, a lock within the head, a rotor provided with a lever arm mounted on the underside of the head, said rotor being pivoted rearwardly of said lock, and connected with the lock to release the same for uncoupling, of a lever mounted below and rearwardly of the rotor, a link between said lever and the lever arm on the rotor, means for swinging the lever upwardly, said lever having an elongated eye fulcrumed so that it may rock laterally on its fulcrum and provided with a slot for engaging the last mentioned means.

1,902,044. AUTOMOBILE RADIATOR. ERNESTO JOSÉ POMMER, Moron, Argentina. Filed Sept. 19, 1932. Serial No. 633,930. 7 Claims. (Cl. 123—174.)



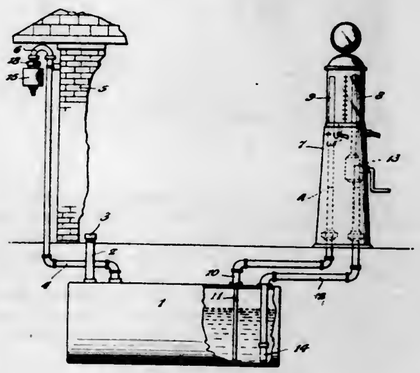
1. The combination with a motor vehicle engine, a radiator with a closed top and a lateral hollow extension below the top of and communicating with said radiator and projecting towards and communication with the cooling jacket of said engine and provided with a filling opening on its upper side below the hood, a reserve tank on the same level with said lateral hollow extension and having communication therewith, and means to cut off said communication between said hollow extension and reserve tank.

1,902,045. MAXIMUM AND TOTAL DEMAND METER. RICCARD PUDELKO, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Joint Stock Company of Switzerland. Filed Aug. 24, 1927. Serial No. 215,096. 11 Claims. (Cl. 284—5.5.)



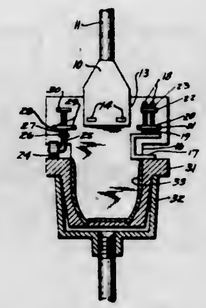
2. An energy metering and recording mechanism including in combination a meter, a recording device positionable proportionately to the energy consumption during a predetermined time interval, a power device, means whereby the power device impels the recording device, connections whereby the meter controls said positioning of the recording device throughout a predetermined time period proportionally to the energy consumed, and means whereby the power device causes the recording device to make a record showing the consumed energy.

1,902,046. DISPENSING APPARATUS. EWELL A. RAINES, Tulsa, Okla. Filed July 2, 1931. Serial No. 548,421. 4 Claims. (Cl. 221—100.)



1. In a dispensing apparatus, a dispensing column, a storage tank, suction and return lines extending from the storage tank into the dispensing column and having their lower ends disposed adjacent the bottom of the tank, and a vent tube rising from the storage tank and provided with a pressure-controlled relief valve.

1,902,047. MOLDING TOOL FOR MOLDING MACHINES. HENRY SCHANTZ, New Castle, Pa. Filed July 28, 1932, Serial No. 625,482, and in Germany Oct. 7, 1931. 4 Claims. (Cl. 25—24.)

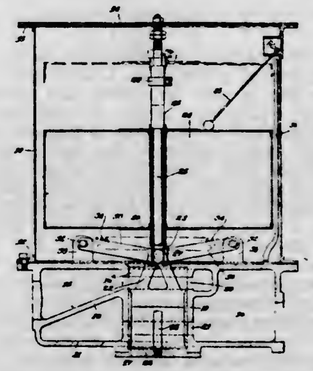


1. In a molding machine the combination of a mold and a shaping tool therein, the mold and tool being relatively rotatable, a trimming blade carried by the tool and spring pressed against the rim of the mold, and means at the opposite side of the tool to balance the spring pressure of the knife.

1,902,048. MATRIX MATERIAL FOR PRODUCTION OF PRINTING PLATES. SHERMAN OSWALD THOMAS, Washington, D. C., assignor to The American Dairy Supply Company, Augusta, Me., a Corporation of Maine. Filed June 18, 1928. Serial No. 286,498. 4 Claims. (Cl. 106—1.6.)

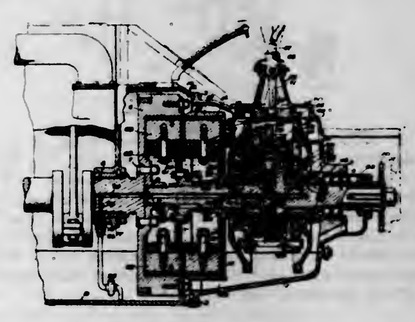
4. As a new article of manufacture, a matrix for receiving impressions and suited for use in casting stereotype plates, comprising a plate or sheet bearing upon one face a closely adhering layer or coating consisting of rubber, finely powdered mineral and carbon black, brought to a tenacious wax-like consistency by mixing with agents which respectively act to facilitate the smooth and even mixing of the solid ingredients and as a solvent for the rubber.

1,902,049. LIQUID METER. ROBERT ARTHUR TRUE, Peterborough, England. Filed May 28, 1932, Serial No. 614,244, and in Great Britain Apr. 21, 1931. 12 Claims. (Cl. 73—28.)



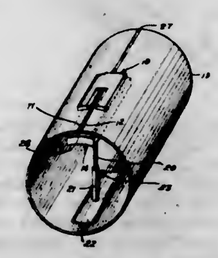
1. A liquid meter of the type set forth comprising a measuring chamber, a float therein adapted to rise and fall with the level of liquid in the chamber, said chamber having inlet and outlet ports, a single sleeve valve controlling said ports and snap action means for actuating the valve to open and close said ports, said valve and snap action means being operatively connected to the float.

1,902,050. LUBRICATING MEANS FOR AUTOMATIC TRANSMISSION MECHANISM. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Sept. 6, 1924, Serial No. 736,829, now Patent No. 1,744,182, dated Jan. 21, 1930. Divided and this application filed Dec. 11, 1929. Serial No. 413,374. 6 Claims. (Cl. 184—6.)



1. A device of the class described comprising, in combination with an engine having a power shaft and a flywheel therefor, a driven shaft provided with an axial oil duct having radial branches, said duct being in communication with the pressure oil system of the engine in the plane of said flywheel, an oil baffle carried by the rear end of said driven shaft and means including centrifugally actuated clutch sectors for transferring power from said flywheel to said driven shaft, said branches leading to the bearings associated with said means.

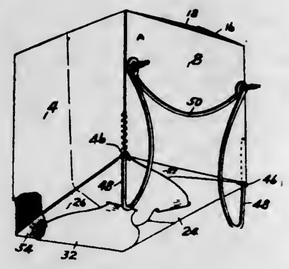
1,902,051. HEAT RETAINING MEANS FOR AUTOGENOUS WELDING AND METHOD OF WELDING. MATTHEW J. WALL, Jersey City, N. J., assignor to The Linde Air Products Company, a Corporation of Ohio. Filed June 20, 1929. Serial No. 372,501. 11 Claims. (Cl. 113—111.)



1. Heat retaining means for autogenous welding comprising a hood provided with a recess adapted for partially surrounding a weld during the formation thereof, and a groove adapted for covering the newly formed portion of said weld.

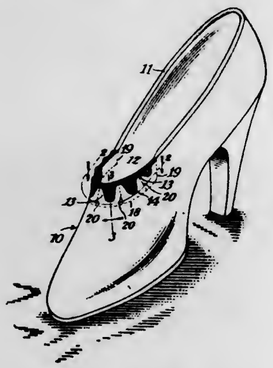
10. Process of welding contiguous metal edges which comprises progressively applying welding heat to said edges while confining the heat so applied to a narrow zone adjacent the welding point; and progressively enclosing the freshly welded portions while applying thereto heat which is conveyed to the enclosed portions from adjacent the welding point.

1,902,052. DISPENSER. HOWARD A. WOLF, Philadelphia, Pa., assignor to Wolf Brothers, Philadelphia, Pa., a Copartnership consisting of Benjamin Wolf, Louis Wolf, Albert Wolf, Howard A. Wolf, and Elias Wolf. Filed Dec. 5, 1929. Serial No. 411,723. 4 Claims. (Cl. 206—57.)



1. A container for paper cups consisting of a box formed from a blank of sheet material, said box having a downwardly and forwardly sloping bottom and upright front, back and side walls, a plurality of interengaging flaps joined to the side walls and partially closing the bottom of the box, and a third flap carried by the front wall and defined therefrom by a line of perforations, and extending rearwardly and engaging one of the aforementioned flaps.

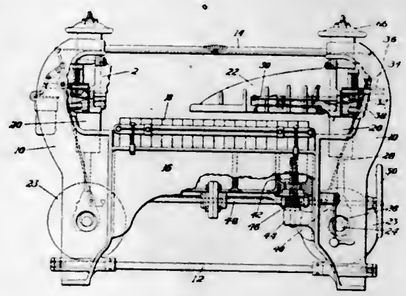
1,902,053. SHOE. SAMUEL ZIDE, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,220. 4 Claims. (Cl. 36—45.)



1. A high heel pump having its throat portion provided with free tongues and intervening spaces, a resilient device disposed between the said tongues and the lining of said pump and secured in place by stitching extending along the ends and one side of said resilient device and upwardly along the center of each of said tongues to the ends thereof, for engaging the instep of the wearer yieldingly.

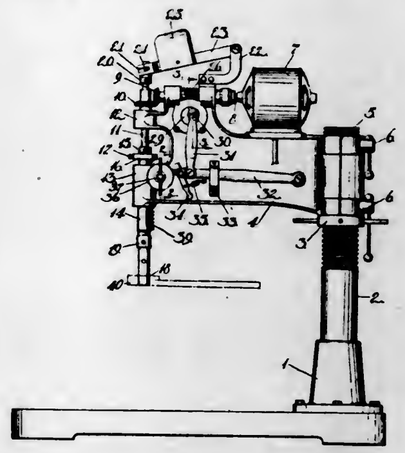
1,902,054. PRESS. MILTON H. BALLARD and DONALD G. MCLEAN, Beverly, Mass., assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 6, 1929. Serial No. 376,463. 9 Claims. (Cl. 164—23.)

9. A clicking machine comprising a post, a presser member secured to the post, a cutting block, means for producing movements of the member toward and away from the cutting block comprising a sleeve secured to the upper portion of the post and having a spherical seating surface, a connecting rod extending through said sleeve and having a spherical portion bearing upon said seating surface, the connecting rod having a spherical recess formed in the end thereof, a hemispherical member



positioned in the recess, and a cap secured to the end of the post and having a pin extending therethrough for engaging the hemispherical member to secure the post to the connecting rod.

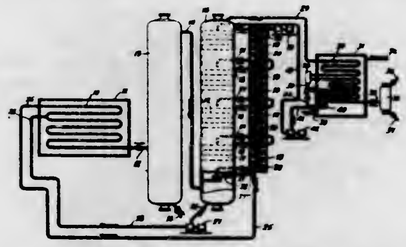
1,902,055. DRILLING MACHINE. ERNST A. BESTE, Kohler, Wis. Filed July 11, 1931. Serial No. 550,239. 6 Claims. (Cl. 125—30.)



2. In a drill wherein an abrasive is the cutting medium, the combination of a standard, a drill frame, a split sleeve connected to said drill frame and concentric to said standard, tightening screws in said split sleeve member whereby said member may be clamped upon said standard and thereby maintain any desired lateral adjustment of the drill frame, a nut screw threaded on said standard and adapted to support and provide vertical adjustment for said split sleeve member and said drill frame, a drill shaft mounted on said drill frame, means for causing the rotation of said drill shaft including a motor mounted on said frame, means actuated by said rotating means for causing reciprocation of said drill shaft simultaneously with the rotation thereof, a weight operatively connected with said drill shaft whereby to create pressure of the drill on the work, a stop collar adjustably mounted on said drill shaft whereby to limit the downward movement of said drill, a drill guide, a concave surface in said drill guide adapted to hold a supply of abrasive in juxtaposition to said drill, and means for positioning said drill guide upon the ware to be drilled.

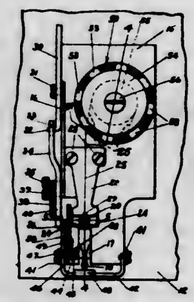
CARNEGIE LIBRARY OF ATLANTA

1,902,056. TREATING HYDROCARBON OILS. OTTO BEHIMER, Chicago, Ill., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 10, 1928. Serial No. 253,261. 4 Claims. (Cl. 196—140.)



1. Apparatus for treating hydrocarbon oil comprising in combination means for raising hydrocarbon oil to a cracking temperature, means for separating vapors from the resulting cracked products, a fractionating tower for treating said vapors, said tower having in the upper portion thereof a plurality of bubble trays and in the lower portion thereof a plurality of baffle plates, means for introducing said vapors into the lower portion of said tower below the level of said baffle plates, means for removing a desired light distillate from said tower, means for withdrawing a reflux condensate from said tower, cooling said condensate and returning it to a point just above said baffle plates, and means for recycling reflux condensate from the bottom of said tower through said means first mentioned.

1,902,057. WIRE STYLUS AND METHOD AND MEANS OF FEEDING SAME. FRANK L. CAPPS, Milford, Conn., assignor to Columbia Phonograph Company, Inc., Bridgeport, Conn., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,824. 16 Claims. (Cl. 274—45.)



3. In a sound reproducing machine, the combination of a pick-up, a stylus formed of fine wire, a stylus bar for supporting said stylus, means for feeding said stylus forwardly, and means preventing operation of said feeding means when the stylus projects a predetermined distance beyond the stylus bar.

1,902,058. DOUGHNUT MACHINE AND THE LIKE. CHARLES E. CARPENTER, Chicago, Ill. Filed Feb. 13, 1931, Serial No. 515,545. Renewed June 30, 1932. 2 Claims. (Cl. 107—14.)

1. In a device of the class described, the combination with a hopper having a downwardly extending cylindrical throat together with a plunger and a valve reciprocatingly working within said throat, and an upwardly extending sleeve having its lower end connected to the plunger and an upwardly extending rod reaching through said sleeve and having its lower end connected to the valve, of means for vertically reciprocating said sleeve and rod in timed relationship and for adjusting the timing of the movement of said parts, said means comprising a gear journaled for rotation about a horizontal axis, a bracket journaled for swinging adjustment con-

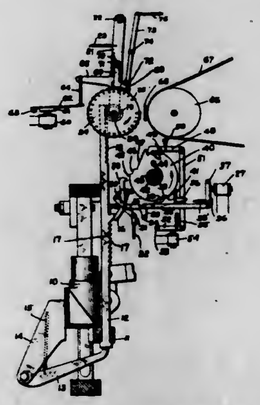


centric with said gear, a gear journaled on said bracket and meshing with the first mentioned gear, both of said gears being of the same size, means for swinging said bracket into adjusted position, means for locking said bracket in said adjusted position, and operative connections between said gears and the sleeve and the rod respectively, substantially as described.

1,902,059. PRODUCTION OF ALLOY SURFACE CASTINGS. JAMES H. CRITCHETT, Douglaston, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Mar. 30, 1931. Serial No. 526,551. 4 Claims. (Cl. 22—189.)

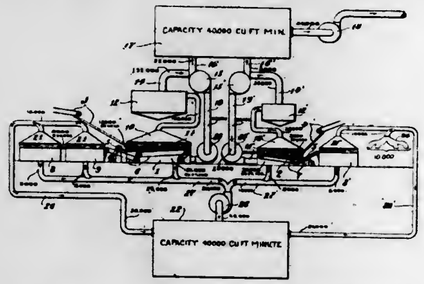
2. A coating for molds adapted to form a chromium-containing alloy surface on a ferrous alloy base metal cast in the mold, which comprises a ferrochromium powder containing carbon, but not more than 2.72% carbon.

1,902,060. PRINTING MECHANISM. PETER DECHÊNE, Berlin, Germany, assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Nov. 27, 1929, Serial No. 410,127, and in Germany Dec. 18, 1928. 19 Claims. (Cl. 101—93.)



1. A printing mechanism having a type carrier, a plurality of type divided into groups on said carrier and means for selecting the individual type in the groups by repeated operations of a single operating member during a single printing operation of said printing mechanism.

1,902,061. PNEUMATIC CLEANING AIR TREATMENT. MORTON I. DORFAN, Hagerstown, Md., assignor to Pangborn Corporation, Hagerstown, Md., a Corporation of Maryland. Filed Dec. 4, 1929. Serial No. 411,430. 6 Claims. (Cl. 209—502.)



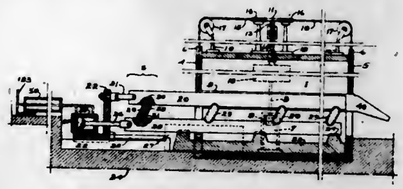
1. The method of treating air in connection with cleaning coal and other materials by air flotation which consists in passing air through the material to be cleaned, the material being fed along a table for this purpose, separating a portion of the dust from the air by passing it through a settling chamber, skimming the entire volume of air from the table and thereby separating it into two volumes, one containing most of the suspended matter and the moisture, the other volume which is the larger one, being relatively pure, returning the pure air to the table where it is again passed through the material, filtering the dust laden volume of air and releasing it to the atmosphere withdrawing from other sources within the cleaning plant a quantity of air corresponding to that released, filtering it by a filtering operation separate from that first mentioned and delivering it to the table to be passed through the material to be cleaned together with the skimmed air.

1,902,062. EXPANSION REAMER. WILLIAM H. EVANS, Chicago, Ill., assignor to Evans Flexible Reamer Corporation, Chicago, Ill., a Corporation of Illinois. Filed Nov. 29, 1929. Serial No. 410,299. 5 Claims. (Cl. 77—75.5.)



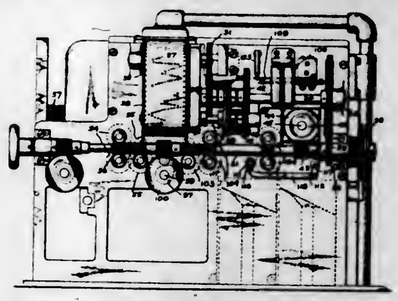
1. A reamer of the character described including a mandrel with a pair of supporting surfaces inclined to the axis of the mandrel in a radial plane and at an angle to the axis in a chordal plane, a pair of segments with spiral cutting teeth, bottom surfaces corresponding to said supporting surfaces, and bevelled ends, retaining collars, one at each end of the segments adapted to fit over the bevelled ends of the segments, a spring bearing against one collar, and an adjusting nut bearing against the other collar, the adjusting nut being so disposed with respect to the segments and their supporting surfaces that tightening thereof expands the segments and moves them bodily sidewise away from the direction of movement of the reamer when cutting.

1,902,063. FURNACE OPERATING MECHANISM. JOHN P. FERRIS, Whitefish Bay, Wis., DONALD CLUTE, Detroit, Mich., and ERNST WIEDMANN, Milwaukee, Wis., assignors to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 10, 1930. Serial No. 487,698. 20 Claims. (Cl. 263—6.)



1. A conveyor, comprising a reciprocable carriage, an elevator connected to said carriage to be reciprocated therewith, a hydraulic motor for advancing and retracting said carriage, a hydraulic motor for raising and lowering said elevator, means for supplying driving liquid to said motors, and means for gradually increasing and decreasing the rate of delivery of liquid to said motors to thereby gradually accelerate and decelerate the movements of said carriage and said elevator.

1,902,064. PERFORATING MACHINE. EUGENE A. FORD, Scarsdale, N. Y., assignor to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Filed Jan. 25, 1929. Serial No. 334,882. 25 Claims. (Cl. 164—114.)

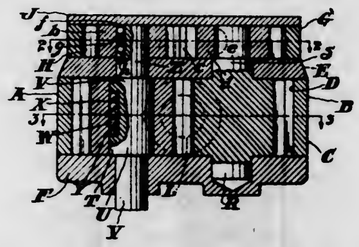


1. A machine for punching record cards in accordance with a perforated pattern record, a punching mechanism having punching pins and coordinated selectors shiftable to engage and hold said pins for a punching operation, pneumatic controlled means for shifting said selectors, said pneumatic controlled means being under the control of said perforated pattern record and means comprising a bar for locking said selectors preliminarily to a punching operation.

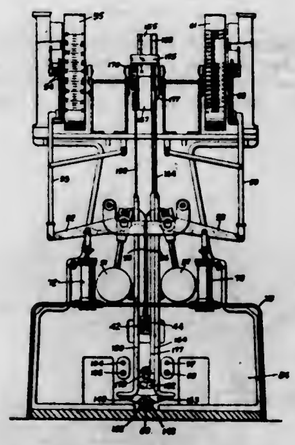
1,902,065. PUMP. FRITJOF FRELIN, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 18, 1931. Serial No. 523,439. 1 Claim. (Cl. 103—126.)

A pump comprising a casing having a pump chamber and a gear chamber, a pair of intermeshing pump gears in the pump chamber, an extension on one pump gear and extending into the gear chamber, a reversible drive shaft in the chambers and extending loosely through one pump gear, a gear train in the gear chamber comprising a gear

mounted loosely upon the drive shaft and another gear keyed to the extension, an idler gear intermeshing with the gears in the gear chamber to transmit the movement of one gear to another, and a pair of automatically acting clutch devices in the drive shaft, one of said clutch devices being adapted to connect the drive shaft to one gear upon rotation of the drive shaft in one direction and the other clutch device being adapted to connect the drive shaft to the other gear upon rotation of the drive shaft in another direction.



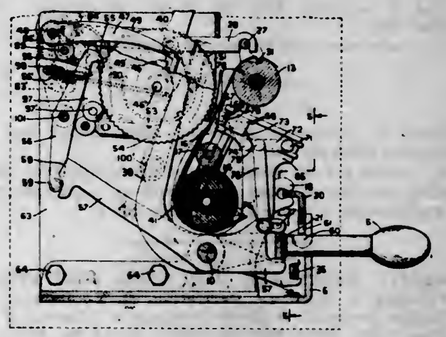
1,902,066. COMPUTING SCALE. FREDERICK L. FULLER, West Orange, N. J., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Mar. 5, 1930. Serial No. 433,440. 29 Claims. (Cl. 265—33.)



1. A scale comprising a beam, a load support connected thereto, load offsetting means, connecting devices for connecting said beam and said load offsetting means, rockable means for individually engaging and operating said devices to vary the connection of the beam to the load offsetting means, keys for determining the operation of said rockable means, and means for mechanically actuating said rockable means under control of the keys after operation of the latter, and while the latter are still in operated positions.

1,902,067. TIME RECORDER. FREDERICK L. FULLER, West Orange, N. J., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Apr. 8, 1929. Serial No. 353,643. 2 Claims. (Cl. 234—43.)

1. In a time recording apparatus, a time controlled printing device, a carrier for a continuous time sheet and shifting means operable only in one direction to shift said time sheet to subsequent printing positions in linear direction, said shifting means comprising a handle actuating a star wheel which cooperates with a pivoted linkage to oscillate the same for shifting the time sheet, and which linkage in turn cooperates with the star wheel to prevent

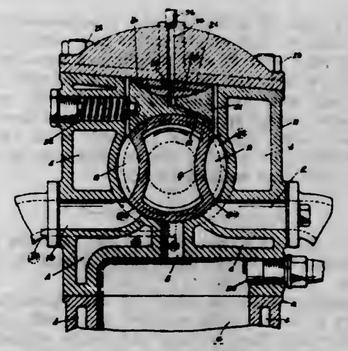


retrograde movement of said wheel, and means for separately adjusting said time sheet carrier in transverse direction into different printing positions relatively to said printing device.

1,902,068. HIGHLY ACTIVE CARBON AND PROCESS OF PREPARING IT. WILHELM THEODOR GEIS, Knapsack near Cologne-on-the-Rhine, Germany, assignor to Aktiengesellschaft für Stickstoffdünger, Cologne-on-the-Rhine, Germany, a Corporation. Filed Nov. 20, 1928, Serial No. 320,749, and in Germany Nov. 26, 1927. 3 Claims. (Cl. 252—3.)

2. The process of preparing highly active carbon which comprises the step of separating the ashes, particularly the flue ashes from lignite (brown coal) into several fractions of different grain sizes by sifting the residues by means of sieves and the further step of purifying in known manner each of the fractions so obtained.

1,902,069. VALVE CONSTRUCTION. HARVEY H. HALLER, Los Angeles, Calif., assignor to The Wehr Motor Company, Los Angeles, Calif., a Corporation of California. Filed July 19, 1930. Serial No. 469,178. 7 Claims. (Cl. 123—190.)



1. In a rotary valve, a compensating device comprising a movable spring-pressed shoe, having concaved upper and lower portions, said lower portion being adapted to engage the periphery of said valve, and a plano-convex backing member having a curved lower portion adapted to engage the upper concaved portion of said shoe, whereby said valve will be held in continual engagement with its seat, irrespective of temperature and wear conditions in said valve and its seat.

1,902,070. ALKOXYALDEHYDE AND PRODUCTION OF SAME. PAUL HALBIG and FELIX KAUFLER, Munich, Germany, assignors to Dr. Alexander Wacker Gesellschaft fur Elektrochemische Industrie, Munich, Germany, a Corporation. Filed June 26, 1930, Serial No. 464,114, and in Germany July 27, 1929. 18 Claims. (Cl. 260—138.)

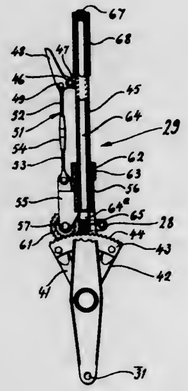
1. A new compound having the formula:

$$R_1 \cdot CH(OR) \cdot CH_2 \cdot CHO$$

wherein R_1 represents H or an alkyl radical and R represents alkyl radical.

6. Process for the production of alkoxyaldehydes comprising treating an alkoxyacetal with an acid hydrolyst in the presence of water at about 20—25° C.

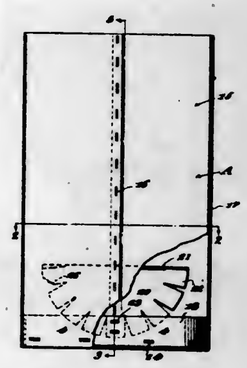
1,902,071. STABILIZER ADJUSTING MECHANISM. CHARLES E. HATHORN, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, a Corporation of New York. Filed May 31, 1930. Serial No. 458,035. 7 Claims. (Cl. 244—29.)



7. In an airplane in combination, a horizontal stabilizer for said airplane, a lever pivoted on said airplane, means connecting said lever to said stabilizer, a fixed gear member positioned adjacent to said lever, a movable gear secured to said lever and adapted to mesh with said fixed gear, a worm wheel secured to the movable gear, and a worm maintained constantly in mesh with the worm wheel regardless of whether the movable gear is in mesh with the fixed gear member or not.

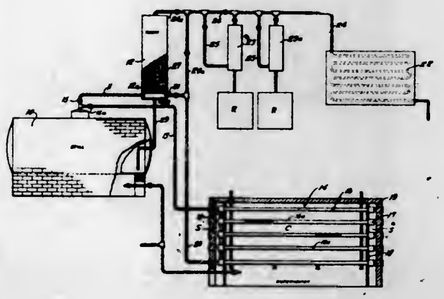
1,902,072. ICE CREAM CONTAINER. HORACE H. HARROD, Morris, Ill. Filed Feb. 6, 1931. Serial No. 514,038. 1 Claim. (Cl. 229—41.)

A collapsible food container of the cylindrical type comprising a tubular body provided at opposite diametric points with score lines defining side walls collapsible one upon the other, said side walls being provided with equadistantly spaced longitudinally extending score lines, whereby the said side walls will be rendered flexible, inturned bottom flanges formed on one end of the body, a disc shaped bottom wall foldable on a diametric line arranged within the body, foldable tabs formed on the periphery of the bottom wall, certain of the tabs at opposite diametric points being received at all times between the side walls and the flange, means permanently securing said last mentioned tabs in position, said other tabs being received between the side walls and the flange upon spreading the side walls to an open position, a false bottom of disc shape detachably fitted on the bottom wall, and a



removable cover for the upper end of the container and having means maintaining the cylindrical form of the container.

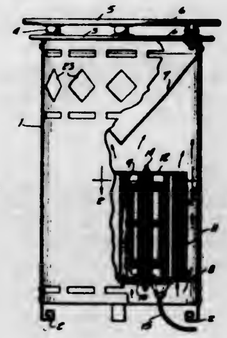
1,902,073. METHOD OF TREATING RESINS. DANIEL W. HOGE, Los Angeles, Calif., assignor to Carlos W. Newbery, Los Angeles, Calif. Filed Dec. 19, 1928, Serial No. 327,013. Renewed Aug. 26, 1932. 5 Claims. (Cl. 202—5.)



1. A method for distilling crude rosin that includes heating and vaporizing crude rosin in a vaporizing zone, subjecting the vapors to cracking in a cracking zone at a temperature between 700° F. and 1100° F., and fractionating the cracked vapors to produce liquid fractions thereof.

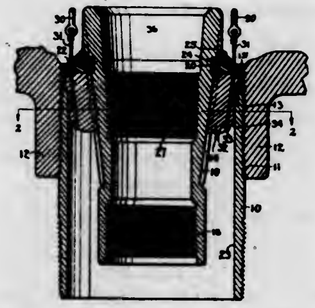
1,902,074. ELECTRIC HOUSE HEATER. EMIL F. HOLINGER, New York, N. Y., assignor to Hudson Electrical Heating Corporation, New York, N. Y., a Corporation of New York. Filed May 27, 1930. Serial No. 456,033. 8 Claims. (Cl. 219—34.)

1. An electric heater comprising a resistor unit and a surrounding casing therefor comprising a substantially continuous loop of corrugated sheathing, the corrugations of which are arranged vertically to form air passages open



at the top and bottom combined with baffle plates located at the top and bottom of said sheathing but not extending beyond the inner apices of the corrugations therein.

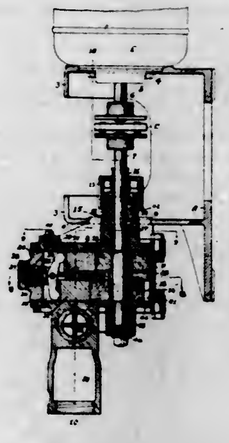
1,902,075. TUBING HANGER. JAMES H. HOWARD, Houston, Tex., assignor to J. H. McEvoy & Company, Houston, Tex., a Corporation. Filed Apr. 10, 1931. Serial No. 529,025. 9 Claims. (Cl. 166—14.)



1. In combination with a tubing head assembly a hanger body, slips on said body, a well casing, means to move said slips to extended position to seat on said casing, said means to move said slips to extended position being releasable from said slips by a direct upward pull upon said means.

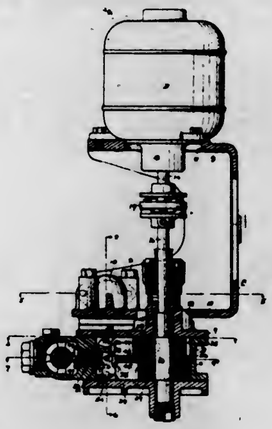
1,902,076. PUMPING APPARATUS. JOSEPH F. JAWOROWSKI, Cleveland, Ohio, assignor of one-third to Samuel E. Dettelbach and one-third to Sam W. Emerson, Cleveland, Ohio. Filed May 14, 1929. Serial No. 363,027. 2 Claims. (Cl. 102—128.)

2. In a rotary pump unit as described, a pump body having a round piston chamber and a smaller chamber connected by a slot, and a removable partition for said round piston chamber and slot comprising a flat round plate



having a circular notch within one edge of a flat bar fitting into said slot having a round head confined within said notch.

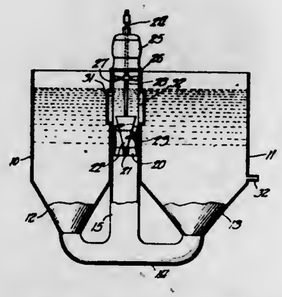
1,902,077. PUMPING APPARATUS. JOSEPH F. JAWOROWSKI, Cleveland, Ohio, assignor of five-eighteenths to Samuel E. Dettelbach, five-eighteenths to Sam Emerson, and two-eighteenths to Edgar Hahn, Cleveland, Ohio. Filed May 1, 1930. Serial No. 448,835. 3 Claims. (Cl. 103—118.)



3. A pump unit comprising an open supporting frame having laterally extending recessed and perforated shelves inverted with respect to each other, a motor mounted at one end of said frame upon one of said shelves having a shaft extending into said frame between said shelves, a rotary pump suspended from the other shelf at the opposite end of said frame and including a cover member

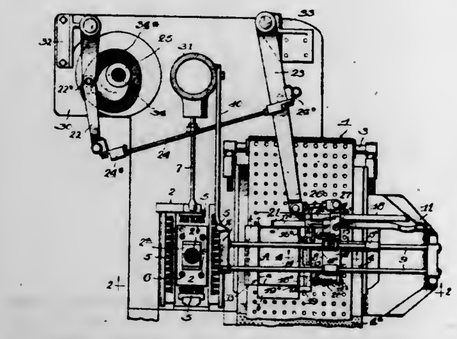
provided with a series of radially arranged re-enforcing ribs having shouldered extensions, passing through said other shelf and seating with their shouldered portions against said other shelf for spacing said cover member from said other shelf and forming a series of drain openings between said other shelf and cover member and centering said pump with respect to said other shelf, said rotary pump having a shaft extending into said frame in axial alignment with the shaft of said motor and a coupling connecting said shafts within said open frame.

1,902,078. MIXING DEVICE OR SEWAGE TREATMENT PLANT. HARRY NEVILLE JENKS, San Jose, Calif. Filed Oct. 21, 1929. Serial No. 401,075. 1 Claim. (Cl. 210—8.)



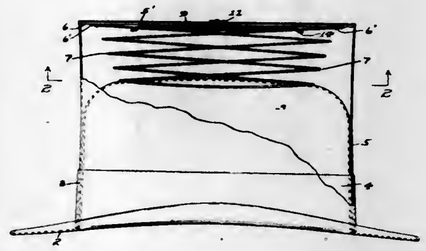
A sewage treatment device comprising a plurality of tanks of cylindrical form with each succeeding tank being relatively larger than the preceding tank, the lower ends of said tanks being conical in form, a conduit forming the connections between the lower ends of said tanks, and vertically extending conduits connected to said first named conduits, and positioned between the adjacent tanks, said vertically extending conduit communicating with the upper ends of the adjacent tanks, and a pump positioned in said vertical conduit for withdrawing the liquid from the bottom of the adjacent tanks and discharging it substantially tangential in the adjacent tanks for seting up a liquid vortex motion in each of said tanks.

1,902,079. BOX WRAPPING MACHINE. ARTHUR E. JOHNSON, Oak Park, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 513,984. 6 Claims. (Cl. 93—54.)



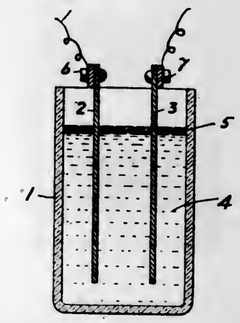
1. In a box wrapping machine, the combination of feeding means upon which the boxes and cover sheets are assembled, sheet applying mechanism adjacent said feeding means including a plunger, a box transfer member movable between said feeding means and the path of said plunger, and means for driving said transfer member comprising a lever arm connected at its free end with said transfer member, another arm parallel with said first lever arm, a connecting rod between said lever arms and driving means for imparting a predetermined oscillatory movement to said last mentioned lever arm.

1,902,080. COMBINATION HAT. HENRY F. JORDAN, Lansdale, Pa. Filed May 2, 1931. Serial No. 534,597. 7 Claims. (Cl. 2—185.)



1. The combination of a hat formed of relative stiff material and tubular body of flexible material substantially elliptical in cross section, closed at one end and fitted over the crown of the hat, stiffening means disposed within the body adjacent its closed end and yielding means carried by and operative to urge said stiffening means axially away from said crown when the body is operatively disposed thereon.

1,902,081. COUNTER-ELECTRO-MOTIVE-FORCE-CELLS. WILLIAM E. KERSHAW, Gwynedd Valley, and JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Feb. 15, 1927. Serial No. 168,311. 6 Claims. (Cl. 175—315.)



1. A counter-electromotive force cell adapted for use with direct current having an electrode of metallic nickel devoid of active material and an electrolyte consisting of a solution of the hydroxide of an alkali metal.

1,902,082. TUBE PROTECTOR. PHILIP KILIMNIK, Middle Village, N. Y. Filed Jan. 10, 1930. Serial No. 419,951. 1 Claim. (Cl. 152—18.)

In a motor vehicle tire protector, a fabric member having a circumferential pleat therein to correspond with the center line of the tire and a plurality of pockets secured to said fabric member on opposite sides thereof, the

adjacent pockets to said central pleat formed to extend under the said pleat and each pocket overlying an adjacent pocket away from the said central line of the tire to such an extent that strips of material in the pleat and pockets will extend under the strips of material in the preceding pleat and pockets and will extend substantially

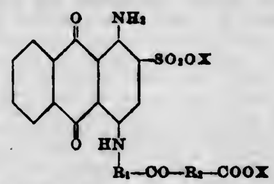


to the centers of said strips, and strips of substantially impenetrable material in said pleat and pockets, said protector adapted to be positioned in a motor vehicle tire between the inner tube and inner surface of the casing providing a continuous protecting element for said inner tube

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1,902,083. CONDENSATION PRODUCTS OF THE ANTHRAQUINONE SERIES. GEORG KRAENZLEIN and ERNST DIEFFENBACH, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1931, Serial No. 520,705, and in Germany Mar. 13, 1930. 4 Claims. (Cl. 260—60.)

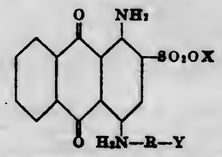
4. As new products, the compounds of the general formula:



wherein the X's stand for hydrogen or alkali metal atoms and R_1 and R_2 represent radicals of the benzene series, the NH-group in the radical R_1 standing in meta-position and the —COOX-group in the radical R_2 in ortho-position to the CO-group, said products forming crystalline powders which dissolve in water to a blue solution and dye wool and silk blue tints of good fastness properties.

1,902,084. ACID DYESTUFFS OF THE ANTHRAQUINONE SERIES. GEORG KRAENZLEIN and ERNST DIEFFENBACH, Frankfort-on-the-Main-Hochst, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 6, 1931, Serial No. 520,706, and in Germany Apr. 4, 1930. 5 Claims. (Cl. 260—60.)

5. As new products, the compounds of the general formula:



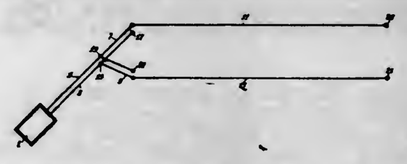
wherein X stands for hydrogen or an alkali metal atom, R for a radical of the benzene series and Y for an esterified carboxylic acid group or for a radical of the benzene series containing an esterified carboxylic acid group, forming crystalline water-soluble powders and dyeing wool clear tints of good to very good fastness to fulling and to sea water.

1,902,085. CIRCUIT CLOSING DEVICE. FRED L. LAM, Binghamton, N. Y., and BURDETT H. PHILLIPS, Montclair, N. J., assignors to The Tabulating Machine Company, Endicott, N. Y., a Corporation of New Jersey. Original application filed June 3, 1925, Serial No. 34,516. Divided and this application filed Nov. 13, 1929. Serial No. 406,826. 2 Claims. (Cl. 200—46.)



1. In a circuit closing device including a support for a perforated card, a plurality of contacts carried by said support for reading perforations in the card, and a conductor bridging all the contacts and adapted to be engaged by any contact extending through a perforation in the card, a carrier for the conductor movable to separate the conductor from the contacts, and a flat plate-like guide extending from said carrier to hold the card flat when the conductor is in effective position and movable with the carrier to permit insertion or removal of a pattern card when the conductor is in ineffective position.

1,902,086. MEANS FOR ENERGIZING ANTENNAE. NILS E. LINDENBLAD, Port Jefferson, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 22, 1929. Serial No. 365,024. 6 Claims. (Cl. 250—33.)



1. In combination, a pair of radiators, a pair of diverging feeders for supplying energy thereto, and leads run from each feeder close to and parallel to the other feeder.

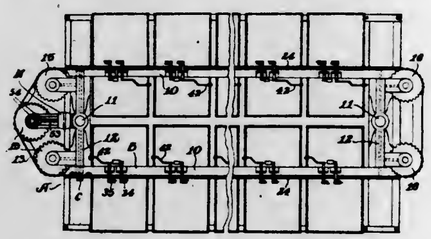
1,902,087. PROCESS OF REPRODUCING SURFACE INLAYS ON PANELS OF COMPOSITE FIBROUS MATERIALS. EMIL C. LOETSCHER, Dubuque, Iowa. Filed Feb. 20, 1930. Serial No. 429,982. 5 Claims. (Cl. 41—35.)



1. The process of producing inlay designs in the surface of a composite material consisting of providing a base of a compressible material, applying a surface covering of

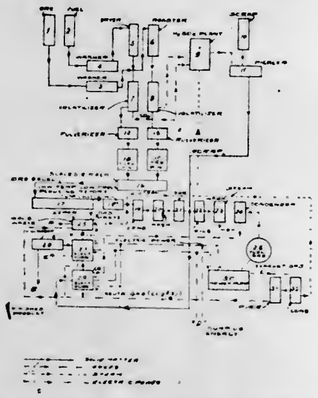
thin fibrous material impregnated with a resinous substance to the surface of the base, laying strips of fibrous material upon the covering material in the outline of the inlay and compressing the material whereby the same is reduced to a uniform density and thickness with the inlay strips flush with the surface thereof.

1,902,088. LAUNDRY SORTING MACHINE. EDWARD C. MAURER, St. Paul, Minn. Filed Aug. 9, 1929. Serial No. 384,626. 9 Claims. (Cl. 209—80.)



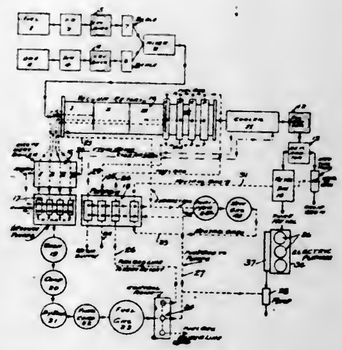
1. A package sorting machine comprising. an overhead track, carriages adapted to be operated on said track, means for moving said carriages, tripping lever means arranged in pairs, receptacles beneath said tripping means and track, deflector means in each of said receptacles, a package key adapted to support a package to be carried by each of said carriages, and means for automatically tripping the package off of said carriage and simultaneously operating the deflector of the receptacle to cause packages to be discharged into either end of the receptacles.

1,902,089. PROCESS OF MINERAL REDUCTION AND METAL EXTRACTION. ALFRED MUSSO, East Orange, N. J., assignor of one-half to William P. Deppe, New York, N. Y. Filed July 25, 1927. Serial No. 208,103. 10 Claims. (Cl. 75—14.)



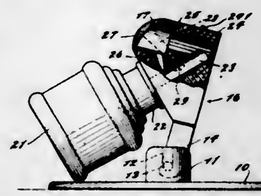
1. A low temperature ore reduction process for producing substantially pure metal, and separating the same in finely divided condition from the gangue before melting, which includes externally heating, in finely divided intermixed condition in a closed retort, a coal and an ore of the group including the oxides, hydroxides, and carbonates of iron, at a temperature approximately between 700° C. as a minimum for coking coals and 950° C. as a maximum for noncoking coals, to avoid fusion, sintering, and agglomeration in the charge, while excluding air from the retort and simultaneously continuously forcibly removing by pump means during the reduction in said retort all gases produced therein, to the degree that substantially no carbon dioxide is obtained, whereby the reduction is caused to be accomplished substantially entirely by the nascent amorphous carbon of the coal, developed in the retort.

1,902,090. PROCESS OF LOW TEMPERATURE REDUCED PRESSURE OR PARTIAL VACUUM REDUCTION OF METALS. ALFRED MUSSO, East Orange, N. J., assignor of one-half to William P. Deppe, New York, N. Y. Filed Dec. 18, 1928. Serial No. 325,713. 8 Claims. (Cl. 75—14.)



1. A process of reducing with coal an ore of the group including the oxides, hydroxides, and carbonates of iron, to produce a substantially pure iron that can be mechanically separated from a non fused gangue, including externally heating the charge in successive closed chambers, in finely intermixed condition, in the absence of air, according to an increasing temperature gradient whose highest point is not in excess of 950° C., and simultaneously forcibly exhausting throughout the charge the gases generated, at pressures below atmospheric, according to a decreasing pressure gradient in said chambers, to cause the reduction to occur substantially entirely by means of the nascent amorphous carbon of the coal, through carbonization of the latter in the reducing chambers to produce said carbon.

1,902,091. INKSTAND. OSCAR F. NILSSON and JOSEPH BACHRACH, New York, N. Y., assignors to L. E. Waterman Company, New York, N. Y., a Corporation of New York. Filed Aug. 12, 1929. Serial No. 385,233. 10 Claims. (Cl. 120—59.)

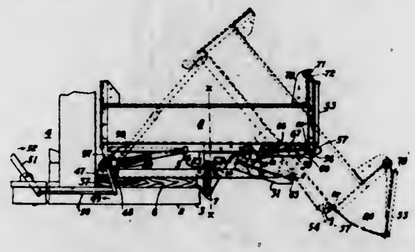


1. In combination, a receptacle adapted to contain a comparatively large quantity of fluid, a well adapted to contain a compsratively small quantity of fluid and communicating with the said receptacle, means connecting said receptacle and well, a base, a pivot on the base supporting the connected receptacle and well for movement between two positions, in one of which the receptacle will empty into the well and in the other of which the well will empty into the receptacle, and means to support the receptacle and well in each of said positions.

1,902,092. PRODUCTION OF CASTINGS WITH COATINGS COMPOSED OF HIGH-CHROMIUM ALLOYS. STANLEY M. NORWOOD, Flushing, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Mar. 10, 1931. Serial No. 521,609. 4 Claims. (Cl. 22—189.)

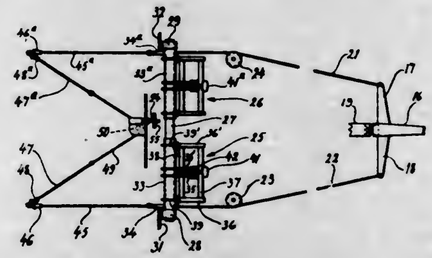
1. A coating for molds adapted to form a chromium-containing alloy surface on a ferrous alloy base metal cast in the mold, which comprises a ferrochromium powder containing about 1% to 6% carbon and about 3% to 7% silicon.

1,902,093. DUMPING BODY. GEORGE E. OGILVIE, Westmoreland, Pa., assignor to Hockensmith Wheel & Mine Car Company, a Corporation of Pennsylvania. Filed Dec. 2, 1929. Serial No. 410,975. 3 Claims. (Cl. 298—12.)



1. In a self unloading vehicle, in combination, a chassis, a body, and swinging link mechanism for supporting said body medially of its ends on the chassis, of a track disposed between said link mechanism and the rear end of said body, and a wheel on said body disposed to roll on said track, said link mechanism causing the body to swing and tilt as the body rolls down the track on said wheel.

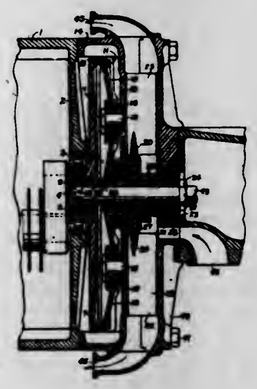
1,902,094. RUDDER PEDAL ADJUSTING MECHANISM. GEORGE A. PAGE, Jr., Freeport, N. Y., assignor, by mesne assignments, to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed May 12, 1930. Serial No. 451,548. 8 Claims. (Cl. 244—29.)



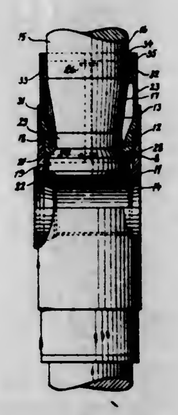
1. In an aerial vehicle, a rudder, a rudder pedal for controlling said rudder, a sleeve bearing upon which said rudder pedal is pivotally mounted, an offset arm also secured to said sleeve bearing, a shaft upon which said sleeve bearing is mounted, connections extending between said offset arm and said rudder, and a screw adjustably secured to said offset arm and also secured to said pedal.

1,902,095. BLOWER AND DRIVING GEAR FOR ENGINES. BEN G. PARSONS, Houston, Tex. Filed Jan. 6, 1930. Serial No. 418,724. 2 Claims. (Cl. 230—116.)

1. A device for feeding fuel vapor to internal combustion engines including a blower fan and driving gear therefor, said driving gear comprising an internal gear driven by the crank shaft of the engine, pinion gears meshing with said internal gear, a hub for said fan meshing with said pinions, said pinions being adapted to rotate within the plane of said internal gear, a pair of flanges keyed to said hub and adapted to frictionally engage said blower fan.



1,902,096. PROPELLER. FRED A. A. PEARSON, Valley Stream, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Jan. 8, 1931. Serial No. 506,392. 12 Claims. (Cl. 170—160.)

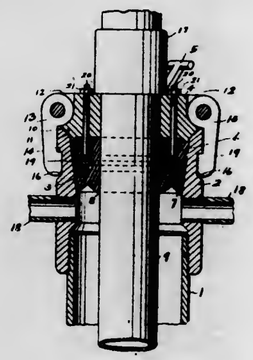


1. In an aeronautical propeller, a hub having a socket, a blade having an inner end adapted to be inserted within said socket, a split sleeve secured to said hub and adapted to bear upon said blade for securing it within said socket and having an outward extension, a cone ring surrounding said blade and inserted within said extension, and means for drawing said cone ring longitudinally of said blade for wedging said blade within said extension.

1,902,097. BLOW-OUT PREVENTER. ARTHUR J. PENICK and KIRBY T. PENICK, Houston, Tex. Filed Dec. 14, 1931. Serial No. 580,846. 8 Claims. (Cl. 285—22.)

1. In combination a tubular head having a slip bowl, a slip therein formed with a top wear ring and a packer

attached to and depending from said ring and having annular lower end lips spaced apart, one of said lips fitting closely against the bowl and the other lip being adapted



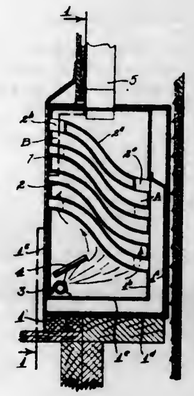
to fit closely about the inner pipe through the bowl and adjustable means for clamping the packing against the wear ring to expand the packing.

1,902,098. DRILL. WALTER C. REA, New York, N. Y., assignor to Detachable Bit Corporation of America, New York, N. Y., a Corporation of Delaware. Filed June 24, 1930. Serial No. 463,391. 1 Claim. (Cl. 255—64.)



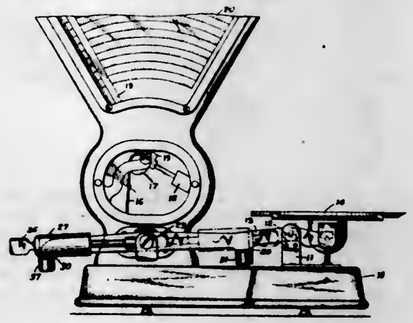
A drill bit including in axial alignment an upper portion constituting a threaded shank, and a body portion, said body portion having a front, a back and sides, the upper portion of the sides forming part of a frusto-conical surface, increasing in diameter from the lower extremity of the threaded shank towards the lower portion and the lower portion of the sides forming part of the surface of a cylinder, the front and back being of similar configuration and each including an upper flat surface converging downwardly and a lower flat surface with the lower flat surfaces at front and back intersecting each other to form aligned apex cutting edges of the bit, and the flat surfaces on both the back and front meeting at an angle and coacting to form thereon aligned cutting edges on the front and back each extending parallel to the apex cutting edges, the front and back being recessed in spaced relation to the side portions to form a web of less thickness than said portions and not intersecting the plane determined by said flat surfaces and said web terminating in spaced relation to the line of the apex cutting edges.

1,902,099. HEATER. WILLIAM E. RENO, Glendale, Calif. Filed Apr. 15, 1930. Serial No. 444,428. 14 Claims. (Cl. 126—90.)



1. In a heater of the class described, a casing having a plurality of separate superimposed air conducting flues extending from the back to the front side of the casing, said flues being flat laterally and curved and directed upwardly from the back to the front side of the casing, and a burner below the lowermost flue, said casing having vertical passages at the lateral ends of the flues for connecting the spaces below alternate flues to the next upper spaces forming a zigzag passage for gases of combustion between and around the ends of the flues.

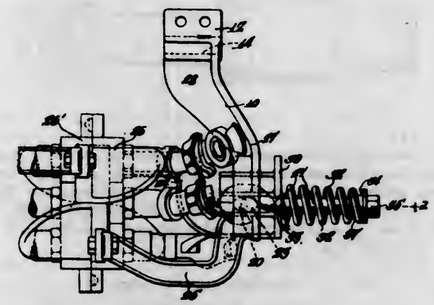
1,902,100. WEIGHING SCALE. ERNEST ALBERT REUSSENZEHN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Apr. 8, 1931. Serial No. 528,543. 9 Claims. (Cl. 265—60.)



1. In a scale, a load support, a lever operated thereby, automatic counterbalancing means, an upright housing therefor, a projection extending into the housing from one side of the lever for connection to the automatic counterbalancing means, a bracket extending transversely to and from the opposite side of said lever, and a weight

pivotally connected to said bracket and adapted to swing in a generally vertical plane past the housing from one side of the bracket to the other.

1,902,101. BRACKET FOR CONNECTER HEADS. EDWARD ARTHUR ROBINSON, Montreal, Quebec, Canada, assignor to Joseph Robinson, New York, N. Y. Filed May 31, 1930, Serial No. 457,943. Renewed Aug. 10, 1932. 9 Claims. (Cl. 285—58.)



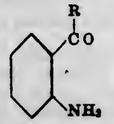
1. A bracket, laterally spaced downward extensions thereon, inwardly directed horizontal pivot projections from the extensions relatively alined and adapted to give pivot support to a train pipe connecter arranged between said extensions of the bracket, a rearwardly extending tie bolt from each extension pivotally connected therewith and spring means rearwardly supported by the rear end of the tie bolts for pressing the connecter resiliently forwardly.

1,902,102. MANUFACTURE OF VISCOSE. OTTO SCHMID, Rottweil-on-the-Neckar, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Nov. 27, 1929, Serial No. 410,262, and in Germany Dec. 3, 1928. 4 Claims. (Cl. 260—100.)

1. A process for manufacturing viscose in a continuous operation which comprises sulfidizing with carbon disulfide a mixture of cellulose with an alkali metal hydroxide solution, said mixture containing at most 25 per cent of cellulose and said alkali metal hydroxide solution having a concentration of at least 12 per cent until a concentrated viscose solution is formed, and diluting said viscose solution with water, all these different operations being carried out at ordinary temperature.

1,902,103. MANUFACTURE OF QUINOLINE DERIVATIVES AND THE PRODUCTS. FRITZ SCHONHOFER, Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 12, 1928, Serial No. 325,662, and in Germany Dec. 17, 1927. 11 Claims. (Cl. 260—88.)

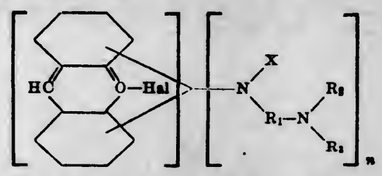
1. Process which comprises reacting upon a compound of the general formula:



in which R stands for hydrogen or alkyl and the nucleus of which may be substituted by monovalent substituents of the group consisting of alkyl, alkoxy and halogen, with such a ketone as contains at least one of the groups $-CH_2$ and $-CH_2-$ linked to the carbonyl group, and at least one substituted or unsubstituted amino group linked to an aliphatic chain.

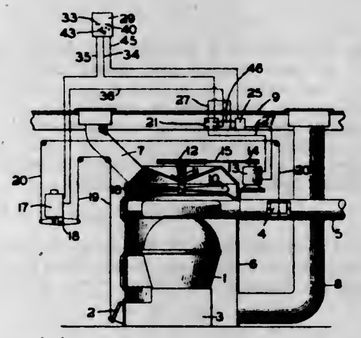
1,902,104. COMPOUNDS OF THE XANTHENE SERIES. WERNER SCHULEMANN, Vohwinkel, near Elberfeld, FRITZ MIETZSCH, Elberfeld, Germany, and AUGUST WINGLER, Westfield, N. J., assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 15, 1929, Serial No. 407,559, and in Germany Sept. 11, 1924. 6 Claims. (Cl. 260—62.)

1. As new products, the xanthene compounds of the probable general formula:



wherein X stands for a substituent of the group consisting of hydrogen, alkyl, aminoalkyl and alkylaminoalkyl, R_1 stands for an alkylene residue which may be substituted by hydroxyl groups, R_2 and R_3 stand for alkyl groups which may be substituted by the amino group, and, "n" stands for one of the numbers one and two, and wherein the nuclei may be further substituted, by substituents of the group consisting of alkyl, alkoxy, phenyl, carboxyphenyl and halogen, said compounds being generally water soluble bronze colored substances, the free bases being generally yellow to red colored, generally sparingly soluble in water, but soluble in organic solvents.

1,902,105. THERMOSTATIC CONTROL. CHARLES M. SELBY, Holland, Mich., assignor to Holland Furnace Company, Holland, Mich., a Corporation of Michigan. Filed Dec. 8, 1930. Serial No. 500,772. 7 Claims. (Cl. 236—11.)



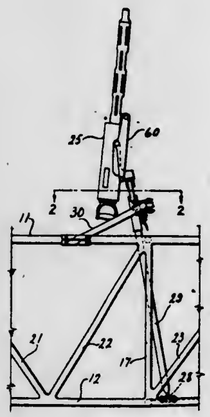
1. In combination, an air conditioning device, means for producing a forced circulation of air therethrough, and temperature responsive means for controlling the actuation of said circulation producing means, said temperature responsive means including mechanism acting to cause actuation of said circulation producing means at temperature within a normal range and to cause inaction thereof at temperatures both above and below the said normal temperature range.

1,902,106. METHOD OF MANUFACTURING PAPER PULP. ALFRED M. THOMSEN, San Francisco, Calif. Filed Dec. 11, 1928. Serial No. 325,898. 2 Claims. (Cl. 92—9.)

1. In the process of manufacturing paper pulp, the method of liberating the fibre by cooking with a liquor containing sodium sulphide as the sole active agent, and separating the fibre from the spent cooking liquor, evaporating said liquor to a syrupy consistency, incinerating

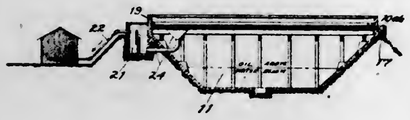
it in a reducing atmosphere, dissolving the ashes in water, separating sodium carbonate formed during incinerating by fractional crystallization, and using the resultant mother liquor for making up fresh cooking liquor.

1,902,107. MACHINE GUN MOUNT FOR AIRCRAFT. CLEM G. TRIMBACH, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Mar. 27, 1930. Serial No. 439,299. 5 Claims. (Cl. 89—40.)



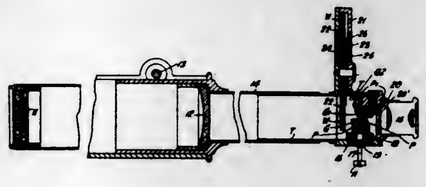
1. In a mount for a machine gun for an airplane, a support for said machine gun, means for guiding said support, and means for attaching the machine gun to the said support comprising an adapter for said machine gun equipped with resiliently spreading jaws, a tubular element spaced from said support and into which the said jaws are adapted to be inserted, and braces securing said tubular member to the said support.

1,902,108. COVER FOR OIL STORAGE TANKS. RALPH S. TWOGOOD, San Francisco, Calif. Filed Apr. 15, 1930. Serial No. 444,426. 3 Claims. (Cl. 220—26.)



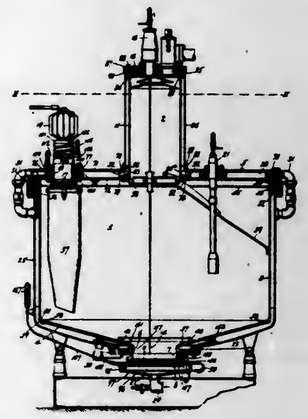
1. A cover for an oil storage reservoir comprising in combination a plurality of pan units connected together to form a unitary water holding structure, means for maintaining a level of water in said units, a passage between said units for the discharge of gas, and a head of water for floating said water containing and gas discharging cover on the surface of the oil in said container.

1,902,109. METHOD OF AND APPARATUS FOR QUANTITATIVE SPECTRUM ANALYSIS. FRANK TWYMAN, London, England, assignor to Adam Hilger, Limited, London, England. Filed Jan. 20, 1930, Serial No. 422,161, and in Great Britain June 11, 1929. 10 Claims. (Cl. 88—14.)



1. The method of quantitative spectrum analysis which comprises bringing spectrum parts side by side, relatively shifting said parts to bring pre-determined lines into juxtaposition and equalizing the intensities of the said lines by a graduated reduction of the intensity of the brighter line.

1,902,110. VAPOR DISCHARGE DEVICE. MORITZ UBICH, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed July 31, 1929, Serial No. 382,451. Renewed Jan. 24, 1933. 14 Claims. (Cl. 250—27.5.)



1. An evacuated space-discharge device comprising a metallic rectifying vessel having a plurality of detachable sections hermetically joined one to the other, seals of liquid at the junctions of said sections, at least one of said sections having a hollow welded joint on its interior wall.

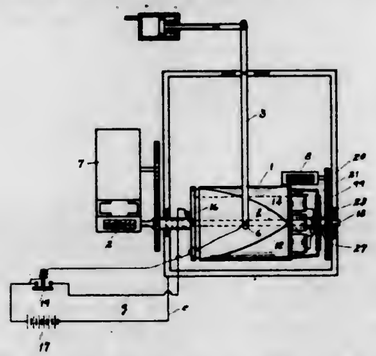
1,902,111. METAL JOINT AND METHOD OF FORMING THE SAME. STANLEY IRVING VAUGHN, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed Sept. 27, 1929. Serial No. 395,539. 9 Claims. (Cl. 113—116.)

1. In metallic structure, a pair of plates each having one edge adjacent to an edge of the other and having the adjacent edges bent back substantially parallel with the main body of the plates, a strip comprising a dome portion, a pair of retroverted portions overlying and contacting with the adjacent edges of the plates, flanges extending from the retroverted portions and folded back under the bent back portion of the plates, and an additional fold for each of the flanges positioned between the main body of its associated plate and the bent back portion thereof.



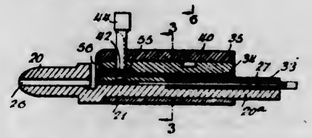
9. The method of joining metallic plates which comprises bending the edges of said plates, forming a connecting strip having a body portion and flanges, placing the bent edges of the plates adjacent to each other, inserting the flanges of the strip between the adjacent bent edges of the plates, folding the end portions of the flanges around the bent edges of the plates so that they lie flat against the edges of the plates, folding the first folds in their entirety back against the plates, and folding the last mentioned folds in their entirety at an angle to the plates to lie within the body portion of the strip.

1,902,112. MEASURING APPARATUS. ARCHER E. YOUNG, Pittsburgh, Pa. Filed Dec. 12, 1931. Serial No. 580,580. 8 Claims. (Cl. 235—61.)



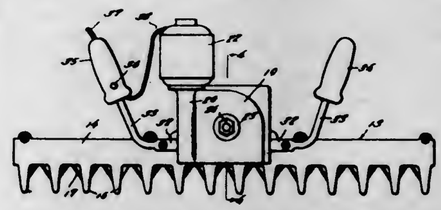
1. In apparatus for aggregating the value of a variable during a prolonged interval of time, a moving member, a tally, means for uniting intermittently the moving member and the tally, electrically operated means controlling such uniting means, such last-named means including a contact-piece movable in response to the value of the variable and in a direction transverse to the direction in which the said member moves, and two contact strips borne by said moving member and with which said contact-piece makes successive contacts as the moving member moves, the two said strips extending divergently one from the other and oppositely divergent with respect to the line of direction of the contact-piece.

1,902,113. BRUSH MAKING MACHINE. ANTON ZAHORANSKY, Todtnau, Germany. Filed Mar. 12, 1931, Serial No. 521,917, and in Germany Mar. 12, 1930. 7 Claims. (Cl. 300—8.)



1. A setting device for brush making machines comprising in combination, a frame, means at least partly surrounded by a part of said frame for driving wire loops into a brush body, separate means for cutting off and bending pieces of wire, said cutting and bending means being at least partly surrounded by a different part of said frame, and means for conveying said wire loops to said driving means, said conveying means being guided by said frame.

1,902,114. FOLIAGE TRIMMER. EMMETT M. BRANBLOSSOM, Corydon, Ind. Filed Jan. 19, 1932. Serial No. 587,557. 2 Claims. (Cl. 56—25.)

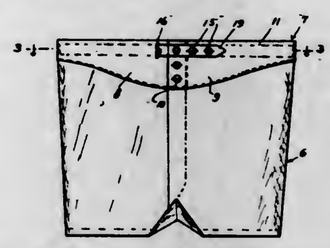


1. A device of the class described comprising an elongated toothed cutter guard, a relatively movable cooperative cutter bar associated with said guard and provided with an actuator intermediate its ends, a casing connected directly to the guard and extending rearwardly therefrom and enclosing said actuator, gearing in said casing for operating the actuator, an electric motor carried by said casing for operating the gearing and supporting handles connected with the casing.

1,902,115. RUBBER COMPOSITION AND METHOD OF PRESERVING RUBBER. ARTHUR W. CAMPBELL, Stow, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 14, 1932. Serial No. 598,886. 10 Claims. (Cl. 18—50.)

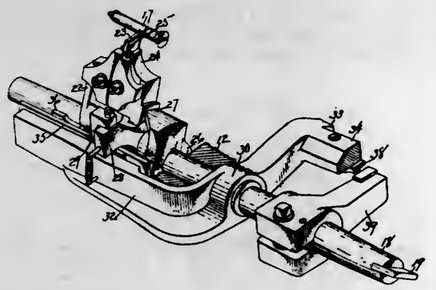
3. The method of preserving rubber which comprises treating rubber with a secondary aromatic amine containing a diarylmethyl group and an arylamino group on different rings of a biaryl nucleus.

1,902,116. WAIST BAND CONSTRUCTION. ROBERT C. CASTLEN, West Palm Beach, Fla., assignor to Palm Beach Garment Company, West Palm Beach, Fla., a Corporation of Florida. Filed May 5, 1932. Serial No. 609,517. 1 Claim. (Cl. 2—237.)



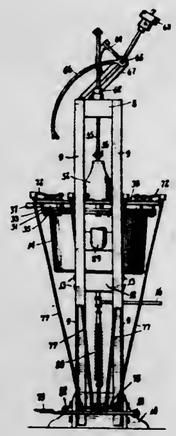
A garment of the class described having a frontal fastener equipped fly, a waistband, said waistband being in the form of a tubular hem, the outer fold of the hem at one end being formed with an outlet slot near said fly, the adjacent end of the hem having its outer fold provided with fasteners, a waistband constricting strap contained in said hem and rigidly secured at one end and having its opposite end left free and extending out through said slot and constructed to engage over the complemental fasteners, said strap being formed intermediate its ends with longitudinal slits, and fastening means passing through the inner and outer folds of the hem and said slits to permit the requisite sliding of the strap for size adjusting purposes.

1,902,117. SCREW MAKING MACHINE. REUBEN S. CROSBY, Hartford, and CHARLES W. SPONSEL, Wethersfield, Conn., assignors to The Asa S. Cook Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 19, 1927. Serial No. 241,008. 8 Claims. (Cl. 10—101.)



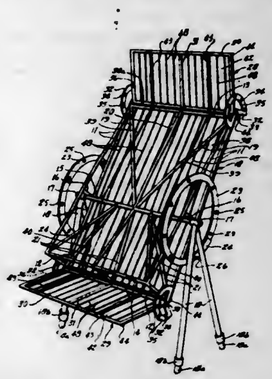
1. A screw making machine including means for holding and rotating a screw blank, a plurality of cutting tools positioned to effect simultaneous cutting action along the same groove in said blank, a tool post support, a cutting tool post fast to said support, a cutting tool post supported on but movable independently of said support, means for rocking said support to engage a tool on one of said posts with the blank, means for engaging the tool on the other post with said blank, means for securing the last named post to said support for movement of said post away from the blank by the rocking movement of the support, and means for imparting relative movement to said support and blank lengthwise of the latter.

1,902,118. MACHINE FOR TREATING HAT BODIES. GEORGE W. CUMING, New York, N. Y., assignor to M. A. Cuming & Co. Inc., a Corporation of New York. Filed Apr. 18, 1930. Serial No. 445,242. 1 Claim. (Cl. 223—31.)



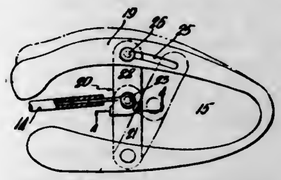
In a machine for treating hat bodies, the combination including means forming a steam chamber having a top wall with an opening therethrough, a hollow perforated hat block supported upon said top wall having its interior communicating with said steam chamber through the mentioned opening, means for admitting steam into said steam chamber and into the interior of said hat block and for exhausting the steam from said steam chamber and hat block, a forming ring arranged above the steam chamber and movable into and out of position encircling the hat block adapted for holding a hat body closely about the exterior surface of the hat block and demarking the crown and brim of the hat body and leaving the brim of the hat body extending radially across the top wall of the steam chest away from said hat block, a plurality of gripping members slidably mounted upon said top wall to slide radially thereof toward and away from the hat block adapted for gripping the brim portion of the hat body and stretching the same radially across the top wall of the steam chest away from the hat block, and operating means for said forming ring and said gripping members.

1,902,119. ORCHARD PROTECTIVE SYSTEM. JOHN DEL REA DE LAND, Pico, Calif. Filed Jan. 16, 1932. Serial No. 587,055. 10 Claims. (Cl. 47—1.)



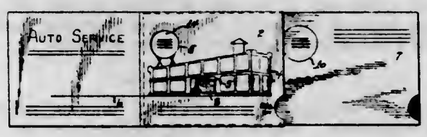
1. An orchard protective wind deflecting structure adapted to be erected at the windward side of an orchard comprising, a baffle wall having a substantially continuous wind deflecting surface extending upwardly above the orchard trees, means pivotally supporting said wall intermediate its upper and lower ends, and a vane attached to said wall and movable relative thereto.

1,902,120. SHOE FORM. WILLIAM J. DE WITT, Auburn, N. Y., assignor to Shoe Form Co., Inc., Auburn, N. Y., a Corporation of New York. Filed July 7, 1931. Serial No. 549,186. 20 Claims. (Cl. 12—128.2.)



1. A shoe form comprising a toe member and a back part wire, said toe member comprising a hollow body portion, the side walls of which terminate in ball flanges and a cross-brace connecting such flanges, said cross-brace being made in two sections, the inner ends of which are pivotally attached to each other and to the forward end of the back part wire member, and the outer ends of which are pivotally attached to the ball flanges, said sections, when in alignment, forming a toggle and certain of said attachments permitting a relative movement of the attached elements, whereby the expansion or contraction of the toe member is performed in two stages, one stage by the making or breaking of the toggle and the other stage by the relative movement.

1,902,121. ADVERTISING FOLDER. WALTER J. GALLAGHER, New York, N. Y. Filed May 5, 1932. Serial No. 609,359. 1 Claim. (Cl. 46—97.)



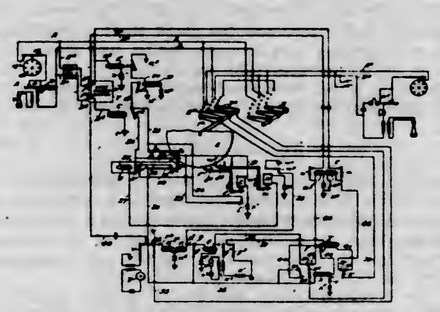
An advertising folder comprising an outer member folded to form front and rear sections, a slidable sheet disposed within the outer member between said sections and adapted to be moved outwardly, a horisontal slot and a slot extending angularly thereof and an opening formed in one of said sections, said last named section having an object printed thereon adjacent said angularly extending slot, an object representation carried by the slidable sheet and projected through said horisontal slot, a series of individual copy briefs or illustrations being printed upon the slidable sheet and in line with said opening, whereby movement of the slidable sheet carries said copy briefs or illustrations successively into view as the object representation is moved along said slot, and whereby said object representation may be projected through the angularly extending slot so as to be obscured by the section in which it is formed.

1,902,122. MACHINE FOR FORMING WATERPROOF TUBING AROUND FIREWORK FUSE MATERIAL. JOSEPH GIOIOSA, Milton, Mass. Filed Aug. 19, 1931. Serial No. 557,974. 13 Claims. (Cl. 154—1.)



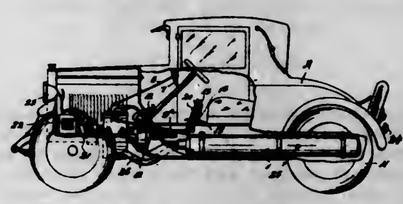
1. A machine of the character described having, in combination, means to position a plurality of strips of sheet material face to face, and means to bend said strips longitudinally thereof into tubular form, one within another.

1,902,123. CONTROL CIRCUIT FOR SWITCHES FOR AUTOMATIC TELEPHONE SYSTEMS. CHARLES L. GOODRUM, Athens, Ga., assignor of one-half to Louis G. Pacent, New York, N. Y. Filed Mar. 31, 1932. Serial No. 602,190. 15 Claims. (Cl. 179—16.)



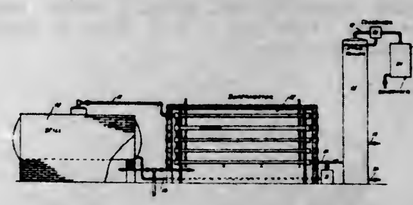
1. In combination with two telephone line conductors, a source of current therefor, an impulse transmitter having a pair of contacts through which said line is normally closed and a normally open contact connected to said source and adapted to maintain current through one conductor while the current through the other conductor is intermittently discontinued, of a main control relay in the first mentioned conductor having a normally open pair of contacts, an associate control relay in the other conductor having a pair of closed contacts, and a switch comprising a motor magnet having a circuit extending through said pairs of contacts.

1,902,124. AIR DRIVEN AUTOMOBILE. JOHN P. HALLORAN, Mayfield Heights, Ohio. Filed Jan. 12, 1932. Serial No. 586,245. 1 Claim. (Cl. 180—66.)



A driving mechanism for vehicles comprising the combination with the chassis of a vehicle, of pressure receptacles disposed in side by side relation beneath the chassis and carried thereby and adapted to contain a compressed gaseous propelling medium, a motor interconnected with the said receptacles and provided with a rotor operable under pressure of jets of the said propelling medium directed obliquely thereagainst, conduits connecting the receptacle and motor and terminating in jet forming orifices, at least one of which is inclined at an angle opposing that of the remaining orifices to permit reverse rotation of the rotor, one of the said conduits being branched to provide an arm for communicating a portion of the propelling medium when desired into the said opposing orifice, control means for each orifice, means for operating the said control means independently of each other and located on the usual instrument board of the vehicle, power transmitting instrumentalities leading from the rotor to the driving wheels of the vehicle for transmitting movement of the rotor to the said driving wheels for propelling the vehicle under influence of jets of the said gaseous propelling medium against the rotor, and a silencing tank for the exhaust from the motor.

1,902,125. MOTOR FUEL. DANIEL W. HOGE, Los Angeles, Calif., assignor to Carlos W. Newbery, Los Angeles, Calif. Continuation of application Serial No. 327,013, filed Dec. 19, 1928. This application filed July 20, 1929. Serial No. 379,810. 7 Claims. (Cl. 44—9.)

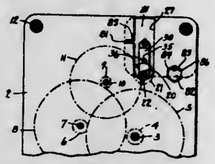


1. A non-detonating motor fuel composed of a mixture of gasoline and a liquid material comprising substantially a mixture of compounds of aromatic nature obtained by vaporizing rosin and cracking the vapors at a temperature between 600° F. and 1200° F., said liquid material having a boiling range within 100° F. to 450° F.

3. As a product, a liquid material comprising a mixture of compounds of aromatic nature obtained by vaporising

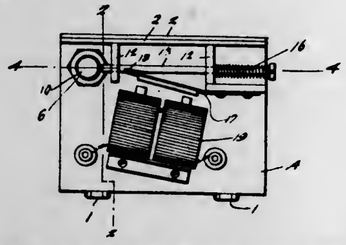
rosin at substantially atmospheric pressure, and then in a subsequent operation cracking the vapors, the compounds of the mixture having specific gravities between 0.75 to 0.95, and a boiling range within 100° F. to 450° F.

1,902,126. HOROLOGICAL MECHANISM. PAUL HUNGERBÜHLER, Oberwil, Switzerland, assignor to Landis & Gyr, A.-G., a Joint-Stock Company of Switzerland. Filed Oct. 12, 1927, Serial No. 225,735, and in Switzerland Oct. 26, 1926. 2 Claims. (Cl. 58—7.)



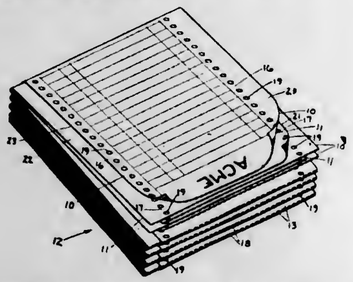
2. A clock movement having regulating mechanism and adapted to be controlled by means of a balance wheel or pendulum and including a gear train, a frame in which said gears are journaled, said frame being provided with an inwardly recessed portion to receive the regulating mechanism, means for fastening the regulating mechanism to the frame, and bearings in said frame oppositely disposed to said recess for rotatably journalling a part of one of the regulating mechanisms which may be employed as a part of the clock mechanism.

1,902,127. GAS GUN. ELWIN H. INGALLS, Aroma Park, Ill. Filed Jan. 19, 1932. Serial No. 587,590. 8 Claims. (Cl. 42—1.)



1. A device of the class described comprising a barrel containing a gas shell, a spring actuated plunger in the barrel for exploding the shell, a spring actuated trigger member for holding the plunger in inoperative position, a latch for holding the trigger member in operative position, magnetic means for moving the latch to releasing position.

1,902,128. MANIFOLDING. ARTHUR A. JOHNSON, Bridgeport, Conn. Filed Sept. 3, 1931. Serial No. 560,968. 3 Claims. (Cl. 282—12.)

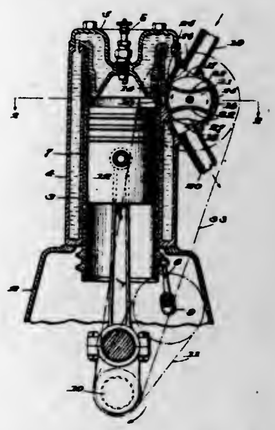


1. A pile of superposed and interleaved record and transfer strips each having at each side margin a feeding band provided with a row of pinwheel-engaging apertures, the feeding bands of the record strips at one side of the pile projecting beyond the adjacent edges of the transfer strips and the feeding bands of the transfer strips at the other side of the pile projecting beyond the adjacent edges of the record strips, the projecting feeding bands forming finger-grips for stripping purposes.

1,902,129. MEANS FOR BREAKING WATER IN OIL EMULSIONS. PHILIP KAPLAN, Brooklyn, N. Y., assignor to The Dehydro Company, Tulsa, Okla., a Corporation of Oklahoma. Filed Jan. 10, 1931. Serial No. 507,995. 3 Claims. (Cl. 252—1.)

1. A medium for treating petroleum emulsions wherein is combined sulphonated rosin oil.

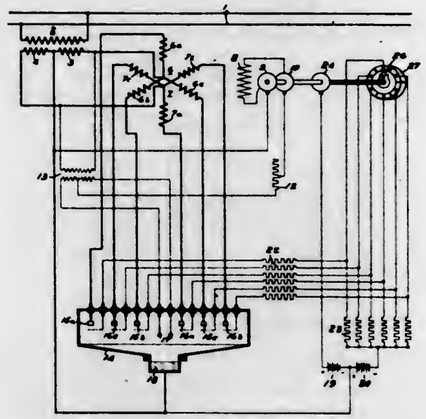
1,902,130. INTERNAL COMBUSTION ENGINE. JAMES KEISTER, Steubenville, Ohio. Filed Nov. 18, 1929. Serial No. 407,989. 11 Claims. (Cl. 123—79.)



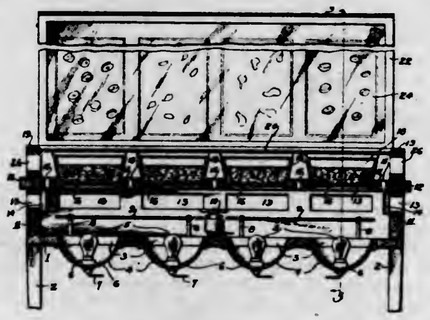
1. An internal combustion engine comprising in combination, a cylinder and a reciprocating piston therein, said cylinder having a port above the upper limit of the piston stroke for the passage therethrough of the explosive charge into and exhaust gases from the cylinder, a charge supply pipe and an exhaust pipe for said engine, a sleeve-valve in said cylinder for covering and uncovering said cylinder port and a distributer valve outside said cylinder for connecting said cylinder port alternately with said charge supply pipe and said exhaust pipe, said valves having such an arrangement and driven movement with respect to each other and the crank shaft of the engine that said cylinder port is uncovered by said sleeve valve and is connected with said charge supply pipe by said distributer valve throughout each suction stroke and into each next succeeding compression stroke of said piston.

1,902,131. DIRECT CURRENT MOTOR COMMUTATING DEVICE. ERWIN KERN, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Feb. 27, 1932, Serial No. 595,536, and in Germany Feb. 23, 1931. 6 Claims. (Cl. 171—228.)

1. In a commutating system for electric motors, a motor having a stator winding and a rotor winding, an alternating current supply line, an electric current rectifier having main anodes, excitation anodes and a cathode, the said stator winding being connected in circuit with the main anodes and with the cathode and with said line to be supplied with current from the latter, the said rotor winding being connected in circuit with the excitation anodes and with the cathode and with said line to be supplied with current from the latter, and means for sequentially causing flow of current through the anodes, the cathode and said windings from said line.



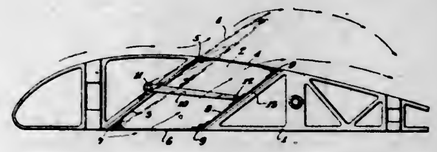
1,902,132. DISPLAY CASE. BENJAMIN A. KLAPPER, Chicago, Ill., assignor to Sprague, Warner & Company, Chicago, Ill., a Corporation. Filed Mar. 11, 1930. Serial No. 434,948. 4 Claims. (Cl. 240—6.)



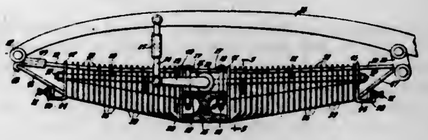
1. In a show case with a transparent top, a shelf partition spaced below the top to form an upper and a lower compartment, said shelf having an opening, a transparent container adapted to seat in the opening and be supported by the shelf, and illuminating means in the lower compartment, means for utilising part of the heat from said illuminating means to prevent condensation on the top, and for venting the bulk of the heated air consisting of air inlets in the bottom of the case, air vents in the side walls of the case below and above the partition shelf, and passages through the shelf partition smaller than said vents to provide a circulation of air into and out of the lower compartment with the diversion of a small part of said heated air into and out of the upper compartment.

1,902,133. AIRCRAFT CONTROL MEANS. THOMAS B. LAVELLE, Hempstead, N. Y. Filed Nov. 24, 1931. Serial No. 576,983. 7 Claims. (Cl. 244—29.)

1. The combination with an airplane of a supporting airfoil having a slot therethrough respectively near each opposite end thereof, and respective closure means for said slots including two plates whose surfaces lie contactingly in opposed relation in the slot closed position of the closure means, said plates being movable away from each other in the slot opening movement.

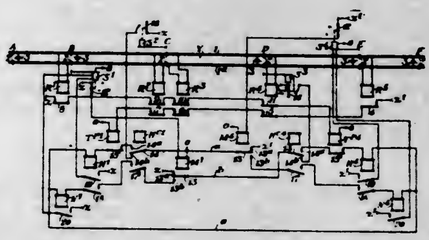


1,902,134. IMPROVED SPRING CONSTRUCTION. ERIC G. LINDHE, Hastings upon Hudson, N. Y. Filed July 26, 1932. Serial No. 624,694. 12 Claims. (Cl. 267—2.)



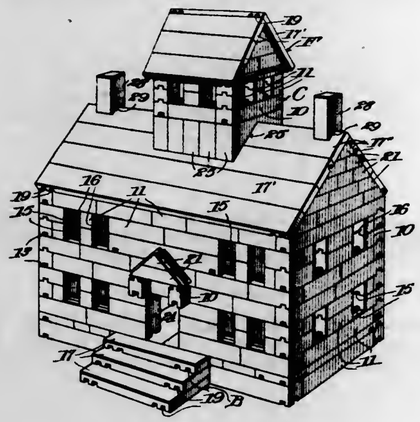
1. A vehicle spring device which comprises a spring leaf element, a plurality of spaced compression plates supported on said element, resilient material disposed between said compression plates, a frame connected to said spring element, connecting rods associated with said compression plates, a cam mechanism connected between the connecting rods and the frame and adjustable in accordance with the movement of the frame with respect to the spring element.

1,902,135. RAILWAY SIGNALING. RONALD A. MCCANN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1931, Serial No. 565,095. Renewed Aug. 24, 1932. 5 Claims. (Cl. 246—3.)



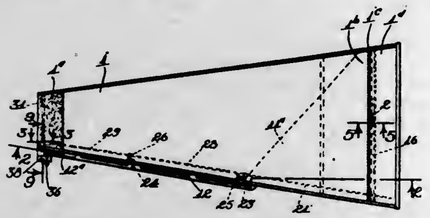
2. In combination, a first and a second signal governing traffic movements from a first and a second direction, respectively over a given stretch of railway track, a first and a second control wire and a common wire, means including said first control wire and said common wire for controlling the caution indication of said first signal and the proceed indication of said second signal, and means including said second control wire and said common wire for controlling the caution indication of said second signal and the proceed indication of said first signal.

1,902,136. TOY BUILDING BLOCK. FRED H. MILLS, Fort Edward, N. Y. Filed June 18, 1932. Serial No. 618,048. 7 Claims. (Cl. 46—35.)



1. A simulative building block having a plurality of grooves in parallel relation with each other and adjacent at least one marginal edge of the block to selectively receive a tongue of an adjacent block.

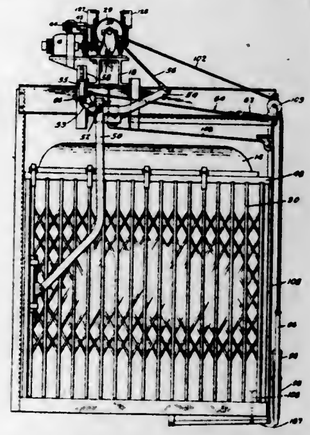
1,902,137. GAME APPARATUS. HARRY T. NAUMAN, Los Angeles, Calif. Filed Oct. 7, 1930. Serial No. 486,880. 8 Claims. (Cl. 273—128.)



1. In a game apparatus, a platform having a plurality of spaced holes at one end thereof, a registering member in association with each of the holes, a trip member in association with each of the holes and operatively connected to the registering member of the respective hole for shifting said registering member into view when a ball enters the hole, and a gate member in association with all of the trip members for retaining the balls thereon and the respective registering member in view, said gate being shiftable for releasing all of the balls for permitting the trip members and registering members to assume their normal inoperative positions.

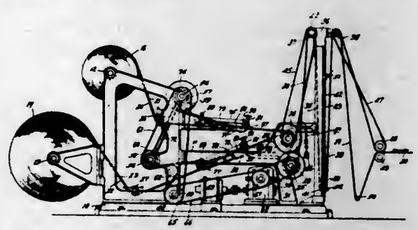
1,902,138. MECHANISM FOR OPERATING ELEVATOR DOORS. CLIFFORD NORTON, South Orange, N. J., assignor, by mesne assignments, to Otis Elevator Company, a Corporation of New Jersey. Filed Aug. 31, 1927. Serial No. 216,588. 28 Claims. (Cl. 187—52.)

1. In an apparatus for operating elevator doors, the combination of an electric motor on the car, a car door, actuating mechanism for the car door directly connected with the said motor to cause said door to be opened, a landing door, actuating mechanism therefor on the car connected to said motor and projectible across the space between the car and landing to open the landing door, an irreversible gear between said actuating mechanisms and the electric motor, means connected with the car door and other means connected with the landing door in which power is stored in the opening operation under the action of the electric motor, said stored power being restrained against closing the doors by the irreversible gear and means



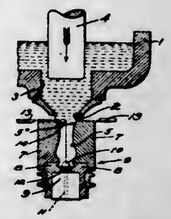
for reversing the direction of rotation of said electric motor to permit the landing door and car door to close through the reversal of the gear by the action of the motor.

1,902,139. METHOD AND APPARATUS FOR SEPARATING ADHESIVELY JOINED SHEETS. FRED BROWN PFEIFFER, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 3, 1930. Serial No. 492,918. 18 Claims. (Cl. 242—55.)



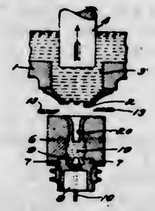
3. The method of separating adhesively joined sheets which comprises feeding the sheets forward while holding the leading end of one sheet stationary to strip it from the first sheet, and maintaining both sheets taut as the separation of the sheets progresses.

1,902,140. MANUFACTURE OF HOLLOW GLASSWARE. GEORGE E. ROWE, Wethersfield, Con., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 30, 1929, Serial No. 396,242. Renewed June 10, 1932. 12 Claims. (Cl. 49—5.)



6. The method of loading a parison mold which comprises discharging molten glass downwardly in a column until the lower end of the column contacts with and seals the upper end of the cavity of the parison mold, and then filling the cavity of the mold by forcing glass thereinto from the interior only of the column.

1,902,141. MANUFACTURE OF HOLLOW GLASSWARE. GEORGE E. ROWE, West Hartford, Con., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 30, 1929. Serial No. 396,243. 18 Claims. (Cl. 49—5.)



11. The method of loading a charge receiver having an elongate glass receiving cavity, comprising the steps of disposing said charge receiver below and in adjacent relation with the lower end of a downwardly opening outlet in the bottom of a container for molten glass, the size of the outlet and of the upper end of the cavity of the charge receiver being such with relation to each other that a column of glass from the outlet will seal the upper end of such cavity on contact with the walls thereof, forcing glass downwardly through the interior of said column into the charge receiver at a rate accelerated beyond that which would be caused by gravity and head pressure, attenuating the glass between the charge receiver and the outlet before the glass in the cavity of the charge receiver has reached the lower end of the latter by moving said charge receiver downwardly with the glass therein and simultaneously applying a retractive impulse to the glass adjacent to the outlet, and severing the attenuated glass before the lower portion of the glass in the charge receiver has completely filled the lower portion of the cavity of said charge receiver, whereby a central cavity will be produced in the upper portion of the glass in the charge receiver when the lower portion of the cavity of said charge receiver has been completely filled with glass, and applying suction to the lower portion of the glass in the cavity of the charge receiver at a time regulable with respect to the time of severance of the attenuated glass to aid in effecting complete filling of the lower end portion of the cavity of the charge receiver and in controlling the size of the central cavity in the upward portion of the glass in the charge receiver.

1,902,142. MANUFACTURE OF HOLLOW GLASSWARE. GEORGE E. ROWE, Wethersfield, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Sept. 3, 1931, Serial No. 560,901. Renewed Jan. 24, 1933. 10 Claims. (Cl. 49—80.)



10. In the manufacture of hollow glassware, the method of charging a mold having a glass shaping cavity open at one end, which comprises the steps of presenting at said open end of the mold cavity a separated charge of glass of insufficient mass completely to fill said cavity, applying superatmospheric pressure to the outer end of the glass charge and causing subatmospheric pressure on the inner end of said charge to tend to move said charge longitudinally of the mold cavity, and checking movement of a perpheral portion of the charge at the outer end of said mold cavity to effect charging of the mold cavity with glass having an axial cavity at its outer end.

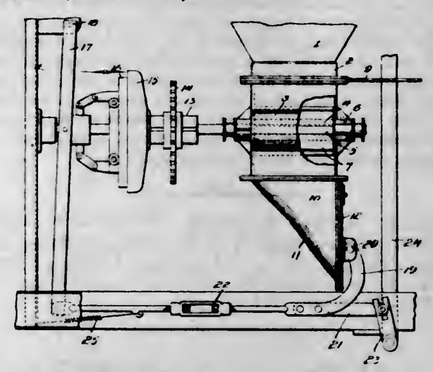
1,902,143. COMPOSITION FOR TREATING STRINGS. FRANK SALADINO, JOSEPH SALADINO, and SALVATORE SALADINO, Chelsea, Mass., assignors to C. Saladino & Sons, Inc., Chelsea, Mass., a Corporation. Filed Jan. 20, 1931. Serial No. 510,056. 11 Claims. (Cl. 134—23.)

1. The method of preparing a composition for treating strings comprising in major part three pounds of gelatine to one gallon of water cooked until said gelatine and water reach a temperature of approximately 200 degrees Fahrenheit, which comprises adding thereto and stirring in red beef oil distilled, then adding and stirring in glycerine and then adding and stirring in tallow oil, maintaining a contaiinous temperature of approximately 200 degrees Fahrenheit during the preparation of said composition.

1,902,144. PROCESS FOR PRODUCING RED PHOSPHORUS. STAPLETON D. GOOCH, Lake Wales, and FRIEDRICH P. KERSCHBAUM, Winter Haven, Fla., assignors to Coronet Phosphate Company, New York, N. Y., a Corporation of New York. Filed Nov. 29, 1930, Serial No. 499,124, and in Germany Dec. 2, 1929. 5 Claims. (Cl. 23—223.)

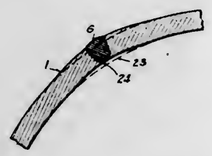
1. A process for the production of red phosphorus from hot gases containing phosphorus substantially entirely in vapor phase comprising adding to the gases from an extraneous source substances capable of transforming yellow phosphorus into the red modification.

1,902,145. APPARATUS DESIGNED FOR HANDLING CEMENT AND LIKE MATERIAL. WILLIAM B. SLEMMER, Malden, Mass., assignor to Warren Brothers Company, Cambridge, Mass., a Corporation of West Virginia. Filed Oct. 21, 1931. Serial No. 570,251. 1 Claim. (Cl. 221—118.)



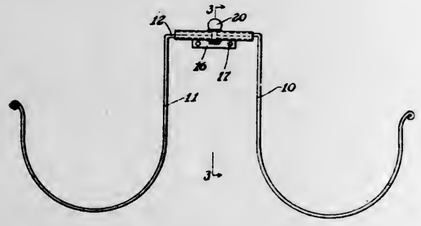
A material handling apparatus comprising a feeder embodying a plurality of radially arranged uniformly spaced wings of which each pair of adjacent wings defines a receiving pocket, a casing enclosing said feeder and in communication at its top with a source of supply, a chute with which said casing is in communication through its bottom, a swinging closure closing the chute on one side, the chute having an inclined bottom wall, a shaft rotatably mounted in said casing and carrying said feeder, a clutch control power actuated member on said shaft, and means for simultaneously opening said closure and engaging said clutch.

1,902,146. METHOD OF ANNEALING VESSELS. RICHARD STRESAU, Wauwatosa, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,657. 14 Claims. (Cl. 148—13.)



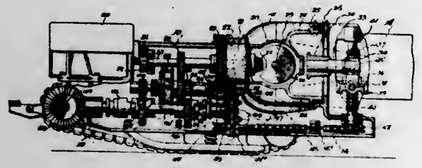
14. The method of supporting the walls of a fabricated pressure vessel during the process of annealing which comprises heating the vessel to an annealing temperature to release stresses in the metal walls, and supplying and maintaining in the vessel a fluid pressure sufficient to support the metal wall when it reaches a temperature at which it cannot support its own weight.

1,902,147. ADJUSTABLE HATRACK. MAXWELL TEITELBAUM, Brooklyn, N. Y. Filed Dec. 31, 1930. Serial No. 505,795. 1 Claim. (Cl. 211—32.)



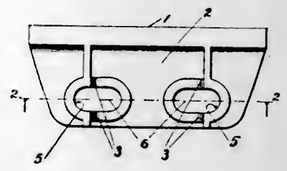
A device of the class described comprising a hollow casing having resilient sides, means for attaching said casing to a wall or the like, resilient hat-holding members, means on said members slidably mounted within said casing for supporting said members against rotation within said casing, comprising an extension on each of said members bent into the form of a substantially rectangular loop having opposite sides of the loop lying in the same horizontal plane, said loop of one of said members lying above said loop of the other member, and means on said casing for depressing the resilient sides thereof against said extensions to lock the latter in fixed position.

1,902,148. MINING MACHINE. FREDERICK W. VODOZ, Wilmette, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1927, Serial No. 231,213. Renewed Oct. 21, 1931. 12 Claims. (Cl. 262—28.)



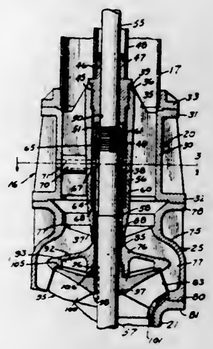
1. In a mining machine, a main frame, a motor, a cutter head mounted for rotation about an axis parallel to the longitudinal axis of said main frame including a cutting element offset from and mounted for pivotal swinging movement in planes substantially parallel with the axis of rotation of said cutter head, coacting power means including screw devices carried on said main frame in advance of said cutter head for swinging said cutting element, and operative connections between said motor and said screw devices including a chain drive for said screw devices extending rearwardly beneath said cutter head, and a drive sprocket therefor on said main frame.

1,902,149. STOKER LINK. HARRY T. WANDLING, Alton, Ill. Filed Feb. 24, 1932. Serial No. 594,919½. 2 Claims. (Cl. 110—40.)



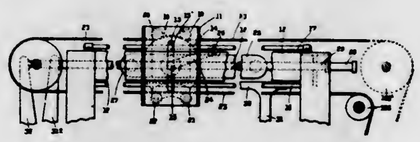
1. A stoker link comprising a web having horizontally elongated eyes provided with lateral webs forming semi-circular bearing surfaces at their outer ends, and cut away above and below the adjacent ends of said eyes from substantially the ends of said semi-circular bearings towards the center of the link substantially as described.

1,902,150. MAIN BEARING CONSTRUCTION FOR TURBINE PUMPS. ARTHUR R. WEIS, Huntington Park, Calif., assignor of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California, and one-fourth to George E. Bigelow, Huntington Park, Calif. Filed Dec. 27, 1927. Serial No. 242,907. 13 Claims. (Cl. 103—102.)



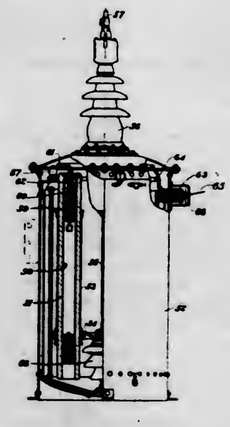
1. In a deep well turbine pump, the combination of: an impeller bowl having an impeller chamber communicating with a longitudinal bore; a shaft extending through said longitudinal bore, there being a primary clearance space between said shaft and the walls of said bore; an impeller on said shaft in said impeller chamber, the rotation of said impeller tending to set up a flow of fluid through said primary clearance space; and means for forming a secondary space in communication with said primary clearance space and through which said flow of fluid must pass before entering said primary clearance space, said secondary space being smaller in cross-section than said primary clearance space so as to filter the fluid entering said primary clearance space.

1,902,151. KNITTING MACHINE. SIDNEY ARTHUR WELCH, ALBERT FAIRHOLME GUYLER, JOHN THOMAS ASHBY, and WILLIAM HENRY BOALER, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 21, 1930, Serial No. 469,448, and in Great Britain July 31, 1929. 19 Claims. (Cl. 66—60.)



1. Method of knitting flat fashioned articles, said method comprising effecting knitting traverses at a substantially constant linear speed, automatically making the knitting traverse at each course substantially equal to the length of such course, and completing successive courses with a frequency substantially inversely proportional to the length of the courses.

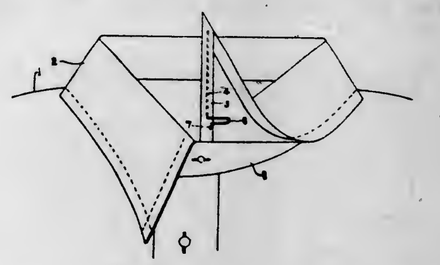
1,902,152. ELECTROSTATIC CONDENSER. ARTHUR O. AUSTIN, Barberton, Ohio, assignor, by mesne assignments, to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed June 25, 1924. Serial No. 722,205. 20 Claims. (Cl. 175—41.)



1. A condenser unit comprising a tubular dielectric member, a covering of conducting material for a portion of the inner surface of said tubular member, a covering of conducting material for a portion of the outer surface of said tubular member, a member of conducting material extending from the end of said inner covering and spaced inwardly from the wall of said tubular member, and a closed cap, of dielectric material covering said extending member.

1,902,153. STIFFENER PIN FOR SOFT COLLARS. FRANK J. BARNES, St. Louis, Mo. Filed Oct. 3, 1932. Serial No. 635,925. 2 Claims. (Cl. 24—87.)

2. A collar stiffener comprising a pin fashioned at one end for insertion into the hem of a collar, and formed at its other end with a point extending in the general direction of said pin for a restraining engagement with the collar, and laterally bent and return-bent adjacent to its pointed end to form upper and lower spaced arms, the upper of said arms terminally carrying said pointed end, in a spaced relation to the extended axis of the pin.

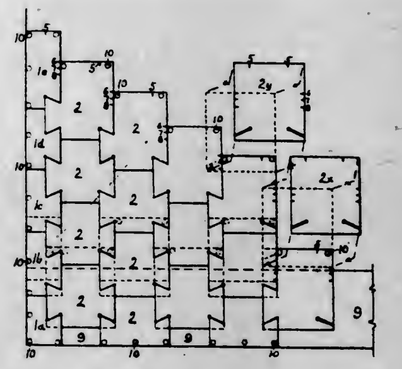


1,902,154. MECHANICAL TOY. RUSSELL D. BEEABOWER, Fort Wayne, Ind. Filed June 27, 1932. Serial No. 619,414. 5 Claims. (Cl. 46—14.)



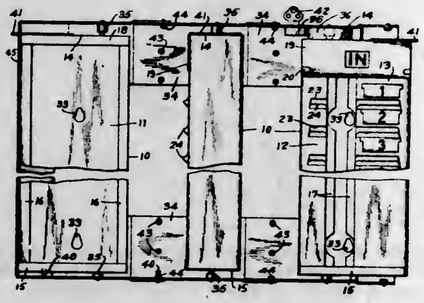
1. A toy consisting of a torsion wheel and its complemental operating cord, an elastic rim on said wheel provided with axially extending slit flanges adapted to create sound upon operation of the wheel, an actuating spiral having an open coil portion and a stop operatively disposed upon said cord so as to be revolved thereby upon its axis when the wheel is actuated, and a miniature configuration of an aeroplane engaged by said spiral so as to be moved to and fro thereby upon rotation of the spiral alternately in opposite directions and its movement limited by said stop.

1,902,155. INTERLOCKING SHINGLE. JESSE E. BERKHEIMER, Tacoma, Wash. Filed Aug. 3, 1931. Serial No. 554,692. 2 Claims. (Cl. 108—7.)



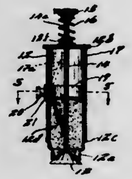
1. A shingle of the class described, said shingle rectangular in form, and means for interlocking said shingle with others of its kind, said means being a diagonal slit extending inwardly and upwardly from each side and from near the butt end of said shingle.

1,902,156. CARD RACK. LEON CRAIN BISHOP, Binghamton, and SEWARD EUGENE SWICK, Endicott, N. Y., assignors to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Sept. 5, 1931. Serial No. 561,368. 16 Claims. (Cl. 40—124.)



1. A card rack unit, comprising an integral sheet metal structure including a base member, a pair of hollow box-like members integrally secured to said base member in spaced relation so as to form a channel, the walls of said members forming the channel being provided with parallel inclined straight slots adapted to freely removably support the cards in overlapping relation, said channel being arranged to permit manual removal of all cards at one operation by a vertical sweeping movement of the fingers of the operator inserted in said channel.

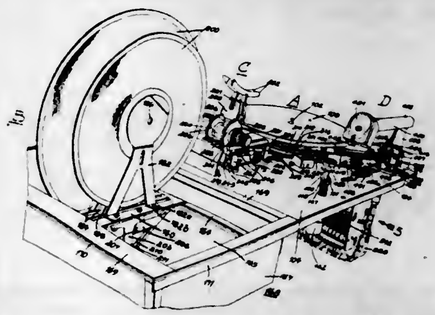
1,902,157. MEASURING AND DISPENSING DEVICE FOR RECEPTACLES. CHARLES BLOMSTROM, Minneapolis, Minn. Filed Oct. 3, 1931. Serial No. 566,608. 5 Claims. (Cl. 221—95.)



5. A measuring device having in combination, a casing providing a mouth, a valve for controlling the mouth of said casing, means for manipulating said valve, a partition slidable along the casing intermediate the ends thereof for varying the size of said casing, and means attached to said partition and supported by a wall of said casing for adjusting said partition longitudinally of the casing.

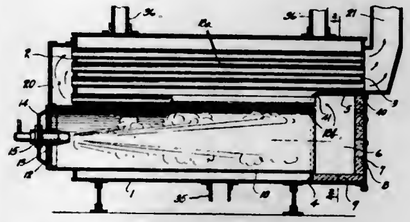
1,902,158. AUTOMATIC PHONOGRAPH. HERBERT L. BRUMP, FREDERICK O. GRAY, and FLOYD E. GRAY, Dayton, Ohio, assignors to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed June 8, 1931. Serial No. 542,822. 25 Claims. (Cl. 274—10.)

5. An automatic phonograph comprising, in combination, a carriage, a record magazine supported by the carriage, a rotatable turntable, a mechanism for transferring a record disc from the magazine to the turntable and vice versa and comprising record gripping fingers, a frame carrying the fingers, means for supporting the frame for rotation about an axis in the plane of the disc in order to place the disc either side up upon the turntable, means for bodily moving the frame so as to locate the disc upon the table, means for causing the gripper frame to rotate selectively in a predetermined direction and comprising pairs of mutilated bevel gears, one gear of each pair being carried by the gripper frame coaxially with respect to its axis, a frame carrying the other gears and movable in order to condition one of the pairs of bevel gears for cooperation when the gripper frame is bodily moved while the other pair of gears remain disconnected, a mechanism



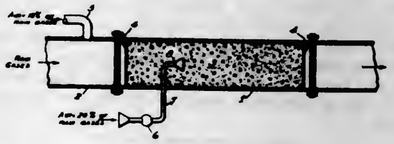
for moving the carriage in at least one of two directions to locate the desired record disc adjacent to the disc transfer mechanism, means for shifting the gear frame in response to the changing of the direction of movement of the carriage, and a reproducer for playing the disc.

1,902,159. BOILER. JONAS H. FOX, Seattle, Wash. Filed Feb. 16, 1931. Serial No. 516,072. 1 Claim. (Cl. 122—149.)



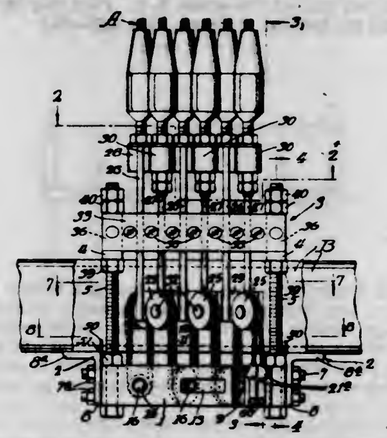
In a boiler of the character described, a horizontal shell, a flue sheet closing one end of the shell and comprising upper and lower relatively offset sections, and a horizontal connecting section merging into the offset sections in gradually rounded curves; said horizontal section being corrugated lengthwise with the corrugations thereof merging at their ends within the rounded curves.

1,902,160. METHOD OF USING OXIDATION CATALYSTS. JOSEPH C. W. FRAZER, Baltimore, Md., and LOUIS S. KASSEL, Pittsburgh, Pa.; said Kassel assignor to Carbon Monoxide Eliminator Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed June 29, 1931. Serial No. 547,674. 13 Claims. (Cl. 23—2.)



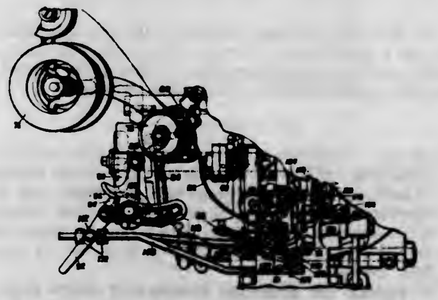
1. In a process of oxidizing an oxidizable gas in which an atmosphere containing said gas and oxygen sufficient for its complete oxidation is passed into contact with an artificially prepared copper chromite catalyst at an elevated temperature, the step comprising treating said chromite at an elevated temperature with a gaseous reducing agent prior to contact with said atmosphere of gas and oxygen to decrease the temperature at which said chromite begins to function when said atmosphere is supplied to it.

1,902,161. SUSPENSION DEVICE FOR EQUALIZING THE STRAIN ON ELEVATOR CABLES. WILLIAM P. FAOST, Jackson Heights, N. Y., assignor to Evans Elevator Equaliser Company, Bedford, Ind., a Corporation of Indiana. Filed Jan. 10, 1931. Serial No. 507,967. 18 Claims. (Cl. 187—1.)



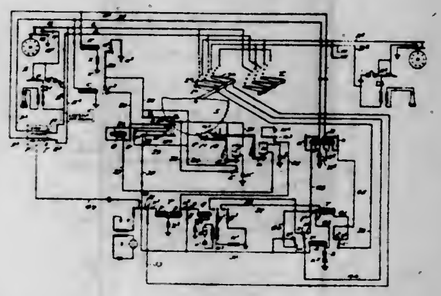
1. A suspension device for connecting an elevator car to a group of suspension cables including a plurality of pairs of floating equalizing pulleys, each pair being connected to a different suspension cable, a plurality of pairs of suspension pulleys pivotally connected to the car, a pair of strands of equalizing rigging connected to the car engaging said pairs of equalizing pulleys and pairs of suspension pulleys in alternation, and means for equalizing the strain on said strands.

1,902,162. LASTING MACHINE. GEORGE GODDU, Winchester, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 8, 1931. Serial No. 542,851. 47 Claims. (Cl. 12—2.)



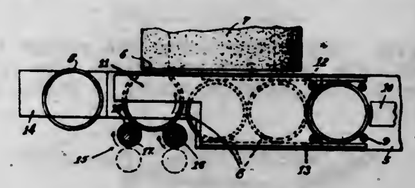
1. In a lasting machine, the combination with means for shaping an upper over a last, of means for fastening the upper to a sole on the last comprising devices arranged relatively to each other for alternative use respectively to drive fastenings and to curve them prior to and during their entrance into the shoe to anchor them in the shoe or to lay the marginal portion of the upper over the outer face of the sole and press it into position to adhere to said face in lasting the shoe with cement instead of with driven fastenings.

1,902,163. SWITCH CONTROL MECHANISM FOR AUTOMATIC TELEPHONE SYSTEMS. CHARLES L. GOODRUM, Athens, Ga., assignor of one-half to Louis G. Pacent, New York, N. Y. Filed Mar. 31, 1932. Serial No. 602,189. 7 Claims. (Cl. 179—16.)



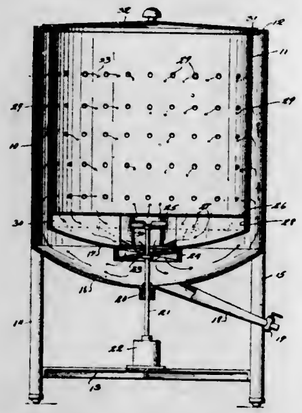
1. In a telephone system, the combination with a switch mechanism comprising a motor magnet for advancing it and a locking magnet for holding it in its adjusted position, a pair of subscriber's line conductors, means for transmitting current impulses thereover, of main and associate control relays in said conductors, each having sets of contacts positioned to operate in reverse directions when said relays are energized, one of said sets of contacts being given a normal spring tension and the other a relatively weak spring tension, and a slow to release relay arranged to be energized upon the attraction of the weak set of contacts, a source of current for said line and for operating said magnets, an energizing circuit for the locking magnet closed by said slow relay, and a circuit for the motor magnet controlled by the normally adjusted contacts on the other line relay and intermittently energized in response to current interruptions on the telephone line.

1,902,164. PISTON RING SNAGGING MACHINE. RUDOLPH A. HANOS, Rockford, Ill., assignor to Burd High Compression Ring Company, Rockford, Ill., a Corporation of Illinois. Filed July 15, 1927. Serial No. 205,896. 12 Claims. (Cl. 51—129.)



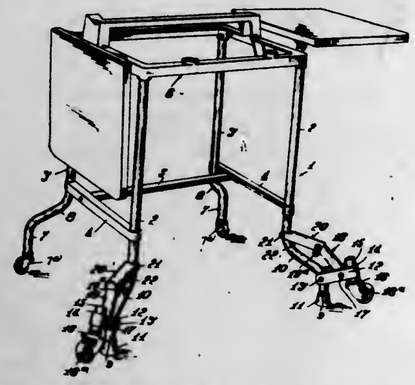
1. A piston ring snagging machine comprising, in combination, a work support, a rotary grinder turning in a plane approximately at right angles to the work support and having a side grinding face, said support being arranged to receive a piston ring laid flat thereon with the periphery thereof presented to said side grinding face, a guide over said work support serving to hold the piston ring flat on the support but permitting turning of said ring and means for simultaneously rotating the ring and pressing the periphery thereof against the grinding face comprising a pair of driven rollers adapted for engaging the periphery of the ring at circumferentially spaced points and to turn in the same direction approximately in the plane of the support and the ring thereon, said rollers being mounted on and movable bodily with a head whereby the same are arranged to be moved toward the grinder to press the ring against the same and communicate rotation thereto at the same time.

1,902,165. WASHING MACHINE. FRANK A. HANSEN, Fergus Falls, Minn. Filed May 19, 1931. Serial No. 538,525. 2 Claims. (Cl. 68—37.)



1. A washing machine of the character described comprising an outer casing, an upright inner casing removably mounted in said outer casing and disposed in spaced relation to the inner surface thereof, said inner casing having a plurality of perforations in the vertical wall thereof, an axially disposed outlet port in said inner casing communicating with the space between the casing, a depending annular flange defining the marginal edges of said outlet port and extending into the space between the two casings, a vertically disposed drive shaft extending through said inner and said outer casings, a propeller mounted on said drive shaft and disposed within said annular flange and having a pitch to force liquid downwardly therethrough into the space between the two casings, and means to cause liquid upon being forced downwardly against the bottom of the inner casing to flow upwardly between the two casings and inwardly of the perforations in the inner casing in a horizontal direction, a second propeller mounted on said drive shaft at a point upwardly from the first propeller and having a pitch to force liquid in a vertical column within the inner casing, and means for holding articles out of contact with each of said propellers but permitting liquids to pass therethrough.

1,902,166. CASTER MECHANISM FOR STANDS AND THE LIKE. EVAN C. HARTER, Sturgis, Mich. Filed Nov. 13, 1930. Serial No. 495,351. 3 Claims. (Cl. 16—34.)



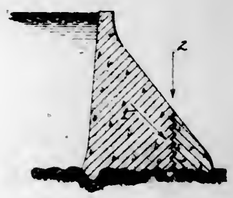
1. In combination with a stand leg having an offset bottom end adapted for friction engagement upon a floor, a swiveling caster, means pivoted at one end to said offset bottom end of the leg and carrying said caster at the other end, and toggle links pivoted to said pivoted means and to said leg above said bottom end and which links are pivoted together, said links being operable to be moved into substantial alignment to swing said pivoted means to engage said caster with the floor, and to automatically lock against reverse movement when so moved into substantial alignment.

1,902,167. EGG CARTON. MARIAN EARLY HASSELL and MALVERIN ALVO TODD, Miami, Fla., assignors of one-third to Starke Hassell, Greenville, N. C. Filed May 20, 1931. Serial No. 538,804. 7 Claims. (Cl. 229—29.)



1. In a carton for eggs, a body having a bottom and a cover, a tray within the body and having a plurality of openings forming seats for eggs, said bottom being provided with a plurality of openings, each one of which overlaps a predetermined number of the openings in said tray to allow of the transillumination of the eggs in groups.

1,902,168. CONCRETE DAM. DAVID CHRISTIAAN HENNY, Portland, Oreg. Filed Sept. 21, 1932. Serial No. 634,098. 3 Claims. (Cl. 61—30.)

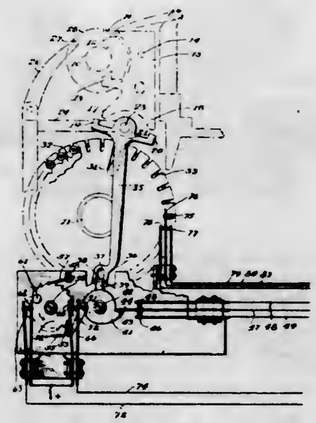


1. In a concrete dam serrated contraction joints extending in a substantially vertical plane with the contacting surfaces thereof being alternately substantially normal and parallel to the direction of principal stresses.

1,902,169. PROCESS FOR PRODUCING UNSATURATED ETHERS. WILLY O. HERRMANN and HANS DEUTSCH, Munich, Germany, assignors to Consortium fuer Elektrochemische Industrie, G. m. b. H., Munich, Germany, a Corporation of Germany. Filed Jan. 29, 1931, Serial No. 512,197, and in Germany Feb. 6, 1930. 14 Claims. (Cl. 260—151.)

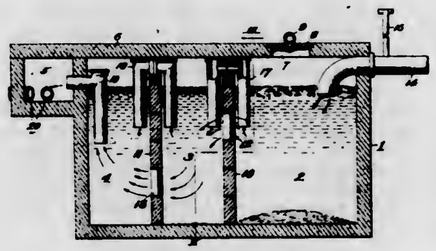
4. Process for producing unsaturated ethers from the vapors of acetals of saturated aldehydes containing a carbon atom adjacent to the carbonyl group, to which carbon atom is linked at least one hydrogen atom, comprising passing said vapors, at a velocity of at least 200 grams per liter of reaction space and per hour at temperatures between 250 and 500° C., over heated metal compound catalysts selected from the group consisting of fuller's earth, burnt brick clay, silica gel, asbestos, feldspars and analogous minerals, zeolites, natural and artificial aluminate-silicates and non-siliceous base exchange compounds.

1,902,170. DIVIDING RECEIVED INTELLIGENCE INTO TWO OR MORE GROUPS. VERNON R. KIMBALL, Palisades Park, N. J., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Oct. 21, 1930. Serial No. 490,261. 20 Claims. (Cl. 178—4.)



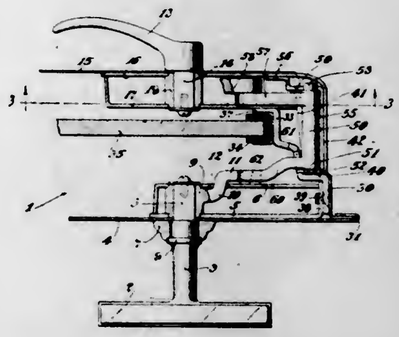
1. In a unit message system in which each message comprises characters from different groups, switching mechanism, counting means for operating in response to a change in the group of the received characters, and means responsive to said counting means for operating said switching mechanism.

1,902,171. SEPTIC TANK. CHARLES A. KOPP, Kansas City, Mo. Filed July 18, 1932. Serial No. 623,123. 1 Claim. (Cl. 210—6.)



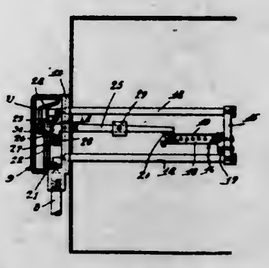
A septic tank divided by full height partitions impervious to the passage of liquid, into a plurality of compartments, a sewage supply pipe communicating with one end compartment, an elevated compartment, an escape pipe for conducting liquid from the other end compartment into the elevated compartment, the end of said pipe where it communicates with said end compartment being at a lower level than the sewage supply pipe, overflow pipes in the partitions respectively and connecting the adjacent compartments, the lower ends of said overflow pipes being lower than the sewage supply pipe and their upper ends open for venting purposes within the respective adjacent compartments, a vent for the said supply pipe exterior to the tank, strainers in the partitions respectively at different levels and below the said various pipes, the strainer connecting the compartment into which the sewage is discharged occupying a higher plane than the other strainer.

1,902,172. LATCH FOR AUTOMOBILE DOORS. ALBERT L. LAMBERT, Philadelphia, Pa., assignor to Heintz Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 6, 1925. Serial No. 60,709. 2 Claims. (Cl. 292—161.)



1. The combination with a door, of a latch on one side of the door, a handle on the other side of the door for operating the latch, and latch operating mechanism operatively connecting said handle and latch, said mechanism including a rock shaft, a housing projecting outside of the door edge, and said shaft being mounted in said housing outside of the edge of the door, said housing having vertical taper increasing from the inner side of the door, and a door jamb having a recess to receive said projecting housing when the door is closed.

1,902,173. HUMIDITY CONTROLLER. JOHN M. LARSON, Chicago, Ill., assignor to National Regulator Co., Chicago, Ill., a Corporation of Illinois. Filed July 14, 1930. Serial No. 467,698. 12 Claims. (Cl. 236—44.)



1. A humidity controller comprising a horizontally extending hydrostatic element secured at one end in a substantially horizontal position within an air duct, an air port for controlling a diaphragm valve secured to a plate attached to the outer side of said duct, a valve member for opening and closing said air port suspended from said plate in front of said air port, adjusting means extending through said valve member, a lever having a projecting portion adjacent one end, said projecting portion being pivotally mounted to said plate so that the actuating end of said lever engages the end of said adjusting means and the free end of said lever extends inwardly into said duct and engages the upper side of the free end of said hydrostatic element, whereby movement of said hydrostatic element pivots said lever and operates said valve member.

1,902,174. WELL BORE STRAIGHTENING TOOL. MILES J. LEWIS, Long Beach, Calif. Filed Jan. 13, 1932. Serial No. 586,293. 9 Claims. (Cl. 251—1.)



8. A well bore straightening tool including a reamer, a drilling bit, and a universal joint operatively connecting said reamer and bit.

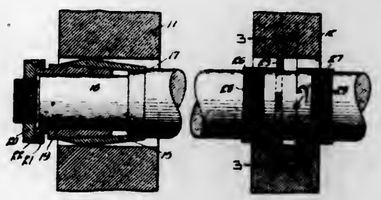
1,902,175. ARTICLE OF MANUFACTURE. ARNOLD N. LUBIN, Chicago, Ill. Filed May 22, 1931. Serial No. 539,646. 5 Claims. (Cl. 45—47.)

1. A device for frictionally retaining a hingedly mounted member in adjustably varying angular positions, comprising an element movable with and connected to said member, said element having an offset portion spaced from the face of said member, a frictional grip comprising an arm having an opening in one end thereof through which said offset portion of said elements extends for frictional engagement, a pivot pin in the other end of said arm, a link connected with said pivot pin at one end thereof, and a stationary support for the other end of said link.

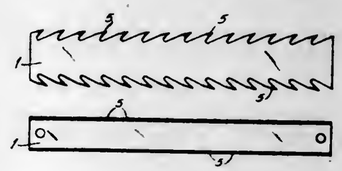
1,902,176. MANDREL FOR HOLLOW CRANK SHAFTS. HARRY H. MINER, Paris, France, assignor to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed June 13, 1931. Serial No. 544,186. 9 Claims. (Cl. 82—44.)

1. A mandrel for grinding hollow crank shafts comprising a bar having means for securing it in two of the bearings of the crank shaft and having resilient expansible means engageable in another bearing to support it while it is being ground, substantially as set forth.

9. A mandrel for supporting a crank shaft during machining or grinding of bearings thereon comprising a bar adapted to be positioned through the bores of hollow bearings, the ends of said bar having expansible sleeves movable to engage the interior of the bearings and having a plurality of equally spaced radial bores, each of said bores having a pair of plungers radially movable therein, the said bores each having a single spring positioned between the inner ends of the plungers to urge the plungers radially outwardly whereby the outer ends of all the plungers will engage the interior of the bearings with substantially the same pressure irrespective of any eccentricity of the bar with the interior of the bearing, substantially as set forth.



1,902,177. METHOD OF PRODUCING SAWS. ORVILLE MITCHELL, Dallas, Tex. Filed July 23, 1931. Serial No. 552,650. 3 Claims. (Cl. 76—112.)



1. The method of making saws which consists in a continuous operation, in cutting over-size saw teeth in the edge of a body of metal, thereafter peening the points of said teeth to sharpen them and finally recutting the teeth to the proper size.

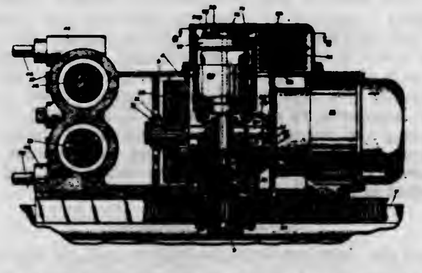
2. The method of making saw bands which consists in cutting over-size teeth in the opposite edges of a length of ribbon steel, peening the points of said teeth to sharpen them, recutting the saw teeth to the desired size and then bending the opposite edge portions of the ribbon at right angles to the body thereof in the same direction.

1,902,178. INSULATING BLOCK. WILLIAM K. NELSON, Chicago, Ill., assignor, by mesne assignments, to Insulex Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 2, 1926. Serial No. 120,002. 7 Claims. (Cl. 72—36.)



6. A composition block comprising relatively thin masonry side walls, and a body of foamaceous material disposed between said side walls and bonded thereto to form an integral block, said foamaceous material forming a substantially uniform cellular structure.

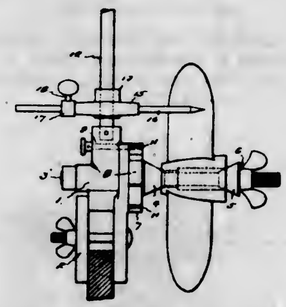
1,902,179. MACHINE TOOL. ALEXANDER OBERHOFFKEN, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed May 15, 1931. Serial No. 537,569. 31 Claims. (Cl. 29—26.)



1. In a machine tool, the combination of a frame structure, a self-contained machine tool head assembly mounted to move bodily on said frame structure and comprising a saddle unit, tool driving and saddle feeding mechanism and motors therefor carried by said saddle unit, an interchangeable tool unit carried by said saddle unit, tool driving mechanism in said tool unit and means for connecting the tool driving mechanisms of said units for extending the tool drive from the saddle unit into the tool unit.

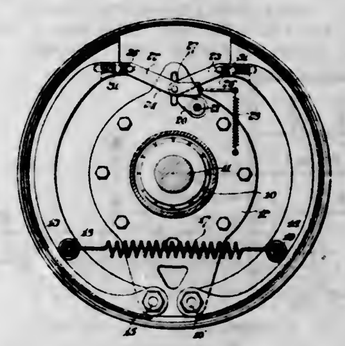
15. In a machine tool, the combination of a frame structure, a self-contained machine tool head assembly mounted to move on said frame structure and comprising a saddle unit and an interchangeable tool unit, drive, feed, and rapid traverse mechanisms and motors therefor carried by said head assembly, feed rate control mechanism and the electrical equipment also carried by said head assembly, said feed rate control mechanism comprising a revolving drum, a drive between the feed mechanism and said drum to revolve the same and switch operating means on the drum positioned to open and close predetermined ones of a group of switches in circuit with said motors.

1,902,180. GAUGE FOR DETERMINING PITCH OF PROPELLER BLADES. GEORGE A. PRIOR, West Hartford, Conn., assignor to The Gray & Prior Machine Company, Hartford, Conn., a Corporation of Connecticut. Filed Dec. 3, 1930. Serial No. 499,647. 7 Claims. (Cl. 33—174.)



6. A propeller gauge comprising a bracket, a shaft rotatably supported by the bracket, means for clamping a propeller on said shaft, a peripherally notched collar rotatable with the shaft, means movably supported by the bracket and adapted to be selectively engaged with the notches in the collar and register said collar and shaft with respect to the bracket, a post fixed to and extending from the bracket, a sleeve adjustable on said post radially with respect to said shaft, and a gauging pointer supported by said sleeve and adapted to be adjusted in a direction parallel to the shaft.

1,902,181. SELF-ADJUSTING BRAKE MECHANISM. EARL J. W. RAGSDALE, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1926. Serial No. 96,119. 22 Claims. (Cl. 188—79.5.)



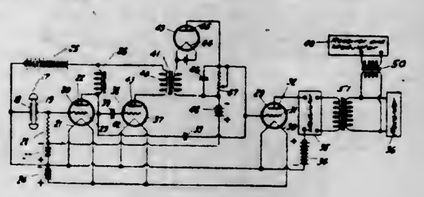
1. Brake mechanism comprising a drum, a pair of brake shoes adapted to cooperate therewith, means including toggle links for moving said shoes into engagement with said drum, and cam means in the connection between said toggle links and brake shoes operable by relative movement between the toggle links and brake shoes for making an automatic adjustment for wear of either or both brake shoes.

1,902,182. CURTAIN ROD TIP OR CURTAIN PROTECTOR. JOHN N. RASP, McKeesport, Pa. Filed June 30, 1931. Serial No. 547,964. 2 Claims. (Cl. 228—38.)



1. A tip for a curtain rod of a flat C type comprising a U-shaped member having channel side arms to snugly receive therebetween an end portion of the rod, said side arms at one side of the tip being provided with inwardly disposed flat lugs to be extended inwardly of the rod to which the tip is applied for close contact with the free longitudinal edges of the rod.

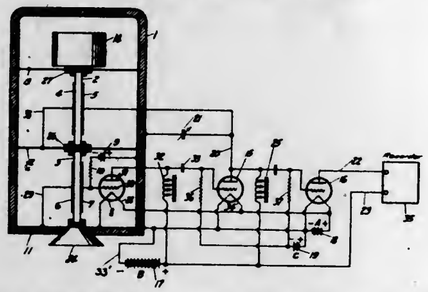
1,902,183. SYSTEM FOR RECEIVING AND RECORDING VIBRATIONS. FRANK RIEBER, San Francisco, Calif. Filed May 24, 1927. Serial No. 193,941. 11 Claims. (Cl. 177—352.)



6. In a system for recording earth vibrations at a plurality of spaced points, a receiver for converting the vibrations into electrical vibrations located at each of said points, a common recorder for all of said receivers, means associated with each receiver for transferring energy to said recorder, and means for blocking said transfer after an interval, comprising a condenser integrating the charges

imparted thereto by the vibrations received by the receiver, and means whereby the potential difference of the condenser is utilized to block said energy transfer.

1,902,184. VIBRATION SENSITIVE SYSTEM. FRANK RIEBER, San Francisco, Calif. Filed June 7, 1927. Serial No. 197,211. 3 Claims. (Cl. 177—352.)

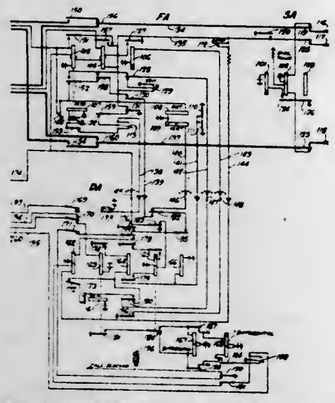


2. In combination, a casing, a contact member extending from the casing, a pair of piezo-electric devices in said casing, one over the other and mechanically in connection with each other, the lower of said devices being in mechanical contact with said contact member, a diaphragm extending across the casing and connected between the devices, another diaphragm extending across the casing and supporting the top end of the top device, and a weight acting on said top end.

1,902,185. METHOD OF COATING ELECTRODES OF DISCHARGE TUBES. HORST ROTHE, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 20, 1932, Serial No. 594,399, and in Germany Mar. 31, 1931. 4 Claims. (Cl. 250—27.5.)

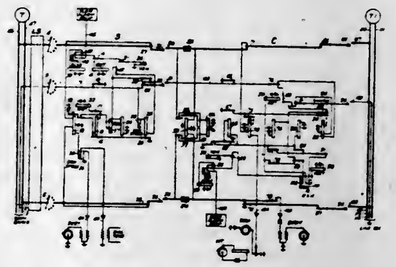
1. The method of treating a metal electrode for electron discharge device to decrease its secondary electron emission which consists in applying to said electrode a coating of chromic oxide, and heating said coated electrode in an inert environment to convert said chromic oxide to chromous oxide.

1,902,186. AUTOMATIC TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 10, 1931, Serial No. 507,815. Renewed May 14, 1932. 26 Claims. (Cl. 179—18.)



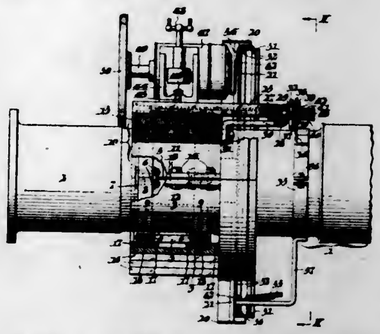
1. In a telephone system, a plurality of groups of lines, primary and overflow finders for each group, a single set of bank contacts comprising a test and line terminals terminating a plurality of overflow finders in different line groups, other similar sets of bank contacts terminating other multipled overflow finders, secondary finders having access to said set and other similar sets of bank contacts, a start relay in an overflow finder energized responsive to a call for initiating the operation of such overflow finder in case all the primary finders in the group of the calling line are busy, means controlled by said relay for applying a calling potential to the terminating test terminal of such overflow finder, means also responsive to the energization of said relay for initiating the operation of an idle secondary finder, and means for simultaneously operating said overflow and secondary finders in search of the calling line and said applied calling potential respectively.

1,902,187. TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed Sept. 8, 1930, Serial No. 480,313. Divided and this application filed June 29, 1931. Serial No. 547,500. 11 Claims. (Cl. 179—18.)



1. In an automatic switch having directive primary and secondary movements, a control circuit over which the primary operation of said switch is effected, a second control circuit over which the secondary operation of said switch is effected, and means automatically operative at the end of the primary movement for causing said switch to take one secondary step, and means responsive to said secondary step for effecting the change-over from the primary to the secondary control circuit.

1,902,188. MACHINE FOR GRINDING AXLES OR THE LIKE. VICTOR P. SCHMIDT and HARRY A. BRENAMAN, Altoona, Pa. Filed June 9, 1931. Serial No. 543,046. 6 Claims. (Cl. 51—241.)



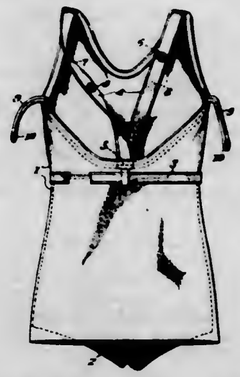
1. A machine for grinding axles or the like comprising an annular bearing adapted to be affixed rigidly to the work to be ground around the body thereof, said bearing being made up of separable segments, a carrier internally grooved to fit snugly on said annular bearing and adapted to be revolved thereon, a grinding tool adapted to engage the circumference of the work, and means for rotating said grinding tool about its axis.

1,902,189. HIGHWAY SIGN. WILLIAM A. SCHUTT, Litchfield, Ill. Filed Feb. 18, 1932. Serial No. 593,718. 2 Claims. (Cl. 40—145.)



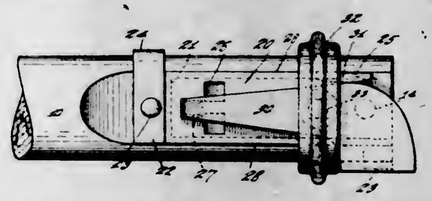
1. A sign construction comprising a standard formed from a continuous length of angle iron and having slots in its upper end, a separate shorter length of angle iron integrally united to the lower end of said standard with the wings thereof arranged in opposite directions, a plate supported by the upper part of the standard and seated in said slots, and a sign frame removably connected with said plate.

1,902,190. BATHING GARMENT. ABRAHAM SLOTOROFF, Brooklyn, N. Y. Filed Dec. 10, 1931. Serial No. 580,099. 5 Claims. (Cl. 2—67.)



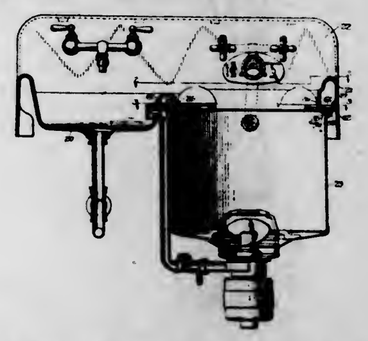
1. As an article of manufacture, a bathing garment comprising a waist having a bust-covering portion and a low-cut open back, a pair of shoulder straps connected at the front to the bust-covering portion and converging downward at the back within the back opening and having their lower end portions superposed and anchored to the lower edge of the back opening, releasable fastening means carried by said straps to fasten them together at a medial point thereof at the back and hold them superposed between said point and their anchorage at the back, a pair of transverse tension strips at opposite sides of the back opening and each anchored at one end to an inner edge margin of the back opening approximately at the bust level and being foldable to concealed positions beneath the bust covering portion, and releasable fastening means carried by the shoulder straps and said tension strips to secure the opposite end of each tension strip to the adjacent shoulder strap.

1,902,191. SNATH. RUBY P. STINE, Shelbyville, Ind. Filed Jan. 17, 1931. Serial No. 509,354. 14 Claims. (Cl. 56—326.)



1. In a snath fastening for detachably fastening to a snath the usual scythe-blade tang, a plate secured to the side of the snath at its scythe-receiving end and having a tang-receiving portion inclined away from said side of the snath, said tang-receiving portion being adjacent said side at the extreme end of said snath, supporting means adapted to hold the upper end of said portion a considerable distance from said side of the snath and to support said portion throughout substantially its entire length, and means acting against the side opposite said blade-receiving scythe adapted to engage the exposed face of a tang and clamp said tang, blade, and snath together.

1,902,192. DISHWASHING MACHINE. EDGAR S. STODDARD, Berwyn, Ill., assignor to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 24, 1930. Serial No. 446,810. 4 Claims. (Cl. 141—9.)

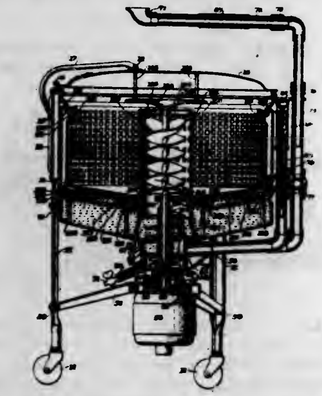


1. In a dishwasher sink combination, a shelf provided with a downwardly projecting skirt forming an opening, an adapter ring secured around the lower portion of said skirt and forming a water tight connection therewith, outwardly extending web portions on said ring, and a dishwasher tank of greater cross section than said opening supported by said ring and forming a water tight connection with said web extensions.

1,902,193. WASHING MACHINE. EDGAR S. STODDARD, Berwyn, Ill., assignor to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed May 5, 1930. Serial No. 449,749. 1 Claim. (Cl. 68—37.)

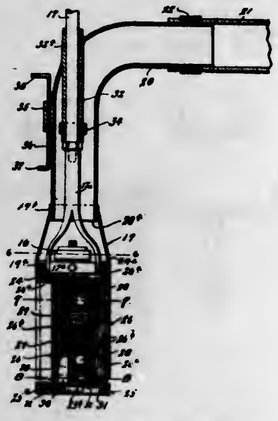
In a washing machine, a tank having a centrally draining bottom, a well chamber communicating with the lower portion of said draining bottom, a motor positioned

externally of said tank having a shaft extending upwardly through said well chamber and into the tank, a water elevating device operatively connected to said shaft above the well chamber, a water elevating and projecting device connected to said shaft about the upper por-



tion thereof, a perforated casing surrounding said water elevating and projecting device and spaced from the bottom of the tank, a rotatable clothes rack positioned about said casing, and means connected through the casing to an intermediate portion of said shaft and to the rack for rotating the latter.

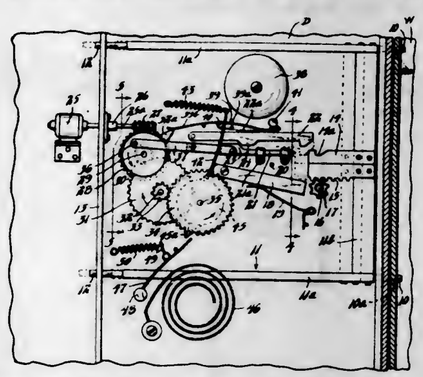
1,902,194. CYLINDER GRINDER. JOSEPH SUNNEN, St. Louis, Mo. Filed Apr. 11, 1930, Serial No. 443,293. Renewed Mar. 11, 1932. 23 Claims. (Cl. 51—184.1.)



1. A dust collector comprising a casing adapted to receive a cylinder grinder carrier and having peripheral outwardly presented pockets for receiving the mounts extensibly mounted on said carrier, an elbow member connected to one end of said casing, and a flexible conduit leading from said elbow member to a suitable exhaust apparatus whereby air can be exhausted from said casing, the latter being provided with a plurality of inlet openings arranged adjacent to said mounts to admit air and dust into the interior of said casing.

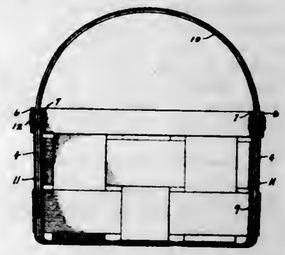
1,902,195. LOCKING SYSTEM FOR STRONG BOXES. ADOLPH SWAHN, Ellsworth, Wis. Filed May 6, 1932. Serial No. 609,613. 8 Claims. (Cl. 109—9.)

1. In a time controlled locking system for strong boxes, a projectable bolt, an apertured portion aligned to receive said bolt, a stop member to prevent retraction of said bolt, said stop member being movable to an inoperative position, means for moving said stop member to its inoperative position for a portion of a given re-



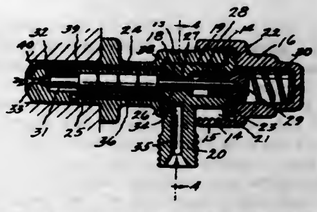
curring period of time, means for projecting said bolt, means for retracting said bolt, and means for reciprocating said movable member.

1,902,196. VEGETABLE AND FRUIT SHIPPING BASKET. GEORGE W. TALBOT, Bloomington, Ind. Filed Sept. 19, 1931. Serial No. 563,816. 2 Claims. (Cl. 217—125.)



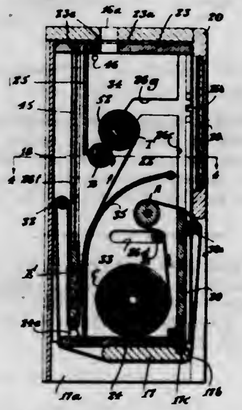
1. A basket formed of veneer strips some of which comprise a bottom member and integral ends upturned to form staves, the middle stave on two opposite sides of the basket being double and interwoven with horizontal strips, a pair of rim strips one on each side of the staves, a handle having its ends inserted between the two members of the rim and frictionally gripped between the double staves and a plurality of staples on each side of the basket substantially spaced from each other uniting the assembly at the rim whereby the handle is prevented from tilting.

1,902,197. FUEL INJECTOR FOR ENGINES. FERI A. THAHELD, Dallas, Tex., assignor, by mesne assignments, to Guiberson Diesel Engine Company, Dover, Del., a Corporation of Delaware. Filed Oct. 20, 1930. Serial No. 490,003. 11 Claims. (Cl. 299—107.6.)



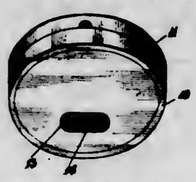
1. In an injector for an internal combustion engine, a body having a bore and a spray outlet at its forward end, a plunger slidable in the bore, and a valve connected with the plunger, the body having a by-pass for conducting fluids from in rear of the plunger to the spray outlet at the front end of the body in advance of the valve, so as to discharge said fluids with the spray of fuel.

1,902,198. ROLL TOWEL CABINET. CHARLES W. THOMPSON, Wollaston, Mass., assignor, by mesne assignments, to Steiner Sales Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 31, 1929. Serial No. 336,518. 8 Claims. (Cl. 312—38.)



1. A towel cabinet comprising an outer frame and an inner case to fit into said outer frame, a curtain adapted to slide vertically in said inner case, said outer frame having provision to cooperate with said curtain whereby said curtain prevents said inner case from being drawn outwardly when the cabinet is in use.

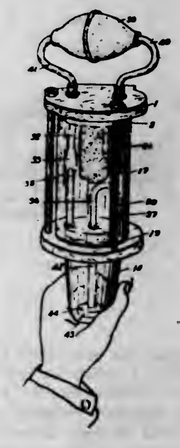
1,902,199. COSMETIC CONTAINER. FERNAND TOURTOIS, New York, N. Y., assignor to Coty, Inc., Wilmington, Del., a Corporation of Delaware. Filed Apr. 6, 1931. Serial No. 527,900. 2 Claims. (Cl. 206—44.)



2. In combination, a container of the character described, comprising a covered casing and a cosmetic compact therein containing colored material, a surface thereof which is exposed when said casing is in an uncovered condition to permit a partial or complete removal of said material through the exposure of said surface, an insert being colored to correspond to the shade of the material and located outside the walls confining the material within the box and between the compact and outer wall of the casing, and an opening in the wall of the casing to disclose the color of said insert.

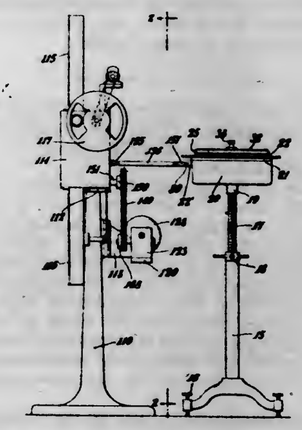
1,902,200. DEVICE FOR IMPREGNATING DRINKING WATER WITH RADIUM EMANATION. ALFRED HENRY TYRER, Toronto, Ontario, Canada, assignor to Standard Radium Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 2, 1926. Serial No. 152,201. 13 Claims. (Cl. 167—51.)

1. A device for impregnating drinking water with radium emanation comprising a reservoir, a radium container having a perforated portion located in the reservoir, a duct leading into the radium container, a return duct leading through the bottom of the reservoir and having an open end adapted to be covered by the open top of the water containing vessel, a bulb adapted when compressed to force air through the aforesaid duct into the water containing receptacle and when expanded to draw the surplus radium charged air from the water



receptacle through said return duct, a tube extending through the bottom head of the reservoir and through which the radium charged air is forced, and a hollow head at the lower end of the tube having a perforated top adapted to be submerged in a body of water contained in a drinking vessel, a resilient washer secured to the lower face of the bottom head of the reservoir and extending around the depending tube against which the upper edge of the drinking vessel is adapted to be forced.

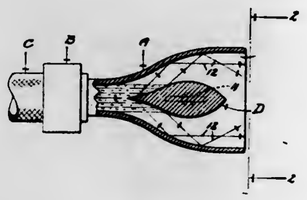
1,902,201. SYNCHRONIZING MECHANISM FOR TALKING MOTION PICTURES. ANTHONY J. VASSELLI, Newark, N. J. Filed May 16, 1929. Serial No. 363,418. 13 Claims. (Cl. 88—16.2.)



10. The combination with a moving picture machine and a sound record machine, each machine having an independent motor drive, of a shaft having two alined sec-

tions, a yielding clutch connecting the sections, one of said sections driving the picture machine and the other section driving the record machine, and means in said clutch to compel the machines to operate in synchronism.

1,902,202. CEMENT GUN NOZZLE. JOHN T. VAWTER, Los Angeles, Calif. Filed Dec. 30, 1929. Serial No. 417,467. 1 Claim. (Cl. 91—45.)



A cement gun nozzle for projecting hydrated particles of material comprising, a nozzle having an expanded orifice, and an ovicular shaped member centrally disposed in said nozzle, the distance between the walls of the nozzle and the ovicular member increasing diametrically from the greatest diameter of the ovicular member to the orifice of said nozzle.

1,902,203. PROCESS OF PREPARING TITANIUM DIOXIDE. FOORD VON BICHOWSKY, Glendale, Calif. Filed Jan. 21, 1931. Serial No. 510,276. 9 Claims. (Cl. 23—202.)

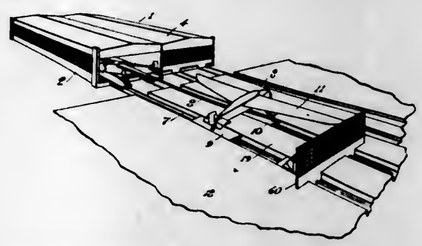
1. Process of preparing titanium dioxide from crystalline titaniferous materials containing iron which comprises reducing the therein contained titanium compound by heating it with a reducing agent containing carbonaceous material to a crude amorphous sub-oxide, then leaching out the impurities and next heating the so-obtained residual sub-oxide with a sulphur containing material under non-oxidizing conditions so as to convert any iron compounds present to iron sulphides and then removing said iron sulphide impurities by means of a mineral acid and oxidizing the amorphous-titanium sub-oxide to titanium dioxide under such conditions as will give a titanium dioxide of pigment grade.

1,902,204. PROCESS OF PRODUCING PIGMENTS CONTAINING TITANIUM. FOORD VON BICHOWSKY, Glendale, Calif. Filed June 10, 1931. Serial No. 543,385. 8 Claims. (Cl. 23—50.)

1. Process of producing pigments, containing titanium, of a substituted alkaline earth titanate type in which the alkaline earth oxide material of the titanate is replaced by an alkaline earth sulphate material, which proccess consists in heating a titanium compound and alkaline earth material in molecular proportions with sulphuric acid in the amount required by theory to form the acid salt and heating the obtained compound with water so as to convert it to titanium dioxide and the sulphate of the alkaline earth and roasting this molecularly proportioned material to give a further degree of chemical homogeneity to the final product.

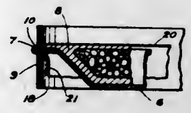
5. As new compositions of matter the compounds of the alkaline earth sulphates with titanium dioxide of a substituted alkaline earth titanate type in which the alkaline earth oxide material of the titanate is replaced by an alkaline earth sulphate material such compounds being dense white pigments.

1,902,205. HANGAR FOR AEROPLANES AND THE LIKE. JAMES M. WEBSTER, New York, N. Y. Filed Mar. 8, 1930. Serial No. 434,226. 22 Claims. (Cl. 189—1.5.)



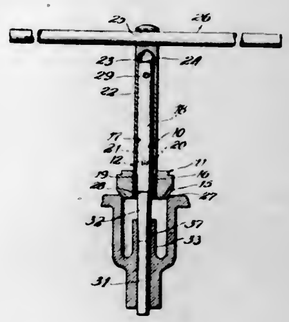
1. In an aeroplane hangar, the combination of means for movably mounting aeroplanes, a source of power operatively connected to said means, and temperature responsive devices operatively connected to said source of power to remove said aeroplanes from the hangar.

1,902,206. HOLDER FOR TRANSPARENT PIE COVERS. JOHN R. WRIGLEY, Norwalk, Conn., assignor to White and Wells Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 16, 1932. Serial No. 611,648. 10 Claims. (Cl. 206—46.)



1. A holder for a pie cover, the same comprising a flexible strip having spaced longitudinally extending slots therein, said strip adapted to be drawn about a pie plate to draw portions of a cover against the edge thereof and secure the cover over a pie thereon and disposed portions of the edge of the pie plate in said slots, and complemental means on the respective end portions of the strip whereby said end portions may be connected to secure the strip in place.

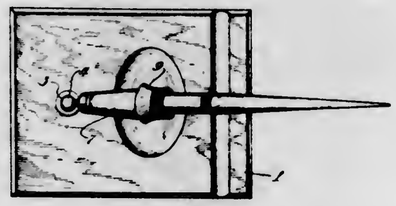
1,902,207. VALVE SEAT TOOL. FRANS O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Filed May 19, 1931. Serial No. 538,504. 1 Claim. (Cl. 90—12.5.)



Apparatus for truing a valve seat aligned with a valve stem guide including: a stationary arbor formed with a cylindrical portion on its lower end adapted to substantially

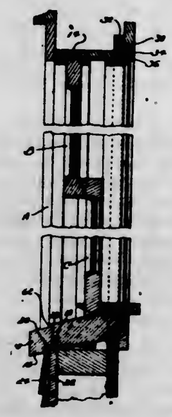
fit the cylindrical portion of the valve stem guide and having a long gradually tapered portion above said cylindrical portion, said tapered portion and cylindrical portion being of sufficient length to engage substantially the entire length of a valve stem guide, said tapered portion being adapted to be firmly wedged in the upper part of the guide, and the cylindrical portion substantially fitting in the valve stem guide throughout substantially the entire length of the guide, said tapered portion and cylindrical portion serving to hold the arbor against wabbling, the upper end of the arbor extending above the guide when the lower end is wedged in the valve stem guide, said tapered portion being tapered between the limits of fifteen to thirty thousandths of an inch taper per foot of length.

1,902,208. DESK PEN HOLDER. ROBERT BACK and GLENN A. COOPER, Chicago, Ill., assignors, by mesne assignments, to Pen Desk Set Company, a Corporation of Illinois. Filed Aug. 14, 1926. Serial No. 129,126. 2 Claims. (Cl. 120—108.)



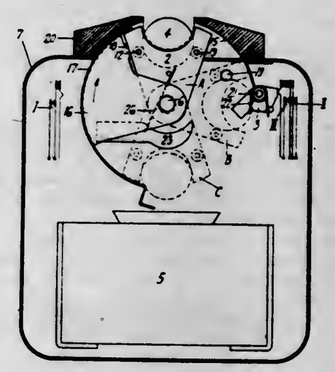
1. In a fountain pen desk set, a base, an open-mouthed tubular pen holder mounted at its lower end on said base, an inwardly extending annular shoulder in said holder adjacent the mouth of the same, the inner walls of the holder and said annular shoulder being so related as to maintain the pen section shoulder of a fountain pen out of contact with said inner walls as the pen is inserted in the holder, said annular shoulder acting as a seal for the holder when the pen is positioned therein, the holder being provided with a small aperture for regulating the humidity of the air within the holder.

1,902,209. WINDOW FRAME CONSTRUCTION. FOREST FREDRICK BEIL, Clinton, Iowa, assignor to Curtis Companies, Incorporated, Clinton, Iowa. Filed Apr. 14, 1930. Serial No. 444,200. 9 Claims. (Cl. 20—11.)



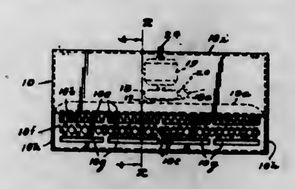
3. In a window frame, a sill, a side jamb, a strip applicable to said side jamb either flat-wise or edge-wise and flush with the inner face of the same when in either position for widening the jamb to a greater or less extent respectively as required, said strip having one side thereof in alinement with the inner face of said side jamb whereby said strip, when applied to the jamb edge-wise or flat-wise, will abut said face.

1,902,210. PAYSTATION APPARATUS. GEORG BINIEK, Berlin, Germany, assignor to Telephon-Apparat Fabrik E. Zwietusch and Company, Charlottenburg, Berlin, Germany. Filed Sept. 22, 1930, Serial No. 483,542, and in Germany Nov. 25, 1929. 10 Claims. (Cl. 194—16.)



1. In a telephone paystation mechanism having a coin receiving unit, means for moving said unit into three different positions, means through which a coin is deposited in said unit or removed from said unit when the same is in one of its positions, a switch control circuit, means closed by said unit and a deposited coin when the unit is rotated to another of its positions for completing said switch control circuit, a talking circuit, means closed by movement of the unit and a coin deposited therein when the unit is moved to a third of its positions for completing said talking circuit, and a coin box for receiving the deposited coin consequent to the movement of the unit to the latter position.

1,902,211. HAIR COLLECTING DEVICE. HENRY L. BJORKLUND, Minneapolis, Minn. Filed Apr. 30, 1930. Serial No. 448,674. 12 Claims. (Cl. 15—15.)

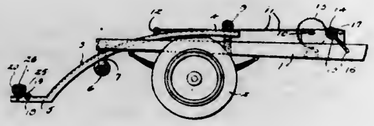


1. A device for collecting hair and the like comprising an upstanding casing having a foraminous front, a substantially horizontal projecting portion below said front, also of foraminous structure and means for withdrawing air from said casing whereby an apron, such as a barber's apron can be placed against the casing and the hair and refuse thereon drawn through said foraminous portion.

1,902,212. TOWING DEVICE. FRED BONGE, Seattle, Wash. Filed Oct. 20, 1931. Serial No. 569,998. 6 Claims. (Cl. 280—33.44.)

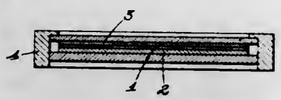
2. A towing mechanism comprising a wheeled structure, a roller suspended from the under side of said structure, a bar extending longitudinally of the structure over said roll-

er and having a downwardly directed rear portion terminating in a straight rear end, means carried by the structure for drawing the downwardly directed rear portion



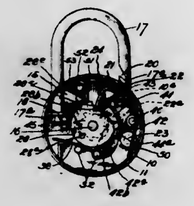
over said roller, and means carried by the straight rear end portion of the bar for coupling an axle of a vehicle therewith.

1,902,213. PROCESS OF REPRODUCING IMAGES ON METALLIC SURFACES. JOHN P. BROCKWAY, Coronado, Calif., assignor to A. B. Bowman, San Diego, Calif. Filed Feb. 28, 1929. Serial No. 343,576. 21 Claims. (Cl. 204—6.)



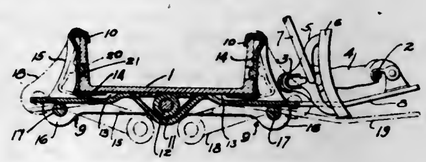
1. The herein described process of reproducing images on metallic surfaces, comprising the subjecting of a film to dry chlorine gas for a period of an hour or more, then placing the same on a highly polished metallic surface the metal of a group consisting of iron, steel, Monel metal, brass and copper, then placing a negative with images thereon over said chlorine treated film and subjecting the same to light.

1,902,214. SELF-CLOSING COMBINATION LOCK. RAYMOND J. BUETTNER and ROBERT A. FOUND, West Allis, Wis.; Joseph M. Muntner, Chicago, John J. Neitz, Naperville, Ill.; and Frank C. Zanzig, Milwaukee, Wis., assignors to Dudley Lock Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 23, 1930. Serial No. 463,018. 22 Claims. (Cl. 70—113.)



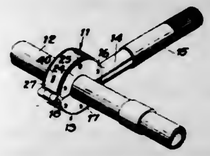
1. In a permutation lock, a lock casing, a shackle mounted in the casing having one end adapted to be released from engagement therein, a locking pawl mounted in the casing and engageable with said releasable end of the shackle, tumbler mechanism including a series of disks adapted to be adjusted in a predetermined combination which permits said pawl to release the end of the shackle, and means engageable by the end of the shackle as it re-enters the casing for positively dis-arranging the tumbler disks.

1,902,215. BRAKE BEAM SUPPORT BRACKET. EDWIN G. BUSSE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1930. Serial No. 493,191. 16 Claims. (Cl. 188—210.)



1. A two-part mounting bracket for a brake beam guard, guide, or support member, each part having a portion adapted to engage a truck spring plank and another portion in rigid relation therewith and adapted to be secured to the other part to retain the bracket in place.

1,902,216. EXTERIOR GRIPPING DEVICE. JOSEPH A. BUTTRESS, South Pasadena, Calif., assignor of one-half to George Parker, Jackson, Miss. Filed Aug. 31, 1931. Serial No. 560,406. 11 Claims. (Cl. 81—179.)



1. An outside gripping device embodying: a body having a polygonal opening therein; a handle on said body; a plurality of floating gripping shoes in said opening having bearing projections engaging the inner face of said opening; means on said body for limiting the radial movement of said shoes into said opening; and yieldable means for normally tilting said shoes on said bearing projections relative to the engaged faces in said opening.

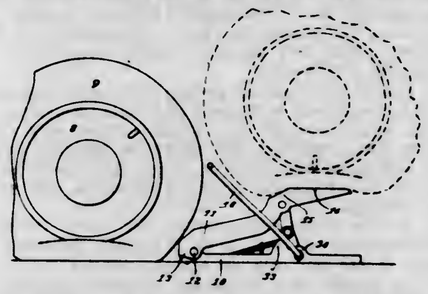
1,902,217. FISH-BAIT ADJUSTING DEVICE. JULES CATARAU, Seattle, Wash. Filed Oct. 29, 1930. Serial No. 491,864. 1 Claim. (Cl. 43—40.)



A fish-bait adjusting device comprising a leader, a conicoid-shaped member, means for adjustably securing said member for axial movement along said leader, a hoop loosely mounted on said leader and having inwardly directed prongs the inner ends of said prongs defining an opening of less diameter than the base diameter of the conicoid-shaped member whereby the base of said member constitutes a stop to limit movement of the hoop along the leader.

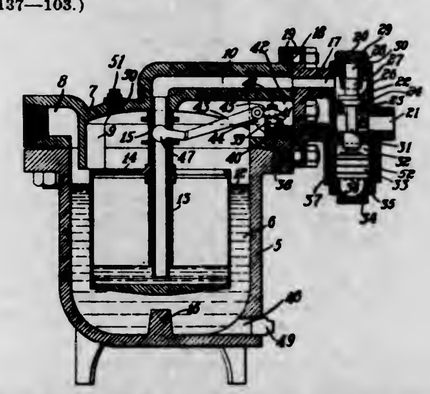
1,902,218. WHEEL RAMP. LOUIS L. COOMBER, Freeport, Ill. Filed May 16, 1930. Serial No. 452,874. 4 Claims. (Cl. 254—88.)

1. A portable wheel ramp upon which the wheel of an automobile is adapted to be driven, whereby supporting means may be placed beneath the axle thereof, comprising in combination, a base adapted to rest upon the ground, an inclined portion pivotally attached at one end to said base along which said wheel is adapted to move to be elevated, at least one toggle link pivotally attached at one end to said inclined portion, a second toggle link pivotally attached at its upper end to the lower end of said first toggle link and having a slotted sleeve positioned at the lower end thereof, a shaft journaled in said base and positioned within said sleeve, an abutment on said base adapted to support said toggle links on one side of the



center line thereof, means on said shaft adapted to engage the end of said slot whereby rotation of said shaft in one direction will cause rotation of said second toggle link, moving the pivotal connection between said toggle links through the center line thereof, said slot permitting movement of said toggle links independent of said shaft, under the weight of said inclined portion, whereby said inclined portion is lowered, to leave said wheel suspended.

1,902,219. STEAM TRAP. CLARENCE F. COVEY, Pittsburgh, Pa., assignor to McAuley Automatic Trap Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 6, 1929. Serial No. 368,778. 3 Claims. (Cl. 137—103.)



1. A steam trap having in combination a body member forming a condensate collecting chamber, a condensate discharge control unit separably removable from said body member and having a main valve for controlling the discharge of condensate from said chamber, a condensate discharge pipe positioned in said chamber, a vertically movable bucket having a grooved guide sleeve surrounding said pipe, a pilot valve for controlling the delivery of operating pressure from said chamber to said main valve and a pilot valve operating lever mounted on said unit and having a yoke positioned in the groove of said sleeve and freely removable therefrom.

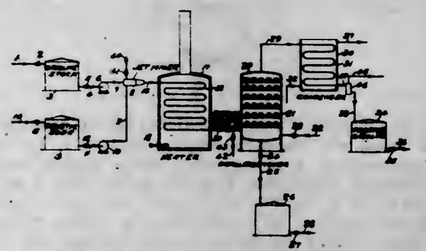
1,902,220. STENCIL CABINET. MICHAEL D'ANDREA, St. Paul, Minn., assignor of one-half to Ray J. Stieger, St. Paul, Minn. Filed Sept. 17, 1931. Serial No. 563,383. 4 Claims. (Cl. 101—126.)

1. In a stenciling device of the class described, a normally upright cabinet of quadrangular box like form comprising two sections hingedly connected to each other at the top and opening toward each other, one part of the cover section adapted to be swung upwardly to resting position on top of the other or base section to about an upright common plane therewith, the lower rear corners of the base section supported in spaced relation to the support-



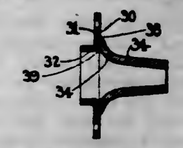
ing surface on which the device is set, a forward and downwardly inclined extension of said base section at each end thereof, a gage bar connecting the forward extremities of said extensions in parallel relation to the main or base part, said bar adapted to contact with a sheet to be stenciled forward of said bar and simultaneously support the front of the cabinet.

1,902,221. PROCESS OF PURIFYING NAPHTHA STOCKS. DAVID E. DAY, Los Angeles, Calif. Filed Dec. 5, 1931. Serial No. 579,287. 3 Claims. (Cl. 196—41.)



1. A process of purifying naphtha stocks, comprising, commingling a naphtha stock with a substantially concentrated water solution of a caustic alkali, passing the commingled mixture through a heating zone at temperatures of approximately 350–500 degrees F., under a pressure sufficient to prevent substantial vaporization of the naphtha stock, releasing the pressure and introducing air into the commingled mixture, and separating a purified naphtha by vaporization, fractionation and condensation from products of reaction, excess caustic alkali and aeriform products.

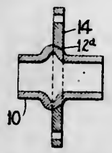
1,902,222. METHOD OF MAKING WHEEL HUBS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 28, 1929. Serial No. 366,549. 2 Claims. (Cl. 29—159.3.)



1. The method of forming flanged hubs which consists in separately fabricating the flange and that part of the

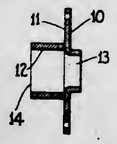
hub barrel lying on one side thereof, flaring the end of a tubular section, and butt welding the flared end of the tubular section substantially to the cornice of the flanged section.

1,902,223. METHOD OF MAKING HUBS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 4, 1929. Serial No. 368,349. 1 Claim. (Cl. 29—159.3.)



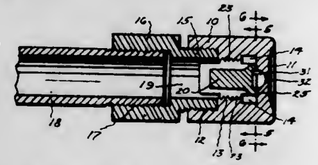
The method of forming hubs which consists in subjecting a tube to axial pressure to slightly externally collapse its walls intermediate its ends and thereby form an annular external shoulder, machining a portion of said shoulder, complementally machining the interior portion of a ring adapted to constitute the flange of the finished hub, and butt welding said complementally machined portions together.

1,902,224. METHOD OF MAKING WHEEL HUBS. CAROLUS L. EKSERGIAN, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 6, 1929. Serial No. 368,775. 3 Claims. (Cl. 29—159.3.)



1. The method of making sectional flanged hubs formed from separately fabricated sections adapted to be united in substantially a radial plane, which method consists in integrally fabricating a flange portion and a portion of the barrel of the hub lying on one side thereof, forming a second unflanged barrel portion as a section of tubing, and butt welding the tubing section through one of its longitudinal extremities to the side of the flange opposite to that carrying the barrel portion.

1,902,225. FUEL BURNER. ROSS H. FORNEY, Dallas, Tex., assignor to Forney Combustion Engineering Company, Dallas, Tex., a Corporation of Texas. Filed Apr. 9, 1932. Serial No. 604,145. 3 Claims. (Cl. 299—120.)



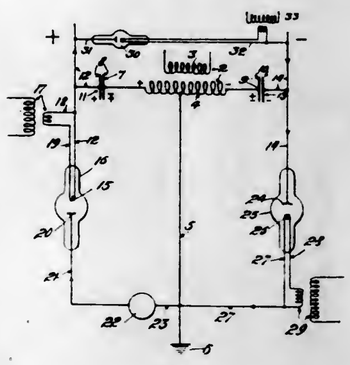
1. In a fuel burner, a burner head having a burner port at one end and a screw threaded internal flange intermediate its ends, a plug having a circumferential screw threaded collar intermediate its ends engaging in the flange of the head, the head having a storage chamber between its flange and its front wall surrounding the plug, the plug having a plurality of external fuel ducts extending substantially from end to end thereof and having at their forward ends deflectors curving gradually outward for directing the fluid fuel into the storage chamber of the head, the plug having also exterior ducts extending from the storage chamber and delivering fuel tangentially to the port of the head.

1,902,226. WEIGHTED SILK AND METHOD OF WEIGHTING THE SAME. VICTOR FROELICHER, Ridgewood, N. J., assignor to Textile Dyeing and Printing Co. of America, Inc., a Corporation of New Jersey. Filed July 27, 1932. Serial No. 625,220. 12 Claims. (Cl. 8—13.)

1. Process of weighting natural silk, which comprises weighting such silk with a tin phosphate, thereafter applying to the said silk an aqueous solution of a water soluble lead compound, and thereafter applying to the said silk an aqueous solution of an alkali metal borate selected from the group consisting of sodium and potassium borates.

3. Process of weighting natural silk, which comprises weighting such silk with a tin phosphate, thereafter applying to the said silk an aqueous solution containing a water soluble lead compound, thereafter applying to said silk an aqueous solution of an alkali metal borate selected from the group consisting of sodium and potassium borates, and thereafter applying to said silk an aqueous solution of a compound selected from the group including the silicates, phosphates or tungstates of sodium or potassium.

1,902,227. HIGH POTENTIAL CURRENT UNIDIRECTIONAL SYSTEM AND METHOD. HARRY D. GARRETSON, New York, N. Y., assignor to Harry F. Waite, New York, N. Y. Filed Sept. 20, 1928. Serial No. 307,113. 4 Claims. (Cl. 250—34.)

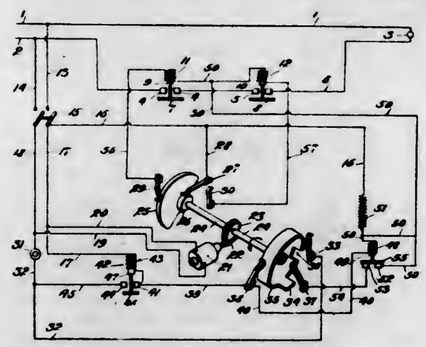


1. The method of generating a high potential, unidirectional, pulsating current which consists in simultaneously generating a first high potential between two terminals, said potential charging a condenser at each terminal to a fixed potential then reversing said high potential to add to said condenser potentials whereby upon discharge a current passes in one direction only from the condensers, said current being passed at a higher potential than said first high potential.

1,902,228. IMPULSE TIMER. HARRY D. GARRETSON, New York, N. Y., assignor to Harry F. Waite, New York, N. Y. Filed July 24, 1930. Serial No. 470,314. 4 Claims. (Cl. 175—375.)

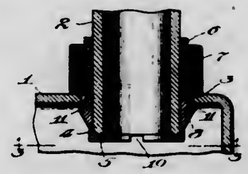
1. In a system of the class described, two separate electro-magnetic switches provided with suitable circuits, one circuit being closed through the contacts of said switches when both switches are closed but not otherwise, other circuits through the magnets of said switches

and means for controlling the magnet circuits for causing one of said circuits to open and close and the other of said circuits to open and close with a lag behind the



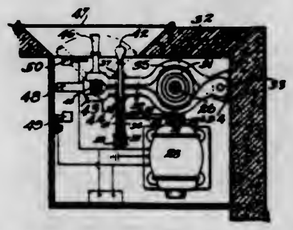
first both as to opening and closing, and each to function with regard to the other so that both are closed for a common period of time.

1,902,229. PIPE CONNECTER. WILLIAM GOETZELMAN, Chicago, Ill., assignor to Appleton Electric Company, a Corporation of Illinois. Filed July 30, 1931. Serial No. 553,985. 6 Claims. (Cl. 285—52.)



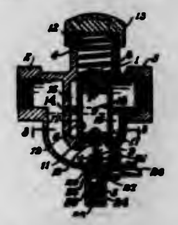
6. A device of the character described comprising a sleeve having remote from one end an external wedge face which recedes from the long axis of the sleeve as the distance from said end increases, the transverse dimension of the sleeve on a line at right angles to a diameter passing through said wedge face being smaller than the transverse dimension along said diameter, the sleeve being divided longitudinally from the opposite end inwardly past the zone in which the wedge face lies, and a nut screw-threaded on the first-mentioned end of the sleeve.

1,902,230. FIRE ESCAPE. OTTO C. N. GUNDERSEN, Spokane, Wash. Filed Feb. 18, 1929. Serial No. 340,694. 1 Claim. (Cl. 188—1.)



In a fire escape as described, the combination with an operating shaft having a brake drum thereon, an electric motor and transmission mechanism between the motor and said shaft, a pair of pivoted brake levers having shoes engaging the drum, a bolt engaging one of the levers, linkage connected to the other lever and a spring on the bolt for holding the linkage in alinement, means connected with the linkage and actuated by the transmission mechanism for releasing the brake shoes, manually operated means for spreading the free ends of the levers to release the brake shoes, a motor circuit and a switch therein, and electrical connections controlled by the manually operated means for closing the motor switch when the brake shoes are released.

1,902,231. AUTOMATIC UNLOADING CHECK VALVE. JOHN W. GURLEY, Miamisburg, Ohio, assignor to The Dayton Air Compressor Company, Dayton, Ohio, a Corporation of Ohio. Filed July 31, 1931. Serial No. 554,171. 2 Claims. (Cl. 251—144.)

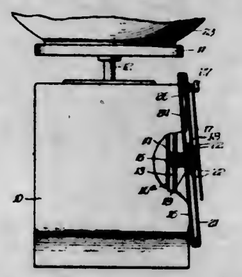


1. A check valve of the type described, comprising a valve body formed with a central bore, a hollow piston valve reciprocable in said bore, a seat for said piston valve, said valve body having a fluid inlet passage below said piston valve, and a fluid outlet passage, a spring for normally holding said piston valve upon its seat, said piston valve formed with an inlet port through which fluid may enter it after it has been raised by said fluid, and also having an outlet port of less diameter than the inlet port for communication with the outlet passage when the piston valve is above its seat.

1,902,232. CLEANER FOR FURS AND THE LIKE AND PROCESS OF CLEANING. WALTER G. HABERL, Minneapolis, Minn. Filed July 31, 1930. Serial No. 472,212. 4 Claims. (Cl. 87—5.)

3. The method of cleaning furs which consists in spreading over the fur a multiplicity of small particles of corn-oil-cake meal, which have been impregnated with a liquid cleaning re-agent, agitating said furs and particles, whereupon the natural shape and characteristics of said particles cause the same to quickly work in to the leather of the fur and to then work outwardly frictionally engaging the hair of the fur and removing dirt therefrom.

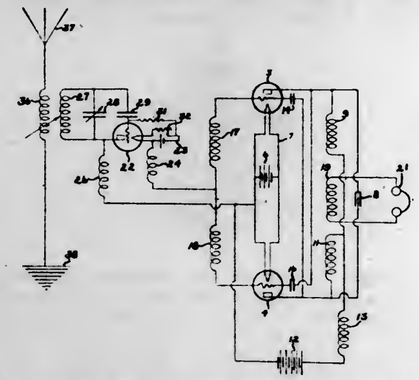
1,902,233. WEIGHING SCALE. STAN L. HANSSEN, Chicago, Ill., assignor to Hanson Scale Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1931. Serial No. 506,691. 2 Claims. (Cl. 265—68.)



1. A scale having in combination, a casing, weighing mechanism therein, a shaft connected to said mechanism and projecting through a wall of said casing, a point-

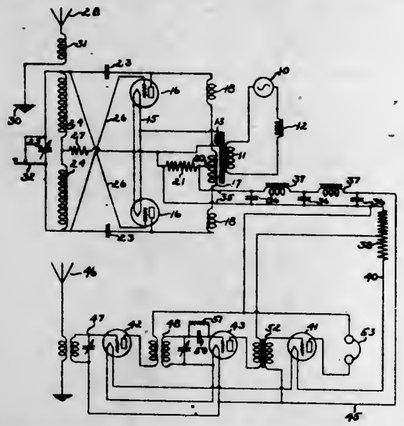
er on the end of said shaft, a dial positioned about said shaft between said pointer and said wall and mounted for rotative adjustment about the axis of said shaft, a handle for moving the dial, a spring concealed behind said dial and acting between said dial and said wall to resist movement of the dial, and a single means securing said handle and said spring to said dial.

1,902,234. RECEIVER FOR CONTINUOUS WAVES. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Mar. 12, 1930. Serial No. 435,100. 6 Claims. (Cl. 250—8.)



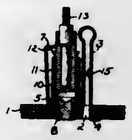
1. A receiver for continuous waves comprising a self-blocking oscillator, a trigger detector tube having a control electrode and a plate circuit connected to permit a current flow releasing said oscillator, and a regenerative detector circuit associated with said control electrode and arranged normally to block said current flow and to release said current flow when a received wave is impressed thereon.

1,902,235. RADIORECEIVER POWER SUPPLY. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed May 6, 1930. Serial No. 450,165. 11 Claims. (Cl. 250—13.)



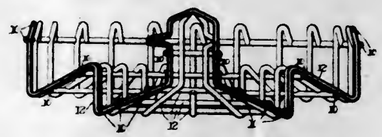
1. In combination, a transmitter for radio waves having a vacuum tube, a transformer for supplying an alternating potential between the cathode and anode of said tube, an impedance in series with said tube and said transformer, and a circuit bridged across said impedance for supplying rectified current to a receiver for radio waves.

1,902,236. CONNECTING PLUG RECEPTACLE. RALPH M. HEINTZ, Palo Alto, Calif., assignor to Heintz & Kaufman, Ltd., San Francisco, Calif., a Corporation of Nevada. Filed Nov. 24, 1930. Serial No. 497,817. 2 Claims. (Cl. 173—328.)



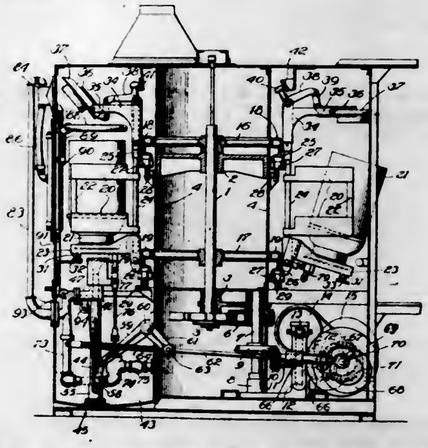
1. A plug receptacle comprising a base-plate apertured to receive a plug contact, a resilient contact strip secured to said base-plate and having a portion projecting from the plane of the base-plate and registered with said aperture to engage said plug contact, a socket member secured to the base-plate and electrically connected to said contact strip, a contact plug formed to engage said socket member and having a flange surface formed thereon, and a latch formed on the end of said contact strip and adjacent said socket for engaging said flange surface.

1,902,237. DISHWASHING MACHINE. WILLIS S. HILPERT, Winnetka, and EDGAR S. STODDARD, Berwyn, Ill., assignors to the Conover Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 5, 1930. Serial No. 425,952. 1 Claim. (Cl. 141—9.)



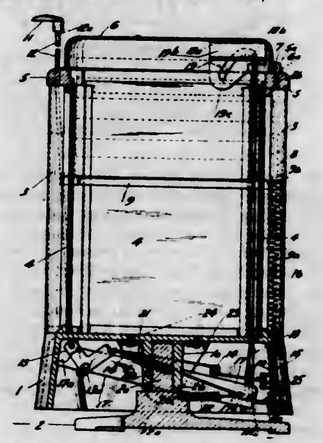
A dishwashing rack composed of a series of wires forming holders for the various articles to be cleansed, and a cushioning coating thereon, said coating consisting of a layer of plasticized and tanned gelatin.

1,902,238. CAN WASHING MACHINE. IRVING R. HIPPENMEYER, Waukesha, Wis., assignor to The Creamery Package Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1929. Serial No. 376,256. 2 Claims. (Cl. 141—7.)



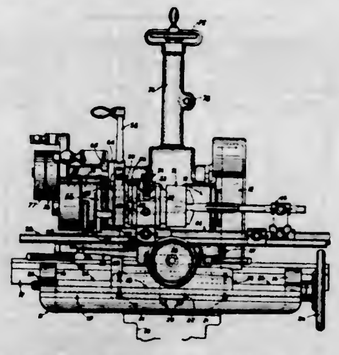
1. In a can washing machine, a liquid discharging jet mechanism having a connection for the supply thereto of liquid under pressure, a valve controlling said connection, mechanism for operating said valve having an actuating lever, a conveyor having a series of can holders adapted to receive cans for successive positioning over said jet mechanism, a plate mounted on each of said can holders adapted to be depressed by a can positioned in said can holder, and a member carried by said plate which is moved by the depression of said plate into position to engage said lever when said can is positioned over said jet mechanism.

1,902,239. BREAD SERVING APPLIANCE. CLEM HOLDGRAFER, Clinton, Iowa. Filed Nov. 17, 1930. Serial No. 496,214. 9 Claims. (Cl. 312—69.)



9. A server for sliced bread comprising a container having a base, cap and sides, with a plurality of tie-rods connecting them in assembled position, a cover hinged to the cap, an elevator platform within the container slidingly mounted upon a pair of tie-rods, coiled springs mounted upon said tie-rods adapted to exert pressure upwardly against the platform, and manually operable means to open the cover and to lock the platform in stationary position before the cover opens and to hold it locked until the cover is closed.

1,902,240. MACHINE FOR SHARPENING SCREWING TAPS AND THE LIKE. HERBERT WILLIAM HUNT and PERCY HUNT, Manchester, England. Filed Aug. 8, 1931, Serial No. 554,766, and in Great Britain Aug. 19, 1930. 4 Claims. (Cl. 51—95.)



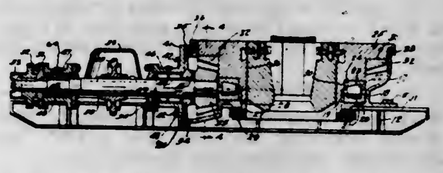
1. In a grinding machine for sharpening screwing taps and the like having a headstock and tailstock mounted to rock about an axis parallel to the axis of the tap and having a cam on the headstock engaging a fixed abutment to produce such rocking motion synchronously with the rotation of the headstock, in combination, a lever rotatably mounted on the axis of the headstock, and carrying the cam, a ratchet wheel secured on the spindle of the headstock adjacent to the lever, a pawl on the lever to engage the ratchet wheel, means for preventing the reverse rotation of the headstock and adjustable means for limiting the arc of movement of the lever.

1,902,241. BIRD CAGE AND UTILITY HANGER. CHARLES A. JONES, Campbell, Calif. Filed Feb. 24, 1932. Serial No. 594,867. 3 Claims. (Cl. 248—22.)



3. Means for movably suspending a hanger for bird cages and the like comprising the combination with a flanged bracket standard of a hook having teeth at its upper portion to securely engage a moulding or like place; a scroll or the like at its lower portion to prevent sway laterally; outwardly and downwardly disposed registering notches on the flanges of said bracket standard intermediate the hook and scroll to securely engage and cooperate with a suspension-hook of the class described and substantially for the purpose set forth.

1,902,242. WELL DRILLING ROTARY. HORACE G. JOHNSTON, Corsicana, Tex. Filed Oct. 24, 1930. Serial No. 490,948. 6 Claims. (Cl. 255—23.)

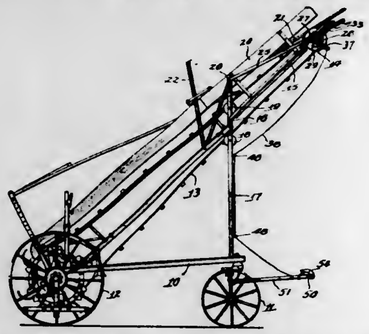


1. In a well drilling rotary, a pair of skids, a base plate mounted on said skids, a bed plate mounted on the skids, a bowl carried by the bed plate, a table rotatably mounted in the bowl, a gear depending from the table within the bowl, an oil sump in the bowl, an arch spanning the sump and integral with the bowl, an upright flange carried by the base plate and detachably fastened to the arch and the sump, a spacer carried by the flange and forming a closure for the sump and arch, a pair of bearing housings mounted on the base plate, a drive shaft journalled in said housings and extending through the flanges and spacer into the sump, and a pinion on the shaft in the sump meshing with the gear ring, the shaft, pinion, spacer, flange and housings being removable with the base plate as one unit.

1,902,243. HAY LOADER. LEE H. KAUPKE, Rock Island, Ill., assignor to The Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed Apr. 30, 1928. Serial No. 273,850. 2 Claims. (Cl. 198—109.)

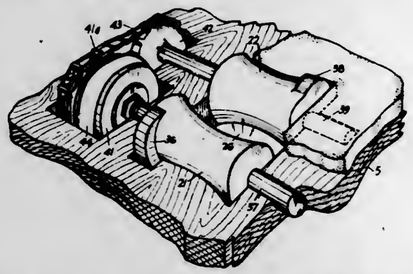
2. In an apparatus of the class described, a main frame, an elevator having a hinged upper portion, locking means

at opposite sides of said upper portion adjacent the outer end thereof, locking bars pivoted at opposite sides of said main frame, each being slidably engaged and selec-



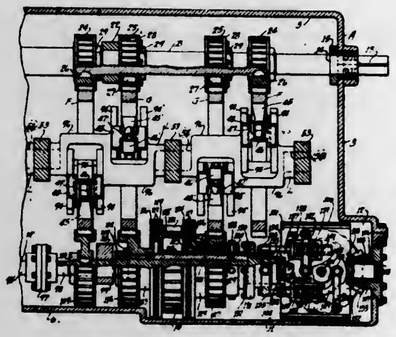
tively adjustable relative to its respective locking member, and means for simultaneously operating said locking members from either side of said hinged portion.

1,902,244. EGG CANDLING MACHINE. JOSEPH F. KING, Burbank, Calif., assignor of one-half to Leo C. King, Glendale, Calif. Filed Mar. 11, 1932. Serial No. 598,102. 17 Claims. (Cl. 99—6.)



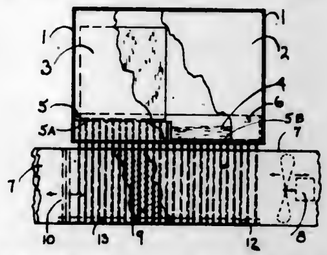
1. In a device of the kind described, a pair of spools, and means to impart to an egg supported between the adjacent surfaces of said spools a circumgyratory movement.

1,902,245. AUTOMATIC TRANSMISSION. VERNON KINSER, Butterfield, Mo. Filed Sept. 8, 1931. Serial No. 561,515. 13 Claims. (Cl. 74—53.)



1. In speed changing apparatus, the combination, with driving and driven shafts, of unyieldingly connected driving and driven elements, the driving element having permanent connection with the driving shaft, said elements having concurrent periods of revolution at relatively variable angular velocities, and means for alternately connecting and disconnecting the driven element with and from the driven shaft during respective predetermined periods of a revolution of the driving element.

1,902,246. AIR COOLING. FRANCIS A. KITCHEN, Cleveland, Ohio. Filed Mar. 2, 1931. Serial No. 519,474. 2 Claims. (Cl. 62—131.)



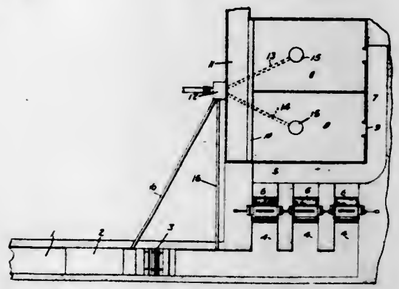
1. An air conditioning device for cooling air and reducing its absolute humidity, comprising in combination a container having a stepped bottom, said step adapted to support a cake of ice within said container, the remainder of said bottom forming a recess for the reception of the water resulting from the melting of said cake of ice, an air duct positioned adjacent to said container, means for inducing a flow of air to be conditioned through said duct, and a plurality of heat exchanging elements extending into said duct, said elements connecting with said bottom in heat exchanging relationship and adapted to reduce the temperature of the air flowing through said duct below its dew point whereby condensation of the excess moisture present will be effected.

1,902,247. PACKING. ANDREW R. KLINGLOFF, Shrewsbury, Mass. Filed May 21, 1932. Serial No. 612,829. 3 Claims. (Cl. 288—1.)



1. As an article of manufacture, a packing consisting of a ring of packing material having conical slits extending into the packing from the outside cylindrical surface thereof, the material on both sides of each slit contacting.

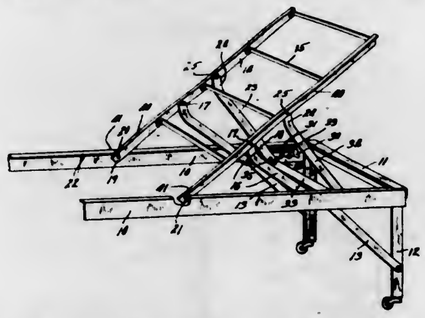
1,902,248. PROCESS AND APPARATUS FOR PURIFICATION OF SEWAGE AND TRADE WASTES. RAYMOND RICE KNIGHT, Toronto, Ontario, Canada. Filed June 1, 1931. Serial No. 541,330. 2 Claims. (Cl. 210—5.)



1. A purification process for sewage and trade waste consisting of first passing the sewage flow through screens

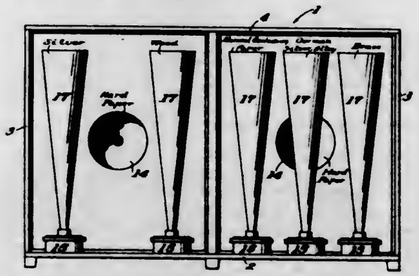
together with the unscreenable fine solids, then treating the effluent passed through such screens with the unscreenable solids contained therein to form screenable solids, then separating the screenable solids thus formed from the liquid effluent, and finally returning the solids resulting from the aforesaid treatment into the influent in front of the screening point thereof.

1,902,249. ADJUSTABLE BACK REST FOR BEDS. FRANK L. LANZY, Cleveland, Ohio, assignor to The Champion Spring Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 5, 1928. Serial No. 317,392. 4 Claims. (Cl. 5—73.)



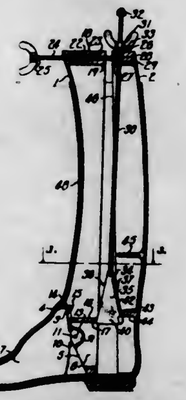
4. A back rest attachment for a cot frame, having supporting braces pivoted to the back rest and the cot frame, the lower end of the rest slidably supported on the frame, the latter carrying elongated box-like structures having slotted vertical walls secured to the inner surface thereof and adjacent the head end of the frame, and the said slots having a series of ratchet notches on the lower edge thereof and facing away from the said head end, and a bail pivoted to said attachment and carrying outstanding pins adapted to enter any one of said notches selectively, the said pivoted bail being mounted beyond the supporting braces, and the latter being intermediate the bail and the lower end of the rest, and cover plates pivoted for movement in said slots to normally protect said notches from entrance of said pins and upon pressure from beneath to rise and expose the said notches to release the pins therefrom, to lower the back rest in a single operation.

1,902,250. SOUND AMPLIFIER. THEODORE LINDENBERG, Columbus, Ohio. Filed Dec. 1, 1931. Serial No. 578,311. 13 Claims. (Cl. 181—27.)



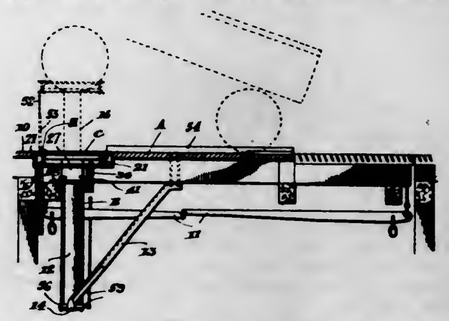
1. In a sound amplifier, a cabinet having open front and rear sides, a baffle arranged centrally of said cabinet and dividing the latter into front and rear compartments, said baffle having an opening formed therein, a reproducer unit arranged in said rear compartment and disposed in registration with the opening, and a plurality of reproducer units disposed in said front compartment, each of the reproducing units in the front compartment being provided with a tapered resonator.

1,902,251. BOOT TREE. FRED R. MAIER, Kansas City, Mo. Filed May 25, 1931. Serial No. 539,778. 8 Claims. (Cl. 12—117.)



1. A boot tree including shin and calf sections, a wedge-shaped member slidably engaging one of the sections, a rod movable longitudinally of the sections to actuate the wedge to spread the lower ends of the sections, means on one of the sections for engaging the rod to effect pivotal movement of the wedge into that section when the wedge is in retracted position, and means for spreading the upper ends of the sections.

1,902,252. COMBINATION GRAIN DUMP. JOHN MCEACHERN, Winnipeg, Manitoba, Canada. Filed Apr. 20, 1931. Serial No. 531,512. 16 Claims. (Cl. 214—46.5.)

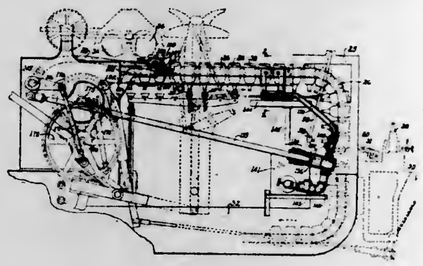


1. In combination with a scale platform, grain dumping mechanism comprising a hoist in the form of a piston and cylinder mounted below the scale platform, a piston rod connected to said piston and adapted to project above the level of the scale platform during operation, a hoist platform mounted on said piston rod and adapted to be flush with the scale platform in normal position, said hoist platform including a framework made up of a central stationary section secured to said piston spacing movable sections designed to be displaced on upward movement of the hoist, means for operating the hoist, and means for stopping downward or upward movement respectively of the movable sections when said hoist is in raised or lowered position.

1,902,253. WASHING APPARATUS. GEORGE J. MEYER, Milwaukee, Wis., assignor to Geo. J. Meyer Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Jan. 24, 1925, Serial No. 4,455, Patent No. 1,787,993, dated Jan. 6, 1931. Divided and this application filed Sept. 17, 1927. Serial No. 220,141. 5 Claims. (Cl. 141—7.)

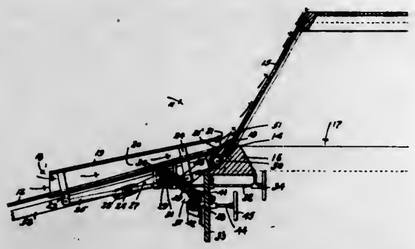
1. In a bottle washing machine, the combination of an intermittently-traveling bottle conveyor adapted to hold

bottles in inverted position, conveyor-impelling means, a spray conduit disposed to register with the openings of said bottles during pauses in their travel, a plunger pump connected to said conduit including a plunger operatively



connected with said conveyor-impelling means to be movable on a pressure stroke during pauses in the travel of said bottle conveyor for injecting a fluid spray into said bottles, and means for supplying fluid to said pump.

1,902,254. WINDSHIELD CLEANER DEVICE FOR AIRPLANES. SILAS A. MOREHOUSE, Los Angeles, Calif. Filed Apr. 1, 1929. Serial No. 351,524. 9 Claims. (Cl. 20—40.5.)



1. For use in combination with the cowl and the windshield of aircraft and the like: a deflector plate mounted on and spaced above said cowl so as to form a passage for directing a stream of air across the outer surface of said windshield.

1,902,255. COATING COMPOSITION AND FILM PRODUCED THEREBY. WILLIAM HENRY MOSS and BLANCHE B. WHITE, Cumberland, Md., assignors to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1928. Serial No. 258,999. 3 Claims. (Cl. 134—26.)

1. A coating composition comprising an organic derivative of cellulose, an aromatic amine-furfural resin which bleaches on exposure to light, a phenol-aldehyde resin which darkens on exposure to light and a common solvent, the proportions of resins present being such as to produce films that maintain their color unchanged on exposure to light.

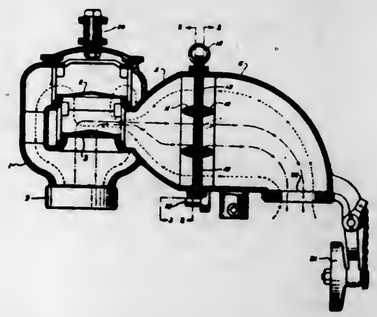
1,902,256. COATING COMPOSITION AND FILM PRODUCED THEREBY. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1928. Serial No. 259,000. 7 Claims. (Cl. 134—79.)

1. A coating composition containing a derivative of cellulose, an acetone furfural resin, a phenol aldehyde resin and a solvent therefor the proportions of resins being such as to produce a light-fast film.

1,902,257. DERIVATIVE OF CELLULOSE COMPOSITION. WILLIAM HENRY MOSS, Cumberland, Md., assignor to Celanese Corporation of America, a Corporation of Delaware. Filed May 13, 1929. Serial No. 362,851. 3 Claims. (Cl. 134—26.)

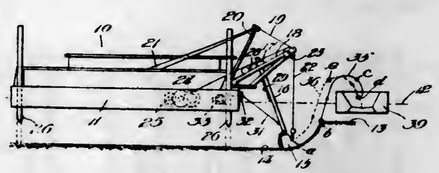
1. A composition of matter containing cellulose acetate, a polymerized vinyl compound in greater quantity than is compatible with the cellulose acetate, a synthetic resin selected from the group consisting of phenol-formaldehyde resins, diphenylol propane-formaldehyde resins, aromatic sulfonamid resins, resins formed by the heating of lactic acid under reflux, phenol-furfural resins, acetone-furfural resins and aniline-furfural resins, and a common solvent, synthetic resin being present in sufficient amount so that the resulting product is clear and homogeneous.

1,902,258. FLAME ARRESTER. FRANS G. D. MULLER, Houston, Tex., assignor to The Staytite Company, Houston, Tex., a Corporation of Texas. Filed Sept. 12, 1930. Serial No. 481,507. 5 Claims. (Cl. 220—88.)



1. A plurality of flame arresting elements, spacing means therefor, and a ring by which said elements and means are movably connected together so that they may be moved apart and cleaned.

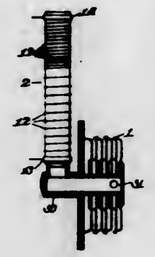
1,902,259. METHOD OF AND APPARATUS FOR CONTROLLING DREDGES. ALOYS NEVELING, Chicago, Ill. Filed Feb. 18, 1932. Serial No. 593,815. 11 Claims. (Cl. 214—135.)



1. The combination with a dredge, of hoisting mechanism mounted on said dredge, and a pair of oppositely connected steam turbines connected to said hoisting mechanism for controlling the opposite movements thereof.

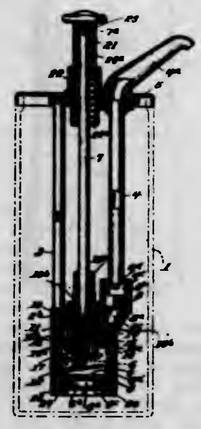
1,902,260. HEAT MOTOR. LAWRENCE M. PERSONS, Des Moines, Iowa, assignor to Cook Electric Company, Chicago, Ill., a Corporation of Illinois. Continuation of application Serial No. 37,091, filed June 15, 1925. This application filed Jan. 10, 1929, Serial No. 331,690. Renewed Jan. 27, 1933. 8 Claims. (Cl. 60—25.)

1. A heat motor comprising an expansible and contractible vessel having a volatile liquid therein, a heating device therefor and a heat coil wound about said heating device, said heat coil being arranged with the windings at the top of said heat coil more closely spaced to accelerate initial heating of said liquid.



7. A heat motor comprising an expansible and contractible vessel having an expansible liquid therein, suitable supporting means for said vessel, a heating device therefor comprising a substantially closed tube communicating at one end with said vessel, and mounting means arranging said tube substantially transversely with respect to said vessel.

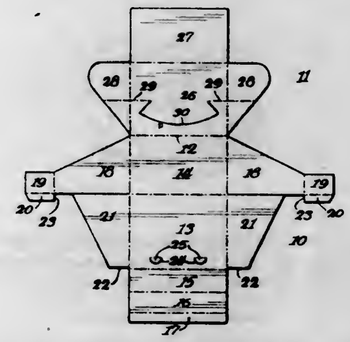
1,902,261. SIRUP PUMP. ALLEN C. PILCHER and LAWRENCE C. PILCHER, Louisville, Ky., assignors, by direct and mesne assignments, to The Russ Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 7, 1930. Serial No. 466,236. 17 Claims. (Cl. 225—35.)



1. In a liquid dispensing pump, a piston having a port, an actuating member having means to operatively connect with said piston for unitary movement therewith, means moving with the actuating member for closing said port, and means rendered operative during such unitary movement to disconnect said actuating member from the piston for relative endwise movement and to open said port.

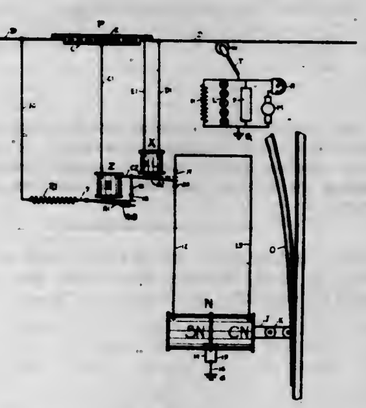
1,902,262. FOLDABLE DISPLAY CARTON. HENRY K. POWELL, Chicago, Ill., assignor to Morris Paper Mills, Chicago, Ill., a Corporation of Illinois. Filed Sept. 24, 1930. Serial No. 483,991. 7 Claims. (Cl. 206—44.)

1. A foldable carton formed of a single blank of paper and including a plurality of walls, one of said walls being formed of a pair of flaps projecting from two other of said walls into mutually overlapping relation, the outer of said flaps having a tongue extending laterally therefrom and across one edge of the other of said flaps, and



a lip extending laterally from said tongue for engaging the inside of the inner flap to lock said flaps in overlapping relation.

1,902,263. AUTOMATIC ELECTRIC SWITCH CONTROL. FRANK H. RICHTMEKESSING, Louisville, Ky., assignor to Cheatham Electric Switching Device Company, Louisville, Ky. Filed Jan. 7, 1928. Serial No. 245,182. 16 Claims. (Cl. 246—227.)

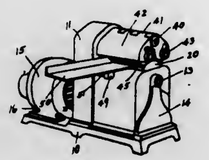


12. A switch operating system comprising an electrically operated track switch, a trolley conductor, a trolley contactor to be engaged by a current collector, a switch operating circuit for conducting current to a track switch solenoid for operating the said track switch, a relay having an operating coil in series with the said track switch solenoid, said relay operable to affect the opening of the said switch operating circuit upon disengagement of the current collector and trolley contactor.

1,902,264. GLUING MACHINE. FRANK J. RECTOR, Pendleton, Ind., assignor to International Printing Company, Indianapolis, Ind., a Corporation. Filed Nov. 3, 1930. Serial No. 493,187. 5 Claims. (Cl. 91—50.)

1. A gluing machine including an adhesive applying roll arranged to support an end and edgewise presented sheet of material while passing thereover and adhesive is applied to the underface thereof, a pair of spaced sheet engaging and sheet conveying pressing rolls positioned thereover and each normally and individually constrained toward the applying roll, means limiting the constrained

movement short of roll to roll contact, and a frame structure supporting said rolls comprising a pair of vertically spaced supports providing a gap between the



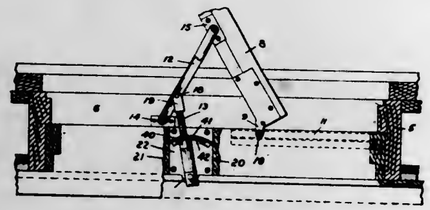
pressing rolls and the adhesive applying rolls and supporting the outer ends thereof and means supporting the opposite ends of said rolls and said supports.

1,902,265. ELECTRICAL PROSPECTING SYSTEM. FRANK RIEBER, Berkeley, Calif., assignor to Frank Rieber, Inc., San Francisco, Calif., a Corporation of California. Filed Feb. 3, 1930. Serial No. 425,631. 8 Claims. (Cl. 175—182.)



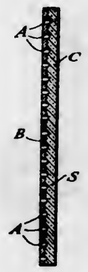
1. The method of determining the distribution of earth conductivity which comprises the steps of passing a current between points on the earth's surface, and measuring the vertical component of said current within the earth.

1,902,266. OPERATING MECHANISM FOR WINDOWS. FRANK X. RIPP, Madison, Wis. Filed Mar. 31, 1932. Serial No. 602,337. 11 Claims. (Cl. 74—14.)



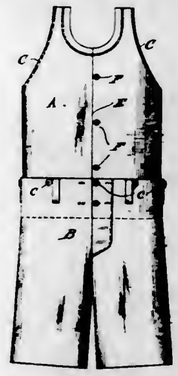
1. An operating mechanism for a swinging member including a bed plate, a bearing member pivotally mounted at one end on the bed plate, a sleeve having an internally threaded collar at one end, said sleeve inserted in the bearing member and having the collar abutting the bearing member, a separate collar on the opposite end of the sleeve and abutting the bearing member, means for securing the separate collar to the sleeve, means engageable with said preceding means for rotating the sleeve, a screw shaft receivable in the sleeve and engaged with the threaded collar and means on the screw shaft engageable with the threaded collar to limit movement of the screw shaft.

1,902,267. STORAGE BATTERY SEPARATOR. JOHN L. RUPP, Wilkinsburg, Pa., assignor, by mesne assignments, to Wubco Battery Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Apr. 24, 1928. Serial No. 272,502. 3 Claims. (Cl. 136—145.)



1. A storage battery separator comprising a sheet of porous material having one side only thereof coated with sizing material forming a layer, said layer being perforated, and said perforations extending for a distance into but not completely through said porous material.

1,902,268. WEARING APPAREL. ABE SCHEAER, Matewan, W. Va. Filed Mar. 22, 1930. Serial No. 438,196. 3 Claims. (Cl. 2—70.)

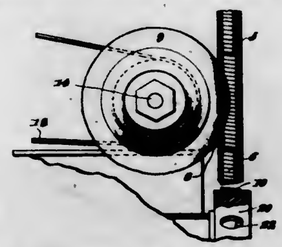


1. In a two-part garment comprising waist and trunk portions; a bifurcated belt-band attached to one of said portions in position to receive the other portion as an insert, the belt-band formed with fastenings on one flap positioned to pass through button holes in the insert and also through button holes in the other flap of the belt-band to fasten the parts together, the insert of the garment being formed with a reinforcement hem along its lower edge, and said hem formed with button-holes arranged in vertical and circumferentially spaced relation to provide for vertical adjustment of one portion of the garment relatively to the other portion, said belt band being also provided with circumferentially spaced button holes for selectively receiving a button to provide for circumferential adjustment of the garment.

1,902,269. APPARATUS FOR MAKING LOCK WASHERS. ALBERT STOLL, Detroit, Mich., assignor to National Machine Products Company, Detroit, Mich., a Corporation of Michigan. Filed May 23, 1930. Serial No. 454,977. 3 Claims. (Cl. 10—73.)

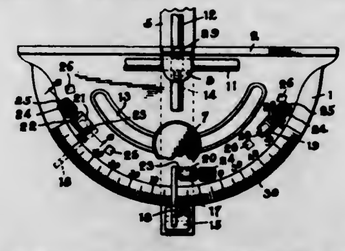
1. In an apparatus for making split lock washers, a magazine of tubular formation adapted for the reception

of a tubular body of helically wound stock, said magazine being provided with a longitudinally extending opening in one side thereof, a combined abrading and cutting wheel extending through the opening at right angles to the axis of the magazine for cutting said tubular body length-



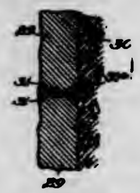
wise and for sharpening the ends of the washers thus formed, and feeding means for the helically wound stock, said magazine having an outlet portion extended beyond said abrading and cutting wheel to hold the previously formed washers in axial alignment.

1,902,270. MITER GAUGE. JAMES TATE, Milwaukee, Wis., assignor to Delta Manufacturing Company, Milwaukee, Wis. Filed June 2, 1932. Serial No. 615,049. 25 Claims. (Cl. 33—99.)



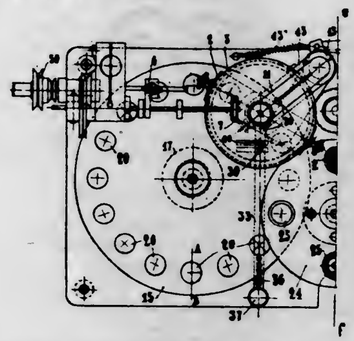
21. A geometrical instrument comprising a base, a bar pivoted to said base, a member adjustably supported by said bar adjacent an edge portion of the base, a gaging stop on said base adjacent its said edge portion and comprising an adjustable abutment, said abutment being within the path of said adjustably supported member on the bar when said member is adjusted into one position with respect to the bar and being clear of said path when said adjustably supported member is moved into another position with respect to the bar.

1,902,271. WALL STRUCTURE. HARRY S. WARNER, Joliet, Ill. Original application filed Apr. 21, 1930, Serial No. 446,010. Divided and this application filed Oct. 29, 1930. Serial No. 492,027. 2 Claims. (Cl. 72—50.)



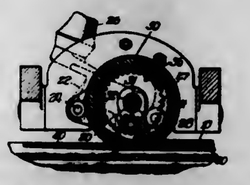
1. A wall-structure comprising a framework, a wall portion of concrete at the outer surface of said framework, pins secured to, and extending forwardly from, said framework, and reenforcement for said wall portion secured to said pins and embedded in said concrete, all of the reenforcement being spaced from said framework.

1,902,272. WAFER DOSING, FILLING, AND SEALING MACHINE. GUSTAVE WILLMANN, Paris, France. Filed June 2, 1930, Serial No. 458,987, and in France June 5, 1929. 6 Claims. (Cl. 226—42.)



1. A machine for dosing, filling and sealing wafers, comprising a powder hopper having a closure at the lower end thereof, a balance for measuring predetermined quantities of the powder fed by the hopper to a wafer-half, electro-magnetic means for operating the said closure when the balance reaches a position of equilibrium, a pair of discs, one of said discs having bosses to carry the upper wafer-halves, and the other of said discs having recesses to carry the lower wafer-halves, means for rotating said discs in opposite directions, a moistener, an additional disc above said first mentionel discs having a plurality of sockets therein, means for imparting said additional disc, sequentially, with an axial movement and a quarter turn in the direction in which the disc carrying the upper wafer-halves rotates, whereby said pair of discs and additional disc cooperate to bring an upper wafer-half on its corresponding boss on one of the pair of discs, to bring the upper wafer-half previously taken in contact with the aforementioned moistener and to bring the upper wafer-half moistened in the preceding operation on to a lower half previously dosed with the powder, an ejector disc, and means for operating said ejector disc to free the completed wafer from the preceding operation with a single axial movement.

1,902,273. DUPLICATING APPARATUS. ALBERT J. BATES, Chicago, Ill., assignor to Ditto Incorporated, Chicago, Ill., a Corporation of West Virginia. Filed Oct. 8, 1930. Serial No. 487,177. 10 Claims. (Cl. 101—133.)



1. In a duplicating machine, a roller mounted for linear movement, a drum mounted therewith for controlling the rotation of said roller, said drum being of larger diameter than the roller, and means to cause said drum to rotate in response to linear movement of said roller.

1,902,274. ELECTRIC IMITATION FIRE. HERBERT HENRY BERRY, London, England. Filed Mar. 2, 1932, Serial No. 596,387, and in Great Britain Apr. 23, 1931. 10 Claims. (Cl. 272—8.)

1. In an electric artificial fire, a piece of translucent fuel simulating material at the front of the fire, a second piece of fuel simulating material arranged in rear of and

spaced from the said translucent material, an electric lamp for illuminating the rear of the translucent material and the front of the second piece of material, whereby the



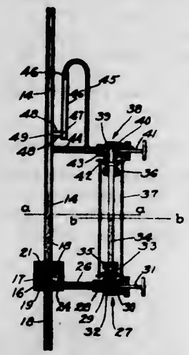
said pieces of material appear to glow and give to the space between them the appearance of a hollow with glowing sides.

1,902,275. GAS SAVER. CHARLES A. BORGESON, San Francisco, Calif. Filed Aug. 31, 1931. Serial No. 560,473. 4 Claims. (Cl. 48—180.)



1. An article of manufacture comprising a base having an opening therein, a bar extending diametrically across the opening, a support carried by the bar and being axially aligned with the short axis of the opening, pins extending radially from the support and being disposed equal distances around the support and equal distances along the support so as to form a spiral, and cup-shaped deflectors carried by the pins and facing toward the opening.

1,902,276. GAUGE FOR LOW TEMPERATURE FLUIDS. CHARLES S. BULL, Colton, Calif. Filed Jan. 20, 1930. Serial No. 421,889. 5 Claims. (Cl. 73—54.)



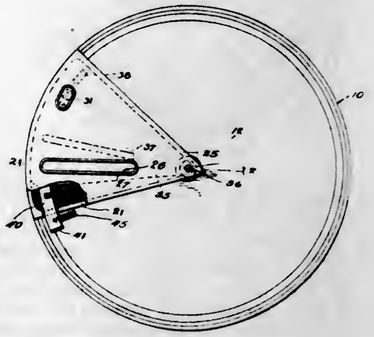
1. In combination with refrigeration apparatus, having a low temperature liquid coil therein, a tube connected across the terminals of said coil, and standing vertically, whereby the level of the liquid within the tube will agree with the level of the liquid within the coil, a trap forming a chamber around the tube and through which the tube extends, said tube being formed with openings through the walls thereof within the trap, and against the top thereof, whereby the low temperature liquid within the column may flow into the trap, a relatively non-freezing liquid of greater weight per volume than the low temperature liquid and disposed in the bottom of the trap, and upon which the low temperature liquid rests, and a sight gauge connected with the bottom of the said trap and into which said non-freezing liquid may flow under pressure of the hydrostatic head of the low temperature liquid in the tube, and whereby a definite relationship may be obtained between the level of the non-freezing compound in the sight gauge and the liquid in the tube.

1,902,277. PRINTING OF FILMS. CURTIS D. CHASE, Boston, Mass., assignor to Chase Rights Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 9, 1930. Serial No. 466,817. 8 Claims. (Cl. 95—77.)



1. A printing frame comprising a base section, a panel operatively related thereto, and a centering pin extending from the base section for centering disc films relative to each other, the panel being provided with a hole thru which the centering pin extends when the section and panel are disposed in printing relation.

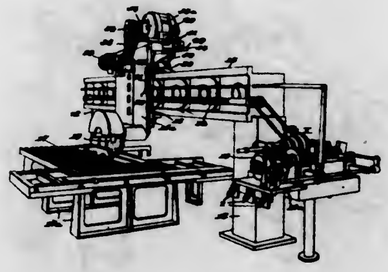
1,902,278. FILM HOLDER. CURTIS D. CHASE, Boston, Mass., assignor to Chase Rights Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 9, 1930. Serial No. 466,818. 15 Claims. (Cl. 88—18.8.)



1. A film holder comprising complemental sections, one of which has a hub and the other has a depression into which the hub is seated, whereby the sections are centered with respect to each other, one of the sections having a seat near its periphery cooperating with a peripheral portion of the other section, whereby to provide a light-proof compartment between said sections, one of the sections being provided with an opening, a cover plate disposed over said section and having an opening in registering relation with the first-named opening, and means to interrupt and complete registry between said openings.

1,902,279. STONE CUTTING MACHINE. HAROLD EVANS, Niagara Falls, Ontario, Canada, assignor to Pollard Machinery Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed July 29, 1932. Serial No. 626,105. 3 Claims. (Cl. 51—100.)

1. In a stone cutting machine, the combination with a travelling cutting wheel mounted for vertical movements, of a profiling mechanism whereby said cutting wheel may be automatically caused to follow any predetermined path of movement in cutting profile figures, said profiling mechanism comprising a template and a guide roller movable over said template and operatively connected with said cutting wheel to control its vertical movements, and manually operable adjusting means whereby the center distance from the guide roller to the center of the cutting wheel may be progressively increased after each forward



and reverse pass of the cutting wheel, the cutting wheel thus always moving in conformity to the template as it is progressively lowered until the desired depth or profile is produced.

1,902,280. PROCESS OF MAKING MIXED CELLULOSE ESTERS AND CELLULOSE ETHER ESTERS. MAX HAGEDORN, OTTO REICHERT, and EUGEN GÜHRING, Dessau in Anhalt, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 25, 1927, Serial No. 186,566, and in Germany May 1, 1926. 4 Claims. (Cl. 260—101.)

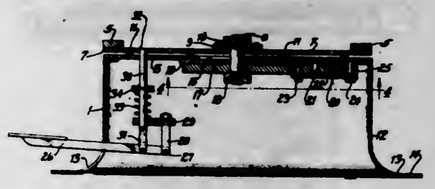
1. The process which comprises treating cellulose acetate which still contains esterifiable hydroxyl groups with stearic acid anhydride.

1,902,281. FEEDING MECHANISM FOR PHOTOGRAPHIC STRIPS. WATERS LEE HELMS, Brooklyn, N. Y., assignor to The New Photomaton, Inc., New York, N. Y., a Corporation of New York. Filed July 25, 1932. Serial No. 624,638. 8 Claims. (Cl. 95—94.)



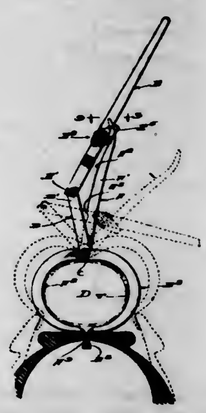
1. In feeding mechanism for photographic strips, means for conveying a strip in reverse directions within a tank, comprising opposed plates, a plurality of sets of feed rollers supported intermediate said plates, driving means for the rollers, parallel channels in each plate for guiding a margin of the strip, and a reversing block intermediate the plates and having a curved guiding face for receiving the strip fed to the base of one channel and for conveying it to the base of the second channel, said block contacting with the strip intermediate its marginal edges.

1,902,282. REVERSIBLE SEAT OR CHAIR. CHARLES R. HULTGREN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed May 13, 1929. Serial No. 362,526. 12 Claims. (Cl. 155—96.)



1. A chair of the character described comprising a base, a seat structure mounted to turn on the base, and seat-shifting connecting means between said base and seat structure serving to laterally shift the seat upon forcible turning of the same upon the base, said shifting means including a pair of intermeshing gear wheels mounted to shift laterally with said seat structure, and a throw arm pivotally secured to the base and having eccentric connection with one of said gear wheels.

1,902,283. TIRE TOOL. JOSEPH C. JACKSON and ANDREW J. INGERSOLL, Wildwood, N. J. Filed Nov. 13, 1931. Serial No. 574,708. 8 Claims. (Cl. 152—27.)

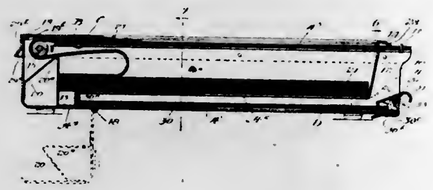


1. A tool for spreading the adjacent bead portions of a pneumatic tire casing, comprising a pair of levers pivotally connected intermediate their ends, each of said levers including an operating portion and a tire engaging portion, said portions lying on opposite sides of said pivotal connection, the tire engaging portion of each lever including a tube supporting and embracing portion conforming generally to the exterior surface of the tube and terminating in an outwardly directed spreading jaw.

1,902,284. AUTOGRAPHIC REGISTER. LOUIS JENSEN, Chicago, Ill., assignor to United Autographic Register Co., a Corporation of Illinois. Filed Feb. 6, 1932. Serial No. 591,421. 9 Claims. (Cl. 282—12.)

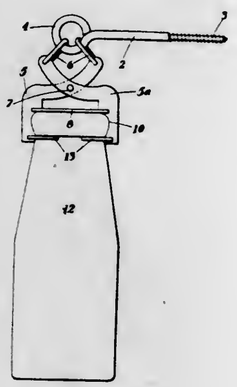
1. An autographic register comprising an elongated casing provided with a platen and immediately below

said platen with a supply-compartment adapted to hold a zig-zag folded packet of continuous stationary; and a longitudinally withdrawable record-slip holder normally



housed and removably secured beneath said compartment between the lower portions of the side walls of said casing.

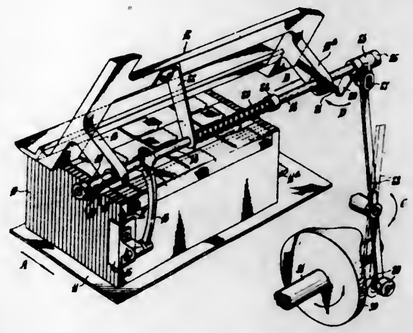
1,902,285. HOLDER FOR CONTAINERS. ARCHER ALFRED JEWELL, Peckham, London, England. Filed Jan. 16, 1932, Serial No. 587,138, and in Great Britain Feb. 2, 1931. 5 Claims. (Cl. 248—65.)



5. A holder for containers, comprising a pair of levers pivoted together with their inner edges shaped to engage a flange on a container, laterally and inwardly extended grips at the lower ends of the levers, the inner edges shaped to engage the container, a closure carried by one of the levers to cover the mouth of the container when the grips are engaged with said container, and means for supporting the levers.

1,902,286. METHOD OF AND MECHANISM FOR EXTRACTING INTERCONNECTING THREADS BETWEEN STITCHED BOOKS. OSCAR KLEINSCHMIT, Leipzig-Plagwitz, Germany, assignor to Gebruder Brehmer, Leipzig-Plagwitz, Germany, a Limited Partnership of Germany. Filed Apr. 21, 1932, Serial No. 606,747, and in Germany June 4, 1931. 16 Claims. (Cl. 112—252.)

1. Means for extracting mechanically the severed interconnected threads between adjacent books of a continuously stitched book-pad, comprising a book-engaging device adapted to engage the foremost book of the book-

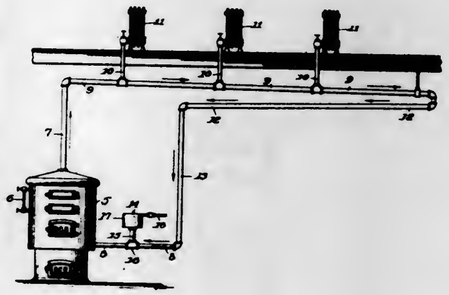


pad, and means for displacing said device and the book engaged thereby laterally with relation to the remainder of the book-pad.

1,902,287. ANTIFREEZE COMPOSITION FOR RADIATORS AND THE LIKE. JOSEPH B. MCCAULEY, Charles Town, W. Va. Filed Sept. 3, 1931. Serial No. 561,093. 4 Claims. (Cl. 252—5.)

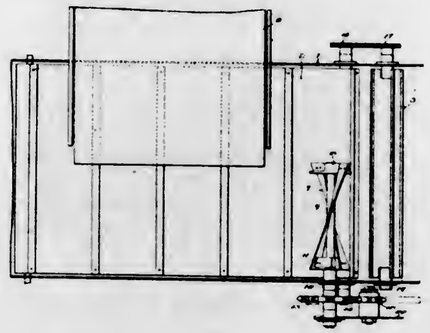
1. An anti-freeze composition for automobile radiators and the like comprising a mixture of sugar, 12 ozs., salt, 24 ozs., copperas, ¼ oz., hydrochloric acid, ½ oz., and heavy oil, 4 ozs.

1,902,288. STEAM HEATING SYSTEM. HARRY B. MCGINNIS, Chicago, Ill. Filed Mar. 17, 1930. Serial No. 436,511. 5 Claims. (Cl. 237—1.)



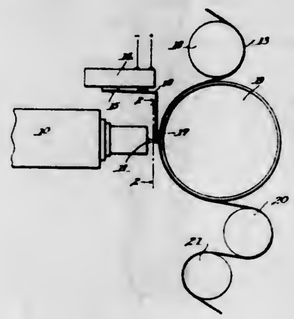
1. In a steam heating system having a steam boiler and one or more radiators, the combination of a conduit leading from the boiler to the radiators for supplying steam thereto, a second conduit connected to said conduit and to the steam boiler at a point substantially below the normal water level within said boiler for returning condensed steam from the radiators and from said first-named conduit to the boiler, a chamber mounted in a plane above the point of connection between said second-named conduit and the boiler and in a plane substantially below the normal level of the water within the boiler during operation of the system, downwardly extending conduit means having its upper end connected to the lower end of said chamber and its lower end connected to said second-named conduit a baffle in said downwardly extending conduit, and a drain conduit communicating with the upper end of said chamber.

1,902,289. GRAIN DISTRIBUTING MEANS FOR COMBINES. EARL W. MENTOR and CHARLES J. SCRANTON, Jr., Peoria, Ill., assignor to Avery Power Machinery Co., Peoria, Ill., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 345,916. 3 Claims. (Cl. 130—1.)



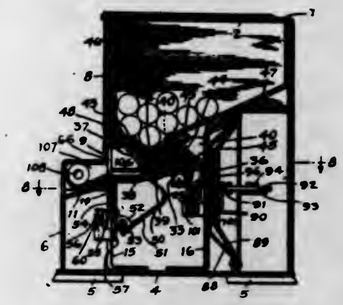
1. In combination in a combined harvesting and threshing machine, a cylinder and concave, means comprising a feed conveyor for delivering the cut grain to the cylinder and concave, means for delivering the cut grain in a loose and unbound condition to the feed conveyor at one side thereof, and a beater mounted to rotate on an axis and extending above and transversely of the conveyor at said side thereof, said beater comprising blades disposed lengthwise and at opposite sides of the axis thereof, said blades extending across said axis and being oppositely related for shifting the cut grain from the side of the conveyor at which the grain is delivered toward the other side of the conveyor, the respective blades having less than a complete turn about the axis of the beater, and the outer edges of the blades being smooth and continuous.

1,902,290. SOUND RECORDING DEVICE. MILTON HARRISON PAGE, Cohoes, N. Y. Filed Nov. 19, 1929. Serial No. 408,393. 4 Claims. (Cl. 274—5.)



1. The method of recording sound waves on the track portion of a sensitized film, which consists in projecting a beam of light onto the film and modulating the amplitude of an intermediate portion of the light longitudinally of the sound track before it strikes the film in accordance with the variations in the sound waves so as to produce adjacent the sides of the sound track dark lines of uniform width that extend lengthwise of the film, and transverse undulations extending inwardly from said lines, each of said lines acting as a base for preventing the transverse undulations from extending beyond the edges thereof.

1,902,291. APPARATUS FOR DELIVERING LIGHTED CIGARETTES AND CIGARS. CLARK W. PARKER, New York, N. Y., assignor, by mesne assignments, to Max Bernstein, New York, N. Y. Filed June 30, 1927. Serial No. 202,497. 14 Claims. (Cl. 312—86.)

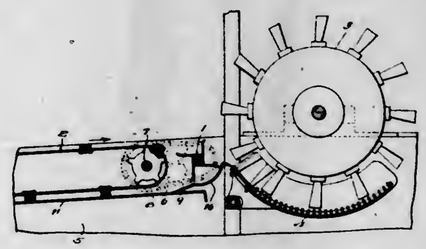


1. An apparatus for delivering lighted cigarettes having, in combinaion, a cigarette holder, a lighting device and a suction device at opposite ends of the holder, and means for shifting said holder longitudinally between the two devices.

7. An apparatus for delivering lighted cigarettes including a horizontally supported tray for carrying a cigarette to be lighted, means for shifting said tray in the plane of its support and resilient clamping means for holding the cigarette in the tray.

8. An apparatus for delivering lighted cigarettes including a base-plate having all the kinetic elements of the apparatus mounted thereon, including an ejector, a removable covering frame for said elements, and means for securing said cover to the base-plate, said cover having a hopper or magazine for holding the cigarettes, and the hopper having an opening in its bottom covered by said ejector.

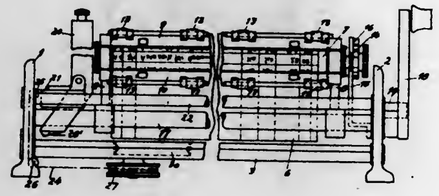
1,902,292. ACCELERATING FEED ROLL. JAMES N. REYNOLDS and CHARLES J. SCRANTON, Jr., Peoria, Ill., assignors to Avery Power Machinery Co., Peoria, Ill., a Corporation of Illinois. Filed Mar. 5, 1929. Serial No. 344,371. 2 Claims. (Cl. 130—1.)



1. In combination in a combined harvesting and threshing machine, a cylinder and concave, a feed house having a closed bottom, a feed conveyor for the cut grain and operating in said house, the lower run of the conveyor operating in proximity to the bottom wall of the feed

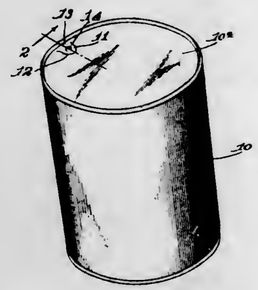
house, and a feed roll disposed to receive the cut grain from the discharge end of the conveyor and deliver it to the cylinder and concave, said roll comprising wing members projecting approximately radially therefrom, said wing members being continuous and unbroken at their outer edges, the roll being driven at higher speed than the conveyor and the wing members acting to prevent entry of the cut grain between the lower run of the conveyor and the bottom of the feed house.

1,902,293. MANIFOLDING MACHINE. WILHELM RITZERFELD, Berlin, Germany. Filed Jan. 8, 1931, Serial No. 507,540, and in Germany Sept. 20, 1928. 16 Claims. (Cl. 101—13.)



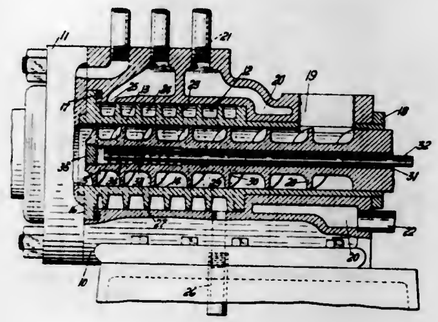
1. A machine of the class described comprising a base plate, levers pivotally connected with the base plate and having a paper feed roller journalled thereon, guide plates yieldably connected with the roller for holding a copy sheet thereon, and means for detachably securing a card upon the base plate for receiving an impression from the copy sheet, means movable transversely of the base plate for moistening the card, and means for swinging the levers to move the roller and copy sheet into engagement with the card.

1,902,294. CONTAINER. WALTER I. RUBOVITS, Chicago, Ill. Filed May 23, 1931. Serial No. 539,571. 2 Claims. (Cl. 220—27.)



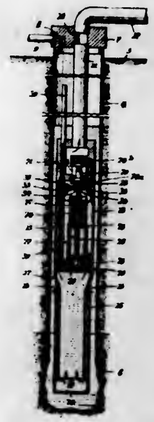
1. A container comprising a metallic wall, prepared to provide an ear portion integral with said wall and having a base portion adjacent a margin of said wall with the metal in normal condition, the metal about the remaining margins of said portion weakened to permit of ready tearing, and a portion of said ear portion spaced from its margins also weakened about a part of the periphery thereof to permit of ready severance by a perforating instrument.

1,902,295. EXTRUDING MACHINE. FLORAIN J. SHOOK, Akron, Ohio, assignor to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 2, 1931. Serial No. 519,510. 2 Claims. (Cl. 18—12.)



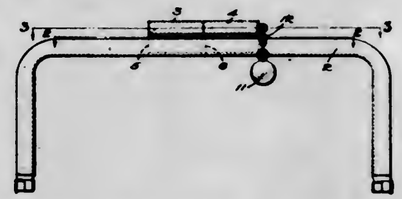
1. In an extruding machine, the combination of a housing formed with a bore, a bushing seated in said bore and comprising a work chamber, and a feed screw in said work chamber, said bushing being exteriorly formed with a helical rib that defines a helical passage for fluid around the work chamber.

1,902,296. PRODUCING OIL FROM WELLS AND APPARATUS THEREFOR. SAMUEL WILLIAM TRAYLOR, Jr., Allentown, Pa., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 607,254. 19 Claims. (Cl. 103—234.)



1. A process or method of taking liquid from a well while preventing the loss of gas, which method comprises opening and closing passage through a delivery conduit for the liquid according to variations of hydrostatic pressure of the liquid in the well, regardless of gas pressure, and thereby always maintaining in the well outside of said conduit, a liquid level above the highest point of entry of liquid into said conduit.

1,902,297. BAG FRAME STRUCTURE AND FASTENER THEREFOR. WILLIAM J. WALKER, Waterbury, Conn., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Sept. 18, 1931. Serial No. 563,473. 1 Claim. (Cl. 292—171.)

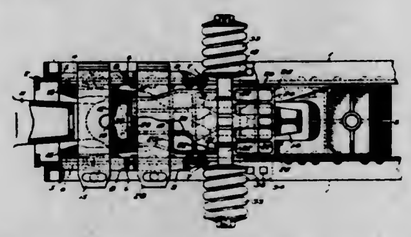


A bag frame structure including a pair of frame members hinged to each other at their ends and normally slightly bowed away from each other lengthwise, separable fastener members attached to said frame members for holding them together under compression when the fastener members are interlocked and hand operable means for unlocking the fastener members, said bowed frame members operating automatically to move the separable fastener members apart after the fastener members are unlocked.

1,902,298. ROOFING AND BUILDING MATERIAL. HENRY C. AVERY, New Brunswick, and LESTER KIRSCHBRAUN, Leonia, N. J., assignors, by mesne assignments, to The Patent and Licensing Corporation, Boston, Mass., a Corporation of Massachusetts. Continuation of application Serial No. 14,122, filed Mar. 9, 1925. This application filed Mar. 2, 1931. Serial No. 519,656. 5 Claims. (Cl. 154—51.)

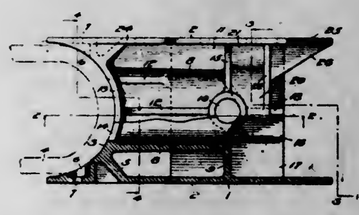
1. A constructional unit comprising a rigid base consisting of a layer of coarse interfelted fibers with a plurality of relatively large interstitial voids, said base having a weather-resistant coating on one face thereof and a sheet of asphalt impregnated, asphalt coated and mineral surfaced roofing material secured to the opposite face thereof by means of a film of a weatherproof adhesive.

1,902,299. DRAFT RIGGING. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Sept. 13, 1928. Serial No. 305,817. 5 Claims. (Cl. 213—38.)



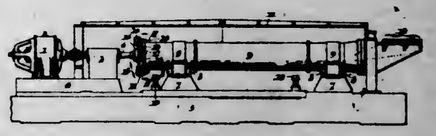
1. In railway draft rigging, in combination, a coupler, with a rearwardly extending stem, a vertical yoke with side walls connecting the forward portions thereof and normally lying on either side of said stem, means connecting said coupler and yoke for simultaneous rearward movement, cushioning mechanism embraced by said yoke and with a forward portion normally received between the side walls of said yoke and engaging the rear end of said stem, and means passing through said mechanism for connecting it to associated draft sills.

1,902,300. DRAFT RIGGING BACKSTOP. DONALD S. BARROWS, Rochester, N. Y., assignor to The Symington Company, New York, N. Y., a Corporation of Maryland. Filed Oct. 22, 1928. Serial No. 314,186. 5 Claims. (Cl. 213—57.)



1. A backstop casting comprising side walls adapted for connection with associated center sills, a front wall concavely curved horizontally on its front face and adapted to receive buffing forces from the correspondingly curved end of an associated yoke, forwardly and inwardly converging webs connecting intermediate portions of said side walls and front wall, said wall portions forwardly of said webs being apertured for receiving connecting rivets.

1,902,301. CHUCK FOR CENTRIFUGAL CASTING MACHINES. LOUIS A. CAMBIOTA, Burlington, N. J., assignor to Walter Wood, Philadelphia, Pa. Filed Nov. 23, 1931. Serial No. 576,725. 2 Claims. (Cl. 22—65.)

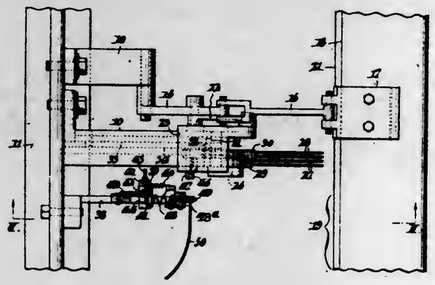


1. In a centrifugal casting machine, including a prime mover having a driving shaft, and bearings for rotatably supporting a cylindrical flask in axial alignment with said driving shaft; a chuck for connecting the driving shaft to an end of the flask, said chuck comprising an arm projecting radially from said driving shaft, and a jaw on said arm in the form of a hook having its end projecting toward said driving shaft, said jaw being adapted to extend around the end of the flask and to engage a projection thereon to transmit rotary movement to the flask.

1,902,302. STOP MOTION FOR LOOMS. JOSEPH P. COSTELLO, Philadelphia, Pa., assignor to Collins & Aikman Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 510,674. 20 Claims. (Cl. 139—372.)

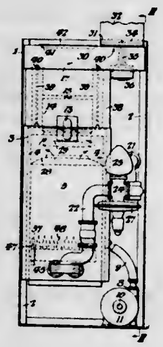
1. In a loom having a breast beam and lay, a weft stop motion including a counter-weighted detector finger supported between said beam and lay for reciprocation by the latter, said finger being pivoted above the plane of

the fabric woven and adapted to engage the weft from beneath and so be held down thereby without itself tending to shift the weft in the shed; and means subject



to actuation by the detector finger upon release thereof in the absence or failure of the weft, to automatically stop the loom.

1,902,303. ELECTRICAL CONTROLLING SYSTEM FOR GAS WATER HEATERS. ROBERT J. DOUGHERTY, Ambler, Pa., assignor to John Wood Manufacturing Company, Conshohocken, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1931. Serial No. 575,042. 3 Claims. (Cl. 236—21.)

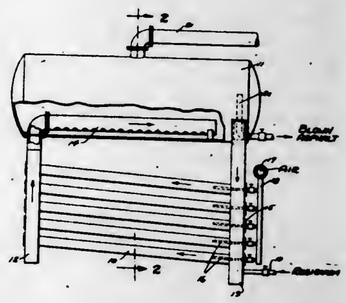


1. In an electrical controlling system for a gas water heater, the combination with a main gas burner; an electrically operative and controlled main gas burner valve; an electrically operative and controlled pump for circulating water through said heater; an electric circuit including the pump motor and main gas valve motor, in multiple relation; a thermostatically operative electric switch controlling the branch circuit through said main gas valve motor independently of said other motor, for opening and closing that branch circuit in accordance with the temperature of the water heated; a thermostatically operative electric room switch for opening and closing said multiple circuit in accordance with atmospheric temperature; and means for supplying the entire circuit with current at the same voltage; whereby said multiple circuit is closed and said valve motor and pump motor energized when said room switch is closed, and deenergized when that switch is opened; and said branch circuit through said valve motor is broken, independently of the branch circuit through said pump motor, and the gas valve closed, if and when the temperature of the water heated exceeds a predetermined degree.

1,902,304. FLEXIBLE TRANSPARENT GELATINOUS PRODUCT. HERMANN HECKEL, Cincinnati, Ohio, assignor to The Twitchell Process Company, St. Bernard, Ohio, a Corporation of Ohio. Filed May 5, 1931. Serial No. 535,303. 6 Claims. (Cl. 106—39.)

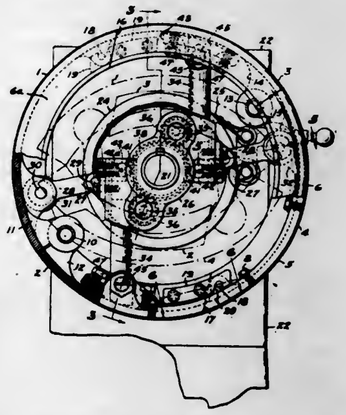
1. A transparent and flexible gelatinous product, the constituting components of which comprise gelatin, white oil, and mahogany sulphonates.

1,902,305. METHOD OF PRODUCING ASPHALT. LESTER KIRSCHBRAUN, Leonia, N. J., assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed May 14, 1930. Serial No. 452,249. 5 Claims. (Cl. 196—74.)



1. A process of producing oxidized asphalt in a continuous system which comprises establishing thermal-circulation of petroleum residuum from a relatively large bulk supply in parallel flow through a plurality of passageways, injecting air into said passageways for oxidising the residuum and accelerating thermal-circulation of the material through said passageways, continuously supplying fresh residuum to the system and withdrawing oxidized asphalt from said bulk supply.

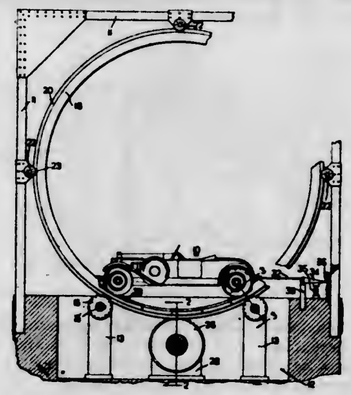
1,902,306. TIRE BUILDING DRUM. HERMAN T. KRAFT, Akron, Ohio, assignor to The Bridgewater Machine Company, Akron, Ohio, a Corporation of Ohio. Filed May 4, 1932. Serial No. 609,058. 16 Claims. (Cl. 154—9.)



12. In a tire-building drum, a pair of diametrically opposed arcuate drum sections, each being bodily movable relative to the other, a pair of pivoted arcuate drum sections, each extending between the first drum sections and being pivoted to one of said first sections,

and means operable during rotation of said drum to bodily move said first drum sections toward each other and to swing said pivoted sections into close gradually increasing overlapping relation with said first sections.

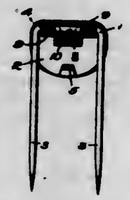
1,902,307. TESTING DEVICE. FRED V. LARKIN, Bethlehem, Pa. Filed July 16, 1928. Serial No. 292,958. 9 Claims. (Cl. 73—51.)



8. In a device for testing motor vehicles the combination of a circular track having an interior diameter large enough to simultaneously receive a front and a rear wheel of an automobile of normal size, means to support said circular track for rotation, and means to measure the power transmitted between said track and vehicle.

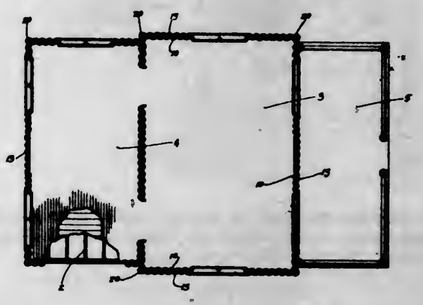
9. In a device for testing motor vehicles, the combination of two circular tracks of a diameter larger than an automobile of normal size, means for supporting said tracks for rotation about a common axis, said tracks being spaced apart so that the wheels on one side of a vehicle may rest on the interior of one of said tracks and the wheels on the other side of the same vehicle may simultaneously rest on the interior of the other of said tracks, and two separate power measuring devices mounted in a stationary position adjacent said tracks and separately connected to said tracks to thereby independently measure the power transmitted between the wheels of the vehicle and the respective tracks.

1,902,308. PIN FASTENER. GEORGE S. MAYNARD, Newtonville, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed June 25, 1931. Serial No. 546,732. 3 Claims. (Cl. 24—152.)



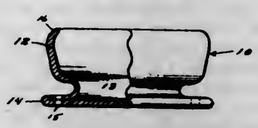
1. A pin fastener comprising, in combination, an attaching part having pin means for securing the fastener to a structure to be fastened thereby, a plate part hinged to said attaching part at its upper end and concealing the entire upper end portion of the attaching part and said plate part having a stabbing prong extending therefrom toward said attaching part and concealed locking means provided partly by the plate part and partly by the attaching part adjacent to the connection between the plate part and the attaching part to hold the plate part in locked position when the fastener is attached to a structure and the stabbing prong is engaged therewith.

1,902,309. LOG HOUSE. HARRY A. MUFFLEY, Minneapolis, Minn., and EDWARD F. MCLEER, Gordon, Wis., assignors to Log Cottage Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 31, 1930. Serial No. 424,942. 11 Claims. (Cl. 20—2.)



1. A wall structure comprising two series of half log sections inner and outer, the members of one series having their flat faces in contact with the members of the others, and being arranged in break-joint relation with the curved surfaces of the members of respective series facing in opposite directions, each log having its longitudinal edges flattened to provide surfaces which are substantially perpendicular to the flat face, said surfaces being engaged.

1,902,310. METHOD OF MAKING INSULATOR CAPS. BENTLEY A. PLIMPTON, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Aug. 6, 1930. Serial No. 473,491. 3 Claims. (Cl. 29—155.5.)

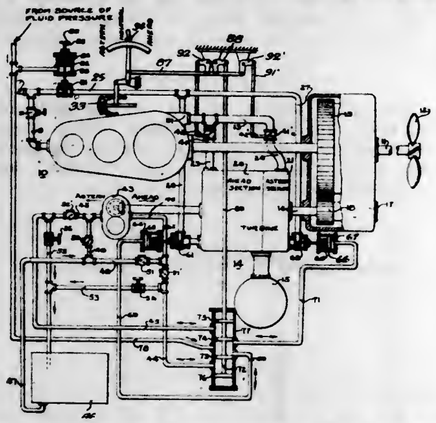


3. The method of making a malleable one piece insulator comprising taking a piece of material, subjecting the same to the action of dies to press it into a fruste-conical cup shape, spinning the cup to form the same with an inwardly extending neck portion intermediate the open and closed ends, and subsequently compressing the cup to fold upon itself the material between the constricted portion and the closed end while leaving the constricted portion unaffected.

1,902,311. GOVERNING MECHANISM. ANDREW B. REAVIS, Swarthmore, and RUDOLPH J. EISINGER, Moorea, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 24, 1929. Serial No. 365,635. 17 Claims. (Cl. 60—21.)

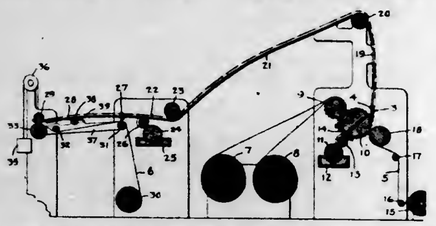
1. The combination with a prime mover capable of operation in its opposite directions, of a control mechanism therefor comprising a control device adapted to be set for operation in either direction, and means operative, when the prime mover is operating in the direction for

which the control device is set, to provide motive fluid admission in response to speed of the prime mover for operation in said direction and, when it is operating in



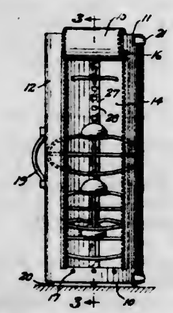
the opposite direction, to provide motive fluid admission independently of the speed for operation in the direction for which the control device is set.

1,902,312. DUPLEX ROLL OF CORRUGATED PAPER AND METHOD AND MEANS FOR MAKING THE SAME. BERNARD ROUS, Brooklyn, N. Y. Filed July 5, 1929. Serial No. 376,091. 7 Claims. (Cl. 154—33.)



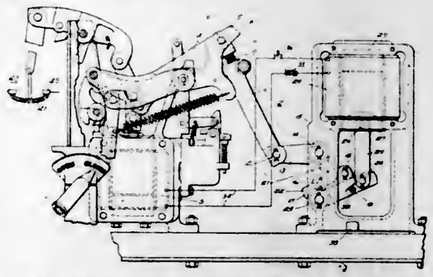
2. Means for manufacturing a duplex roll of corrugated paper comprising in combination, means for corrugating and intimately associating two sheets of paper, means for securing facing sheets to the respective corrugated sheets, and means for winding the two corrugated and faced sheets into a duplex nested roll, the means for associating the facing sheet which is outermost in the convolutions of the duplex roll operating in conjunction with the winding means.

1,902,313. HAT BOX. MABEL STRUBLE, New York, N. Y. Filed Apr. 6, 1931. Serial No. 527,964. 16 Claims. (Cl. 206—8.)



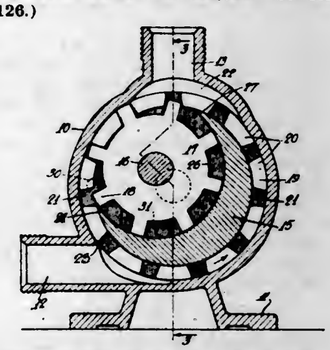
1. A hat box comprising parallel oval end pieces, a side member curved to oval form connecting the end pieces, said side member having a door opening therein, a door adapted to close said opening, a handle on said side member, a circular hat retaining member, and means for holding said hat retaining member in the box in inclined position.

1,902,314. CIRCUIT BREAKER. ROSWELL C. VAN SICKLE, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 9, 1927. Serial No. 238,801. 14 Claims. (Cl. 200—101.)



1. The combination with an operating mechanism, of a booster mechanism, and a lever system joining the two mechanisms comprising a toggle for controlling the effective force of the said booster mechanism.

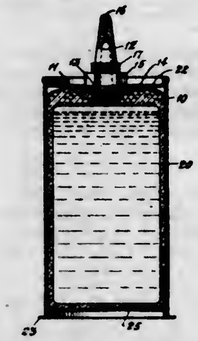
1,902,315. ROTARY PUMP. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers Incorporated, Louisville, Ky., a Corporation of Delaware. Filed May 15, 1930. Serial No. 452,624. 10 Claims. (Cl. 103—126.)



1. A rotary pump including a cylindrical casing, an inlet and discharge port associated with said casing, an internally toothed rotor adapted to rotate in close proximity to the interior periphery of said casing, a pinion eccentrically mounted with respect to said rotor and fully intermeshing therewith at one side of the cylindrical casing, and a stationary crescentic member disposed on the opposite side and occupying the space between the disengaged teeth of said rotor and wheel, the end of said member proximate the inlet port extending beyond the latter to such a distance during pumping operations as to serve as a baffle and prevent the induction of material from said port into the interdental spaces of the pinion.

1,902,316. CONTAINER. ARTHUR W. WILKINSON, Easton, Pa., assignor to Sterling Products Company, Easton, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1932. Serial No. 635,011. 13 Claims. (Cl. 221—1.)

1. A container for corrosive liquids consisting of a supply chamber of relatively hard material, proof against attack by such liquid and of a size and shape adapted to be manipulatable by one hand alone, a seat associated with one wall of said chamber adapted to receive a washer, a threaded aperture surrounded by said seat and dimensioned for convenient filling of the chamber therethrough, a washer, a nozzle section of relatively nonbreakable material, proof against corrosive attack of the liquid contained in the chamber, apertured to permit passage of liquid from the chamber and having an exit duct of such small calibre as to prevent free flow of liquid therethrough, said nozzle section having at one end thereof a tapered nozzle extending to a point relatively remote from the apertured wall of the chamber and at the other end

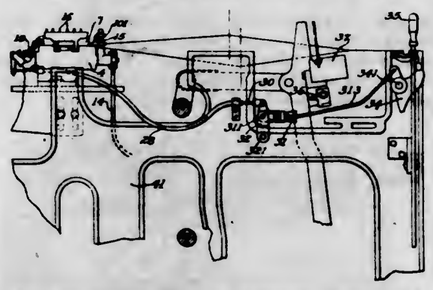


of the nozzle section a screwthreaded portion adapted to engage the threads of the aperture of the chamber, a flange associated with said nozzle section adapted for pressure-contact with the washer against the seat of the chamber, a relatively thick portion associated with said nozzle section adapted for engagement by a tightening tool, a cap-engaging and seating portion associated with said nozzle section, and a cap adapted to cooperate with the cap-engaging portion of the nozzle section and to be held thereby in liquid-tight position with reference to any liquid which might pass through the nozzle during the time the cap is in place.

1,902,317. FROTH-FLOTATION CONCENTRATION OF ORES. PERCY C. WRIGHT, Pittsburg, Calif., assignor to Minerals Separation North American Corporation, New York, N. Y., a Corporation of Maryland. Filed July 14, 1926. Serial No. 122,496. 4 Claims. (Cl. 209—166.)

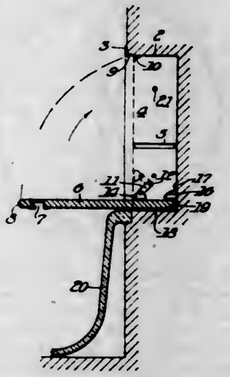
1. The process of concentrating ores which consists in mixing an xanthate and another material in an ore pulp so as to yield dixanthogen, agitating the pulp so as to produce a mineral-bearing froth, and separating the froth.

1,902,318. WARP-STOP MOTION FOR LOOMS. WILLIAM H. BAKER, Montreal, Quebec, Canada. Filed Mar. 5, 1929. Serial No. 344,235. 16 Claims. (Cl. 139—366.)



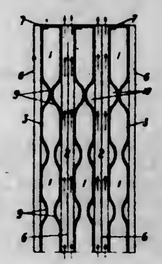
1. The combination with longitudinally reciprocable feeler-bars having projections with holes therethrough, of a vibrator, and flexible fingers extending through said holes and transmitting movement yieldingly from the vibrator to the individual feeler-bars.

1,902,319. COMBINATION CABINET AND SEAT CONSTRUCTION. HENRY A. BLOEDEL, Pittsburgh, Pa. Filed May 9, 1932. Serial No. 610,040. 5 Claims. (Cl. 155—83.)



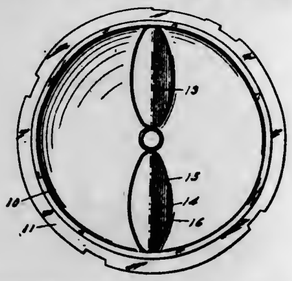
1. A cabinet consisting of a rectangular open front casing provided with side walls, a top and a flat bottom wall, a back wall having a longitudinal ledge spaced above the rear portion of the bottom wall for insertion thereunder of a door when resting horizontally on the bottom wall, a front closing wall fitting between the front edges of the bottom, side and top, and swinging hinge members connecting the lower inner portion of the front wall with the side walls at points above the ledge.

1,902,320. HEAT EXCHANGER. STUART MELVILL BURTON, Burnham, England. Filed Aug. 18, 1931. Serial No. 557,819, and in Great Britain Aug. 18, 1930. 6 Claims. (Cl. 257—130.)



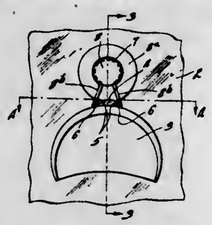
1. A heat exchanger built up from a plurality of assembled units presenting internal passages for fluid at one temperature alternating with passages for fluid at another temperature between adjacent units, each unit comprising a pair of registering metallic sheets having parallel longitudinal edges, each sheet joggled along a line adjacent and parallel to each of said edges to afford a strip portion located in a plane parallel to the plane containing the central portion of the sheet and offset from said last mentioned plane in the direction away from the other sheet of the unit, each such strip portion being formed at each of said edges with a series of hexagonal corrugations of a depth exceeding the amount of offset of the strip portion from the plane containing the central portion of the sheet, the troughs of the corrugations of the two sheets of the unit being in face to face contact, so that the central portions of the two sheets are spaced apart to afford a passage between said sheets, the ridges of the corrugations defining nozzles communicating with said passage, the offset strip portions on adjacent sheets of adjacent units contacting with one another whereby adjacent units are spaced apart to afford a passage therebetween.

1,902,321. NONGLARE REFLECTOR. ARCHIBALD K. CROSSMAN, Oakland, Calif. Filed Feb. 29, 1932. Serial No. 595,759. 2 Claims. (Cl. 240—41.35.)



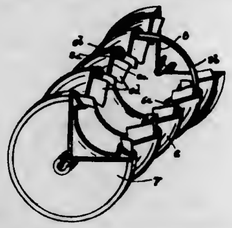
1. A reflector comprising a main reflector element of substantially parabolic form and having a lamp mounting socket positioned at the focal axis thereof, a light deflector element above said socket and a second light deflecting element below said socket, each of said light deflecting elements consisting of a single straight ridge connecting the periphery of the socket and the periphery of the reflector and being disposed in a vertical plane relative to the focal axis, said deflecting elements having plane inclined sides and each intersecting the parabolic surface in a curve having an ovate form.

1,902,322. SIGNAL VIEWING ATTACHMENT FOR AUTOMOBILES. BRUCE W. DAVID, Cleveland Heights, Ohio, assignor to The Moonbeam Manufacturing Company, a Corporation of Ohio. Filed Oct. 20, 1928. Serial No. 313,878. 20 Claims. (Cl. 88—1.)



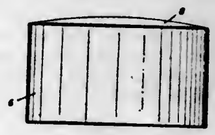
10. In a device of the class described, the combination of a resilient bracket, a suction means carried by said bracket for attachment to a glass window, and a lens mounted in said bracket and having means provided upon an annularly restricted portion of the lens for co-operating with said bracket for holding the lens in assembly.

1,902,323. CHAMBER OF VARIABLE VOLUME. GÉRARD DE MONGE, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli, Societa Anonima, Milan, Italy. Filed Mar. 27, 1929, Serial No. 350,426, and in Belgium Apr. 2, 1928. 6 Claims. (Cl. 137—156.5.)



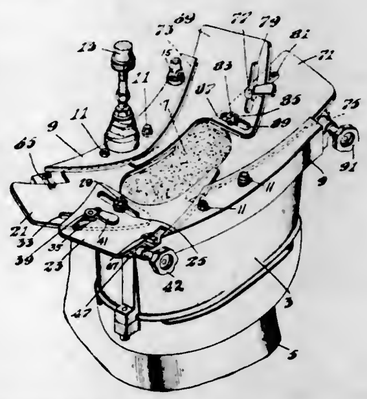
1. A chamber of variable volume comprising a corrugated bellows of rubber with reenforcing means embedded in the wall of said bellows between the bends thereof.

1,902,324. SIFTER CONTAINER. ALEXANDER H. DREUX, Buffalo, N. Y., assignor to F. N. Burt Company, Ltd., Toronto, Ontario, Canada, a Corporation of Ontario. Filed Mar. 21, 1929. Serial No. 348,822. 9 Claims. (Cl. 221—61.)



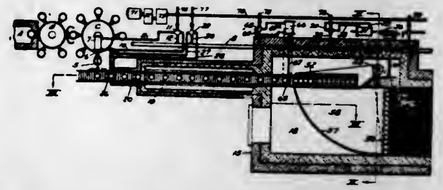
1. In a container, in combination, a shell crimped to provide a retaining bead, a sifter head and a movable cover for said head retained in position by said bead, and a frangible seal for said sifter head, said cover being mounted for movement upon said frangible seal.

1,902,325. SOLE LAYING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 3, 1929. Serial No. 352,279. 11 Claims. (Cl. 18—2.)



9. The combination with a pressure box one wall of which comprises a flexible diaphragm, of two converging guideways, two cooperating plates each having an edge located in a guideway, cooperating edges of the plates being shaped to provide a recess between them, and a slip connection between the plates constructed and arranged to permit the plates to overlap each other more or less as they are moved toward or away from the converging ends of the guideways.

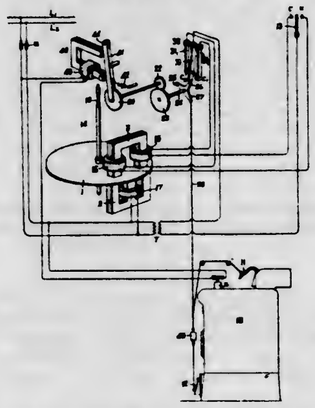
1,902,326. APPARATUS FOR ANNEALING GLASSWARE. PAUL L. GEER, Bellevue, Pa., assignor to The Amsler-Morton Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Nov. 11, 1926. Serial No. 147,681. 28 Claims. (Cl. 49—47.)



1. In an annealing apparatus, an annealing leer, a belt ware feeding conveyor, a second belt ware conveyor having parallel movement with the feeding conveyor, means for depositing ware on to the feeding conveyor, a radially movable transfer member within the leer for transferring the ware from the feeding conveyor to the said second conveyor movable from a position parallel with the feeding conveyor to a position transverse to the second conveyor, and means for moving the transfer member.

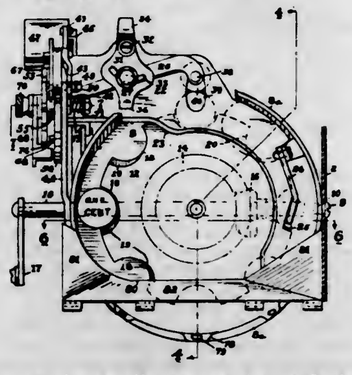
18. In a leer, a means for conveying articles to the leer, a main leer conveyer, a sweeper, means for swinging the sweeper to convey the articles from the means to the conveyor and return the sweeper to the means, and a means for raising and lowering the sweeper to disengage the articles and to receive the articles.

1,902,327. CONTINUOUS HEAT REGULATOR. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1929. Serial No. 398,252. 13 Claims. (Cl. 236—74.)



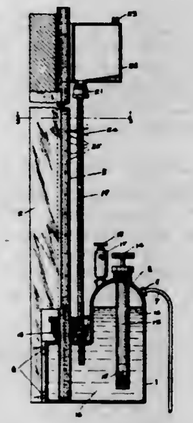
1. In a heat control device, a movable heat regulating member, a thermostatically controlled reversible motor for operating the member each way to a position dependent upon heating conditions, releasable operating connections between said motor and said member, means for independently moving the member upon release of said connections, and automatic means for controlling said releasable operating connections to release the same and effective to re-establish said connections to permit the motor to return the member to said position after said connections have been released independently of the relative positions of the motor and member.

1,902,328. MACHINE FOR COUNTING AND DELIVERING COINS. CHARLES D. HOWENSTINE, North Charleroi, Pa. Filed June 5, 1931. Serial No. 542,273. 4 Claims. (Cl. 133—8.)



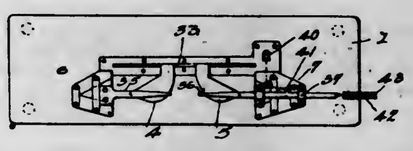
1. In a machine for the purpose described, the combination of a housing, a disk rotating in said housing and having notches formed in the perimetral edge of said disk to carry coins and the like, the carried coins protruding beyond the perimetral edge of the disk, means to feed the coins to said disk, a counting device, a lever, one end of the lever being operatively connected to the counting device whereby the latter is operated by the movement of the lever, the other end of the lever being in the path of the protruding edges of the coins carried by said disk, and means to regulate the path of movement of the coin-engaged end of the lever whereby it may be operated solely by a coin and the like of a selected diameter while the path of movement of the other end of the lever remains substantially constant.

1,902,329. LIQUID GAUGE. EDWARD L. HUBBARD, Piedmont, Calif., assignor to Water Works Supply Company, San Francisco, Calif., a Corporation of California. Filed Mar. 12, 1929. Serial No. 346,317. 2 Claims. (Cl. 73—54.)



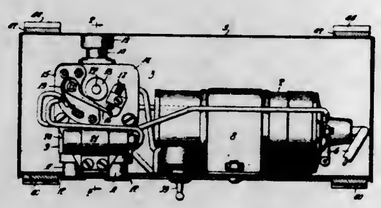
1. A gauge for indicating the level of a liquid comprising a chamber partially filled with a gauging liquid, an air duct having one end connected with the chamber to communicate with the air space above the gauging liquid and having the other end positioned below the level of the liquid to open at the maximum depth to be indicated, an upwardly extending sight tube connected with said chamber and opening below the level of the gauging liquid, and a pump casing mounted in said chamber and having means projecting out of said chamber, and a check valve in said pump casing for compressing the air in the space above the liquid in the chamber, said check valve being submerged in the gauging liquid.

1,902,330. COLLAR STRETCHING MACHINE. MORRIS L. KAPLAN, Hazleton, Pa. Filed Apr. 25, 1931. Serial No. 532,913. 10 Claims. (Cl. 223—55.)



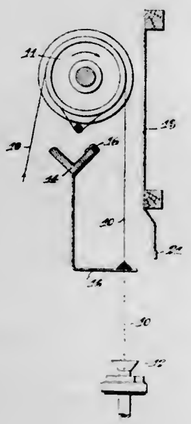
1. In a machine as described, the combination with a mold having a recess in one face, of a yieldable stretching-plate fitted in said recess, guide pins for said plate, and springs for urging the plate into said recess.

1,902,331. DISPLAY DEVICE. LUDVIO P. KONGSTED, Longmeadow, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed June 14, 1932. Serial No. 617,099. 4 Claims. (Cl. 176—124.)



1. An advertising device comprising a casing containing a transformer adapted to have its secondary circuit connected to a neon sign, a frame in the casing, a plate secured to the frame, an interrupter on the plate connected to the primary of the transformer, a motor in said frame, and gearing between the frame and the plate to enable the motor to operate the interrupter.

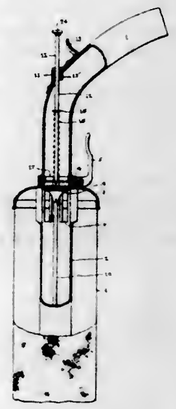
1,902,332. ARTIFICIAL SILK SPINNING MACHINE ATTACHMENT. ALFONS KRAUSE, Breslau-Cawallen, Giesche-Siedlung, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1931, Serial No. 571,474, and in Germany Feb. 13, 1931. 3 Claims. (Cl. 118—16.)



1. A machine for spinning thread having a take-up roller, a gutter located therebeneath, a guide means, a platform located between said take-up roller and guide means, movably secured to said gutter and adapted to receive the thread during the doffing operation.

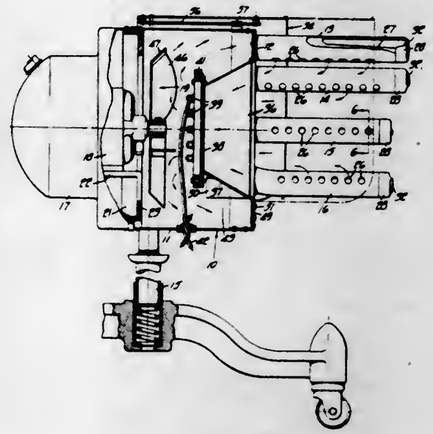
1,902,333. VACUUM CLEANER FILTER VALVE. WARD LEATHERS, Haworth, N. J., assignor to The Quadrex Corporation, a Corporation of Connecticut. Filed Nov. 3, 1930. Serial No. 493,068. 6 Claims. (Cl. 183—57.)

1. In a vacuum cleaner, a motor-driven blower, a rigid hollow air duct leading therefrom, a filter, upper and lower ports in said air-duct communicating with the filter, and means of opening and closing the upper and lower



ports, the upper being open when the lower is closed and vice versa, for purposes of cleaning said filter pneumatically.

1,902,334. HAIR DRIER. TOMLINSON I. MOSELEY, San Francisco, Calif., assignor to Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company Ltd., San Francisco, Calif., a Corporation of California. Filed Feb. 8, 1932. Serial No. 591,529. 4 Claims. (Cl. 34—26.)



1. In a hair drier, a shell through which a current of air can be caused to flow, said shell having a forward end wall, a plurality of spaced air discharge tubes grouped in an inverted U formation and mounted on the sides and upper marginal portions of said front wall, said tubes having inner side openings for the discharge of air jets and having inlet ends communicating with the interior of the shell through said end wall, the lower marginal portions of said front wall having openings formed therein for the discharge of air in a forward direction, a rotary impeller disposed within the shell and adapted to deliver air to said tubes and said last mentioned openings, a frusto-conical structure secured to said front wall and

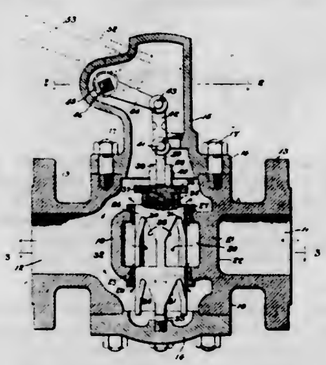
serving to form a passage leading through said front wall to said impeller, said passage being located above said last mentioned openings and within the space encompassed by said tubes, and means disposed within the shell for heating air flow.

1,902,335. CASEMENT WINDOW PROTECTION. WILLIAM F. MOSS, Upper Montclair, N. J. Filed Feb. 2, 1932. Serial No. 590,339. 1 Claim. (Cl. 156—14.)



A frame for a rain-excluding ventilating fabric screen for casement windows or other wall openings having flanges extending inwardly of the same, comprising a collapsible frame consisting of members notched to fit over said above mentioned flanges and adapted to be connected with the edge portions of the ventilating rain-excluding fabric at points to hold the same fully stretched continuously across the space outlined by the flanges when said notched parts of said members are engaged over said flanges and releasable means for removably retaining said members spread apart in position thus engaged over the flanges and supporting said fabric in position closing the opening against rain but passing air for ventilation.

1,902,336. BALANCED VALVE. RALPH L. MURRAY, Philadelphia, Pa. Filed Nov. 25, 1930. Serial No. 497,972. 1 Claim. (Cl. 251—41.)

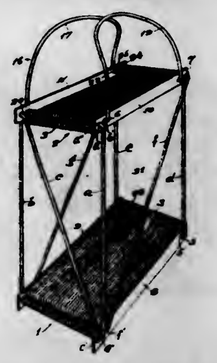


A valve organization comprising a housing, a valve mounted to reciprocate therein, a shaft extending through the housing, an arm on the shaft within the housing, links from the arm to the valve interconnected by a pintle, and a pintle perpendicular to the first mentioned pintle pivoting the terminal link to the valve, said links and pintles forming substantially a universal joint between the arm and valve.

1,902,337. MANUFACTURE OF FILMS, LACQUERS, AND THE LIKE. CARL NEUBAUER, Mannheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 9, 1926, Serial No. 153,738, and in Germany Dec. 14, 1925. 5 Claims. (Cl. 134—26.)

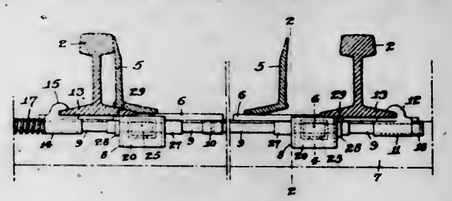
1. A composition of matter comprising a condensation product of urea and formaldehyde and at least one water-insoluble organic colloidal substance selected from the group consisting of cellulose esters and ethers in a quantity at least equal to that of the said condensation product.

1,902,338. PHOTOENGRAVER'S GLASS DIPPING RACK. CLARENCE E. RILEY, South Pasadena, Calif. Filed Oct. 21, 1930. Serial No. 490,157. 3 Claims. (Cl. 141—1.)



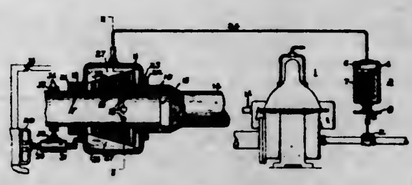
1. The combination with slats comprising ribs, and runners provided with hubs, of cross-bars extending through the hubs to hold the slats together to form a grooved member of a plate holding rack.

1,902,239. SWITCH HEATER. ERNST L. RUBY, Jenkintown, Pa. Filed Mar. 28, 1932. Serial No. 601,489. 15 Claims. (Cl. 246—428.)



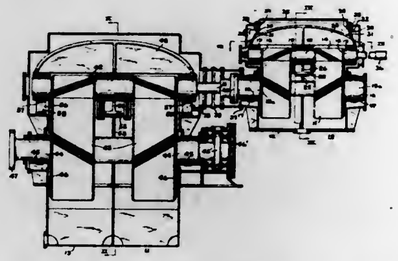
1. In a gas burning switch heater, a burner box adapted to be supported below a railroad rail in close proximity to the bottom thereof and having an open top and an open bottom and comprising side walls adapted to extend substantially parallel to the rail, end walls adapted to extend transversely of the rail, and a substantially horizontal wall supported between said end walls in spaced relation thereto and below the upper ends thereof; and a fuel pipe extending through the side walls of the box and having fuel discharging openings beneath said horizontal wall.

1,902,340. FLUID PRESSURE GOVERNING SYSTEM. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 15, 1930. Serial No. 420,958. 9 Claims. (Cl. 264—14.)



1. The combination with centrifugal fluid impelling means and a governor responsive to fluid pressure developed by said impelling means, of means whereby the radial extent of the impelling surfaces providing the fluid pressure imposed on the governor may be changed.

1,902,341. REDUCTION GEAR. HENRY F. SCHMIDT, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 29, 1931. Serial No. 560,194. 7 Claims. (Cl. 74—7.)



1. In a reduction gear, meshing pinion and gear members, a rigid frame having bearings for the gear member and provided with an arch springing from opposite sides thereof and midway of the length of the latter, a floating frame for the pinion disposed oppositely to the central portion of the arch, and flexible connecting means between the central portion of the arch and the floating frame.

1,902,342. SUSPENDERS. LUDWIG SCHULLERMAN, Astoria, N. Y. Filed Mar. 21, 1932. Serial No. 600,176. 1 Claim. (Cl. 241—27.)

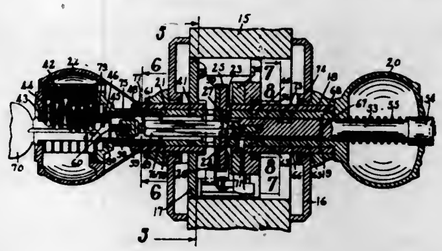


In a pair of suspenders, two shoulder straps, two supporting members each comprising three suspending elements two of which form a forked member and with the third suspending element form a bite, each of said shoulder straps engaging the bite of its corresponding supporting member and with the forked members on proximate sides of said shoulder straps.

1,902,343. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn. Filed Mar. 7, 1929. Serial No. 344,974. 27 Claims. (Cl. 70—91.)

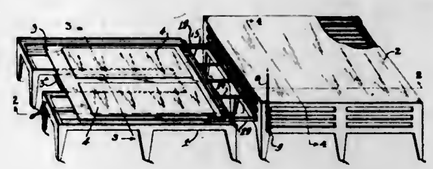
1. In a door lock, a latch bolt, operating mechanism therefor, a knob on one side of said lock for actuating said operating mechanism and a key operated member on the other side of the lock for actuating said mechanism, said key operated member being adapted to receive a change key and a master key, means on the opposite side of the lock from said key operated member for disengaging the key operated member from connection with said mechanism for operation thereof by the change key, whereby when the change key is received in said lock it will rotate idly, and means controllable by the master key controlled member for restoring the engagement of the key controlled member with said operating mechanism.

27. In a door lock, a latch bolt, operating mechanism for said latch bolt, a knob on one side of the lock for actuating said operating mechanism, key operated means on the other side of the lock for actuating the operating mechanism, a thimble on the inner end of said key operated means, an axially movable shaft mounted in said thimble and extending into the operating mechanism, said shaft



having a non-circular part and a circular part, said thimble having a part normally embracing the non-circular part of the shaft, means for moving said shaft to bring the circular part thereof opposite the said part of the thimble, and means associated with key operated means for rotating said shaft in either of said positions.

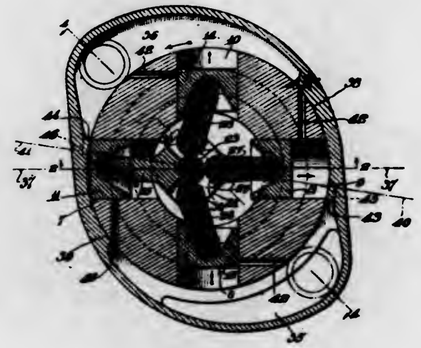
1,902,344. APPARATUS FOR CLEANING WINDOW SHADES. WILLIAM M. THEOBALD, Cleveland, Ohio. Filed Dec. 20, 1929. Serial No. 415,596. 6 Claims. (Cl. 15—1.)



1. Apparatus for cleaning window shades including a polished metallic plate, means for supporting the same, drying means located adjacent said support, and means for supporting the plate for sliding the same from the supporting means to the drying means.

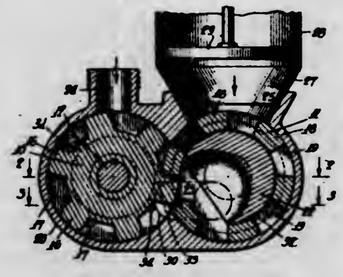
1,902,345. FLUID PRESSURE PUMP. WARREN P. VALENTINE, Line Lexington, Pa., assignor to National Transit Pump & Machine Company, Oil City, Pa., a Corporation of Pennsylvania. Filed Apr. 2, 1931. Serial No. 527,068. 6 Claims. (Cl. 103—161.)

1. A pump of the character indicated comprising a cylindrical rotor having a hollow recess extending rearwardly from its forward end and having circumferentially spaced radial bores intersecting said recess, a plunger in each bore, a stationary eccentric pin, an operating connection between said pin and said plungers whereby rotation of the rotor reciprocates the plungers in their respective bores, an external casing presenting a surface toward the rotor recessed outwardly to provide inlet and outlet passages respectively registering with the ends of the bores during major portions of the inward and outward movements respectively of the plungers within the bores and seals comprising casing portions making arcuate sealing engagements with the outside of the rotor intermediate the passages at positions to respectively register the seals with the bores when the plungers therein are at their innermost and outermost positions, and the seal in position to register with the bores while the plungers thereof are at their innermost positions having an arcuate forward sealing extension sealing the open ends of the bores during early portions of the outward movements of the plungers within the bores, said rotor having a perforation extending forwardly from an intermediate point only of each bore to a point on the circumference of the rotor such that the bore is connected to the discharge



passage through the perforation while the open end of the bore is closed by the sealing extension and the perforation is sealed when the piston extends outwardly beyond the intermediate point.

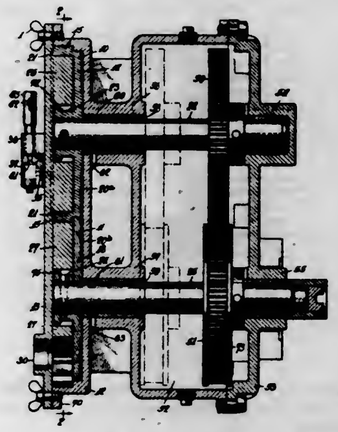
1,902,346. ROTARY PUMP. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers, Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Aug. 23, 1930. Serial No. 477,232. 7 Claims. (Cl. 103—126.)



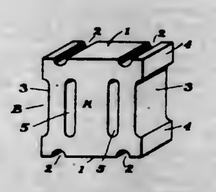
1. A rotary pump for mixing, proportioning and advancing separate materials including a pair of intermeshing rotary members having parallel axes, one of said members having an annular series of pockets and an internal chamber and the other having projections adapted to enter said pockets, separate inlets at the peripheries of the two members and an outlet from said chamber, said outlet being disposed adjacent the point of entry of the projections into said pockets.

1,902,347. ROTARY GEAR PUMP. CLARENCE W. VOGT and WALTER E. ZOELLER, Louisville, Ky., assignors to Vogt Instant Freezers, Incorporated, Louisville, Ky., a Corporation of Delaware. Filed Jan. 31, 1931. Serial No. 512,525. 8 Claims. (Cl. 103—126.)

1. A rotary gear pump including a casing, a removable end wall connected to said casing and forming therewith a pumping chamber, a pair of shafts, a pair of intermeshing pumping gears connected to said shafts and disposed in said pumping chamber, a pair of intermeshing driving gears connected to said shafts, and means for interlocking said driving gears against relative axial movement, said casing having a wall between said driving gears and spaced from the former to a distance substantially equal to the thickness of said chamber, whereby said shafts may be moved axially through said wall to such distance as will move said pumping gears out of said chamber.



1,902,348. CHECKER BRICK AND CHECKER WORK FORMED THEREFROM. JAMES W. WAGSTAFF, Youngstown, Ohio. Filed Nov. 29, 1930. Serial No. 498,984. 3 Claims. (Cl. 263—51.)

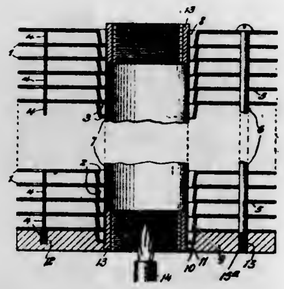


3. A checker brick of the class described comprising a refractory body having substantially rectangular faces, the end faces thereof each having an elongated depression extending between the adjacent lateral faces spaced from the top and bottom faces, and each of the top and bottom faces having a pair of spaced semi-cylindrical grooves extending between said lateral faces, said body also having a pair of relatively narrow elongated spaced openings extending transversely therethrough and providing intercommunication between areas adjacent the respective lateral faces of the brick.

1,902,349. PROCESS OF MAKING HEAT EXCHANGERS. LOUIS PREVOST WHITAKER, New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Jan. 31, 1931. Serial No. 512,577. 5 Claims. (Cl. 22—204.)

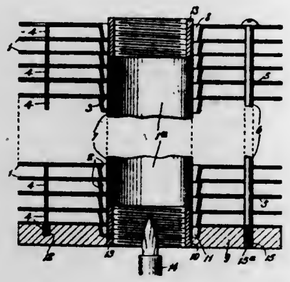
1. The herein described process of manufacturing a heat exchanger which consists in forming an exterior mold wall by assembling a plurality of apertured metal plate elements, spaced by apertured metal spacing ele-

ments, said plate and spacing elements having their apertures in coaxial alignment, supporting a metal tube element within said exterior mold wall and spaced therefrom



to form an interior mold wall, and casting a body of metal between said mold walls, and united to said tube and said plate elements.

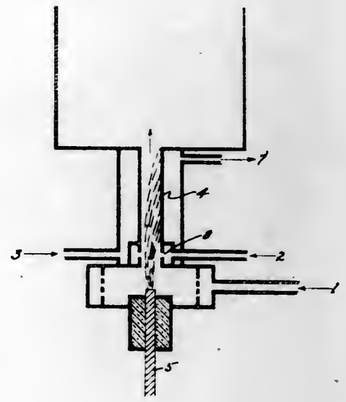
1,902,350. HEAT EXCHANGER. LOUIS PREVOST WHITAKER, New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Original application filed Jan. 31, 1931, Serial No. 512,577. Divided and this application filed Oct. 10, 1931. Serial No. 568,008. 7 Claims. (Cl. 257—263.)



1. A heat exchanger comprising a thin metal tube, a series of parallel plates surrounding said tube, and an integral cylindrical reinforcing cast metal body united to said tube and to said plates to form an integral structure, said cast metal body forming the only connection between said plates and said tube.

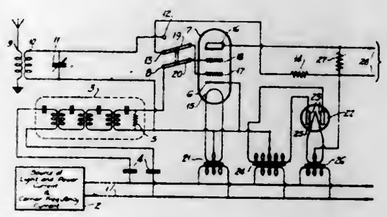
1,902,351. TREATING CARBONACEOUS MATERIALS WITH ELECTRIC ARCS. PAUL BAUMANN, HEINRICH SCHILLING and ALBERT FISCHER, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 16, 1932, Serial No. 599,156, and in Germany Mar. 20, 1931. 3 Claims. (Cl. 204—31.)

2. In the production of acetylene by treatment of a vaporized hydrocarbon in the electric arc the steps of suspending in said hydrocarbon a finely divided solid substance which is not chemically altered by said arc



and then passing the resulting suspension through the arc so that the said solid substance comes into contact with the surfaces confining the arc space.

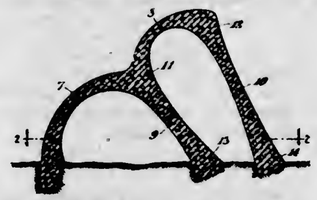
1,902,352. RADIO RECEIVING SYSTEM. ADOLF W. C. BOLJAHN, Jersey City, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 6, 1931. Serial No. 513,795. 3 Claims. (Cl. 179—2.5.)



1. A radio receiving system comprising, a plurality of different sources of signaling energy, a space discharge tube including a cathode and an anode, a plurality of control grids interposed between said cathode and anode, a source of steady potential, and means for connecting one of said control grids selectively to one of said sources of signaling energy or to said source of steady potential and the other of said control grids selectively to the other of said sources of signaling energy, or to said source of steady potential.

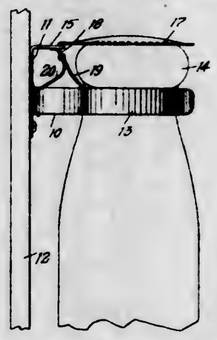
1,902,353. DAM. EDGAR H. BURROUGHS, Scarsdale, N. Y., assignor to Ambursen Construction Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 30, 1930. Serial No. 448,504. 4 Claims. (Cl. 61—32.)

1. A dam with an up- and down-stream section comprising an arch having abutments in foundation material with the up-stream abutment terminating substantially normal to the surface of said material, a second arch



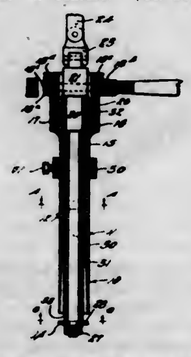
having one abutment on said first-named arch adjacent the crown thereof, with said arches presenting up-stream surfaces forming a water-bearing deck.

1,902,354. COMBINATION HOLDER AND COVER FOR BOTTLES. RULOFF D. CORKE, Yonkers, and FREDERIK HANSEN, White Plains, N. Y. Filed Nov. 7, 1931. Serial No. 573,530. 1 Claim. (Cl. 248—65.)



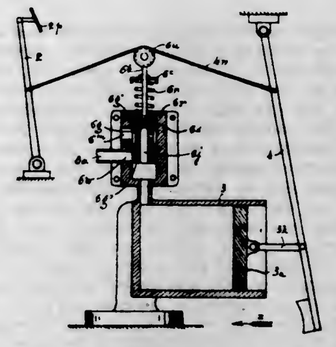
A device as characterized comprising a supporting member and bent forwardly and flatwise at its upper extremity, outwardly projecting arms adjacent and integral the lower end of said supporting member to hold a bottle therebetween, a slot in the flatwise portion of the supporting member, a cover attached to said flatwise portion, a strip extending from said cover and projecting downwardly through said slot and shaped to resiliently engage the side of said bottle, and a spring member attached to said strip and diverging at its free end to engage against the inner wall of the supporting member whereby the cover will be securely clamped on the top of the bottle.

1,902,355. TUBING CUTTER. LEVI DAY and WILLEM VAN EE, Long Beach, Calif. Filed June 27, 1930. Serial No. 464,282. 4 Claims. (Cl. 29—69.)



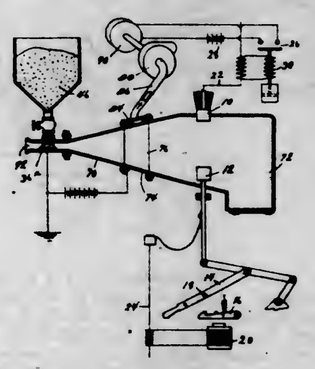
1. A tubing cutter including, a body adapted to be inserted in a tube and having a longitudinal opening, a shaft extending through the opening; means for rotatably and tiltably mounting the shaft in the opening including, a shell rotatably carrying the shaft and tiltably mounted in the opening, a cutter on the shaft, a screw on the body operable to engage the shell to tilt the shell and shaft to feed the cutter outwardly, and spring means for automatically tilting the shell to a normal axial position upon retraction of the screw.

1,902,356. SYSTEM FOR TRANSMITTING MOVEMENT. GÉRARD DE MONGE, Brussels, Belgium, assignor to Fabrica Italiana Magneti Marelli, Societa Anonima, Milano, Italy. Filed July 18, 1928, Serial No. 293,589, and in Belgium July 23, 1927. 1 Claim. (Cl. 121—41.)



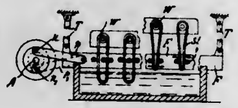
A transmission system comprising a cylinder having a piston, a lever connected to the piston, a valve casing having an opening for admitting a power medium to the cylinder and having means for exhausting said medium therefrom, a sliding valve having a duct therein and an external groove to control said opening and said means, a rod connected to said valve, a pulley on said rod, an actuating member and a flexible connection joining said lever and said member and passing over said pulley.

1,902,357. CIRCUIT INTERRUPTION. WILLIAM S. EDSALL, Brookline, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 17, 1930. Serial No. 428,894. 22 Claims. (Cl. 200—144.)



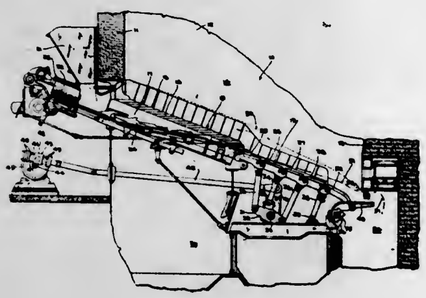
17. The method of extinguishing an electric arc which consists in neutralising electrically charged ions in the arc by oppositely electrically charged free discrete particles.

1,902,358. APPARATUS FOR THE MULTIPLE OR MULTICOLOR DYEING OF HANKS OF YARN. FRIEDRICH FAIGLE and CARL FAIGLE, Hard, near Bregenz, Austria. Filed Dec. 11, 1931, Serial No. 580,408, and in Austria May 23, 1930. 6 Claims. (Cl. 8—19.)



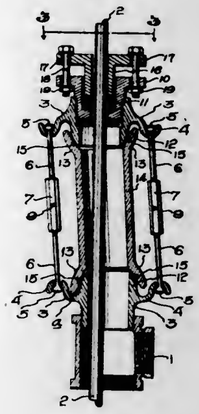
1. A device for swinging and wringing hanks of yarn subjected to multiple stepwise dyeing operations in a dye bath, comprising in combination: means for suspending the hanks so that they are immersed only to the desired extent in the dye bath; members arranged above the dye bath for moving the hanks; means for moving said members simultaneously either in the same direction or in opposite directions to one another, whereby the hanks are swung to and fro during the dyeing operation by said members and are wrung out after the dyeing operation between said members upon withdrawal from the bath; said means comprising a shaft on which some of said members are mounted; and a second shaft which is arranged adjacent to said first-named shaft and on which the others of said members are mounted; the said two shafts being arranged so as to be axially displaceable and to be rotatable together with said members through an angle of 90° independently of and, when desired, dependently on one another, substantially as described.

1,902,359. FURNACE. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 30, 1930. Serial No. 505,615. 5 Claims. (Cl. 110—44.)



1. In a furnace, the combination of a progressive feed stoker including a grate disposed at the discharge end thereof and mounted for movement bodily in the direction of fuel feed for ejecting the ash therefrom; means for effecting such movement of the grate; a normally stationary member disposed transversely of the fuel feed at the discharge end of the stoker and providing a support for the ash coming from the stoker; the forward end of the member extending beneath and forming a bearing support for the rear end of the grate; a furnace wall disposed transversely of said member at the rear thereof and having a portion overhanging the rear portion of the member to form, in conjunction with said member, an approximately horizontally extending passage through which ash is moved by virtue of the action of the grate; adjusting means for moving the ash supporting member angularly about an axis extending transversely of the fuel feed and disposed adjacent the forward end of the member, whereby the rear portions of the member may be moved up or down with respect to the overhanging portion to vary the size of the passage.

1,902,360. PUMP ROD STUFFING BOX MOUNTING. WALTER W. FOSTER, Wichita Falls, Tex. Filed Nov. 23, 1931. Serial No. 576,765. 6 Claims. (Cl. 286—15.)



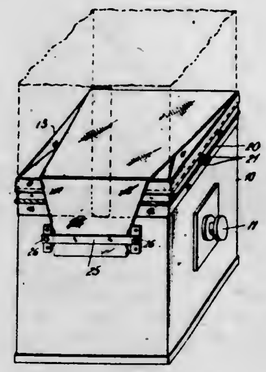
1. A pump rod stuffing box mounting including relatively movable flanges and a tubular spacing member, parallel rods arranged to maintain said flanges in positive parallel relationship whereby to constrain said stuffing box to move in a horizontal plane during reciprocating movements of said pump rod.

1,902,361. CUSHIONING PAD. CARL S. HAMERSLEY, New York, N. Y. Filed Feb. 27, 1932. Serial No. 595,447. 11 Claims. (Cl. 154—54.)



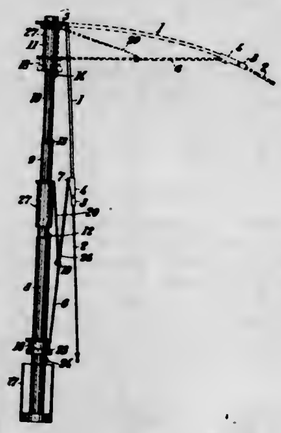
1. A cushion of the character described, comprising a plurality of corrugated sheets arranged in stacked relationship with the corrugations of each sheet arranged transverse to those of each adjacent sheet, each sheet having the major portion thereof free of connection with the adjacent sheet or sheets to permit independent expansion of each sheet in its own plane.

1,902,362. RECEPTACLE AND CLOSURE THEREFOR. WILLIAM L. HANAVAN, Montclair, N. J. Filed July 10, 1931. Serial No. 549,892. 10 Claims. (Cl. 220—1.)



1. A receptacle, having a single open side a closure therefor comprising a flexible member secured around the edge portion of said open side of the receptacle to form a continuation of the walls of the receptacle, and folded across said open side of the receptacle, and means securing the folded member across said open side.

1,902,363. TELESCOPIC UMBRELLA. HANS HAUPT, Berlin, Germany. Filed Aug. 16, 1930, Serial No. 475,647, and in Germany July 19, 1930. 3 Claims. (Cl. 135—22.)



1. An umbrella of the character described, comprising a stick composed of telescopically connected sections, ribs composed of slidably connected sections, a runner on the stick, stretchers connecting said runners with the outer rib sections, a sleeve arranged to slide on the stick, and auxiliary struts pivoted at one end to said sleeve and at the other end to the central portions of the stretchers for supporting the latter in the open position of the umbrella, said struts being formed with knees adapted to bear against and exert outward pressure on the stretchers when the umbrella is closed.

1,902,364. METHOD OF PREPARING FATTY ACID ESTERS OF BORNEOL AND ISOBORNEOL. VALENTIN HILCKEN, Gersthofen near Augsburg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 19, 1931, Serial No. 569,843, and in Germany Nov. 7, 1930. 11 Claims. (Cl. 260—99.)

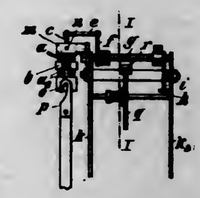
1. In the process of preparing fatty acid esters of borneol by causing fatty acids to react upon camphene, the new step which consists in adding a small amount of borontrifluoride to the reaction mixture.

1,902,365. WATER HEATER. WILLIAM M. HILLS, Hartford, Conn. Filed May 16, 1931. Serial No. 537,789. 11 Claims. (Cl. 122—333.)



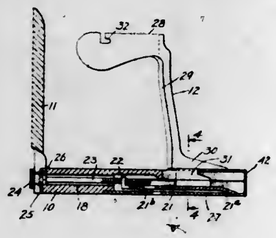
1. A liquid heater including a base, composed of a gas receiving section having a peripheral flange to create a recess, an inlet section resting on said flange to close said recess and thereby create a gas chamber, said inlet section having passages therein, an inlet pipe extending through said gas chamber and communicating with said passages, tubes communicating with said passages and extending upwardly from said base, means at the top of the structure for collecting liquid delivered by said tubes, and gas tubes communicating with said gas chamber and extending upwardly within the space bounded by said tubes.

1,902,366. ESCAPEMENT AND PENDULUM MECHANISM. GOTTLOB JAISSLE, Feuerbach near Stuttgart, Germany, assignor to Uhrenfabrik J. Kienzle, Komotau, Czechoslovakia. Filed Jan. 5, 1931, Serial No. 506,690, and in Germany Jan. 7, 1930. 2 Claims. (Cl. 58—123.)



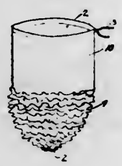
2. A mechanism of the class described and having the features outlined in claim 1, in which the said energy transmitting means comprise a lever, adjustably mounted on the axis of the anchor, a connecting rod horizontally extending from said lever and a U-shaped member rigidly interconnecting said rod and clamp.

1,902,367. SEAT. EVERARD L. JOHNSON, Patchogue, N. Y. Filed Mar. 11, 1930. Serial No. 434,869. 3 Claims. (Cl. 155—36.)



1. The combination with a seat and an upright member on said seat movable forwardly and backwardly with respect thereto, of means for retaining said member in different positions of adjustment, the seat having an elongated channel and a part on said member operating in said channel, said retaining means comprising a cam plate arranged in said channel, a rod projecting at the rear end of the seat and in screw threaded engagement with said plate for moving said plate longitudinally in said channel into and out of engagement with the part on said member for retaining said member in different positions of adjustment.

1,902,368. BAG. MARTHA E. JOHNS, Norfolk, Va. Filed May 27, 1932. Serial No. 614,016. 2 Claims. (Cl. 150—1.)



1. A bag comprising a single sheet of fabric having its side edges stitched together, hems arranged at the top and bottom of the sheet of material, draw strings arranged in said hems, draw strings having one of their ends secured to the sheet of material and disposed about the bag in row formation, said last mentioned draw strings being passed through the fabric in spaced parallel relation with respect to each other and in running stitch formation whereby to provide a ruffled portion upon movement of the fabric upwardly on the last mentioned draw strings, the first mentioned draw strings being adapted to draw the ends of the sheet together to give a pillow effect with the ruffled portion disposed above the remaining portion of the bag and ornamental means secured to the ruffled portion.

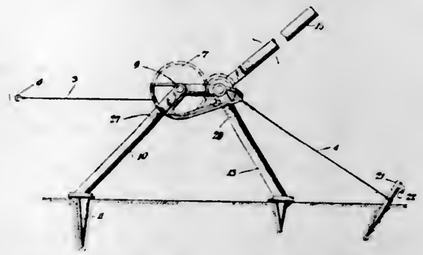
1,902,369. ADHESIVE TAPE FOR FASTENING PACKAGES AND FOR LIKE PURPOSES. THEODORE HENRY KRUEGER, New York, N. Y., assignor to Better Packages, Incorporated, Shelton, Conn., a Corporation of New York. Original application filed May 2, 1930, Serial No. 449,152, and in Great Britain Oct. 31, 1929. Divided and this application filed Aug. 7, 1930. Serial No. 473,747. 4 Claims. (Cl. 229—49.)

1. Adhesive tape for fastening packages and for like purposes, divided longitudinally into three zones by parallel lines of weakness along which said tape as a whole will bend readily to a channelled cross-section with the gum inwards, so that the flanges at the sides may be gripped by the operator without touching the moistened gum, and wherein the distance between the lines of weakness is at least one eighth of the width of the strip, and



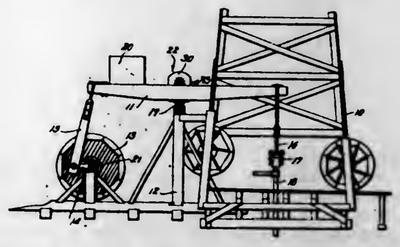
not less than one quarter of an inch (whichever is the greater), and not more than seven eighths of said width or three and one-half inches (whichever is the less).

1,902,370. SUPPORTING FRAME FOR WINDING MECHANISM. RAUL LAVANDEIRA, Buenos Aires, Argentina. Filed Dec. 6, 1930, Serial No. 500,530, and in Argentina Aug. 22, 1930. 1 Claim. (Cl. 254—135.)



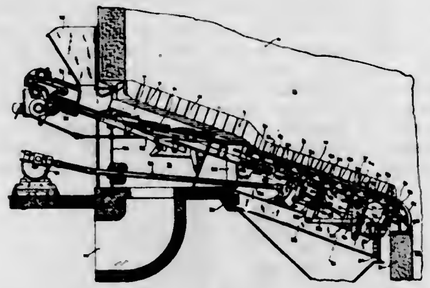
A supporting frame for a winding mechanism to pull vehicles from swampy ground comprising a casting supporting the winding mechanism, said casting being formed with sockets, legs having their upper ends secured in said sockets, spikes secured to the lower ends of the legs and positioned at an angle thereto, concave discs securing the spikes to the legs and having a surface adapted to rest on the surface of the ground, a peg adapted to be driven into the ground at a suitable distance from said spikes, and a stay connecting said peg to said casting, said peg and spike being relatively so arranged as to overcome the resistance of the vehicle.

1,902,371. CONTROL FOR PUMP ACTUATING MECHANISMS AND THE LIKE. LLOYD M. MILLER, Los Angeles, LYNN M. GREENE, Whittier, JOSEPH G. MILLER, Los Angeles, and ELMER E. CALKINS, Whittier, Calif. Filed Apr. 25, 1931. Serial No. 532,771. 22 Claims. (Cl. 192—116.5.)



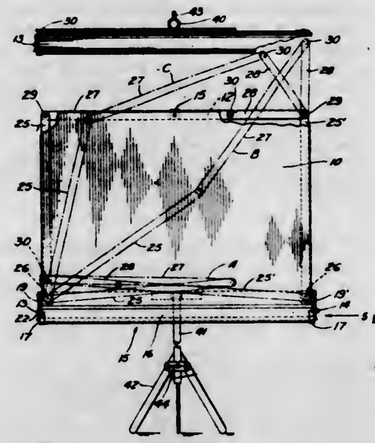
2. In combination, a walking beam, and a control device carried by the walking beam including, a contact mechanism, and means for actuating the contact mechanism upon the speed of the motion of the walking beam being accelerated.

1,902,372. COMBUSTION APPARATUS. DONALD J. MOSSHART, Lansdowne, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 14, 1929. Serial No. 392,578. 6 Claims. (Cl. 110—44.)



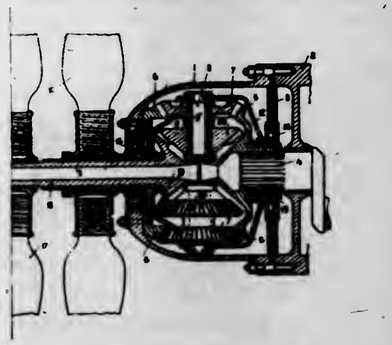
1. In combustion apparatus, the combination with an underfeed stoker section comprising alternately-arranged retorts and tuyère rows, and means for feeding fuel to one end of the underfeed section; of an overfeed section disposed to receive the burning material from the other end of the underfeed section and comprising a series of grate members pivotally connected together in end-to-end relation and extending in the direction of fuel feed; means for supporting the first grate member considered in the direction of fuel feed for reciprocatory movement bodily in the direction of such feed; and means for imparting a combined oscillatory and reciprocatory motion to some of the remaining grate members of the series.

1,902,373. PORTABLE SCREEN. ORRIN WESTON PINEO, Milo, Me., assignor to Sprague Specialties Co., North Adams, Mass., a Corporation of Massachusetts. Filed Nov. 13, 1931. Serial No. 574,878. 4 Claims. (Cl. 88—24.)



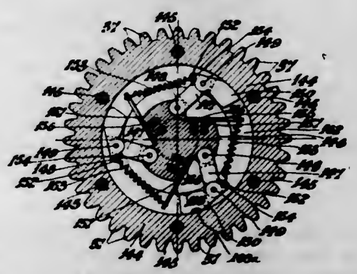
1. A portable screen assembly comprising a casing and a plurality of links adapted to form a frame, two of said links being of equal length and secured to the two ends of said casing to form the sides of the frame, and two links of unequal length connected to said side links, and adapted to form the top of the frame, the longer one of the top links being of equal length to the side links and the shorter one of the top links being equal in length to the difference between the width and length of the screen.

1,902,374. REDUCING GEAR. GUGLIELMO PIRINOLI, Turin, Italy, assignor to Fiat Società Anonima, Turin, Italy. Filed Sept. 23, 1931, Serial No. 564,650, and in Italy May 15, 1931. 1 Claim. (Cl. 74—34.)



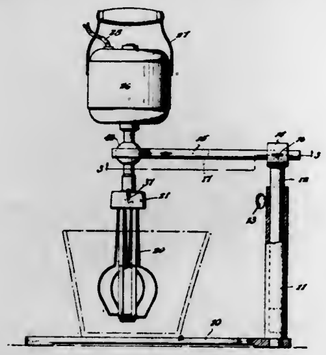
In a reducing gear, the combination with a casing, a driving shaft and two driven shafts concentrically arranged to each other and in alignment with the driving shaft, of a sun gear fixed to the casing, a sun gear keyed to said driving shaft, planet gears comprising two toothed rims, one of which meshes simultaneously with both of said sun gears, a casing for said planet gears connected with the outer driven shaft and supported on both sides by the first-mentioned casing, said casing being provided with openings, through which project the toothed rims meshing with the fixed sun gears and a third sun gear keyed on the inner driven shaft and meshing with the other toothed rim of said planet gears.

1,902,375. CLUTCH. WALTER CHARLES PITTER, London, England, assignor to Pitter Trust, a Common-Law Trust. Original application filed Sept. 20, 1924, Serial No. 738,829, and in Great Britain Aug. 28, 1924. Divided and this application filed July 18, 1928. Serial No. 293,593. 14 Claims. (Cl. 192—45.2.)



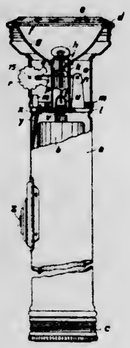
1. A one-way rotary clutch, comprising a driving member and a driven member, a clutch piece and a strut, the strut bearing at one end against one of the members, the other member being provided with an annular groove of which the opposite sides form concentric friction surfaces of different diameters, the clutch piece being provided at one end with oppositely-disposed gripping surfaces for engaging the inner and outer concentric friction surfaces when the clutch piece is tilted in a plane which is substantially at right angles to the axis of revolution, the rear end of the clutch piece bearing against the outer end of the strut, the strut being of such length as to hold the clutch piece substantially tangentially to the groove of the annular grooved member and to tilt it in such groove so that it will grip the opposite sides of the groove only when one of the members is moved rotatively relative to the other in one direction.

1,902,376. FOOD MIXER. CONN A. PURDIN, Chico, Calif. Filed Feb. 10, 1932. Serial No. 592,144. 2 Claims. (Cl. 259—132.)



1. A mixer comprising a vertically adjustable standard, a horizontally adjustable supporting arm thereon terminating in an adjustable socket, and a combined motor and beater assembly having a ball slidable bodily toward and away from the motor and pivotally received in said socket to contact the assembly for universal as well as vertical sliding movement on the supporting arm.

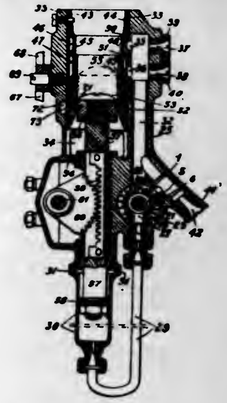
1,902,377. FLASH LIGHT. PAUL ROSENBERG, Berlin, Germany, assignor to Walter Rosenberg, Berlin, Pankow, Germany. Filed Dec. 4, 1930, Serial No. 500,113, and in Germany Mar. 11, 1929. 4 Claims. (Cl. 240—10.69.)



1. In a flash light having a casing, a reflector, and a source of light mounted to be adjusted with respect to said reflector, a battery in said casing, a plate of insulating material in said casing intermediate said battery and said source of light, a guide of channel section on said plate having slots, a socket for said source of light, pins on said socket adapted to move in said slots, a forked lever mounted to rock in said guide, with its arms surrounding said socket and engaging said pins, and manually operated means for rocking said lever.

1,902,378. CARBURETOR. HUGO SCHNEEBELI, Courbevoie, France. Filed Oct. 29, 1931, Serial No. 571,900, and in France Nov. 7, 1930. 5 Claims. (Cl. 261—49.)

1. A carburetor for internal combustion engines, comprising: a carburetor body, a tubular sleeve secured in a bore of the said body, a union secured on said sleeve and putting the sleeve in direct communication with the gasoline tank, without interposition of a constant lever chamber, a nozzle adapted to constitute a sprayer, in said sleeve, and perforated with a channel for the admission of gasoline, a conical seat surrounding the outlet orifice of the said channel, means for controlling the closing, opening and output of the spraying nozzle, an annular chamber formed in the tubular sleeve, about the conical seat of the spraying nozzle, and adapted to receive gasoline delivered by the spraying nozzle, a circular groove, provided in the outer wall of the tubular sleeve and adapted to form with the shape of the carburetor body, a gasoline atomizing chamber, channels putting the atomizing chamber in communication with said annular chamber, means for putting the atomizing chamber in communication with the atmosphere for the admission of primary air, its mixing with the gasoline admitted in the said chamber, and the atomization of



the gasoline in the form of a rich emulsion, means for transmitting in this atomizing chamber the partial vacuum produced by the engine and supplying the emulsion produced in the said chamber to the suction connecting branch of the engine, means for adding to and mixing with this emulsion further quantities of primary air during its passage from the atomizing chamber to the suction connecting branch of the engine, means for controlling the admission of this mixture into the suction connecting branch of the engine, means for ensuring the introduction in this mixture of adjustable quantities of secondary air and for delivering this explosive mixture in the suction connecting branch of the engine, and means adapted to ensure the simultaneousness of the control of the admission of gasoline and primary air and of the control of the admission of secondary air.

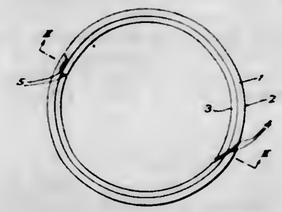
1,902,379. AGE RESISTING RUBBER COMPOUND AND PROCESS OF MAKING SAME. WINFIELD SCOTT, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed Sept. 10, 1929. Serial No. 391,709. 6 Claims. (Cl. 18—50.)

1. The process of manufacturing an age resisting vulcanized rubber product which comprises curing a rubber composition of vulcanization characteristics in the presence of an anit-oxidant comprising a sulfur derivative of a reaction product of substantially two molar proportions of beta-naphthol and substantially one molar proportion of p,p'-diamino-diphenyl-methane.

1,902,380. ANNULAR DOWEL FOR TIMBER BONDS. JACOB SEGER, Zurich, Switzerland, assignor to the Firm Locher & Cie., Zurich, Switzerland. Filed Sept. 11, 1930. Serial No. 481,297. 2 Claims. (Cl. 20—92.)

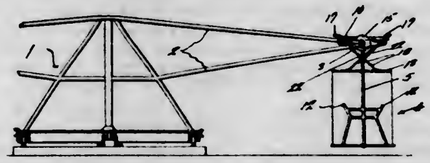
1. In a timber bond, the combination with grooves provided in the surfaces of the timbers to be joined,

said grooves forming internal cores the sides of said cores tapering inward from the bottom of the grooves to the jointing surfaces of the timbers, of a bipartite annular dowel having a cross-section corresponding to that of the juxtaposed grooves, the opposite faces of the dowel joints being parallel and at least one of said



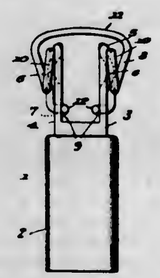
joints S-shaped, the ends of the two parts at the S-shaped joint being formed with interlocking axially extending sockets and knobs permitting opening and closing movements while opposing separate overturning movements of the two parts, and tightening means for said timbers adapted to press said dowel home in said grooves so as to yieldingly engage the side portions of said grooves.

1,902,381. AMUSEMENT DEVICE. SOLOMON W. SHEPHERD, Orlo Vista, Fla. Filed May 9, 1930. Serial No. 451,087. 5 Claims. (Cl. 272—40.)



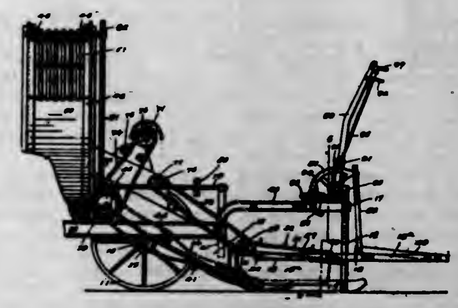
1. An amusement device comprising, in combination, a rotatable supporting structure including radiating arms, connecting rods extending between the outer ends of the arms, a car suspended for lateral swinging movement from the connecting rods, and coacting means carried by the connecting rods and the car and operable by the occupants of said car for causing the car to swing laterally.

1,902,382. SPARK PLUG IGNITION TERMINAL. FRED G. SHOEMAKER, Syracuse, N. Y. Filed Mar. 2, 1928. Serial No. 258,517. 7 Claims. (Cl. 173—269.)



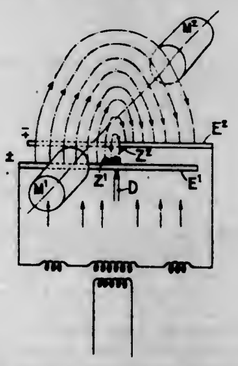
1. In combination with a forked ignition-cable-terminal having two opposed projecting bosses and a pair of perforations in the fingers of said forked terminal, a locking member including opposed trunnions to enter the said perforations in the forked terminal, a central transverse portion adapted to close the opening at the end of the forked terminal, and opposed coiled formations intermediate the said trunnions and the said central transverse portion, the said opposed coiled formations being adapted to engage the said opposed projecting bosses and to confine said opposed projecting bosses within the space defined by said opposed coiled formations.

1,902,383. TRACTOR OPERATED BEET LOADER. JULIUS SIEHC, Torrington, Wyo. Filed Mar. 21, 1931. Serial No. 524,350. 8 Claims. (Cl. 209—358.)



1. A beet loader including a wheel supported frame, a horizontally disposed pick-up blade carried by the frame, an agitating conveyor extending upward and rearward from the pick-up blade, means disposed above the pick-up blade and extending forward and rearward thereof whereby the beets in the path of movement of the blade are carried upward on to the blade and on to the conveyor, a transversely extending endless elevator on which the beets are discharged from the conveyor and including a floor having a slatted upper portion, and a plate disposed below and in spaced relation to the slatted portion of the floor and extending downward and inward to carry trash discharged through said slatted portion downward and inward.

1,902,384. PROCESS FOR PRODUCING CHEMICAL REACTIONS IN GASES AND VAPORS WITH AID OF A HIGH TENSION ELECTRIC ARC. EWALD STEINBUCH, Basel, and MAX ESCHMANN and HANS SCHWAMMBERGER, Monthey, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 8, 1932, Serial No. 636,960, and in Switzerland Oct. 16, 1931. 20 Claims. (Cl. 204—31.)



1. A process for the production of chemical reactions in gases and vapors by a high tension electric arc which is blown mechanically (aerodynamically) and magnetically, consisting in driving the gases from below upwards

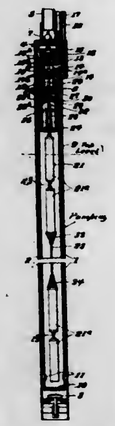
through a space crossed by electrode bars of any suitable cross section substantially parallel to each other, extending transversely to the direction of the gases and approximately at right angles to the lines of force of the magnetic field, the electric arc being struck approximately at the middle points of the electrodes and the speed of the gas current being so selected that the arc, under the simultaneous effect of the magnetic field, is spread out to assume the form of an upwardly extending body with flat faces the foot of which oscillates on the electrode bars from within outwards.

1,902,385. METHOD OF PRODUCING $MgCl_2$ CONTAINING CHLORIDES OF ALKALI METALS OR ALKALINE EARTH METALS. HIROSHI TANAKA, Komagome, Hongo-Ku, and SHOICHIRO IMATOMI, Ikegami-Machi, Ebara-Gun, Tokyo, Japan, assignors to Zaidan Hojin Rikagaku Kenkyujo, Tokyo, Japan. Filed Mar. 8, 1929, Serial No. 345,594, and in Japan Apr. 12, 1928. 8 Claims. (Cl. 23—91.)

1. A process of producing anhydrous magnesium chloride containing a chloride of alkali metals or of alkaline earth metals; consisting in mixing magnesium sulphide with chloride of alkali metals, charging the mixture into a furnace, heating the mixture from 400° to 600° C., and passing chlorine gas therethrough while continuing the heating.

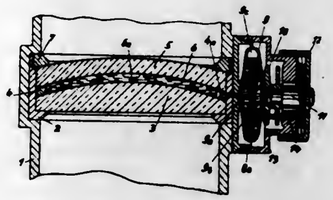
8. A process of producing anhydrous magnesium chloride containing chloride of alkaline earth metals, consisting in mixing magnesium sulphide containing magnesium oxide, with sulphide of alkaline earth metals, charging the mixture into a furnace, heating the mixture from 400° to 600° C., and passing a reducing gas containing chlorine gas therethrough while continuing the heating.

1,902,386. LIQUID PUMP. SAMUEL W. TRAYLOR, JR., Allentown, Pa., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa., a Corporation of Delaware. Filed May 19, 1932. Serial No. 612,348. 20 Claims. (Cl. 103—248.)



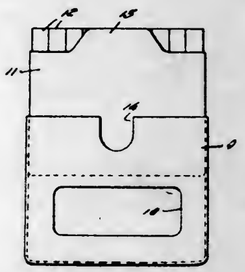
1. In a liquid pump, a working chamber, valve means controlling motive fluid inlet and exhaust for said chamber, operating means constantly tending to move said valve means into inlet position, and a buoyant member located in said chamber and constantly exerting a downward force tending to move the valve means into exhaust position against the force of said operating means, said buoyant member having its downward force reduced by the buoyancy of the liquid when it rises to a predetermined high level in said chamber to permit said valve means to be moved by said operating means into inlet position, said operating means including the buoyant member being in substantial longitudinal alignment for a substantially frictionless line motion directly from the buoyant force of the liquid on the said member to the valve means.

1,902,387. BOX SHAPED WATER LEVEL. CHRISTIAN VON HOFE and JOHANN SCHIER, Vienna, Austria, assignors to Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav, Pressburg, Bratislava, Czechoslovakia, a Company of Czechoslovakia. Filed Mar. 5, 1931, Serial No. 520,418, and in Germany Mar. 8, 1930. 2 Claims. (Cl. 33—211.)



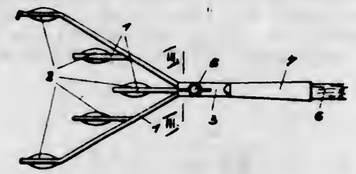
1. A box shaped water level comprising a liquid chamber enclosing the air bubble of the water level, an elastic container filled with the liquid of the said water level and communicating with the said liquid chamber, means for exerting external pressure on the said elastic container and a atructure supporting the said liquid chamber, elastic container and pressure exerting means, the proportions and materials of the said elements being such that the dilations by heat of the said elements substantially compensate for each other whereby the size of the air bubble in the said air chamber is automatically kept constant substantially in case of variations of temperature.

1,902,388. COMBINED CIGARETTE CASE AND ASH TRAY. CLIFTON WELCH, Pensacola, Fla. Filed Feb. 3, 1931. Serial No. 513,213. 1 Claim. (Cl. 206—41.)



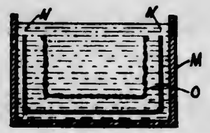
A device of the character described comprising an outer casing, having an open top and being further provided with an elongated opening in one side wall in spaced relation to said open top, an inner open top casing slidably disposed in the outer casing for the reception of cigarettes, and being movable across said elongated opening to close the same, when said inner casing is seated in the outer casing, the inner casing being of a height less than that of the outer casing and less than the length of the cigarettes for exposing one end portion of the cigarettes, opposed walls of the outer casing being provided with alined recesses to facilitate withdrawal of the inner casing from the outer casing, upstanding tongues formed integrally with the top of the inner casing and disposed in alinement with the recesses when the inner casing is seated in the outer casing, and a closure slidably mounted on the outer casing and removable therefrom and adapted to enclose one end of said inner casing.

1,902,389. HAND CULTIVATOR. GREGOR WOLF, Betzdorf-on-the-Sieg, Germany. Filed Nov. 22, 1930, Serial No. 497,509, and in Germany Aug. 5, 1930. 2 Claims. (Cl. 306—45.)



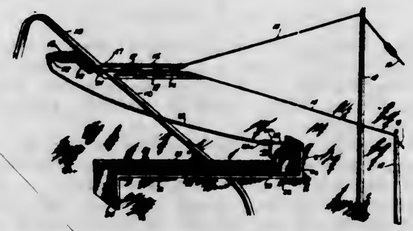
1. A hand cultivator comprising a tine socket, a handle secured to said socket, said tine socket having five sides three of which are substantially at right angles to each other, a plurality of exchangeable tines arranged pairwise juxtaposed in said socket, a single exchangeable tine disposed in the angle formed by the remaining two sides of said socket, and a screw mounted in the wall of said socket opposite said last named angle for pressing said tines against each other and towards said angle, whereby said tines are securely held in position.

1,902,390. STERILIZING PROCESS. JAMES C. WORMLEY, New York, N. Y. Filed May 9, 1931. Serial No. 536,204. 2 Claims. (Cl. 204—1.)



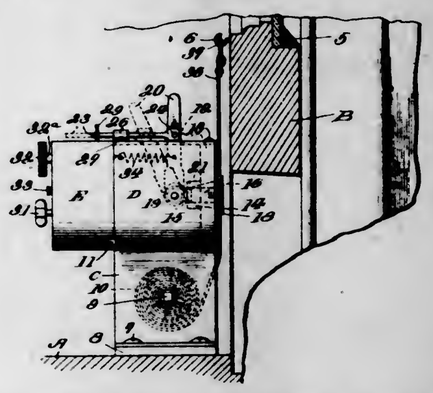
1. The method of sterilising metallic surfaces comprising, submerging the metallic surface in a receptacle containing an aqueous electrolyte solution containing sodium carbonate and inside of a U-shaped insoluble anode, connecting the anode in an electric circuit and connecting the metallic surface in the same circuit as a cathode supported within and spaced from the U-shaped anode, and passing current through the circuit and consequently the electrolyte whereby electrolysis is set up to generate caustic soda and hydrogen at the surface of the metal and to render the cleaned surface sterile and free from microorganisms.

1,902,391. AIR-MAIL PICK-UP AND DEPOSIT MECHANISM. LOUIS P. WULF, Lost Nation, Iowa. Filed Aug. 28, 1930. Serial No. 477,412. 19 Claims. (Cl. 258—1.)



16. A cable depending from an aircraft and carrying a mail bag supporting element, there being coupling means between the mail bag supporting element and said cable, including a loop and a latching element normally extending through the loop but retractible therefrom, a ground trap including converging guides defining a gap, and means at said gap causing the withdrawal of said latch from the loop when the cable has moved out of the gap.

1,902,392. AUTOMATIC CLOSER FOR WINDOWS AND THE LIKE. LOUIS VANCE BLUE, Pittsburgh, Pa.; Edward B. Blue executor of the estate of said Louis V. Blue, deceased. Filed July 12, 1927. Serial No. 205,204. 16 Claims. (Cl. 161—1.)



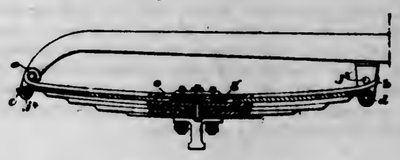
1. A window closing device comprising a spring pulling the window downward, said spring having trigger receiving means, a trigger for locking the spring against its downward tension, means to move said trigger into locked position in respect to the spring, and means for releasing the trigger, whereby the spring pulls the window downward.

1,902,393. ANCHOR FOR BOATS. ALBERTO BOSCH, Habana, Cuba. Filed Sept. 21, 1931, Serial No. 564,213, and in Cuba Jan. 29, 1931. 4 Claims. (Cl. 114—206.)



1. An anchor comprising a flat body slit at one end to define anchoring tongues, the two tongues being curved outwardly in opposite directions and projecting laterally beyond the flat sides of the body, and a supporting ring pivotally attached to the body at a point adjacent the slit end whereby the weight of the opposite end of the body tilts the latter to a vertical position with the tongues disposed uppermost when the body is held suspended from said ring.

1,902,394. SUSPENSION SPRING. PAUL ADOLPHE CARTERET, Neuilly sur Seine, France. Filed Apr. 22, 1930, Serial No. 446,330, and in France Oct. 28, 1929. 5 Claims. (Cl. 267—36.)



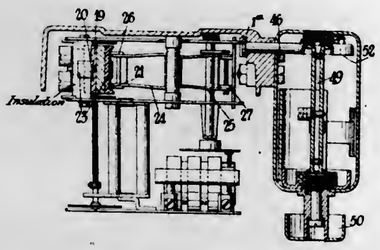
1. A suspension spring comprising two leaves each of which is secured at one end to a fixed point while the other end is free and positioned adjacent the fixed end of the other leaf, one of said leaves being provided with a slot, and a stationary spacing plate mounted in the slot allowing relative longitudinal movement of the two leaves.

1,902,395. UMBRELLA. EMILE CORNIC, Paris, France. Filed Dec. 28, 1931, Serial No. 583,506, and in France July 23, 1931. 8 Claims. (Cl. 135—44.)



1. An umbrella, comprising a stick, a rib-carrying ring secured to this stick, ribs pivoted on this ring, a handle slidably mounted on the upper end of the stick, a cup rigid with the handle, a returning device between the handle and the stick, this returning device being adapted to constantly urge the cup towards the ribs, the end of the stick passing through an axial hole perforated from end to end in the handle, and projecting at the top of the latter when the returning device has relaxed.

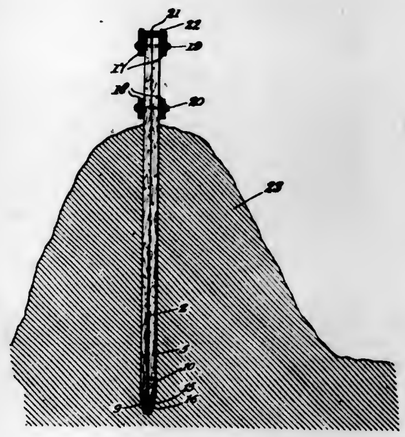
1,902,396. PREPAYMENT ELECTRICITY METER. SEBASTIAN ZIANI DE FERRANTI, deceased, Hollinwood, England, by Gertrude Ruth Ziani De Ferranti, Legal Representative, London, England, assignor to Ferranti Inc., New York, N. Y. Filed Oct. 14, 1931, Serial No. 568,839, and in Great Britain Sept. 25, 1930. 4 Claims. (Cl. 200—164.)



1. An electric switch including contact members having contacting surfaces, means for urging said surfaces into mutual contact with sufficient pressure to prevent appreciable local temperature rise whilst the switch is closed, means for causing said surfaces to separate to an extent of about .01 inch only to open said switch and means ensuring that the contacting surfaces remain substantially parallel during separation.

1,902,397. SHEET PILING BULKHEAD. OTIS F. DOYLE, New Orleans, La. Filed Sept. 7, 1932. Serial No. 632,026. 4 Claims. (Cl. 61—58.)

1. An improved sheet piling bulkhead comprising groups of vertical timbers associated together and driven into the levee, three of said timbers in the group lying end to end, the remaining two timbers of the group extending end to end with respect to one another and beside the first three timbers and bridging the joints between the first three timbers, the first three timbers being constructed and adapted to be driven into the ground in a definite order, the first timber having beveled walls to facilitate insertion, the second timber also having beveled side walls to facilitate insertion and a beveled end wall away from the first timber, a third timber having beveled sides and a beveled



end wall away from the second timber, the other two timbers being also adapted and constructed to be driven into the ground in a definite order, the fourth timber being driven into the ground at any time after the positioning of the first two timbers and having a beveled side face away from the first two timbers, the fifth timber being driven into place after the fourth timber and having a beveled end wall away from the fourth timber.

1,902,398. PROCESS OF MANUFACTURING VULCANIZED RUBBER AND PRODUCTS OBTAINED THEREBY. SYLVESTER M. EVANS, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed June 17, 1930. Serial No. 461,850. 10 Claims. (Cl. 18—50.)

1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an anti-oxidant comprising a reaction product of a dioxy dinaphthyl sulfide and an aryl amine.

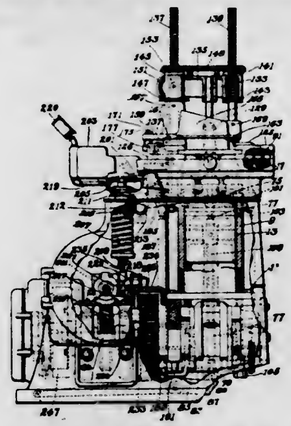
1,902,399. SOLE LAYING MACHINE. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 29, 1927. Serial No. 209,297. 44 Claims. (Cl. 12—33.)

1. A machine of the class described having, in combination, a pressure box one wall of which comprises a flexible diaphragm, a jack adapted to support a shoe against pressure applied through the diaphragm, means located outside the box adjacent to the diaphragm and having an opening therein large enough to permit the bottom of the shoe to pass through it, and connected mechanisms acting in timed relation first to operate said means to decrease the size of the opening and then to apply pressure through the diaphragm to the shoe.

28. A machine of the class described having, in combination, a pressure box one wall of which comprises a flexible diaphragm, a jack for supporting a lasted shoe against pressure applied through the diaphragm, means for moving the jack into a position just above the top of

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the last and for holding it stationary in that position, a plurality of plates, means for causing the plates to close about the shoe, means acting in conjunction with one of



the plates for gripping the toe portion of the shoe, and means operating after the toe portion has been gripped for forcing fluid under pressure into the box.

1,902,400. PROCESS OF PRODUCING GUANIDINE-THIOCYANATE. WILHELM GLUUD, Dortmund-Eving, Germany, assignor to Gesellschaft für Kohlentechnik mit beschränkter Haftung, Dortmund-Eving, Germany, a Company of Germany. Filed Dec. 3, 1931, Serial No. 578,745, and in Germany Dec. 12, 1930. 5 Claims. (Cl. 260—125.)

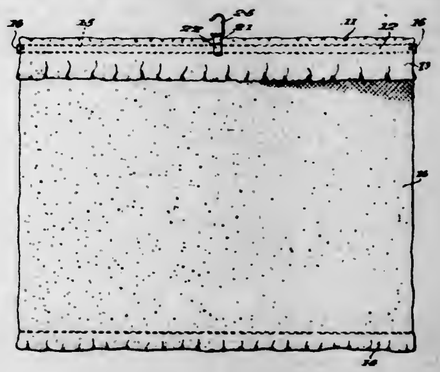
1. The process of producing guanidine-thiocyanate, consisting in melting ammonium-thiocyanate and conducting ammonia through the molten mass.

1,902,401. OPHTHALMOLOGICAL APPARATUS. WILLIAM A. GUNNING, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 14, 1929. Serial No. 407,148. 12 Claims. (Cl. 254—95.)



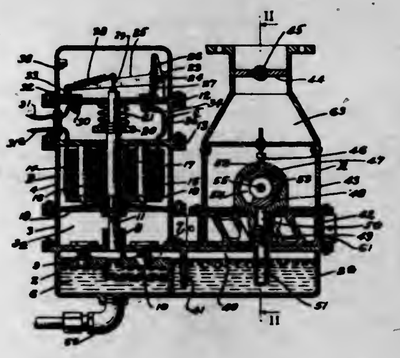
1. In a device of the character described an inner member, a housing surrounding the inner member, means attached to the housing to secure said housing against movement in one direction on said inner member at any variable position on said inner member and operating independently of any definitely formed holding means on said inner member, means to move said housing and securing means in the opposite direction on the inner member to any variable position and means to disengage the securing means to permit movement of the securing means and housing in either direction.

1,902,402. CURTAIN DISPLAY HANGER. HERBERT C. HERING, Cincinnati, Ohio. Filed Oct. 22, 1931. Serial No. 570,470. 7 Claims. (Cl. 156—22.)



1. A hook-clip for use in a curtain display hanger comprising a clip portion made from a single strip of metal bent intermediate its ends to form a spring loop, and a hook portion extending from said loop and retained against displacement therefrom.

1,902,403. COMBINATION FUEL PUMP AND CARBURETOR. WILLIAM R. HEWITT, New York, N. Y. Filed Sept. 3, 1930. Serial No. 479,529. 5 Claims. (Cl. 261—27.)

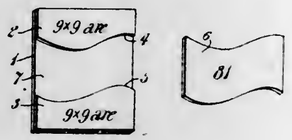


1. In a device of the character described, a carburetor having a chamber formed therein for the reception of air and fuel under pressure, an atomizing nozzle in communication therewith, an intermediate valve to regulate and to cause the flow of fuel under pressure to the nozzle, a pump whereby fuel under pressure is delivered to the chamber, and means whereby the pressure on the fuel in said chamber automatically regulates the pump to maintain a constant pressure.

1,902,404. MEANS FOR ASSISTING AND TESTING THE MEMORY. AUSTIN GEORGE HUMPHREYS, Brighton, England. Filed Feb. 27, 1930, Serial No. 431,946, and in Great Britain Mar. 27, 1929. 1 Claim. (Cl. 35—2.)

An educational appliance comprising a plurality of rectangular blocks of uniform peripheral dimensions, a transverse channel extending completely across one face of

each block between two ends so that each block consists of two parts the full thickness of the block separated by an integral part which is thinner, the edges forming the junctions of the said parts being sinuous, the transverse channel of one block being distinct from that of any other block, and a plurality of elements each having a longitudinal dimension corresponding to a transverse dimension of one of said blocks and each formed with longitudinal

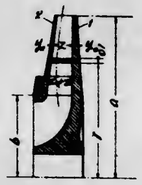


sinuous edges and straight transverse ends, th sinuous edges of such elements being such that each element has its own characteristic configuration so that it has to be fitted into one of said channels of a predetermined block, the said elements bearing matter which is complementary to matter formed upon the said blocks, and their transverse end edges coinciding with the straight edges of the blocks.

1,902,405. AGE RESISTING VULCANIZED RUBBER PRODUCT AND PROCESS OF MANUFACTURING SAME. JOSEPH R. INGRAM, Nitro, W. Va., assignor to The Rubber Service Laboratories Co., Akron, Ohio, a Corporation of Ohio. Filed June 14, 1930. Serial No. 461,264. 14 Claims. (Cl. 18—50.)

1. The process of vulcanizing rubber which comprises heating rubber and sulfur in the presence of an anti-oxidant comprising a reaction product of a glycerol and an aromatic amine.

1,902,406. ROTOR FOR TURBO-BLOWERS, CENTRIFUGAL PUMPS AND THE LIKE. HARUHISA INOKUTY, Hongo-Ku, and ZYUNKITI NAGAOKA, Shitaya-Ku, Tokyo, Japan. Filed June 20, 1930, Serial No. 462,654, and in Japan Nov. 2, 1929. 2 Claims. (Cl. 103—115.)



1. A rotor for turbo-blowers, centrifugal pumps and the like including vanes, discs coupled together elastically by said vanes, one of said discs having an inner opening, and a shrinkage ring fitted on the innermost radial part of said disc and rendering the displacements and stresses in both discs substantially equal.

1,902,407. STATIC ELIMINATOR. PETE KLIER, Bisbee, N. Dak. Filed Sept. 24, 1929. Serial No. 394,860. 3 Claims. (Cl. 250—20.)

1. A static eliminator comprising an inner and an outer tubular member of metallic composition, an inner coil about the inner member, one end of the inner coil being adapted to be connected to a radio receiving set, an outer



coil about the outer member, one end of the outer coil being adapted to be connected to an antenna, a shield about the outer coil, and an iron core within the inner member.

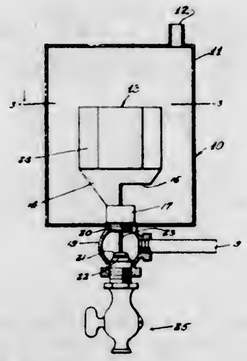
1,902,408. MANUFACTURE OF NEW CARDIO-ACTIVE GLUCOSIDES OF BULBUS SCILLÆ. WALTER KREIS, Binningen near Basel, Switzerland, assignor to "Chemical Works formerly Sandoz," Basel, Switzerland. Filed Sept. 8, 1927, Serial No. 218,366, and in Germany Aug. 12, 1927. 6 Claims. (Cl. 87—28.)

1. A process for the isolation of an easily soluble cardio-active glucoside from bulbus Scillæ, comprising the steps of dissolving a raw alcoholic extract from bulbus Scillæ in an aliphatic alcohol selected from a class comprising methanol and ethanol, treating this solution with chloroform in order to precipitate the inactive impurities, filtering the solution, evaporating same in vacuo at a low temperature, extracting the residue thus obtained which consists of a mixture of tannoids of the active glucosides, with water, in order to separate the water-insoluble portion, treating the obtained aqueous extract with tannin precipitating substances, separating the solution from the precipitate thus obtained, extracting the easily soluble gluco-side from the solution by means of a neutral aliphatic organic liquid from the class of chloroform and ethyl-acetate, and isolating the glucoside in dry form from its solution in the organic solvent by evaporating the solvent in vacuo.

1,902,409. AIR VENTING DEVICE. JEFFERSON N. LA BRANCH, San Diego, Calif. Filed Jan. 12, 1931. Serial No. 508,289. 3 Claims. (Cl. 137—69.)

1. An air venting device of the character described, comprising, a closed casing, an air vent leading from the casing, an air and fluid conduit intake opening in the casing, a float valve structure having a part thereof within the casing and a part thereof outside the casing, said structure comprising an inverted hollow conical body having an opening in one side and a closed top, a neck depending from the lower end of the body, a reduced screw threaded portion on the lower end of the neck defining a shoulder on the neck and adapted to be received through said intake opening so as to rest said shoulder upon the part of the casing surrounding said intake opening, a T-shaped fitting having a globular body portion, one of the arms

thereof being threaded upon the lower end of the said reduced portion so as to engage the exterior of the closed casing adjacent said intake opening, an air and fluid conduit connected with a lateral arm of the fitting, and a test spigot in the lowermost arm of the fitting; a float adapted to come to rest upon the top of the body, a valve



stem depending from the float through a guide hole in the top of the said body and into said globular body portion, a collar near the lower end of the stem adapted to enter snugly said neck, a valve on the lower end of the stem, a valve seat in the lower end of said reduced portion of the neck adapted to seat said valve.

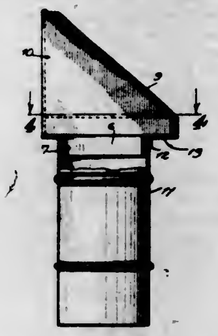
1,902,410. INTERCHANGEABLE TOOTHBRUSH. HENRY GUIDO LÉON LEMOINE, Perriers-sur-Andelle, France. Filed Mar. 12, 1930, Serial No. 435,805, and in France Apr. 26, 1929. 1 Claim. (Cl. 15—176.)



A tooth brush comprising a chambered head, flanges forming the chamber in said head, a bristle carrying plate disposed in the chamber of the head and engaging the flanges, one end flange of said chambered head being undercut to form a recess, and one end of said bristle plate engaging in said recess, the other end thereof being provided with a recess, a handle carried by the head, a reinforcing sleeve within the handle and terminating in the inner end of the chamber, an arcuate member carried by said sleeve and engaging said other end of the bristle carrying plate, said handle being formed in two pieces, said sleeve being threaded through both portions of the handle, a rotatable shaft extending through the sleeve and into said recess in the end of the bristle carrying plate, a handle member carried by said shaft and rotatably mounted on the rear end of the brush handle, said shaft being threaded into the rear end of the brush handle.

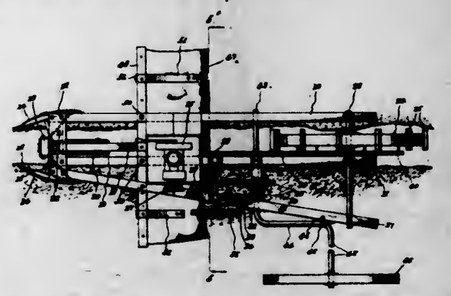
1,902,411. FORCED DRAFT DEFLECTOR FOR GAS STOVES. JOSEPH A. MCCARTHY, Richmond Hill, N. Y. Filed Feb. 25, 1930. Serial No. 431,187. 10 Claims. (Cl. 126—299.)

1. In a flue cap and deflector, a collar adapted for mounting on the outlet flue of a gas range, a deflector hood having a forward side opening therein parallel with the forward side of the outlet flue, said hood being mounted



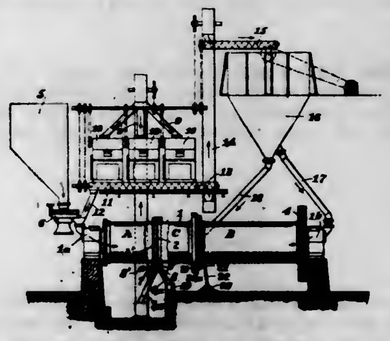
on the upper end of the collar and said hood having an air inlet opening in the bottom thereof entirely rearwardly of the forward side of the collar.

1,902,412. MECHANICAL IRRIGATOR. OTTO MELIN, Livingston, Mont., assignor of one-half to Clarence Allen, Livingston, Mont. Filed Apr. 14, 1931. Serial No. 530,124. 21 Claims. (Cl. 61—1.)



1. In a mechanical irrigator, a wheeled frame for movement through the field, and a dam carried by said frame for moving in the ditch.

1,902,413. METHOD OF AND APPARATUS FOR MULTIPLE STAGE GRINDING. ARTHUR F. MILLER, Jackson, Mich., assignor to Traylor Engineering & Manufacturing Company, Allentown, Pa., a Corporation of Delaware. Filed Apr. 29, 1931. Serial No. 533,842. 18 Claims. (Cl. 83—9.)



1. The process of comminuting material which comprises (a) reducing the material by subjecting the same

to the action of comminuting means, (*b*) separating the reduced product into undersize and oversize material, (*c*) returning the oversize for further reduction by said means, (*d*) separating the undersize into fine and coarse material, (*e*) subjecting the coarse material to the action of a second set of comminuting means to produce fine material, (*f*) and subjecting the fine of the undersize and the fine from said second set of comminuting means to the action of a third set of comminuting means.

1,902,414. GUY WIRE PROTECTOR. HERBERT E. MILLER, Allentown, Pa., assignor to Utilities Service Company, Inc., Allentown, Pa., a Corporation of Pennsylvania. Filed Feb. 28, 1931. Serial No. 519,187. 13 Claims. (Cl. 189—31.5.)

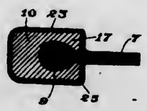


1. A device of the character described comprising a longitudinal body split to permit the insertion of a guy wire therein, means for fixing the lower portion of said body against movement with respect to the guy wire, a cap at the upper end of said body provided with a slot extending from the split in the body to a point substantially centrally of the cap, and a fixed retaining device adapted to contact with the guy wire at a point spaced from the cap longitudinally with respect to said body.

1,902,415. SWEETENED AND FLAVORED DESSERT MADE WITH RENNIN. KARL J. MONRAD, Little Falls, N. Y. Filed July 21, 1931. Serial No. 552,293. 4 Claims. (Cl. 99—11.)

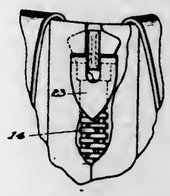
1. A dry composition of matter for mixing with milk to form a sweetened and flavored dessert comprising suger, rennin, a flavoring ingredient, and calcium glycerophosphate.

1,902,416. SEPARABLE FASTENER. SAMUEL H. NORTON, Meadville, Pa., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Aug. 4, 1930. Serial No. 472,846. 5 Claims. (Cl. 24—205.)



3. In a slide fastener, a pair of fastener stringers, cooperating series of metal fastener elements attached to the adjacent edges of said stringers, a slider movable along said elements for engaging and disengaging same, each of said elements having an interlocking head at one end and clamping jaws at the other end, the exterior edges at the jaw ends of said elements being normally sharp or burred, and a separate and individual coating of lacquer applied to the exterior surfaces of each individual element adjacent said corners to eliminate said sharp edges and thereby provide for smoother operation of said slider.

1,902,417. SLIDE FASTENER. HENRY J. PIEHL, Hudson, Ohio, assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Oct. 26, 1929. Serial No. 402,731. 12 Claims. (Cl. 24—205.)



1. In combination, an article having edges to be fastened, fastening means along said edges, a slider movable over said fastening means for engaging or disengaging the same, a slider retaining means including a member fixed to said article and extending longitudinally of the fastener, and means for pressing said member against said slider to retain the same in the desired position.

1,902,418. SURGICAL INSTRUMENT. ERNEST C. PILGRIM, Okmulgee, Okla., assignor to The Jensen-Salsbery Laboratories, Inc., Kansas City, Mo., a Corporation of Missouri. Filed Nov. 2, 1931. Serial No. 572,512. 7 Claims. (Cl. 128—350.)



2. A device of the character described comprising a drainage tube, a liquid supply tube extending through the drainage tube, a guide bearing a fixed relation to the supply tube and a sliding relation to the drainage tube, and a stop to prevent projection of the supply tube and guide beyond the front end of the drainage tube.

1,902,419. MOLDING COMPOSITION AND METHOD OF TREATING. ROY A. PLANT and MANLEY E. BROOKS, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed July 30, 1931. Serial No. 554,154. 13 Claims. (Cl. 22—188.)

1. In a method of treating a molding composition to prevent excessive loss of moisture, the step which consists in incorporating in such composition a hygroscopic, fluorine free, halide salt.

1,902,420. CUTTER CHAIN FOR MINING MACHINES. EDWARD W. RADIUS, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 26, 1931. Serial No. 518,418. 9 Claims. (Cl. 262—33.)

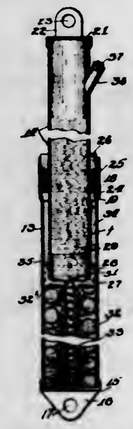
1. In combination with a cutter chain block for mining machines, a body portion having a bit receiving slot therein opening to the forward end thereof, said body portion having a rearwardly and downwardly inclined face, a bit insertable in said bit receiving slot, and means for securing said bit in said bit receiving slot comprising a removable forward part arranged in alignment with said body portion having an upwardly extending projection

adapted to fit in said slot and engage the forward face of said bit and having an inclined plane surface adapted to abut said rearwardly and downwardly inclined face of



said body portion and adapted to engage the under portion of said bit and force said bit against said body portion and the forwardly facing face of said slot.

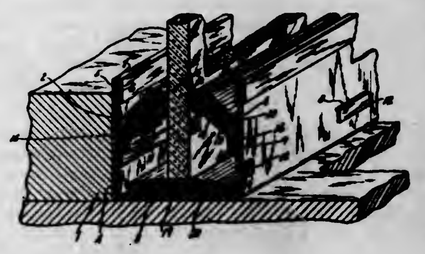
1,902,421. SHOCK ABSORBER. HERBERT RAWDON and WALTER E. BURNHAM, Wichita, Kans., assignors to Travel Air Company, a Corporation of Delaware. Filed Oct. 23, 1929. Serial No. 401,748. 2 Claims. (Cl. 267—34.)



1. A shock absorber comprising a cylindrical member closed at its outer end; a tubular plunger member concentric with but of less diameter than the cylindrical member telescoped therein; a piston secured to said plunger member, engaging a wall of the cylindrical member, and having a convergent orifice therethrough for allowing the restricted flow of fluid between the cylindrical member and the plunger member; a shock absorbing spring at the outer end of said cylindrical member, said plunger member being adapted to be moved outwardly with its piston a distance away from said spring, whereby upon sudden movement of said plunger member into the cylindrical member such movement would be primarily dampened solely by the resistance to flow through said orifice and eventually assisted by the engagement of the plunger member with the spring; and relatively hard inserts in said piston head for taking up the wear due to the contact of the spring on the piston head.

1,902,422. GLASS RUN CHANNEL STRUCTURE. JAMES S. REID, Shaker Heights, Ohio, assignor to The Reid Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 6, 1931. Serial No. 555,518. 2 Claims. (Cl. 296—44.5.)

1. A glass run channel structure, comprising a non-metallic generally U-shaped channel member having side flanges and a base portion, finishing strips at the outer edges of said flanges, and a pair of glass-engaging lip pad strips, one for each of said side flanges, each of said lip pad strips comprising a main strip portion engaging the



inner surface of one of said side flanges, a glass-engaging padded lip portion secured to said main strip portion and means integral with said main strip portion for securing the same to one of said side flanges.

1,902,423. FLOWER HOLDING DEVICE. WILLIAM H. SELTZER, Lehighton, Pa. Filed Apr. 14, 1932. Serial No. 605,335. 16 Claims. (Cl. 47—39.)



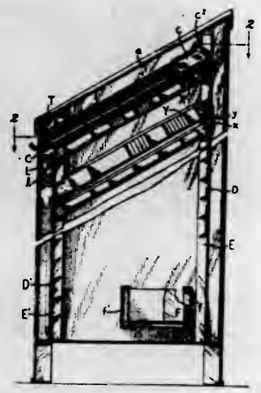
1. A flower holding device comprising a frame ring, supporting members carried by the frame ring to support said ring in an elevated position, and a reversible support disposed below the frame ring and adjustably engaging said supporting members, said support having differently positioned flower holder engaging and ground engaging devices on the opposite faces thereof.

1,902,424. DRAFTING TABLE. DONALD W. SHERMAN, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed Apr. 30, 1931. Serial No. 538,927. 9 Claims. (Cl. 45—109.)



1. A table, comprising a table top, legs formed by struts spaced apart at the top and converging toward the bottom, said legs being arranged in pairs at each end of said table top and pivotally connected thereto to permit each pair to turn or oscillate relative to the other pair to adjust the legs to the floor.

1,902,425. MATRIX CABINET. ANTHONY J. STOUGHS, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed June 19, 1931. Serial No. 545,381. 19 Claims. (Cl. 276—44.)



1. A matrix cabinet including in combination, a frame, a plurality of pairs of brackets supported by the frame and arranged equidistant from one another, a plurality of drawers arranged in the cabinet each supported by a pair of the brackets and adapted to occupy the space between the pair of brackets on which the drawer is supported and an adjacent pair of the brackets, and at least one drawer adapted to be supported by any pair of the brackets and to occupy a space greater than that between the pair of brackets on which the drawer is supported and an adjacent pair of the brackets.

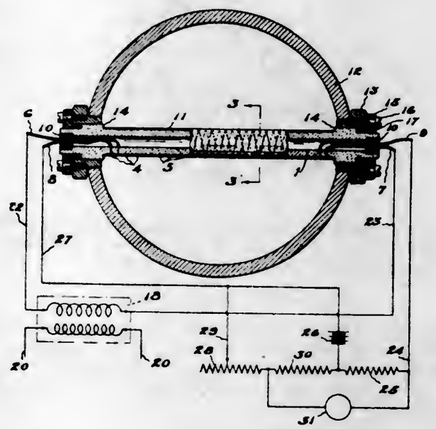
1,902,426. SMOKER'S FINGER GLOVE. ROSETTA RICH STRASSER, New York, N. Y. Filed July 25, 1931. Serial No. 553,112. 2 Claims. (Cl. 2—21.)



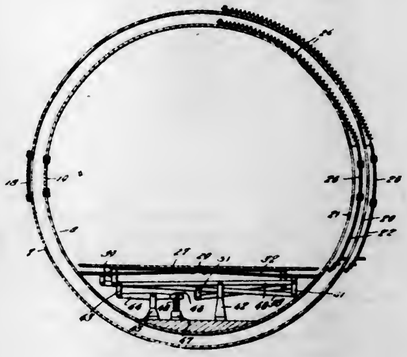
1. In combination with a finger glove having two fingers for covering adjacent fingers on one's hand, cigarette holding pieces mounted upon said fingers and having opposite curved recesses for engaging against the opposite sides of a cigarette, and means for adjustably holding said holding pieces comprising a ring within each finger and having ridges engaging through the materials of the fingers and into grooves in said holding pieces, the holding pieces being provided with prong portions extending substantially around the fingers.

1,902,427. FLOW METER. CHARLES B. SAWYER, Cleveland Heights, Ohio, assignor to The Brush Laboratories Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 10, 1930. Serial No. 419,826. 9 Claims. (Cl. 73—167.)

6. In a meter for determining a characteristic of a fluid, a thermally sensitive body arranged in heat interchanging relation with the fluid, said body including a heater winding having a negligible temperature coefficient of resistance, means for automatically supplying constant current to said heater winding to effect the interchange of heat between said fluid and body, and a resistance thermometer arranged to determine the average temperature of the surface of said body in contact with the fluid.



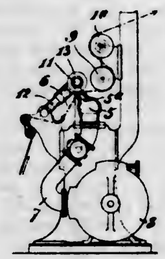
1,902,428. CABIN FOR AIRCRAFT AND THE LIKE. THEODORE A. VERSTEGEN, Buffalo, N. Y. Filed Apr. 29, 1932. Serial No. 608,271. 6 Claims. (Cl. 244—1.)



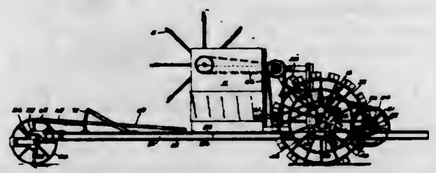
1. In a cabin construction, inner and outer spherical shells respectively provided with doors and windows with the doors and windows of the inner shell normally coinciding with the doors and windows of the outer shell, anti-friction means disposed between said shells, and stabilizing means for said inner shell.

1,902,429. MOISTENING CLOTH. EMIL WENZEL, Aue, Germany, assignor to Ernst Gessner Aktiengesellschaft, Aue, Germany, a Corporation of Germany. Filed May 11, 1931, Serial No. 536,624, and in Germany June 2, 1930. 1 Claim. (Cl. 26—46.)

A device for moistening cloth comprising a moistening drum formed of a perforated hollow cylindrical body and a porous liner surrounding said body, a supply pipe for water under pressure connected to the interior of said cylindrical body, a suction chamber extending along said drum and having a suction slot directed towards said drum, and means for passing the cloth to be treated between said drum and slot.

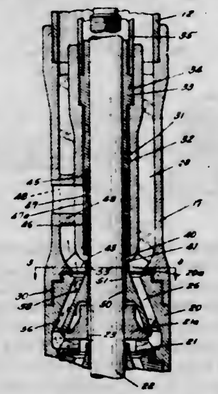


1,902,430. HARVESTER. ELMER E. WICKERSHAM, San Leandro, Calif., assignor, by mesne assignments, to Caterpillar Tractor Co., San Leandro, Calif., a Corporation of California. Filed Apr. 24, 1928. Serial No. 272,435. 22 Claims. (Cl. 56—23.)



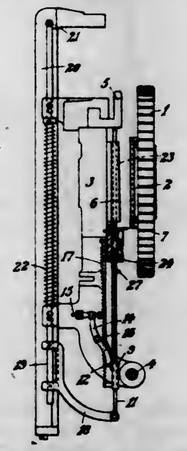
1. A windrow header comprising a box frame including a pair of beams joined substantially throughout their length by upper and lower plates, a body loosely pivoted to said frame, and means for fastening the axle of a standard header at a plurality of points to said body.

1,902,431. DEEP-WELL TURBINE LEAKPROOF AND SANDPROOF UPPER MAIN BEARING. ARTHUR R. WEIS, Huntington Park, Calif., assignor of one-half to Pacific Pump Works, Huntington Park, Calif., a Corporation of California, and one-fourth to George E. Bigelow, Huntington Park, Calif. Filed Apr. 23, 1928, Serial No. 272,097. Renewed July 5, 1932. 6 Claims. (Cl. 103—102.)



1. In a deep-well turbine pump, the combination of: a supporting structure having a discharge chamber, and a bearing chamber therein; a bearing in said bearing chamber; and a shaft journalled in said bearing and passing through a bore in said supporting structure, there being a longitudinal leakage passage between said shaft and the walls of said bore, said longitudinal leakage passage being communicable with said bearing chamber, said supporting structure also providing a radial leakage passage opening on said longitudinal leakage passage and on said discharge chamber, said radial leakage passage being narrower than said longitudinal leakage passage.

1,902,432. WIPING MECHANISM FOR MATRIX COMPOSING AND LINE CASTING MACHINES. CHRISTIAN AUGUSTUS ALBRECHT, Berlin, Germany, assignor to Mergenthaler Linotype Company, Brooklyn, N. Y., a Company of New York. Filed Oct. 1, 1931, Serial No. 566,248, and in Germany Oct. 7, 1930. 10 Claims. (Cl. 199—62.)



1. Wiping mechanism for matrix composing and line casting machines, with a common wiper for the mold and trimming knives, characterised by the fact that the wiper is pivotally supported by the mechanism actuating it, and is so controlled, that when moved in one direction, it will be brought into position to effect the wiping of the mold, and when moved in the other direction, will bear against and wipe the knives.

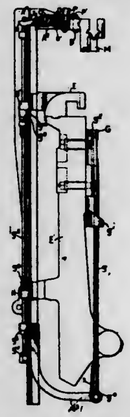
1,902,433. NIPPLE. FRANKLIN BROWN, Philadelphia, Pa., assignor to General Health Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed July 2, 1931. Serial No. 548,428. 2 Claims. (Cl. 128—252.)



1 A rubber nipple comprising a thick, upwardly tapering relatively stiff breast portion non-collapsible under

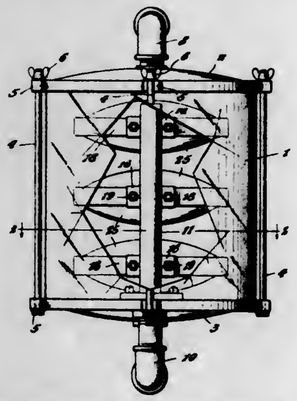
pressure to which it will ordinarily be subjected in use while applied to a bottle, a flexible elastic mouth piece extending from the top of the breast portion, a flexible elastic attaching flange at the base of the breast portion, and a flexible elastic connecting portion between the flange and the base of the breast portion, the attaching flange being sufficiently thin to be rolled up against the breast portion preparatory to applying the nipple to the bottle, the breast portion being non-collapsible under the pressure exerted thereon while the attaching flange is being rolled up and while it is being rolled down into engagement with the bottle.

1,902,434. KNIFE WIPER. HAROLD A. BURT, St. Albans, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 21, 1931. Serial No. 552,145. 11 Claims. (Cl. 199—62.)



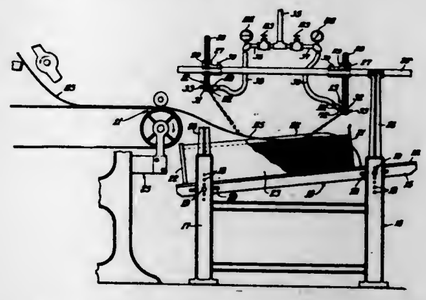
1. In a slug casting machine, the combination of a line transporter, means for varying the casting position of the transporter, slug trimming knives, means for cleaning the knives, and operative connections between the transporter and the knife cleaning means, said connections including an adjustable element carried by the transporter and arranged to engage a stationary part of the machine whereby the extent of the knife cleaning action may be kept uniform regardless of the casting position of the transporter.

1,902,435. FILTER. WILLIS G. ELDER, West Somerville, Mass. Filed July 13, 1931. Serial No. 550,533. 1 Claim. (Cl. 210—165.)



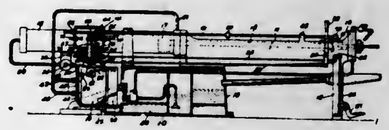
A filter comprising a casing, a stand pipe within the casing, the casing being provided with an inlet at one end and with an outlet at its opposite end alined with the stand pipe and the stand pipe having an opening through its side and having flattened lugs at the sides of said opening, a ring having an opening alined with the opening in the stand pipe and having flattened lateral projections at the sides of said opening bearing against the flattened lugs on the stand pipe and being further provided in its upper and lower sides with annular grooves, fastening devices inserted through the flattened projections on the ring into the lugs on the stand pipe, reticulated frames having their edges disposed within the respective grooves in the ring and their areas bowed from the ring, filtering cloths extending over said frames with their edges fitted in the grooves in the ring, and retainers engaged in the edge portions of the filtering cloths to stretch the same over the reticulated frames and secure the cloths in the grooves in the ring.

1,902,436. METHOD OF AND APPARATUS FOR STACKING SHEETS. HERMAN L. JOACHIM, Ridgefield Park, N. J. Filed Aug. 3, 1931. Serial No. 554,649. 16 Claims. (Cl. 271—74.)



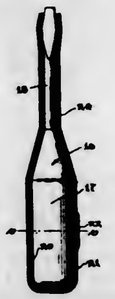
1. A device of the class described comprising a support for a pile of sheets, conveying means terminating adjacent the support and disposed so as to project the sheets over such support in a plane substantially aligned with the plane of the conveying means, a conduit adapted to be connected to a source of air pressure disposed above the plane of the conveying means and transversely to its direction of travel, a port in the conduit for directing an air jet across the width of the sheets and biased in the direction of travel of the sheets whereby to facilitate the delivery and laying of the sheets on the support.

1,902,437. HYDRAULIC DRIVE. JOHN P. FERRIS, Milwaukee, Wis., assignor to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 29, 1924. Serial No. 740,560. 5 Claims. (Cl. 60—52.)



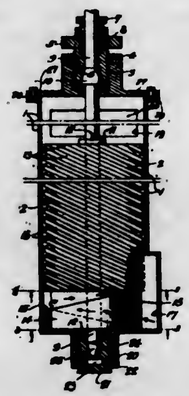
1. In a hydraulic drive for machine tools and the like the combination of a driven member, a hydraulic motor cylinder, a differential piston therein coacting therewith to drive said member, said piston having two opposite faces having unequal pressure areas, a hydraulic pump, and hydraulic connections though which the entire discharge from said pump is delivered directly to said cylinder to effect operation of said member, said connections including valve means selectively operable to subject one only of said faces or both of said faces to the delivery pressure of said pump, the difference in the areas of said faces being such as to effect operation of said member at a greater rate when both of said faces are subjected to said pressure than when said one only of said faces is subjected to said pressure.

1,902,438. INSULATED ARTICLE. JOHN RUSSELL FOLEY, New York, N. Y. Filed Jan. 23, 1932. Serial No. 588,425. 5 Claims. (Cl. 145—61.)



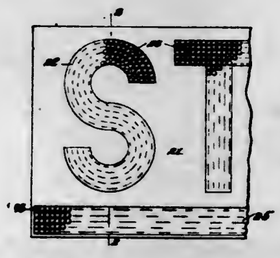
3. A conventional tool coated with electric insulating material, consisting mainly of cellulose acetate, and a tubular lamination of absorbent shock absorbing material embedded within said insulating material and spaced from the metal of the tool by said insulating material.

1,902,439. FLYING WORM STEAM MOTOR. LELAND L. FOSS, Statesboro, Ga., assignor, by direct and mesne assignments, of fourteen per cent to Edward T. Skeffington, fourteen per cent to Bert H. De Loach, and three per cent to Arthur H. Barrington, Savannah, Ga., fourteen per cent to Lee V. Graham, Chatham County, Ga., and five per cent to Sam J. Foss, Statesboro, Ga. Filed Dec. 30, 1930. Serial No. 505,604. 2 Claims. (Cl. 253—65.)



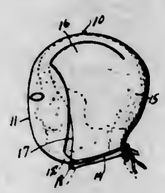
1. In a worm steam motor, the combination of a cylindrical casing, bearings on the ends of the casing, a shaft rotatably mounted in said bearings, a drum welded on the shaft, spiral blades integral with the drum and extending to the inside wall of the casing to provide spiral steam channels intervening between the worm blades, a wedge-like steam guide member affixed to the inside wall of the motor casing below the drum and guiding the inflowing steam to the open lower ends of the spiral steam channels of the drum, means for conducting steam to the lower portion of the casing and directly into the mouths of the steam spiral channels, means for discharging exhaust steam from the upper portion of the casing after passing through the steam channels of the drum, the means for conducting steam to the lower portion of the casing comprising a passage having one wall thereof aligned with the periphery of the adjacent portion of the drum, the end of the steam passage being of restricted size to increase the speed and power of the steam current applied to the worm blades of the drum.

1,902,440. SIGN. EDWIN R. GILL, Jr., Yonkers, N. Y., assignor to Prismo Holding Corporation, a Corporation of New York. Filed Jan. 15, 1932. Serial No. 586,827 9 Claims. (Cl. 40—130.)



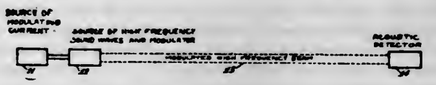
7. In a sign a portion covered with a reflecting layer and a plurality of relatively small substantially symmetrical reflex reflecting elements embedded to about half their depth in the reflecting layer.

1,902,441. PROTECTIVE HEAD COVERING. RONALD GIULIANO, South Orange, N. J. Filed Apr. 23, 1932. Serial No. 607,195. 6 Claims. (Cl. 2—174.)



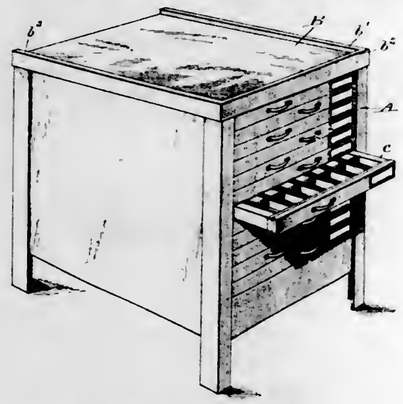
1. A protective head covering formed to provide a front, face covering portion and a portion covering the top, back and sides of the head, the upper end of the face-covering portion above the eyes of the wearer being connected to the portion covering the top of the head but separated from a point above the eyes of the wearer from the portions covering the sides of the head, and strings adapted to encircle the neck and hold the head protector in place.

1,902,442. SOUND REPRODUCER. ALFRED N. GOLDSMITH and IRVING WOLFF, New York, N. Y., assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 5, 1928. Serial No. 317,149. 30 Claims. (Cl. 181—0.5.)



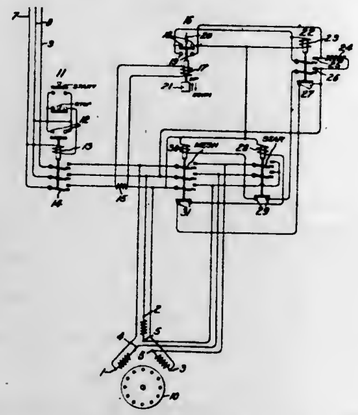
1. An acoustic system comprising a source of modulated super-audible frequency sound waves and an acoustic detector for obtaining an audible frequency sound wave therefrom.

1,902,443. MATRIX CABINET. FRED C. GRUMMAN, Norwalk, Conn., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 8, 1931. Serial No. 549,882. 10 Claims. (Cl. 276—44.)



1. A matrix cabinet drawer for storing matrices having ears projecting from the edges thereof, and provided with means for supporting the matrices by their edges in an upright position independent of their projecting ears.

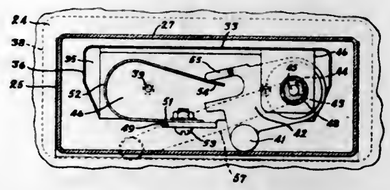
1,902,444. METHOD OF OPERATING POLYPHASE ALTERNATING CURRENT MOTORS. HENRY M. HOBART, Niskayuna, FREDERICK O. STEBBINS, Schenectady, N. Y., and ARTHUR F. GETTELMAN, Duluth, Minn., assignors to General Electric Company, a Corporation of New York. Filed July 19, 1929. Serial No. 379,528. 10 Claims. (Cl. 172—274.)



1. In a motor control system, a source of alternating current, an alternating current motor having primary windings, switching means between said motor and source of supply adapted in different positions to connect the primary winding of said motor to said source so as to impose different volts per turn on such windings, and electromagnetic control means responsive to the load on said motor for controlling said switching means to increase the volts per turn on said windings as the load increases beyond a predetermined amount, said control means having a time delay action.

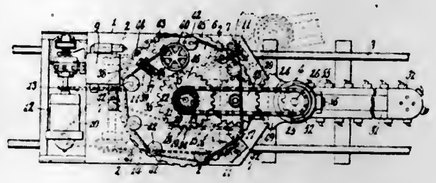
10. The method of operating an alternating current motor having a primary winding, which with motor loads below a predetermined value consists in impressing on the primary winding approximately 30% less volts per turn than would be impressed if the volts per turn were to remain substantially constant during the entire operating load range of the motor, and which with motor loads above the predetermined value consists in impressing on the primary winding approximately 22% more volts per turn than would be impressed if the volts per turn were to remain substantially constant during the entire operating load range of the motor.

1,902,445. REFRIGERATING APPARATUS. GEORGE F. HOFFERBERTH, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,686. 16 Claims. (Cl. 62—108.5.)



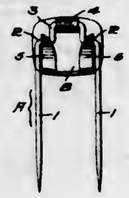
1. A refrigerating apparatus comprising in combination, an evaporator, a container to be cooled by said evaporator, a support for said container, means for separating the container from said support, said means including an arm pivotally mounted to said container at a point remote from the vertical center thereof, said arm including a camming portion adapted to engage said support at a point between the vertical center of said container and said pivot point of said arm, and handle means having one end thereof secured to the pivot point of said arm for actuating said camming portion of said arm into engagement with said support.

1,902,446. MINING APPARATUS. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 7, 1929. Serial No. 338,286. 9 Claims. (Cl. 262—28.)



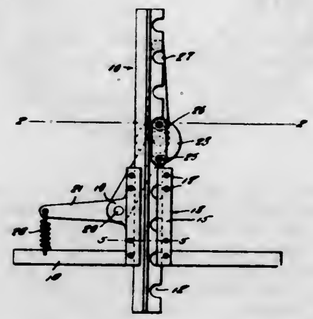
2. In a mining apparatus, the combination of a support, a second support mounted on said first support for rotation upon a vertical axis, kerf cutting mechanism including a cutter bar pivotally mounted on said second support for swinging movement upon an axis parallel to the axis of rotation of said second support, means for effecting rotation of said second support upon its axis of rotation to effect swinging movement of said cutter bar about the axis of rotation of said second support, and means operatively connected to said supports and said cutter bar for swinging automatically said cutter bar upon its own pivotal axis relative to said second support as said second support is rotated, said automatic bar swinging means including a gear member secured to said first support, a rotatable gear carried by said second support and meshing with said gear member, and a gear member connected to said cutter bar and meshing with said gear.

1,902,447. PIN FASTENER. GEORGE A. HOLMES, Newton, Mass., assignor to United-Carr Fastener Corporation, Cambridge, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1932. Serial No. 585,755. 3 Claims. (Cl. 24—152.)



3. A pin fastener comprising, in combination, an attaching part formed from a single piece of wire bent to provide two spaced sharp pointed legs, a cross-bar connecting said legs at one end, two shoulders each extending at right angles from one leg of the attaching part, a U-shaped loop formed in said cross-bar between said shoulders, a plate part formed from a single piece of metal and having concealed at the under side a hinge portion engaging said loop to pivot the plate to the attaching part and two yieldable stabbing prongs extending away from the plate and adapted to enter the material to which the pin is to be attached and said stabbing prongs having detent means engaging said shoulders to lock the plate in position when said stabbing prongs are in operating position.

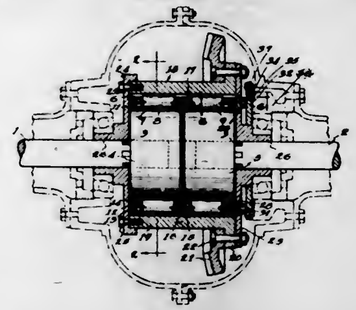
1,902,448. LIFTING JACK. ANTHONY HORVATH, Wallingford, Conn. Filed July 8, 1931. Serial No. 549,516. 3 Claims. (Cl. 254—122.)



2. In a jack, a bar provided with a series of relatively spaced notches, a lifting device provided with means engaging the bar to constrain the lifting device to shift longitudinally of the bar, a lever pivotally mounted on the lifting device, a member rotatably mounted on the lever, and having a pair of relatively spaced pins to engage the notches of the bar, and a handle for rotating the member.

1,902,449. COMBINED POSITIVE DRIVE WITH DIFFERENTIAL CHARACTERISTICS AND FREE-WHEELING. HUGHEY V. HUGHES, Oakland, Calif., assignor of one-half to John A. Weaver, Oakland, Calif. Filed Dec. 8, 1931. Serial No. 579,804. 13 Claims. (Cl. 74—7.)

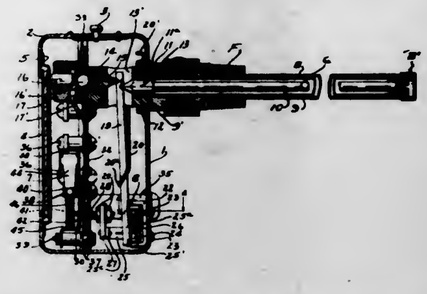
1. In combination, a driven member, a control member, a driving member, rollers having spring shafts carried by the control member for causing the rollers to yieldingly contact with the driven member, and means on the driving member and cooperating with the rollers for locking the drive and driven members together when the drive member is rotated in either direction.



1,902,450. RESERVING OF ANIMAL FIBERS. JOHANN HUISMANN and HUGO SCHWEITZER, Wiesdorf near Cologne-on-the-Rhine, Germany, assignors, by mesne assignments, to General Aniline Works, Inc., New York, N. Y. Filed Mar. 26, 1930, Serial No. 439,216, and in Germany Mar. 30, 1929. 5 Claims. (Cl. 8—5.)

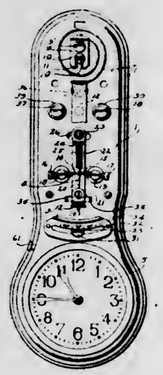
1. Process for reserving animal fibers in mixed textile fabrics with vegetable fibers which comprises applying to the fibers a water soluble aryl-sulfonic or aryl-carboxylic acid amide in which at least one hydrogen atom of the amino group is replaced by a substituent of the group consisting of alkyl, aryl and aralkyl and which cannot be coupled with diazo compounds.

1,902,451. THERMOSTATIC SWITCH FOR USE WITH HEATERS. ROY W. JOHNSON, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 19, 1929. Serial No. 356,580. 7 Claims. (Cl. 200—137.)



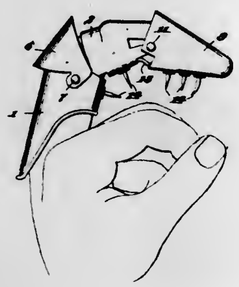
1. In combination, a thermostatic element, an electric switch and mechanism for operating the switch in accordance with movement of said thermostatic element, said mechanism including a lever associated with said thermostatic element to be moved thereby, a spring for exerting a bias upon the lever in opposition to the force exerted by the thermostatic element, a second lever associated in operative relation with said switch, and a second spring for biasing said second lever to maintain the same in abutting relation with the movable end of said first mentioned lever and to bias the switch to one position whereby movement of the thermostatic element controls the operation of the switch.

1,902,452. THERMOSTATIC SWITCH. ROY W. JOHNSON, Milwaukee, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Apr. 19, 1929. Serial No. 356,581. 30 Claims. (Cl. 200—139.)



1. In an electric switch of the character described, the combination of a thermostat, a movable contact member, a spring acting upon said movable contact member and adapted to have varying angular relation with respect thereto to cause said contact member to move from one position to another with a snap action, and means operable in response to movement of said thermostat for varying said angular relation and also operable independently of said thermostat for varying said angular relation to effect the temperature adjustment.

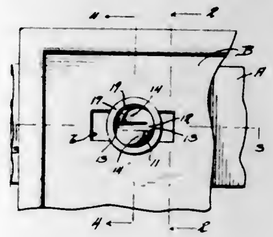
1,902,453. EEL GRIP. HARRY N. KAISER, Washington, D. C. Filed Sept. 1, 1932. Serial No. 631,407. 5 Claims. (Cl. 294—25.)



1. In an eel holder, a flexible finger member having right front sections over the three phalanges and prongs projecting from two or more of said front sections.

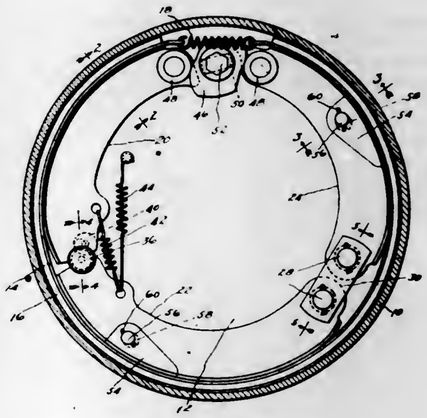
1,902,454. SELF-LOCKING BOLT. THOMAS A. KIRTON, Jacksonville, Fla., assignor to Lanier-Kirton Co. Inc., Jacksonville, Fla., a Corporation of Florida. Filed May 21, 1931. Serial No. 539,100. 6 Claims. (Cl. 40—125.)

1. The combination with two elements, each having a slot, of a bolt passing through the slots and having a ratchet nick in its head, a nut engaging the bolt and a washer through which the bolt passes, the confronting faces of the washer and nut having diametrically extending projecting portions extending into the slots in the said elements to thus prevent any rotation of the nut or washer



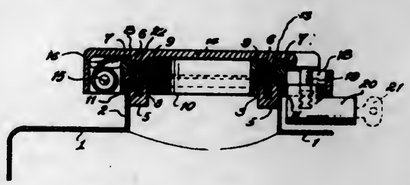
when the nut is screwed home, the outer face of the washer being recessed to receive the head of the screw and surround its periphery.

1,902,455. BRAKE. LUDGER E. LA BAIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1928. Serial No. 250,353. 22 Claims. (Cl. 183—78.)



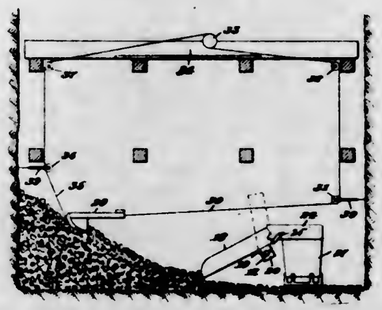
1. A brake comprising, in combination, a drum, a flexible friction band, a plurality of shoes engaging said band and arranged to force the band against the drum, an applying device engaging said shoes, said band being arranged to anchor on one of the shoes when the drum is turning in one direction and on a different shoe when the drum is turning in the other direction, and a return spring for contracting the band bridging across the applying device.

1,902,456. TANK COVER. WILLIAM HENRY MATTHEWS, Fort Valley, Ga. Filed Oct. 14, 1931. Serial No. 568,843. 5 Claims. (Cl. 220—55.)



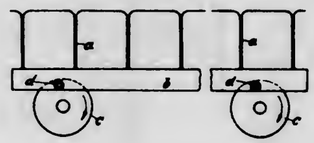
1. A tank inlet having a turned over mouth portion, a ring extending over the turned over portion, a block separable from the tank inlet and ring and insertible under the turned over portion and means for attaching the ring and the turned over mouth portion of the tank inlet to the block through said turned over portion.

1,902,457. APPARATUS FOR LOADING BROKEN ROCK. ALBERT MENDELSOHN, Painesdale, Mich. Filed Oct. 17, 1932. Serial No. 638,205. 2 Claims. (Cl. 214—105.)



1. An ore loading apparatus for mines or shafts comprising an extensible and contractible post or bar to be fixed to the sides of a mine shaft or drift, an inclined guideway or slide adjustably mounted on said bar or post, a hinged, open-bottomed receiving pan open to said guideway, a weighted scraper constructed to drag broken ore from a pile up said guideway to said pan for delivery to an ore-receiving bucket or skip, and means for moving said scraper to and fro in a loading operation.

1,902,458. THREAD GUIDE. KARL MEYER-GAUS, Barmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filed Mar. 16, 1929, Serial No. 347,502, and in Germany Mar. 19, 1928. 8 Claims. (Cl. 242—158.)



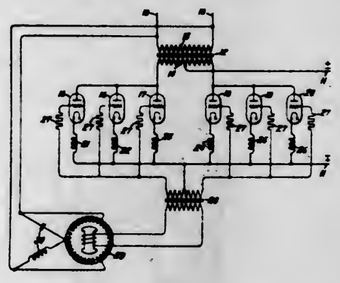
2. A thread guide for reeling threads on reels, bobbins and the like, comprising a bar, a plurality of wire stirrups mounted thereon so as to form slots between adjacent stirrups and means for imparting to the thread guide a motion in the direction of the slots and a motion at right angles thereto.

1,902,459. GUY WIRE ANCHOR CONNECTION. HERBERT EDWARD MILLER, Allentown, Pa. Filed Dec. 14, 1931. Serial No. 580,976. 14 Claims. (Cl. 24—129.)

5. The combination with a guy clamp, of an anchor connection, a head carried by said connection adjacent the upper end thereof and having its lower end offset from the connection to form therewith a saddle around which the guy wire is adapted to be looped, and opposite inwardly opening hooks carried by the head for engaging the strands of the cable on opposite sides of the loop thereof, the upper extremity of said hooks being engageable against the lower end of the guy clamp to prevent downward movement thereof with respect to said connection.



1,902,460. ELECTRIC TRANSLATING CIRCUITS. ALBERT H. MITTAG, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 14, 1932. Serial No. 634,001. 12 Claims. (Cl. 175—363.)

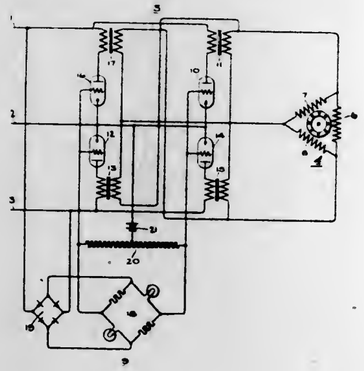


1. In an electric translating circuit, a pair of grid controlled vapor electric valves connected in parallel, a grid circuit for each of said valves, and means for forcing a distribution of the current between said valves in accordance with their ratings comprising means responsive to the current in each valve for modifying the action of the grid circuit of the other valve.

1,902,461. THERMOSETTING RESINOUS PRODUCT AND METHOD OF MAKING THE SAME. EMIL E. NOVOTNY, Philadelphia, Pa., assignor to John Stogdell Stokes, Spring Valley Farms, Huntingdon Valley, Pa. Original application filed June 10, 1930, Serial No. 460,282. Divided and this application filed Sept. 6, 1930. Serial No. 480,281. 37 Claims. (Cl. 92—21.)

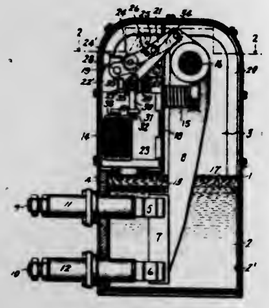
1. A sheetlike body comprising a fibrous material and a substantially nongritty natural gum of plant origin containing free phenolic hydroxyl groups and a hardening agent.

1,902,462. ELECTRICAL CONTROL SYSTEM. HARRY L. PALMER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 29, 1931. Serial No. 512,102. 6 Claims. (Cl. 172—274.)



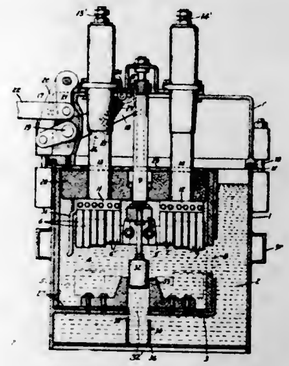
1. In combination, a three phase alternating current supply circuit, a three phase load, means including a single pair of electric valves for connecting said load to said circuit, means including a single pair of electric valves for connecting said load to said circuit with reversed phase rotation, and means for selectively rendering each pair of valves conductive.

1,902,463. ELECTRIC CIRCUIT BREAKER. WILLIAM E. PAUL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 3, 1931, Serial No. 519,757, and in Great Britain Jan. 13, 1931. 7 Claims. (Cl. 200—150.)



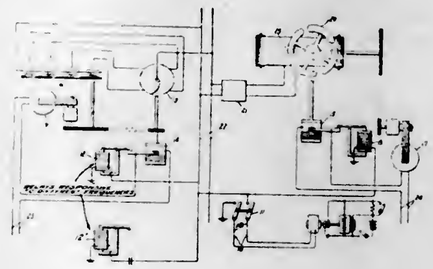
1. An electric circuit interrupter comprising a pair of contacts and a bridging member coacting therewith forming two breaks in series, a common pressure-confining casing for said contacts containing an insulating liquid in which said contacts are immersed, said casing provided with a pressure relief opening opposite and adjacent one of said breaks arranged so that the arc is drawn transversely of said opening, the other of said breaks being remotely positioned with respect to said relief opening so that pressure generated by arcing at said last-named break is effective to blast the arc formed at said first-named break through said relief opening by a high velocity jet of insulating liquid.

1,902,464. ELECTRIC CIRCUIT BREAKER. WILLIAM E. PAUL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 28, 1931. Serial No. 553,603. 11 Claims. (Cl. 200—150.)



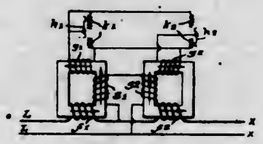
1. An electric circuit breaker of the fluid-blast type comprising a pressure confining casing containing an insulating liquid, said casing provided with a pressure relief opening, relatively movable contacts forming a pressure generating arc and a second arc within said casing, and means maintaining fixed the length of said pressure arc during the initial circuit opening movement, the pressure forcing insulating liquid from said casing through said relief opening at high velocity to interrupt said second arc.

1,902,465. CENTRALIZED METER RECORDING. WILLIAM H. PRATT, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1930. Serial No. 474,746. 23 Claims. (Cl. 234—35.)



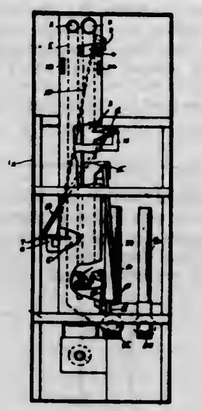
1. A system for recording at a central station the indication of an integrating meter having a plurality of dials, comprising contacts and a contact actuating device, positioned in accordance with the dial indication associated with each of said dials, an independently driven mechanism for operating said devices, an electro-responsive device located at the central station, a circuit connecting said contacts and said electro-responsive device, recording means including recording elements corresponding to each of said dials successively actuated by said electro-responsive device, and means for synchronizing said mechanism and said recording means whereby the time of actuation of each recording element is dependent upon the indication of its corresponding dial.

1,902,466. APPARATUS FOR REGULATING ALTERNATING CURRENT CIRCUITS. FERENCZ RATKOVSZKY, Budapest, Hungary, assignor, by mesne assignments, to General Electric Company, Schenectady, N. Y. Filed May 28, 1928, Serial No. 281,056, and in Hungary May 28, 1927. 4 Claims. (Cl. 171—119.)



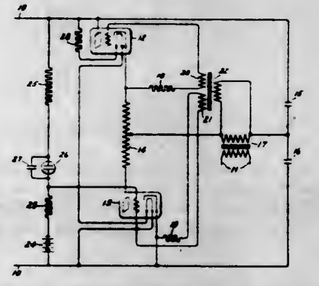
1. Apparatus for regulating the tension of an alternating current circuit, comprising transformer means providing two closed flux paths, a series coil for each path, a control coil for each path, a voltage winding connected to the alternating current circuit to be regulated in such manner that the flux generated by the winding flows through the series coils of the separate paths in opposite directions relative to their direction of winding, and means for short circuiting one of said control coils, said means including a variable resistance arranged to regulate the tension in the alternating current circuit.

1,902,467. COMBINED VENDING AND CHANGE MAKING MACHINE. LEWIS J. ROSS, Rochester, N. Y. Filed Apr. 30, 1930. Serial No. 448,681. 8 Claims. (Cl. 194—10.)



1. In a combined vending and change making machine the combination of a magazine adapted to contain packages to be vended, a coin tube containing coins of predetermined denomination, a coin chute having a coin slot for the insertion of a coin of another predetermined denomination into said coin chute, an electric switch, a lever projecting into said coin chute and operated on the passage of a coin thru said coin chute to close said switch, a second lever, a link connecting said first lever with said second lever and operable to project said second lever into said coin chute on the operation of said first lever by a coin passing thru said coin chute, said second lever being operated by the coin after said coin has operated said first lever, said second lever operating to return said first lever to its original position and simultaneously open said switch on the operation of said second lever by said coin, a solenoid operated on the closing of said switch to eject a package from said magazine and a coin from said coin tube.

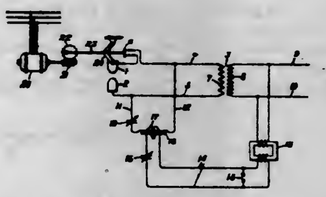
1,902,468. ELECTRIC POWER CONVERTING APPARATUS. CAMIL A. SABBAH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1930. Serial No. 489,149. 12 Claims. (Cl. 175—363.)



2. In combination with an electric power converting apparatus including a direct current circuit and a plurality of electric valves adapted to be rendered conductive in a predetermined sequence, means for maintaining one of said valves non-conducting, and means responsive to the potential of the direct current circuit for overcoming said first mentioned means to render said valve conductive a predetermined time interval after initiation of the operation of said apparatus.

4. In combination with an apparatus for converting direct current into alternating current including a direct current circuit and a plurality of electric valves serially connected across said source, said valves being provided with cathodes heated from said direct current circuit, means for rendering one of said valves non-conducting to interrupt the operation of the apparatus upon a decrease in the potential of the direct current circuit to such a value that the valves are operating beyond their normal capacity of electron emission.

1,902,469. WELDING APPARATUS. JOHN A. SEEPE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 22, 1931. Serial No. 552,425. 7 Claims. (Cl. 219—4.)

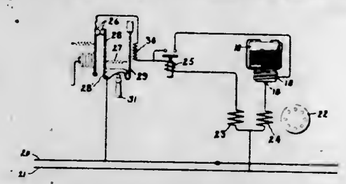


1. Resistance welding apparatus comprising a plurality of work engaging electrodes, means for moving said electrodes into and out of engagement with the work to be welded, a source of welding current, means for connecting said source of welding current to said electrodes, and means including an auxiliary source of current for establishing the flow of welding current through said electrodes and said work as soon as said electrodes engage said work.

1,902,470. VOLTAGE COMPENSATED MOTOR STARTER. CHRISTIAN STRENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 25, 1930. Serial No. 438,858. 7 Claims. (Cl. 172—279.)

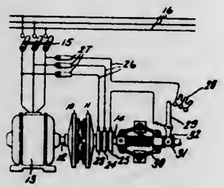
1. In combination a split phase motor having a running winding and a starting winding, electroresponsive means in series with said running winding and con-

trolled by the current therethrough for controlling energization of said starting winding, a resistor unit comprising a fixed resistance and a self reducing variable resistance for splitting the phase to start the motor



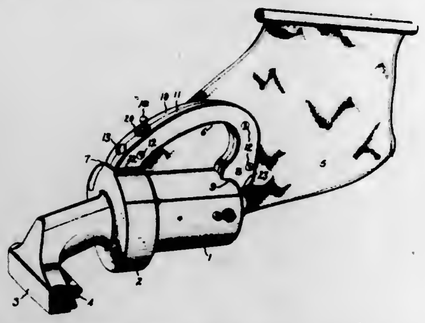
and limiting the current through said starting winding, said resistor decreasing its impedance on low voltage to permit sufficient current to start the motor and thermostatic switch means for energizing said motor.

1,902,471. ELECTROMAGNETIC CLUTCH. ELIHU THOMSON, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 3, 1929. Serial No. 389,891. 11 Claims. (Cl. 172—239.)



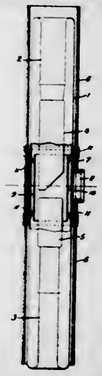
1. A clutch comprising a pair of members mounted for relative rotation and for mechanical driving engagement with each other, a polyphase winding on one of said members in inductive relation with the other member, means for energising said winding from a polyphase source of supply whereby said members are clamped together and a variable resistance in circuit with one phase of said winding for independently controlling the energization of said phase to control the slip between said members.

1,902,472. HANDLE FOR VACUUM CLEANERS. JULIUS TUTEUR, Cleveland, Ohio, assignor to Electric Vacuum Cleaner Company, Inc., Cleveland, Ohio, a Corporation of New York. Filed July 21, 1930. Serial No. 469,509. 1 Claim. (Cl. 247—13.)



A handle adapted to be secured to the upper side of a motor driven vacuum cleaner for sustaining its weight when in use, and comprising a pair of counterpart members extending longitudinally of the cleaner and defining between them an elongated channel, the front end of said channel having walls arranged to form a clamping means, seats formed at both ends of the handle for engagement with the cleaner, a switch held by said clamping means, circuit wires extending from the switch through the channel and one of the seats into the cleaner whereby they are fully protected and concealed from view, and means for securing both ends of the handle to the cleaner.

1,902,473. DEVICE FOR SUPPORTING METAL PARTS WITHIN A VACUUM TUBE. ALFRED UNGELENK and WALTER HOFMANN, Thuringia, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 11, 1930, Serial No. 443,587, and in Germany Apr. 20, 1929. 2 Claims. (Cl. 250—35.)



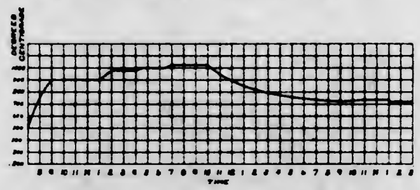
1. The combination of a cylindrical envelope containing a plurality of cooperating electrodes in endwise opposed relation, a cylindrical metal member surrounding the discharge space between the electrodes and concentrically mounted within the envelope, means for supporting said member, said means comprising a plurality of wires equidistantly spaced about the periphery at both ends of said member, said wires extending radially from the member and secured to the peripheral surface of the envelope at positions contained wholly within the length of said member.

1,902,474. PROTECTIVE COVER FOR X-RAY TUBES. ALFRED UNGELENK and WALTER HOFMANN, Thuringia, Germany, assignors to General Electric Company, a Corporation of New York. Filed Apr. 11, 1930, Serial No. 443,588, and in Germany Apr. 19, 1929. 3 Claims. (Cl. 250—35.)



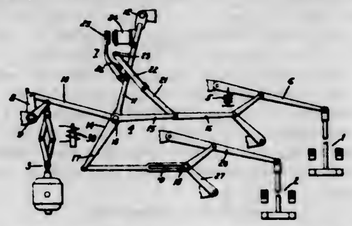
1. A wheel having a plurality of spokes and a rim fastened thereto, the spokes being of a material for which the ratio $\frac{E}{\rho}$ is less than the corresponding ratio for the material forming the rim, E representing the modulus of elasticity and $\frac{E}{\rho}$ the density of the respective materials.

1,902,475. SHORT CYCLE ANNEALING PROCESS FOR PRODUCING MALLEABLE IRON. IRVING R. VALENTINE, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 9, 1930. Serial No. 442,921. 5 Claims. (Cl. 148—21.8.)



1. The method of producing malleable cast iron which comprises heating white cast iron at an elevated temperature for a period of time long enough to cause the cementite in the iron to go into solid solution, cooling the casting in about 6 to 11 hours to a temperature of about 720° C. and raising the temperature of the casting to 730° C. in a relatively short time and maintaining the casting at 730° C. for a few hours.

1,902,476. CIRCUIT CONTROLLING APPARATUS. LUDWIG S. WALLE, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1930. Serial No. 475,919. 7 Claims. (Cl. 200—92.)



1. Circuit controlling apparatus comprising a plurality of circuit breakers, actuating means including thrust transmitting structure for effecting closing of one of said breakers, a lost-motion mechanical connection between said thrust transmitting structure and the other of said breakers, and spring means adapted to be charged by said actuating means during the said switch closing operation for causing opening of said first breaker and closing of said second breaker through said lost motion connection in response to collapse of said thrust transmitting structure.

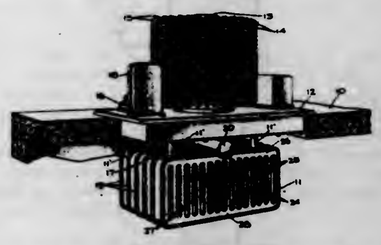
1,902,477. MANUFACTURE OF SYNTHETIC RESINS. HENRY WILLIAM HUGH WARREN, Coventry, REGINALD NEWBOUND, Rugby, and ALFRED T. WARD, Derby, England, assignors to General Electric Company, a Corporation of New York. Filed July 31, 1930, Serial No. 472,184, and in Great Britain Nov. 29, 1929. 8 Claims. (Cl. 260—8.)

7. The process which comprises heating a fusible alkyd resin with a substance of the class consisting of organic acid chlorides and anhydrides of monobasic carboxylic acids to accelerate the conversion of the resin from the fusible to the infusible state.

1,902,478. MANUFACTURE OF HOT CATHODES FOR ELECTRIC DISCHARGE DEVICES. ERICH WIEGAND, Berlin-Waidmannslust, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 11, 1932, Serial No. 592,450, and in Germany Feb. 14, 1931. 6 Claims. (Cl. 75—1.)

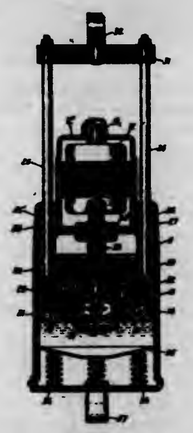
1. The process of producing a metallic structure suitable for use as a hot cathode which comprises pressing a powdered metal of high melting point thereby to provide a porous body and impregnating said body with molten material comprising an alkaline earth metal.

1,902,479. REFRIGERATOR CABINET. HENRY S. WOODRUFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 19, 1930. Serial No. 429,781. 4 Claims. (Cl. 62—126.)



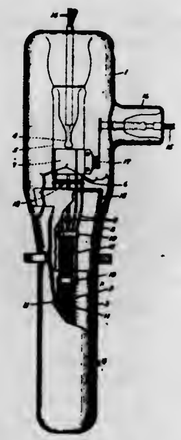
2. An evaporator for refrigerating systems including a plurality of flat refrigerant containing plates spaced apart to provide for an unobstructed flow of air between them over the entire surface of said plates, said plates being vertically arranged and having passages therein arranged to provide for the circulation of liquid refrigerant in a plurality of closed paths, and a refrigerant header secured directly to the upper portion of said plates communicating directly with said passages.

1,902,480. HYDRAULIC OPERATOR. WILLIAM J. WOODS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 15, 1930. Serial No. 475,424. 9 Claims. (Cl. 60—52.)



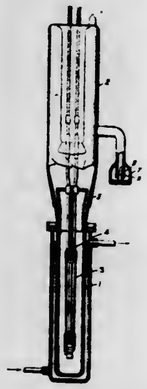
1. An electro-hydraulic operator including a fluid-containing cylinder, a piston operable within said cylinder between two positions and biased to one of said positions, said piston being provided with passageways therethrough, an electrically driven pump having communication with said passageways for controlling the transfer of fluid between opposite sides of the piston through said passageways in one direction to move the piston from its biased position to the other position when said pump is energized, and a movable baffle means cooperating with said piston and effective to control the flow of fluid through the passageways of said piston in the reverse direction for producing a time-delay effect on said piston when said pump is deenergized and said piston moves to the biased position.

1,902,481. ELECTRON DISCHARGE DEVICE. MARCUS A. ACHESON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 2, 1928. Serial No. 289,666. 4 Claims. (Cl. 250—27.5.)



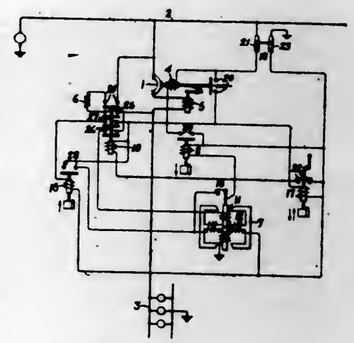
1. In an oscillation generator, an evacuated envelope composed of a material which upon being heated conducts current to an appreciable extent, said envelope containing an electron emitting cathode, a control member and an anode, and having a reentrant portion, a clamping device surrounding said portion, stay wires secured to the clamp for supporting the control member, and means comprising a member positioned in close proximity to said clamping device for preventing the initiation of induced heating currents when high frequency oscillations are generated in said reentrant portion, said member constituting a flat metallic plate secured to said stay wires.

1,902,482. ELECTRON DISCHARGE APPARATUS. MARCUS A. ACHESON and JAMES L. ZEHNER, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Sept. 4, 1928. Serial No. 303,698. 15 Claims. (Cl. 250—27.5.)



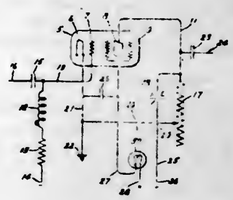
1. A thermionic device comprising a filamentary cathode and a cooperating anode between which the discharge tends to be limited by space charge, said anode being adapted to have its temperature controlled, and means, comprising a substance forming a substantial coating on said anode, for reducing space charge.

1,902,483. AUTOMATIC RECLOSING CIRCUIT BREAKER SYSTEM. ARVID E. ANDERSON, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 10, 1928. Serial No. 298,684. 5 Claims. (Cl. 175—294.)



1. In combination, a supply circuit, a load circuit, a circuit breaker connecting said circuits together, overload responsive means for opening said circuit breaker, a resistor, a reclosing relay having an operating winding, means responsive to the opening of said circuit breaker for connecting said resistor in series between said circuits and for connecting said operating winding to said load circuit so that energization of the operating winding varies in accordance with amount of the load connected to said load circuit, and means for preventing the subsequent reclosure of said circuit breaker including a timing device responsive to the opening of said circuit breaker for disconnecting said winding from said load circuit after said circuit breaker has remained open for a predetermined time.

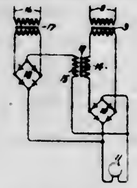
1,902,484. REGULATING MEANS FOR HIGH POWER ELECTRIC DISCHARGE AMPLIFIERS. PAUL D. ANDREWS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 12, 1930. Serial No. 443,876. 8 Claims. (Cl. 179—171.)



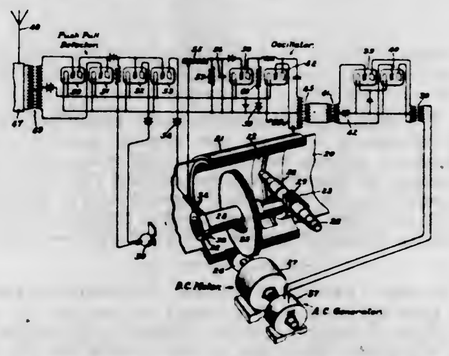
1. The combination with an electric discharge device having a control grid, a cathode, an anode, and an additional grid, of means for applying a positive biasing potential to said additional grid, said means including a voltage supply circuit and a constant current device in series with said supply circuit.

1,902,485. ELECTRICAL CONTROL SYSTEM. WEBER H. ARKENBURGH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1931. Serial No. 574,845. 6 Claims. (Cl. 171—119.)

1. An electrical system including, in combination, a load, a plurality of sources of current supply connected in parallel to said load, and a saturable reactor having an alternating current winding connected to control the output of one source and a direct current saturating winding connected to be energized in accordance with the output of another source.

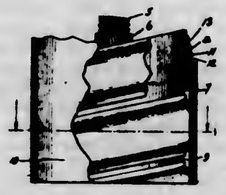


1,902,486. PICTURE TRANSMISSION. HENRY B. BUTLER, East Orange, N. J., and CHARLES J. YOUNG, Ardmore, Pa., assignors to General Electric Company, a Corporation of New York. Filed Oct. 31, 1930. Serial No. 492,535. 3 Claims. (Cl. 178—69.5.)



1. In picture transmission apparatus including a sending device having means for producing framing impulses and a receiving device, means for driving the receiving device, and means for regulating the speed thereof, including an oscillator having a plate circuit, and an electron discharge device for varying the voltage applied to said plate circuit in accordance with the phase relation of said framing impulses and said driving means.

1,902,487. OIL-FILLED HIGH TENSION CABLE. FRANCIS V. CALVERT, Madison, Me., assignor to General Electric Company, a Corporation of New York. Filed July 26, 1928. Serial No. 295,569. 4 Claims. (Cl. 173—266.)



1. A high tension cable comprising a conductor, insulation therefor which includes a fluid and an impervious sheath, in combination with a spirally wound cellular element located within the sheath and extending longitudinally thereof and comprising two spaced metal strips united along their edges to form a closed chamber, one of said strips being corrugated in the direction of its length to increase its flexibility.

1,902,488. OUTLET BOX. GEORGE CARLSON, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Sept. 17, 1930. Serial No. 482,549. 2 Claims. (Cl. 247—20.)



1. A bridge for securing devices in place over apertures of different sizes in cover plates and which permit securing means to extend therethrough, said bridge comprising an elongated plate having elongated slots in each end thereof, and pairs of integral projecting lugs unequally spaced on opposite sides thereof and the lugs on each side adapted to abut against the periphery of a correspondingly sized aperture to position said bridge concentrically of said cover.

1,902,489. INSULATING COMPOSITION. FRANK M. CLARK, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1931. Serial No. 559,187. 3 Claims. (Cl. 252—1.)

1. An insulating composition consisting of mineral wax, petrolatum and mineral oil, the mineral wax being a preponderant ingredient.

1,902,490. ELECTRORESPONSIVE LATCHING MECHANISM. HARRY B. CRAGO, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 25, 1930. Serial No. 447,368. 10 Claims. (Cl. 175—375.)

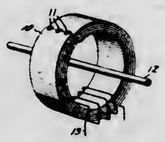


1. In combination, a movable member biased to one position, latching means for holding the member against its bias upon operation thereof to another position, electroresponsive means for independently holding the member against its bias in said other position and means for releasing said latching means while said member is being held by said electro-responsive means against its bias and for deenergising said electro-responsive means after said movable member has been released from said latching means.

8. A circuit controlling device comprising a circuit controlling member movable between two positions, and biased to one position, an electroresponsive means for moving said circuit controlling member from one position to another position, an extension on said circuit controlling member, a latch for engaging said extension to retain said circuit controlling member against its bias in said other position, an electroresponsive means for releasing said latch from said extension, a plurality of circuit controlling contacts actuated by said latch for opening and closing a circuit through said first electroresponsive means for energising and deenergising the same, means for energising said first electroresponsive means to close said circuit controlling member, said latch member actuating said contacts to open the circuit through said first electroresponsive means when said latch engages said extension and means for energising said first electroresponsive means to remove the bias pressure of said circuit controlling member from the latch when said releasing electroresponsive means is energised to release said latch from said extension, said contacts being

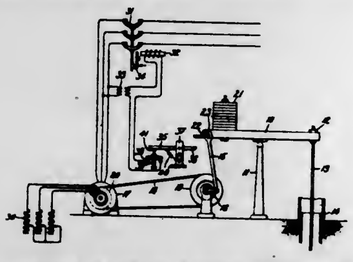
actuated to deenergize said first electro-responsive means after said circuit controlling member is released from said latch, and means for thereafter deenergizing said second electroresponsive means.

1,902,491. MAGNETIC CORE. OTTO DAHL, Berlin-Wilmersdorf, and JOACHIM PFAFFENBERGER, Berlin-Marienfelde, Germany, assignors to General Electric Company, a Corporation of New York. Filed Nov. 11, 1932, Serial No. 642,306, and in Germany Nov. 12, 1931. 2 Claims. (Cl. 175—21.)



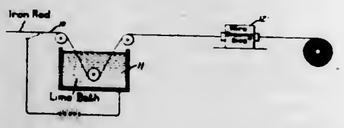
2. A method for making an annular magnetic core, said method including the steps of heating a strip of magnetic sheet material to a temperature between 100° and 350° C., winding the strip of magnetic sheet material into annular form while still heated and to a diameter smaller than the desired diameter of the finished core, and then permitting the wound strip to expand while still heated to the desired diameter.

1,902,492. PROTECTIVE DEVICE FOR WALKING BEAM PUMPING RIGS. HARRY H. DANSBOE, Dallas, Tex., assignor to General Electric Company, a Corporation of New York. Filed Sept. 24, 1930. Serial No. 484,224. 11 Claims. (Cl. 192—116.5.)



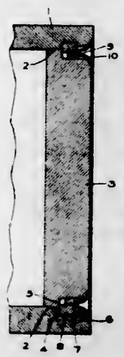
1. A protective device for a motor driven counter-balanced walking beam pumping rig comprising a switch for controlling the energising circuit of the electric driving motor, electro-responsive means for maintaining said switch in the closed position, a control switch for controlling the energization of said electro-responsive means, and a member adapted to be positioned adjacent the normal path of movement of a movable part of the beam mechanism to be engaged thereby upon abnormal unbalanced movement of the beam mechanism and arranged to control said electric switch.

1,902,493. WIRE MAKING PROCESS. CHRISTIAN DANTSIZEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1931. Serial No. 546,169. 9 Claims. (Cl. 205—21.)



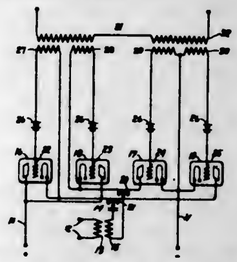
1. The process of making wire which comprises fabricating a ferrous metallic rod of requisite thickness, making said rod the anode in a bath of lime and water, passing current therethrough, drying said rod, and drawing said rod through a wire drawing die.

1,902,494. CYLINDER HEAD FASTENING MEANS. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Sept. 17, 1928, Serial No. 306,486. Divided and this application filed Oct. 22, 1929. Serial No. 401,564. 5 Claims. (Cl. 220—46.)



4. A drum comprising an integrally formed body with an opening, a plate for said opening, means for mechanically securing said plate to said body and a ring covering the joint between the body and plate and being integrally united therewith at opposite sides of the joint, said ring being yieldable in a radial direction to permit relative expansion between the drum and the plate.

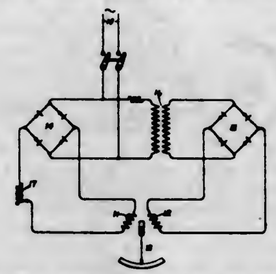
1,902,495. ELECTRIC POWER CONVERTING APPARATUS. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1930. Serial No. 473,913. 6 Claims. (Cl. 115—363.)



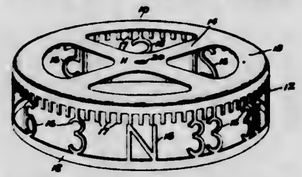
1. In a system for converting direct current electrical energy into periodically varying current, the combination of a source of direct current, a plurality of electrical valves, a capacitor, a circuit including a plurality of said valves for charging said capacitor from the full voltge of said source, a circuit including a plurality of other of said valves for oppositely charging said capacitor from the full voltage of said source, means for controlling the conductivities of said valves, and an output circuit common to both of said charging circuits and adapted to furnish periodically varying currents.

1,902,496. HIGH FREQUENCY MEASUREMENT. ALAN S. FITZ GERALD, Wynnewood, Pa., assignor to General Electric Company, a Corporation of New York. Filed May 27, 1931. Serial No. 540,488. 2 Claims. (Cl. 175—368.)

1. Frequency measuring apparatus comprising a differential direct current instrument having two supply circuits, a source of alternating current supply, a rectifier having its direct current terminals connected to supply one of said instrument circuits and having its alternating current terminals connected to said source of supply, a second rectifier having its direct current terminals connected to supply the other instrument circuit, and a transformer connected between said source of supply and the alternating current terminals of the second mentioned rectifier for varying the voltage supplied to the latter in proportion to the frequency of said source.



1,902,497. INDICATING DEVICE. CHARLES F. GREEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 26, 1930. Serial No. 447,716. 4 Claims. (Cl. 33—223.)



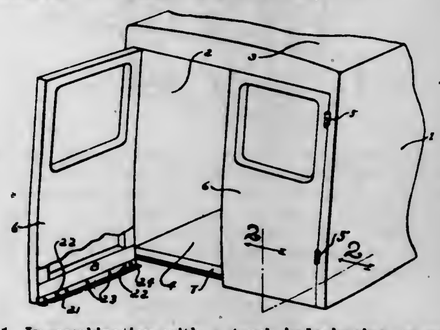
3. An indicating member comprising a cupped member having the major portion of its side wall cut away to provide a plurality of solid spaced apart markings of different masses circumferentially arranged with respect to a central axis, and a support attached to said markings and having its mass unevenly distributed with respect to said central axis to form with said markings a balanced structure with respect to said central axis.

1,902,498. CONTROL DEVICE. CHESTER I. HALL, Philadelphia, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 8, 1929. Serial No. 398,253. 3 Claims. (Cl. 297—15.)



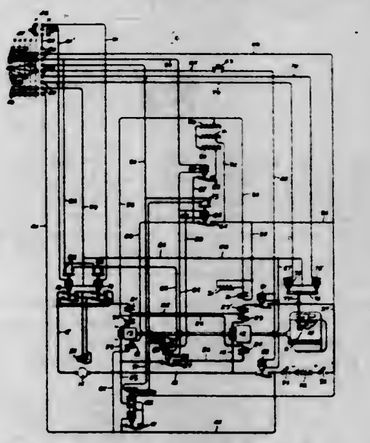
2. A room thermostat including an enclosing casing having a base and a removable cover provided with a pair of openings therein, two pairs of stops mounted one above the other in the same plane at one end of the base in spaced apart alignment for independent adjustment transverse the base, a pair of bimetallic thermal strips extending substantially in edgewise alignment centrally of the base and in substantially the same plane and each having one end thereof movable between a corresponding pair of said spaced apart contacts, a pair of oppositely disposed lever arms, each having one end thereof secured to the other end of a corresponding one of said thermal strips and mounted adjacent the other end of the base for movement transverse the base to adjust the position of the corresponding thermal strip between the pair of spaced apart contacts cooperating therewith with the free ends of the lever arms extending on opposite sides of the thermal strips and adjacent thereto, and a pair of adjusting screws mounted transversely of the base in opposing alignment and each having a drum dial partially extending through a corresponding one of the openings in the cover for effecting micrometer adjustment of the free end of a corresponding one of said lever arms.

1,902,499. VEHICLE BODY DOOR STIFFENER. ALEXANDER G. HERRESHOFF, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,835. 2 Claims. (Cl. 296—44.)



1. In combination with a truck body having an opening in one side thereof, a door for said opening, a plate on said closure extending substantially normally to said door, said plate being engageable with the lower surface of the floor of said body, and means mounted on said lower surface engageable with the outer side of said plate for resiliently clamping said plate against said floor when said door is closed.

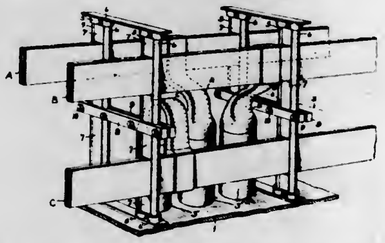
1,902,500. DRIVING APPARATUS FOR SELF-PROPELLED VEHICLES. MARSHALL D. HENSHAW, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Apr. 6, 1931. Serial No. 527,958. 12 Claims. (Cl. 290—16.)



7. A vehicle driving apparatus including a prime mover, a generator driven by said prime mover and

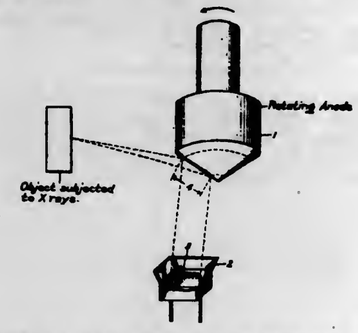
having a field excitation system, a battery, means for connecting said battery to said generator to charge the same, means for increasing the excitation of said generator at idling speed of said prime mover to charge said battery, and means responsive to actuation of said first-mentioned means for preventing increase in excitation of said generator until said prime mover is running at idling speed.

1,902,501. BUS BAR STRUCTURE. CHARLES H. HILL, Drexel Hill, and NATHAN SWERDLOW, Philadelphia, Pa., assignors to General Electric Company, a Corporation of New York. Filed June 16, 1932. Serial No. 617,588. 7 Claims. (Cl. 173—251.)



1. Supporting and insulating structure for parallel bus bars comprising a plurality of pairs of rods of insulating material, the rods of each pair disposed on opposite sides of a bus bar for preventing lateral movement thereof, and insulating means common to and bracing pairs of said rods associated with different bus bars with respect to lateral movement.

1,902,502. X-RAY TUBE. WALTER HOFMANN, Erlangen, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 6, 1931, Serial No. 542,671, and in Germany Feb. 4, 1930. 4 Claims. (Cl. 250—35.)

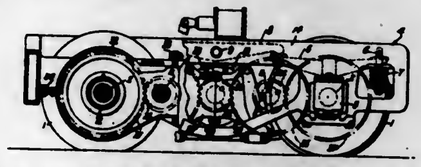


1. An X-ray tube including an envelope and provided with an anode adapted to rotate, and a line focus cathode, said cathode comprising a helical filament whose turns are spaced closer together as the end of the filament remote from the anode axis of rotation is approached.

1,902,503. PROCESS FOR COATING METALS. GOODWIN H. HOWE, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 29, 1930. Serial No. 457,492. 8 Claims. (Cl. 91—70.1.)

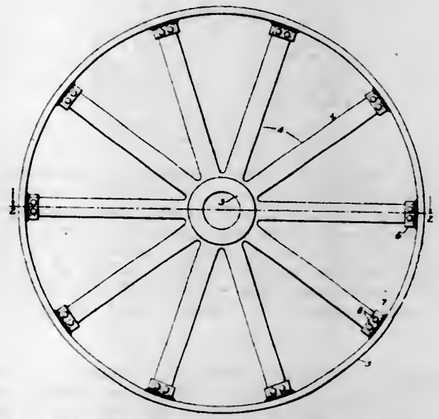
1. The method of providing a foundation metal with a protective coating of chromium, which comprises heating the said metal in the presence of, but out of contact with, chromium and with a carrier which is out of contact with both the foundation metal and the chromium.

1,902,504. TRUCK. FRED B. HOWELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 29, 1931. Serial No. 565,819. 7 Claims. (Cl. 105—113.)



1. A truck including wheels and an axle, a truck frame, resilient means for supporting said truck frame on said wheels and axle, said truck frame having a transom and longitudinal members extending between said transom and the ends of said truck frame, a motor provided with a frame and carried by said truck frame, means including reduction gearing having a countershaft and a quill shaft surrounding said axle for connecting said motor to said axle, means including bearings for securing said countershaft to said motor frame and said quill shaft to said longitudinal members, and a flexible connection between said quill shaft and said axle.

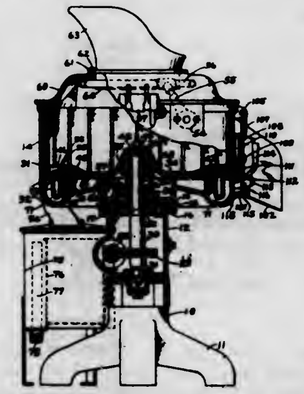
1,902,505. FLYWHEEL. WILFRID E. JOHNSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1932. Serial No. 606,892. 5 Claims. (Cl. 74—6.)



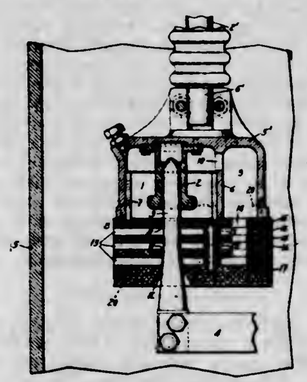
1. A wheel having a plurality of spokes and a rim fastened thereto, the spokes being of a material for which the ratio $\frac{E}{\rho}$ is less than the corresponding ratio for the material forming the rim, E representing the modulus of elasticity and ρ the density of the respective materials.

1,902,506. FOOD HANDLING APPARATUS. HERBERT L. JOHNSTON and DAVID A. MEEKER, Troy, Ohio, assignors to The Hobart Manufacturing Company, Troy, Ohio, a Corporation of Ohio. Filed July 19, 1929, Serial No. 379,426, and in France Feb. 2, 1929. 21 Claims. (Cl. 146—49.)

2. In a peeling machine of the character described, a container, a rotary peeling member having an upper abrasive surface adapted to effect peeling of vegetables and the like within said container and to throw them outwardly by centrifugal force due to rotation of said member, said member having an upstanding projection on the upper surface of the member adjacent the periphery thereof to impart an upward thrust to the vegetables thereon during rotation of the member, said container having a side wall formed about its interior surface with a multiplicity of closely spaced smooth-surfaced non-abrasive corrugations extending inwardly from the side wall a comparatively small distance in substantially uniform close spacing about the interior thereof so as to retard the rotary movement of the vegetables without materially deflecting them toward the center and while permitting their upward movement along said wall in a substantially uniform manner about the periphery thereof, without substantial peeling action or cutting of the vegetables by said interior side wall.



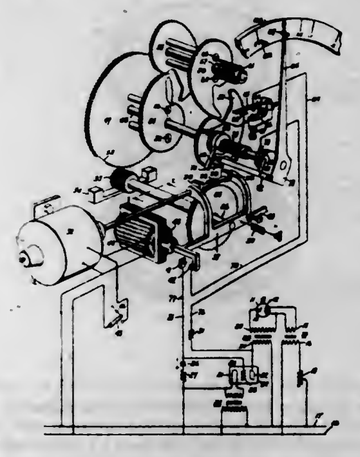
1,902,507. ELECTRIC CIRCUIT INTERRUPTER. GUSTAF ADOLF JUHLIN, Timperley, England, assignor to General Electric Company, a Corporation of New York. Filed Nov. 19, 1931, Serial No. 576,163, and in Great Britain Dec. 16, 1930. 5 Claims. (Cl. 200—150.)



1. An electric circuit interrupter of the oil-blast type comprising an arcing chamber, contacts separable in an insulating liquid within said chamber, an auxiliary chamber communicating with said arcing chamber containing insulating liquid in amount sufficient to interrupt the circuit, the liquid in said auxiliary chamber being subjected to pressure generated within said arcing chamber and means directing insulating liquid under influence of said pressure from said auxiliary chamber across the arc formed between said contacts.

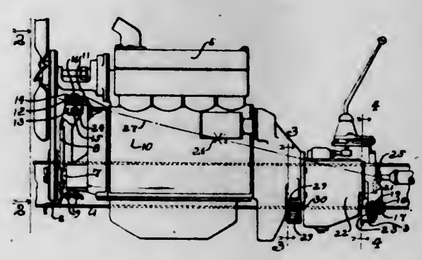
1,902,508. TIME SWITCH. WILLIAM K. KEARSLEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 12, 1930. Serial No. 495,193. 16 Claims. (Cl. 175—375.)

1. A time switch comprising driving means having a substantially constant velocity, two pairs of cooperating contacts, means operated by said driving means for effecting a change in the normal contact relationship of one pair of contacts, a movable element for effecting a change in the normal contact relationship of the second pair of contacts at a desired time interval after the change in normal contact relationship of the first pair of contacts, and motion transmitting means between the driving means and the movable element for driving the latter at a constantly varying velocity.



15. Apparatus for controlling the time interval between two operations on an external mechanism, said apparatus comprising driving means having a substantially constant velocity, two adjustably spaced apart normally stationary members, movable means normally maintained in a stationary position, said movable means being adapted to engage at one instant during its travel with one of the stationary members to effect one of said operations and to engage at a later instant with the second stationary member to effect the other of said operations, and motion transmitting means between the driving means and the movable means for driving the latter at a constantly varying velocity.

1,902,509. INTERNAL COMBUSTION ENGINE MOUNTING. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Highland Park, Mich., a Corporation of Delaware. Original application filed June 6, 1931, Serial No. 542,601. Divided and this application filed Feb. 3, 1933. Serial No. 655,129. 23 Claims. (Cl. 248—14.2.)



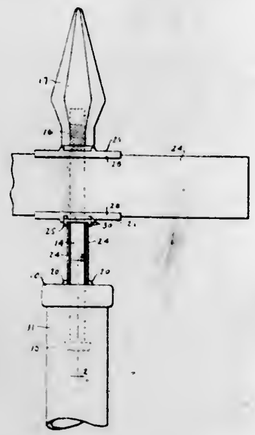
1. The combination of an internal combustion engine unit having a crankshaft, supporting structure, and means for mounting said unit on said supporting structure so constructed and arranged as to mount said engine unit for oscillation about an axis extending substantially through the center of mass of said engine unit and at an inclination to the axis of said crankshaft.

1,902,510. ELECTRICAL DISCHARGE DEVICE. KARL B. MCEACHRON and ELMER J. WADE, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Jan. 20, 1932. Serial No. 587,716. 3 Claims. (Cl. 175—30.)



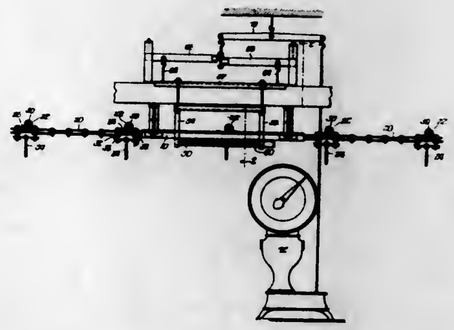
1. An electrical discharge device including an insulating casing, a plurality of gap assemblies in said casing, a support for said gap assemblies, springs between said support and the inner surface of said casing and connected to said gap assemblies, a conductive member between each spring and the inner surface of said casing, and a conductive member on the outer surface of said casing and extending opposite all of said inner conductive members.

1,902,511. POST CAP. DONALD MCDANIEL, Hamilton, Ohio, assignor to The Hamilton Foundry and Machine Company, Hamilton, Ohio, a Corporation of Ohio. Filed Oct. 13, 1930. Serial No. 488,370. 13 Claims. (Cl. 40—145.)



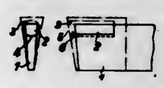
1. In apparatus of the character described, adapted to be attached to a post end or the like, a cap member comprising a cover portion for the post end and a projection telescoping the post end, a wedge member operably associated with the cap member, and means extending through the cap member cover portion and operable upon the cap member for causing said wedge member to grip said post.

1,902,512. COMBINATION CONVEYER AND SCALE. ARTHUR JULIUS MEHL, Omaha, Nebr., assignor to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed May 3, 1929. Serial No. 360,073. 4 Claims. (Cl 265—27.)



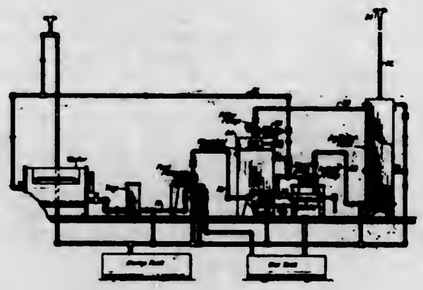
1. Conveying and weighing means comprising in combination a horizontally moving conveying element having vertically extending guide rods depending therefrom, a horizontally extending plate normally supported from the lower ends of said rods but in a manner to permit movement of the plate in respect to its vertically extending guide rods, which said guide rods are relied upon to effect horizontal movement of the plate as the conveying element moves, a hook or supporting means depending from the central portion of said plate, and horizontally extending weighing platform bars supported and held in spaced parallel relationship in respect to each other by depending stirrup means that straddles the conveying element and that constitutes part of the weighing platform of the weighing means, said parallel weighing platform bars each having a series of longitudinally spaced rollers thereupon and being arranged in respect to the horizontally moving conveying element in such a manner that the opposite longitudinally extending edge portions of the plate during the travel of the plate past the weighing means must ride upon said series of rollers in a manner to be lifted thereby and to be completely supported thereby whereby a weighing operation can be carried out while the plate is being moved horizontally and while it is completely supported on the parallel weighing platform bars through the medium of said series of rollers thereupon.

1,902,513. METHOD OF MAKING AND HARDENING STEEL TOOLS PROVIDED WITH HARD METAL MEMBERS. ADOLF MEUTSCH, Essen, Germany, assignor to Gewerkschaft Walram, Essen, Germany. Filed Aug. 15, 1931, Serial No. 557,337, and in Germany May 6, 1930. 6 Claims. (Cl. 76—101.)



1. The method of making and hardening steel tools provided with hard metal members consisting in forming a cavity in the tool, inserting the hard metal member into the said cavity, closing up the said cavity with a metal covering means, heating up to hardening temperature and chilling the tool together with the covered hard metal member, and exposing the hard metal cutting edges by removing the covering means.

1,902,514. PROCESS OF CLARIFYING DRY CLEANING FLUID. RALPH A. MORGEN and FRANK FAIR, Kansas City, Mo. Filed July 11, 1931. Serial No. 550,180. 3 Claims. (Cl. 196—15.)

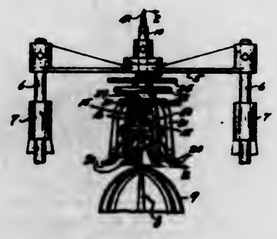


1. The process of clarifying dry cleaning fluid including delivering the fluid and a cleaning compound to an open mixing basin, pumping the mixture from the basin in accelerated flow to effect addition of air to the mixture and promote agitation of the mixture, delivering the mixture into a body thereof in an accumulator, drawing off the mixture from the accumulator at a point sufficiently above its intake to provide a conditioning period between intake and outlet of the mixture, and filtering the drawn off mixture.

1,902,515. PROCESS FOR PRODUCING WATER-SOLUBLE CONDENSATION PRODUCTS AND THE PRODUCTS PRODUCED. ROBERT MULLER, Pirna-Copitz, Germany, assignor to Chemische Fabrik Pott & Co., Dresden, Germany. Filed Nov. 25, 1929, Serial No. 409,746, and in Germany Nov. 27, 1928. 8 Claims. (Cl. 260—127.)

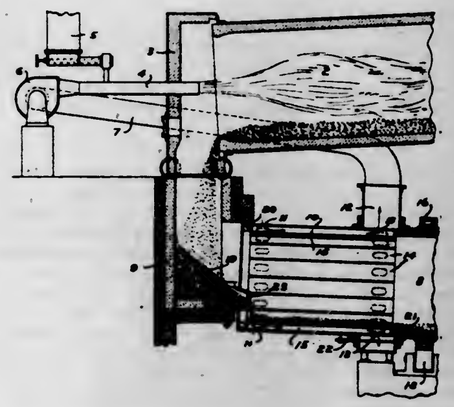
1. The process of preparing water soluble condensation products having capillaractive properties, which comprises nuclear condensing a carbocyclic, water soluble, non-sulfonated quaternary ammonium compound with an aliphatic alcohol above ethyl alcohol in the paraffin series.

1,902,516. HAT MAKING MACHINE. RUDOLPH G. MULLER, Irvington, N. J. Filed Dec. 1, 1931. Serial No. 578,283. 12 Claims. (Cl. 223—33.)



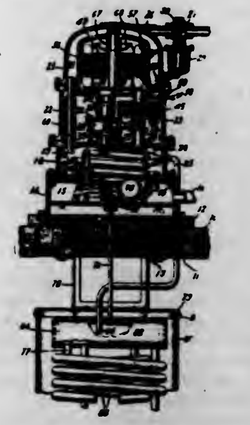
1. In a machine of the kind described, stretcher means including a support and a plurality of stretcher fingers projecting angularly and radially from said support, said support having a central opening outwardly open at its upper and lower ends, a tip cushion, disposed in said opening to abut converging inner end portions of said stretcher fingers, and releasable means for holding said tip cushion so disposed, said tip cushion being replaceably removable through the outwardly open upper end of said opening.

1,902,517. ROTARY COOLER. RAY C. NEWHOUSE, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed July 11, 1929. Serial No. 377,384. 8 Claims. (Cl. 222—7.)



1. In combination, a rotary shell, inlet means for delivering hot granular material into an end of said shell, a corrugated lining for said shell located adjacent to said end and forming a series of passages extending longitudinally of the shell axis, said passages being isolated from the material confining space within said shell, the corrugations of said lining being adapted to shower material within said shell, and means for producing a flow of cooling air through said passages.

1,902,518. REFRIGERATING MACHINE. CLARK ORR, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed July 3, 1920. Serial No. 393,888. 11 Claims. (Cl. 62—115.)



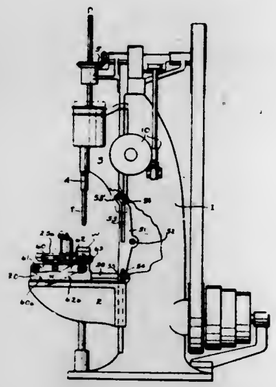
1. The combination with a casing provided with a compression chamber, a compressor located in the lower portion of said chamber, a motor for operating the compressor located in the upper portion of said chamber, and means for conducting cooling fluid around said motor, and means for automatically controlling the flow of cooling fluid in response to the temperature in the upper portion of said compression chamber.

1,902,519. AIRSHIP. WILFRID V. N. POWELSON, New York, N. Y., and WARREN TRAVELL, San Bernardino, Calif. Original application filed Sept. 6, 1921, Serial No. 498,605. Divided and this application filed Mar. 17, 1931. Serial No. 523,250. 3 Claims. (Cl. 244—3.)



1. In an airship, an upper gas container for lifting gas and a lower gas container for gas of different properties, the two containers being external to each other, with atmospheric air intervening between them, but having contiguous walls, movable in unison and in harmony with expansion and contraction of gas in the upper container, and means whereby gas flows out from the lower container in harmony with said expansion; the said contiguous walls extending in direction approximately normal to the direction of gravity, whereby mutual abrasion is minimized.

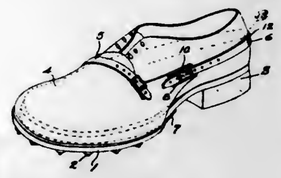
1,902,520. INDEXING MECHANISM FOR MACHINE TOOLS. GEORGE E. RANDLES, Cleveland, Ohio, assignor to The Foote-Burt Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 20, 1928. Serial No. 300,834. 13 Claims. (Cl. 77—64.)



1. Indexing mechanism of the kind described, comprising, a rotary element to be indexed, a support therefor, said element being movable transversely of as well as along its axis relative to the support, and means interposed between the element and support for causing an indexing movement of the element consequent upon the transverse movement, there being locking means for holding the rotary element in indexed position, said means being affected to release the element consequent upon said movement of the element along its axis.

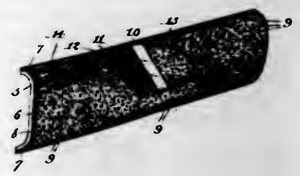
1,902,521. SPIKED SANDAL. ELMER V. RICE, Covina, Calif. Filed Mar. 31, 1932. Serial No. 602,229. 2 Claims. (Cl. 36—7.7.)

1. A sandal comprising a flexible sole provided with antislipping members, means to removably attach the sandal to the forward portion of an ordinary shoe, said means comprising a pair of spring hooks attached to the



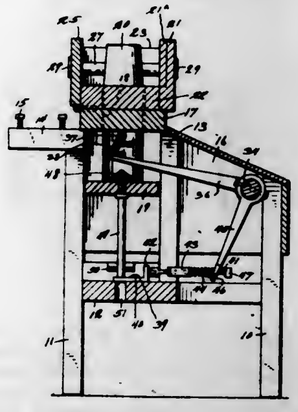
shoe, and a reversible strap provided at one end with a link and at the other end with a buckle whereby said strap may optionally engage either of said spring hooks.

1,902,522. METHOD OF IMITATING WOOD GRAINING. GUSTAF ALBIN ROSE, Jamestown, N. Y., assignor to Dahlstrom Metallic Door Company, Jamestown, N. Y., a Corporation of New York. Filed Aug. 31, 1929. Serial No. 389,855. 4 Claims. (Cl. 91—68.)



1. The method of simulating the grain of natural wood on a metallic or other hard surface, which consists in irregularly spattering paint in varied sized regions over such surface, and before drying, spreading such paint regions to form elongated markings of varying degrees of fineness to simulate the pores of the wood to be imitated.

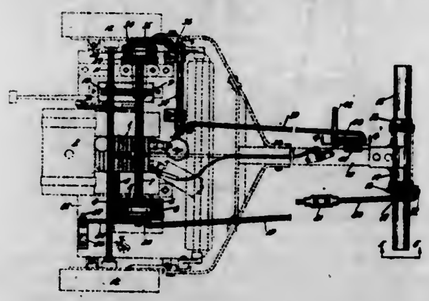
1,902,523. MACHINE FOR MAKING CEMENT BLOCKS. JOSEPH P. ROSE, Jr., Wellfleet, Mass. Filed Feb. 24, 1932. Serial No. 594,831. 5 Claims. (Cl. 25—41.)



4. A cement block machine including a supporting frame, a block mold hinged to the frame for movement from a horizontal to a vertical position, the bottom of the mold

having core openings, a plurality of vertical cores disposed within the frame, a member supporting said cores and vertically guided in the frame, a rod extending downward from said member, a manually operable shaft having an arm, a rod connecting said cores and beneath which said arm engages upon an upward movement of the arm, an operative spring connection between the arm and the cores to permit an initial downward movement of the arm before the cores are pulled downward, a latch mounted for swinging movement into a position beneath said rod when the cores are fully raised, an arm on the shaft having an eye, a rod passing loosely through the latch and through said eye, a sleeve bearing against the latch and surrounding the rod, and a coiled compression spring between said sleeve and the eye.

1,902,524. POWER LAWN MOWER. LESTER B. ROTH, Prophetstown, Ill. Filed Jan. 12, 1931. Serial No. 508,075. 3 Claims. (Cl. 56—26.)



1. Control mechanism for a power lawn mower having an engine comprising an idler shaft carried by the lawn mower, clutch mechanism associated with said shaft for transmitting power from the shaft of the engine to the idler shaft, a drive shaft for the ground wheels of the lawn mower, driving connections between the idler shaft and the drive shaft, a shaft carrying the cutting reel of the lawn mower and driving connections between the idler shaft and the reel shaft, said connections including a clutch for completing or releasing the connection between the idler shaft and the reel shaft.

1,902,525. MIXER. CHARLES A. ROWLEY, Los Angeles, Calif. Filed June 12, 1931. Serial No. 543,771. 5 Claims. (Cl. 259—144.)

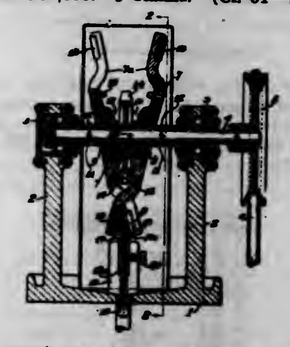


1. An article of manufacture comprising a handle, fittings secured at the opposite ends thereof and extending in parallel planes at right angles thereto, mixing wires flexed to assume an arcuate shape and secured within said fittings, the fittings being longitudinally corrugated to receive the individual wires and having a folded over portion to hold the wires within the individual corrugations, said wires being formed with bent end portions engaging the ends of the ribs of the corrugations to prevent the withdrawal of the wires from the fittings after being assembled therewith.

1,902,526. FILAMENT TREATMENT. KURT SCHMIDT, Wuppertal-Elberfeld-Grenze, Germany, assignor to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed May 20, 1932, Serial No. 612,658, and in Germany June 8, 1931. 9 Claims. (Cl. 117—53.)

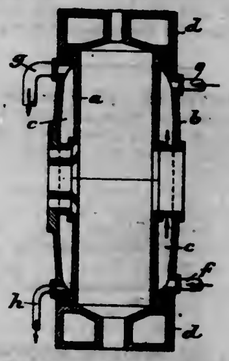
1. In a method of treating spun filaments, the steps of spooling the filaments, after-treating with appropriate liquids while on the spool, rewinding and twisting the filaments onto a second supporting means, removing the filaments in the form of a cake from this second support, and further wet treating the said cake.

1,902,527. METAL SHARPENING MACHINE. CONRAD B. SCHUMACHER, Lynbrook, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Apr. 30, 1928. Serial No. 273,835. 6 Claims. (Cl. 51—112.)



1. A sharpening machine comprising a pair of separate spaced members located side by side at an angle to one another and having sharpening means in opposing relation on side faces of the members, means supporting said members for common axial rotation and each member for individual angular rocking movement with respect one to another due to centrifugal force in said members during rotation thereof, means to rotate said members, and means to support a piece of metal in position between said members to be sharpened by said sharpening means with the axis of a member on the side of the metal remote from the side of the metal engaged by the sharpening means of said member.

1,902,528. WATER COOLED INTERNAL COMBUSTION ENGINE CYLINDER. OSCAR SIMMEN, Erlach, Switzerland, assignor to Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed Mar. 19, 1931, Serial No. 523,777, and in Switzerland Mar. 31, 1930. 2 Claims. (Cl. 123—173.)



1. In a vertical, water-cooled cylinder for internal-combustion engines, a water-jacket having at the top an inlet,

for the cooling water and an outlet therefor, and having at the lower part of the cylinder another inlet for the water, and a discharge port at the lowest point of the jacket for continuously discharging therethrough, by the cooling-circulation, the slurry continuously forming.

1,902,529. ARTIFICIAL SILK. JOHANN JOSEPH STOCKLY, Teltow, and EBHARD WITTE, Berlin-Lichterfelde, Germany, assignors, by mesne assignments, to American Glanzstoff Corporation, New York, N. Y. Filed Apr. 9, 1929, Serial No. 353,889, and in Germany Oct. 2, 1928. 1 Claim. (Cl. 106—40.)

As a solution for use in the manufacture of dull lustre filaments, threads, bands, and the like, a filtered and deaerated mixture comprising:

	Per cent
Viscose	98.7
Japan wax	0.4
Benzol	0.9

1,902,530. HANDLE FOR ROCK DRILLS. EDWARD F. TERRY, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 30, 1931. Serial No. 553,939. 3 Claims. (Cl. 121—36.)



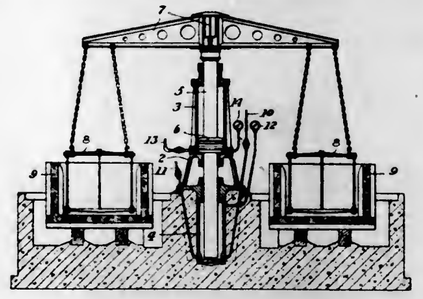
1. In combination, a rock drill having pairs of opposed recesses spaced along the length thereof, a handle, legs on the handle having apertures therein, rods seated with their ends in the recesses and extending through the apertures, springs to oppose the movement of the legs relatively to the rods, and yieldable means in the recesses to serve as abutments for the ends of the rods.

1,902,531. MARKER OR TAG. CHARLES E. TIMSON, Chicago, Ill., assignor to William Cooper & Nephews Incorporated, Chicago, Ill., a Corporation of Illinois. Filed Sept. 19, 1932. Serial No. 633,803. 8 Claims. (Cl. 40—3.)



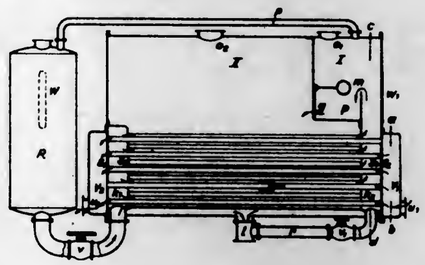
1. A marking and sealing tag comprising a bent metal strip having a pointed portion at one end and a cap covered aperture near the other end for receiving the pointed portion, said cap being provided with means to prevent the curling of the pointed portion when the same is inserted in the cap, the pointed portion being bent within said cap when said tag is applied in marking or sealing position, said pointed portion having a hole in it to weaken it so that when the weakened portion is bent within the cap an enlarged end is produced to prevent withdrawal of the point from within the cap without breaking the tag and thus preventing re-use of the tag.

1,902,532. METHOD OF OPERATING PICKLING MACHINES. WILLIBALD TRINKS, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 26, 1929. Serial No. 373,742. 1 Claim. (Cl. 121—1.)



A method of operating a pickling machine having an air balancing means and a steam lifting means which comprises evaluating for various loads the highest air pressure at which rapid lowering of the respective loads can be effected, and the relation of the load carried at any time to the air and steam pressures required to balance it, embodying these relations in a calculation-saving device, and adjusting the air pressure for the loads being handled in accordance with the pressures indicated by said device.

1,902,533. EVAPORATOR. KAREL VYKOUPIL, Mariampol, Lithuania. Filed July 27, 1932, Serial No. 625,067, and in Czechoslovakia May 31, 1929. 3 Claims. (Cl. 159—17.)



1. An evaporator having two evaporating chambers separated from one another, characterised in that these evaporating chambers (I, II) are connected together by means of a float valve (g) and are heated by a system of heating tubes (t_1, t_2, t_3) which consist of outer tubes (t_3) in which are carried inner tubes (t_1, t_2) through which latter the heating steam flows, the substance to be evaporated flowing through the outer tubes (t_3) into the first chamber (I) of the evaporator, while the second chamber (II) of the evaporator is heated by the outer tubes (t_3), and different pressures may be maintained in the two chambers.

1,902,534. VACUUM CLEANING DEVICE. FRED WIELATZ, Chicago, Ill. Filed Jan. 11, 1932. Serial No. 585,826. 4 Claims. (Cl. 15—152.)



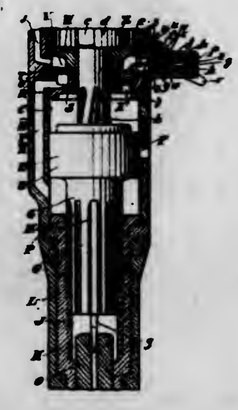
1. A suction nozzle for cleaning devices, formed with a pair of laterally spaced longitudinal internal passageways and provided with apertures on opposite sides in communication with said passageways, and opposed longitudinally extended brushing elements on the opposite sides of the nozzle and interposed medially between said passageways.

1,902,535. FOLDABLE BUCKLE. MAURICE ANDERSON, Edgewood, R. I., assignor to Levy, Anderson Co., Inc., a Corporation of Rhode Island. Filed July 18, 1932. Serial No. 623,210. 11 Claims. (Cl. 24—71.)



1. In a foldable buckle, a section provided with a curved tongue, a pivoted member in said section to confine a bracelet link between it and the section and provided with a curved tongue to snap over the first tongue and hold the member in closed position, a second section hinged to the first section to fold over the said member and the first said section and maintain said member in link confining position.

1,902,536. BLOWING DEVICE FOR ROCK DRILLS. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 23, 1931. Serial No. 552,600. 2 Claims. (Cl. 121—6.)



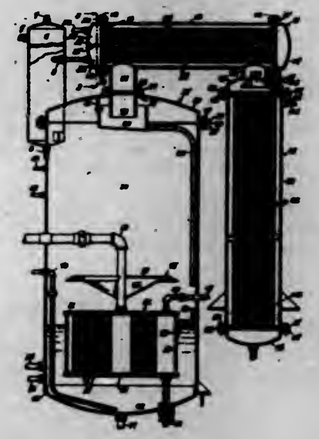
1. A fluid actuated rock drill comprising a casing having a piston chamber and an exhaust port, a hammer piston in the piston chamber controlling the exhaust port and having a blower passage, an automatic valve for distributing pressure fluid to the piston chamber, a spring in the casing, a plug in the casing to actuate the spring against the valve for holding the valve in position to admit pressure fluid into the front end of the piston chamber and to the blower passage, said plug having a groove for engagement with the spring to retain the plug in the casing, a passage in the casing opening into the rear end of the piston chamber, and a passage in the plug to register with the passage in the casing for admitting pressure fluid into the rear end of the piston chamber during the blowing operation to maintain the piston in an intermediate position in the piston chamber for closing the exhaust port.

1,902,537. CASE FOR LIPSTICKS. FELICIE EUGENIE AMELIE WANPOUILLE BERGAUD, Paris, France. Filed July 9, 1931, Serial No. 549,719, and in France July 30, 1930. 7 Claims. (Cl. 206—56.)



1. A case for lipsticks comprising a body, a tube slidable therein and projecting through the rear end of the body, and coacting shutters forming front extensions of the tube for opening and closing the front end of the body as the tube is moved rearwardly and forwardly respectively.

1,902,538. DISTILLING APPARATUS. WILLIAM F. BRACE and FERNAND E. BELUCHE, Buffalo, N. Y., assignors to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 19, 1931. Serial No. 509,590. 6 Claims. (Cl. 202—177.)

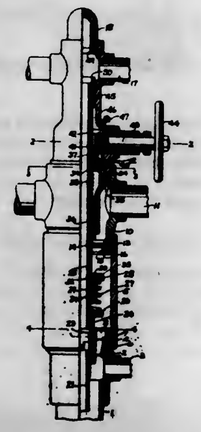


1. In an apparatus of the character described for removing foreign substances from a liquid, a preheater and a still, means for conducting the liquid to be treated first through said preheater and thence to said still, means for heating said still, said preheater comprising means forming an upper header chamber, means forming a lower header chamber arranged immediately below said upper header chamber, means for conducting the liquid to be treated into one of said header chambers and out of the other header chamber, tubes connecting said chambers, means increasing the flow of liquid through said header chambers without increasing the flow of liquid through said tubes, comprising means forming a restricted by-pass directly connecting said header chambers and means for conducting the vapors from said still around said tubes to preheat the liquid flowing therethrough.

1,902,539. STENCIL. CARL FRIEDRICH BRAUER, Stettin, Germany. Filed Apr. 16, 1931, Serial No. 530,723, and in Germany Oct. 28, 1930. 10 Claims. (Cl. 41—38.6.)

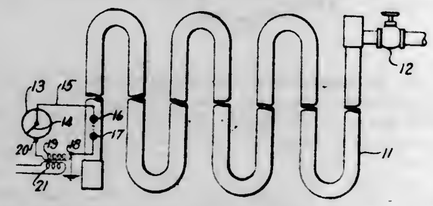
1. A directly stencilizable stencil sheet comprising an open texture fibrous base coated with a composition including gelatin highly distended in an aqueous solution of acetic acid and having homogeneously dispersed therethrough oleic acid and a noncoagulating stabilizer of the group comprising chlorinated naphthalene, palmitic acid and stearic acid, the gelatin in the coated sheet being in an unhardened and uncoagulated condition, and said stabilizer maintaining the homogeneity and permanence of the coating.

1,902,540. WELL CONTROL DEVICE. CICERO C. BROWN, Houston, Tex. Filed Feb. 19, 1932. Serial No. 593,993. 8 Claims. (Cl. 166—15.)



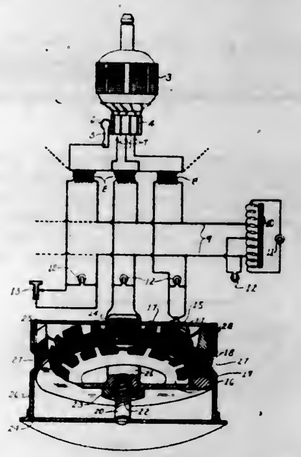
1. A well control apparatus including a well casing, a casing head thereon, a well tubing suspended in said casing head, an upward extension for said tubing adapted to form a seal with the upper end of said tubing, means connected with said casing head to entirely enclose the said upward extension, outlets from said casing, outlets from the tubing extension at its upper end, means to move said extension, and means on said extension to close said casing outlets and said extension outlets when said extension is moved upwardly.

1,902,541. METHOD AND APPARATUS FOR IGNITING COMBUSTIBLE MIXTURES. GEORGE G. BROWN and MOTT SOUDERS, Jr., Ann Arbor, Mich. Filed Apr. 15, 1931. Serial No. 530,270. 8 Claims. (Cl. 175—115.)



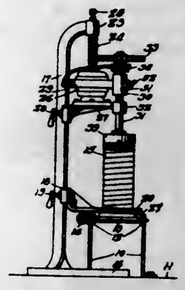
4. The method of igniting combustible mixture in combustion chambers without the accompaniment of shock waves which comprises filling a combustion chamber with a combustible mixture at a desired temperature and at a pressure of several atmospheres, and igniting the same by a substantially unilateral passage of an electric spark of desired intensity for a period of time of the order of a ten-thousandth part of a second.

1,902,542. TESTING INSTRUMENT AND REGULATOR. PENROSE E. CHAPMAN, St. Louis, Mo. Filed Sept. 16, 1929. Serial No. 392,830. 6 Claims. (Cl. 171—242.)



1. In an adjustable impedance, the combination of a magnetic core having a plurality of symmetrically spaced pairs of poles, electrical windings around said poles, an armature adapted to engage the poles of said core, the engaging faces of said poles and said armature being tapered so that the movement of one relative to the other will effect a change in the length of the air gap.

1,902,543. MEANS AND METHOD OF MARKING CONTAINERS FOR ICE CREAM AND THE LIKE. GEORGE F. DICKSON, Chicago, Ill., assignor to George A. Pearson and Leslie Muter, Chicago, Ill. Original application filed July 3, 1931, Serial No. 548,577. Divided and this application filed Mar. 18, 1932. Serial No. 599,835. 8 Claims. (Cl. 93—36.)



1. Cap seating and marking apparatus comprising a standard, a head on said standard, branding dies in said head, means for heating said branding dies, and means for maintaining said branding dies in contact with a cap while said head is rotating.

1,902,544. GRAIN DOOR FOR CARS. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 29, 1930. Serial No. 478,645. 15 Claims. (Cl. 20—27.)

1. In a car having a door opening and a floor, a grain door for closing said opening, said door being comprised of a main lower section and an auxiliary upper section, said sections being arranged to assume either a vertical operative position over the door opening with the surfaces on one side thereof adapted to engage fixed portions of the car defining the door opening to form a seal therewith, or an inoperative horizontal floor position, said auxiliary section overlying the main section when the



sections are in the horizontal floor position and the auxiliary section having its said seal-forming side faced downwardly to thereby prevent injury to the seal-forming surfaces of both sections.

1,902,545. GRAIN DOOR FOR CARS. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 24, 1930. Serial No. 484,032. 16 Claims. (Cl. 20—27.)



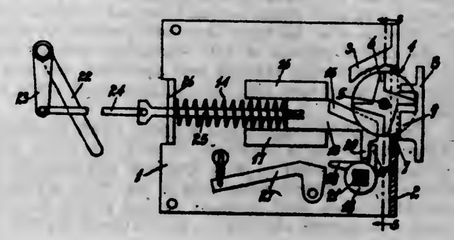
1. In a car having a door opening, a grain door movably attached to the car adjacent the sill of the door and movable to both vertical operative position to close the lower portion of the door opening and a horizontal inoperative floor position; a relief door pivotally mounted on said grain door and bodily movable therewith; and displaceable floor-forming means for covering and protecting said grain door and relief door when the grain door is in said inoperative floor position.

1,902,546. METAL DOOR CONSTRUCTION. FRANK DITCHFIELD, Cleveland, Ohio, assignor to The Youngstown Steel Door Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed June 18, 1930, Serial No. 461,976. Divided and this application filed Feb. 27, 1931. Serial No. 518,616. 4 Claims. (Cl. 189—46.)



1. In a door of the class including a plurality of sheet metal panels with the main portions thereof located in substantially the same plane and each panel having strengthening indentations incorporated therein; means for uniting the panels along adjacent edges, said means including: a flange on one panel offset to one side of the main plane of said panel, and an offset to the same side on the adjacent panel located inwardly from the edge of the last named panel, the flange of the first named panel being secured to said offset of the second named panel and the edge of the second named panel beyond said offset thereof being secured to the main portion of said first named panel whereby to provide a box girder lap joint between the panels.

1,902,547. ROTARY BOLT DOORLOCK. WALDEMAR A. ENDTER, Long Beach, Calif. Filed Mar. 15, 1932. Serial No. 598,960. 8 Claims. (Cl. 292—218.)



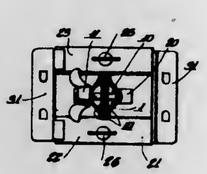
1. In a latch construction, a rotary bolt capable of free rotation in all positions when released, including a plurality of heads, any one of which is adapted to engage a keeper, a movable dog adapted to engage successive heads of the bolt in non-latching position, cooperating means between the bolt and the dog imposing a continued rotation of the bolt in latching direction when one of the heads is in keeper engaging position and concurrently imposing a multi-directional wedging action.

1,902,548. WATER CARRIER AND THE LIKE. FRANCIS F. FENWICK, Jr., East Orange, N. J. Filed Jan. 13, 1932. Serial No. 586,357. 14 Claims. (Cl. 299—97.)



1. A device of the kind described, comprising a flexible tubular bag body doubled upon itself with the doubled end lowermost to provide upstanding communicating superimposed sections, means to secure said sections together, closable filling means at the upper end of one section, and means connected with the doubled end of said bag body for discharging the content therefrom, said means issuing from the space between the body sections.

1,902,549. BOOKHOLDER. GEORGE J. FLANAGAN, Chicago, Ill.; Earle C. Grannan executor of said George J. Flanagan. Filed Oct. 30, 1930. Serial No. 492,144. 9 Claims. (Cl. 45—85.)

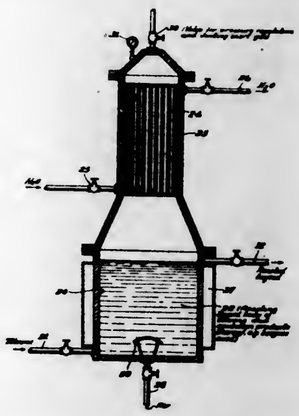


1. A book holder comprising a support, a stationary friction disc carried by said support having a central aperture, said disc having a cut out peripheral portion, movable means for engaging and holding a book, a friction disc carried by said means having a central aperture, said latter friction disc having a deflected portion extending into the cut-out portion of said stationary friction disc, a pivot pin extending through said apertures, and a nut cooperating with said pin for clamping said discs together.

7. A book holder comprising a support, a pair of laterally adjustable brackets connected to said support, a pair of members connected to said brackets and adapted to receive a book therebetween, and a lazy-tong structure connected between said members to engage the back of the book and support the same in any adjusted position of said brackets.

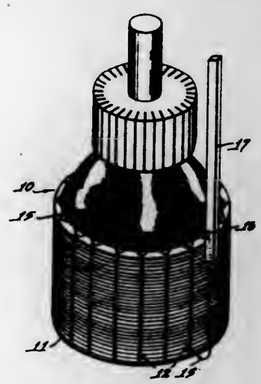
1,902,550. PROCESS OF OXIDIZING CYCLIC ORGANIC COMPOUNDS. HENRY O. FORREST, Andover, Mass., and PER K. FROLICH, Elizabeth, N. J., assignors to National Synthetic Corporation, Painesville, Ohio, a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 424,904. 11 Claims. (Cl. 260—108.)

1. A process of producing a cyclic partial oxidation product of a directly oxidizable cyclic organic compound other than benzene by direct oxidation thereof, comprising heating a liquid body of the compound to an elevated temperature above the normal boiling temperature and below critical temperature and contacting it with molecular oxy-



gen in the absence of other active agents in a closed system and under a pressure substantially in excess of the vapor pressure of the compound at said temperature.

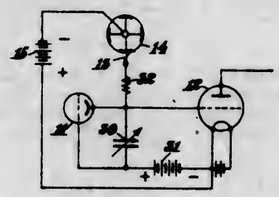
1,902,551. WEDGE REMOVING TOOL FOR ELECTRIC MOTORS AND GENERATORS. MILTON O. FREDRICKSON, San Pedro, Calif. Filed Mar. 23, 1932. Serial No. 600,689. 6 Claims. (Cl. 29—84.)



1. A device of the class described comprising a handle, a web adjacent one end of the handle extending laterally therefrom, said web being designed to extend through the slot opening of a winding slot of an electric motor, generator or the like, there being an enlargement at the edge of the web presenting a driving end adapted to engage the end of a wedge in the slot to drive the wedge from the slot.

1,902,552. APPARATUS FOR PICTURE TRANSMISSION OR THE LIKE. OTHO FULTON, Bromley, England. Filed Mar. 16, 1929, Serial No. 347,623, and in Austria Aug. 22, 1928. 2 Claims. (Cl. 250—41.5.)

1. In a communication system, a three-electrode valve having a grid and a cathode, a condenser connected in circuit with said grid and cathode, means for periodically charging the condenser to interrupt the flow of current from said valve, and a photocell connected to the grid to provide a leak path whereby the period of interruption



of the flow of current from the valve is inversely proportional to the intensity of the illumination impinging upon said cell.

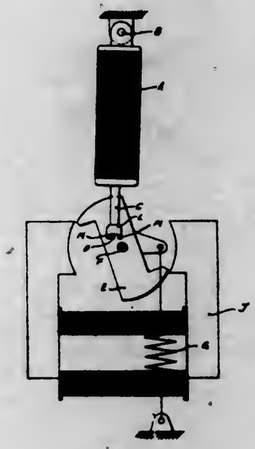
1,902,553. BUTTON-HOLE TAPE. EDWIN M. GOLDSMITH, Philadelphia, Pa., assignor to Friedberger-Aaron Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 27, 1930. Serial No. 484,858. 4 Claims. (Cl. 139—383.)



1. A woven button-hole tape having elongated button-holes extending in the direction of the warp threads comprising two sets of warp threads extending respectively along opposite sides of the tape, and two weft threads, both weft threads being interwoven with both sets of warp threads to form the body of the fabric between button-holes, and one weft thread being interwoven with only one set of warp threads and the other weft thread being interwoven with only the other set of warp threads to form a button-hole, each weft thread extending from an edge of a button-hole to the corresponding edge of the tape in each pick involved in the formation of a button-hole, whereby the tape is of close weave both beyond and at the sides of the button-holes, the weft threads of each side being extended over a limited number of warp threads of the other side at both ends of each button-hole.

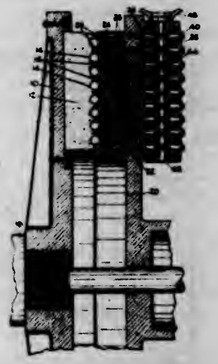
1,902,554. VOLTAGE REGULATING APPARATUS. HUGO GROB, Berlin, Germany. Filed Oct. 22, 1930, Serial No. 490,428, and in Germany Oct. 22, 1929. 7 Claims. (Cl. 171—229.)

1. In apparatus of the character described, in combination, a carbon pile, means pivotally supporting one end of said pile so that said pile may pivot about the axis thereof and means at the other end of said pile having a substantially flat face extending transversely of the length of said pile, said second-mentioned means with its flat face being adapted to move in a direction to vary the compression of said pile and to move with the said other end of said pile as the latter swings about said axis, an electromagnet having and controlling a rotatable armature, spring means acting upon said armature to rotate it in a direction opposite to that in which an increasing flux of said electromagnet rotates said armature, and a member carried by said armature at a point eccentric to the axis of rotation of said armature, said member having a curved face engaging said flat face and adapted to be in rolling contact therewith as the flux of said magnet rotates said armature in one direction to swing said pile in one direction about the axis of its pivot



and as said spring rotates the armature in opposite direction to swing said pile in opposite direction about the axis of its pivot.

1,902,555. GRINDING MACHINE. FREDERICK G. HUGHES, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed June 6, 1923. Serial No. 643,764. 8 Claims. (Cl. 51—130.)

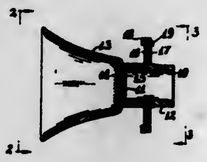


6. In a grinding machine having a grinder and means for rotating the grinder, a series of shafts extending parallel to the axis of the grinder and arranged in a radial plane, a dressing tool eccentrically mounted on the end of each shaft, and means for rotating the shafts to carry each dressing tool over a portion of the surface of the grinder, substantially as described.

1,902,556. SILENCER MOUTHPIECE FOR TELEPHONE TRANSMITTERS. EMMA V. HUSSON, Brooklyn, N. Y. Filed Apr. 11, 1932. Serial No. 604,515. 2 Claims. (Cl. 179—188.)

1. A silencer mouthpiece for telephone transmitters, comprising a tubular member closed at the front end and adapted for attachment at the rear on a telephone transmitter, a mouthpiece rotative on the front of said tubular member and having apertures adapted to align with or

be out of alignment with similar apertures on the front end of said tubular member, and means for urging said mouthpiece into one of said rotative positions and adjustable for urging the mouthpiece into the other of said rotative positions and further adjustable to hold the mouthpiece in either of said positions.

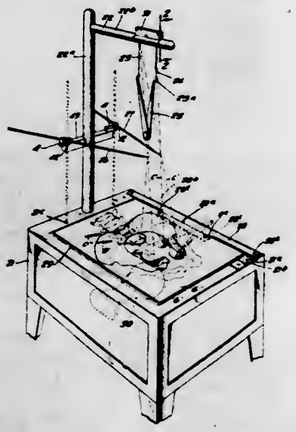


1,902,557. SNAP FASTENER SOCKET. EDMUND D. JANES, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 20, 1932. Serial No. 618,196. 2 Claims. (Cl. 24—77.)



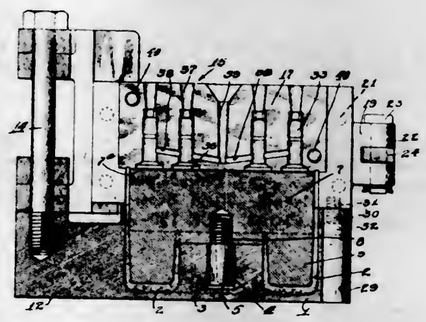
1. A detachable snap fastener comprising a stud element having an attaching head and a two-part socket element consisting of a perforated sheet-metal body portion and a restricted, resilient, expansible stud-engaging portion in the form of a split ring having a neck portion extending through the perforation in the body portion and outwardly-turned portions overlapping parts of the opposite surfaces of the body portion immediately surrounding the perforation, the diameter of the perforation in the body portion being equal to the diameter of the head of the stud plus twice the thickness of the material of the neck portion of the split ring plus a minimum necessary working tolerance.

1,902,558. APPARATUS FOR AND METHOD OF LOCALIZING AND MEASURING BY X-RAY. CLAYTON R. JOHNSON, Los Angeles, Calif. Filed Sept. 29, 1928. Serial No. 309,197. 5 Claims. (Cl. 250—34.)



3. In an apparatus of the class described, a table, a supporting means secured thereto and extending thereover, a pair of wires extending from horizontally spaced apart portions on said supporting means, resilient means normally drawing said wires toward said supporting means, and extensible means having a pair of pointed portions adjustable with respect to each other, the free end of each wire being secured to one of the pointed portions.

1,902,559. MOLD. WILLIAM E. KEMP, Kokomo, Ind., assignor to Kingston Products Corporation, Kokomo, Ind., a Corporation of Indiana. Filed Dec. 3, 1931. Serial No. 578,648. 12 Claims. (Cl. 22—136.)



1. Apparatus for forming metal articles having portions of different degrees of hardness, comprising a mold having a number of article forming cavities, a base having a fluid reservoir, a chill plate pivotally mounted on said base and having a portion thereof directly below said mold and fins on said chill plate extending in said reservoir.

12. A molding apparatus comprising a base, a permanent mold proper attached to said base, said permanent mold proper being formed in separable sections having matched recesses in abutting faces providing mold cavities, and a chill plate for forming the bottom closure of the mold cavities, said chill plate being rotatably mounted on said base.

1,902,560. SPINNER. JOHN J. KILPATRICK, San Francisco, Calif. Filed Oct. 27, 1931. Serial No. 571,303. 3 Claims. (Cl. 43—45.)



1. A spinner comprising a central web having an aperture adjacent its leading edge, a hook secured adjacent the trailing edge of the web, a pair of oppositely extending wing flanges projecting outwardly from the side edges of the web, and a pair of oppositely extending end flanges projecting outwardly from the trailing edges of the wing flanges.

1,902,561. VACUUM CLEANER. CARL KÜHNEL and KARL KORITTKE, Berlin-Charlottenburg, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 23, 1932, Serial No. 643,966, and in Germany Oct. 27, 1931. 4 Claims. (Cl. 15—155.)

1. In a vacuum cleaner, a nozzle having an elongated inlet opening, an apertured flap adapted to restrict the cross-section of said inlet opening, supports integral with said nozzle at one side of the latter, said flap being pivotally mounted on said supports to bring in and out of engagement said flap with said nozzle, and means for holding said flap out of engagement with said inlet opening.



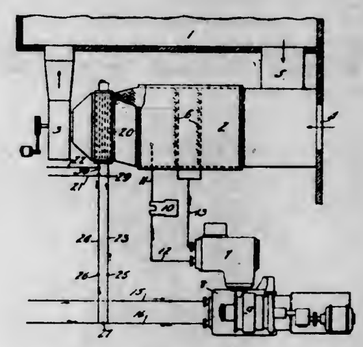
1,902,562. BLOWING DEVICE FOR PNEUMATIC TOOLS. EARL B. LEAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 6, 1931. Serial No. 555,415. 1 Claim. (Cl. 121—10.)



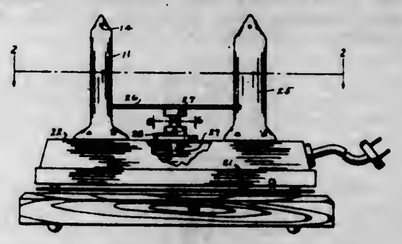
A pneumatic tool comprising a casing having a piston chamber, a hammer piston therein, a hollow drill steel guided by the casing, an automatic valve to distribute pressure fluid to the piston chamber, a blower passage in the casing and being in constant communication with the interior of the drill steel, a bushing in the casing communicating with the passage and extending through the automatic valve to act as a guide therefor, a blower valve to connect the bushing with a source to selectively supply pressure fluid through the passage to the drill steel during the operating and idle periods of the piston and being arranged coaxially with the bushing, and a spring interposed between the bushing and the blower valve to hold the blower valve immovable in its limiting positions and to hold the bushing firmly seated in the casing.

1,902,563. APPARATUS FOR CONDITIONING INCLOSURES. LEO L. LEWIS, Plainfield, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Feb. 23, 1928. Serial No. 256,258. 4 Claims. (Cl. 257—8.)

1. In a system for conditioning the atmosphere of an inclosure, the combination of air conditioning apparatus, means for conveying air through said apparatus and to said inclosure, means including a refrigerating device for lowering the dewpoint of the air passing through said apparatus and including a condenser, means for circulating a fluid through said condenser, a heater for heating air leaving said apparatus and moving to said inclosure, and means connected to said heater for supplying additional heat thereto, whereby said heater may be connected selectively either to said last means or in series with the outgoing side of said condenser.

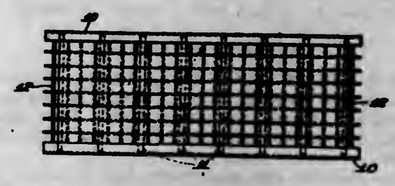


1,902,564. BUN PUNCHER AND TOASTER. CHARLES W. MABEY, Indianapolis, Ind., assignor to Mabey Electric and Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 15, 1929. Serial No. 340,254. 4 Claims. (Cl. 219—19.)



1. In a bun puncher and toaster, a post formed of a plurality of hollow longitudinally divided sections tapered to form a sharpened top and flared at the bottom to form an expanded base, a fixed base, means for detachably securing the upper portions of the sections together, means for removably securing the expanded base to the fixed base and an electric heating element located in the hollow of the post.

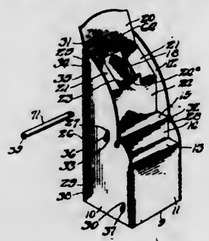
1,902,565. SLAB FLOOR OR ROOF CONSTRUCTION. HERBERT E. MARKS, Sewickley, Pa., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed May 14, 1928. Serial No. 277,425. 11 Claims. (Cl. 72—68.)



7. A preformed building slab comprising a body of cementitious material, slab-supporting and side-facing

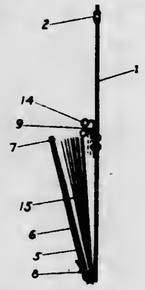
bars molded in the sides of the slab and having their ends projecting beyond the ends of the slab, and integral cementitious flanges formed below said bars and extending outwardly from the edges of the slab.

1,902,566. DISPLAY RACK. HARRY V. MARSH, Chicago, Ill. Filed Nov. 8, 1930. Serial No. 494,216. 3 Claims. (Cl. 211—72.)



1. A display device having a seat angularly positioned for the support of an article of merchandise and comprising a plurality of blanks of sheet material, one of said blanks being divided into a series of sections, there being a section extending from a second to a third of said sections and traversing intermediate sections, said first named section being cut from the body of said intermediate and said third section, and the intermediate sections and said first section being articulated to coform said seat.

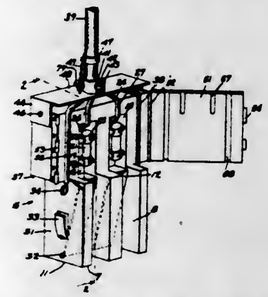
1,902,567. CALENDAR AND RECORD. LESTER B. MARTIN, Columbus, Ohio. Filed Mar. 19, 1932. Serial No. 599,986. 2 Claims. (Cl. 281—15.)



1. In a combination calendar and record, a base section, a second section, a strip of fabric connecting said sections permitting the second section to be swung vertically upward in superposed position on the base section, a record book connected to said strip between the edges of said sections so that it may be readily severed from both sections, means for securing the second section in raised position with said book between it and the base section, a calendar pad having its top edge connected to the rear side of the second section, and means engaging the lower free edges of the calendar to hold the same flat against said section, said calendar being visible for reference when said second section is raised.

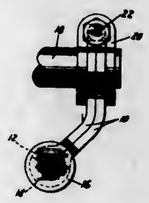
1,902,568. FUSED ELECTRICAL PLUG. LEONARD L. MAXAM, Los Angeles, Calif., assignor of one-third to Clarence S. Crews, San Pedro, Calif. Filed Apr. 10, 1931. Serial No. 529,115. 6 Claims. (Cl. 200—115.5.)

4. An electrical plug cooperative with a socket having a plurality of structurally differentiated pairs of electrical contacts therein, said plug comprising a body of insulative material receivable within said socket, a plurality of pairs of electrical contacts carried by said plug and differentiated similarly to those of the socket, means for bringing contacts of the plug into engagement with the associated contacts of the socket when the plug is inserted therein, an electrical conductor con-



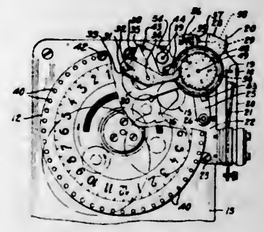
nected to each of said plug contacts, means associated with each of said plug contacts for resiliently pressing them against the associated socket contacts, and fuses interposed between certain of said conductors and their associated contacts.

1,902,569. OPERATING DEVICE. EUGENE G. MCDONALD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed July 12, 1929. Serial No. 377,673. 14 Claims. (Cl. 74—33.)



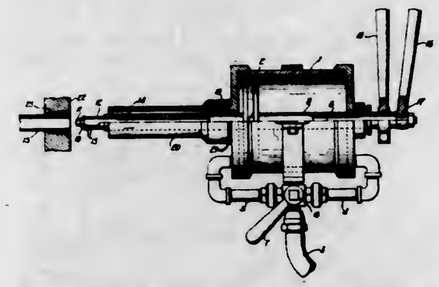
1. An operating device having a shaft-encircling opening with a slot communicating therewith so that the opening may be contracted about a shaft, and a generally U-shaped member with its sides secured to the opposite sides of the device and with its center arranged to cooperate with the edge of said device to embrace a clamping member arranged to contract said opening as described.

1,902,570. TIME-CONTROLLED ELECTRIC SWITCH. JOSEF METTLER, Zug, Switzerland, assignor to Landis & Gyr, A.-G., a Limited Joint-Stock Company of Switzerland. Filed Nov. 30, 1928, Serial No. 322,619, and in Switzerland Dec. 6, 1927. 11 Claims. (Cl. 200—38.)



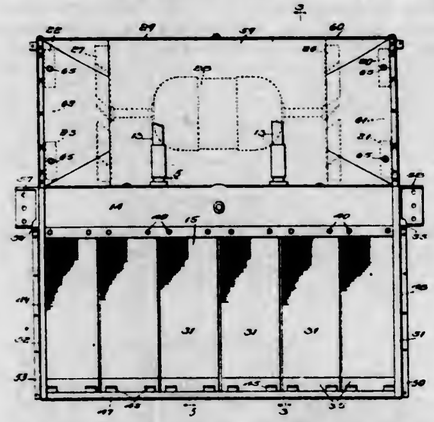
1. A time-controlled switch, including in combination a switch, clock-controlled means for closing the switch, switch opening means brought into operation by the closing of the switch for opening the switch, and means for driving the opening means from the clock mechanism only during the time the switch is closed.

1,902,571. APPARATUS FOR EXTRACTING TUBES. DAVID F. MITCHELL, Staten Island, N. Y. Filed Sept. 17, 1931. Serial No. 563,328. 6 Claims. (Cl. 29—88.2.)



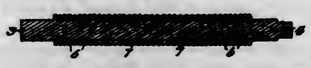
1. A device of the class described comprising a sleeve, a shaft within said sleeve, a removable extension comprising an eccentric cutting member carried by said shaft and an eccentric cutting member carried by said sleeve, said shaft being rotatable within said sleeve to move the cutting members into and out of alignment.

1,902,572. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 7, 1929. Serial No. 397,877. 9 Claims. (Cl. 257—125.)



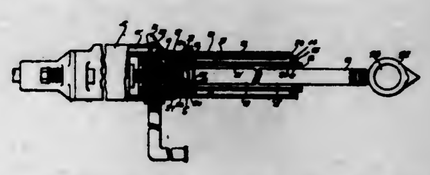
9. In a device of the kind described the combination of a plurality of heat exchange devices respectively providing top and side walls of a casing, means for advancing air through said casing, a fluid supply tank with which said device providing the top wall is connected.

1,902,573. METHOD FOR FORMING TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Filed Jan. 18, 1929. Serial No. 333,356. 12 Claims. (Cl. 18—56.)



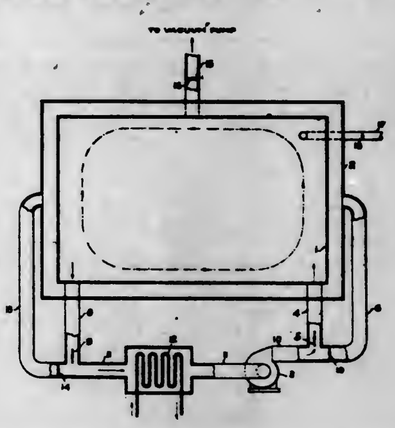
1. The method of forming a tube of celluloid and the like, with a smoothly cylindrical inner surface formed of a single material, and a smoothly cylindrical outer surface formed of a plurality of materials in an exterior mosaic structure; which includes forming a tube of smoothly cylindrical laminations of different materials, forcing different regions of an outer lamination into an inner lamination, sequentially thus embedding the same sequentially, without deforming the interior surface of said tube; and thereafter separating from the embedded portions and eliminating the portions of the outer laminations which are not thus embedded.

1,902,574. POWER FEEDING DEVICE. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 23, 1929. Serial No. 401,747. 6 Claims. (Cl. 121—9.)



1. In combination, in a rock drill, a fluid pressure percussive motor, a fluid pressure power feed for advancing said percussive motor and retracting it from the work, said feed comprising at least three nested telescoping members capable of extending to a length equal to at least twice its length when collapsed, and a single manually operated valve for controlling both said percussive motor and said feed, said valve having three control sones motive fluid, control means in each of said sones one sone controlling the operation of said percussive motor, another sone controlling the extending of said feed and the third sone controlling the retracting or collapsing of said feed, vent means under control of said valve in said second and third sones, said valve being arranged to admit pressure fluid at the third sone in all positions except neutral.

1,902,575. METHOD OF TREATING OBJECTS. LOUIS C. NICHOLS, Wauwatosa, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 23, 1930. Serial No. 422,963. 8 Claims. (Cl. 34—24.)



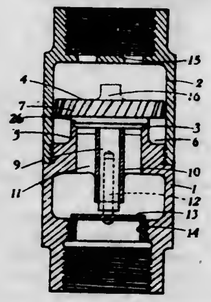
1. The process of treating which comprises placing the object to be treated in a container, raising the temperature of said object by blowing heated air into said container, against said object and out of said container for a predetermined time, heating said container from the exterior after stopping said blowing action, and subjecting

the inside of said container to a pressure lower than atmosphere by withdrawing the air and vapor from said container while maintaining the heating of said container from the exterior thereof.

1,902,576. FRICTION SURFACES. RAYMOND J. NORTON, Washington, D. C., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 29, 1930. Serial No. 457,530. 6 Claims. (Cl. 154—52.)

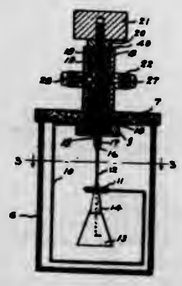
1. A friction facing comprising a bonded asbestos fiber having incorporated therein alloys of different melting points, and which alloys melt within the temperature ranges of normal braking.

1,902,577. NONRETURN VALVE. EDWARD CHARLES FREDERICK OAKLEY, Norbury, Eng. Filed Feb. 25, 1931, Serial No. 518,160, and in Great Britain Feb. 28, 1930. 5 Claims. (Cl. 277—42.)



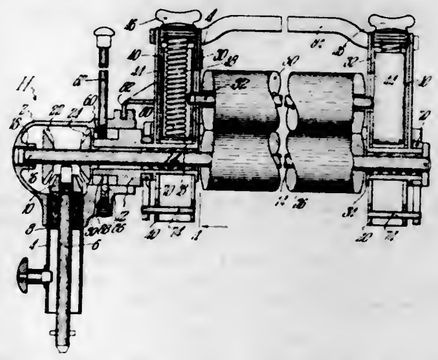
1. A non-return valve for controlling the flow of fluids, comprising in combination a casing, a valve seating therein, a valve coacting with said seating, a plurality of angularly disposed vanes on the periphery of the head of said valve, a part screwed into the lower end of the casing below the first named valve seating, a seating formed on the inner surface of said part, a light flat plate valve coacting with said seating, the two valves being so arranged that the light plate valve closes first and permits the fluid to leak slowly past, thereby for a short period maintaining fluid pressure below the first named valve for preventing the two rapid closure thereof.

1,902,578. CIRCUIT CLOSER FOR AN AUTOMATIC SIGNALING DEVICE. WILLIAM M. PARSONS, Seattle, Wash. Filed Mar. 1, 1928. Serial No. 258,198. 3 Claims. (Cl. 200—52.)



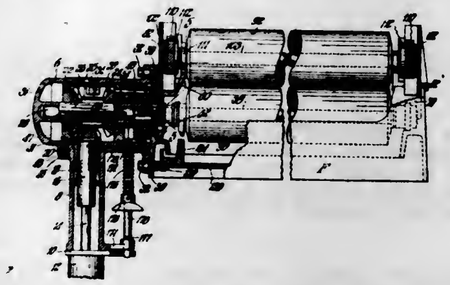
1. In a device of the class described, a housing, a rigid stem extending upwardly from said housing, universal joint suspension means connected with said stem, a screw threaded lengthwise through said stem and adjustable from the upper end thereof, a pendulum of electrically conductive material suspended from the lower end of said screw, a cone shaped contact member on the lower end of said pendulum, a resilient electrical conductor disposed within said housing, and means forming a horizontal contact loop on the lower end of said resilient electrical conductor, said cone shaped contact member being positioned within said loop whereby vertical adjustment of said screw will adjust the clearance between said cone shaped contact member and said loop.

1,902,579. WRINGER. JULIAN L. PERKINS, West Springfield, Mass. Filed Apr. 6, 1931. Serial No. 528,093. 17 Claims. (Cl. 68—32.)



1. A wringer comprising in combination a support, a barrel rotatable and reciprocable therein, a shaft rotatable in said barrel having a free end extending from said support, engageable driven and driving gears associated with said shaft and support, movable means associated with said barrel and support and movable on said barrel to facilitate reciprocation of said barrel for moving said gears between neutral and operative positions, roll supporting means associated with said support and shaft, coacting wringer rolls associated with said shaft and said roll supporting means and means associated with said barrel and support to releasably hold said barrel against movement.

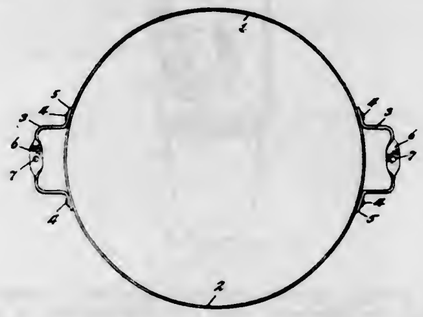
1,902,580. WRINGER. JULIAN L. PERKINS, West Springfield, and HIRAM D. CROFT, Springfield, Mass. Filed Aug. 6, 1931. Serial No. 555,612. 17 Claims. (Cl. 68—32.)



1. A wringer apparatus comprising in combination, a frame, a lower roll rotatable therein, spring pressed members at opposite ends of said frame, a guard having an upper roll associated therewith, the said spring pressed members being provided with receiveing means for receiving said guard and upper roll so that said roll may rest on said lower roll with the axes of said rolls in a certain plane, the said receiving means being arranged to permit the upper roll in contact with the lower roll

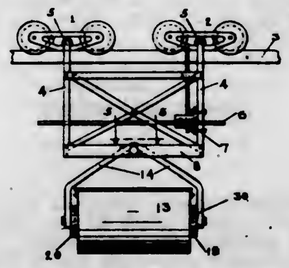
to be moved circumferentially of said lower roll so that the axes of said rolls are in a different plane from said certain plane, and releasable connections associated with said guard and spring pressed members to releasably hold said rolls in operative engagement.

1,902,581. SUSPENSION RING FOR SCALE PANS. LEONARD W. REIS, Dumont, N. J., assignor to John Chatillon & Sons, New York, N. Y., a Corporation of New York. Filed Sept. 14, 1931. Serial No. 562,711. 12 Claims. (Cl. 265—27.)



1. A suspension ring for scale pans comprising a strip of material having a plain end and an integral loop projecting outwardly adjacent the other end, the looped end of the strip overlapping the plain end and secured thereto at both sides of the loop.

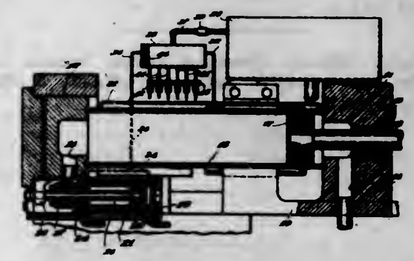
1,902,582. CONVEYER BUCKET. ROYAL N. RIBLET, Spokane, Wash. Filed Mar. 24, 1931. Serial No. 524,885. 1 Claim. (Cl. 214—61.)



In a conveyer bucket, the combination with a suspending frame having a pair of spaced, lower, parallel bars and a transversely extending pin joining said bars, of an angular bail pivoted on the pin and between said bars to prevent lateral sway of the bail, a complementary bearing plate beneath the pin and bolted to the angular bail, brackets on the ends of said bail, offset bearings on said brackets, a tiltable bucket journalled in said brackets, co-acting means on said bucket and one of the brackets for latching the bucket, and means for releasing the latching means.

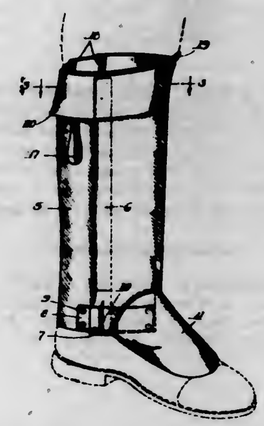
1,902,583. LUBRICATING SYSTEM. GEORGE J. RUSSELL, Waltham, Mass. Filed Mar. 18, 1930. Serial No. 436,736. 5 Claims. (Cl. 184—55.)

1. The combination with a fluid motor of the kind utilizing a relatively non-compressible working fluid and comprising a cylinder and a piston therein, of a pressure tank for supplying lubricant to a lubricating system and a tube extending between the cylinder and the tank for conducting fluid from the cylinder to the pressure tank, at least a portion of the tube being capillary to the working fluid, whereby the tube may be effective for sealing the cylinder to prevent air from passing from the tank to the cylinder



during non-working periods and to provide for removal of air from the cylinder during working strokes of the piston.

1,902,584. PULL-OFF LEGGING. SAMUEL N. SAGER, Chicago, Ill. Filed Oct. 23, 1930. Serial No. 490,572. 2 Claims. (Cl. 36—2.)



1. A pull-off legging of the quick detachable type having metal fastenings at the top for securing the overlapping parts together, and a flap secured to the underlying part of the legging and extending over the top of the overlying legging part and covering the metal fastening parts to protect them from lodgement of molten particles.

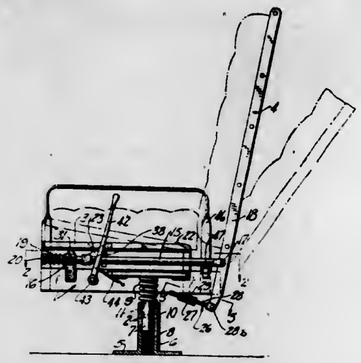
1,902,585. CABLE CONTROL. ROY SELDEN SANFORD, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Mar. 9, 1929. Serial No. 345,703. 1 Claim. (Cl. 74—89.)



A control device comprising a cable having a rigid element secured to its ends, the rigid element being of larger diameter than the cable, a support having a bore of a diameter to fit the rigid element and into which bore a short section of the cable extends, a flexible conduit housing the cable and engaging the support at its end, and

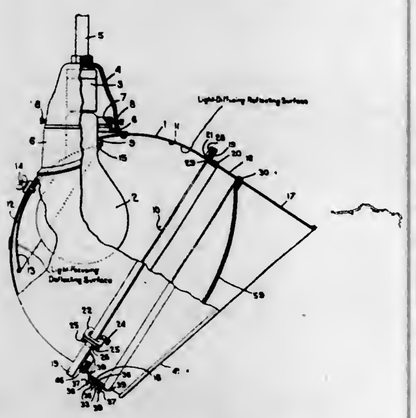
means for introducing lubricant into the annular space about said short section of the cable within the bore of said support whereby the inner end of the rigid element serves as a pump plunger for forcing lubricant into the flexible conduit.

1,902,586. CHAIR. JOSEPH A. SANTOS, Oakland, Calif. Filed Mar. 14, 1930. Serial No. 435,836. 3 Claims. (Cl. 155—116.)



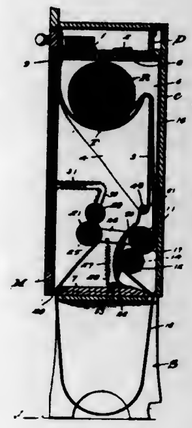
1. In a chair, a frame, a seat member pivoted thereto, a member slidably mounted on said frame, means connecting said seat member to said second named member, spring means yieldingly resisting relative sliding motion between said second member and said frame, a back rest pivotally mounted on said second member, and a resilient link mechanism connected between said back rest and said frame.

1,902,587. FLOODLIGHT. KENNETH A. SAWIN, Winthrop, Mass., assignor to Wheeler Reflector Company, Boston, Mass., a Corporation of Massachusetts. Filed Dec. 4, 1930. Serial No. 500,032. 4 Claims. (Cl. 240—3.)



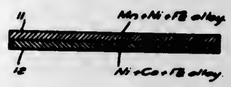
1. In an electric light fixture, the combination with a reflector, of a light within the reflector, a supporting ring detachably secured to the reflector, a visor element carried by the supporting ring, said visor element being expansible and contractible radially, a cover glass situated within the visor member and a lock for locking the visor member in its contracted condition, the cover glass being held in the visor by the contraction thereof.

1,902,588. TOWEL SERVICE APPARATUS. SAMUEL A. SCHWARTZ, St. Paul, Minn. Filed Apr. 28, 1931. Serial No. 533,527. 7 Claims. (Cl. 312—38.)



5. A towel service apparatus comprising a casing, a trough for supporting clean toweling mounted in said casing and having an apron depending from a side portion thereof, a feed roller mounted in said cabinet below said apron, soiled towel takeup means mounted in said casing in spaced relation from said feed roller and a plate projecting from the lower edge of said apron downwardly to the bottom of said casing between said feed roller and said takeup means.

1,902,589. BIMETAL THERMOSTAT. HOWARD SCOTT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 28, 1930. Serial No. 446,776. 2 Claims. (Cl. 297—15.)



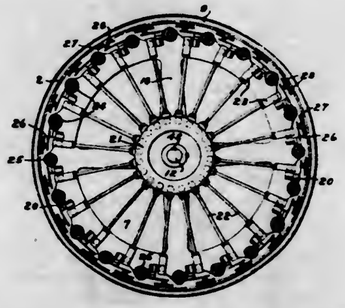
1. A thermostatic element comprising a pair of cooperating metallic members having different temperature coefficients of expansion, the high-expansion member including approximately sixteen per cent of manganese, a major portion of iron, relatively small quantities of silicon and carbon and approximately three per cent of nickel to substantially eliminate the delta to gamma transformation of the iron within the temperature range of from 0° C. to 500° C., and the low-expansion member being an iron alloy including approximately twenty-eight per cent nickel, approximately sixteen per cent cobalt and not over one per cent each of manganese and carbon.

1,902,590. ELECTRIC FLASH-LIGHT. JAMES L. SHANNON, Longmeadow, Mass., assignor, by mesne assignments, to French Battery Company, Madison, Wis., a Corporation of Wisconsin. Filed Sept. 30, 1930. Serial No. 485,421. 2 Claims. (Cl. 200—60.)

2. In a flashlight construction having a battery enclosing casing and a switch enclosing casing, a contact strip insulated from and secured to the inner surface of the battery enclosing casing, said securing means comprising two rivets whose heads project within said switch enclosing casing, a slidable switch in said switch enclosing casing which is formed with a contact loop portion at each end, means for retaining said switch in an open circuit position, means for retaining said switch in a position for making a momentary contact between one of said contact loops and one of said rivets, means for retaining said switch in continuous contact between the opposite end of said contact loops and the other one of said rivets, and means for moving said switch from any one of said positions to any other.

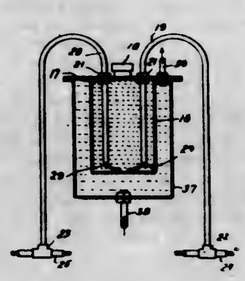


1,902,591. GRINDING, REFINING, AND MIXING MACHINE. CARL G. SPRADO, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 18, 1929. Serial No. 333,314. 15 Claims. (Cl. 83—11.)



1. A device of the character described comprising a blade having front and rear grinding portions, pivot means for applying pressure to said blade between said portions, and stop means for limiting the movement of said blade about said pivot means.

1,902,592. OILING SYSTEM FOR MOTOR CARS. EDGAR CLARK STANLEY, Glen Cove, N. Y., assignor, by mesne assignments, to Motor and Plane Accessories, Inc., Detroit, Mich., a Corporation of Delaware. Filed Feb. 10, 1926, Serial No. 87,246. Renewed Aug. 11, 1932. 15 Claims. (Cl. 184—7.)



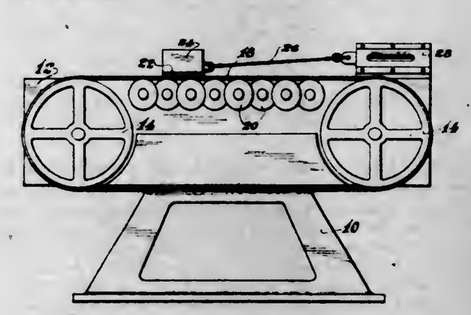
1. An oiling system for use in conjunction with a prime mover comprising a sealed receptacle to contain oil, the receptacle being so mounted as to be exposed to heat applied during the operation of the prime mover, a conduit leading from below the surface of the oil in the receptacle to a point in proximity to an element to be lubricated, a wick within the conduit extending a substantial proportion of the length thereof, said system upon operation of the prime mover and the application of heat to the fluid within the receptacle causing oil to flow from the receptacle to the element and causing the flow of oil to cease upon the stopping of the prime mover and the cooling of the receptacle.

1,902,593. VACUUM CLEANER HANDLE STRUCTURE. BERNARD JACQUES TAMARIN, Philadelphia, Pa. Filed July 19, 1930. Serial No. 469,247. 2 Claims. (Cl. 242—77.)



1. A vacuum cleaner handle structure comprising companion casing members having marginal flanges arranged in overlapping relation with each other and further provided with two sets of neck sections extending from opposite points from the casing members, a sleeve slipped over and secured to one set of neck sections, a tubular handle having one end portion slipped over and securing the remaining neck sections together, a bearing supported by one of the casing members, an axle secured to the remaining casing member, and also secured to said bearing thereby forming an interconnection between the central portions of the said casing members, and a reel unit removably mounted on said axle and said bearing.

1,902,594. BRAKE-LINING TESTING. GEORGE J. THOMAS, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Sept. 13, 1928. Serial No. 305,672. 4 Claims. (Cl. 73—51.)

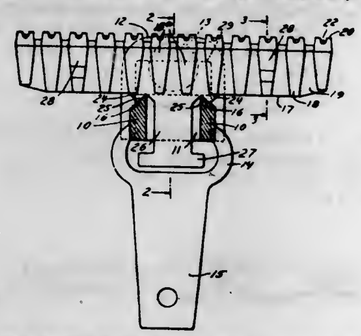


1. A machine for testing brake linings and the like comprising an endless power driven band having a rectilinear reach, means for pressing the work against said reach, and means connected to said first-mentioned means for yieldingly overcoming the frictional drag of the band on the work and measuring by its yield the frictional drag.

1,902,595. GRATE BAR. JAMES S. THOMPSON, New Rochelle, N. Y., assignor to Firebar Corporation, Cleveland, Ohio, a Corporation of Delaware. Filed July 1, 1931. Serial No. 548,124. 13 Claims. (Cl. 126—180.)

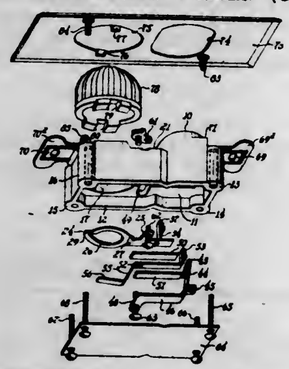
1. A grate bar which comprises the combination of a carrier made up of a pair of supporting members connected at their ends by arms and spaced apart to define an opening through the carrier from top to bottom and substantially the full length thereof, and a plurality of fuel-supporting units on the carrier, each having a part extending

through said opening and provided with a portion underlying said members and of a greater over-all width than the width of the space between said members, at least



one of said arms having a passage communicating with said opening and of a size to permit said portions of the units to be moved through it.

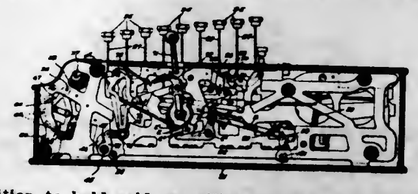
1,902,596. COMBINED PLUG RECEPTACLE AND WARNING LIGHT FIXTURE. WILLIAM C. TREGONING, Wauwatosa, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,164. 7 Claims. (Cl. 173—330.)



1. In a combined plug receptacle and warning light fixture, in combination, a one-piece molded insulating base having a plurality of recesses extending upwardly from the lower surface thereof, center and screw shell lamp contacts located in one of said recesses, attachment plug receptacle contacts in other of said recesses, wiring terminal plates located in spaced relation to each other on the upper surface of said base, a pair of screws penetrating said base and having mechanical and electrical connection with the respective terminal plates and with certain of said contacts, said screws clamping all of said contacts in position within said base, and means comprising a plurality of plates for normally insulating certain of said contacts from other of the same and from one or both of said terminal plates.

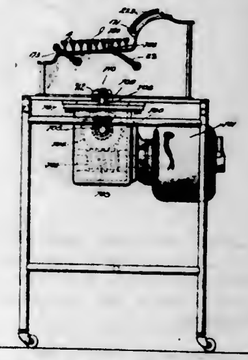
1,902,597. CALCULATING MACHINE. JOSEPH A. V. TUSCK, Wilmette, Ill., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 29, 1927. Serial No. 222,733. 8 Claims. (Cl. 235—130.)

1. In a multiple-order key-driven calculating machine, in combination: accumulator mechanism including numeral wheels and trains of gearing; column actuators therefor; driving keys therefor; cancelling mechanism operable to detrain said gearing; means for detaining said gearing in detrained position; a shaft adapted to be moved when a column actuator is out of normal position; a member connected to said shaft and operable thereby to prevent said detaining means from further detaining said detrained gearing; a cancelling mechanism lock between said shaft and said cancelling mechanism said lock connection being operable by said shaft when said shaft is in moved



position to hold said cancelling mechanism in cancelling position until the column actuator that has moved said shaft has returned to normal position and being adapted to so hold the cancelling mechanism until after said shaft has moved said member to permit said detaining means to detain said detrained gearing whereupon said lock releases said cancelling mechanism; substantially as specified.

1,902,598. CALCULATING MACHINE. JOSEPH A. V. TUSCK, Wilmette, Ill., assignor to Felt & Tarrant Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed July 7, 1922, Serial No. 573,431. Renewed Feb. 18, 1932. 16 Claims. (Cl. 235—62.)

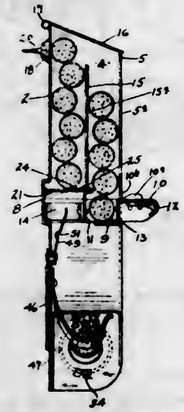


1. In a calculating machine, in combination: accumulator mechanism; multiplying mechanism adapted to actuate the accumulator mechanism; a continuously operating power member; a driven member connectable with said multiplying mechanism; a spring actuated clutch interposed between said members; and a locking device, releasable only upon setting of the multiplying mechanism for both factors of a multiple stroke problem, for permitting such clutch to operate to connect the driven member with the driving member; substantially as specified.

10. A multiple-order calculating-machine controlled by multiplicand and multiplier keyboards, combined with a common member for transferring power to all the orders of actuating mechanism and adapted to receive hand or other flexible power, and means for delivering an inflexible power to the said common member, said means being controlled by the said multiplier keys, to regulate the varying amount of inflexible power required to effect the varying number of actuations of the actuating mechanism in accordance with the predetermined setting of the multiplier keys.

1,902,599. CIGARETTE DISPENSING AND LIGHTING MACHINE. SERGIUS VERNET, Brooklyn, N. Y. Filed Jan. 13, 1926. Serial No. 80,881. 7 Claims. (Cl. 312—86.)

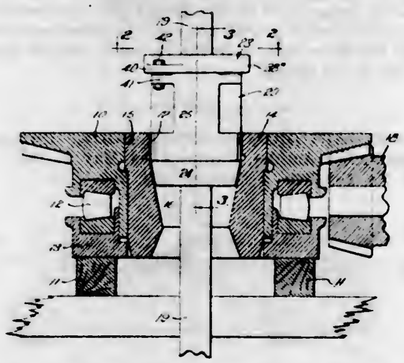
1. In a cigarette dispensing and lighting machine, a container for a supply of cigarettes comprising front and rear compartments, a dispensing slide mounted at the bottom thereof and having an opening extending therethrough large enough to accommodate a cigarette, means to close the bottom and open the top of said opening when said slide is in its normal outer position and to open the bottom and close the top when said slide is in its inner position, and means connected with said slide to urge a cigarette from said rear compartment to said front compartment when said front compartment is empty.



4. In a cigarette dispensing and lighting machine, means to dispense a cigarette and means to light the dispensed cigarette including a flue, an ignition device comprising a wire heating element, a non-conducting support therefor having a duct therethrough, and means to releasably secure said support and heating element at the bottom of said flue to provide a path for a current of air through said duct, across said heating element and up said flue.

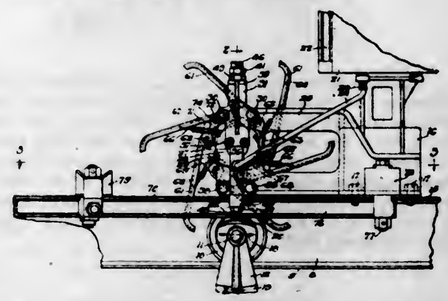
5. In a cigarette dispensing and lighting machine, a container for a supply of cigarettes, a dispensing means at the bottom of said container to drop one cigarette at a time from said container, a hook attached to said container, a second hook attached to said dispensing means, said hooks being substantially in line and cooperating to receive a cigarette when said dispensing means is operated and inclined forwardly when said dispensing means is released to bring one end of said cigarette into more easily removable position.

1,902,600. BUSHING. WILLIAM A. VOCK, Long Beach, Calif. Filed Oct. 5, 1931. Serial No. 566,992. 13 Claims. (Cl. 253—23.)



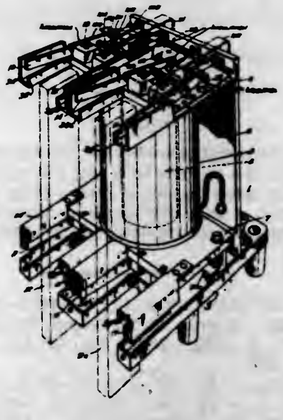
1. A bushing for use in a rotary table to form a drive between the table and a drill stem, which bushing includes a body to be carried by the table and having an opening for passing the drill stem, and a plurality of rotatable members mounted in the opening for engaging the drill stem, the said members being related vertically so that when during vertical movement of the drill stem one of the said members comes into register with one of the points on the drill stem previously engaged by one of the other members all of the said other members are out of register with the other points on the drill stem previously engaged by said other members.

1,902,601. AUTOMATIC LUBRICATOR. JOSEPH R. WARNER, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind., a Corporation of Indiana. Filed Aug. 8, 1929. Serial No. 384,341. 12 Claims. (Cl. 184—3.)



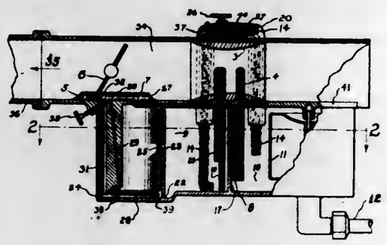
1. In automatic lubricating mechanism, the combination with a lubricator, of means for operating the same, a pivoted lever in the path of the moving part to be lubricated and connected to said operating means to serve as an actuator therefor, and a retaining spring connected to said lever to permit swing thereof on its pivot when said moving part is reversed.

1,902,602. RELAY. HAROLD W. WILLIAMS and DANILO SANTINI, East Pittsburgh, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 22, 1928. Serial No. 279,771. 12 Claims. (Cl. 175—336.)



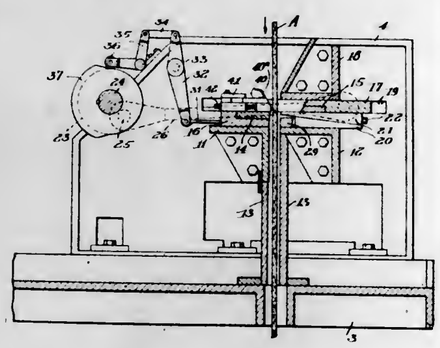
1. In an inductor relay, a magnetizable coil, an armature, a magnetizable plate for cooperating magnetically with said armature, and a magnetic shield disposed to prevent the passing of magnetic lines of force directly between the armature and the plate until the plate is in a predetermined position relative to the armature.

1,902,603. AUTOMATIC PRIMING DEVICE. WESLEY WILSON, Chicago, Ill., assignor, by direct and mesne assignments, to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Aug. 29, 1927. Serial No. 216,171. 6 Claims. (Cl. 123—179.)



1. The combination with an internal combustion engine, carburetor and throttle, of a means for automatically supplying additional fuel to the fuel mixture of said carburetor when the engine is being started, the total quantity of said additional fuel to vary as the time interval between said starting and the last stopping of the engine previous to said starting varies, and a thermostatic means for controlling the action of said automatic means of supplying additional fuel.

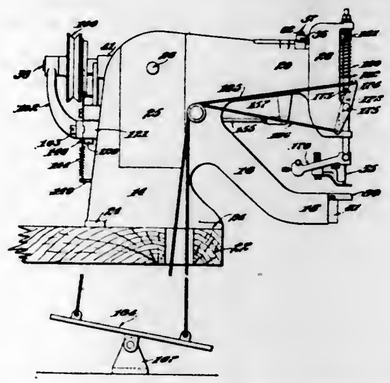
1,902,604. SHEET SEVERING MECHANISM. OTTO R. WINTER, Cincinnati, Ohio, assignor to The Upson Company, Lockport, N. Y., a Corporation of New York. Filed Jan. 22, 1930. Serial No. 422,686. 6 Claims. (Cl. 164—49.)



1. In a sheet severing mechanism, the combination with a fixed knife and a movable knife cooperating therewith, of guides for the latter including a supporting surface having a plurality of adjusting means at intervals along the length of the knife to regulate its cooperation with the fixed knife.

1,902,605. MACHINE FOR ATTACHING ORNAMENTS TO SHOES. GUSTAF E. ANDERSON, Brockton, Mass. Filed May 6, 1926. Serial No. 107,140. 9 Claims. (Cl. 112—258.)

1. A machine of the character described, comprising a frame made up of an overhanging arm carrying a main shaft and operating instrumentalities, a lower work-supporting arm thereunder having its end of a diameter sufficiently restricted to permit a shoe to be mounted thereon with its vamp uppermost and in position to be operated on by the instrumentalities on said overhanging arm, said arm being bent upwardly a short distance from its end to permit the heel of the shoe to be raised back of said end, operating instrumentalities carried by the end of said lower arm, a short shaft rotatably mounted in the bent upwardly end of said arm and a transmission shaft



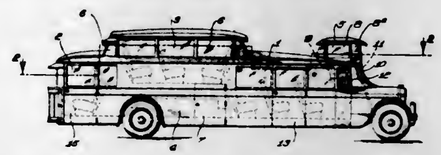
rotatably mounted in the oblique portion of said arm for transmitting rotary movement from said main shaft to said short shaft.

1,902,606. METHOD OF MAKING A SPRING COVER. FRED. W. ANDREW, Philadelphia, Pa., assignor to Briggs & Stratton Corp., Milwaukee, Wis., a Corporation of Delaware. Filed Mar. 12, 1930. Serial No. 435,054. 6 Claims. (Cl. 153—1.)



1. The method of covering a vehicle spring, which consists in taking a flat metal strip and draw-forming this into a curved channel-shaped member, then slitting the sides of the channel into sections, forming flanges at the free edges of said sections, then placing the channel over the spring so the web of the channel fits on one side of the spring, forcing the sides of the channel member over the edges and other side of the spring so said flanges are in close juxtaposition along said other side of the spring, placing a continuous substantially W-shaped seam member of metal over said flanges, said seam member being formed to engage each of said flanges on both sides thereof between the legs of the W, and then spreading said flanges and at the same time flattening the seam member against the side of the spring.

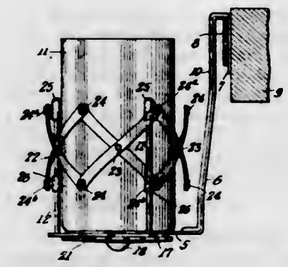
1,902,607. AUTOMOBILE STAGE BODY. DWIGHT E. AUSTIN, Los Angeles, Calif. Filed May 7, 1927. Serial No. 189,705. 2 Claims. (Cl. 296—24.)



1. In an automobile stage body, the combination with a stage body having entrance and exit means at its opposite ends, an aisle connecting said entrance and exit

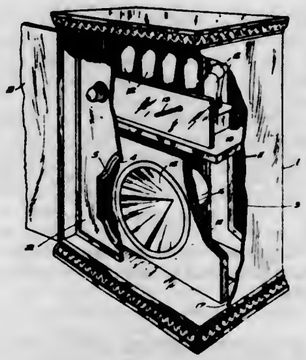
means for continuous passage therebetween, the intermediate portion of the aisle being raised above the floor portions within the body immediately adjacent said entrance and exit means, of seat compartments arranged on different levels adjacent the aisle, seats in said compartments, the floor levels of the seat compartments on the lower level being substantially on the level with the floor portions adjacent said entrance and exit means, and the floor levels of the seat compartments on the higher level being positioned above the raised portion of the aisle and communicating therewith.

1,902,608. GLASS HOLDER. LOUIS E. BALTZLEY, Glen Ridge, and FREDERICK GOERTZ, Newark, N. J. Filed Sept. 29, 1930. Serial No. 484,975. 4 Claims. (Cl. 248—20.)



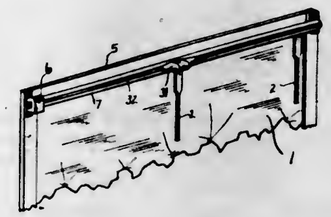
1. A glass holder comprising a base, glass confining rods upstanding from said base, supports for said rods movably mounted on the base, a rotatable control disc mounted on the base and connected with said supports for shifting the same, said control disc being dished and frictionally gripping said supports.

1,902,609. LOUD SPEAKER MOUNTING. GEORGE L. BEERS, East Pittsburgh, and WILLIAM S. BARDEN, North Braddock, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 19, 1928. Serial No. 306,869. 3 Claims. (Cl. 274—2.)



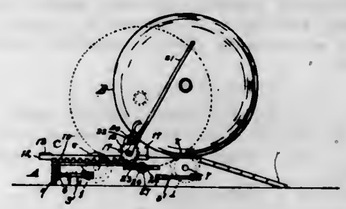
1. In combination, a sound-reproducing device, including a baffle, a cabinet that has a tendency to accentuate by resonance-chamber effect, certain of the sound frequencies that said device is capable of reproducing, said cabinet being substantially open in the rear, said baffle being located within said cabinet and in spaced relationship with certain of the walls of said cabinet so that said tendency to accentuate is nullified.

1,902,610. WINDSHIELD WIPER. PETER F. BERRY, Detroit, Mich. Filed July 6, 1931. Serial No. 548,919. 6 Claims. (Cl. 15—253.)



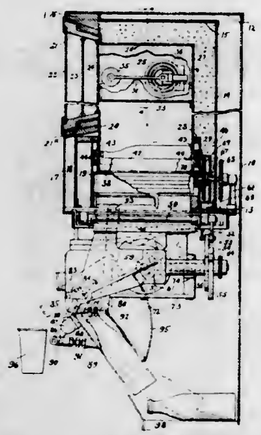
1. In a windshield wiper, the combination with a windshield, of a pair of wiper arms reciprocatory respectively between the median vertical line of said shield and its lateral margins, a threaded shaft extending across said shield, an electric motor driving said shaft, a pair of nuts threaded upon and reciprocatory by said shaft respectively at each side of the vertical median line of the shield, means attaching each of said wiper arms to one of said nuts, a reversing switch controlling said motor, positioned adjacent to the mid portion of said shaft, and comprising a single control element directly projecting from such switch substantially toward said shaft, and means carried by each of said nuts engageable with said control element in substantially identical inner limiting positions of said nuts to reverse the motor.

1,902,611. CARRIER FOR CABLE AND WIRE REELS. EARL P. BLACKMAN and LEON D. BLACKMAN, Battle Creek, Mich.; said Earl P. Blackman assignor to said Leon D. Blackman. Filed Oct. 16, 1931. Serial No. 569,300. 6 Claims. (Cl. 242—54.)



1. In a reel or spool carrier, oppositely disposed parallel narrow rectangular side pieces adapted to seat on their lower edges, said pieces sloping downwardly and outwardly from their upper narrow edges, a tramway mounted upon said sloping portions, a flanged ended roller journalled to the rear and in close proximity to the upper rear edge of said tramway, a secondary flanged ended roller journalled in spaced parallel arrangement to said first named roller, in said side pieces, and ball bearing castors longitudinally adjustable between said rollers on the inner side faces of said side pieces above the axles of said rollers.

1,902,612. VENDING MACHINE. CARL W. BLOSSOM, Cleveland, and WILLIAM H. STAPLES, Cleveland Heights, Ohio. Filed May 31, 1930. Serial No. 457,726. 8 Claims. (Cl. 225—21.)



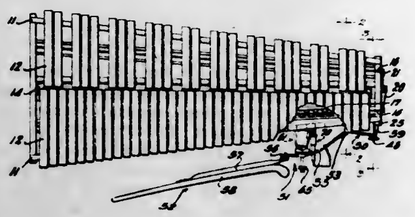
1. A vending apparatus comprising means adapted to contain a plurality of capped bottles filled with liquid, and means automatically operable upon the insertion into the apparatus of a suitable medium, such as a coin, token, or the like, for decapping one of the bottles and emptying the contents thereof into a suitable container.

1,902,613. FUSE. GUSTAV BLUMBERG, Berlin-Spandau, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk, Siemensstadt, near Berlin, Germany. Filed Apr. 28, 1930, Serial No. 447,847, and in Germany July 22, 1929. 7 Claims. (Cl. 200—131.)



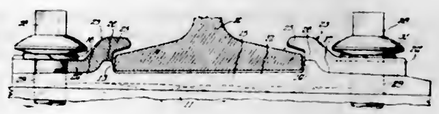
6. In an electric fuse, a transparent tube, electrodes at each end thereof, a fusible metallic coating deposited on the inner surface of said tube in the form of a ring, said metallic coating rendering the tube opaque as long as the coating is intact, and transparent when the fuse is blown by an excessive current extending between said electrodes.

1,902,614. CONTROL MECHANISM FOR VIBRA HARPS. HARRY A. BOWER, Los Angeles, Calif. Filed Oct. 1, 1931. Serial No. 566,296. 13 Claims. (Cl. 84—410.)



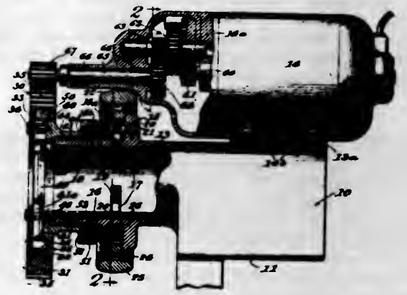
1. A musical instrument having a percussion means to produce musical tones of different pitches, a tubular resonator to respond to each different tone, a vibrator for each resonator, a driving means to operate said vibrators, a setting means to initially set the driving means to operate the vibrators at a certain predetermined period of vibration, and a control means operable by the body of the player of the instrument to increase the rate of drive to decrease the period of vibration.

1,902,615. RAIL SUPPORT AND FASTENING MEANS. WILLIAM S. BOYCE, Chicago, Ill. Filed Oct. 13, 1930. Serial No. 488,237. 10 Claims. (Cl. 238—338.)



1. In combination, a tie plate having a rail seat portion, end portions projecting from the opposite sides of said rail seat portion, and a rail-abutting shoulder at one side of said rail seat, a rail seated on said rail seat, and a fastening clip seated on the end portion of the tie plate outside of said rail-abutting shoulder and provided with a shoulder portion constituting an extension of said tie plate shoulder, and a lip portion overlying the base flange of the rail in spaced relation thereto.

1,902,616. PORTABLE PIPE CUTTER. ALPHONSE O. BRUNGARDT, Scituate, FRENCH H. MOREHEAD, Brookline, and JAMES W. MORRISSEY, Medford, Mass. Filed June 27, 1930. Serial No. 464,222. 13 Claims. (Cl. 81—190.)



1. A hand portable, power-operated pipe cutting device adapted to cut and sever pipe of various sizes and diameters, comprising a rotatable head, cutting and centering members carried by said head, cam means forming a part of said head and adapted to engage said cutting and centering members to propel them inward simultaneously and progressively toward the center of the pipe when the head is revolved, means for gripping a pipe and supporting it centrally within the rotatable head, and an electric motor forming a fixed part of said device for rotating one of said head members to first cause movement of the cutting and centering members by the cam means into engagement with the pipe and then automatically to rotate said head members as a unit to cut and sever the pipe.

1,902,617. HIGH-VOLTAGE BUSHING DEVICE. GORDON A. BURR, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 6, 1929. Serial No. 337,884. 1 Claim. (Cl. 173—318.)

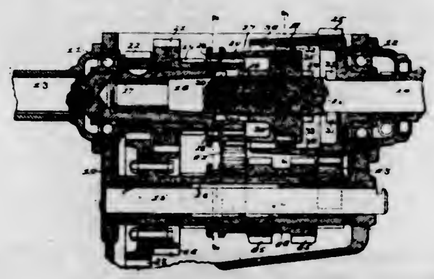
The combination with a condenser bushing including conducting cylinders of different lengths, and a dielectric

tube enclosing a portion thereof, of a tap lead extending from an intermediate conducting cylinder adjacent to an end thereof at a position between the ends of the tube



and along a portion of a shorter outer conducting cylinder of the bushing in insulated relation thereto within the tube to a position beyond one end of the tube.

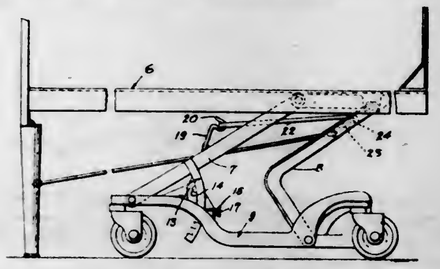
1,902,618. TRANSMISSION MECHANISM. EVERETT R. BURTNETT, Pasadena, Calif. Filed Jan. 14, 1931. Serial No. 508,601. 20 Claims. (Cl. 74—57.)



18. In transmission mechanism, the combination of a drive shaft, a driven shaft in alignment with said drive shaft, a device operating to drive said driven shaft in one direction and permit over-run of said driven shaft in the same direction under momentum of the latter, and means for driving said driven shaft from said drive shaft through the medium of said device at a different speed than said drive shaft including a gear train, the driven gear element of said gear train being in encircling and rotatable relative position to said drive shaft.

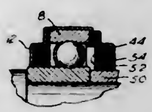
1,902,619. COUNTERBALANCING MEANS FOR FOLDABLE BEDS. GORDON F. CANE, San Francisco, Calif., assignor, by mesne assignments, to Thorn Thompson, San Francisco, Calif. Filed July 23, 1929. Serial No. 380,320. 5 Claims. (Cl. 5—164.)

1. In a folding bed, a rollabout truck, an upendable bed frame, interconnecting means between the frame and truck whereby the frame may be swung on the truck from vertical to horizontal position and vice versa, a helical spring mounted on said truck and arranged with the ends thereof extended at substantially right angles from the longitudinal axis of the spring, means connecting one of said spring ends to said first named means, and a member slidably and adjustably carried by said truck and connected to the other end of said spring whereby



upon displacement of said member relative to said truck the torsional twist exerted by said spring may be adjustably varied.

1,902,620. BEARING AND SEAL THEREFOR. LELAND D. COBB, Bristol, Conn., assignor to The New Departure Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Aug. 25, 1930. Serial No. 477,589. 11 Claims. (Cl. 308—187.)



1. In a unit-handling antifriction bearing and seal, an inner race ring, an outer race ring, a series of rolling elements between the race rings, and a closure plate detachably carried by the bearing to close the space between the race rings, said plate comprising a circular body portion extending alongside the end of the bearing, a web bent inwardly from the outer edge of the body portion and abutting against the end of the bearing to hold the body portion spaced therefrom, and means for securing the web to one of the race rings; substantially as described.

1,902,621. ZINC COATED ARTICLE. SIDNEY H. DAVIS and CARL O. ANDERSON, Baxter Springs, Kans., WILLIAM N. SMITH, Platteville, Wis., and HERBERT R. HANLEY, Rolla, Mo., assignors to The Century Zinc Company, a Corporation of Ohio. Filed Nov. 2, 1928. Serial No. 316,875. 3 Claims. (Cl. 29—181.)

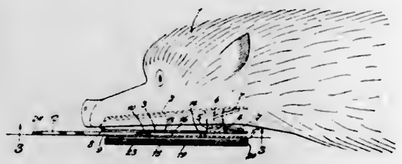


1. As a new product of manufacture, a ferrous article having a plurality of irregularly shaped minute surface depressions, bodies of spongy lead disposed in and partially filling said depressions, and a coating of substantially pure zinc intimately associated with all of said bodies of lead and contacting said article itself in the spaces between adjacent bodies.

1,902,622. HANGER FOR FUR SCARFS AND THE LIKE. GOLIAT DAVISON, St. Louis, Mo., assignor of one-third to John Speroulias and one-third to George Abatgis, St. Louis, Mo. Filed May 22, 1931. Serial No. 539,156. 11 Claims. (Cl. 223—68.)

1. A device of the character described comprising a supporting pivot, means holding said pivot in connection

with an article to be suspended, a hanger member having one end pivoted on for swinging movements about said pivot and having a hook on the opposite end, and a wall



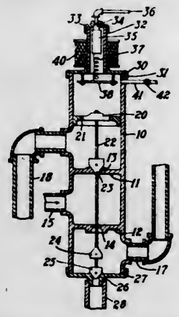
attached to said pivot and arranged to cover said hanger member when said hanger member is in an unoperated position and to expose said hook when said hanger is in its operated position.

1,902,623. FREEWHEELING ATTACHMENT. JAMES DORST and PHILIP BACHHUBER, Mayville, Wis. Filed May 2, 1931. Serial No. 534,628. 9 Claims. (Cl 192—.01.)



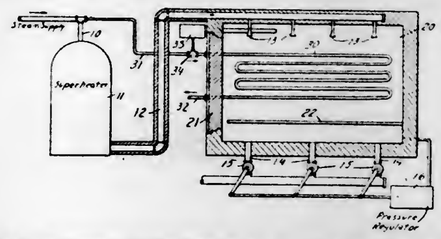
1. A free wheeling device of the character described, comprising the combination with a motor vehicle and an engine therefor, of a resilient diaphragm supported within the vehicle, lever means connecting the diaphragm with the clutch pedal for rocking of the pedal upon movement of the diaphragm, said diaphragm normally maintaining said lever means ineffective and suction means connecting the diaphragm and the vehicle engine whereby to move the diaphragm.

1,902,624. VALVE MECHANISM. ANDREW J. DOTTERWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed July 1, 1927. Serial No. 202,842. 8 Claims. (Cl. 137—139.)



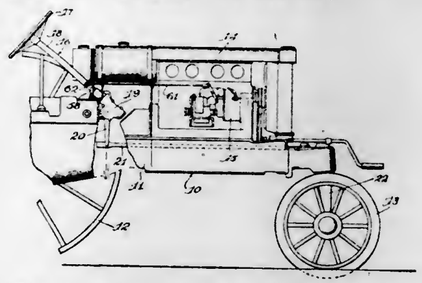
1. In a flow control system, a valve chamber having divergent outlet passages and having a common inlet passage, a single valve controlling the flow through said divergent outlet passages, a leaky piston connected to said valve, means independent of said valve for causing flow through said inlet passage around said leaky piston to close one of said outlet passages and said valve being responsive to the flow from said inlet passage against said valve for causing the flow to the other said outlet passages.

1,902,625. METHOD AND APPARATUS FOR STERILIZING. ARTHUR L. DUNHAM, Tompkinsville, N. Y. Filed June 22, 1929. Serial No. 372,848. 10 Claims. (Cl. 167—3.)



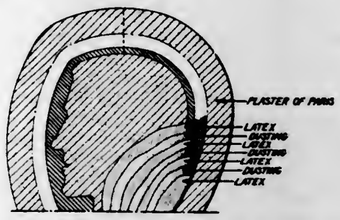
5. A chamber provided with an opening for the introduction of an article to be sterilized, means for closing the opening, means for raising the temperature within the chamber, a source of superheated steam, and means for passing a current of the superheated steam into and out of the chamber.

1,902,626. DEVICE FOR SYNCHRONIZING THE SPEED OF A VEHICLE WITH THE STEERING MECHANISM THEREOF. OSCAR E. EGGEN, Charles City, Iowa, assignor to Oliver Farm Equipment Company, a Corporation of Delaware. Filed July 6, 1931. Serial No. 548,754. 9 Claims. (Cl. 180—82.)



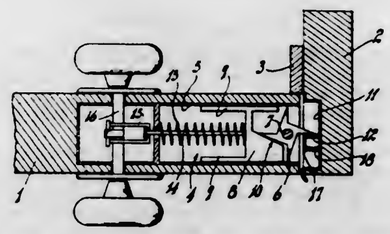
1. The combination with a motor vehicle, of an internal combustion engine for propelling said vehicle, traction elements operatively driven by said engine, steering means for steering said vehicle, a governor for controlling the speed of said engine, and means for synchronizing said steering means with said governor for controlling the speed of said vehicle when making a turn.

1,902,627. MOLD AND METHOD OF MAKING THE SAME. PAUL ELBOGEN, Mount Kisco, N. Y., assignor of one-third to George D. Kratz, Scarsdale, N. Y. Filed July 5, 1932. Serial No. 620,797. 10 Claims. (Cl. 18—47.)



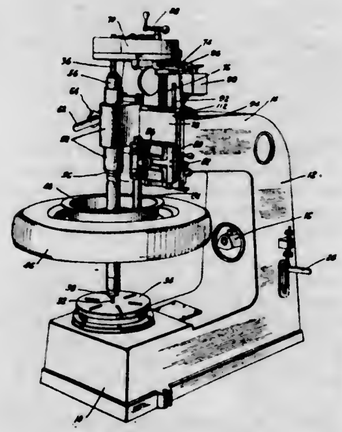
1. A mold for the casting of articles having an inner matrix portion and outerly backing portions, said inner matrix being formed principally of rubber derived from rubber latex and the more outerly portions of the mold comprising laminated layers of gypsum alternating with rubber.

1,902,628. DOORLOCK. WALDEMAR A. ENDTER, Long Beach, Calif. Filed Sept. 13, 1930. Serial No. 481,707. 6 Claims. (Cl. 292—213.)



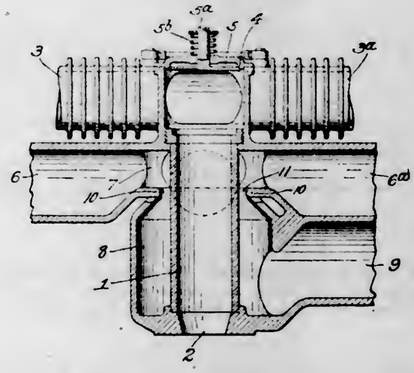
2. In a latch construction, a rotary bolt capable of free rotation in all positions when released, including a plurality of heads, any one of which is adapted to engage a keeper, means engageable with any one of the heads, said means including means for imposing a continuous rotation of the bolt in a latching direction when the bolt is in keeper engaging position.

1,902,629. DRUM TRUING MACHINE. WILLIAM F. EVANS, South Bend, Ind., assignor, by mesne assignments, to Bendix Aviation Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 8, 1929. Serial No. 353,279. 11 Claims. (Cl. 51—50.)



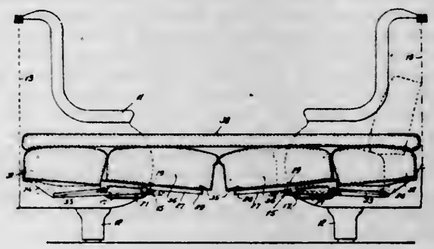
1. A machine comprising, in combination, a motor-driven wheel support, a spindle in alinement with said support and driven thereby through the wheel, a tool, and tool-traversing means driven by said spindle, together with adjusting means for shifting the tool at right angles to its direction of traverse.

1,902,630. CERAMIC CATALYZER. ALICE MAUDE FAIRCHILD, Chicago, Ill., assignor, by mesne assignments, to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1929. Serial No. 376,341. 10 Claims. (Cl. 23—288.)



1. A catalytic member for use in treating hydrocarbons which includes a ceramic body structure containing catalytic zirconium and platinum halogen compounds.

1,902,631. SEAT. GERHARD FLINTERMANN, West Orange, N. J. Filed May 8, 1929. Serial No. 361,405. 8 Claims. (Cl. 155—6.)

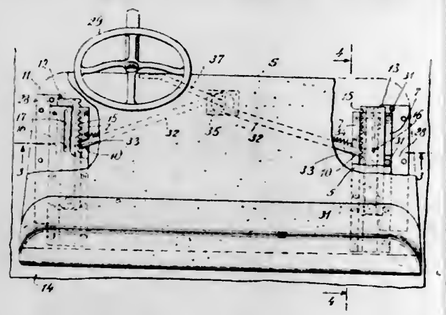


1. A seat comprising a frame, a rigid support therefor, resilient supporting means interposed between said frame and said rigid support and connecting the same, a cushion support and horizontally extending means for slidably connecting said cushion support to said frame whereby said cushion support may be moved in a direction from front to rear of the seat to change the horizontal relationship between the cushion support and the resilient means.

1,902,632. ADJUSTABLY SUPPORTED SEAT. GERHARD FLINTERMANN, West Orange, N. J. Filed Apr. 25, 1931. Serial No. 532,827. 11 Claims. (Cl. 155—14.)

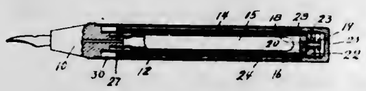
1. In a device of the character described, two relatively movable members comprising a fixed support and a seat, a pair of spaced substantially parallel guides both extending in a single substantially horizontal plane from front to rear of said seat and fixed to one of said members, a separate slide movably carried in each of said guides,

anti-friction means disposed between one only of said guides and its corresponding slide and resilient means interposed in supporting and connecting relationship be-



tween each of said slides and the other of said members whereby said two slides may move relative to each other to a limited extent as said slides move in said guides.

1,902,633. FOUNTAIN PEN. WILLIAM J. FOLEY, West Somerville, Mass. Filed Oct. 24, 1931. Serial No. 570,817. 2 Claims. (Cl. 120—47.)



1. In a self-filling fountain pen having a collapsible ink sack, a tube enclosing said sack and having an air tight connection at one end with the mouth thereof, a piston disk mounted on the opposite end of said tube, arranged for limited movement axially thereof, and having a constantly open air passage therethrough to the interior of said tube, a tubular plunger closed at one end and telescopically fitted on said tube at its opposite end, with its inner surface having an air tight connection with the periphery of said disk in all relative positions thereof, said disk being inwardly movable by the frictional engagement of the plunger therewith when moved to force air into the tube thru said passage, and said tube having a vent passage arranged to be obstructed by said piston disk when moved inward and to be fully opened when the disk is moved outward.

1,902,634. DROP SEAT PAJAMA. NATHAN A. GROSS, Fords, N. J., assignor to William Gross, Fords, N. J. Filed Sept. 26, 1931. Serial No. 565,332. 2 Claims. (Cl. 2—83.)

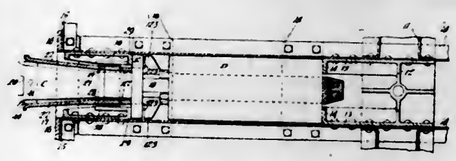


1. In a pajama, material in the form of pajamas open at the shoulders and having shoulder straps attached upon the rear and extendable across to the front for closing the opening, said material being open at the seat portion and provided with an upwardly extended flap for closing this latter mentioned opening, said flap having extensions to the front of the garment, said shoulder straps extending inside and down the front of the garment to the vicinity of the flap extensions, means for detachably securing the upper portion of the front of the garment on to the shoulder straps, and means for detachably securing the free ends of the shoulder straps with the flap extensions, comprising buttons upon the ends of the shoulder straps engageable through button holes formed in the front of the garment and button holes formed in the flap extensions.

1,902,635. GREASE AND METHOD OF MAKING THE SAME. FRANK C. GEBHARDT, Erie, Pa., assignor to United Oil Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 6, 1927. Serial No. 197,003. 13 Claims. (Cl. 87—9.)

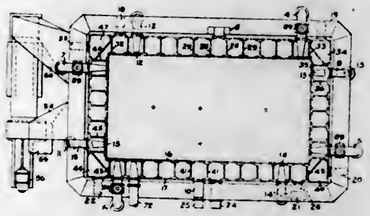
1. The method of forming grease which consists in mixing and heating mineral oil of a viscosity of not less than ninety seconds Saybolt at 212° F. and an aluminum salt of fatty acid of general formula $C_nH_{2n}O_2$ when n is not less than fifteen, such fatty acid salt being from 15% to 45% by weight of the total mass to a temperature from 160° to 260° F., and chilling the mass rapidly enough to prevent reversion.

1,902,636. RAILWAY DRAFT RIGGING. WILLIAM A. GRIGER, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 13, 1928. Serial No. 254,010. 3 Claims. (Cl. 213—61.)



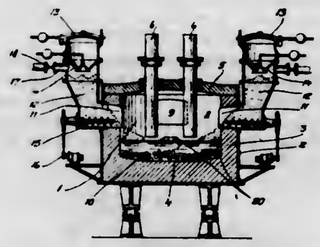
2. In a draft rigging, the combination with draft sills; of front and rear stop means; a shock absorbing device of relatively long compression stroke; a yoke; and means limiting the draft movement of said yoke to less than the compression stroke of said device, said means including portions formed integrally with said yoke and engaging the front stop means of the sills.

1,902,637. APPARATUS FOR TREATING OBJECTS. JOHN H. GROW, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,530. 16 Claims. (Cl. 34—30.)



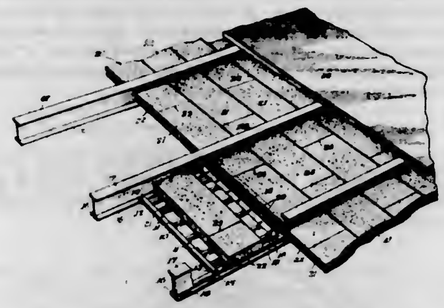
1. In combination, a tank, a jacket spaced from said tank, partitions dividing the space between said tank and said jacket into a plurality of intercommunicated chambers, an inlet header surrounding said jacket and conduits connecting said header with certain of said chambers respectively.

1,902,638. METHOD OF MELTING METALS IN ELECTRIC FURNACES. EMIL GUSTAF TORVALD GUSTAFSSON, Stockholm, Sweden. Filed Apr. 28, 1930, Serial No. 448,185, and in Sweden May 7, 1929. 9 Claims. (Cl. 75—22.5.)



1. A method of melting metals and metal alloys containing metal of the iron group, consisting in preparing a slag bath in a closed electric furnace having a downwardly extending electrode that can be raised and lowered, melting the metal practically completely covered by said slag, simultaneously reducing and melting in the furnace a charge containing oxide ore and reducing agent for producing similar metal as that to be melted with the charge floating on the slag, and adapting the heat development in the furnace by arc and by electric resistance in the slag bath so that the additional heat required for melting the solid metal is developed in the slag.

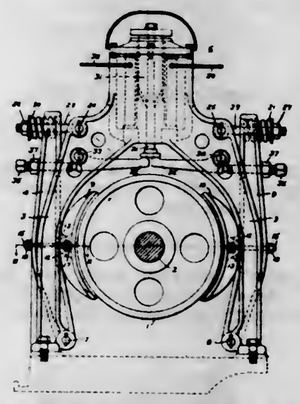
1,902,639. BUILDING INSULATION AND METHOD OF APPLYING SAME. ROBERT G. HALLIWELL, Wilmette, Ill., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed July 30, 1928, Serial No. 296,207. Renewed Jan. 24, 1933. 7 Claims. (Cl. 108—65.)



1. The method of applying building insulation which consists in first arranging a plurality of blocks of insulating material end to end; applying a perforated plate to the sides of said blocks; sticking pins through said plate and partially into said blocks; partially withdrawing said plate over said pins; applying other blocks to the ends of said pins; and then forcing said sets of blocks together.

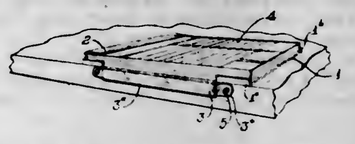
3. A building insulation comprising elevated spaced supporting members, there being open space between and below said members; a plurality of insulating blocks of relatively soft penetratable material extending between said supporting members; a relatively thin, flat reinforcing bar imprisoned between and contacting with said blocks and spanning the joints between them; and penetrating members securing said bar to said blocks on opposite sides of the joints between the blocks whereby said bar supports the weight of said blocks and said blocks reinforce said bar against lateral flexing.

1,902,640. BRAKE. GUSTAF A. HALVARSON, Verona, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 12, 1928. Serial No. 269,535. 4 Claims. (Cl. 188—171.)



1. A brake comprising a brake drum, a frame associated with said drum, a pair of brake levers pivotally mounted at their lower ends, on said frame, a pair of brake shoes disposed on the inner central portions of said levers for engaging said drum, a plurality of springs independently mounted on said frame and engaging the upper ends of said levers for actuating said levers independently into braking position, and releasing means positioned for engaging said brake levers between the brake shoes and the springs.

1,902,641. RESTAURANT CHECK HOLDER. EVANGEL A. HAVELES, Los Angeles, Calif. Filed Feb. 3, 1930. Serial No. 425,697. 7 Claims. (Cl. 281—15.)



2. In a restaurant check holder, the combination with a counter or table having a slot therein adjacent its upper surface, and a check holder comprising a plate adapted to rest upon the upper surface of the counter or table and having a downwardly extending flange extending into the slot for removably locating the holder on the top of the counter or table.

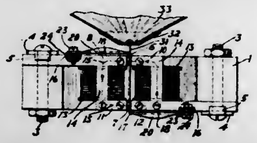
1,902,642. METHOD OF COATING AND COATING COMPOSITION. CHARLES G. HARFORD, Quincy, Mass., assignor to The Philadelphia & Reading Coal & Iron Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 12, 1928. Serial No. 325,653. 2 Claims. (Cl. 134—15.)

1. A coating composition for spraying coal, consisting of finely divided colored cellulose pulp of sprayable fineness distributed through an aqueous suspension of a water repellent substance.

1,902,643. ELECTRICAL TRANSLATING DEVICE. JUNIEN S. HIGH, Oaklyn Manor, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1930. Serial No. 492,215. 8 Claims. (Cl. 179—115.5.)

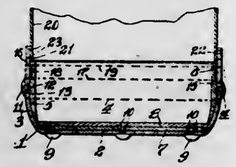
8. In a loud speaker actuating motor, a magnetic circuit defining an air gap, an armature, only a portion of which

lies in said air gap, means for generating a current in that portion of said armature lying outside of said air



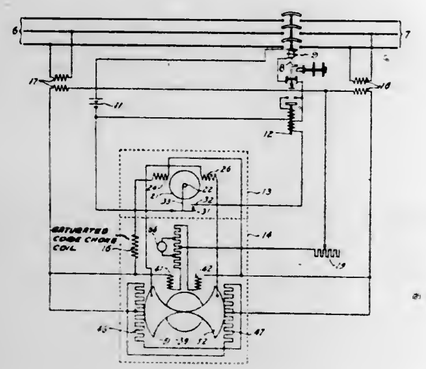
gap but parallel to the portion in said air-gap and means for directing said current into that portion of the armature located in the air gap.

1,902,644. BOWL SHAPED BASE FOR GOLF BAGS. JOHN K. HOTZE, St. Louis, Mo. Filed Dec. 23, 1929, Serial No. 415,972. 15 Claims. (Cl. 150—1.5.)



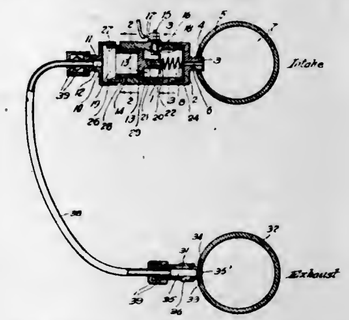
1. A golf bag base comprising a material layer formed into a bowl like shape having an annular connector secured interiorly of the upturned wall of the base, and a reinforcing ring secured on the outside of the upturned wall of the base having a part engaging the connector.

1,902,645. AUTOMATIC PARALLEL CONNECTING SYSTEM. ROBERT KELLER, Ennetbaden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint Stock Company of Switzerland. Filed Feb. 18, 1931, Serial No. 516,655, and in Germany Feb. 27, 1930. 6 Claims. (Cl. 171—118.)



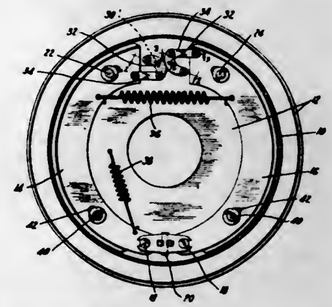
1. In a system for automatically connecting alternating current systems when synchronized, a plurality of alternating current systems to be connected, a circuit breaker for connecting said systems, a coil for electromagnetically causing closing of said circuit breaker, a source of current applicable to said coil to cause energization thereof, a relay for applying said source of current to said coil, a relay responsive to the frequency relations of said systems to cause operation of said first relay, and comprising a disc and two electromagnets, a regulator responsive to the phase relations of said systems, a voltage transformer connected with each of said systems, and a choke coil, one of the electro-magnets being supplied from said transformers through said regulator and the other of the electro-magnets being supplied from said transformer through said choke coil.

1,902,646. AUTOMATIC STARTING SYSTEM FOR INTERNAL COMBUSTION ENGINES. ARTHUR S. KNAPP, Glendale, Calif., assignor, by direct and mesne assignments, to Automatic Safe-Start Company, a Corporation of California. Filed July 23, 1928. Serial No. 294,834. 3 Claims. (Cl. 290—38.)



1. An apparatus for starting internal combustion engines comprising, in combination with an internal combustion engine and with a starting motor therefor and means for automatically effecting operative connection of said motor to said engine to start the same and automatically releasing such connection upon starting the engine, an electric circuit including said starting motor, a switch included in said circuit, means for causing said switch to be opened upon starting of the engine, solely by the expansive effect of the exhaust gases of said engine, and means for causing said switch to be closed upon stopping of the engine, by the combined action of the decrease in intake suction and the decrease in expansive effect of the exhaust gases.

1,902,647. BRAKE. LUDGER E. LA BRIE, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 30, 1929. Serial No. 336,130. 1 Claim. (Cl. 188—78.)

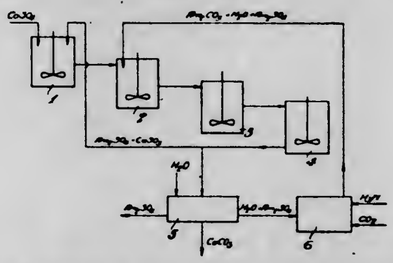


A brake having an operating shaft, a crosshead on the shaft, thrust members pivoted to opposite ends of the crosshead on opposite sides of the axis of the shaft and rolling against each other, approximately at said axis and thrust links pivoted to the ends of said thrust members and constructed and arranged for operative engagement with the friction means of a brake.

1,902,648. METHOD OF LEACHING RAW PHOSPHATE. MARKUS LARSSON, Berlin Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Filed May 25, 1929, Serial No. 366,078, and in Sweden June 5, 1928. 7 Claims. (Cl. 23—165.)

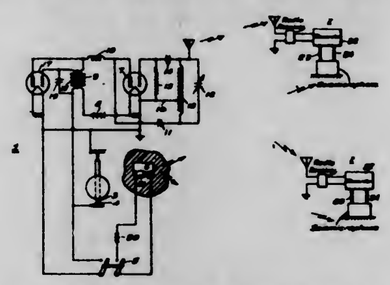
1. A method of treating phosphate rock, which comprises reacting upon the phosphate rock with chemical reagents under such condition of concentration that a solution containing an essential part of the phosphoric acid and a precipitate of calcium sulphate are produced, subjecting the reaction mixture to a temperature of at least 80° C., thus bringing the calcium sulphate to crystallise substantially as semihydrate in the solution, then causing the semihydrate to recrystallise into dihydrate by lowering the temperature of the solution, and finally separating said dihydrate from the solution produced.

1,902,649. METHOD OF PRODUCING AMMONIUM SULPHATE. MARKUS LARSSON, Berlin, Germany, assignor to Kunstdünger-Patent-Verwertungs-Aktiengesellschaft, Glarus, Switzerland. Filed Oct. 25, 1930, Serial No. 491,104, and in Sweden Nov. 9, 1929. 2 Claims. (Cl. 23—119.)



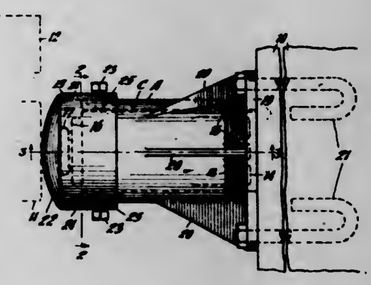
1. In a method of continuously producing ammonium sulphate in which calcium sulphate is reacted upon by means of ammonium carbonate, the process which consists in forming a suspension of the calcium sulphate in a slurry of finished reaction products consisting chiefly of ammonium sulphate solution and precipitated calcium carbonate, adding a solution of ammonium carbonate to said slurry in sufficient quantity to react with calcium sulphate, returning a portion of the reaction products to the process as suspending means for the calcium sulphate in the continuous performance of the process, and separating the ammonium sulphate solution from the insoluble matters of the reaction products not returned.

1,902,650. REMOTE CONTROL SYSTEM FOR OSCILLOGRAPHS. JOSEPH W. LEGG, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 13, 1928. Serial No. 305,858. 10 Claims. (Cl. 234—1.5.)



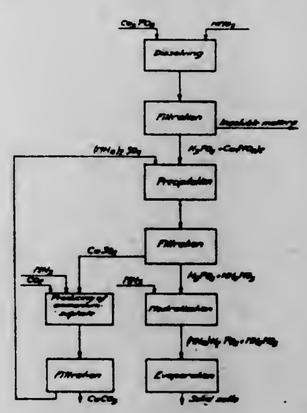
1. A system comprising transmitter means for transmitting a series of signals which occur at predetermined intervals and receiver means for recording them on a receiving surface, said two means being widely separated geographically, means for transmitting mechanical vibrations through the earth and means for recording them on said receiving surface, and means for altering the characteristic of said series in response to the initiation of said mechanical vibrations.

1,902,651. BUMPER. GOODRICH Q. LEWIS, Wheaton, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 22, 1931. Serial No. 546,014. 5 Claims. (Cl. 104—254.)



1. In a bumper including a supporting post, the combination with a casing fixed to said post, said casing being open at the forward end; of a buffing cap closing the open end of the casing and movable lengthwise of the same; and a removable friction shock absorbing mechanism housed within the casing, said friction shock absorbing mechanism including a friction shell and cooperating spring resisted friction means movable lengthwise of the shell, said friction means being engaged and actuated by the buffing cap and said shell being held against movement outwardly and inwardly of the casing.

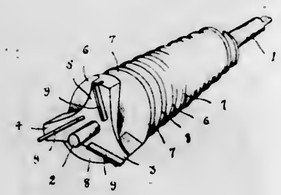
1,902,652. METHOD OF PRODUCING MIXED FERTILIZERS. FRANS GEORG LILJENROTH, Stockholm, Sweden. Filed Dec. 10, 1927, Serial No. 239,259, and in Sweden Dec. 14, 1926. 5 Claims. (Cl. 71—7.)



1. Method of producing mixed fertilizers, which comprises leaching crude calcium phosphate with a solution containing a sulphate the base of which forms a soluble salt with phosphoric acid and an acid the calcium salt

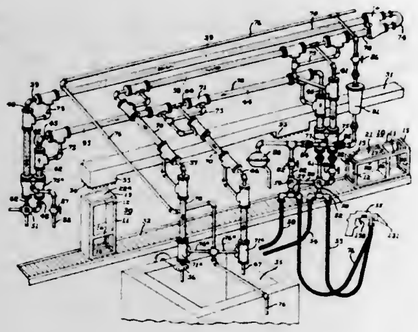
of which is soluble, said acid being present in deficit in relation to the content of lime in the crude phosphate, separating the insoluble matters from the solution, neutralising the latter, and finally recovering the soluble salts from the neutralised solution by evaporation.

1,902,653. MEAT CHOPPER. CHARLES F. LINDGREN, Duluth, Minn. Filed Dec. 1, 1930. Serial No. 499,137. 2 Claims. (Cl. 146—189.)



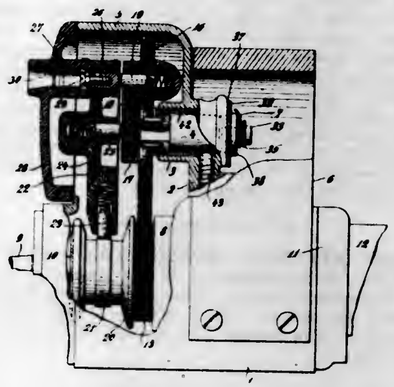
2. A worm of the class described comprising a plurality of cutting blades forming independent passages therebetween, each blade terminating at one end in a flat faced arm substantially at right agles to the axis of the worm, and a cutting knife removably disposed within the surface of each face and projecting substantially axially therefrom.

1,902,654. COATING PROCESS AND APPARATUS. CECIL A. MANN, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,358. 9 Claims. (Cl. 91—44.)



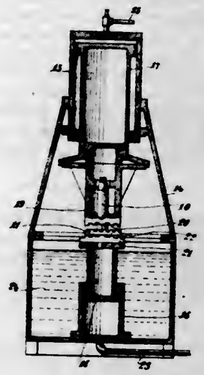
2. An apparatus for the manufacture of refrigerator cabinets or the like comprising a movable track for supporting and moving the unfinished cabinets, a system of conduits for continuously circulating hot bituminous material, a plurality of individually operable flow control nozzles on said conduits for selectively applying bituminous material to said cabinets at various places on said track, a flexible inlet conduit connected to each nozzle, each of said conduits being connected to a common point of supply from the conduit system, and a flexible return conduit connected to each nozzle, each of said return conduits communicating with a common point of return to the conduit system.

1,902,655. MAGNETO TIMING INDICATOR. JOHN F. MARTIN, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed Sept. 26, 1931. Serial No. 565,295. 8 Claims. (Cl. 171—209.)



1. In a magneto having encased movable parts and means for continuously moving same, the combination of a continuously movable member having an enclosed portion and another portion projecting constantly into view and an element secured to said member to indicate the position of said parts.

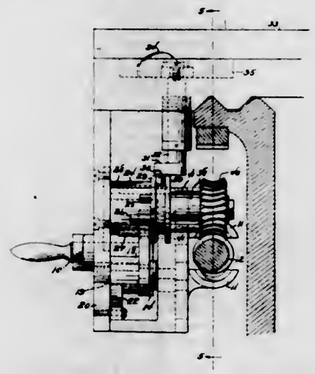
1,902,656. METHOD OF MANUFACTURING GEARING. JOSEPH L. MATTHEWS, New Brunswick, N. J., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Original application filed Jan. 7, 1931, Serial No. 507,086. Divided and this application filed Aug. 11, 1931. Serial No. 556,370. 4 Claims. (Cl. 29—159.2.)



1. The method of forming gear sectors comprising machining a sector with gear teeth lying at angles to the axis of the sector and subsequently forming certain of the teeth in different planes.

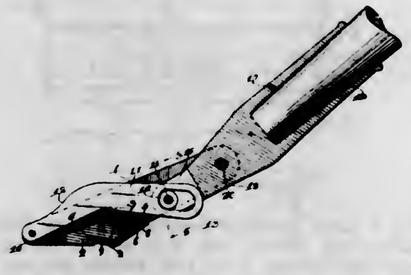
1,902,657. THREAD CUTTING ATTACHMENT FOR LATHES. GEORGE E. MERWIN and FRANK W. SHOEMAKER, Port Arthur, Tex. Filed Nov. 23, 1931. Serial No. 576,929. 5 Claims. (Cl. 82—83.)

1. In combination with the carriage and lead screw of a lathe, half nuts, means for engaging the half nuts with the lead screw and disengaging them therefrom, a latch for the last said means, a barrel provided with peripheral ribs constituting latch releasing elements which are of different lengths axially, means for shifting the barrel axially, and means for driving the barrel from the lead screw, said means comprising a worm wheel meshing with the lead screw and having dowel pins slidably engaged with said barrel.



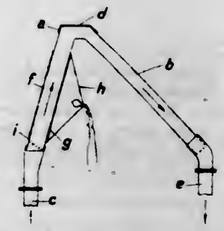
5. In combination with the carriage and lead screw of a lathe, half nuts, means for engaging the half nuts with the lead screw and disengaging them therefrom, a latch for the last named means, a barrel provided with peripheral ribs constituting latch releasing elements which are of different lengths axially, means for driving the barrel from the lead screw, a lever disposed on top of the carriage, a shaft extending through the carriage and connected with said lever, a crank carried at the lower end of the shaft, the barrel having spaced flanges, and a wrist pin carried by the crank disposed between said flanges to impart axial movement to the barrel upon swinging movement being imparted to said lever, the lever being disposed in a segmental clearance space in said carriage, the latter being formed with spaced seats to be engaged by a lever carried latching means in different positions of adjustment of the lever.

1,902,658. CAR MOVER DEVICE. OSCAR W. MILLER, Appleton, Wis. Filed Jan. 10, 1931. Serial No. 507,889. 1 Claim. (Cl. 254—38.)



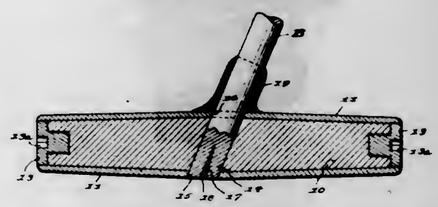
A car mover comprising a shoe having a fulcrum on its lower face at a point substantially equally distant from its ends, said shoe being provided with a longitudinally extending slot from one end thereof to the other, an operating lever having its forward end received in the slot and pivotally connected to the rear end of the shoe, the forward end of the lever in advance of the pivot being provided with a longitudinal guide slot, a lift link of substantially bell crank shape received within said slot, means pivotally connecting the forward end of the lift link to the forward end of the shoe, the angle portion of the lift link being arranged substantially above the fulcrum of the shoe and opposite thereto, the rear end of the lift link being provided with a closed slot received within the slotted end of the lever and closely engaged by the side walls of the slot of said lever, and a transversely extending pin carried by the slotted portion of the lever having an antifriction roller received within the closed slot of the lift link.

1,902,659. APPARATUS FOR THE CONTINUOUS CONTROL OF THE PROPERTIES OF SOLID BODIES DISPERSED IN A LIQUID. HELLMUTH MÜLLER-CLEMM, Mannheim-Waldhof, Germany, assignor to The Firma Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Filed Oct. 6, 1930, Serial No. 486,852, and in Germany Feb. 3, 1930. 3 Claims. (Cl. 88—14.)



1. Apparatus for viewing the presence and nature of solid matter in suspension in a liquid in motion, the said apparatus comprising a vessel having its front and back walls spaced apart a distance less than the distance between its side walls and having an outlet at one end, a chamber having one of its ends in open communication with the other end of said vessel and having an inlet in its opposite end, the cross section of said chamber increasing from said inlet toward said vessel, a source of light disposed outside the vessel and sheets of transparent material forming the front and rear walls of said vessel and disposed opposite said source.

1,902,660. PONY POLO MALLET. HANS P. NELSON, Grantwood, N. J. Filed Aug. 22, 1931. Serial No. 558,813. 4 Claims. (Cl. 273—67.)

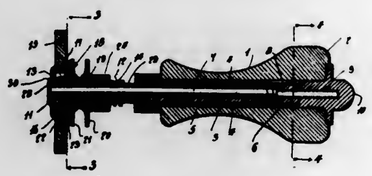


1. The herein described process of making a mallet which consists in treating a wooden core in heated oil to render the same impervious to moisture, affixing and shaping a prepared cylinder of celluloid about said core and finally affixing moisture-proof plugs to the ends of said core to seal the connection between said core, said cylinder of celluloid and said plugs.

1,902,661. GRINDING MACHINE. OSCAR W. NELSON, Portland, Oreg. Filed Nov. 6, 1930. Serial No. 493,879. 1 Claim. (Cl. 51—170.)

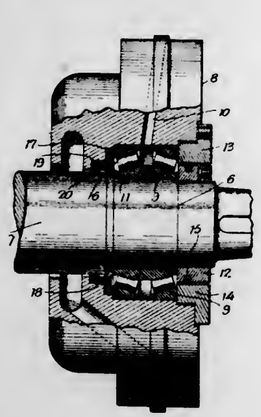
A portable grinding machine, comprising a shaft having a flanged head at one end, the other end of the shaft being

reduced and polygonal in cross section, a handle having a longitudinal bore therethrough, a sleeve secured in said bore and provided with a bore to receive the shaft, a threaded sleeve rotatably mounted on the shaft and having a flanged head engaging the head on the shaft, a grinding disk splined on the threaded sleeve and abutting the



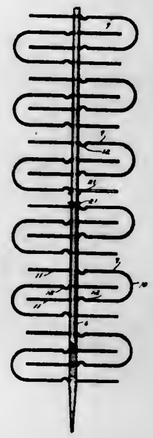
head thereon, a pulley loosely mounted on the sleeve, a friction washer secured to the pulley and engaging the grinding disk, and a jam nut threaded on the threaded sleeve and engaging the pulley to hold it for rotation with the grinding disk and threaded sleeve, said pulley being adapted to be geared to a motor shaft.

1,902,662. PACKING RING FOR SHAFT BEARINGS. ARTHUR F. PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 6, 1931, Serial No. 528,119. Renewed Dec. 12, 1932. 1 Claim. (Cl. 308—207.)



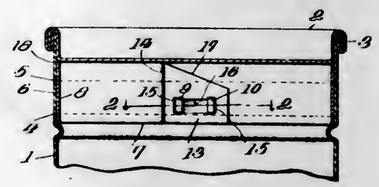
In combination, a shaft having progressive reduced diameter portions, a shaft bearing comprising an outer and an inner race member, a housing, a bushing screw-threaded into said housing and engaging the outer of said races, a grooved nut screw-threaded on the shaft wholly within said bushing and adjustably bearing against the inner race member of the bearing, an expansible packing ring located in said nut groove and tightly fitting against said bushing, a collar on the inner-most reduced diameter of the shaft and adjacent the inner side of the bearing races, an expansible packing ring in the housing immediately adjacent said collar, and a contractile packing ring on the shaft lying immediately against said expansible ring, said packing rings having intimate contact with each other, substantially as set forth.

1,902,663. TRELLIS, ARBOR, AND THE LIKE. HEMAN HENRY PHILLIPS, Charlemont, Mass. Filed May 23, 1931. Serial No. 509,598. 1 Claim. (Cl. 47—47.)



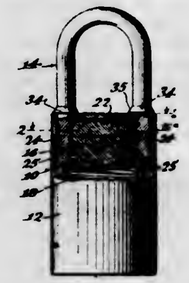
A device of the character described comprising a main body member of elongated form and having a plurality of aligned openings passing therethrough, and a plurality of resilient U-shaped members having their leg portions removably insertable thru said openings, and said members being retained in place by their own resiliency, the leg portions of each of said U-shaped members being formed intermediate their ends with opposed offset portions defining stops for engaging said main body member.

1,902,664. METAL CONTAINER. WILLIAM F. PUNTE, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 3, 1931. Serial No. 527,583. 2 Claims. (Cl. 220—54.)



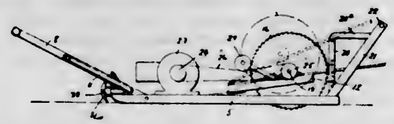
1. A metal container comprising a body portion, an end secured thereto, said body portion having spaced score lines forming a rip strip whereby the end may be released from the body of the container, and a collar inserted within said body and positioned so as to overlie the rip strip, one end of said collar having an offset portion overlying the other end of the collar, one end of said collar having an opening therethrough and the other end of said collar having a lug struck up from the metal forming an opening adjacent the lug, said lug extending through the opening in the other end of the collar and folded down against the face of the end of the collar and depressing a portion of said end into the opening formed by striking up the lug.

1,902,665. PADLOCK. FREDERICK E. REINHOLD, Los Angles, Calif. Filed June 6, 1932. Serial No. 615,570. 3 Claims. (Cl. 70—108.)



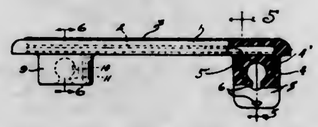
1. A padlock comprising a housing having a screw threaded bore therein, a bow shaped shackle threaded ends movably mounted in said housing, and a screw plug mounted in the housing bore and engaging the threads of the shackle to lock the same to the housing.

1,902,666. PORTABLE ICE SAW. THEODORE J. ROBBINS, New Egypt, N. J. Filed Mar. 10,1932. Serial No. 598,063. 2 Claims. (Cl. 262—20.)



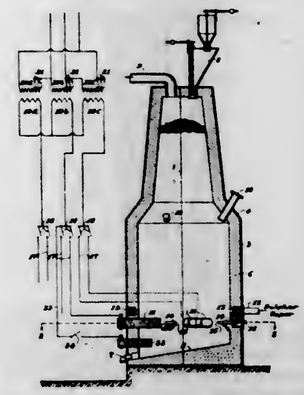
2. An ice saw comprising in combination a pair of spaced parallel runners, a bar supported on the runners adjacent the forward ends thereof, a scriber adjustably mounted on the bar laterally of said runners, a frame hinged at one end to said runners rearwardly of said bar, a shaft rotatably mounted on said frame, a cutter mounted on said shaft laterally of said frame and runners, driving means for said shaft, a standard rising from one of said runners rearwardly of said frame, a lever pivotally secured to said frame, and a vertical series of spaced elements on said standard and with which said lever is engageable for securing said frame at the desired angular adjustment relative to the plane of said runners.

1,902,667. ACCELERATOR PEDAL. RUFUS C. SANDERS, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 22, 1931. Serial No. 552,315. 7 Claims. (Cl. 74—81.)



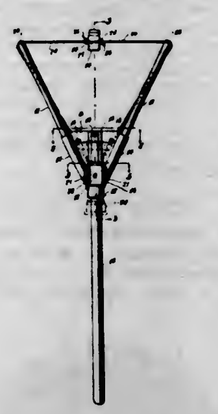
1. An accelerator pedal including a tread portion having rigid sheet-like elements protruding from one side thereof, a lug enveloping said protruding rigid elements comprising resilient material and having a pair of sockets therein between said elements, the entrances to said sockets being yieldably restricted by the resilient material of said lug, and a pair of members, each securable at one end to a supporting structure and each having a knob slightly larger than the relaxed dimensions of said sockets, said knobs being receivable in said sockets for tiltably supporting said pedal.

1,902,668. ELECTRIC FURNACE. CLARENCE C. SCHWEGLER, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 14, 1932. Serial No. 611,313. 13 Claims. (Cl. 13—23.)



1. In an electric furnace for the manufacture of carbon bisulphide, the combination of a chamber enclosed by walls of refractory heat-insulating material, a plurality of electrodes laterally inserted through the walls of said chamber, a source of electric current for said electrodes, switch means to control each electrode independently, a plurality of inlet ports for introducing sulphur vapor into said chamber, said ports being at a level not substantially below that of the electrodes, a header connecting said inlet ports for supplying sulphur vapor thereto, and valve means for independently controlling said inlet ports.

1,902,669. ARTICLE DELIVERY DEVICE. CHESTER G. SHEPHERD, Freeport, Ill. Filed Oct. 20, 1932. Serial No. 638,812. 3 Claims. (Cl. 258—3.)

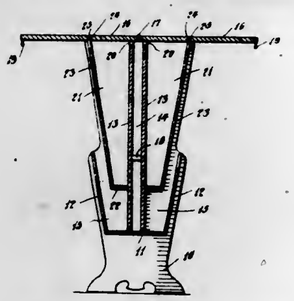


3. In an article delivery device, a staff, arms mounted on said staff arranged at an angle to said staff, a two-part clamping head having mating grooved recesses receiving and clamping said staff and arms in position, and means to hold an article between the ends of the angularly disposed arms.

1,902,670. COMBINED RACK AND UTILITY TABLE. ALYSON E. SMITH, Ogden, Utah. Filed Jan. 28, 1932. Serial No. 589,467. 4 Claims. (Cl. 45—116.)

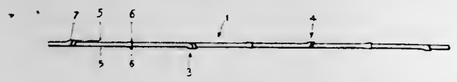
4. A device of the class described comprising end members, panels between the same having a space therebetween,

panels on opposite sides of the first mentioned panel and coacting therewith to form racks, a table top comprising flexibly connected sections, said top being normally disposed in said space, said top being disposable in extended



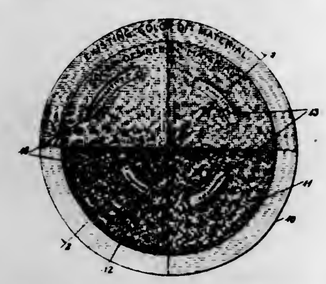
condition across the top of said panels for support thereon, and the second mentioned panel having interfitting engagement at the upper end thereon with said top, and said end members extending above the lower edge of the table top in its extended position.

1,902,671. SAW. WILLIAM H. SMOLA, Sr., Central City, Iowa. Filed May 25, 1932. Serial No. 613,497. 1 Claim. (Cl. 143—140.)



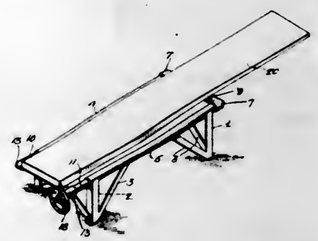
A saw consisting of a series of teeth, certain of which have their cutting edges extending in the direction of motion of the saw and certain of which have laterally extending cutting edges, the teeth having the laterally extending cutting edges being bent in alternately opposite directions to form said edges, the side walls of said teeth opposite said cutting edges being co-planar with the face of the saw, and shoulders behind the cutting edges of said bent teeth on the side thereof towards which the teeth are bent, said bent teeth having a distance between the cutting edges of oppositely bent teeth greater than the width of the teeth having cutting edges extending in the direction of motion of the saw, whereby the edge of the cut is smoothed by said bent teeth.

1,902,672. COLOR METER. RAYMOND L. SPERBER, Cheviot, Ohio, assignor to Wells & Richardson Company, Inc., Burlington, Vt., a Corporation of Vermont. Filed Apr. 8, 1931. Serial No. 528,683. 5 Claims. (Cl. 35—12.)



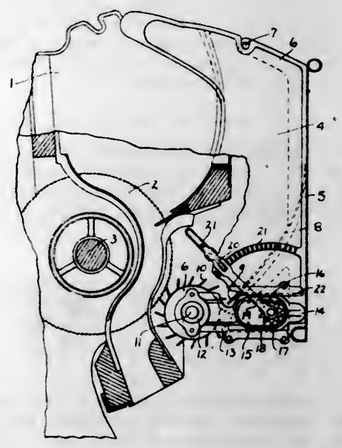
1. A coloring meter comprising, in combination, a plurality of relatively movable members, one of said members bearing a plurality of areas of varying colors to be matched against the existing color of a material to be color adjusted, another of said members bearing a plurality of areas variously colored to show colors which may be produced in material, a plurality of sets of coloring directions associated with each of said areas on one member and an indicator associated with each of the areas on the other of said members to indicate the appropriate set of directions for bringing an existing color in the material to the chosen color desired when any two areas are brought into juxtaposition.

1,902,673. ADJUSTABLE SPRINGBOARD. HORACE N. STEVENSON, Trenton, N. J. Filed Nov. 1, 1932. Serial No. 640,712. 10 Claims. (Cl. 272—66.)



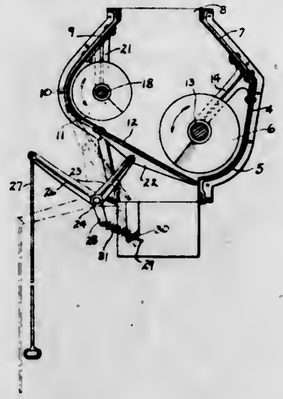
1. In an apparatus of the stated character, a frame including a fulcrum member, a carriage movable with respect to said frame, a spring board resting on said fulcrum and anchored at one end to the carriage, and means for adjusting the carriage with respect to the frame, to vary the relative positions of the spring board anchorage and the fulcrum with respect to each other and increase or decrease the effective rigidity of the board.

1,902,674. ADJUSTABLE PICKER ROLLER. JOHN ARNOLD STREUN, Sherman, Tex., assignor to Hardwicke-Etter Company, Sherman, Tex. Filed Feb. 21, 1931. Serial No. 517,427. 6 Claims. (Cl. 19—56.)



1. In a cotton gin including a saw cylinder, a rotating toothed roll positioned in front of said saw cylinder, a shaft for said roll, plates supporting the ends of said shaft, slideways for said plates, racks on said plates, pinions engaging said racks and means to rotate said pinions to slide said plates in said slideways.

1,902,675. CONVEYER FOR COTTON. JOHN ARNOLD STREUN, Sherman, Tex., assignor to Hardwicke-Etter Company, Sherman, Tex. Filed Apr. 3, 1931. Serial No. 527,457. 8 Claims. (Cl. 19—74.)



1. A plurality of cotton machines, a conveyer for cotton above said machines, including a trough having its floor inclined to one side thereof, hopper openings in said floor to discharge cotton to said machines, a large screw conveyer in the lower side of said trough and at the downward edge of said floor, a smaller conveyer at the upper edge of said floor at the opposite side above said large conveyer and means in said openings and forming a part of said floor to control the passage of cotton therethrough.

1,902,676. HARDENING ALLOY STEELS. HUBERT SUTTON, ARTHUR JOHN SIDERY, and BENJAMIN EVANS, South Farnborough, England. Filed Nov. 18, 1930, Serial No. 496,559, and in Great Britain Dec. 19, 1929. 15 Claims. (Cl. 148—16.)

1. Case-hardening an alloy steel by subjecting it to nitrogenization after coating it while cold with a porous, thin, adherent film of a nitride promoting agent of the group consisting of copper, silver, platinum, arsenic, cobalt, which permits penetration of nitrogen to the alloy steel.

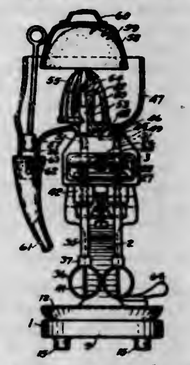
1,902,677. DISPLAY TABLE. EUGENE S. TAYLOR, Montpelier, Ohio. Filed Dec. 26, 1931. Serial No. 583,258. 10 Claims. (Cl. 312—140.)



10. In combination: a table having spaced sockets; a vertical wall; a post having means in spring-pressed relation with the wall for releasably holding the same, and legs spring-pressed apart and adapted in their sprung-together position to be thrust into the sockets respectively and to releasably engage the same respectively in the normal position of the legs.

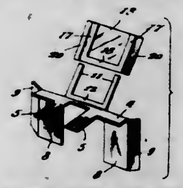
1,902,678. TWIN FOOD MIXER. ARISTEDE A. THEODOROPULOS, New York, N. Y. Filed Apr. 18, 1932. Serial No. 605,860. 9 Claims. (Cl. 259—105.)

1. In a mixing machine of the character described, a head, a motor in said head, a worm gear operated by said motor, spur gears meshing with said worm gear, spindles with solid central portions having triangular shaped sockets in their ends upon which said spur gears are mounted, threads holding said spur gears on said spindles, set



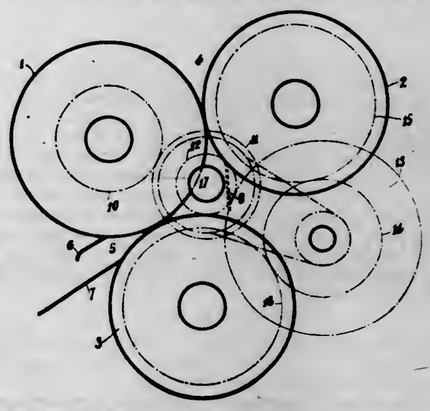
screws also holding said spur gears on said spindles, a stand pivotally supporting said head, and a base in which said stand is freely mounted.

1,902,679. TOOL HOLDER GUARD. ISIDORE E. TONIEWICZ and MICHAEL LIZON, Buffalo, N. Y. Filed Mar. 19, 1931. Serial No. 523,874. 7 Claims. (Cl. 82—34.)



5. A guard for a tool holder comprising an attaching portion adapted to be firmly secured upon a tool holder, depending laterally extending wings at opposite sides of said attaching portion adapted to straddle said tool holder and forming side guards, a portion projecting upwardly at a forward incline from the front of said attaching portion between said wings, a frame carried by the last-mentioned portion, and a transparent sheet carried by the frame.

1,902,680. MILL FOR REDUCING PAINTS, COLORS, AND PIGMENTS. JOHN ROWLAND TORRANCE, Bitton, England. Filed Dec. 21, 1928, Serial No. 327,704, and in Great Britain Jan. 3, 1928. 2 Claims. (Cl. 83—12.)



1. A roller mill of the character described for grinding pastes and semi-pastes, comprising a high periphery speed

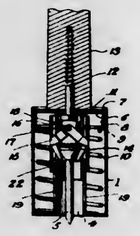
roll mounted in fixed bearings so as to prevent any oscillation of the roll due to its speed, two low periphery speed rolls, one located beneath the high periphery speed roll, and the other located at the back of said high periphery speed roll, said high periphery speed roll mating with said low periphery speed rolls to form the grinding nips and serving to convey the material from one grinding nip to the next, means for adjusting the bearings of the low periphery speed rolls in relation to the fixed high periphery speed roll, a driving shaft, a driving wheel train from said shaft to said high speed roll, a speed decreasing driving wheel train from said shaft to said low speed low speed rolls, a feed hopper from which the material is supplied to the first grinding nip, and a scraper on the high periphery speed roll at the front of the mill.

1,902,681. COSMETIC COMPACT. WILLIAM R. TUTTLE and CHARLES W. STICKEL, Rochester, N. Y., assignors to The Kurlash Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Mar. 14, 1932. Serial No. 598,742. 4 Claims. (Cl. 132—79.)



1. In combination with a compact case having an intermediate base plate as described, a casing for a moistening element or sponge adapted to engage with an opening in the said intermediate base plate, and means to raise the said casing.

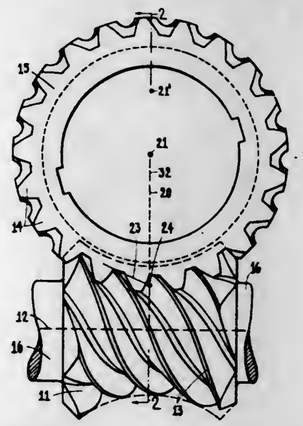
1,902,682. GOLF TEE POSITIONING DEVICE. ERNEST L. WALRATH, Bend, Oreg. Filed May 18, 1931. Serial No. 538,315. 4 Claims. (Cl. 273—32.)



1. A golf tee positioning device comprising a handle, a head secured to the handle, a casing slidable on the head and having an opening, tension means between the head and casing, a sleeve secured to the head in alinement with said opening to receive a tee, gripping means in said sleeve to engage the tee and retain the latter within the sleeve, means carried by the casing to disengage the gripping means from the tee when the latter has been inserted in the ground by pressure placed on the handle and with the casing in engagement with the ground, and means carried by the sleeve for releasing the gripping means from the last named position after the tee has been again inserted in the sleeve.

1,902,683. WORM GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed Sept. 3, 1931. Serial No. 560,905. 19 Claims. (Cl. 74—41.)

1. Worm gearing, comprising two conjugate worm gears each containing differing profiles in parallel planes perpendicular to its axis, one of said worm gears having composite tooth surfaces, a composite tooth surface containing two individual surfaces meeting along a line extending obliquely over the tooth surface, at least one of



said individual surfaces being a surface envelopable by a member containing tooth like projections of constant side profile in all axial planes.

1,902,684. METHOD OF TREATING DRYING OILS. ERICH ASSAN, Wandsbek, Germany. Filed Nov. 2, 1929, Serial No. 404,513, and in Germany May 1, 1929. 7 Claims. (Cl. 87—12.)

1. Improved method of treating drying oils for paint purposes, which comprises heating the oil to a temperature at which polymerization begins until the oil begins to thicken, then blowing air through the oil and continuing to heat the latter up to about 310° C., until the viscosity of standoil is obtained.

1,902,685. COMBINATION TONGS AND POKER DEVICE FOR FIRE GRATES AND FIREPLACES. NATHANIEL BALDWIN, East Mill Creek, Utah. Filed Oct. 29, 1930, Serial No. 491,858. Renewed June 21, 1932. 4 Claims. (Cl. 294—11.)



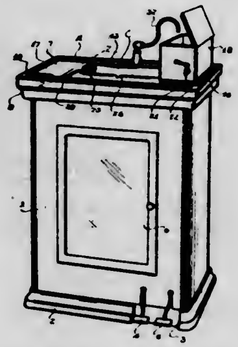
1. In a device of the class described, two members permanently connected together to be rotatably movable with respect to each other, said members being each shaped at one end to form handles and at the other end to form coacting jaws, and means connected to both said members normally to urge said jaws to the open position.

1,902,686. SHOE HEEL. LINZY W. BROOKS, Portland, Oreg., assignor of one-third to Howard P. Arnest, Portland, Oreg. Filed Dec. 5, 1931. Serial No. 579,291. 5 Claims. (Cl. 36—35.)



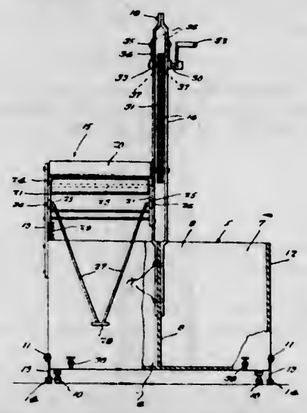
1. A heel of the class described comprising a base formed of hard rubber and a tread part formed of softer and more elastic rubber and a metal plate partly inserted in the base part and having its lower face partly contacting the upper face of the tread part, said plate having holes therein for receiving fastening means for connecting the heel to the heel part of the shoe.

1,902,687. STERILIZING APPARATUS. WILMOT V. CASTLE, Rochester, N. Y., assignor to Wilmot Castle Co., Rochester, N. Y., a Corporation of New York. Filed Sept. 4, 1931. Serial No. 561,235. 10 Claims. (Cl. 167—3.)



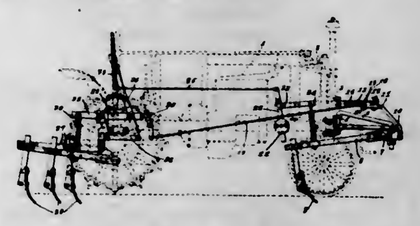
5. An apparatus of the class described comprising a supporting means and a top member mounted on the supporting means and including upper and lower walls connected by a continuous side wall rising at its upper edge slightly above the upper surface of the top member, a bowl carried by the top member and connecting the upper and lower walls, the top member having sloping depressions in its upper wall and provided with communicating passageways leading from said depressions to said bowl, said depression each having a lateral extension communicating therewith adapted to receive drippings, from a faucet of a sterilizer when supported over said depression, each of which depressions is constructed so as to conduct drippings thus received in the extension thereof to the bowl by way of the respective communicating passageway between such depression and the bowl.

1,902,688. MOP WRINGER. MARY CESARIO, Kenosha, Wis. Filed Aug. 25, 1932. Serial No. 630,468. 1 Claim. (Cl. 15—264.)



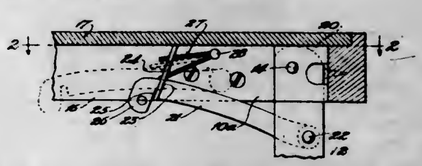
A mop wringer comprising in combination a receptacle provided with two compartments, swivel casters supporting said receptacle, laterally extending bars mounted on the receptacle at relatively opposite ends thereof, and ground engaging elements pivotally connected with said bars; and a wringer device mounted on said receptacle in operative position to one of said compartments, said wringer device comprising a pair of spaced parallel supports, a roller rotatably supported between said supports, a shaft mounted on one of said supports above said roller, chain and sprocket means connecting said shaft with said roller, handle means for said shaft, a curved arm pivoted to each of said supports intermediate the ends of said arm, a roller supported between said arms at one end of said arms, a foot pedal supporting bracket pivotally connected with the other end of said arms, and yieldable means urging said arms to rotate in one direction for normally retaining said rollers spaced apart.

1,902,689. TRACTOR CULTIVATOR. IRA L. CHARLESWORTH, Newton, Iowa. Filed Oct. 5, 1931. Serial No. 567,054. 1 Claim. (Cl. 97—47.)



A tractor cultivator attachment comprising in combination with an upstanding steering shaft on the tractor provided with a forwardly projecting lug having a notch in its free end, brackets secured to the tractor frame, arms mounted in said brackets projecting forwardly from the tractor frame, a transverse bar carried by said arms, cultivators having beams pivotally mounted on said bar, means for swinging and lowering said beams, a rearwardly disposed arm, means for supporting the last said arm from the forwardly projecting arms, a centrally arranged forwardly pojecting bar disposed in diametrical alignment with said notch when the steering shaft is disposed to direct the tractor steering wheels directly forward, and a spring actuated latch bar carried on the under side of the last named bar, a lever pivotally mounted on the rear end of the rearwardly projecting arm and operatively connected with said latch member, and means for rocking said lever, the latch being engageable with the notch and said steering shaft in one position of the latter and being releasable therefrom on rocking said lever.

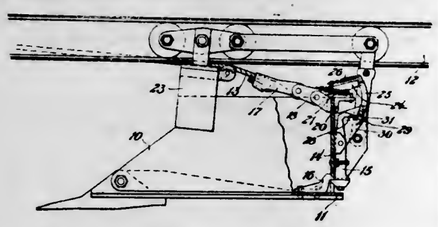
1,902,690. TABLE LEG BRACE. GEORGE J. CORPORON, Hooksett, N. H. Filed Mar. 5, 1931. Serial No. 520,371. 3 Claims. (Cl. 45—11.)



1. A device for the purpose indicated comprising a bracket for securement at the corners of the side rails of a table top and having a parallel walled leg seat in which a leg is disposed for pivotal or swinging movement, and a lever pivotally connected with the leg and having a sliding connection with the bracket and interlocking with the latter in the extended or right angular position of the legs, the bracket having an angularly turned flange formed with a slot through which the lever extends and the latter having a slot engageable with the bottom of the slot in the flange when the leg is in extended position, that

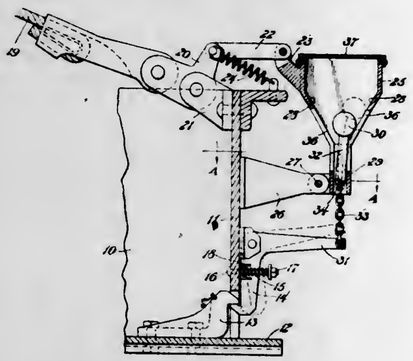
portion of the bracket carrying said flange being offset from the leg seat to dispose the flange next adjacent the side rail of the table top and the pivotal connection between the leg and the lever being on that side of the leg next to the offset to dispose the lever between the bracket and said side rail when the leg is folded.

1,902,691. EXCAVATING MACHINE. ROBERT REX DOWNIE, Beaver Falls, Pa. Filed July 14, 1928. Serial No. 292,655. 16 Claims. (Cl. 214—146.)



1. An excavating machine comprising, in combination, a scoop with a latched bottom; a hauling line for moving the scoop in its excavating stroke. a connection between the hauling line and the scoop permitting slight longitudinal movement of the line relative to the scoop; and a latch operating mechanism secured to the hauling line by means of said connection and constructed and arranged to release the latch whenever the hauling line is sharply released and rapidly thereafter sharply retracted.

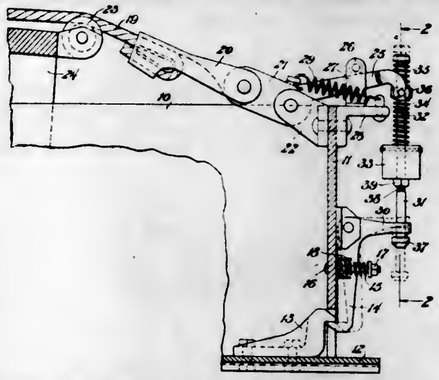
1,902,692. EXCAVATING MACHINE. ROBERT REX DOWNIE, Beaver Falls, Pa. Filed July 14, 1928. Serial No. 292,657. 10 Claims. (Cl. 214—146.)



1. An excavating machine comprising, in combination, an excavating scoop having a pivoted discharge wall and provided with a spring-actuated latch for controlling the discharge of spoil from the scoop; a power-actuated hauling line attached to the scoop for moving it through the earth; and latch operating mechanism mounted on the scoop and connected with the hauling line and latch and so constructed and arranged that a series of rapid jerks on the hauling line releases the latch.

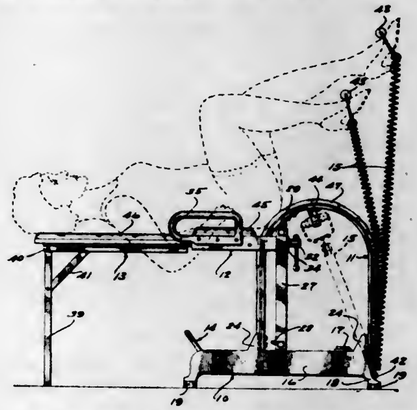
1,902,693. EXCAVATING MACHINE. ROBERT REX DOWNIE, Beaver Falls, Pa. Filed Feb. 11, 1932. Serial No. 592,407. 16 Claims. (Cl. 214—146.)

1. A machine of the class described comprising, in combination, a scoop having an automatically latched bottom; a hauling line attached to the scoop; and mechanism mounted on the scoop and connected to the hauling line and latch for releasing the latch, said mechanism having a reciprocatory weight whose momentum is used



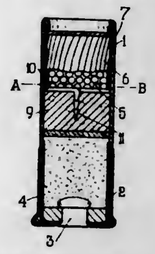
to release the latch, and being so constructed and arranged that a sharp release of the hauling line followed by a sharp retraction will operate it.

1,902,694. GYMNASTIC APPARATUS. REID A. EDWARDS, Albert Lea, Minn. Filed Feb. 8, 1932. Serial No. 591,599. 17 Claims. (Cl. 272—58.)



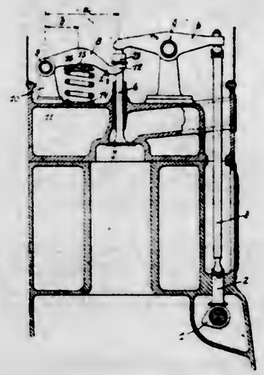
1. In an apparatus of the class described, a base, an arch member, and a vertically adjustable seat on the base.

1,902,695. CARTRIDGE. WALTER EDWARDS, Luton, England. Filed Feb. 17, 1932, Serial No. 593,613, and in Great Britain Dec. 23, 1931. 4 Claims. (Cl. 102—15.)



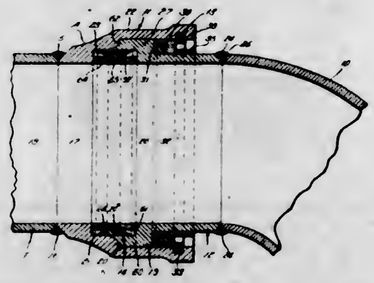
1. A sporting cartridge comprising in combination an outer container, a percussion cap, a wad, loose shot, a spiral corrugated metal foil shell containing said shot and means to secure said shell directly upon said wad.

1,902,696. VALVE CONTROL GEAR FOR INTERNAL COMBUSTION ENGINES. ERNEST EIMER, Courbevoie, France, assignor to Delage & Cie, Courbevoie, France. Filed Jan. 7, 1930, Serial No. 419,018, and in France Nov. 12, 1929. 3 Claims. (Cl. 123—90.)



1. In a valve control gear for internal combustion engines, a valve, a rocker arm adapted to move the valve in one direction, a return lever adapted to move the valve in the opposite direction and a spring adapted to actuate said lever, the leverage of the valve being greater than the leverage of the spring with respect to said lever.

1,902,697. COUPLING. FRANK ELLINGSEN, Brea, Calif., assignor to Chiksan Oil Tool Company, Fullerton, Calif., a Corporation of California. Filed Nov. 7, 1932. Serial No. 641,570. 12 Claims. (Cl. 285—9.)



1. A connection for a conduit including, two relatively rotatable members, one extending into the other, a bushing surrounding the first mentioned member in the said other member, and a removable lock part in registering recesses in the bushing and the said other member.

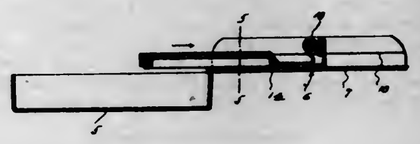
1,902,698. COLLAPSIBLE TUBE CAP. VICTOR E. GASSER and LEONIDES J. GASSER, Madison, Wis. Filed Mar. 8, 1932. Serial No. 597,576. 6 Claims. (Cl. 221—60.)

1. A collapsible tube comprising a collapsible body, a semi-spherical shaped head for said body and having a port adjacent one edge, said head having a groove and a flattened face in communication with the groove and surrounding the port, said flattened face and groove forming



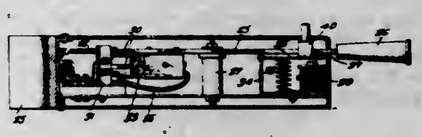
oppositely disposed abrupt shoulders, and a closure slidably mounted in the groove and movable to close the port and limited in its movement by the shoulders.

1,902,699. CIGARETTE RECEPTACLE AND ROLLER. HARRY H. GERJETS, Bellingham, Wash. Filed Apr. 7, 1932. Serial No. 603,881. 3 Claims. (Cl. 131—5.)



3. A cigarette rolling device comprising a plate having side walls bent downwardly to provide guides, a cross member between the side walls, a slider movable in the guideways, and a cigarette rolling web carried by the said slider and being disposed over the cross member.

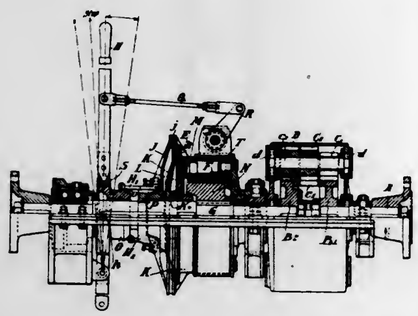
1,902,700. SWITCH FOR DIRECTION INDICATORS. RINJIRO HADANO, Honolulu, Territory of Hawaii. Filed May 5, 1931. Serial No. 535,231. 1 Claim. (Cl. 200—6.)



A switch comprising a casing, spaced resilient contacts mounted in the casing, a lever pivotally mounted ingthe casing with one end thereof arranged exteriorly of the casing to provide a handle and the other end of said lever arranged for movement between said contacts, resilient contacts carried by the last-named end of the lever to alternatingly engage the first-meationed contacts during opposite movements of the lever by the handle, tension means connected to the lever and the casing for normally positioning the lever to disengage the contacts, a spring pressed hinged latch plate mounted in the casing and underlying the lever adjacent the handle and having

spaced notches, a lug on said lever to engage in said notches for holding the lever against self-movement and means for removing said plate to allow self-movement of the lever.

1,902,701. SHIP DRIVE-COUPLING MECHANISM. OTTO HEGEMANN, Dortmund, Germany, assignor of one-half to Dortmunder Vulkan A. G., Dortmund, Germany, a Corporation of Germany. Filed Apr. 8, 1930, Serial No. 442,699, and in Germany June 24, 1929. 6 Claims. (Cl. 192—48.)



1. In a ship's reversing gear mechanism embodying a helical-band coupling and a rotating casing, a pair of slip-clutch elements movable separately into frictional drive contact with the casing and a plate-member with which one of the same in so moving engages; said plate-member being in turn actable on the helical-band part of the coupling and actuated by said one of the slip-clutch elements to bring the same into operation or engagement after its rotative part has first been set in motion.

1,902,702. SHOTGUN. RALPH M. JENKINS, Orleans, Ind. Filed May 23, 1932. Serial No. 613,072. 10 Claims. (Cl. 42—42.)

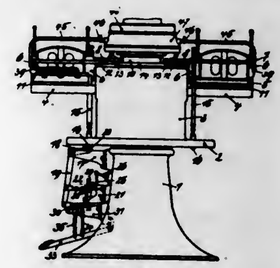


1. In a triple barreled shot gun having two barrels in one plane and the third barrel in a parallel plane and between the other two, means for extracting shells from said third barrel operating between the other barrels of said gun, and in advance of the rear end of the barrels.

9. In a single-trigger mechanism comprising a selector mechanism movable into two firing positions by a table, means for moving said selector mechanism into a third firing position.

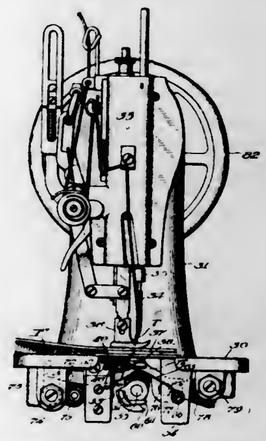
1,902,703. SOLDERING MACHINE. EWALD HORST JUGEL, Goppingen, Germany. Filed Nov. 28, 1931. Serial No. 577,798. 4 Claims. (Cl. 113—92.)

1. A machine for the production of longitudinal soldering seams, comprising, in combination, a stationary base and a rotatory table adapted to perform part rotations in intervals; a plurality of clamping devices attached to said table, each of these devices comprising a supporting mandrel projecting freely over the table, a pressure ledge adapted to be pressed against said mandrel from above, an abutment ledge adapted to be shifted parallel to said pressure ledge, and a heating device so located as to be adapted to heat the place of soldering of the workpiece; a cam for the automatic and positive control of said ledges, a bell-crank lever (26) so arranged as to be adapted to be actuated by said cam; a shiftable roll (22) and a chain (25) connected at one end with said lever and running over said roll; another bell-crank lever (18, 19), one arm of which is connected with the other end of said chain;



a supporting member (20) attached to the other arm of said other bell-crank lever; a slidable rod (15) carried by said supporting member, and a lever (8) hinged to said rod, this lever carrying said pressure ledge, substantially as set forth.

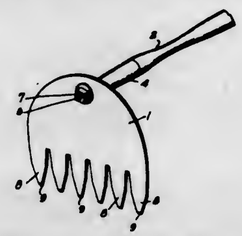
1,902,704. TUFTING MECHANISM. CHARLES KADLEC, Oshkosh, Wis., assignor to Waite Carpet Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Dec. 2, 1931. Serial No. 578,425. 31 Claims. (Cl. 112—79.)



1. In tufting mechanism of the class described, the combination of a reciprocating needle, a bill-shaped looper presenting its tip in a direction opposite to the line of advance of the fabric and in closely spaced relation to the needle when lowered and provided with a downwardly presented cutting blade, a feeding finger mounted for movement laterally past the tip of the needle when lowered, to engage a turn of thread carried by the needle and carry the same over the tip of the looper, and means for actuating the parts in timed relationship to one another.

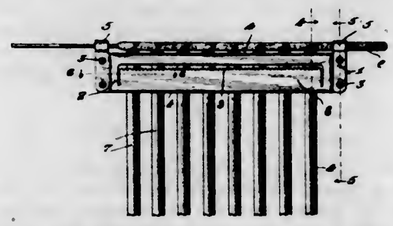
1,902,705. HOE. WILLIAM B. KEE, Atlanta, Ga. Filed Oct. 21, 1932. Serial No. 638,963. 1 Claim. (Cl. 97—71.)

An implement of the class described comprising a hoe structure provided with a body portion and a plurality of spaced, parallel, sharpened teeth extending from the body portion and adapted to enter the soil, each tooth having side edges in the plane of the adjacent teeth and provided with one angle of inclination extending from the points of each tooth to a point approximately one-half the length thereof, and with a continuing straight edge extending at



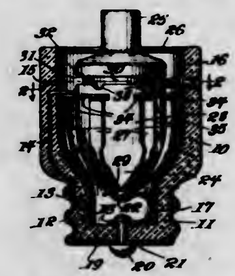
a less angle of inclination to the point of merger with the body portion of the hoe, substantially as and for the purpose set forth.

1,902,706. COMBINATION FUSE HOLDER AND LIGHTER. FRANK E. KEESE, Jr., Iron River, Mich. Filed Apr. 21, 1932. Serial No. 606,711. 3 Claims. (Cl. 102—8.)



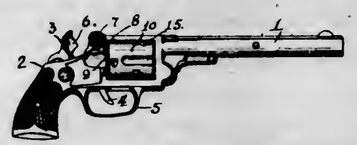
1. A holder comprising spaced plates fixed together to receive therebetween a plurality of fuses with their igniting ends arranged in alignment, tension tongues on said plates and gripping the fuses, and a burnable medium carried by said plates and arranged in close proximity to the igniting ends of said fuses.

1,902,707. RENEWABLE ELECTRIC FUSE. CHARLES KEMP and ERNEST KEMP, Bloomfield, Ind. Filed July 8, 1931. Serial No. 548,635. 8 Claims. (Cl. 200—125.)



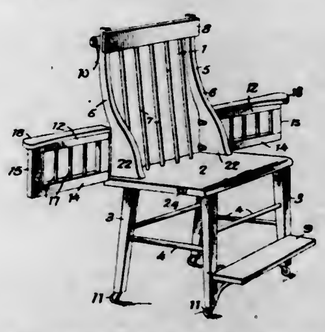
1. A renewable fuse device comprising a casing of insulating material, a metallic threaded shell member on one end of said casing adapted to be screwed into a socket, a spring contact bearing secured within said end of the casing and having a projecting element adapted to engage the central contact of a socket, a contact member embedded in the wall of said casing and connected with said shell member, a spindle of insulating material rotatably mounted within the casing, and a plurality of fuse elements carried by said spindle and radiating from a common element rotatably engaged with said spring contact bearing and having their other ends terminating in lateral extensions cooperating with said contact member embedded in the wall of the casing.

1,902,708. TOY PISTOL. FREDERICK B. KEYSTON, San Mateo, Calif., assignor to Keyston Bros., San Francisco, Calif., a Corporation of California. Filed Feb. 15, 1932. Serial No. 592,901. 4 Claims. (Cl. 42—58.)



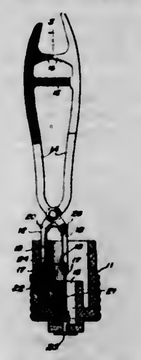
1. A toy pistol of the revolver type comprising a body having a stock and a paper cap seat; a hammer and trigger assembly carried by the stock and associated for tripping function; a barrel extending from the body; a chambered cylinder revolubly mounted in the body between the cap seat and the barrel, said cylinder having a plurality of exterior recesses; and a spring mounted in the body above said cylinder for resiliently engaging said recesses when the cylinder is revolved.

1,902,709. INVALID'S CHAIR. DELLA KING, Louisville, Ky. Filed Apr. 9, 1932. Serial No. 604,302. 4 Claims. (Cl. 155—30.)



1. A chair having a seat, a seat back including side members set inward from the side edges of the seat and forming stops, side arms hinged on fixed pivots to swing to a forward operative position above and at the sides of the seat and against said stops and to a rearward inoperative position behind the seat back, and a latch for fixing each side arm in its operative position to the seat.

1,902,710. FUSE REFILLING TOOL. MASARU KONDO, Puunene, Maui, Territory of Hawaii. Filed Feb. 29, 1932. Serial No. 595,949. 1 Claim. (Cl. 81—5.1.)



A tool of the kind indicated comprising pivotally connected members of which those portions on one side

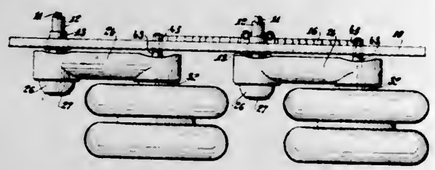
of the pivot constitute jaws and the remaining portions constitute handles, an expansion spring connecting the handles, stops carried by the handles and engaged with each other against the action of the spring, and a bowed spring member disposed between the jaws and secured to each, the legs of said member lying flat against the jaws and the latter and the spring member having lateral extensions constituting fuse leg engaging elements.

1,902,711. BUSHING REMOVER. HARRY W. KULP and MARTIN C. DELLINGER, Lancaster, Pa. Filed Nov. 21, 1928. Serial No. 320,851. 11 Claims. (Cl. 29—88.2.)



1. A bushing removing tool comprising two members having their upper end portions secured together, free arms adapted to cooperate in fitting about an interposed part and adapted to engage the opposed end face of a bushing while said interposed part extends in said bushing, and formed intermediate said upper end portions and said arms with portions outwardly bent away from each other whereby said members may straddle an element of greater diameter than, and carried by, said interposed part and exert pressure on said opposed end face of said bushing.

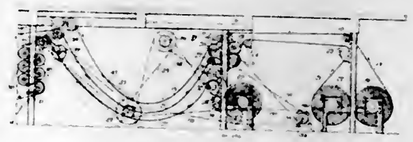
1,902,712. CHAIN DRIVE. AUGUST H. LEIPERT, College Point, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed July 22, 1931. Serial No. 552,361. 6 Claims. (Cl. 180—22.)



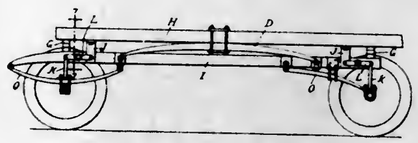
1. A drive for a wheel mounted independently on a vehicle frame comprising a hollow crank arm for mounting a wheel and having apertures spaced upon opposite sides at one end thereof, a driving shaft on the frame projecting into the crank arm, a housing for the shaft secured to the frame, a sleeve journaled on the housing in the crank arm, a spider secured to the sleeve and splined to the shaft, and means to journal the arm on the spider.

1,902,713. MACHINE FOR PASTING WEBS OF PAPER TOGETHER. JOSEPH A. LOWE, Fitchburg, Mass., assignor to Falulah Paper Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed June 21, 1930. Serial No. 462,847. 18 Claims. (Cl. 154—37.)

1. In a machine for pasting webs of paper together to form a sheet, nip rolls disposed adjacent each other for drawing webs of paper from unwinding rolls, guide rolls disposed adjacent each other and spaced from the nip rolls to provide a festooning arrangement between the nip rolls and the guide rolls with the webs of paper disposed face to face and approximately parallel, wrap rolls for holding the webs of paper under tension, means for drawing the webs of paper from the wrap rolls and pressing the webs of paper together, and a pasting means between the wrap rolls and the first mentioned means for coating surfaces of one or more webs of paper with paste.

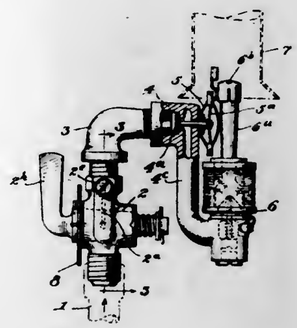


1,902,714. METHOD OF SUPERSHOCK ABSORPTION. RHETHERFORD B. MARTIN, Roselle, N. J. Filed Jan. 26, 1927, Serial No. 163,709. Renewed Mar. 16, 1932. 2 Claims. (Cl. 280—106.5.)



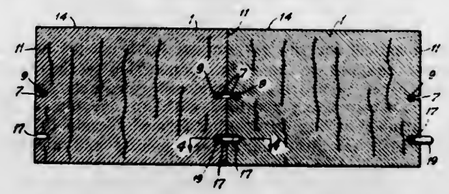
1. The combination with front and rear axles of a vehicle, of spaced frames superposed relative to said axles, bowed leaf springs arranged at opposite sides and opposite ends of the frames and connecting the same, said side springs being located medially with respect to the frames, bowed springs yieldably suspending said frames from the axles and means connecting the axles of said frames operative by shock impacts to reverse the directions of movements of the frames and axles.

1,902,715. GAS REFRIGERATING APPARATUS. HAROLD J. NACHMAN, Washington, D. C., assignor to Washington Gas Light Company, Washington, D. C., a Corporation. Filed Mar. 9, 1931. Serial No. 521,328. 2 Claims. (Cl. 62—5.)



1. In gas refrigerating apparatus of the character specified having a generator, a burner, a manually operable main gas valve, means for conducting gas from the said valve to the burner, and a thermostatic cut-off valve interposed between the main valve and burner and adapted to be heated by the burner flame, said manually operable valve being open when the apparatus is normally operating and closed when it is desired to defrost the apparatus; a passage whereby when the main valve is closed a small amount of gas is supplied to the burner to maintain a flame sufficient to keep the thermostatic valve open and the generator warm enough to prevent condensation of vapors therein.

1,902,716. FLOORING. HAROLD M. NEWTON, Clayton, Mo., assignor to Midland Creosoting Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 8, 1931. Serial No. 561,655. 11 Claims. (Cl. 20—6.)



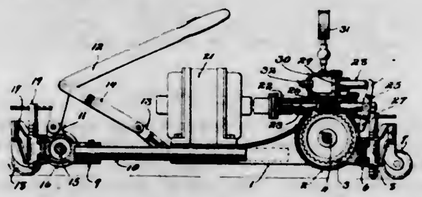
1. Flooring comprising units, the units being composed of juxtaposed wood members, aligned grooves in the members and wire in said grooves joining said members, said grooves having widths normally less than the diameter of the wire, the grooves being so arranged with respect to the natural grain of the wood that said wood presents end grain to wear after the flooring is laid.

1,902,717. PAPER DRINKING CUP. ABRAHAM NOVICK, Flushing, N. Y., assignor to United States Envelope Company, Worcester, Mass., a Corporation of Maine. Filed Jan. 11, 1930. Serial No. 420,128. 6 Claims. (Cl. 229—1.5.)



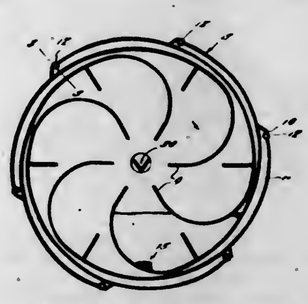
1. A paper drinking cup comprising a sector-shaped body portion, a body flap folded upward toward the bottom portion, and wing portions turned over without creasing into overlapped relation with and secured adhesively to the outer face of the bottom flap just above the lower margin thereof, forming a cup of normally distended open form, tapering to a straight line bottom closure, portions of the walls of the cup adjacent said bottom closure being of less thickness than portions of the walls directly above said bottom portions.

1,902,718. BRAKE TESTING DEVICE FOR VEHICLE WHEELS. THOMAS A. PATTERSON, Clintonville, Wis. Filed May 31, 1928. Serial No. 282,027. 4 Claims. (Cl. 265—25.)



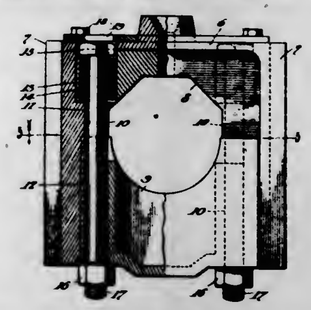
1. A brake testing device for vehicle wheels comprising a body portion, an auxiliary portion slidably carried by said body portion, wheel engaging rollers carried by said body portion and auxiliary portion, means for moving said auxiliary portion towards said body portion to cause said rollers to engage and raise a wheel of the vehicle, power means for rotating one of said rollers, and a dynamometer for indicating the force required to rotate the vehicle wheel.

1,902,719. METHOD OF CLEANSING METERING DRUMS. THOMAS PAYTON, Rock Rapids, Iowa. Filed Nov. 18, 1931. Serial No. 574,881. 1 Claim. (Cl. 141—1.)



The herein described method of washing and cleansing a metering drum of the type having an axial hub, peripheral slots, and circumferentially spaced baffles therein, comprising placing and confining shot within the drum while permitting the passage of cleaning solution into and out of said drum through said slots, then rotating said drum containing shot with its axis substantially horizontal and its lower part dipping into a cleaning solution, and finally removing the shot through said hub while said drum rotates.

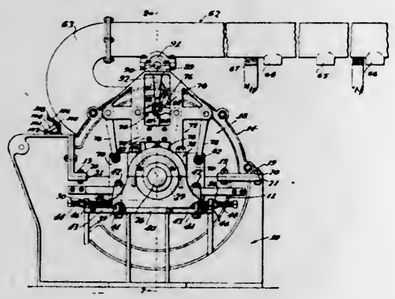
1,902,720. LOCOMOTIVE JOURNAL BOX. ARTHUR FRED PHELPS, Bluefield, W. Va., assignor to West Virginia Armature Co., Bluefield, W. Va. Filed Apr. 28, 1931. Serial No. 533,585. 1 Claim. (Cl. 308—88.)



An inside journal box for locomotive axles comprising an open frame adapted to be mounted on the locomotive, an upper bearing block arranged in and fixed to the frame, a lower bearing block mounted on and between the sides of the frame for sliding movement toward and away from the upper bearing block and for restricted angular movement with relation to the frame and upper bearing block, the bearing blocks having alined bolt openings and the upper portions of the openings in the upper bearing block being enlarged to provide recesses, bolts mounted in said openings and smaller diametrically than the same to permit the lower bearing block to move angularly with relation to the frame and upper bearing block without distorting the bolts, the bolts having heads located in said recesses and having elements contacting with the lower side of the lower bearing block, and springs sleeved on the bolts between the heads and the bottom walls of

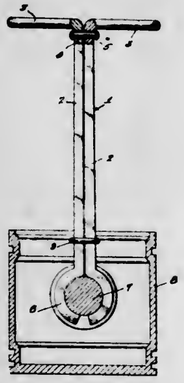
said recesses and constantly acting to move the lower bearing block in the direction of the upper bearing block and normally hold the lower bearing block against angular movement.

1,902,721. ROCK CRUSHER AND SEPARATOR. GEORGE A. REYNOLDS, Los Angeles, Calif. Filed Oct. 25, 1930. Serial No. 491,241. 4 Claims. (Cl. 83—11.)



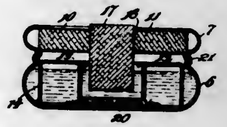
1. An apparatus of the character described comprising a housing, a shaft extending through said housing, bearings rotatably supporting said shaft at each end thereof, a plurality of disks secured to said shaft, a plurality of hammers pivotally mounted on pins extending between said disks, a horizontally disposed conduit having a plurality of outlets connected to said housings with one end thereof in register with an opening formed in said housing, each of said disks and hammers having a plurality of blades formed thereon for inducing a current of air through said housing and conduit, and means for controlling the current of air induced by the fan blades on said disks and hammers.

1,902,722. PISTON TOOL. POSEY D. REYNOLDS, Rustburg, Va. Filed July 6, 1932. Serial No. 621,108. 1 Claim. (Cl. 294—115.)



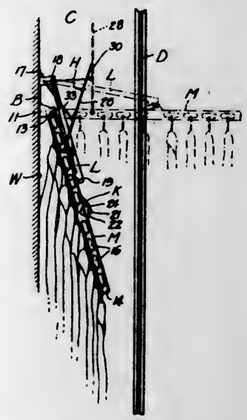
A tool comprising elongated shanks, arcuate shaped jaws formed on one of the ends of the shanks, handles formed on the other ends of the shanks, said shanks having aligned openings adjacent the handles, a rivet loosely fitted in the apertures to pivotally connect the shanks, and a collar slidable on the shanks to be moved towards the jaws for urging the latter about the wrist pin of a piston.

1,902,723. CONTAINER. EDWARD WILLIAM ROBERTS, Chicago, Ill., assignor to Lakewood Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 10, 1930. Serial No. 480,933. 2 Claims. (Cl. 43—131.)



1. An article for the purpose set forth comprising two members adapted to have interconnection with respect to each other to provide an enclosed receptacle and one of the members being provided with an opening, a partition member having an opening formed therein in registration with the first mentioned opening and arranged in said receptacle to divide the receptacle into an upper and lower compartment, an absorbent member arranged in the upper compartment and supported by the partition member and having a portion thereof exposed through the first mentioned opening, and a wick member in contact with the absorbent member with one end projecting through the first mentioned opening and having its opposite end portion extending into the lower compartment.

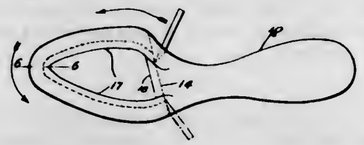
1,902,724. GARMENT RACK. ARTHUR E. SANDERSON, San Pedro, Calif., assignor of one-half to Hughes T. Rupert, San Pedro, Calif. Filed Mar. 16, 1931. Serial No. 523,082. 12 Claims. (Cl. 211—99.)



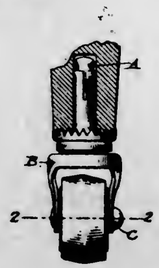
1. A garment rack comprising a garment supporting member, means for mounting said member on a support for pivotal movement vertically to occupy raised and lowered positions, a pivoted latching member having a lug adapted to ride upon a surface of the garment supporting member during movement of the latter, and a keeper pivoted on the garment supporting member over which said lug is adapted to ride during raising movement of the garment supporting member, the keeper having a notch receiving said lug to latch the garment supporting member in raised position.

1,902,725. METHOD OF PRODUCING COMPLEMENTARY INSOLE-OUTSOLE COMBINATIONS. FRANK SBICCA Philadelphia, Pa., assignor to Sbicca-Method Shoes Incorporated, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 7, 1931. Serial No. 573,676. 4 Claims. (Cl. 12—146.)

1. The method of producing complementary insole-outsole combinations comprising the following steps, providing a leather sole blank of the desired thickness of the outsole and having a grain and a flesh side, splitting the heel and shank portions of the sole blank to form insole and outsole shank pieces, removing a rand from the margin of the ball section of the flesh side of the sole while leaving the same attached to the forward end of the insole shank piece, and splitting the sole between the shank and ball sections by a cut extending inwardly from the flesh side thereof to the depth of the desired insole and between the rand terminals.



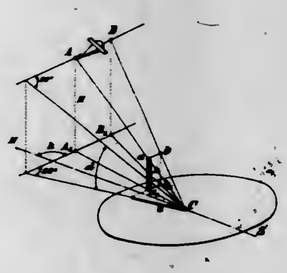
1,902,726. CASTER ROLLER. WILLLIAM F. SCHACHT, Huntington, Ind. Filed May 9, 1932. Serial No. 610,253. 1 Claim. (Cl. 16—45.)



A caster wheel, comprising a molded circular solid body of rubber, having an axial bore extending therethrough; side plates each having an inwardly directed offset shoulder adjacent their peripheries closely fitted against the sides of the body, the offset shoulders being substantially V-shaped in cross-section and adapted under compression to enter into the sides of the body and maintain the sides of the body in substantial conformity with the contour of the side plates; the marginal portions of the side plates lying against the sides of the body adjacent its periphery; and means transfixing the body and connecting the side plates together with the body compressed therebetween.

1,902,727. APPARATUS FOR DETERMINING THE POSITION OF AIRCRAFT NOT VISIBLE WITH THE NAKED EYE. JOHANN SCHIER, KARL PETSCHENIG, and ANTON PEINL, Vienna, Austria, assignors to the Firm Optische Anstalt C. P. Goerz Aktiengesellschaft, Akciova Spolecnost K. P. Goerz, Opticky Ustav, in Bratislava, Czechoslovakia. Filed Nov. 15, 1924, Serial No. 750,215, and in Czechoslovakia Nov. 16, 1923. 1 Claim. (Cl. 181—05.)

In an apparatus for determining and following the path of an object not visible with the naked eye, but producing a sound, the said object moving substantially in a straight horizontal line, a unitary structure located at the point of observation and comprising a double binaural device for determining the direction of the incoming sound waves means cooperating with the said binaural device for keeping the plane of the sound receiving orifices of the said binaural device perpendicular to the said incoming sound waves moving in the so-called roof plane, and a horizontal rotatable table for plotting a line parallel to the direction of flight of the aircraft, the said table being provided with parallel lines, the distance of the said lines from the center of the table being proportional to the cotangent of the angle of the roof plane relatively to a horizontal plane, and means on said first-mentioned means and cooperating with said table for defining a rectangular rotatable triangle having a constant height and a hypothenuse of variable length, the said hypothenuse being arranged at a right angle to the binaural device whereby the said hypothenuse lies constantly in the direction of the sound waves.



1,902,728. CONVEYING LIQUIDS AT HIGH PRESSURE BY MEANS OF EJECTORS. PAUL SCHMIDT, Munich, Germany. Filed Aug. 14, 1930, Serial No. 475,803, and in Germany Aug. 21, 1929. 2 Claims. (Cl. 103—233.)

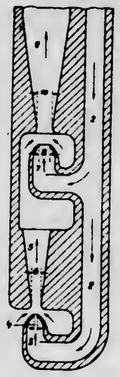


1. The method of creating a high liquid pressure in a conduit which comprises admitting a liquid under low pressure into the conduit, and successively imparting to it, during its passage through the conduit, increments of pressure totaling the differential between said high and low pressures by impulses from individual jets from a single column of a liquid under a pressure less than the said high pressure to be created.

1,902,729. MULTISTAGE LIQUID DRIVEN EJECTOR FOR DELIVERING LIQUIDS. PAUL SCHMIDT, Munich, Germany. Filed Aug. 10, 1932, Serial No. 628,247, and in Germany, Aug. 15, 1931. 1 Claim. (Cl. 103—261.)

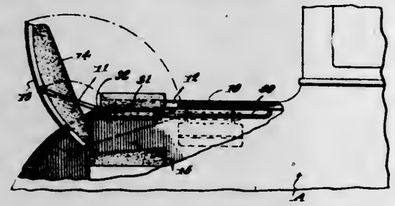
A liquid driven ejector of two or more stages, for delivering liquids from deep bore holes, characterized by the

fact that, in the first stage the size of the exit cross sectional area of the driving nozzle is less than 0.5 of the size of the smallest cross sectional area of the diffuser, while



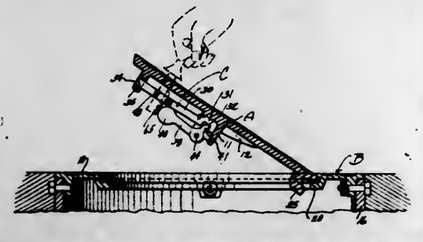
in the second stage, the size of the exit cross sectional area of the driving nozzle is more than 0.6 of the size of the smallest cross sectional area of the diffuser.

1,902,730. SIDE ARM CUSHION. ARTHUR W. SHAW, Cambridge, Mass. Filed Mar 8, 1930. Serial No. 434,850. 1 Claim. (Cl. 155—198.)



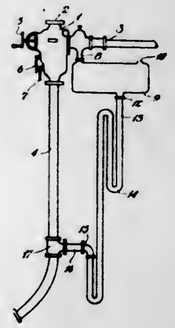
The combination with a vehicle provided with a rumble seat opening having a hinged back secured thereto, a guiding rod extending longitudinally of the side of the rumble seat opening and hung under the side edge thereof, an arm rest slidably mounted upon said rod and capable of being swung thereon, whereby the arm rest may be moved over the edge of the rumble seat opening to protect the same, and means pivotally connecting the back to said arm rest for automatically moving said arm rest longitudinally upon said rod and away from the side edge of the rumble seat opening to permit the closing of said hinged back over said opening.

1,902,731. LOCKING COVER. WARREN S. SHERMAN, Oklahoma City, Okla. Filed Nov. 15, 1930. Serial No. 496,008. 2 Claims. (Cl. 70—14.)



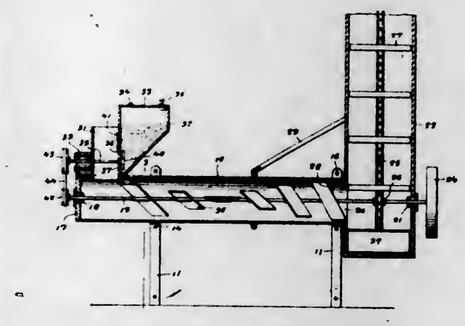
1. In a cover lock, the combination of a cover having an elongated keyhole and a depending flange about said keyhole, said flange having an outer face substantially perpendicular to the cover throughout the length of said flange, and a locking bolt carried by said cover, said locking bolt including a portion engageable with a key for retracting said bolt, whereby said flange provides a substantially perpendicular stop for the bit of a key to prevent unintentional removal of said key, the bit of said key being provided with a recess allowing insertion, operation and partial retraction of the key so as to receive said flange in said recess and thus stop said key from removal by abutment of its bit against said substantially perpendicular flange.

1,902,732. METHOD OF AND APPARATUS FOR ECONOMIZING FEED WATER. MICHAEL P. SHIELDS, Quebec, Quebec, Canada. Filed Oct. 31, 1929. Serial No. 403,843. 7 Claims. (Cl. 103—264.)



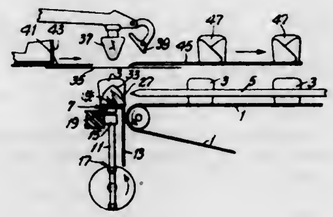
1. The method of economizing feed water being injected into a boiler by a steam jet which consists in draining by gravity from the injector and against atmospheric pressure only, the mixed steam and water not delivered to the boiler when the injector is first operated, and thereafter, as soon as the feeding operation is effective, drawing the water so collected into the stream being fed into the boiler.

1,902,733. GRAIN TREATING AND ELEVATING DEVICE. HANS M. SMESTAD, Bainville, Mont. Filed July 19, 1930. Serial No. 469,184. 1 Claim. (Cl. 83—28.)



In a device of the character described, a conveyor pipe, legs for the pipe, each leg formed from a single length of material bent to provide spaced parallel members connected at their lower ends, bolts bridging said members, an arcuate-shaped strap formed at the upper ends of the inner members of the legs, curved straps extending from the outer members of said legs around the pipe and adjustably connected together, a head closing one end of the pipe, a vertical feed chute opening into the pipe near its closed ends, a hopper located adjacent to the chute and having openings leading thereinto, a shaft journaled centrally of the pipe and having staggered blades working therein, a second shaft journaled exteriorly of the pipe and having blades working within the hopper next to the openings communicating said hopper with the chute, driving connections between said shafts, and an elevator communicative with the shaft at its end opposite the closed end thereof.

1,902,734. BREAD WRAPPING MACHINE. LEO F. STRENG, Columbia, Mo., assignor to Streng Bakery Appliance Company, Columbia, Mo., a Corporation of Missouri. Filed July 22, 1932. Serial No. 624,008. 9 Claims. (Cl. 93—2.)



1. In a bread wrapping machine, an elevator, wrapping means including end folding plates and a bottom plate adapted to force the wrapping material beneath the loaf being wrapped, said elevator including collapsible end wings adapted to hold sliced loaves from falling apart, said end wings remaining in position until said loaf is positioned between said end folding plates, said bottom plate and said wings being so shaped that as said bottom plate advances to force the wrapping material beneath said loaf, it collapses said end wings.

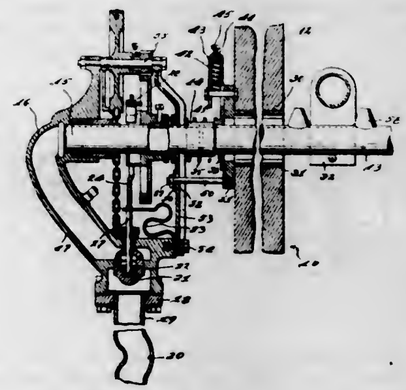
1,902,735. PROCESS FOR TREATING MATERIAL CONTAINING TIN. SETSUZO TAMARU, Kamakura Gun, Kanagawa Ken, and YUKO KOIZUMI, Ebara Gun, Tokyo Fu, Japan, assignors to Mitsubishi Kogyo Kabushiki Kaisha, Tokyo, Japan, a Corporation of Japan. Filed Sept. 11, 1928, Serial No. 305,313, and in Japan Feb. 7, 1928. 6 Claims. (Cl. 23—53.)

1. A process for treating ores containing tin with oxygen containing alkaline earth metal compounds, which consists in igniting the mixture in the presence of a trace of reducing agent, and converting tin into the form easily soluble in acid and alkali, thereby to render possible its technical separation from its admixture.

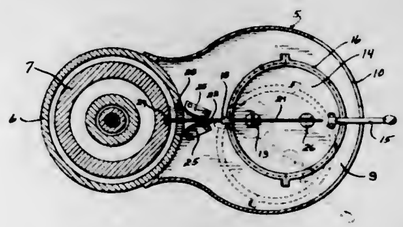
6. A process for treating ores containing tin with oxygen containing alkaline earth metal compounds, which consists in igniting the mixture in the presence of a trace of reducing agent and extracting tin therefrom by a solution containing alkali and a salt of alkali metal.

1,902,736. BOILER CLEANER. WILLIS P. THOMAS, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Original application filed Nov. 6, 1922, Serial No. 599,330. Divided and this application filed Nov. 25, 1929. Serial No. 409,611. 9 Claims. (Cl. 122—392.)

1. In a boiler cleaner, the combination with a boiler wall, a blower element projecting through said wall for discharging jets of cleaning fluid adjacent the portions of the boiler to be cleaned, and a head arranged exteriorly of said boiler wall for supplying cleaning fluid to said blower element, said blower element being rotatable relative to said head but fixed against longitudinal movement with respect thereto, of means for adjusting said blower element relative to the portions of the boiler to be cleaned, said means including a bracket fixed to said head and a member fixed to said boiler wall and adjustably engaging said bracket.



1,902,737. VEHICLE SIGNAL SWITCH. JOHN EMMANUEL TSAVARIS, Tarpon Springs, Fla. Filed Oct. 9, 1930. Serial No. 487,540. 5 Claims. (Cl. 200—59.)

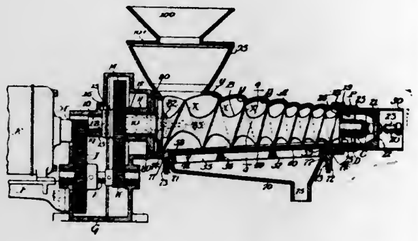


1. In a vehicle signal switch the combination with a steering column housing having an opening therethru and a steering tube rotatable in the housing and provided with a recess for movement past said opening, of a casing mounted upon the housing over said opening, a manually operated eccentric disc mounted in the casing, circuit controlling means operable by movement of the disc when swung to either side of a neutral position, an eccentric strap on the disc, and a spring arm carried by the strap and operatively connected to the eccentric disc for movement into engagement at one end with the periphery of the steering tube at a selected side of said recess, said end of the arm being engaged in the recess upon rotation of the steering shaft to return the disc to a neutral position.

1,902,738. MACHINE FOR EXPRESSING FRUIT JUICES AND THE LIKE. HENRY W. TUTTLE, Chicago, Ill. Filed Sept. 2, 1927. Serial No. 217,248. 16 Claims. (Cl. 100—48.)

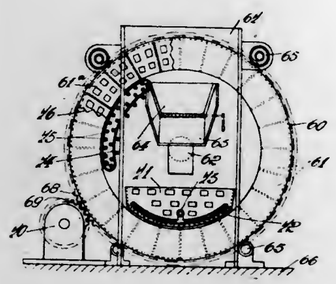
1. In combination, a screw casing provided on the interior thereof with spiral inwardly projecting ribs having feed grooves therebetween, and a co-operating screw revolubly mounted within said casing and being provided with a continuous spiral rib extending from end to end thereof, and having a continuous spiral feed groove between said

ribs and co-operating with the spiral feed grooves of the said casing, there being a portion of the side wall of each convolution of the said groove in the casing formed to lie approximately parallel to the plane of the pitch of the screw, one of the side walls of the grooves of the



said screw opposite the aforesaid wall in the groove of the casing being formed also approximately parallel to the plane of the pitch of the screw and consequently approximately parallel with the opposing wall in the corresponding groove of the casing.

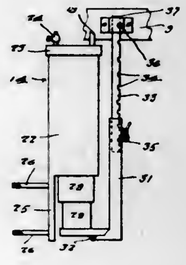
1,902,739. APPARATUS FOR SEPARATING WATER FROM DREDGED MATERIAL. DIRK VERSTOEP, The Hague, Netherlands. Filed Mar. 4, 1931, Serial No. 520,015, and in Belgium Mar. 7, 1930. 2 Claims. (Cl. 40—196.)



1. An apparatus for separating water from dredged material, comprising a wheel structure rotatable about a horizontal axis, said wheel having a series of circumferentially arranged compartments which are open at the side facing the center of the wheel, a fixed trough having straining apertures in the side walls mounted inside the wheel in the lowest part of the inner free space, means for discharging the contents of the trough into the wheel compartments, a chute for conveying the contents discharged from the wheel compartments and extending from the upper part of the inner free space of the wheel to an outer point of discharge, and means for rotating the wheel.

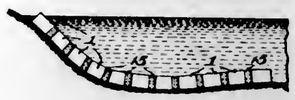
1,902,740. COMBINATION JACK AND SHOCK ABSORBING STRUCTURE. ALBERT BERT WALTER, Elm Grove, W. Va. Filed Sept. 30, 1931. Serial No. 566,102. 5 Claims. (Cl. 254—93.)

1. In a structure of the class described, in combination, a wheel supported axle, a vehicle frame connected thereto, a fluid actuated lifting jack clamped on said axle, said jack embodying a cylinder, an air supply pipe connected thereto, an air release valve also connected thereto, a piston slidable in said cylinder, said piston being provided with a base plate constituting a foot, and adjustable means for connecting the foot to said frame, whereby to



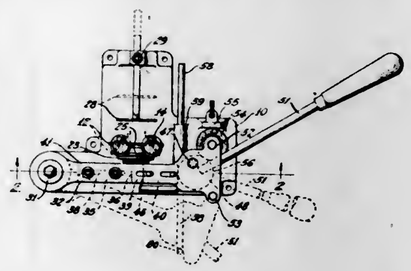
permit the jack to have the additional function of a pneumatic shock absorber when partially collapsed for normal running conditions.

1,902,741. DIVERSION DAM. CARL WEBER, Jacksonville, Fla. Filed Dec. 1, 1930. Serial No. 499,355. 4 Claims. (Cl. 61—32.)



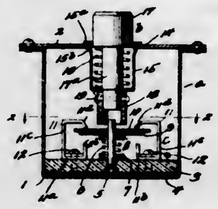
1. A diversion dam composed of sinkable independent hollow units, flexible couplings uniting said units and a flexible mat secured to each unit to overlap the joint between it and the adjacent unit.

1,902,742. INSULATION STRIPPING DEVICE. ALFRED N. WENTINK, Chicago, Ill. Filed Sept. 28, 1931. Serial No. 565,678. 13 Claims. (Cl. 81—9.51.)



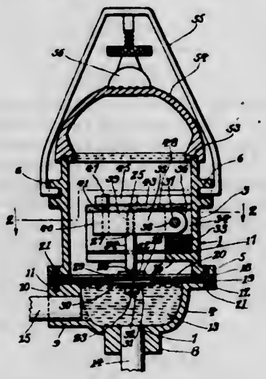
1. A device of the character described, comprising a base, rotatable elements on the base, stripping knives carried by the rotatable elements, means constraining said elements and knives to rotate in unison, an arm pivotally mounted on the base, a slidable jaw and a relatively stationary jaw carried by said arm adapted to grip an object and pull the same between the knives, a rotatable cam eccentrically mounted on said arm to move said slidable jaw toward said stationary jaw, a handle attached to said cam for moving the same, and stops on said arm limiting movement of said handle relative to said arm.

1,902,743. PUSH BUTTON SWITCH. GEORGE H. WHITTINGHAM, Baltimore, Md., assignor to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 4, 1930. Serial No. 472,963. 3 Claims. (Cl. 200—159.)



3. A switch casing having a detachable cover, a base of insulating material removably secured within the casing, a switch mounted on said base and comprising a guide pin projecting toward the cover, stationary contact members at opposite sides of the pin, each member having two spaced contact surfaces, an insulating disk and a metal disk slidable on the pin and both projecting between said spaced surfaces and a spring interposed between said disks and the base, and means for moving said disks comprising a thimble, concentric with the pin, extending through an opening in the cover into the casing and secured to the cover, a push button movable in said thimble and having a shank extending through the bottom of the thimble, a sleeve of insulating material on the inner end of said shank adapted to bear against said disks, and a spring in said thimble normally pressing said push button away from the disks.

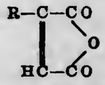
1,902,744. CIRCUIT CONTROLLING DEVICE. CHRISTOPHER B. WILLI, Heber, Calif., assignor of one-fourth to George D. Thompson, Heber, Calif. Filed Feb. 11, 1932. Serial No. 592,416. 2 Claims. (Cl. 200—83.)



1. In a circuit controlling device, an angle shaped flat support including a pair of legs disposed at right angles to each other, an insulator element mounted on and of the same form as that of said support, an angle shaped flat holder including a pair of legs disposed at right angles to each other, seated upon and of the same form as that of said element, one of the legs of said holder formed in its upper face with a transverse groove, insulating means mounted upon the other leg of the holder, a shiftable arm having one end positioned in said groove, said arm being pivotally connected at said end to and extended from said grooved leg, said arm having a vertical opening and a breaker point interposed in the circuit, a holder mounted on said means and formed with a stationary arm extended over said shiftable arm, said stationary arm having a breaker point interposed in the circuit and normally spaced from and aligning with said other breaker point, a spring attached to and extending from said grooved leg and permanently bearing on said shiftable arm, means for anchoring said support, holders, insulating means and element together, and a normally stationary vertically movable shouldered post abutting and extending into said opening and providing when moved upwardly to bring the breaker points on said arms into contact.

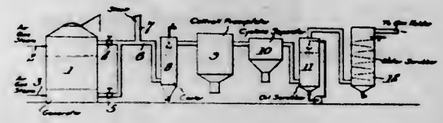
1,902,745. ANTIRACHITICALLY ACTIVE PRODUCT. ADOLF WINDAUS, Gottingen, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed June 24, 1931, Serial No. 546,662, and in Germany Apr. 2, 1931. 21 Claims. (Cl. 167—81.)

1. In the process of preparing antirachitically highly active transformation products of ergosterol which has been irradiated with ultra violet light not containing wave lengths below 275 $\mu\mu$, the steps which comprise reacting upon the irradiation product with an anhydride of the formula



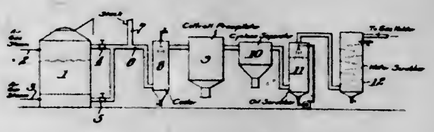
wherein R stands for hydrogen or alkyl during several days in the presence of an organic solvent being inert to the reacting components, subjecting the reaction mass to a saponifying process at room temperature, and extracting the reaction mass by means of an organic solvent.

1,902,746. PROCESS FOR THE PRODUCTION OF CARBON BLACK. JAMES A. YUNKER, Louisville, Ky., assignor to National Gas Hydrogen Corporation, New York, N. Y., a Corporation of Delaware. Filed July 8, 1930. Serial No. 466,558. 4 Claims. (Cl. 134—60.)



3. Process of making carbon black which comprises blasting a bed of ignited coke with air, purging the coke bed with steam, passing natural gas through the bed of coke and continuously repeating this series of steps, collecting carbon black from the gases produced by the passage of natural gas through the coke bed, and occasionally substituting steam for natural gas in the cycle.

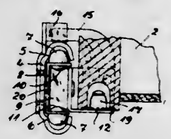
1,902,747. PROCESS OF RE-FORMING NATURAL GAS. JAMES A. YUNKER, Louisville, Ky., assignor to Natural Gas Hydrogen Corporation, New York, N. Y., a Corporation of Delaware. Filed July 8, 1930. Serial No. 466,559. 1 Claim. (Cl. 48—196.)



Process of re-forming natural gas which comprises blasting a bed of coke at a temperature of about 1200° C., with air for about three minutes, to raise its temperature to about 1400° C., wasting the gases produced during about the first 2¼ minutes of said 3 minute period and saving the gases produced during about the last ¾ minute

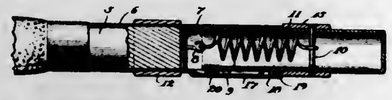
of said 3 minute period, purging the bed of coke with steam for about ½ minute, saving the resulting gases, and then passing natural gas through the bed of coke for about 8 to 10 minutes, saving the resulting gases, purifying the saved gases and recovering carbon black therefrom and mixing the purified gases for use as fuel, and continuously repeating the series of operations.

1,902,748. DRAWER GUIDE. GUSTAV HERMANN ZIEHL, Rodenkirchen, Germany. Filed Oct. 30, 1931, Serial No. 572,137, and in Germany Nov. 8, 1930. 7 Claims. (Cl. 45—77.)



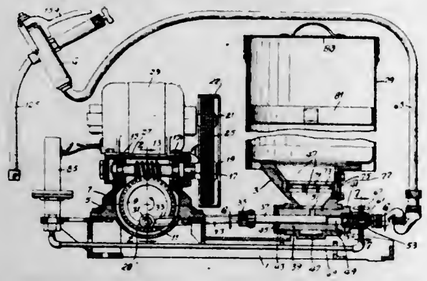
1. In a device of the kind described, a cabinet having side walls and an open front, main channel rails fixed to said side walls in confronting relation, sliding rails supported in said main rails to move in and out of the cabinet, means to limit outward movement of the sliding rails arranged to retain the rear ends of the sliding rails in the channel rails in the extreme outward position of said sliding rails, said sliding rails includng angle members havng horizontal legs projecting toward the center of the cabinet from the sliding rails, and a drawer resting on said horizontal legs and vertically liftable therefrom, said drawer being slidable on said horizontal legs.

1,902,749. ATTACHING MEANS FOR FISHING REELS. CLIFF BAIRD and WILLIAM R. ROBERTSON, Eugene, Oreg. Filed Apr. 19, 1932. Serial No. 606,210. 5 Claims. (Cl. 43—22.)



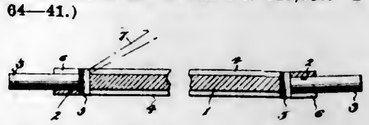
1. A reel holder for fishing rods comprising a sleeve attachable to the rod, a spring retracted carrier telescopically mounted therein, pockets on the sleeve and the carrier for receiving the reel base, said sleeve having a longitudinal groove on its inner wall, and a projection on the carrier slidable in said groove and maintaining the pockets in alignment.

1,902,750. DISPENSING APPARATUS. FRANK S. BARKS, St. Louis, Mo. Filed Sept. 8, 1928. Serial No. 304,831. 8 Claims. (Cl. 221—47.1.)



6. In a high pressure lubricating apparatus, a lubricant supply chamber, a delivery line leading from said supply chamber, means for forcing lubricant from said supply chamber to the delivery line whereby high pressure is effected in said line, electric motivating means for actuating said forcing means, an electric circuit for energizing the electric motivating means, a pressure-operated and snap-acting switch in said circuit, means placing said delivery line and said pressure switch in communication, said switch being operable to instantaneously start and stop said motivating means at predetermined pressures in said delivery line.

1,902,751. SPINDLE. FRANK BAUMAN, Honesdale, Pa. Filed Nov. 15, 1928. Serial No. 319,568. 2 Claims. (Cl. 64—41.)



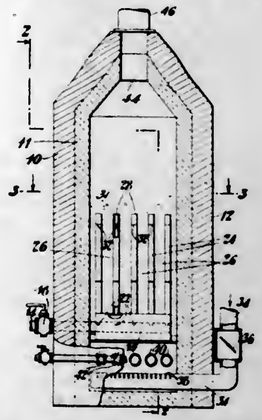
1. A spindle provided with an axial opening and an intersecting transverse opening and having a slot formed in a side thereof and extending from the transverse opening through the end of the spindle and communicating with the axial opening, and a removable journal pressed into the axial opening and removable therefrom by means of a drift which has a free passage through the side slot leading outwardly from the axial opening.

1,902,752. STRAIGHT BAR KNITTING MACHINE. CARL BAUMGÄRTEL, Zeulenroda, Germany. Filed Aug. 22, 1932, Serial No. 629,957, and in Germany Jan. 29, 1931. 6 Claims. (Cl. 66—76.)



1. In a needle operating mechanism for straight bar knitting machines, operating jacks for moving the needles, cams for moving the said operating jacks, and longitudinally shiftable auxiliary jacks on which the said operating jacks are caused to slide, the said operating jacks being lifted and lowered by the said auxiliary jacks parallel to the walls of the needle passage and remaining in continuous engagement with the heels of the needles.

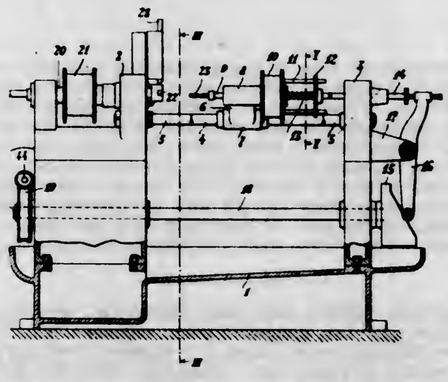
1,902,753. METHOD OF AND APPARATUS FOR PRODUCING CARBON BLACK. DAVID J. BEAVER, Elizabeth, N. J., assignor to General Atlas Carbon Company, Dover, Del., a Corporation of Delaware. Continuation of application Serial No. 219,152, filed Sept. 12, 1927. This application filed Jan. 27, 1931. Serial No. 511,640. 40 Claims. (Cl. 134—60.)



1. Apparatus for the production of carbon black, comprising a furnace chamber having an unobstructed upper interior portion, a plurality of uniformly-spaced, narrow gas ducts mounted in the lower portion of the chamber with their longer sides arranged in parallel, and air ducts surrounding each of the gas ducts and wider than the latter, the said arrangement of the air and gas ducts within the furnace chamber thereby providing for the radiation directly from each flame to the others of a greater proportion of radiant energy, during the combustion of gas in the chamber than is radiated from such flame directly to the walls of the chamber.

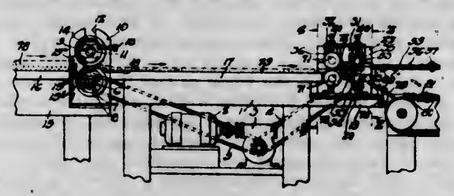
12. In the art of producing carbon black by partial combustion of contiguous flowing streams of hydrocarbons and air in a heated, enclosed chamber, the improvement comprising burning the said hydrocarbon with between 60% and 65% of the theoretical amount of air required for the complete combustion of the hydrocarbons.

1,902,754. AUTOMATIC LATHE FOR HIGH SPEED WORK. ADRÉ BECHLER, Moutier, Switzerland. Filed May 20, 1932, Serial No. 612,594, and in Switzerland Apr. 30, 1932. 3 Claims. (Cl. 29—53.)



3. In an automatic lathe for high speed work of the kind described, and in combination, a head stock having a hollow base provided with a trough-like extension towards the tail stock, a tail stock mounted upon said extension and connecting rods between head stock and tail stock, a head comprising a housing enclosing the tool with driving means and mounted angularly adjustable on one of the rods left hollow, a driving shaft arranged within said hollow shaft, at least one spindle, as tool holder held slidingly and rotatably within said housing, a system of spur wheels constituting the means for transmitting movement from the said driving shaft to the spindle, a piston-like member held slidingly in the tail stock to constitute an axial abutment for the spindle and a system of cams and levers operated from the main shaft and adapted to guide said piston-like member.

1,902,755. CONFECTION MACHINE. JOHN L. BIGGS, Chicago, Ill., assignor to Queen Anne Candy Company, Hammond, Ind., a Corporation of Illinois. Filed Aug. 12, 1931. Serial No. 556,469. 1 Claim. (Cl. 107—21.)

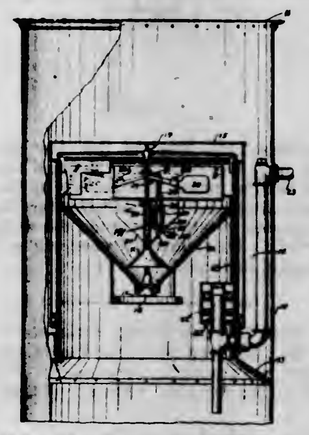


In a confection machine, the combination of two drums disposed upon parallel axes, blades having cutaway sections and extending radially from the periphery of said drums, and a taut wire intermediate said drums and arranged normally to said axes, said drums being timed to rotate so that a blade on either of said drums traverses the plane common to said axes simultaneously, said wire being cleared by the cutaway sections of one of said drums.

1,902,756. HETEROCYCLIC ARSENO-COMPOUNDS AND PROCESS OF PURIFYING SAME. ARTHUR BINZ, Berlin, and CURT RÄTH, Rangsdorf, Germany. Original application filed Nov. 8, 1924, Serial No. 748,717, and in Germany Nov. 19, 1923. Divided and this application filed Mar. 28, 1927. Serial No. 179,180. 4 Claims. (Cl. 260—15.)

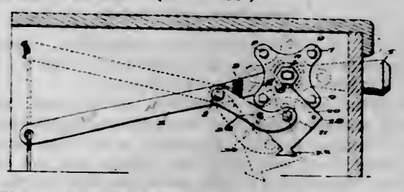
1. Process of purifying heterocyclical compounds which comprises transforming a heterocyclical compound of the arsonic acid type into a compound of a lower degree of oxidation by treating same with a reducing agent separating the resulting arseno compound by filtration and reconverting this arseno compound into the starting product by means of an oxidising agent.

1,902,757. ACETYLENE GENERATOR. ROY A. BOLEY, Indianapolis, Ind., assignor to J. B. Colt Company, a Corporation of New Jersey. Filed June 13, 1928. Serial No. 285,084. 10 Claims. (Cl. 48—38.)



1. In acetylene generator, the combination of a main carbide hopper; a gas bell; a reserve carbide hopper comprising a discharge opening normally closed by a gate; mechanism operable by said bell for opening said gate; mechanism operated by a yieldable means for closing said gate against the pressure thereon of the carbide in said hopper; and a device operable by said mechanism to suddenly release said gate to discharge reserve carbide into said main hopper.

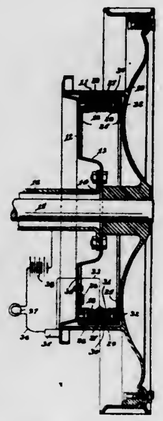
1,902,758. FLUSH-TANK LEVER. WILLIAM B. CAMPBELL, Nashville, Tenn. Filed Mar. 2, 1931. Serial No. 519,670. 3 Claims. (Cl. 4—67.)



1. The combination of a lever, a cam having a projection formation, said cam reversibly connected with the lever, a handle having a stem, said stem having means

thereon in position to engage and traverse the edges of the cam, the cam and said means having edges in position to meet and pass when the lever is actuated to prevent hanging, the projection formation on the cam acting as a stop, when the cam is properly set to limit the turn of the handle in either direction, when used as a double-acting lever.

1,902,759. BRAKE BAND SIGNALING DEVICE. ALFRED S. CATAUDELLA, Bridgeport, Conn. Filed Feb. 5, 1931. Serial No. 513,509. 4 Claims. (Cl. 177—311.)



1. In an automobile brake of the class described, the combination with a circular brake drum, a circular brake shoe, a flat circular lining intermediate of the drum and shoe, a metal strip positioned between the shoe and lining, an insulating covering enclosing the strip, a circuit wire connected to the strip and ground, and a battery and signal connected in circuit.

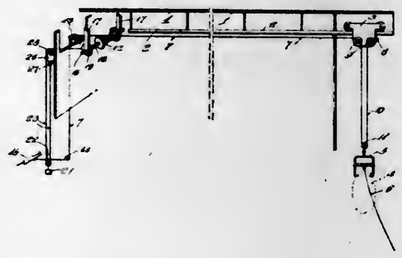
1,902,760. SPECIAL PACKAGE. CHARLES C. CHASE, St. Joseph, Mo., assignor to Chase Candy Company, St. Joseph, Mo., a Corporation of Missouri. Filed June 22, 1931. Serial No. 546,119. 1 Claim. (Cl. 206—46.)



Package, comprising a flexible sheet uniformly diverted in a central portion from a planar state to form a convex chamber, a flat reinforcing element forming the bottom of said chamber, the corner portions of said flexible sheet being folded over said reinforcing element, and the secondary corners thus formed also being folded over said reinforcing element, a sealing sheet pasted over said folded portions, any one of said corners constituting a pouring trough when released from said sealing sheet.

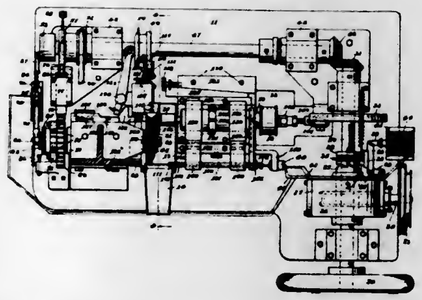
1,902,761. HAY UNLOADING APPARATUS. HARRY C. CHRISTIANCE, Compton, Ill. Filed Dec. 31, 1930. Serial No. 505,926. 1 Claim. (Cl. 212—93.)

Unloading apparatus comprising an overhead track, a carriage movable along said track from a loading position to an unloading position, a grapple, a tow rope extending longitudinally of said track and having one end secured to the carriage and a portion extending downwardly from the carriage and trained about a pulley wheel carried by the grapple whereby movement of the grapple towards and away from the carriage may be controlled, hangers at opposite sides of said track adjacent one end thereof, a shaft rotatably supported by said hangers and extending transversely beneath the track, a drum carried by said shaft, said rope having a portion wound about the drum to cause the drum and shaft to rotate when the rope is drawn upon to move the carriage along said track and the rope extending outwardly from the drum for engagement by draft means, said drum being corrugated longitudinally to create frictional binding between the drum and rope



and cause the drum to rotate when the rope is drawn upon, and means to yieldably resist rotation of the drum and shaft in one direction consisting of a cable having one end wound upon said shaft and its intermediate portion engaged with a guide pulley, said cable extending downwardly from the guide pulley and then upwardly and secured to form a depending loop, and a weight having a suspending pulley engaged with the depending looped portion of the cable to exert pull upon the cable and resist rotation of the shaft and drum in one direction.

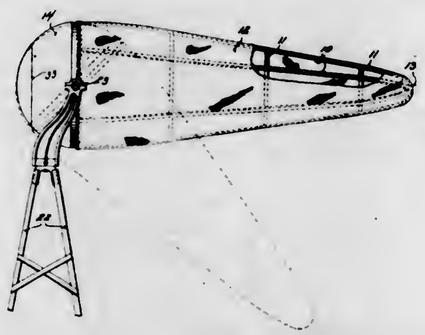
1,902,762. RIVET DRILLING MACHINE. BARTHOLOMEW J. CONLON, Bridgeport, Conn., assignor to The Conlon Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 18, 1931. Serial No. 523,507. 5 Claims. (Cl. 77—5.)



1. In a rivet drilling machine of the class described, the combination of a rotatable carrier having a series of pockets in its peripheral edge portion, means for imparting step-by-step rotary movement to said carrier, comprising a rotatable spindle upon which the carrier is mounted, a stop wheel mounted upon the spindle, means for engagement with the wheel to lock it and the carrier in properly indexed positions, a pawl and ratchet wheel mounted on the spindle, means for adjusting the ratchet wheel upon the spindle, a solenoid, an eccentric and yieldable link connected for operating the pawl and ratchet, said link connection including contacting means, means whereby incomplete indexing operations of the carrier and the locking device will operate the solenoid to stop the machine.

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1,902,763. WIND INDICATOR FOR AIRPLANE LANDING FIELDS. FRANK M. CHAPIEWSKI, Milwaukee, Wis. Filed Aug. 13, 1928. Serial No. 299,280. 9 Claims. (Cl. 73—55.)



1. In a wind indicator the combination of a hollow elongated body portion having translucent walls, a support therefor, a pivotal connection between said support and said body portion permitting the same to swing with the wind about a substantially vertical axis to thereby indicate the direction of the wind, and a rockable connection between said support and said body portion permitting the same to rock about a substantially horizontal axis in accordance with the changes in wind velocity to thereby indicate the velocity of the wind, and means for illuminating the interior of said body portion to render the same visible at night.

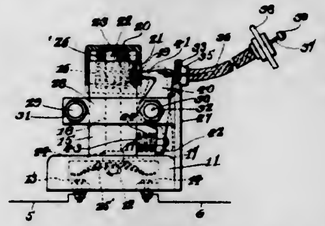
1,902,764. MAIL BAG. JULIUS L. DE GIVE, Atlanta, Ga.; Henry L. de Give executor of said Julius L. de Give, deceased. Filed Nov. 8, 1929. Serial No. 405,756. 2 Claims. (Cl. 150—13.)



1. The combination with a mail bag, of flexible cable members extending around the bag near the top and bottom ends thereof, spaced eyelets disposed around the bag adjacent the opposite ends of the bag and through which the cable is threaded, and buoyant element carried by each cable and disposed between the confronting portions of each of the eyelets.

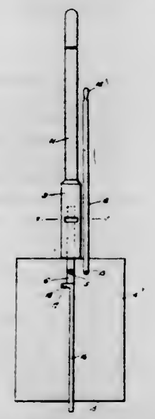
1,902,765. SAFETY CUT-OUT SWITCH. CARL E. DEITSCH, Marion, Ohio. Filed Dec. 13, 1929. Serial No. 413,895. 3 Claims. (Cl. 200—169.)

1. In a latching device for a safety cut-out switch of that type including a base, a notched stationary member carried by the base and a spring controlled apertured movable member having its aperture adapted to register with the notch in the former, the combination of an upstanding support arranged in opposed spaced relation to said members, adapted to be secured at its lower end to said base and having an opening near its top, a bracket extended from the support at right angles to the latter to oppose and extend across one side of said stationary member, means carried by the bracket for securing it to said



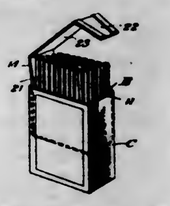
stationary member, a spring controlled vertically movable dog pivotally supported intermediate its ends from said bracket between said support and said members and having a nose at its upper end for extension into the registering notch and aperture for normally latching said movable member to said stationary member, and a pull element extending through said opening and attached to said dog.

1,902,766. SCRAPING AND CLEANING IMPLEMENT. EDGAR DE NIO, Woodford, N. Y. Filed Sept. 11, 1930, Serial No. 481,244. Renewed Sept. 1, 1932. 2 Claims. (Cl. 15—236.)



1. Means for cleaning the blade of a scraper implement comprising an arm pivotally connected to the upper part of the blade whereby said arm can be swung across the blade to clean one face thereof.

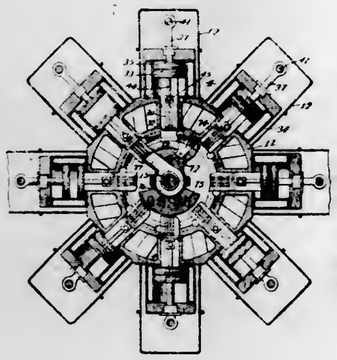
1,902,767. MATCH BOX. ISADORE H. DUBE, Cincinnati, Ohio. Filed Apr. 23, 1932. Serial No. 607,196. 2 Claims. (Cl. 206—3.)



1. A match box comprising a shell, a slide member fitted within the shell and having a bridging tongue for

a group of matches when contained in the slide member, said tongue being provided with a weakened line between it and the slide member, said tongue further having fold lines for disposing the same in bridging relation to the matches and adapted to open and close relative thereto, and extensions folded from the tongue onto the same exteriorly thereof to reinforce said tongue.

1,902,768. ROTARY INTERNAL COMBUSTION ENGINE. EDWARD C. DUER, Los Angeles, Calif., assignor of one-half to John Harrah, Los Angeles, Calif. Filed May 30, 1930. Serial No. 457,551. 14 Claims. (Cl. 123—14.)



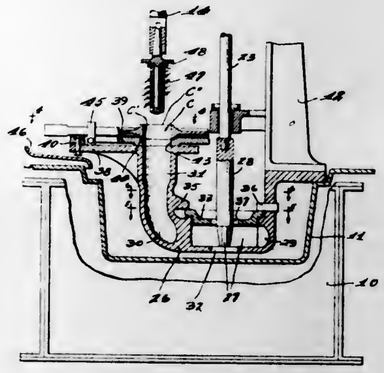
1. In a rotary internal combustion engine, a housing provided on its inner surface with a circumferential channel, a crank shaft journaled in and passing through said housing, a rotor secured to said crank shaft, a head on said rotor, which head is positioned in the channel in said housing, said rotor being provided with a channel to the rear of said head that registers with the channel in the housing, a series of reciprocating abutments radially disposed about the housing, the inner ends of which abutments are adapted to enter the channel in the rotor, pins projecting laterally from said abutments, radially disposed arms having their inner ends mounted on cranks of said crank shaft, radially movable axes to which the outer ends of said arms are pivotally connected, blocks mounted on said arms and adapted during the swinging reciprocating movements of the arms to engage beneath the pins of said abutments and to move the same radially outward and retractile springs connected to said abutments for moving the same inwardly after said pins ride off said blocks.

1,902,769. STORE FIXTURE DISPLAY MOLDING. JOHN H. ESDORN, New Rochelle, N. Y. Filed Feb. 18, 1932. Serial No. 593,921. 3 Claims. (Cl. 40—16.)



1. A molding formed of a relatively long narrow strip of material, said strip having marginal beads at its opposite longitudinal edges, and an outwardly projecting portion arranged centrally between the beads, the beads having each an angular notch undercut therein, said outwardly extending portion having an inwardly projecting groove formed in the exposed face thereof, a pair of diverging surfaces extending from the opposite edges of the groove to form each one of the sides of the angular notch in the respective bead.

1,902,770. METHOD AND APPARATUS FOR TINNING CONNECTING ROD BEARINGS. WILLIAM J. FIEGEL, Detroit, Mich., assignor to Bohn Aluminum & Brass Corporation, Detroit, Mich., a Corporation of Michigan. Filed Sept. 16, 1929. Serial No. 393,092. 9 Claims. (Cl. 91—70.2.)



1. In the method of tinning the bearing surfaces of heat treated connecting rods and the like, that step which consists in locally heating the surface to be tinned by continuously flowing a column of tinning metal in contact with the said surface, and excluding air from contact with said surface by contact therewith of said column of tinning metal whereby said surface is tinned without oxidization.

1,902,771. PRACTICE CARTRIDGE. ALONZO F. GAIDOS, Redwood City, Calif. Filed Dec. 22, 1930. Serial No. 503,957. 2 Claims. (Cl. 102—14.)

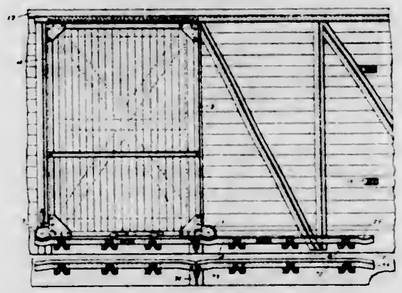


2. A reloadable practice shell comprising two longitudinal shell sections demountably secured to each other, an end of one section having a recess in its free end to receive a projectile therein, and having a passage from said recess to the other end of said section to contain a cartridge behind the projectile, the passage being of smaller diameter than the projectile, the firing end of the section being recessed and apertured, an auxiliary firing pin in said second section in operative position relative to the usual firing mechanism of a firearm, and a rim firing element on the end of said pin adjacent the rim of the cartridge.

1,902,772. RAILWAY CAR DOOR FIXTURE. GARTH G. GILPIN, Riverside, Ill., assignor to Railway Metal Products Company, Chicago, Ill., a Corporation of Delaware. Original application filed Mar. 27, 1930, Serial No. 439,398. Divided and this application filed Jan. 25, 1932. Serial No. 588,684. 4 Claims. (Cl. 16—96.)

1. In a railway car, a track having a tread arranged to engage rollers supporting a door and a member on the door positioned over the track but out of engagement

therewith, said tread having interrupted portions of sufficient depth to allow the door to move downwardly, when the rollers are moved to a position over said interrupted

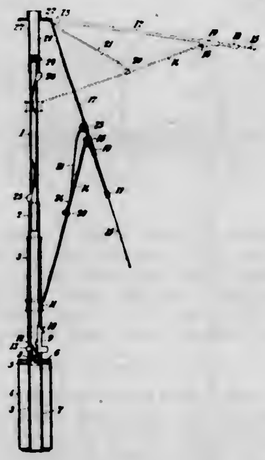


portions of the tread, until said member engages said track and supports the entire weight of the door upon the track independently of the rollers.

1,902,773. METHOD OF PROTECTING GRANULES OF HYGROSCOPIC SUGARS AND ARTICLE PRODUCED THEREBY. WILLIAM J. HALE, Midland, Mich. Filed Mar. 25, 1930. Serial No. 438,911. 13 Claims. (Cl. 127—63)

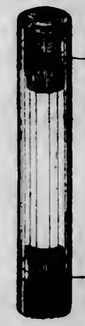
1. The process of protecting a hygroscopic carbohydrate from atmospheric moisture which comprises spraying the surfaces of the granules of the carbohydrate with a non-hygroscopic water-soluble carbohydrate to produce a continuous and completely enclosing film thereof, and increasing the thickness of such non-hygroscopic film by crystalline deposition thereon from a solution saturated with respect to the non-hygroscopic carbohydrate being deposited.

1,902,774. TELESCOPIC UMBRELLA. HANS HAUPT, Berlin-Wilmersdorf, Germany. Filed Apr. 18, 1931, Serial No. 531,172, and in Germany Apr. 25, 1930. 2 Claims. (Cl. 135—27.)



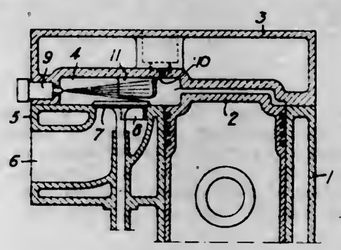
1. In an umbrella having a telescopically adjustable rib pivoted to a crown and a stretcher pivoted to the outer rib section, an auxiliary strut pivoted at one end to the stretcher and slidable at the other end on the inner rib section independently of the outer one.

1,902,775. PROCESS OF RENDERING NONPOISONOUS THE TOBACCO FUMES DURING SMOKING. KARL HERRMANN, Vienna, Austria, assignor, by mesne assignments, to Bonicot Corporation of America. Filed June 17, 1930, Serial No. 461,827, and in Austria Feb. 15, 1930. 2 Claims. (Cl. 131—52.)



1. Process of rendering nonpoisonous the tobacco smoke during smoking which consists in injecting a liquid into the cigar or cigarette at its forward end, and injecting a solution containing a ferric salt into the cigar or cigarette at its rear end.

1,902,776. INTERNAL COMBUSTION ENGINE. KNUT JONAS ELIAS HESSELMAN, Saltsjo-Storangen, Sweden. Filed Dec. 16, 1927, Serial No. 240,554, and in Sweden Dec. 31, 1926. Renewed Sept. 30, 1930. 9 Claims. (Cl. 123—32.)



1. In an internal combustion engine having a cylinder chamber substantially of the shape of a body of revolution, a drum shaped combustion chamber situated at the side of the cylinder, means to introduce atmospheric air directly into said combustion chamber so as to cause said air to perform a rotating motion therewithin, there being an opening affording communication between said combustion chamber and the cylinder chamber at the inner end thereof, the center line of said opening being radial with respect to both of said chambers in order to allow said rotating motion to transmit from the combustion chamber to the cylinder chamber, and vice versa.

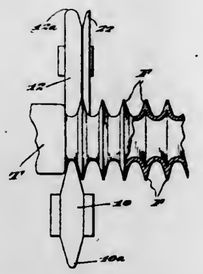
1,902,777. PROCESS FOR WEIGHTING OF NATURAL AND ARTIFICIAL SILK FIBERS. HARRY HERTZ, Paterson, N. J. Filed Apr. 22, 1932. Serial No. 607,006. 17 Claims. (Cl. 8—13.)

1. The process of weighting natural and artificial silk fiber which comprises treating said fiber in separate baths with tin-weighting agents and fixing baths, subsequently treating the fiber with aqueous solution containing sodium acetate with isopropylated beta naphthaline di-sulphonic acid, and with di-chloride of lead in the presence of at least one material selected from the group consisting of phosphoric acid, di-sodium phosphate and tri-sodium phosphate, and finally treating said fiber in a bath of aqueous carbonate of ammonia.

1,902,778. PROCESS FOR WEIGHTING OF NATURAL AND ARTIFICIAL SILK FIBERS. HARRY HINTZE, Paterson, N. J. Filed May 13, 1932. Serial No. 611,244. 10 Claims. (Cl. 8—13.)

1. The process of weighting natural and artificial silk fiber which comprises treating said fiber in separate baths with tin-weighting and fixing agents, treating said fiber in a bath containing di-chloride of lead, and subsequently treating said fiber in a fixing bath.

1,902,779. METHOD OF MAKING RADIATOR ELEMENTS. FRANK K. HOFFMAN, Dunkirk, N. Y. Filed Apr. 19, 1930. Serial No. 445,738. 1 Claim. (Cl 29—157.3.)



The method of spinning tubes to produce tubular finned elements which comprises rotating said tube, and feeding spinning elements into operating engagement therewith with operative portions of said elements adapted to engage the metal of the tube in a relatively narrower area at one side thereof and in a wider area producing the finished contour of the tubular finned element at another side thereof.

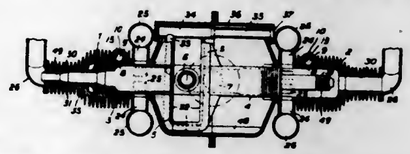
1,902,780. KNITTED LINING FOR RUBBER FOOTWEAR AND METHOD OF MAKING SAME. ROGER M. HOLDEN and JOHN F. ROBERTS, Worcester, Mass., assignors to Holden Knitting Co., Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 11, 1930. Serial No. 443,358. 4 Claims. (Cl. 66—170.)



1. The improvement in the manufacture of a lining for a formed rubber article which consists in knitting a length of tube with one portion in rib stitch, another portion partially in rib and partially in tuck stitch and a third portion in tuck stitch, the mixed rib and tuck stitched portion lying between the other portions to impart an arcuate form to the lining.

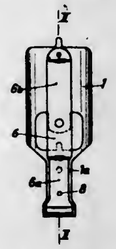
1,902,781. INTERNAL COMBUSTION ENGINE. CECIL ISLE, London, England. Filed May 18, 1929, Serial No. 364,241, and in Germany May 18, 1928. 11 Claims. (Cl. 123—56.)

7. In an internal combustion engine comprising a cylinder, having inlet and exhaust ports, a tubular extension formed with said cylinder, means for supplying air under pressure to said tubular extension, a hollow working piston movable in said cylinder adapted to communicate with said tubular extension whereby air may be continuously supplied within the hollow working piston, a



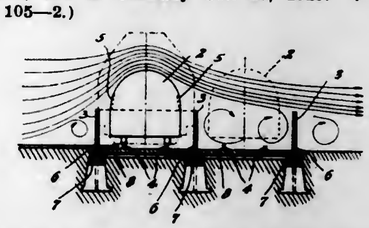
crosshead for driving the crankshaft of the combustion engine, and said crosshead having slots formed therein for the escape of air flowing through said hollow piston.

1,902,782. WRITING, DRAWING, OR RULING PEN. THEODOR KOVACS, Berlin-Schoneberg, Germany. Filed Mar. 16, 1932, Serial No. 599,259, and in Germany Mar. 18, 1931. 8 Claims. (Cl. 120—114.)



1. A pen for attachment to a pen holder comprising a pen-shaped element of spring metal and formed with a reduced writing portion, a spring metal member pivoted to said element and having its pivoting axis normal to the top face of said element, said member having a portion adapted to normally overlie the reduced writing portion.

1,902,783. SIDE WIND PROTECTION FOR RAILWAY SYSTEMS. FRANZ KRUCKENBERG and CURT STEDEFELD, Hanover, Germany. Filed Sept. 4, 1930, Serial No. 479,762, and in Germany Oct. 25, 1929. 7 Claims. (Cl. 105—2.)

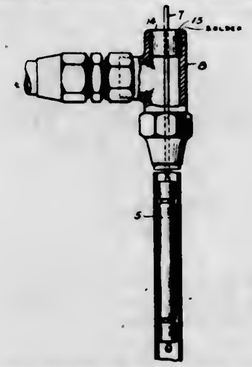


1. In a railway the combination of a track, imperforate wind protection walls parallel with said track in the outer boundaries of the loading gauge, and a car having portion projecting above said walls said portion being rounded off, the upper edges of said walls being substantially level with the lower edges of the car windows.

1,902,784. REFRIGERATION SYSTEM. LESTER U. LARKIN, Atlanta, Ga., assignor to Larkin Refrigerating Corporation, Atlanta, Ga., a Corporation of Georgia. Filed Oct. 9, 1930. Serial No. 487,542. 1 Claim. (Cl. 62—8.)

In combination, pipe fitting adapted to be intercalated in the conduit on the low side of a refrigeration system for the purpose of introducing a thermostat directly into the stream of effluent refrigerant in said system, comprising a T having a through-bore and a branch nipple,

one end of said through-bore being counter-bored, and a thermostatic element comprising a bulb and a tube connected thereto, said tube passing axially within said

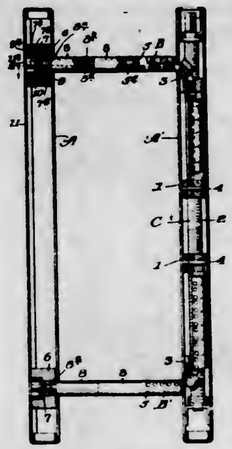


through-bore, and means secured to said tube and adapted to be secured in sealing relation in the counter-bored end of said T.

1,902,785. CRYSTALLINE ANTIRACHITICALLY ACTIVE PRODUCT AND A PROCESS OF PREPARING THE SAME. OTTO LINSERT, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 26, 1932, Serial No. 624,899, and in Germany Sept. 18, 1931. 4 Claims. (Cl. 167—81.)

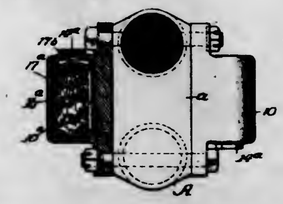
1. The process which comprises freeing an antirachitically active product, prepared by irradiating ergosterol with the unfiltered light of a magnesium spark from the unchanged ergosterol contained therein, subjecting the product obtained to the action of at least one mol of citraconic acid anhydride over a period of several days at room temperature in the presence of an organic solvent which is inert to the reacting components, saponifying the reaction mixture by the addition of a caustic alkali, then diluting the mixture with water, extracting the mixture obtained with an organic solvent, evaporating the solvent and transforming the remainder into crystals by fractional recrystallization from an organic solvent.

1,902,786. LOOSE-LEAF BINDER. LESTER T. LLOYD, Chicago, Ill., assignor to W. G. Lloyd Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1929. Serial No. 371,594. 7 Claims. (Cl. 129—41.)



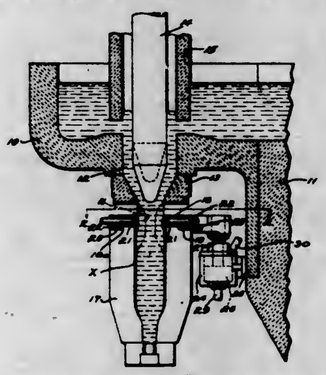
3. In a binder, a hollow clamping-member having bearings therein and having its outer wall provided with perforations registering with said bearings, and rotary connectors journalled and confined in said bearings having actuating stems presented to said perforations.

1,902,787. DAMPING DEVICE FOR CRANK-SHAFTS. FREDERICK S. DUESENBERG, Indianapolis, Ind., assignor to Duesenberg, Inc., Indianapolis, Ind., a Corporation of Delaware. Filed Jan. 28, 1929. Serial No. 335,405. 6 Claims. (Cl. 74—6.)



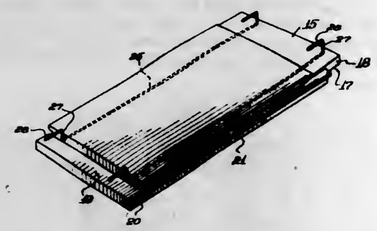
1. The combination with the crank-shaft of a high speed multi-cylinder engine, of a damping device comprising a casing rotatable with the shaft and having a chamber therein, and a removable liquid-filled container in the chamber.

1,902,788. GLASS FEEDING APPARATUS AND METHOD. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 2, 1928. Serial No. 274,389. 5 Claims. (Cl. 49—55.)



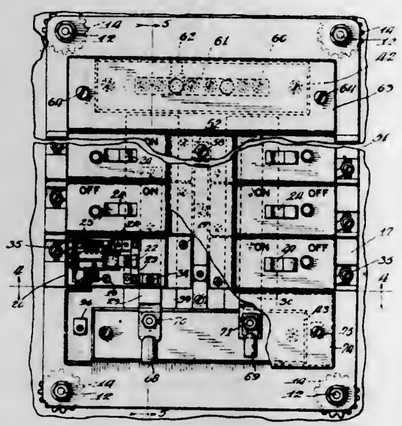
5. The method of feeding molten glass from a downwardly opening outlet to a charge receiver below and spaced from the outlet, comprising the steps of discharging glass downwardly from the outlet in a column having an area in cross section not substantially less than the cross-sectional area of the major portion of the cavity of the charge receiver, guiding the lower end of said column into the cavity of said charge receiver centrally of the latter and providing a seal between the glass column and the upper end of the charge receiver, augmenting the column of glass by discharge of glass from said outlet at a rate so related to the rate of downward movement of the lower end of said column in the cavity of said charge receiver as to prevent substantial attenuation of any portion of said column before the lower end thereof reaches the lower end of the cavity of the charge receiver, applying sub-atmospheric pressure to the cavity of the charge receiver around the glass at the upper end of the latter to aid in effecting contact of the lateral surface of the glass in the charge receiver with the side walls of said cavity, breaking the seal between the glass column and the upper end of the charge receiver and attenuating the glass column at the upper end of said charge receiver, and severing the attenuated glass at a plane close to that of the upper end of said charge receiver.

1,902,789. PRECAST CEILING CONSTRUCTION. HERBERT W. REEL, Hinsdale, Ill., assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1930. Serial No. 461,738. 3 Claims. (Cl. 72—68.)



2. A ceiling tile comprising a rectangular slab of cementitious material having a reinforcing mat embedded therein, tongues and grooves formed on the four edges of said slab adapted to interlock with the tongues and grooves of other adjacent slabs to form a ceiling, said slab being provided with core holes, and attaching hook rods removably extending into said core holes and adapted to attach said slabs to lower flanges of floor beams.

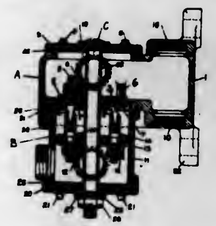
1,902,790. PANEL-BOARD AND PANEL-BOARD CONSTRUCTION. HENRY F. STARRETT, Chicago, Ill. Filed Mar. 25, 1929. Serial No. 349,622. 16 Claims. (Cl. 247—10.)



1. A panel-board comprising, in combination, a panel-box enclosure, a metallic panel-board mounting plate positioned in said box, insulated branch switch mounting bases secured thereto, a strip of insulating material positioned on said plate, a stepped longitudinal channel formed by the assembled switch mounting bases, the wider stepped channel serving to laterally position said insulating strip, and a panel-board bus-bar, said bus-bar being positioned in the narrower stepped channel.

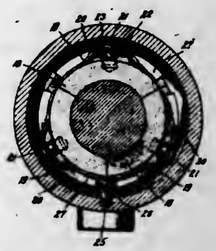
1,902,791. ELECTRICAL PLUG COUPLER. HERBERT B. TAYLOR, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Oct. 15, 1926. Serial No. 141,864. 1 Claim. (Cl. 173—328.)

A quick-detachable connector for electric circuits, comprising, a two part casing, means for insuring its proper assembly, a female portion in the casing including, two opposed flat spring clips, spaced apart and having inturned free ends facing each other to form a narrow slot therebetween, a fixed port spaced from, and in line with, said narrow slot, a sleeve slidably carried on said post with a flat face, and a spring biasing said sleeve to press said face against the ends of said spring clips, and a



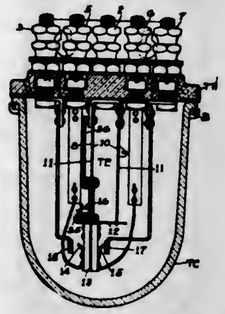
male portion in the casing including a flat sided wedge tapering toward its free end and adapted to enter between, and spread, said clips.

1,902,792. PACKING. DONALD F. WARNER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1932. Serial No. 600,741. 1 Claim. (Cl. 286—24.)



In a packing arrangement, a casing having walls defining a cell, a rotary member projecting through the casing, a packing ring in the cell comprising a plurality of segments surrounding the rotary member, each segment having a portion with an outer surface inclined towards the shaft, a saddle member having a twisted portion engaging the inclined surface of the segment, and a leaf spring fastened to the saddle member and having portions engaging the inner surface of the casing.

1,902,793. THERMAL RELAY. JOSEPH E. WILLING, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed June 26, 1930. Serial No. 463,903. 6 Claims. (Cl. 200—122.)



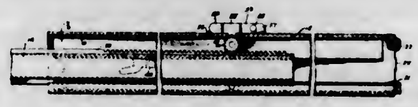
1. In a thermal relay, in combination, fixed front and back points, and a thermal element positioned to move between and said points and including, spaced, bi-metallic arms, a heating coil on but one of said arms, and rheostat for regulating flow of current through the heating coil.

1,902,794. HEAT INSULATING COVERING. GRANT V. WILSON, Chicago, Ill., assignor to Norristown Magnesia & Asbestos Company, Norristown, Pa., a Corporation of Pennsylvania. Filed May 18, 1932. Serial No. 611,987. 10 Claims. (Cl. 154—28.)



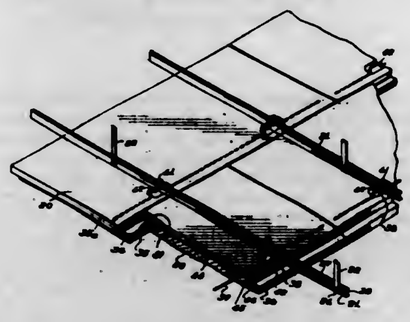
2. In a laminated heat insulating covering, for a cylindrical body; the combination with a plurality of double webs, each including a plane web and a corrugated web cemented together at the crests of the corrugations; said laminations being of the relatively different circumferential extent of respective concentric circles in radially spaced relation, and for coaxial relation with the body to be covered; of means reinforcing the ends of said laminations, and holding said ends even, including cement between said laminations.

1,902,795. DRAWER SUSPENSION. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Filed Aug. 30, 1930. Serial No. 478,941. 11 Claims. (Cl. 45—77.)



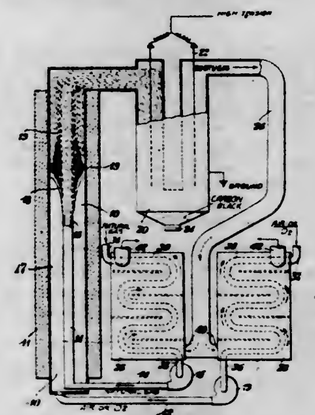
10. In combination with a cabinet having a longitudinally movable drawer therein, a drawer support comprising a pair of cabinet slides mounted within the cabinet in parallel spaced relation, an intermediate slide slidably mounted on each cabinet slide, a drawer slide slidably mounted on each intermediate slide, said drawer secured to the drawer slides, said cabinet slides and drawer slides having rack portions, a pinion mounted on each intermediate slide in meshing engagement with adjacent rack portions of the drawer and cabinet slides, and means cooperating with said slides for positioning said intermediate slides in transverse aligned relation.

1,902,796. CEILING CONSTRUCTION. CHARLES R. BIRDSEY, Oak Park, and HERBERT W. REEL, Hinsdale, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 12, 1930. Serial No. 501,834. 8 Claims. (Cl. 72—68.)



3. In a ceiling construction, the combination with a plurality of support bars in spaced parallel relation, of a plurality of precast ceiling slabs arranged in a plane below said bars, an outstanding tongue formed along each diagonal edge of the tile forming upper and lower tongues, the upper tongue on one edge of each slab being supported solely on the lower tongue of the adjoining tile, said slab having a recess formed in its upper surface adjacent said lower tongue, a hook bar embedded in said slab and extending into said recess, attaching means engaging said hook bar within said recess and also engaging said support bar, and a reinforcing mat embedded in said slab and extending into said tongue.

1,902,797. CARBON BLACK PROCESS AND APPARATUS. STEPHEN P. BURKE, New York, N. Y., assignor to General Atlas Chemical Company, Dover, Del., a Corporation of Delaware. Filed Sept. 10, 1927. Serial No. 218,755. 22 Claims. (Cl. 134—60.)



1. A method of making carbon black including diffusing a gaseous or vaporous hydrocarbon into a stream of highly heated gas while they are flowing along a predetermined path within an enclosed unobstructed space, decomposing said hydrocarbon in said stream by heat with the production of carbon black while maintaining nonturbulent stream line flow of the gas within the zone of decomposition of said hydrocarbon.

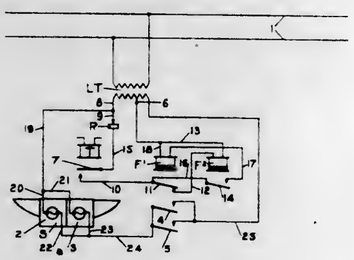
9. Apparatus for making carbon black comprising a furnace having insulated walls forming an elongated combustion chamber, a gas duct within the chamber having walls parallel to those of the latter, an air duct concentric with the said gas duct and having its walls forming a continuation of the chamber walls, and means for independently controlling the rate of fluid flow respectively through the gas duct and the air duct.

1,902,798. PAPER MAKING APPARATUS. WILLIAM H. CAPE, Cumberland Mills, Me., assignor to S. D. Warren Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 28, 1931. Serial No. 533,377. 15 Claims. (Cl. 92—44.)



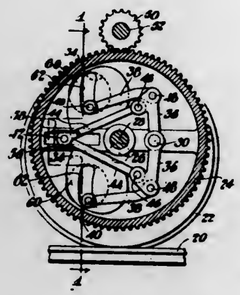
1. In an appratus for forming a travelling web of paper stock comprising a travelling surface and an extensible slice bar comprising sections movable longitudinally relative to each other and disposed transversely across the travelling surface, the combination of means disposed along adjacent sides of said sections and independently adjustable relative to the travelling surface at points spaced along the slice bar for maintaining the forming web of a substantially uniform thickness transversely thereof.

1,902,799. FLASHING LIGHT SIGNAL. SALISBURY M. DAY, Rochester, N. Y., assignor to General Railway Signal Company, Rochester, N. Y. Filed Sept. 1, 1926. Serial No. 132,998. 5 Claims. (Cl. 177—329.)



1. In an automatic railway crossing signal system, an alternating current source of energy, a flashing light signal unit, a lighting circuit for the light unit fed from the alternating current source, direct current interconnected relays constituting automatic make and break control means for the lighting circuit, and an energized circuit for the control means including the alternating current source and a rectifier in series.

1,902,800. FLEXIBLE TRANSMISSION. PHILIP C. GORDON, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 27, 1928. Serial No. 295,702. 14 Claims. (Cl. 64—97.)

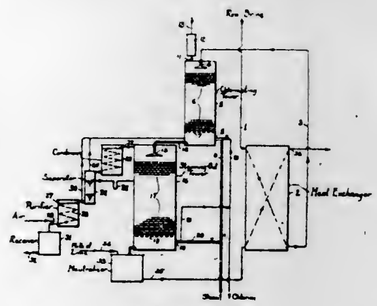


1. A flexible transmission comprising a driving pin, a pair of arms pivoted on said pin, a pair of driven pins, links pivoted to said driven pins and to said arms, a second pair of links pivoted to a common axis and to said pairs of links and arms, and means supporting said common axis and permitting it to move toward and away from said driving pin.

1,902,801. CONTINUOUS PROCESS OF PREPARING LIQUID BROMINE. IVAN F. HARLOW, IVAN A. KENAGA, and GRAYTON F. DRESSEL, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 3, 1930. Serial No. 441,210. 12 Claims. (Cl. 23—218.)

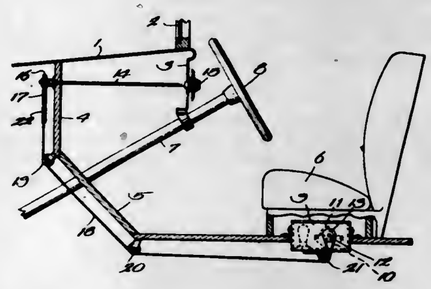
1. The process of extracting bromine from bromide-containing solutions which comprises treating such solution with an air-chlorine mixture at a temperature materially below the boiling point thereof whereat the liberated bromine remains substantially dissolved, steaming the treated solution in a separate stage to expel bromine as vapor therefrom, condensing the vapors and separating liquid bromine from the aqueous distillate.

10. The continuous process of producing liquid bromine of high purity from aqueous solutions containing a bromide in relatively small amount which comprises preheating such solution to a temperature between about 70° and 90° C., treating the preheated solution with chlorine in amount slightly in excess of that theoretically required to oxidize reduced compounds and liberate all of the bromine, separating residual undissolved gases, steaming the treated solution to expel bromine as vapor therefrom while adding thereto a further amount of chlorine sufficient to liberate



any recombined bromine therein, refluxing the vapors at a temperature between 80° and 90° C., condensing the residual vapors, separating liquid bromine from the aqueous distillate, returning the latter to the steaming-out step, purifying the liquid bromine by flowing the same in contact with a current of air, returning the exit gases from the purification step to the chlorinating step, and employing the hot debrominated solution from the steaming-out step for preheating the original solution in the first step.

1,902,802. AUTOMOTIVE VEHICLE WITH RADIO EQUIPMENT. JOHN W. HOBBS, Rockford, Ill., assignor to Mechanics Universal Joint Company, Rockford, Ill., a Corporation of Illinois. Filed Jan. 29, 1930. Serial No. 424,435. 2 Claims. (Cl. 250—14.)

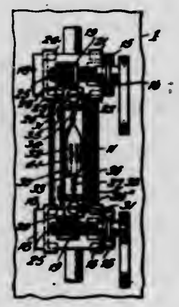


1. The combination with an automotive vehicle having a dashboard and an instrument board at the rear of the dashboard; of a radio receiving set carried by the vehicle and which is inclusive of a tuning member that is mounted to turn; a motion transmitting shaft mounted in the dashboard and instrument board and extending forwardly beyond the dashboard and accessible for operation at the instrument board; a driving pulley upon the forward end of said shaft; a driving pulley coupled with the tuning member of the radio receiving set; and a bolt passing beneath the floor of the automotive vehicle and over said pulleys, said belt being inclusive of two springs one in each of its stretches and serving to maintain said belt stretches taut whereby movement of the aforesaid shaft is accurately communicated to the tuning member of the radio set.

1,902,803. PLASTIC COMPOSITION. HARRY HOPKINSON and JOHN GUY BRITTON, Lansdowne, Pa., assignors of one-third to Tudor R. Williams, Scranton, Pa. Filed May 2, 1931. Serial No. 534,699. 13 Claims. (Cl. 91—63.)

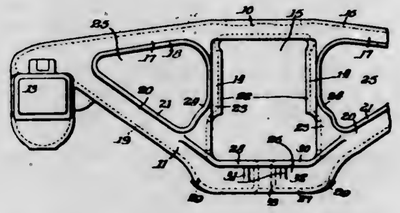
1. A method of forming a substantially fireproof plastic composition which is principally porous cellulosic material which is normally inflammable; which consists in impregnating such cellulosic material with a dilute solution of a metallic phosphate containing excess or free acid, and forming an insoluble salt in said material by neutralising said excess or free acid with an alkaline substance.

1,902,804. FUSE CLIP LOCK. FRANK C. LA MAR, New York, N. Y., assignor to Great Western Fuse Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 596,452. 5 Claims. (Cl. 200—134.)



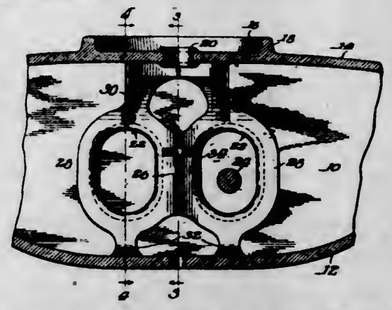
1. In a combined clip lock and fuse integrity indicator, in combination: two separated pairs of locking fingers adapted to contact with and press together the free ends of the legs of two separate substantially U-shaped fuse clips; means for causing the locking fingers to approach and/or recede one from the other and means associated with said last named means for indicating the integrity of a fuse in the clips.

1,902,805. TRUCK SIDE FRAME. HARRY C. DREIBUSS and GEORGE S. CHILES, St. Louis, Mo., assignors to Scullin Steel Company, St. Louis, Mo., a Corporation of Delaware. Filed Nov. 12, 1929. Serial No. 406,678. 9 Claims. (Cl. 105—205.)



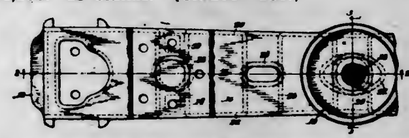
1. In a side frame, a box-shaped spring seat section and tubular strengthening means between the webs of the spring seat section.

1,902,806. TRUCK BOLSTER. HARRY C. DREIBUSS and GEORGE S. CHILES, St. Louis, Mo., assignors to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Oct. 9, 1930. Serial No. 487,488. 15 Claims. (Cl. 105—230.)



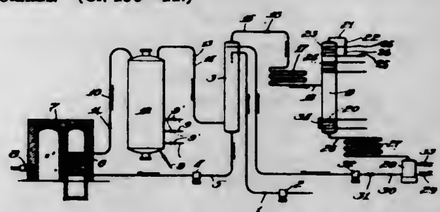
1. A box type bolster having a wall with an opening therethrough, the portion of said wall adjacent said opening being thicker than the remote portion of said wall and a reentrant flange surrounding said opening.

1,902,807. REENFORCED TRUCK BOLSTER. HARRY C. DREIBUSS and GEORGE S. CHILES, St. Louis, Mo., assignors to Scullin Steel Co., St. Louis, Mo., a Corporation of Delaware. Filed Apr. 14, 1930. Serial No. 444,180. 15 Claims. (Cl. 105—230.)



1. A truck bolster including a compressional member, a tensional member, and a reenforcing member integral therewith comprising a portion of a tube with the remainder of the tube cut away,

1,902,808. CONVERSION OF HYDROCARBONS. EDWIN F. NELSON, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 28, 1929. Serial No. 374,471. 2 Claims. (Cl. 196—11.)



2. In hydrocarbon oil pressure cracking processes wherein the cracked vapors and gases are cooled under superatmospheric pressure to condense the vapors, the improvement which comprises introducing the condenser distillate and gas to a stabilising zone maintained under the superatmospheric pressure of the cracking process, separating the gas from the distillate in said zone, removing the separated gas under pressure from the stabilising zone and reducing the pressure thereon, and passing the expanded gas in indirect heat exchange relation with the gas being separated in said zone.

Patents Nos. 1,902,809 to 1,903,276

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March 28, 1933

Trade-Marks	118	No. 302,054 to No.	302,171,	inclusive.
T. M. Renewals	7			
Labels	3	No. 41,572 to No.	41,574,	inclusive.
Reissues	9	No. 18,776 to No.	18,784,	inclusive.
Designs	19	No. 80,444 to No.	80,462,	inclusive.
Patents	488	No. 1,902,809 to No.	1,903,276,	inclusive.
Total	634			

Adjudicated Patents

(D. C. La.) Dodds patent, No. 1,295,853, for sample-taking device, claims 3 and 5 *Held* invalid. *Reed Roller Bit Co.* v. *Brewster Co.*, 2 F. Supp. 197.

(D. C. La.) Dodds patent, No. 1,295,134, for sample-taking device, claims 1, 2 and 3 *Held* invalid. *Id.*

(C. C. A. Ohio.) Warren patent, No. 1,502,494, for time-indicating apparatus, claims 8 and 9 *Held* invalid. *Kodel Electric & Mfg. Co.* v. *Warren Telechron Clock Co.*, 62 F.(2d) 692.

(C. C. A. Me.) Paisseau patent, No. 1,525,317, for process of preparation of pearl essence, claims 1, 2, 4 and 5 *Held* not infringed. *Joseph H. Meyer Bros.* v. *Pelspearl Products*, 62 F.(2d) 668.

(C. C. A. Mich.) Winters and Crampton patent, No. 1,648,249, for hinge, *Held* invalid. *Winters & Crompton Mfg. Co.* v. *Grand Rapids Brass Co.*, 62 F.(2d) 822.

(C. C. A. Mich.) Roedding patent, No. 1,710,321, for furniture fixture, *Held* not infringed. *Id.*

(D. C. Mass.) Watson and Culver patent, No. 1,729,654, for method of making bifocal lenses, *Held* invalid, or, if valid, not infringed. *United Kingdom Optical Co.* v. *American Optical Co.*, 2 F. Supp. 174.

(C. C. A. Me.) Paisseau patent, No. 1,760,771, for process for purifying pearl essence, claims 1 and 2 *Held* invalid. *Joseph H. Meyer Bros.* v. *Pelspearl Products*, 62 F.(2d) 668.

(D. C. N. Y.) Tanger patent, No. 1,807,852, for radiator enclosure, claims 2–6 *Held* invalid. *Universal Radiator Products Co.* v. *Craftsmen Radiator Enclosure Co.*, 2 F. Supp. 205.

(D. C. La.) Barrett and Robichaux patent, No. 1,837,424, for core taking apparatus, claims 4, 7 and 8 *Held* invalid. *Reed Roller Bit Co.* v. *Brewster Co.* 2 F. Supp. 197.

Trade-Marks Canceled

125,797. Whiskey. Jack Daniel Distilling Company, St. Louis, Mo. Registered June 17, 1919. Canceled February 28, 1933.

193,162. Certain named radio and electrical apparatus, machines, and supplies. Music Master Corporation, Philadelphia, Pa. Registered May 5, 1925. Canceled February 28, 1933.

289,573. Certain named lubricating equipment, apparatus, and machinery. Gray Company Incorporated, Minneapolis, Minn. Registered December 1, 1931. Canceled February 28, 1933.

291,942. Medical preparation. Robert G. Reaves, Knoxville, Tenn. Registered February 23, 1932. Canceled February 28, 1933.

296,433. Coal. Harlan-Wallins Coal Corporation, Verda, Ky. Registered August 9, 1932. Canceled March 9, 1933.

TRADE-MARK RULES—AMENDMENT

Order No. 3,234

U. S. Patent Office, *Washington, Feb. 11, 1933.*

Acting under the provisions of section 487 of the Revised Statutes (U. S. C. Title 35, sec. 11), and with the approval of the Secretary of Commerce, the rules of the Patent Office governing the registration of trade-marks are amended as follows:

Rule 11, add at the end thereof the following paragraphs:

Every attorney prosecuting applications for registration of trade-marks shall submit to the Commissioner of Patents for approval copies of all proposed advertising matter, circulars, letters, cards, etc., intended to solicit trade-mark business, and if it be not disapproved by him and the attorney so notified within 10 days after submission, it may be considered approved.

Any such attorney sending out or using any such matter, a copy of which has not been submitted to the Commissioner of Patents in accordance with this rule, or which has been disapproved by the Commissioner of Patents, shall be subject to suspension or exclusion from practice before the Patent Office, or any division thereof.

THOMAS E. ROBERTSON,
Commissioner.

Condition of Applications Under Examination at Close of Business March 11, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 54,072; Trade-Mark Division, 1,040. Oldest new case, Oct. 14, 1932; oldest amended, Oct. 12, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Nov. 1	Nov. 1	669
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 11	Nov. 11	938
4008	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Dec. 13	Dec. 22	648
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 9	Dec. 9	512
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 12	Dec. 27	481
4936C	6. LEWERS, A. M., Carbon Chemistry	Oct. 26	Oct. 27	1065
5726	7. JARBOE, C. G., Optics; Photography	Nov. 15	Nov. 14	1056
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	Dec. 22	Dec. 20	562
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 12	Dec. 24	614
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Nov. 29	Nov. 29	527
5067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 18	Oct. 17	665
7701	12. HENRY, C. C., Machine Elements	Nov. 26	Dec. 5	547
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Nov. 26	Nov. 26	810
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Dec. 17	Dec. 20	580
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 11	Nov. 11	1218
5612	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 15	Dec. 15	583
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Oct. 26	Oct. 27	1155
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 14	†Jan. 13	326
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Oct. 24	Oct. 24	1232
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 11	†Jan. 11	343
7732	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 12	Nov. 12	899
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Nov. 12	Nov. 12	836
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Oct. 24	Oct. 22	627
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 12	†Jan. 12	453
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 3	Nov. 2	1177
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Nov. 23	Nov. 29	531
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 12	Dec. 12	627
4628	28. BENSON, A. R., Internal-Combustion Engines	Oct. 17	Oct. 17	976
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Oct. 29	Nov. 9	459
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 14	Dec. 7	618
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 1	Nov. 2	1230
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 15	Dec. 16	662
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Oct. 26	Oct. 31	1314
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Oct. 17	Oct. 25	977
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Oct. 24	Oct. 28	870
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 17	Oct. 17	1409
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Nov. 25	Nov. 28	649
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Nov. 14	Nov. 14	729
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Oct. 31	Nov. 1	973
7880	40. OBERLIN, J. J., Receptacles	Nov. 14	Nov. 14	1557
6062	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Nov. 7	Nov. 1	686
5882	42. CUTTING, H. O., Electric Signaling	Oct. 14	Oct. 15	1110
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 18	Oct. 20	1118
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Oct. 31	Nov. 1	778
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 5	†Jan. 5	520
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Nov. 11	Nov. 11	602
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Nov. 2	Nov. 1	1369
5731	48. ROEPKE, O. B., Electricity, General Applications	Nov. 12	Nov. 12	702
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 15	Oct. 12	969
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Oct. 18	Oct. 25	1150
5628	51. BACKUS, C. D., Radiant Energy	Dec. 3	Dec. 3	923
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 5	Dec. 9	589
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 12	†Jan. 14	443
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Oct. 31	Oct. 31	927
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery	Dec. 15	Dec. 15	309
	{Designs	†Feb. 10	†Feb. 20	268
4726	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 9	Nov. 2	981
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 11	Nov. 15	523
5605	58. DOWELL, E. F., Abrading; Typewriting	Nov. 11	Nov. 11	574
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 2	Nov. 2	687
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Oct. 22	Oct. 22	1102
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Oct. 27	Oct. 28	854
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 18	Nov. 19	1192
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Oct. 20	Oct. 20	1209
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 14	Nov. 19	998
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Oct. 18	Oct. 25	1266
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—{Trade-Marks	†Feb. 9	†Feb. 28	843
	{Labels and Prints	†Feb. 11	†Feb. 24	197

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Reeves

No. 3,990. Decided December 27, 1932

1. Patentability—Printed Matter.

"It seems to be settled patent law that invention cannot rest alone in novel printing arrangement, although it may reside in some physical structures of printed matter."

2. Same—Same.

Claims for a valuation chart *Held* unpatentable since such an article does not fall within the scope of the patent law.

Appeal from the Patent Office. Affirmed.

Messrs. Parker & Prochnow, Mr. Charles W. Parker and *Mr. Max D. Farmer* for Reeves.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Bland, *J.*:

Appellant appeals to this court from a decision of the Board of Appeals of the United States Patent Office, affirming that of the Examiner, who refused to allow appellant's two claims, being all of the claims in appellant's application for patent.

The nature of the alleged invention is described in appellant's brief as follows:

The claims are drawn to a valuation chart intended for use in appraising buildings. The chart carries designations representing characteristics of buildings, with check spaces adjacent each item, and the various items are grouped according to classes. Each vertical column of items includes such characteristics as may be expected in buildings of a particular class. In the use of the charts, the building to be appraised is inspected and the characteristics or construction details or items of the building are checked off on the classification chart by placing check marks opposite those items. After the items of a building have been checked off on the chart, it is readily apparent from an inspection of the chart that the particular building has a predominating number of characteristics found in a particular class or column, which indicates directly the class of buildings in which that particular building should be classified, and since the average cost of reproduction of such buildings of each particular class is known, this classification gives a starting point for determining the value of the building. The extent of check marks in the other classes or columns on those items which distinguish from the items in the particular class in which the building falls by reason of the predominating number of check marks, indicates directly the extent to which this particular building differs from the other average buildings of that class. Hence, by an inspection of the chart for any building it can be ascertained whether such distinctions in the other items checked tend to place the building in a higher or a lower class, thereby enabling the appraiser to know whether to add to or subtract from the average cost of the building of that class in which the building is placed, amounts determined by the differences which that particular building has from the average building of that class in which it falls.

Claim 2 is illustrative and reads:

2. A valuation chart for buildings comprising a record sheet having details of building constructions arranged in groups designated by classes, each class having listed thereunder the details of building construction frequently found in buildings of that class, and the details being arranged similarly in order in all the classes, whereby when the details of construction of a building to be valued are checked on the record sheet under the nearest approximated classes, the preponderance of checks in any class group will directly indicate the class of buildings to which that particular building belongs and the checks missing in that class group or found in the groups of the other classes will indicate directly the extent to which that building being valued differs from the usual run of buildings of that class.

The Examiner held that under the decisions of *Guthrie* v. *Curlett et al.*, 10 F.(2d) 725, 353 O. G. 286, and *Flint* v. *Leonard*, 27 F.(2d) 215, appellant's disclosure showed no invention within the scope of devices intended to be patented under the patent laws.

The Board of Appeals said:

We see nothing inventive in this grouping of characteristics which the applicant has adopted, and therefore deem the claims clearly unpatentable in view of the decisions relied upon by the Examiner.

The appellant relies upon the following decisions: *Cincinnati Traction Co.* v. *Pope*, 210 Fed. 443; *Benjamin Menu Card Co.* v. *Rand, McNally & Co., et al.*, 210 Fed. 285; *Rand, McNally & Co.* v. *Exchange Scrip Book Co.*, 187 Fed. 984; *Munson* v. *The Mayor, etc.*, 3 Fed. 338.

Appellant argues here that his disclosure shows invention of the same character as that which was shown by the claims sustained by the courts in the Cincinnati Traction Co. case and in the other cases relied upon by him.

The Cincinnati Traction Co. case, supra, involved a street railway transfer ticket having tabulations of information thereon and a coupon which could be detached in certain instances in order to convey certain information.

The Benjamin Menu Card Co. case, supra, held the claims of a patent valid, which patent was granted for a menu card, so arranged that use by a guest would change its form.

In the *Rand, McNally & Co.* v. *Exchange Book Co.* case, supra, the patentable subject matter consisted of a railroad ticket having a series of coupons to be detached and exchanged at ticket offices for passage tickets and having stubs with specified information thereon.

We agree with the Board of Appeals that appellant's disclosure shows nothing inventive within the meaning of the patent law. It is not a

new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof. *Guthrie* v. *Curlett et al.* supra, and *Flint* v. *Leonard*, supra.

It was said in *Guthrie* v. *Curlett* et al., supra, that:

* * * we believe that it discloses an art, which, if it be novel, is not the kind of art protected by the patent acts.

In discussing the holding of the court in *Cincinnati Traction Co.* v. *Pope*, supra, this court in *In re Russell*, 18 C. C. P. A. 1184, 48 F.(2d) 668, 410 O. G. 820, said:

The court, however, did not hold that the mere arrangement of the printed text constituted patentable subject matter, but, on the contrary, based its decision upon the patentable novelty of the physical structure of the tickets * * *.

See also *In re Dixon*, 18 C. C. P. A. (Patents) 711, 44 F.(2d) 881, 402 O. G. 3; *In re Clark*, 19 C. C. P. A. (Patents) 1166, 58 F.(2d) 455, 422 O. G. 608; and *In re Malcolm*, 19 C. C. P. A. (Patents) 1097, 56 F.(2d) 876, 420 O. G. 293.

It seems to be settled patent law that invention cannot rest alone in novel printing arrangement, although it may reside in some physical structures of printed matter.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE MASON

No. 3,989. Decided December 27, 1932

PATENTABILITY—COMPOSITE FIBER BOARD.

Claims for a composite fiber board *Held* unpatentable, in view of the prior art, over the claims of applicant's prior patents which, respectively, cover each of the elements which make up the composite board.

APPEAL from the Patent Office. Affirmed.

Mr. Herbert H. Dyke for Mason.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

GARRETT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office affirming the rejection of four out of five claims in an application for patent on "hard-surfaced composite insulating board," filed February 23, 1926.

Claims numbered 8 and 12 are quoted as representative:

8. Composite fibre board comprising at least one highly dense surface portion or layer of wood or woody material which had been disintegrated into fibrous state and permanently coalesced together while wet under high heat and pressure and containing at least the principal part of the lignins and cellulose of the original wood or woody material, and an adjacent portion or layer of light porous relatively yielding fibrous heat insulating material cemented to the first named portion.

12. Composite fibre board comprising a porous layer of fibrous material obtained by disintegration of ligno-cellulose material with retention of at least the principal part of the lignin and by the drying of a wet body thereof under initial pressure only, and a protective layer non-integral therewith and composed of similar material compacted and substantially completely dried under pressure in the presence of moisture and heat to produce a hard, strong, coherent, substantially non-porous sheet of specific gravity approximately one.

The record is not entirely clear as to just what references were relied upon by the tribunals of the Patent Office. First and last, the Examiner made reference to three patents to applicant himself (Nos. 1,578,609, 1,663,504, and 1,663,505), two to Toles and one each to Carey and Lappen. Each of these was listed in the statement of the Examiner responding to the appeal to the Board; each was listed in the Board's opinion, and each appears in full in the record.

Of the Examiner's decision the Board says:

The Examiner holds that, in view of Toles, there is no invention in uniting the porous and hard finished boards of Patents Nos. 1,663,504 and 1,663,505. He also rejects the claims on the Toles patent in view of Mason No. 1,578,609, holding that the product is substantially the same although made of a different material.

The Board sustained the rejection, apparently relying, in part, upon Toles Patent No. 1,369,500, but said in conclusion:

As to the second ground of [the Examiner's] rejection we are unable to say whether the products would be substantially the same in the application and in the Toles patent and we prefer to stand on the rejection above discussed.

The opinion of the Board made no allusion to Carey beyond merely listing it with the references. The brief of the Solicitor for the Patent Office, however, includes Carey Patent No. 1,156,753 as a reference and analyzes it, and applies it alternatively with Toles.

As we interpret the claims they are meant to cover a composite board, or "hard-surfaced composite insulating material," made up of at least two parts. One of these parts is a lamina of light, porous insulating material, spoken of in argument as a "core"; the other (or others if each side of the "core" is surfaced with one) consists of a dense, or "highly dense" (claim 8, supra), layer. Both are made of ligno-cellulose. They are united by "cementitious" material, "asphaltum, for example."

The claims themselves set forth details and limitations with sufficient clearness to render unnecessary closer analysis, or further description.

The first of appellant's patents referred to by the Examiner is No. 1,578,609, issued March 30, 1926, upon an application which was, for a time, copending with the one at bar. It is entitled "Process and apparatus for disintegration of wood and the like." It seems to have been used by the Examiner to show that applicant's material was disclosed therein and is, therefore, old. The Board makes no specific reference to this patent, nor is it mentioned in the brief of the Solicitor for the Patent Office.

The application in the instant case in its specifications makes reference to "the inner insulating board portion" (the "core") of the composite board and states that it—

may be made * * * in accordance with my copending application Serial No. 57,251, filed September 18, 1925, * * *.

Serial No. 57,251 matured into Patent No. 1,663,504, one of the references.

The instant application also refers in the specifications to "The hard, dense, grainless surface board material" (the surface "layer" either upper or lower or both), and states that this—

may be produced in accordance with my copending application Serial No. 57,252, filed September 18, 1925, * * *.

Serial No. 57,252 matured into Patent No. 1,663,505, another of the references.

It thus appears that appellant has received product patents, issued upon each product separately, for both the boards or material, which, when combined or united by "cementitious" material, comprise the product for which the patent application involved was filed.

The Toles Patent No. 1,369,500 relates to built-up board of fiberized cereal straw made of layers "cementitiously" united with, preferably, "a waterproof cement."

The Board of Appeals took the view that appellant's real and only product inventions resided in the separate boards for which patents had been granted, because, in view of the teaching of Toles, as to—

a similar composite board made up of laminæ of porous and hard finished boards of fiberized cereal straw,

united "cementitiously," there was no per se invention in appellant's combination of the two similarly united. The Board said:

Where a patent has been granted, the novelty of which depends upon a certain feature, the invention is exhausted so far as that feature is concerned and any further patent must be based upon an inventive improvement thereon or upon a novel and inventive combination of such feature with other elements. If there is no further invention there is no consideration for another patent.

The fact that a loose practice has grown up of allowing claims in the same application which are not patentably different from each other is no argument for the allowance of such claims in different patents in which the monopoly of the same invention would be extended, *Ex parte Edison* C. D. 1915, page 30, *Ex parte Creveling* C. D. 1904, page 253.

In *James* vs. *Campbell* C. D. 1882, pages 67, 85, the Supreme Court said:

It is hardly necessary to remark that the patentee could not include in a subsequent patent any invention embraced or described in a prior one granted to himself any more than he could an invention embraced or described in a prior patent granted to a third person.

Appellant very earnestly urges that his instant application was copending with the applications upon which the respective patents for the respective separated products were granted; that these are not legal references against the involved applications; that he was entitled, under the practice of the Patent Office, to have the instant claims; that he earnestly sought an issuance of patent upon them simultaneously with the issuance of the other patents, and that he never sought any extension of monopoly. The implication is that if the grant of the involved application should have the effect of double patenting, or be equivalent thereto, that is the fault of the Patent Office for which he should not be held responsible.

Upon this last point the brief, after having classified the three Mason patents as A, B, and C, says:

Mason never sought any extension of monopoly, but on the contrary, endeavored to obtain issue of this case simultaneously with his companion cases B and C on which it is now rejected, and this application would have been issued with B and C, and none of the questions involved in this appeal would have arisen had not the Examiner erred in forcing applicant to appeal in order to overcome his erroneous rejection on applicant's copending patent A and patents of the prior art, instead of according the allowance that applicant requested and was entitled to have.

This argument renders it proper to say that our concern is primarily with the decision of the Board of Appeals and, the Patent Office rules having been complied with, if we find that decision to be sound, we have no occasion to look back of it to the decision of the Examiner.

In the instant case, however, we do not find that the Board overruled the grounds upon which the Examiner based his decision. One ground at least was approved, and the other was not expressly overruled, but merely disregarded.

Much of appellant's argument is devoted to the contention that his own patents are not legal references against the instant application. As we have said in the case of *In re Thompson* (suit No. 3008), 20 C. C. P. A. (Patents) ——, —— F(2d) ——, recently decided, while the said patents are not technical references in the sense that a timely granted patent to a third person might have been, it is, under the rule announced in the case of *In re Isherwood*, 46 App. D. C. 507, 245 O. G. 847, which we have frequently followed, perfectly proper to look to them for what they claim, and when two applications are presented by an inventor it is proper—

to hold the one unpatentable in view of the prior art and the claims upon which the other was patented.

The real test in such cases is whether the application presents claims that are inventive over the claims of the patent granted in a copending application. If not, then appellant had no legal right to an allowance of the application at the time the copending applications were allowed. Conceding, without holding (since we are not here concerned with any possible issue as to the validity of the patent sought had it then been granted), that no harm would have resulted from its allowance, it remains true that, if the only really patentable matter was covered by the applications that were granted, appellant has not suffered from the action, nor has he been deprived of any legal right, while to grant same now would result in double patenting, which the law prohibits.

Of course, if appellant were not already fully protected as to the matter which he invented, and if he had matter in his application patentable over his patents or other references, an entirely different situation would confront us.

We find no error in the decision of the Board of Appeals and same is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

IN RE BENDIX

No. 3,940. Decided December 27, 1932

PATENTABILITY—DISC WHEELS.

Claims for a disc wheel *Held* unpatentable over the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. M. W. McConkey, Mr. H. O. Clayton and *Mr. N. D. Parker, jr.* for Bendix.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting for want of invention, in view of the prior art, claims 13, 14, 16, 17, 18, and 19 of appellant's application, filed April 10, 1925.

Claims 13 and 18 are illustrative of the claims in issue and read as follows:

13. A disk wheel having a radially-extending body part and formed at its outer periphery to support a rim, in combination with a member secured to the inner face of the body part and having a flange projecting laterally and radially inward, the flange and said body part providing opposed friction surfaces for engagement with an axially-expansible disk brake positioned within the plane of the rim.

18. A disk wheel having a rim, a load-supporting disk secured marginally within the rim adjacent its outer edge and deformed inwardly thereinto and having a radially-extending load-carrying portion arranged substantially within the load-carrying plane of the wheel and provided with an inner braking surface, and a second disk secured marginally to the inside of the first disk and thence offset and having a radially-extending portion provided with an outer braking surface spaced from and arranged opposite and parallel to the braking surface of the first disk, said second disk being disposed inside of the radial plane of the wheel and in substantial proximity to its load carrying plane.

The references relied upon are: Aspinwall, 1,612,345, December 28, 1926; Putnam, 1,398,739, November 29, 1921; Putnam, 1,414,375, May 2, 1922; Williams, 1,441,770, January 9, 1923.

The alleged invention relates to vehicle wheels and the brake mechanisms cooperating therewith, and more particularly to the construction and arrangement of a combined disk wheel and disk brake.

Appellant discloses a disk, hereinafter called the "disk wheel," comprising a relatively thin metal disk adapted to support a rim, the intermediate portion of the disk being located substantially in the central or load-supporting plane of the wheel. The disk is mounted upon the wheel hub and a portion of the disk extended radially from said mounting is utilized as a braking zone, the same being adapted to be frictionally engaged by a non-rotatable braking member and attached friction disk movable axially of the wheel; also attached to said disk wheel, outside of the braking zone above described, is a metal flange or housing member extending laterally from said disk wheel and then projecting radially inward toward the hub of the wheel in a plane parallel with, but spaced from, said disk wheel in order to form a housing for the braking elements; this housing rotates with the wheel. The radially extending portion of said housing member also forms a braking zone which is adapted to be frictionally engaged by a non-rotatable axially movable braking member to which is attached a friction disk. Mechanism is disclosed for simultaneously moving each of said braking members into frictional engagement with the braking zones upon the disk wheel and upon said housing member.

In rejecting the claims, both tribunals of the Patent Office relied principally upon the reference Aspinwall. This reference shows a car wheel provided with braking surfaces, one of which is formed on the web of the wheel and the other on a plate bolted to the body of the wheel proper. The necessary offsetting of the plate is obtained by securing a seat therefor on an offset portion of the wheel.

The Williams reference shows a portion of a disk of a sheet metal wheel as a braking surface, and Putnam shows a brake member attached to an intermediate zone of a wheel disk.

In its decision the Board said:

> In converting a wheel of the Putnam type to provide axially engaging braking surfaces it is our view that appellant has merely adapted obvious expedients. Clearly, as taught by Aspinwall, there must be an offset either in the body of the wheel or in the attached cooperating element and we deem it a matter of choice to provide such offset in either. If the continuity of the disk is to be maintained the obvious solution is to provide the necessary offset in the attached plate.
>
> To summarize: It is not new to provide a wheel with parallel braking surfaces normal to its axis of rotation. It is old to attach a brake element to an intermediate portion of a sheet metal wheel disk. We see no invention in giving to such a disk and such an element a form which will adapt them for cooperation with axially movable braking members.

Appellant contends that there is no suggestion in any of the references of the construction disclosed by him with respect to the offsetting of braking elements outside of the wheel body; that appellant's structure preserves the wheel disk body unchanged, while the Aspinwall reference does not; that the structure shown by Aspinwall traps the heat energy generated during braking and will effect a material increase in the temperature of the wheel structure, including the rim, resulting, in the case of rubber tires, in melting or vulcanizing the rubber; and further, that the construction shown by Aspinwall would greatly weaken the wheel because of the recessing to provide the brake housing. Appellant insists that his construction avoids all of these objections to the Aspinwall construction.

All of these contentions of appellant may be conceded to be well founded, but the question remains whether, in view of the references, it required the exercise of the inventive faculty to produce the construction set forth in appellant's claims. In other words, did appellant's construction require anything more than the exercise of mechanical skill in view of the prior art?

It is clear that when there are parallel braking surfaces upon two disks, said disks being perpendicular to the wheel axis but spaced one from the other, and said disks being joined together at points radially beyond the braking zone, one disk must be offset with respect to the other. Aspinwall shows such offset within the body of the wheel; appellant shows and claims such offset outside of the body of the wheel. In view of the references, we think the only debatable question is whether placing the offset outside of the body of the wheel, thus distinguishing it from Aspinwall, constituted invention. Upon this question we agree with the Board of Appeals that appellant's construction is merely an obvious expedient in view of Aspinwall, and called only for the exercise of mechanical skill.

For the reasons stated, we are in accord with the views of the Board of Appeals above quoted and its decision is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

923,449. (See 1,389,216.) 942,843. (See 1,389,216.)

1,115,972. (See 1,389,216.) 1,115,973. (See 1,389,216.)

1,158,217, J. F. Grace, Condenser, D. C., S. D. N. Y., Doc. E 70/299, *Worthington Pump & Machinery Corp.* v. *Foster Wheeler Corp.* Consent decree for plaintiff Feb. 9, 1933.

1,170,790, E. E. Kent, Serving device for eating houses, filed Aug. 4, 1931, D. C., N. D. Ill., E. Div., Doc. 10757, *Mapleton Corp.* v. *Wieboldt Stores, Inc.* Doc. 10759, *Mapleton Corp.* v. *F. W. Woolworth & Co.* Doc. 10760, *Mapleton Corp.* v. *Montgomery Ward & Co., Inc.* Doc. 10696, *Mapleton Corp.* v. *John Sexton & Co.* Dismissed Sept. 10, 1931.

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,877, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,297,188, I. Langmuir, System for amplifying variable currents; 1,728,879, C. W. Rice, Amplifying system, D. C., S. D. Calif. (Los Angeles), Doc. T-69-H, *Radio Corp. of America et al.* v. *F. R. Smith (Westerner Radio Mfg. Co.).* Decree proconfesso Feb. 4, 1933.

1,195,632. (See 1,173,079.)

1,222,144, 1,225,362, W. M. Ruthrauff, Dentifrice, C. C. A., 3d Cir., Doc. 4892, *F. R. Hoover et al.* v. *Eckerd's Cut Rate Medicine Co., Inc.* Decree affirmed that bill was rightly dismissed Feb. 10, 1933.

1,225,362. (See 1,222,144.)

1,225,487. (See 1,389,216.)

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,332, same, Vacuum tube amplifier, D. C., S. D. Calif. (Los Angeles), Doc. E T-70-H, *Radio Corp. of America et al.* v. *F. R. Smith (Westerner Radio Mfg. Co.).* Decree proconfesso Feb. 4, 1933.

1,251,377. (See 1,173,079.)

1,254,317, W. H. Faust, Process of converting garbage into food; 1,440,727, M. E. Faust, Process of treating garbage, D. C., S. D. Calif. (Los Angeles), Doc. T-19-C, *U. S. Mfg. Co., Ltd.* v. *National Conservation Co., Ltd., et al.* Dismissed as to 1,254,317; case still open as to other patent Aug. 19, 1932.

1,266,988, Fridham & Jensen, Amplifying receiver; 1,881,824, H. E. Metcalf, Signal reproducer, filed Feb. 3, 1933, D. C., N. D. Calif. (San Francisco), Doc. 3497-K, *The Magnavox Co.* v. *Victroy Speakers, Inc., et al.*

1,293,913. (See 1,389,216.) 1,297,188. (See 1,173,079.)

1,313,828, A. G. Leigh, Aeroplane; 1,404,129, same, Aeroplane with inherent stability; 1,353,666, F. H. Page, Wing and similar member of aircraft, filed Feb. 8, 1933, Court of Claims of U. S., Doc. 42314, *A. G. Leigh et al.* v. *The U. S.*

1,320,384, Godbold & Fletcher, Drill cutter, D. C., S. D. Calif. (Los Angeles), Doc. E T-90-C, *Hughes Tool Co. et al.* v. *F. & S. Welding & Machine Works et al.* Dismissed for want of prosecution Apr. 19, 1932.

1,353,666. (See 1,313,828.) 1,356,020. (See 1,389,216.)

1,371,015, C. Amiguet, Lighting fixture, filed Feb. 11, 1933, D. C., W. D. Mo. (Kansas City), Doc. 2235, *The Miller Co. et al.* v. *The Bailey-Reynolds Chandelier Co.* Doc. 2236, *The Miller Co. et al.* v. *Jenkins Music Co.*

1,378,807, W. H. Young, Apparatus for cracking and refining petroleum products; 1,392,629, C. P. Dubbs, Process for converting hydrocarbons; 1,484,445, 1,534,927, 1,543,832, 1,686,654, same, Method for treating hydrocarbons; 1,548,831, same, Apparatus for treating hydrocarbons; 1,587,593, G. Egloff, Process for cracking oil; 1,602,990, R. I. Pollock, Process and apparatus for converting hydrocarbons; 1,764,296, R. Fleming, Method and apparatus for treating hydrocarbons, filed July 22, 1931, D. C., N. D. Ill., E. Div., Doc. 10744, *Universal Oil Products Co.* v. *Winkler-Koch Engineering Co. et al.*

1,389,216, J. C. Potter, Metal working machine; 1,293,913, 1,115,972, 1,115,973, same, Automatic turret lathe; 1,225,487, same, Gearing for turret lathes and other mechanism; 942,843, 1,356,020, E. B. Sellew, Metal working machine; 942,843, Potter & Johnston, Turret lathe, filed Feb. 9, 1933, D. C. Conn. (New Haven), Doc. E 2274, *Potter & Johnston Machine Co.* v. *The Baird Machine Co.*

1,392,629. (See 1,378,807.)

1,396,070, Shoup & Oliver, Paper feed device for autographic registers, D. C., W. D. Mich., S. Div., Doc. E 2380, *Autographic Register Co.* v. *Sturgis Register Co. et al.* Decree for plaintiff Feb. 7, 1933.

1,403,475. (See 1,231,764.) 1,404,129. (See 1,313,828.)

1,413,577, J. M. Eldredge, Mattress border, D. C., S. D. Ind. (Indianapolis), Doc. 1419, *Eldredge Border Co. et al.* v. *Backstay Welt Co. et al.* Dismissed for want of prosecution Dec. 29, 1932.

1,436,459, J. Reece, Seat cover, D. C., N. D. Ill., E. Div., Doc. 10741, *Bor-Klean Seat Pad Co.* v. *Warshawsky & Co.* Dismissed Sept. 8, 1931.

1,440,727. (See 1,254,317.)

1,462,904, S. E. Finley, Method of preparing bituminous cement-aggregate composition; 1,522,481, same, Apparatus for preparing bituminous cement-aggregate composition, D. C., E. D. Mo. (St. Louis), Doc. 10044, *S. E. Finley et al.* v. *Asphalt Paving Co. of St. Louis.* Dismissed (notice Feb. 9, 1933).

1,465,332. (See 1,231,764.)

1,467,614, C. W. Eads, Finger nail cleaning compound, D. C., S. D. N. Y., Doc. E 60/147, *Northam Warren Corp.* v. *A. M. Braun, Inc., et al.* Dismissed (notice Feb. 6, 1933).

1,484,445. (See 1,378,807.)

1,485,115, Guittard & Carril, Process of making confections, filed Feb. 6, 1933, D. C., N. D. Calif. (San Francisco), Doc. E 3505-L, *Pan Chocolate Products Co.* v. *The Euclid Candy Co. of Calif., Inc.*

1,494,428, C. W. Kirsch, Drapery carrier and supporting fixture therefor; 1,581,806, same, Master drapery carrier for curtain rods, filed June 8, 1931, D. C., N. D. Ill., E. Div., Doc. 10597, *Kirsch Co.* v. *H. L. Judd Co., Inc.*

1,522,431. (See 1,462,904.) 1,534,927. (See 1,378,807.)

1,587,593. (See 1,378,807.) 1,543,831. (See 1,378,807.)

1,543,832. (See 1,378,807.)

1,544,986, O. Hovden, Fish beheading and entrail removing machine, D. C., S. D. Calif. (Los Angeles), Doc. E Q-5-M, *O. Hovden* v. *Christiansen & Kuemme et al.* Consent decree holding patent valid and infringed Feb. 8, 1933.

1,570,298, A. H. Fisher, Method and means for repairing tire casings, filed July 16, 1931, D. C., N. D. Ill., E. Div., Doc. 10709, *Key Co., Inc., et al.* v. *L. E. Brown et al.*

1,581,806. (See 1,494,428.) 1,589,339. (See Re. 16,869.)

1,602,990. (See 1,378,807.)

1,620,809, A. H. Fager, Vehicle running gear, D. C., D. C. Calif. (Los Angeles), Doc. U-64-C, *Fager Hydraulic Hoist & Body Co.* v. *Barton Brown Engineering Corp.* Dismissed for want of prosecution Feb. 6, 1933.

1,673,727, L. V. Aronson, Cigar lighter, D. C., S. D. N. Y., Doc. E 56/293, *Art Metal Works, Inc.*, v. *Kemeda & Co., Inc.* Decree for plaintiff (notice Feb. 9, 1933).

1,686,654. (See 1,378,807.)

1,687,013, O. A. Frederickson, Armored electric cable; 1,801,549, same, Anti-short bushing, C. C. A., 2d Cir., Doc. 12279, *National Electric Products Corp.* v. *Circle Flexible Conduit Co., Inc.* Decree reversed (notice Feb. 6, 1933).

1,695,557, R. H. Myers, Spark plug testing device, D. C., W. D. Mich., S. Div., Doc. E 2502, *Wayne Equipment Mfg. Co.* v. *Allen Electric & Equipment Co.* Dismissed Feb. 8, 1933.

1,706,099, Benbow & Green, Dump wagon; 1,716,810, Armington & Armington, Dump trailer hitch means; 1,752,056, same, Dump trailer, D. C., W. D. Tenn., W. Div., Doc. E 1034, *Western Wheeled Scraper Co.* v *E. A. Davis et al.* Claims 9, 11, 14, 15, 17, 18, 19, 20, 21, 22, and 23 of 1,706,099 held valid and infringed; the defendant The Euclid Crane & Hoist Company's counter claim as to patents 1,716,810 and 1,752,056 which are held invalid, dismissed June 20, 1932.

1,706,392, Buono & Buono, Method of treating furs and machine therefor, D. C., S. D. N. Y., Doc. E 49/237, *U. S. Blind Stitch Machine Corp.* v. *M. L. Goldman.* Consent order of discontinuance (notice Feb. 7, 1933).

1,716,810. (See 1,706,099.)

1,720,801, 1,720,802, E. F. Suter, Hair drying, C. C. A., 2d Cir., Doc. 12280, *Eugene, Ltd.*, v. *The Chas. Arnao Co., Inc.* Decree affirmed (notice Feb. 6, 1933).

1,720,802. (See 1,720,801.) 1,728,879. (See 1,173,079.)

1,742,417, W. Schrobsdorff, Production of metal alloy and of articles made thereof, filed July 31, 1931, D. C. N. D. Ill., E. Div., Doc. 10754, *Fansteel Products Co., Inc., et al.* v. *Carboloy Co., Inc.*

1,752,056. (See 1,706,099.) 1,764,296. (See 1,378,807.)

1,769,836, W. G. Holmes, Water feed control, C. C. A., 2d Cir., Doc. 12467, *KNY Scheerer Corp.* v. *American Sterilizer Co.* Discontinued by consent (notice Feb. 7, 1933).

1,776,957, J. Sneed, Fourwheel brake, filed Aug. 7, 1931, D. C., N. D. Ill., E. Div., Doc. 10764, *Steeldraulic Brake Corp. et al.* v. *Bendix Brake Co.*

1,797,546, W. A. Clark, Ornamental side ring for wire spoked wheels, D. C., N. D. Ill., E. Div., Doc. 10742, *W. A. Clark et al.* v. *Do-Ray Lamp Co.* Dismissed on motion of plaintiff Feb. 23, 1932.

1,801,549. (See 1,687,013.)

1,802,306, M. Baker, Frozen confection, filed Feb. 9, 1933, D. C., S. D. N. Y., Doc. E 74/176, *Interstate Franchise, Inc.*, v. *J. M. Horton Ice Cream Co.*

1,815,745, R. E. Thompson, Safety razor, appeal filed Feb. 9, 1933, C. C. A., 2d Cir., Doc. 12575, *Gillette Safety Razor Co.* v. *Standard Safety Razor Corp.*

1,822,796, M. Belloch, Buckle and method of making same, filed Feb. 7, 1933, D. C., S. D. N. Y., Doc. E 74/141, *M. Belloch* v. *Cosmo Casting Co., Inc., et al.* Same, filed Feb. 9, 1933, D. C., S. D. N. Y., Doc. E 74/175, *M. Belloch* v. *F. Rich.*

1,841,159, L. Silverman, Method of making textile fabrics, filed Feb. 10, 1933, D. C., S. D. N. Y., Doc. E 74/177, *Millinery Braid Manufacturers Research Corp.* v. *Bengreen Textile Corp.* Doc. E 74/178, *Millinery Braid Manufacturers Research Corp.* v. *J. Rubin Braid Co., Inc.* Doc. E 74/179, *Millinery Braid Manufacturers Research Corp.* v. *American Brand Trimming, Inc.*

1,858,316, Thompson & Smith, Safety razor, appeal filed Feb. 9, 1933, C. C. A., 2d Cir., Doc. 12574, *Gillette Safety Razor Co.* v. *Standard Safety Razor Corp.*

1,865,821, W. L. Blayney, Scarf and method of making same, filed Feb. 8, 1932, D. C., S. D. N. Y., Doc. E 74/143, *Marshall Field & Co.* v. *Rose Silk Mills, Inc., et al.*

1,881,324. (See 1,266,988.)

1,890,181, L. N. Hoffman, Hardware display card, filed Feb. 11, 1933, D. C., N. D. Ohio, E. Div., Doc. 4606, *The Shelby Metal Products Co.* v. *The Champion Hardware Co.*

Re. 16,869 (of 1,589,339), R. H. Goldman, Manicuring instrument, appeal filed Feb. 7, 1933, C. C. A., 8th Cir. (St. Louis), Doc. 9685, *H. L. Hughes Co., Inc.*, v. *R. Rawson.*

Re. 18,151, H. P. Elliott, Stencil machine and stencil therefor, filed Feb. 7, 1933, D. C., S. D. N. Y., Doc. E 74/142, *Elliott Addressing Machine Co.* v. *E. Newgass.*

Des. 81,678, J. Tuteur, Electric vacuum cleaner, C. C. A., 2d Cir., Doc. 12406, *Electric Vacuum Cleaner Co.* v. *Landers, Frary & Clark.* Decree affirmed (notice Feb. 6, 1933.

Des. 88,459, Des. 88,547, A. J. Heinke, Textile fabric, D. C., S. D. N. Y., Doc. E 74/10, *H. R. Mallinson & Co., Inc.*, v. *M. Schwarz Textile Corp.* Consent decree for plaintiff Feb. 9, 1933.

Des. 88,547. (See Des. 88,459.)

T. M. 116,845, M. Hersog, Hair net, filed Feb. 6, 1933, D. C., M. D. Pa. (Scranton), Doc. 1028, *M. Hersog* v. *N. B. Cohen.*

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,719,988, R. E. Myers, Electron device and the like adapted for alternating current, decided February 28, 1933, claims 3 and 4.

Pat. 1,780,875, T. F. Bradley, Treating porous and non-porous materials, decided February 28, 1933, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 15.

Pat. 1,812,615, E. W. Wall, Sulphonated substances and process of preparing the same, decided February 27, 1933, claims 1, 5, and 6.

Pat. 1,824,893, R. J. A. Chandler, Cigarette cutoff, decided January 31, 1933, claim 13.

Pat. 1,849,683, W. K. Millholland, Multiple unit turret type machine tool, decided February 24, 1933, claims 3, 4, 5, and 6.

Pat. 1,870,188, V. R. Abrams, Device for measuring, regulating and metering supply or distribution of fluids, decided February 27, 1933, claims 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

TRADE-MARKS

OFFICIAL GAZETTE, MARCH 28, 1933

[VOL. 428. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 332,330. EDWARD EMANUEL BARTON, London, England. Filed Nov. 21, 1932.

ARGONITE

For Fuel—Namely, Coal, Coke, or Cinders Treated with a Chemical Compound for Economising Consumption Thereof.

Claims use since Mar. 19, 1918.

Ser. No. 334,376. GEORGE L. POWNALL, Cincinnati, Ohio. Filed Jan. 26, 1933.

"Kolderols"

For Small Ice Portions for Table Use.

Claims use since Jan. 18, 1933.

Ser. No. 334,973. AKTIEBOLAGET IGGESUNDS BRUK, Iggesund, Sweden. Filed Feb. 15, 1933.

SISU

For Wood Pulp, Especially Such Produced by Chemical Way.

Claims use since 1931.

CLASS 2

Receptacles

Ser. No. 334,000. ELGIN AMERICAN MANUFACTURING CO., Elgin, Ill. Filed Feb. 3, 1933.



For Vanity Cases, Rouge Boxes, Eye-Brow Pencil Holders, Compact Boxes; Powder Containers—viz., Compacts for Both Loose and Cake Powder, and Powder Boxes Designed for Dressing Table Use; Perfume Containers—viz., Bottles Made Wholly or Partly of Metal for Use in Handbags or with Dresser Sets; Lip Stick Holders, Jewel Boxes; Portable Receptacles for Rouge, Perfume, and Soap—viz., Compacts Having Compartments for Rouge or Perfume, and Boxes for Use in Traveling Bags, All Empty and Made in Whole or in Part of Base Metal.

Claims use since Nov. 14, 1932.

Ser. No. 335,047. KEYES FIBRE COMPANY, INC., Waterville, Me. Filed Feb. 16, 1933.

CHI-NET

For Plates and Dishes Made of Paper Pulp or Fibre.

Claims use since Jan. 28, 1933.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 329,001. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Filed July 22, 1932.



For Dry Cleaner.
Claims use since Mar. 1, 1932.

Ser. No. 329,002. EDWARD R. TOLFREE, doing business as "X" Laboratories, New York, N. Y. Filed July 22, 1932.

"X"

For Dry Cleaner.
Claims use since Mar. 1, 1932.

Ser. No. 333,773. PH. D. PRODUCTS COMPANY, Philadelphia, Pa. Filed Jan. 9, 1933.

Ph. D.

THE HIGHEST DEGREE



For Shaving Cream.
Claims use since Feb. 15, 1932.

Ser. No. 334,236. TAKAMINE LABORATORY, INC., Clifton, N. J. Filed Jan. 21, 1933.

TAKALAB

For Cleansing Compound, Especially Useful for Cleaning Fabrics and the Like.
Claims use since Mar. 4, 1932.

Ser. No. 334,981. THE CINCINNATI SOAP COMPANY, Cincinnati, Ohio. Filed Feb. 15, 1933.

HELTH'GARD

For Toilet Soaps.
Claims use since June, 1932.

Ser. No. 335,017. COMFORT MANUFACTURING COMPANY, Chicago, Ill. Filed Feb. 16, 1933.

All American

For Saponaceous Compounds for Cleaning the Hands, Shaving Cream, Shaving Sticks, Shaving Powder; Outfit Packages Containing Soap and Towel; Soap Powder for Bathing, Washing, and Cleaning Purposes; Laundry Soaps, Soap Flakes, Hand Soaps.
Claims use since Feb. 6, 1933.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 317,262. F. E. ULLREY, doing business as Steril Tab Co., Hamilton, Ohio. Filed July 23, 1931.



No claim being made to the words "Steril Tabs" apart from the mark shown.
For Medicine in Tablet Form for the Treatment of Female Disorders.
Claims use since Aug. 1, 1926.

Ser. No. 322,049. L. B. LABORATORIES, Los Angeles, Calif. Filed Dec. 12, 1931.



The portrait is that of Carolina Olson. The words "Trade Mark" are disclaimed apart from the mark as shown. Applicant is the owner of registered Trade-Mark No. 153,781, registered Mar. 28, 1922, by the L. B. Hair Tonic Co.
For Hair Oil, Permanent Wave Oil, a Hair Pomade, Liniment for External Treatment for Sprains, Sore Throat, Chest, Back, and Neuralgia.
Claims use on hair oil since January 25, 1921; on permanent wave oil since May, 1930; on hair in place (a hair pomade) since May, 1930; and on liniment since June 1, 1931.

Ser. No. 322,611. THE HALE-JUSTIS DRUG COMPANY, doing business as The Hale-Justis Laboratories, Cincinnati, Ohio. Filed Dec. 30, 1931.

HĀKŌ

For Epsom Salt, Seidlitz Powders, Compound Licorice Powder, Milk of Magnesia, Cough Syrup, Baby Cough Syrup, Castor Oil, Disodium Salt of Dibrom-Oxymercury-Fluoresceine, Essence of Peppermint, Paregoric, Cascara Compound.
Claims use since Aug. 4, 1930.

Ser. No. 325,365. H. B. DAVIS COMPANY, Hoboken, N. J. Filed Mar. 22, 1932. Under section 5b of the act of 1905 as amended in 1920.

DAVIS

For Baking Powder and Baking Soda.
Claims use since July 1, 1886, on baking powder; since Feb. 5, 1932, on baking soda.

Ser. No. 327,858. NICHOLAS N. MARCOTOON, New York, N. Y. Filed June 9, 1932.

YEASTEX

For Tissue Cream and Protective Cream.
Claims use since Apr. 10, 1931.

Ser. No. 329,254. CALAVO GROWERS OF CALIFORNIA, Los Angeles, Calif. Filed Aug. 1, 1932.

CALAVOIL

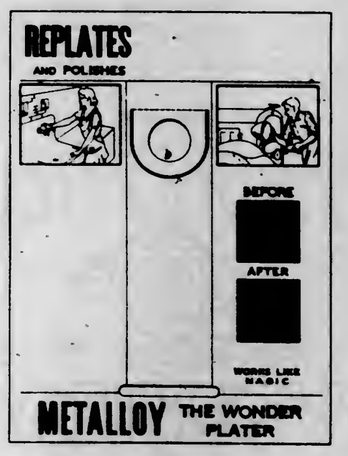
For Avocado Oil Used in the Preparation of General Cosmetics, Muscle Oil, Soaps, Etc.
Claims use since June 20, 1932.

Ser. No. 332,245. WILLIAM STANLEY BAUER, London, England. Filed Nov. 18, 1932.

PERMFOAM

For Vaginal Antiseptic Preparation for Treatment of Various Diseases Peculiar to Women and an Antiseptic and Hygienic Preparation.
Claims use since June 1, 1932.

Ser. No. 332,256. FRED JACOBS, doing business as Metalloy Products Co., New York, N. Y. Filed Nov. 18, 1932.



The color of the rectangles marked "Before" and "After" and all the words shown in the drawing except "Metalloy",

"The Wonder", and "Works Like Magic" are disclaimed apart from the mark shown in the drawing. The representation of the tag per se appearing on the drawing is disclaimed.

For Metal Plating and Polishing Compound.
Claims use since July 1, 1932.

Ser. No. 332,821. JACOB J. ALPERT, New York, N. Y. Filed Nov. 18, 1932.



The portrait shown in the drawing is fanciful.
For Deodorant Cream.
Claims use since Jan. 1, 1931.

Ser. No. 332,677. AMERICAN HERB COMPANY, San Jose, Calif. Filed Dec. 2, 1932.



For Herb Tea for the Treatment of Constipation, Bad Complexion, Obesity, Bedwetting, Anemia and General Debility, Kidney Disease, Liver Troubles, Nervousness, Stomach Trouble, Blood Pressure, Debility, Catarrh, Lung Troubles, Piles, and as a Body Tonic.
Claims use since Feb. 11, 1930.

Ser. No. 333,046. JOSEPH C. MOONEY, doing business as Reid Products Company, Yonkers, N. Y. Filed Dec. 6, 1932.



For Hair and Scalp Preparation Recommended for a Dry Scalp, Dandruff, and Premature Loss of Hair.
Claims use since Apr. 27, 1931.

Ser. No. 333,128. DINA RUBENSTEIN, doing business as Continental Pharmacal Co., New York, N. Y. Filed Dec. 16, 1932.

FLORTEX

For General Nerve Sedative in Tablet, Jelly, or Liquid Form.
Claims use since Sept. 17, 1932.

Ser. No. 333,179. BANNER MANUFACTURING CO. INC., doing business as Gold Seal Mfg. Co., New York, N. Y. Filed Dec. 19, 1932.

Gold Seal

THE SAFE ANTI-FREEZE

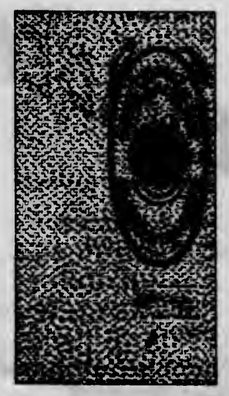
The applicant does not claim the words "The Safe Anti-Freeze", but claims only the words "Gold Seal" in connection with the anti-freeze solution.
For Anti-Freeze Solution.
Claims use since Jan. 2, 1932.

Ser. No. 333,395. JOHN T. LEVERAGE, Dover, Del. Filed Dec. 27, 1932.



For Salve Compound for the Treatment of Skin Cancer.
Claims use since Dec. 9, 1932.

Ser. No. 333,486. STEARNS' ELECTRIC PASTE COMPANY, INC., Chicago, Ill. Filed Dec. 29, 1932. Under 10-year proviso.



The applicant is the owner of trade-mark registration No. 144,068 for the words "Stearns Electric Rat and Roach Paste" and "Sure Death". The drawing is lined to indicate black and yellow. No claim is made to the outline of a label, or to the wording on the drawing with the exception of the words "Stearns' Electric Rat and Roach Paste, Sure Death, Stearns' Electric Paste Co." and the signature "J. J. Kearney".
For Poison in Paste Form for Rats, Mice, Squirrels, Gophers, Prairie Dogs, Coyotes, Wolves, Foxes, Land Crabs, Cock Roaches, Water Bugs, and Croton Bugs.
Claims use since Dec. 22, 1932.

Ser. No. 333,613. LUTHER C. SMITH, doing business as L. C. Smith Laboratory, Canton, Ohio. Filed Jan. 3, 1933.



For Germicidal Lotion for General Antiseptic and Household Use.
Claims use since May 11, 1931.

Ser. No. 333,884. HEWITT LABORATORIES INC., New York, N. Y. Filed Jan. 13, 1933.

DENTAL
33

No claim is made to the word "Dental" apart from the mark as shown.
For Gum Healing Antiseptic and Germicide.
Claims use since Feb. 1, 1932.

Ser. No. 333,886. LESQUENDIEU, INCORPORATED, New York, N. Y. Filed Jan. 13, 1933.

ECLADOR

For Nail Polish (Liquid and Paste), Nail Polish Dissolvent, Preparation for Removing Stains from the Skin and from Under the Nails, Nail White, Cuticle Cream, Cucumber Lotion, Almond Cream, and Sets Comprising Nail Polish and Nail Polish Dissolvent.
Claims use since Sept. 21, 1912.

Ser. No. 333,925. STEPHEN M. DUSCHOCK, doing business as Polamer Drug Co., South River, N. J. Filed Jan. 14, 1933.



The drawing is lined to indicate the color red.
For Medical Preparation for Use as a Stomach Regulator in the Treatment and Relief of Indigestion, Loss of Appetite, and Constipation.
Claims use since Dec. 15, 1931.

Ser. No. 333,960. YARDLEY & CO., LIMITED, London, England. Filed Jan. 14, 1933. Under 10-year proviso.

YARDLEY'S

For Face Powders and Face Creams.
Claims use since 1890.

Ser. No. 334,012. HUDSON VALLEY WINE CO., INC., Highland, N. Y. Filed Jan. 17, 1933.

DUVINET

For Medicinal Tonic Having a Wine Base.
Claims use since Dec. 15, 1932.

Ser. No. 334,090. E. I. DU PONT DE NEMOURS AND COMPANY, Wilmington, Del. Filed Jan. 19, 1933.

DUPONOL

For Sulfonated Alcohols.
Claims use since Nov. 10, 1932.

Ser. No. 334,102. JOHN A. HAMILL, New York, N. Y. Filed Jan. 19, 1933.

Femme du Monde

For Soapless Oil Shampoo, Wave Lotion, Brilliantine, Hair Tonic, and Blonde Rinse.
Claims use since November, 1932.

Ser. No. 334,127. RALPH C. VAUGHN, New York, N. Y. Filed Jan. 19, 1933.

TRULIP

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Depilatories, Tooth Pastes, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Nov. 21, 1932.

Ser. No. 334,129. HERCULES POWDER COMPANY, Wilmington, Del. Filed Jan. 18, 1933.

HERCOSE

For Cellulose Esters and Ethers.
Claims use since Aug. 31, 1932.

Ser. No. 334,219. S. H. KRESS & Co., New York, N. Y. Filed Jan. 21, 1933.

BLACK DART



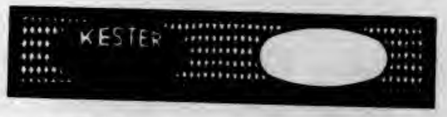
For Insecticides, Germicides, Fungicides, Deodorants, and Disinfectants.
Claims use since Dec. 5, 1932.

Ser. No. 334,258. GEORGE J. MILLER, doing business as Drug Products Co., Toledo, Ohio. Filed Jan. 23, 1933.

PULVADENT

For Dental Powder for the Teeth.
Claims use since Dec. 12, 1931.

Ser. No. 334,310. KESTER SOLDER COMPANY, Chicago, Ill. Filed Jan. 25, 1933.



For Soldering Fluxes.
Claims use since Jan. 16, 1933.

Ser. No. 334,330. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 25, 1933.

COLOROLE

For Chemical Products for Use in the Scouring, Bleaching, and Dyeing of Textiles.
Claims use since June 16, 1931.

Ser. No. 334,364. LES LABORATOIRES DAUSSE, SOCIETE ANONYME, Paris, France. Filed Jan. 26, 1933.

JUGLOCRINYL

For Lotion for the Skin and Hair.
Claims use since July 4, 1932.

Ser. No. 334,369. S. M. A. CORPORATION, Cleveland, Ohio. Filed Jan. 26, 1933.

CARITOL

For Solution of Carotene in Oil.
Claims use since September, 1932.

Ser. No. 334,524. DARWIN G. CHAMBERLAIN, doing business as Al-To Laboratories, Cleveland, Ohio. Filed Feb. 1, 1933.

AL-TO

For an Ointment for the Relief of Skin Ailments.
Claims use since 1902.

Ser. No. 335,040. ROBERT J. TRETHEWEY, doing business as Dr. Leidy, Distributors, Boyertown, Pa. Filed Feb. 16, 1933.

CIN - X

For Medicinal Preparation in Pill Form for Use in the Treatment of Rheumatism and Other Pains.
Claims use since Dec. 1, 1932.

CLASS 8

Smokers' Articles, Not Including Tobacco Products

Ser. No. 330,907. WÜRTTEMBERGISCHE METALLWARENFABRIK, Geislingen-Steige, Germany. Filed Oct. 3, 1932.

IKORA-METALL

The word "Metall" is disclaimed apart from the mark as shown on the drawing.
For Smoker's Requisites—Namely, Cigar Cutters, Ash Trays, Match Holders, Cigar Holders, Cigarette Holders, Cigar Cases, Cigarette Cases, Tobacco Pouches, Tobacco Humidors, Pipes, Pipe Holders and Trays, Pipe Cleaners, Pipe Reamers, Match Box Holders, and Snuffers.
Claims use since Sept. 22, 1930.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 331,019. CARL WALTHER, WAFFENFABRIK, Zella-Mehlis, Germany. Filed Oct. 6, 1932.

WALTHER

For Howitzers, Field Pieces, Cannons, Artillery Guns, Mortars, Anti-Aircraft Guns, Torpedo Tubes, Military Rifles, Carbines, Hunting Rifles, Shot Guns, Pistols, Revolvers, Machine Guns, Guns for Shooting Signal Rockets and Flares, Guns for Shooting Liquid Fire, Guns for Shooting Gas Grenades and Bombs, Guns for Shooting Harpoons, Life Saving Guns, Adult Air Guns, Adult Pistols, Adult Cap Pistols, and Adult Cap Guns; Torpedos, Dynamite, Air Bombs, Bombs, Shells, Rockets, Hand Grenades, Mines, and Depth Bombs.
Claims use since 1910.

CLASS 10

Fertilizers

Ser. No. 334,933. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 13, 1933.



For Fertilizer.
Claims use since Jan. 24, 1933.

CLASS 12

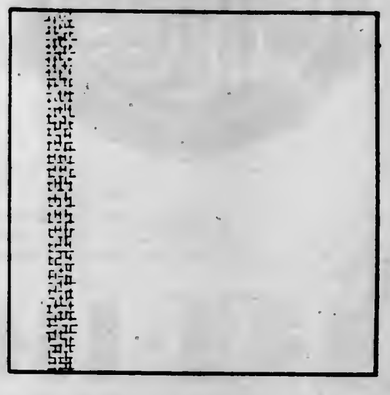
Construction Materials

Ser. No. 301,120. OHIO FIBRATED ASPHALT AND RUBBER COMPANY, Sandusky, Ohio. Filed May 28, 1930.



For Cable Trunking, Expansion Joints for Building and Paving Structures, Bituminous Flooring, Moldings, Paving Blocks, Planking, Raggle Block, Rail Filler, Bituminous Roofing, Siding, Wall Coping, Roof Flashing, Bituminized Felts, and Papers for Buildings, Thermal Insulation, Tiling, and Wallboard.
Claims use since Sept. 9, 1929.

Ser. No. 321,482. THE BARBER ASPHALT COMPANY, Philadelphia, Pa. Filed Nov. 25, 1931.



The mark comprises a band of yellow or gold color. The drawing is lined for yellow. The representation of roofing is disclaimed.
For Composition Roofing in the Form of Strips, Shingles, and Strip Shingles.
Claims use since Oct. 6, 1931.

Ser. No. 329,136. THE CLEVELAND TRINIDAD PAVING CO., Cleveland, Ohio. Filed July 28, 1932.

OREITE

For Paving Compositions, Comprising Broken Rock, Ground Iron Ore, and an Asphaltic Binder.
Claims use since June 14, 1932.

Ser. No. 332,750. THE BARRETT COMPANY, New York, N. Y. Filed Dec. 5, 1932.

TOMAHAWK

For Building Paper Suitable for Covering Concrete During Its Curing, for Temporary Roofs and Coverings to Protect Materials Against the Elements, for Covering Floors, for Sheathing Buildings, and the Like.
Claims use since 1916.

Ser. No. 332,928. SEALCELL CORPORATION, New York, N. Y. Filed Dec. 9, 1932.



For Closures, Closure Frames, Doors, Door Frames, and Other Parts and Fittings Used in the Construction and Equipment of Fermentation Cells for the Treatment of Garbage and the Like.
Claims use since January, 1929.

Ser. No. 334,551. ANDERSON BRICK AND SUPPLY CO., INC., New York, N. Y. Filed Feb. 2, 1933.

MASTER BOARD

No right is asserted to the exclusive use of the word "Board" apart from the mark shown in the drawing.
For Fire Resisting Plaster Boards.
Claims use since January, 1930.

Ser. No. 334,628. ALBERT C. FISCHER, doing business as Servicised Sales Company, Chicago, Ill. Filed Feb. 3, 1933.

CEMENTONE

For Expansion Joint Strips Composed of Rubber or Other Plastic Material.
Claims use since Oct. 15, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 330,913. WÜRTTEMBERGISCHE METALLWAREN-FABRIK, Geislingen-Steige, Germany. Filed Oct. 8, 1932.

IKORA-METALL

The word "Metall" is disclaimed apart from the mark as shown on the drawing.
For Vases, Flower Vases, Flower Pots, Dishes, Plates, Goblets, Casings for Glasses, Bottle-Stands, Bowls, Scutcheons, and Gongs Made of Base Metal.
Claims use since Sept. 22, 1930.

Ser. No. 333,147. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Dec. 17, 1932.

OLYMPIC

For Metal Pipe.
Claims use since Sept. 30, 1932.

Ser. No. 333,149. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Dec. 17, 1932.

CORVIC

For Metal Pipe.
Claims use since Oct. 5, 1932.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 333,148. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Dec. 17, 1932.

CORVIC

For Angles, Wire, and Sheet-Metal.
Claims use since Oct. 4, 1932, on angles; since Oct. 5, 1932, on wire; and since Oct. 7, 1932, on sheet-metal.

CLASS 15

Oils and Greases

Ser. No. 332,806. BRADFORD GASOLINE COMPANY OF BRADFORD, Bradford, Pa. Filed Dec. 6, 1932.

PENN-TEST



The words "Penn-Test" are hereby disclaimed when used apart from the mark as shown in the drawing.
For Illuminating Oils, Lubricating Oils, Lubricating Greases, and Motor Fuel Oils.
Claims use since Nov. 19, 1932.

Ser. No. 333,587. HANCOCK OIL COMPANY OF CALIFORNIA, Long Beach, Calif. Filed Jan. 3, 1933.

5 Point

For Gasoline.
Claims use since Nov. 1, 1932.

Ser. No. 333,588. HANCOCK OIL COMPANY OF CALIFORNIA, Long Beach, Calif. Filed Jan. 3, 1933.



For Gasoline.
Claims use since Nov. 1, 1932.

Ser. No. 333,589. HANCOCK OIL COMPANY OF CALIFORNIA, Long Beach, Calif. Filed Jan. 3, 1933.



The words "Quality" and "Regular Gasoline" are disclaimed apart from the mark shown in the drawing.
For Gasoline.
Claims use since Nov. 1, 1932.

Ser. No. 334,278. ARBUTHNOT OIL COMPANY, Picher, Okla. Filed Jan. 24, 1933.



For Petroleum Products—Namely, Gasoline, Kerosene, Lubricating Oils, Lubricating Greases, Fuel Oil (a Heavy Residual Oil Used for Burning Under Boilers, and as a Fuel in Diesel-Type Oil Engines), Petroleum Distillate (Used as a Furnace Fuel and as a Fuel in Semi-Diesel-Type Oil Engines), and Motor Fuels in Which the Chief Constituent is Gasoline.
Claims use since Apr. 26, 1930.

Ser. No. 334,487. MERLE B. KEMPER, doing business as Sta-Lube Company, St. Louis, Mo. Filed Jan. 28, 1933.

STA-LUBE

For Lubricating Oils and Greases.
Claims use since Aug. 1, 1931.

Ser. No. 334,487. JOHN B. CONNOR, Los Angeles, Calif. Filed Jan. 31, 1933.

HI-EFF

For Lubricating Oil.
Claims use since July 21, 1932.

Ser. No. 334,534. NEW YORK & NEW JERSEY LUBRICANT COMPANY, New York, N. Y. Filed Feb. 1, 1933.

CONDENZOL

For Lubricating Oils and Lubricating Oil Compositions and Greases.
Claims use since Jan. 6, 1933.

Ser. No. 334,581. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Feb. 2, 1933.

ARACAR

For Lubricating Oils.
Claims use since Jan. 11, 1933.

CLASS 16

Paints and Painters' Materials

Ser. No. 325,260. THE R. M. HOLLINGSHEAD COMPANY, Camden, N. J. Filed Mar. 18, 1932.

NUGLOSS

For Polishing Materials—Namely, Automobile Polish and Furniture Polish.
Claims use since January, 1906.

Ser. No. 331,064. RINSHED-MASON COMPANY, Detroit, Mich. Filed Oct. 7, 1932.

Pearlite

For Lacquer, Including Lacquer with a Pigment Which Forms a Film of Irridescent Nature.
Claims use since Aug. 17, 1932.

Ser. No. 334,514. CONTINENTAL CAR-NA-VAR CORPORATION, Brazil, Ind. Filed Feb. 1, 1933.

Luster var

For Liquid Polish for All Kinds of Floors.
Claims use since June 25, 1931.

Ser. No. 334,544. VALENTINE & COMPANY, New York, N. Y. Filed Feb. 1, 1933.

Super VALSPAR

For Paint Enamels, Stains, and Varnishes.
Claims use since Mar. 23, 1932.

CLASS 17

Tobacco Products

Ser. No. 332,254. GOLDBLATT BROS., INC., Chicago, Ill. Filed Nov. 18, 1932.

Goldblatt's Bond

For Cigars.
Claims use since Mar. 15, 1932.

Ser. No. 334,387. CUESTA, REY & CO., Tampa, Fla. Filed Jan. 27, 1933.

FAVORITA DE TAMPA

For Cigars.
Claims use since June 15, 1930.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 332,717. INTERNATIONAL MOTOR COMPANY, New York, N. Y. Filed Dec. 3, 1932.

For Self-Propelled Commercial Motor Trucks and Tractor Trucks.
Claims use since Nov. 1, 1932.

Ser. No. 332,866. LIPSCHULTZ BROS. INC., St. Paul, Minn. Filed Dec. 8, 1932.

WASHABLE AUTO SEAT COVERS

The descriptive words "Washable," "Fitwel," and "Auto Seat Covers" also the representation of the goods and of the manner of their use are disclaimed apart from the mark as shown on the drawing.
For Automobile Seat Covers.
Claims use since Nov. 1, 1932.

Ser. No. 332,868. LIPSHULTZ BROS. INC., St. Paul, Minn. Filed Dec. 8, 1932.

KOOL-TEX SEAT COVERS

The descriptive words "Seat Covers" and "Kool" are disclaimed apart from the mark as shown on the drawing.
For Automobile Seat Covers.
Claims use since Mar. 1, 1931.

Ser. No. 332,869. LIPSCHULTZ BROS. INC., St. Paul, Minn. Filed Dec. 8, 1932.

Tropico FORM-FITTING SEAT COVERS

The descriptive words "Form-Fitting Seat Covers" are disclaimed apart from the mark as shown on the drawing. The cross-hatching appearing in the drawing is utilized for shading purposes only.
For Automobile Seat Covers.
Claims use since Mar. 1, 1931.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 326,875. SCHWARZE ELECTRIC COMPANY, Adrian, Mich. Filed Nov. 6, 1931.

SAFERAY

For Infra-Red Ray Generators of the Type of Reflector Heaters for Defrosting Vehicle Windshields and Similar Purposes.
Claims use since August, 1931.

Ser. No. 327,411. "PERTRIX" CHEMISCHE FABRIK AKTIEN-GESELLSCHAFT, Berlin, Germany. Filed May 24, 1932.

Pertrix

For Electric Primary Battery Cells, Electric Primary Batteries, Electric Transportable Lamps Having Primary Battery Cells, and Parts Thereof, Incandescent Lamps and Parts Thereof, Gas Igniters equipped with Primary Cells, Electric Cigar Lighters Provided with Primary Cells.
Claims use since Jan. 10, 1928.

Ser. No. 328,823. UNITED STATES RADIO & TELEVISION CORPORATION, Marion, Ind. Filed July 15, 1932.

For Radio Receiving Sets.
Claims use since May 21, 1932.

Ser. No. 330,908. WÜRTTEMBERGISCHE METALLWAREN-FABRIK, Geislingen-Steige, Germany. Filed Oct. 3, 1932.

IKORA-METALL

The word "Metall" is disclaimed apart from the mark as shown on the drawing.
For Electric Lamps and Parts Thereof, Lamp Feet, Electrical Candlesticks.
Claims use since Sept. 22, 1930.

Ser. No. 332,002. THE ROLA COMPANY, Cleveland, Ohio. Filed Nov. 7, 1932.

Rola

For Radio Receiving Sets and Parts Thereof, Loud Speaker Diaphragms, Transformers, Loud Speaker Parts, Consisting of Shells, Voice Coils, Housings, Plates, Cores, Field Coils, Transformer Coils, and Amplifiers.
Claims use on radio sets and parts thereof, since about September, 1929; loud speaker diaphragms since about January, 1926; transformers since about March, 1928; loud speaker parts, such as shells, voice coils, housing cores, field coils, and transformer coils, since about March, 1928; and amplifiers since about September, 1929.

Ser. No. 333,209. SUN HEAT AUTOMATIC OIL BURNER CORP., New York, N. Y. Filed Dec. 19, 1932.

SPARKOSTAT

For Control Device Consisting of a Series of Thermostatically Controlled Electric Switches Used in Connection with Automatic Oil Burners.
Claims use since Jan. 2, 1930.

Ser. No. 333,228. EDWARD O. GRIFFIN, Jr., doing business as Griffin Specialty Sales Co., Los Angeles, Calif. Filed Dec. 20, 1932.

"HOT BABY"

For Electrical Cigar and Cigarette Lighters.
Claims use since Jan. 15, 1931.

Ser. No. 333,535. SCHWARZE ELECTRIC COMPANY, Adrian, Mich. Filed Dec. 30, 1932.

STARTATOR

For Combined Electro-Magnetic and Pneumatic Controllers and Parts Thereof for Electric Motor Starting Switches for Automobiles.
Claims use since May 15, 1932.

Ser. No. 333,594. INTELLECT-A-RAY CORPORATION, Pasadena, Calif. Filed Jan. 3, 1933.

INTELLECT-A-RAY

For Electric Apparatus, Particularly Photo-Electric Cells, Photo-Electrically Controlled Advertising Sign Systems, Electrically Controlled Burglar Alarm Systems and Apparatus.
Claims use since Oct. 15, 1932.

Ser. No. 333,704. FREDERICKS ARMATURE CORPORATION, Lock Haven, Pa. Filed Jan. 6, 1933.



No claim is made to the representation of the goods apart from the mark as shown in the drawing. The drawing is lined to indicate red.
For Armatures and Generators.
Claims use since 1916.

Ser. No. 333,968. ELECTRICAL PRODUCTS CORPORATION, Oakland, Calif. Filed Jan. 16, 1933.

ZEON

For Electric Lighting Fixtures.
Claims use since Dec. 28, 1932.

Ser. No. 334,007. GENERAL RAILWAY SIGNAL COMPANY, Rochester, N. Y. Filed Jan. 17, 1933.

GRS

For Electrical Equipment for the Control and Operation of Signals and Switches on Railroads, and Parts Thereof.
Claims use since Sept. 2, 1930.

Ser. No. 334,042. BURGESS BATTERY COMPANY, Madison, Wis. Filed Jan. 18, 1933.

MAJOR

For Dry Cell Batteries.
Claims use since Aug. 12, 1932.

Ser. No. 334,049. CONTINENTAL CORPORATION, Chicago, Ill. Filed Jan. 18, 1933.

Continental

For Radio Tubes, Radio Dial Lights, Automobile Headlight Bulbs, and Light Bulbs.
Claims use since December, 1920, on tubes; since Jan. 3, 1933, on dial lights, automobile headlight bulbs, and light globes.

Ser. No. 334,689. S & M LAMP CO., INC., Los Angeles, Calif. Filed Feb. 6, 1933.

"RED CAP"

For Flood Lights.
Claims use since Jan. 31, 1933.

Ser. No. 334,737. CASTLE RUBBER COMPANY, East Butler, Pa. Filed Feb. 8, 1933.

MIDGET

For Electric Connecting Plugs.
Claims use since Aug. 16, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 327,754. JAMES HEDDON'S SONS, Dowagiac, Mich. Filed June 6, 1932.

FISH-FLESH

For Artificial Baits.
Claims use since Mar. 10, 1932.

Ser. No. 334,079. UNIVERSITY DISTRIBUTING COMPANY, Cambridge, Mass. Filed Jan. 18, 1933.

CONTRACT OF THE WEEK

No registration rights are claimed in the word "Contract" apart from the mark shown in the drawing.
For Bridge Accessory in the Nature of a Demonstration Chart Used as a Reference Sheet or as an Index to and with Playing Cards.
Claims use since Nov. 23, 1932.

Ser. No. 334,695. JAMES SUMNER, doing business as Sumner Sales Co., St. Louis, Mo. Filed Feb. 6, 1933.

MARBL-O

For Table Board Game Played with Pieces, Marbles, or the Like.
Claims use since Jan. 25, 1933.

Ser. No. 335,044. VIKING MANUFACTURING COMPANY, INC., Cambridge, Mass. Filed Feb. 16, 1933.



For Jig Saw Type Puzzles.
Claims use since Oct. 20, 1932.

Ser. No. 335,113. DONALD F. DUNCAN INC., Chicago, Ill. Filed Feb. 20, 1933.

DO-DEL-DO

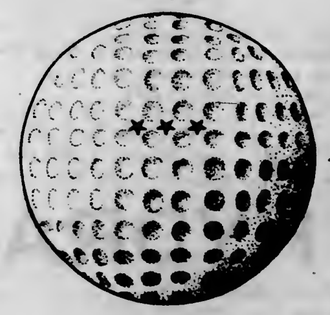
For Diabolos of Wood, Rubber, or Metal.
Claims use since Jan. 30, 1933.

Ser. No. 335,130. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass. Filed Feb. 20, 1933.

JIGWOOD

For Picture Puzzles.
Claims use since Feb. 6, 1933.

Ser. No. 335,145. UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Feb. 20, 1933.



No claim is made to the representation of a golf ball. The trade mark consists of a group of three stars.
For Golf Balls.
Claims use since Dec. 28, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 315,809. SIDNEY THOMAS and FRANCIS JOSEPH DELVES, Paris, France. Filed June 13, 1931.

MACO

For Templates.
Claims use since Jan. 1, 1926.

Ser. No. 323,506. UNITED SHOE MACHINERY CORPORATION, Paterson, N. J., and Boston, Mass. Filed Jan. 27, 1932.

ONE USMC CLICK

For Cutting Dies.
Claims use since Sept. 9, 1931.

Ser. No. 332,012. MOORE PLOW & IMPLEMENT CO., Greenville, Mich. Filed Nov. 9, 1932.

MOORE PLOWS

The word "Plows" is disclaimed.
For Walking Plows, Sulky Plows, Gang Plows, Hand Cultivators, and Parts Thereof.
Claims use since May 1, 1921.

Ser. No. 333,667. THE BRISTOL AEROPLANE COMPANY LIMITED, Bristol, England. Filed Jan. 5, 1933.

HYDRA

For Aircraft Engines.
Claims use since February, 1932.

Ser. No. 333,853. THE IRWIN AUGER BIT COMPANY, Wilmington, Ohio. Filed Jan. 12, 1933.

BLUWIN

For Auger Bits for Woodworking Use.
Claims use since Dec. 1, 1932.

Ser. No. 333,989. THE JAEGER MACHINE COMPANY, Columbus, Ohio. Filed Jan. 16, 1933.

JAEGER
SURE PRIME
PUMPS

The drawing is lined for red and black. The words "Sure Prime" and "Pumps" are disclaimed apart from the mark as shown.
For Centrifugal Self-Priming Pumps.
Claims use since Jan. 4, 1933.

Ser. No. 334,228. MULTICYCOL PUMP & ENGINE CORPORATION, New York, N. Y. Filed Jan. 21, 1933.

MULTICYCOL

For Rotary Pumps.
Claims use since Jan. 16, 1933.

Ser. No. 334,343. BEE LINE MANUFACTURING COMPANY, Davenport, Iowa. Filed Jan. 26, 1933.

BEE B LINE

While the drawing is lined to indicate red, applicant does not desire to be limited to this particular color as the mark is sometimes used in black lettering and may be used in other colors.
For Automobile Frame Straighteners, Lifting Jacks, and Axle and Wheel Straightening Presses.
Claims use since Feb. 13, 1931.

Ser. No. 334,399. THE MAGNAVOX COMPANY, Fort Wayne, Ind. Filed Jan. 27, 1933.

"MAGNA-WHIRL"

For Hand and Motor Driven Mechanical Fruit Juice Extractors.
Claims use since June 15, 1932.

CLASS 24

Laundry Appliances and Machines

Ser. No. 334,056. HARRISON WHOLESALE COMPANY, Chicago, Ill. Filed Jan. 18, 1933.

Empress

For Laundry Washing Machines.
Claims use since Nov. 8, 1932.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 333,891. ILFORD, LIMITED, Ilford, England. Filed Dec. 27, 1932.

SELOCHROME

For Sensitized Cinematographic and Photographic Films.
Claims use since January, 1932.

Ser. No. 334,656. THE VAN BEUREN CORPORATION, New York, N. Y. Filed Feb. 4, 1933.



For Motion Picture Films for Use by Motion-Picture Exhibitors.
Claims use since Dec. 29, 1932.

Ser. No. 334,657. THE VAN BEUREN CORPORATION, New York, N. Y. Filed Feb. 4, 1933.

CUBBY BEAR

For Motion-Picture Films for Use by Motion-Picture Exhibitors.
Claims use since Dec. 29, 1932.

Ser. No. 334,677. I. G. FARBENINDUSTRIE AKTIENGESELLSCHAFT, Frankfurt-on-the-Main, Germany. Filed Feb. 6, 1933.

Agfacolor

For Sensitized Photographic Plates and Films, Cinematographic Films.
Claims use since Apr. 14, 1932.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 333,611. SEARS, ROEBUCK AND CO., Chicago, Ill Filed Jan. 3, 1933.



For Brooms, Handled Floor Brushes and Dusters.
Claims use since Nov. 15, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 321,369. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn. Filed Nov. 19, 1931. Under section 5b of the act of 1905 as amended in 1920.

Columbia

For Refrigerators and Parts Thereof.
Claims use since July 15, 1931.

Ser. No. 333,823. THE DAYTON PUMP & MANUFACTURING COMPANY, Dayton, Ohio. Filed Jan. 11, 1933.

PARAD-ICE

No claim is made to the word "Ice" except in the association shown on the drawing.
For Household and Store Refrigerators for the Preservation of Foodstuffs.
Claims use since Oct. 1, 1932.

CLASS 32

Furniture and Upholstery

Ser. No. 330,910. WÜRTTEMBERGISCHE METALLWARENFABRIK, Geislingen-Steige, Germany. Filed Oct. 8, 1932.

IKORA-METALL

The word "Metall" is disclaimed apart from the mark as shown on the drawing.
For Mirrors.
Claims use since Sept. 22, 1930.

CLASS 33

Glassware

Ser. No. 311,545. WÜRTTEMBERGISCHE METALLWARENFABRIK, Geislingen-Steige, Germany. Filed Feb. 27, 1931.

Ikora-Kristall

The word "Kristall" is disclaimed apart from the trade-mark as shown on the drawing.
For Glass or Crystal in All Forms—Namely, Glassware for Windows and Doors, Table Glassware, Flat Glassware, Glass in Bulk, Stained Glass, Glass Vases, Glass Dishes, Glass Cups, Glass Goblets, Plate Glass, Sheet Glass, Reinforced Glass.
Claims use since Apr. 20, 1929.

CLASS 34

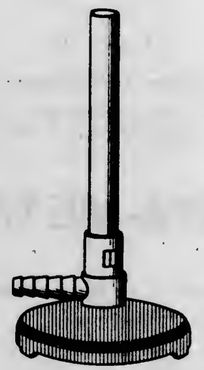
Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 322,735. FUEL CONSERVATION CORP., Washington, D. C. Filed Jan. 5, 1932.

STEDEFYR

For Smoke Pipe Air Checks.
Claim use since Nov. 21, 1931.

Ser. No. 324,061. CENTRAL SCIENTIFIC COMPANY, Chicago, Ill. Filed Feb. 11, 1932.



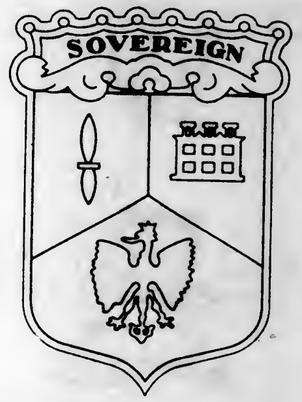
The drawing is lined to indicate maroon and the trade-mark consists in a band of the color maroon applied to a laboratory burner on the upper and side surfaces of the lower portion of the base. No claim is made to the representation of the goods per se in this registration.
For Laboratory Burners of All Kinds Employing Gaseous Fuels.
Claims use since Oct. 7, 1926.

Ser. No. 330,995. HEPHAEST A. G. FUR MOTORISCHE KRAFTERZEUGUNG, Zurich, Switzerland. Filed Oct. 6, 1932.

„HEPHAEST"

For Steam Boilers, Steam Generators, and Furnaces.
Claims use since Feb. 15, 1930.

Ser. No. 333,212. IRVING CLAMAN, New York, N. Y. Filed Dec. 17, 1932.



For Gas Stoves, Ranges, Range Parts, and Stove Parts.
Claims use since July, 1928.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 323,714. THE PISTON RING COMPANY, Muskegon, Mich. Filed Feb. 1, 1932.

SEALED POWER

For Piston Rings.
Claims use since Dec. 2, 1931.

Ser. No. 328,998. THE SHALER COMPANY, Waupun, Wis. Filed July 22, 1932.

HOT Patches

The word "Patches" and the representation of the tool are disclaimed, except in the association shown.
For Repair Patch Equipment for Rubber Articles Particularly Tire Tube Repair Kits.
Claims use since June 1, 1931.

Ser. No. 330,397. THE DAYTON RUBBER MANUFACTURING COMPANY, Dayton, Ohio. Filed Sept. 16, 1932.

ROLLON

For Vehicle Tires and Inner Tubes Made of Rubber and Rubber and Fabric.
Claims use since Aug. 9, 1932.

CLASS 37

Paper and Stationery

Ser. No. 333,610. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 3, 1933.

ALLSTATE

For Yellow Second Sheets and Stationery—Namely, Boxed Paper and Envelopes.
Claims use since Nov. 16, 1932.

Ser. No. 334,282. AUGUST ROSENBERG, doing business as Estatement System, New York, N. Y. Filed Jan. 21, 1933.

ESTATEMENT SYSTEM

No registration rights are claimed herein to the word "System" apart from the mark as shown.
For Looseleaf Binders, Looseleaf Binder Sheets, Looseleaf Records, Partially Printed Forms, Instruction Blanks, Blankbooks and Books and Sheets of a Blank Nature Used for Keeping Household and Personal Investment, Income and Expense Records, Insurance Data, Records, Tabulations, and the Like.
Claims use since July 1, 1928.

CLASS 38

Prints and Publications

Ser. No. 317,777. PATTERSON PUBLISHING COMPANY, Chicago, Ill. Filed Aug. 7, 1931.



For Magazine Section or Department.
Claims use since March, 1931.

Ser. No. 333,481. CLIFFORD W. PFLUGER, New York, N. Y. Filed Dec. 29, 1932.

The Green Card

MUTUEL
WINNER

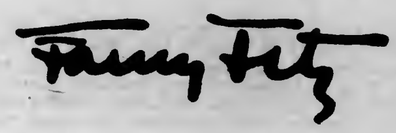
Applicant disclaims the words "Card" and "Mutuel Winner" and the right to the exclusive use of a card colored green.
For Printed Mutuel Racing Charts.
Claims use since Oct. 8, 1931.

Ser. No. 334,019. MYSTIC BROTHERHOOD UNIVERSITY, INC., Tampa, Fla. Filed Jan. 17, 1933.



For Leaflets, Manuscripts, Booklets, Treatises, Lessons, and Weekly Publications.
Claims use since November, 1932.

Ser. No. 334,564. FANNY FERN FITZWATER, New York, N. Y. Filed Feb. 2, 1933.



The trade-mark is in the handwriting of the applicant.
For Newspaper Fashion Section.
Claims use since December, 1922.

CLASS 39

Clothing

Ser. No. 297,337. SPORTSWEAR MFG. CO., San Francisco, Calif. Filed Mar. 14, 1930.



The words "Novel Knit" are disclaimed apart from the mark as shown.
For Ladies' and Children's Knitted Sweaters, Knitted Coats, Knitted Ensembles, Knitted Dresses, and Knitted Hats.
Claims use since Sept. 12, 1927.

Ser. No. 331,792. JAYFORM, INC., New York, N. Y. Filed Nov. 1, 1932.



For Boots and Shoes of Leather and Fabric and Combinations of Leathers and Fabrics.
Claims use since Aug. 1, 1930.

Ser. No. 333,440. M. C. SCHRANK COMPANY, Bridgeton, N. J. Filed Dec. 28, 1932.



For the Following Garments of Knitted, Netted, or Textile Fabrics to be Worn by Men, Women, or Children, Corsets, Dresses, Nightwear—Namely, Pajamas, Pajama Coats, Pajama Blouses, Pajama Trousers, Robes, Negligees, Gowns, and Pajama Ensembles; and Lingerie—Namely, Chemises, Step-Ins, Slips, Bloomers, Panties, Bandeaux Sets, and Combination Suits of Underwear.
Claims use since July, 1928.

Ser. No. 334,066. MODEL BRASSIERE CO. INC., Brooklyn, N. Y. Filed Jan. 18, 1933.

Swankies

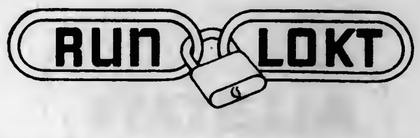
For Combination Garment Combining the Functions of a Brassière and of a Corset.
Claims use since Jan. 12, 1933.

Ser. No. 334,217. LOUIS HIRSCH TEXTILE MACHINES, INC., New York, N. Y. Filed Jan. 21, 1933.



The exclusive use of the term "Loop Lokt" is disclaimed except as associated with other features of the mark.
For Hosiery.
Claims use since Dec. 23, 1932.

Ser. No. 334,218. LOUIS HIRSCH TEXTILE MACHINES, INC., New York, N. Y. Filed Jan. 21, 1933.



The exclusive use of the term "Run Lokt" is disclaimed except as associated with other features of the mark.
For Hosiery.
Claims use since Dec. 23, 1932.

Ser. No. 334,253. GREENHILL & DANIEL, INC., Brooklyn, N. Y. Filed Jan. 23, 1933.

Corso-Knit

No claim is made to the word "Knit" apart from the mark shown on the drawing.
For Knitted Bathing Suits, Knitted Sweaters, and Knitted Dresses and Skirts for Women, Misses, and Children.
Claims use since July, 1932.

Ser. No. 334,274. VALLEY SHOE CORPORATION, St. Louis, Mo. Filed Jan. 23, 1933.

val-eze

For Footwear—Namely, Shoes of Leather, Fabric, and Combinations Thereof.
Claims use since Jan. 1, 1933.

Ser. No. 334,282. GARFINKEL & RITTER, New York, N. Y. Filed Jan. 24, 1933.

CARRI-MI

For Ladies' Underwear—Namely, Brassières and Bandeaux.
Claims use since Jan. 15, 1933.

Ser. No. 334,358. GARFINKEL & RITTER, New York, N. Y. Filed Jan. 26, 1933.

SHADOW FOE

For Ladies' Undergarments—Namely, Slips.
Claims use since Jan. 16, 1933.

Ser. No. 334,470. PHOENIX HOSIERY COMPANY, Milwaukee, Wis. Filed Jan. 30, 1933.

Streamline Heel...

No claim is made to the exclusive use of the word "Heel" apart from the mark as shown.
For Hosiery.
Claims use since Sept. 20, 1932.

Ser. No. 334,790. BROWN & WELLS, INC., Boston, Mass. Filed Feb. 9, 1933.

CATHEDRAL

For Four-In-Hand Neckties for Men.
Claims use since Oct. 20, 1932.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 332,471. SNAPPIES, INC., Tulsa, Okla. Filed Nov. 25, 1932.

Snappies

For Garment Clasps and Bandage Clasps But Not Including Snap Fasteners.
Claims use since Nov. 10, 1932.

Ser. No. 333,820. THE BUTTON CORPORATION OF AMERICA, INC., Orange, N. J. Filed Jan. 11, 1933.



The lining on the drawing indicates shading only. No claim is made to the representation of the buttons apart from the mark as shown.
For Buttons.
Claims use since Dec. 23, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 326,661. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal-Oberbarmen and Wuppertal-Elberfeld, Germany, assignors to American Bemberg Corporation, New York, N. Y. Filed May 2, 1932.

„Kreppeline"

For Textile Materials in the Piece, Composed Wholly or in Part of Artificial Silk.
Claims use since Oct. 29, 1929.

Ser. No. 334,275. BRNĚNSKÁ TOVÁRNA NA SMALTOVÉ A KOVOVÉ ZBOŽÍ BRATŘI GOTTLIEBOVÉ A BRAUCHBAR, Brno, Czechoslovakia. Filed Jan. 28, 1933.

GEOTEX

For Lining for Clothes of All Kinds, Said Lining Being Made as a Fabric of Piled and Vegetable Fibres.
Claims use since Nov. 3, 1932.

Ser. No. 334,299. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Jan. 25, 1933.

NINON FASONAY

No claim is made to the exclusive use of the word "Ninon" apart from the mark as shown on the drawing.
For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Jan. 23, 1933.

Ser. No. 334,322. ROSSIN VELVET COMPANY, Mystic, Conn. Filed Jan. 25, 1933.

Q-vel

For Pile Fabrics.
Claims use since Dec. 14, 1932.

Ser. No. 334,324. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Jan. 25, 1933.

Shado-vel

For Pile Fabrics.
Claims use since Dec. 14, 1932.

Ser. No. 334,325. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Jan. 25, 1933.

VISTA-vel

For Pile Fabrics.
Claims use since Dec. 24, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 332,510. AUSTENAL LABORATORIES, INC., New York, N. Y. Filed Nov. 28, 1932.



The mark consists of a yellow tipped end for wire. No claim is made to the representation of a piece of dental wire per se.
For Wire Composed of an Alloy of Precious Metals for Dental Purposes.
Claims use since Nov. 1, 1932.

Ser. No. 334,027. UNIVERSAL DENTAL COMPANY, Philadelphia, Pa. Filed Jan. 17, 1933.

Criterion Teeth

The word "Teeth" is herein disclaimed apart from the mark as shown.
For Artificial Teeth.
Claims use since June, 1922.

Ser. No. 334,477. TAM TAPE COMPANY, Orchard Lake, Mich. Filed Jan. 30, 1933.



"COMES OFF CLEAN"

Exclusive use of the words "Comes Off Clean" is disclaimed apart from the other features of the mark. The representation of the Scotchman shown in the mark is fanciful.
For Adhesive Tape.
Claims use since Apr. 30, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 334,010. SIDNEY HARRIS and WILLIAM AMERICUS, Pittsburgh, Pa. Filed Jan. 17, 1933.

SOUTHERN STYLE

No claim is made to the word "Style".
For Ginger Ale, a Non-Alcoholic, Non-Cereal, Maltless Beverage, Sold as a Soft Drink, and Sirup and Extract for Making the Same.
Claims use since April, 1929.

Ser. No. 334,732. ALBERT S. SORRENTINO, Detroit, Mich. Filed Feb. 8, 1933.

Cocasane

For Nonalcoholic, Maltless Beverage Sold as a Soft Drink.
Claims use since Jan. 15, 1933.

Ser. No. 334,953. CALIFORNIA CONSOLIDATED WATER COMPANY, Los Angeles, Calif. Filed Feb. 14, 1933.

PURITAS

For Drinking Water, Distilled Water.
Claims use since Jan. 29, 1932.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 316,763. W. BURTON & CO., INC., Brooklyn, N. Y. Filed July 9, 1931. Under 10-year proviso.

EMPIRE STATE

For Flavoring Extracts and Imitations Thereof for Food Purposes.
Claims use since 1885.

Ser. No. 317,501. BORDEN QUALITY, INC., New York, N. Y. Filed July 31, 1931.

FOX MEADOW

For Dressed Poultry, Butter and Eggs.
Claims use since Apr. 23, 1931.

Ser. No. 323,468. SHERWOOD P. SNYDER, doing business as The Sherwood Snyder Food Co. and Snyder's Community Kitchen, Dayton, Ohio. Filed Jan. 26, 1932.

Dinner Bell

For Noodle Dinner, Consisting of Canned Noodles with Sauce, Meat and Seasonings, Noodles in Beef Broth and Butter, Potato Salad, Macaroni Salad.
Claims use since Nov. 10, 1930.

Ser. No. 323,520. BORDEN QUALITY INC., New York, N. Y. Filed Jan. 28, 1932.

VALLEY GROVE

For Dressed Poultry and Eggs.
Claims use since Nov. 24, 1931.

Ser. No. 324,232. THE RICCIARDI CO., INC., New York, N. Y. Filed Mar. 4, 1932.



Applicant disclaims exclusive use of the words "Ice Cream" except and apart from the mark as shown in the accompanying drawing.
For Ice Cream and Frozen Confections.
Claims use since Jan. 29, 1932.

Ser. No. 328,413. HEALTH FOOD CORPORATION, Chicago, Ill. Filed June 27, 1932.

Ladex

For Powdered Health Food, Derived from Milk, Vegetables, and Yeast, of Laxative and Tonic Effect and for the Change of the Intestinal Flora.
Claims use since Aug. 17, 1931.

Ser. No. 329,333. ALBERT J. HARPER, doing business as Harper Creamery Company, Cleveland, Ohio. Filed Aug. 4, 1932.



The words "Old Fashun Buttermilk" are disclaimed apart from the mark as shown.
For Buttermilk.
Claims use since Apr. 1, 1930.

Ser. No. 329,692. TOWN TALK FOOD PRODUCTS CORPORATION, New York and Brooklyn, N. Y. Filed Aug. 19, 1932.

TOWN TALK

For Flavoring Syrups for Food Purposes.
Claims use since May, 1931.

Ser. No. 330,144. THE W. E. LONG COMPANY, Chicago, Ill. Filed Sept. 6, 1932.

Two-Tone

For Bread.
Claims use since May 9, 1932.

Ser. No. 330,327. THE AMERICAN DIAMALT COMPANY, Cincinnati, Ohio. Filed Sept. 14, 1932.

X MALT X

No claim is made to the word "Malt" except in connection with associated characteristic features of the trade-mark as shown in the drawing.
For Malt Syrup.
Claims use since Aug. 15, 1932.

Ser. No. 330,973. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Oct. 5, 1932.



The drawing is lined for yellow or gold. The Hebrew characters translated into English mean "Stuhmer's Genuine (Pure) Pumpernickel Bread", said words "Genuine (Pure) Pumpernickel Bread" being disclaimed apart from the mark as shown.
For Bread (Rye Bread and Pumpernickel).
Claims use since 1891.

Ser. No. 332,167. JOSEPH TETLEY & CO., INC., New York, N. Y. Filed Nov. 15, 1932.

TETLEY



For Tea, Coffee, Cocoa, Chocolate, Sugar, Spices, Prepared Puddings and Desserts, Bread, Cake, and/or Cracker Spread Such as Jam and Jellies and Fruit Juices.
Claims use since 1888.
Under 10-year proviso.

Ser. No. 332,607. WEIGUM & FREY, Victor, Calif. Filed Nov. 29, 1932.

OLD VINE

For Fresh Grapes.
Claims use since Nov. 1, 1931.

Ser. No. 332,754. THE CERA-LAC COMPANY, Los Angeles, Calif. Filed Dec. 5, 1932.



The words "Good to Eat", "Good to You", and "Lac" are disclaimed apart from the mark as shown on the drawing.
For Natural Grain Flour with Bran, Cereal Breakfast Food, Bread.
Claims use since July 1, 1930.

Ser. No. 332,773. OTIS HOYT, Long Beach, Calif. Filed Dec. 5, 1932.

COACHELLA DESERT

For Fresh Citrus Fruits, Fresh Dates.
Claims use since Mar. 4, 1932.

Ser. No. 332,781. OLD MONK OLIVE OIL CO., Chicago, Ill. Filed Dec. 5, 1932.



Old Monk

For Mayonnaise, French Dressing, Thousand Island Dressing, Cherries Artificially Colored and Flavored, Tartare Sauce.
Claims use since 1920 to Mayonnaise, French Dressing, and Thousand Island Dressing; since 1914 to Cherries; and since 1922 to Tartare Sauce.

Ser. No. 332,831. BILOXI CANNING & PACKING COMPANY, INC., Biloxi, Miss. Filed Dec. 7, 1932.

BILOXI MISS



The picture shown is fanciful.
For Canned Shell Fish.
Claims use since Aug. 15, 1929.

Ser. No. 332,832. BILOXI CANNING & PACKING COMPANY, INC., Biloxi, Miss. Filed Dec. 7, 1932.

SEA BEACH



The picture shown is fanciful.
For Canned Shell Fish.
Claims use since Aug. 15, 1929.

Ser. No. 332,836. EMIL CHALUPA, New York, N. Y. Filed Dec. 7, 1932.



No claim is made to the words "Fancy Chinese" and "Brand" apart from the mark shown on the drawing.
For Mustard.
Claims use since June, 1931.

Ser. No. 332,885. JABURG BROTHERS, INC., New York, N. Y. Filed Dec. 8, 1932.



For Alimentary Paste, Butter, Candies, Maraschino Cherries, Candied Peels, Candied Citron, Glacé Fruits, Canned and Bottled Vegetables and Vegetable Juices, Canned Soups, Canned Milk, Canned Eggs, Canned Fish, Canned Clam Juice, Crackers and Biscuits, Ice Cream Cones, Catsup, Chili Sauce, Marmalade, Salad and Fruit Dressings, Peanut and Fruit Butters, Fruit Emulsions, Cheese, Chocolate and Cocoa for Beverages, Chocolate and Cocoa for Making Candy and Bakery Products, Coffee, Corn Starch, Dehydrated Vegetables, Dehydrated Fruits, Dehydrated Eggs, Dehydrated Milk, Dehydrated Fish; Essential Oils, Fruit Essences, Extracts and Extract Powders for Food Flavoring; Edible Fats and Oils for Salads, Shortening, Frying and Baking; Flour and/or Meal Made from Tapioca, Potatoes, Wheat, Corn, Rye, Rice, and Barley for Edible Purposes; Cocoanut, Gelatine, Glucose, Honey, Jams, Jellies, Fruit Preserves, Pickles, Lard, Lard Substitute; Alimentary Pastes—Namely, Macaroni, Noodles, Spaghetti, Vermicelli and Alphabets; Malt Compound Powder, Hop Extract and Malt Extract for Food Purposes, Mayonnaise, Marshmallow Whip, Malted Milk and Milk Powder, Mince Meat, Molasses, Sandwich Spreads, Mustard, Nuts, Shelled and Unshelled, and Nut Pastes and Nut Butter; Cocoa Butter, Oleomargarine, Pepper, Paprika, Pepper Sauce, Worcestershire Sauce, Wine Sauces for Flavoring Purposes, Celery Salt, Horseradish, Olives, Spices, Seeds and Herbs for Food Flavoring Purposes, Pie Crust Preparation, Pie Fillings, Ice Cream Powders, Pop Corn in its Natural State, Potato Chips, Rice, Cane Syrup, Corn Syrup, Maple Syrup or Syrup Made From Combinations Thereof, Malt Syrup for Food Purposes, Sugars, Teas and Tea Balls, Vinegar, Yeast, Cake Fillers; Dog, Cat, Bird, Poultry and Animal Foods—Namely, Horse and Cattle Feeds; Concentrated Soup Cubes, Edible Gums for Food Purposes, and Salts, and Baking Powder.
Claims use since August, 1914.

Ser. No. 333,012. RED BAND COMPANY, INC., Johnson City, Tenn. Filed Dec. 12, 1932.

REDDY

No claim is made to the word "Reddy" apart from the mark as shown on the drawing. The drawing is lined for the color red.

For Prepared Flour.

Claims use since Oct. 4, 1932.

Ser. No. 333,029. EL FOOD AND DRUG PRODUCTS, Philadelphia, Pa. Filed Dec. 13, 1932.

LAKFIR
LACTO-KEFIR

No claim is made to the words "Lacto" or "Kefir" or "Lacto-Kefir" except in association with the mark as shown.

For Acidified, Fermented, Sugar Splitting Milk Product Changing the Gastric Intestinal Flora and Usable Where Plain Milk is Not Tolerated.

Claims use since Sept. 1, 1932.

Ser. No. 333,129. FRED SANDERS, Detroit, Mich. Filed Dec. 16, 1932. Under 10-year proviso.

Sanders

For Candy, Ice Cream, Noodles, Coffee, Tea, Maple Syrup, Mustard, Mayonnaise, Nuts (Shelled and Salted), Pastries, Sandwich Dressing, Glace Fruits, French Dressing, Ice Cream Cones and Potato Chips, Bread, Rye Bread, Cake and Fruit Cake, Biscuits, Doughnuts, Raisins, Bon Bons, Peanuts.

Claims use since June 1, 1875.

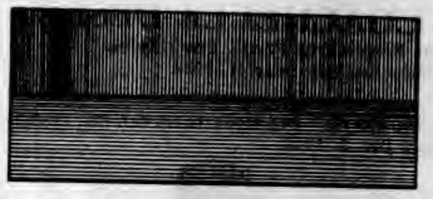
Ser. No. 333,161. JAMES MARSHALL (GLASGOW) LIMITED, Glasgow, Scotland. Filed Dec. 17, 1932.

FAROLA

For Preparation of Wheat for Infant Feeding, Puddings, Blanc-Manges, Cakes, Pastries, Biscuits, and Thickening Soups, Gravies, and Sauces.

Claims use since 1885.

Ser. No. 333,355. GIBBS & COMPANY, INC., Baltimore, Md. Filed Dec. 24, 1932.



The mark consists of two adjacent bands colored, respectively red and blue. The drawing is lined for red and blue. No claim is made to the outline of the label.

For Canned Fruits, Canned Berries, Canned Vegetables, Canned Sauerkraut, and Hominy.

Claims use since 1902.

Ser. No. 333,627. SOPHIE TUCKER'S FOOD PRODUCTS COMPANY, INCORPORATED, Baltimore, Md. Filed Jan. 3, 1933.



The picture shown on the drawing is that of Sophie Tucker. No claim is made to the representation of the label. All notations except "Sophie Tucker's" and "Sophie Tucker's Food Products Company" are disclaimed apart from the mark as shown on the drawing.

For Noodles.

Claims use since Dec. 1, 1932.

Ser. No. 333,828. JOHN H. CALDWELL, New York, N. Y. Filed Jan. 11, 1933.

TECHNOCRACY
BAR
A New Deal

No claim is made to the exclusive use of the word "Bar" apart from the mark as shown.

For Candy, Ice Cream, Peanuts, and Peanut Bars.

Claims use since Jan. 7, 1933.

Ser. No. 333,839. THE PROVIDENCE MILLING CO., Grand Rapids, Ohio. Filed Jan. 11, 1933. Under 10-year proviso.

PILLIOD'S

For Buckwheat and Wheat Flour Compound, Buckwheat Flour and Whole Wheat Pancake Flour Compound.

Claims use since 1843.

Ser. No. 333,924. DREW CANNING COMPANY, LTD., San Jose, Calif. Filed Jan. 14, 1933.



The representation of a label is disclaimed apart from the mark shown in the drawing. Although the main body or background of the trade-mark as shown has customarily been printed in black and the vertical and horizontal bars in gold, the lines shown in the drawing are not intended to be restrictively indicative of any particular colors.

For Canned Fruits and Vegetables.

Claims use since June 5, 1931.

Ser. No. 333,926. EASTAID MANUFACTURING COMPANY, Toledo, Ohio. Filed Jan. 14, 1933.

Eastaid

For Prepared Compound to be Mixed With Water, Yeast, and Flour to Produce Dough.

Claims use since Nov. 1, 1932.

Ser. No. 334,124. SIMITSIS BROS., INC., New York, N. Y. Filed Jan. 19, 1933.

CONTE SAVOIA

For Olive Oil.

Claims use since Jan. 11, 1933.

Ser. No. 334,361. C. H. HOLLYMAN, Alamosa, Colo. Filed Jan. 26, 1933.



The words "Pure Honey" and "100% Quality" are disclaimed apart from the other features of the mark shown in the drawing.

For Honey.

Claims use since Aug. 1, 1931.

Ser. No. 334,453. ERNEST C. WATERHOUSE, doing business as Kwickorn Sales Company, Los Angeles, Calif. Filed Jan. 28, 1933.

Branquick

For Food Preparation for Making Bran Muffins, Bran Pancakes, Bran Bread, Bran Waffles, Etc.

Claims use since Jan. 21, 1933.

Ser. No. 334,454. ERNEST C. WATERHOUSE, doing business as Kwickorn Sales Company, Los Angeles, Calif. Filed Jan. 28, 1933.

Kornquick

For Food Preparation for Making Corn Muffins, Corn Bread, Corn Pone, Corn Pancakes, Etc.

Claims use since Jan. 21, 1933.

Ser. No. 334,687. OLD TRUSTY DOG FOOD COMPANY, Needham Heights, Mass. Filed Feb. 6, 1933.

BOVEX

For Food for Carnivorous Animals, Particularly Dogs and Cats, the Food Having Meat as an Ingredient Thereof and Adapted for Use Alone and Also for Admixture with Other Foods.

Claims use since Dec. 30, 1931.

Ser. No. 334,955. COAST FISHING COMPANY, Wilmington, Calif. Filed Feb. 14, 1933.

TUNAETTS

For Creamed Tenderloin of Tuna Fish; Also Specially Prepared Tenderloin of Tuna, in a Form Most Suitable for Salads and Sandwiches.

Claims use since Feb. 1, 1933.

Ser. No. 334,956. B. W. DOYLE, doing business as Doyle Packing Company, Los Angeles, Calif. Filed Feb. 14, 1933.

FELIX

For Canned Cat Food.

Claims use since Jan. 17, 1933.

Ser. No. 334,958. A. J. GAHAN, doing business as Bench Dog Food Co., San Francisco, Calif. Filed Feb. 14, 1933.

BENCH

For Canned Dog and Cat Food.
Claims use since Sept. 7, 1932.

Ser. No. 334,959. A. J. GAHAN, doing business as Canine Food Co., San Francisco, Calif. Filed Feb. 14, 1933.

Fearless

For Canned Dog and Cat Food.
Claims use since Oct. 20, 1932.

Ser. No. 334,960. A. J. GAHAN, doing business as The Gold Cup Food Co., San Francisco, Calif. Filed Feb. 14, 1933.

GOLD CUP

For Canned Dog and Cat Food.
Claims use since Dec. 29, 1932.

Ser. No. 334,969. VICTORY PACKING COMPANY, Oakland, Calif. Filed Feb. 14, 1933.

VICTORY

For Canned Dog and Cat Food.
Claims use since Jan. 16, 1933.

CLASS 47

Wines

Ser. No. 333,368. BODEGAS FRANCO-ESPAÑOLAS, Logrono, Spain. Filed Dec. 24, 1932.



No claim is made to the exclusive use of any of the words appearing on the drawing with the exception of the name of the applicant firm, apart from the mark shown.
For Wines.
Claims use since Dec. 1, 1915.

CLASS 48

Malt Beverages and Liquors

Ser. No. 326,212. GLUEK BREWING COMPANY, Minneapolis, Minn. Filed Apr. 18, 1932.



For Brewed Cereal Beverages with Not More Than the Legal Alcoholic Content.
Claims use since Sept. 15, 1890.

Ser. No. 326,213. GLUEK BREWING COMPANY, Minneapolis, Minn. Filed Apr. 18, 1932.

PILSENER G PALE

No claim is made to the word "Pale" apart from the mark shown in the drawing.
For Brewed Cereal Beverages with Not More Than the Legal Alcoholic Content.
Claims use since Aug. 1, 1930.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 332,983. JAMES BUCHANAN & CO. LD., London, England. Filed Dec. 12, 1932. Under 10-year proviso.

BUCHANAN'S

For Whisky.
Claims use since 1880.

Ser. No. 334,967. PUBLICKER COMMERCIAL ALCOHOL COMPANY, Philadelphia, Pa. Filed Feb. 14, 1933.

PHARMCO



For Pure Grain Alcohol.
Claims use since Jan. 18, 1933.

Ser. No. 335,028. THOMAS LOWNDES & CO., LIMITED, London, England. Filed Feb. 16, 1933. Under 10-year proviso.

THOS LOWNDES & CO LIMITED

For Rum.
Claims use since 1866.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

MARCH 28, 1933

302,054. CAKE. WARD BAKING COMPANY, New York, N. Y.
Filed May 7, 1932. Serial No. 326,876. PUBLISHED JANUARY 10, 1933. Class 46.

302,055. MALT EXTRACTS AND MALT SYRUPS. MALT-DIASTASE COMPANY, Brooklyn, N. Y.
Filed October 2, 1930. Serial No. 306,320. PUBLISHED JUNE 14, 1932. Class 46.

302,056. FRESH CITRUS FRUITS—NAMELY, ORANGES, LEMONS, AND GRAPEFRUIT. HIGHLAND ORANGE ASSOCIATION, Highland, Calif.
Filed January 30, 1931. Serial No. 310,563. PUBLISHED MAY 26, 1931. Class 46.

302,057. FRESH GRAPES. FRED G. CAHY, Lodi, Calif.
Filed March 4, 1931. Serial No. 311,720. PUBLISHED JANUARY 10, 1933. Class 46.

302,058. WOMEN'S READY-TO-WEAR ACCESSORIES, INCLUDING COATS, DRESSES, ETC. HAHN DEPARTMENT STORES, INC., Wilmington, Del.
Filed August 18, 1931. Serial No. 317,935. PUBLISHED JANUARY 12, 1932. Class 39.

302,059. OIL BURNERS, HUMIDIFIERS AND HEAT SAVERS, CONSISTING OF HEATING DRUMS THROUGH WHICH THE PRODUCTS OF COMBUSTION OF HEATING PLANTS ARE RUN PRIOR TO PASSAGE TO SMOKE PIPES. REAL-OIL-HEAT BURNER COMPANY, Winona, Minn.
Filed August 19, 1931. Serial No. 318,170. PUBLISHED JANUARY 17, 1933. Class 34.

302,060. COKE. THE VALLEY CAMP COAL COMPANY, Cleveland, Ohio.
Filed December 2, 1931. Serial No. 321,701. PUBLISHED JANUARY 10, 1933. Class 1.

302,061. CANDIES AND CHOCOLATES. THE NEW YORKER HOTEL CORPORATION, New York, N. Y.
Filed December 19, 1931. Serial No. 322,289. PUBLISHED JANUARY 10, 1933. Class 46.

302,062. CANNED TOMATO PASTE, CANNED TOMATOES, AND CANNED SARDINES PACKED IN OLIVE OIL. A. J. CAPONE COMPANY, New York, N. Y.
Filed December 8, 1931. Serial No. 321,905. PUBLISHED JANUARY 10, 1933. Class 46.

302,063. ANTIPYRETICUM AND ANALGESIC AND SPECIFIC. GEORGE RUCK, Philadelphia, Pa.
Filed December 3, 1932. Serial No. 332,734. PUBLISHED JANUARY 17, 1933. Class 6.

302,064. DENTAL WIRE. JULIUS ADERER, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,676. PUBLISHED JANUARY 17, 1933. Class 44.

302,065. DENTAL WIRE. JULIUS ADERER, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,675. PUBLISHED JANUARY 17, 1933. Class 44.

302,066. DENTAL WIRE. JULIUS ADERER, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,674. PUBLISHED JANUARY 17, 1933. Class 44.

302,067. SOAPS. FRANK A. BOWLES, doing business as Bowles Bros. Co., Los Angeles, Calif.
Filed November 30, 1932. Serial No. 332,611. PUBLISHED JANUARY 17, 1933. Class 4.

302,068. VALVE GRINDING COMPOUNDS. MONARCH PRODUCTS CO. INC., Shrewsbury, N. J.
Filed November 26, 1932. Serial No. 332,495. PUBLISHED JANUARY 10, 1933. Class 4.

302,069. VALVE GRINDING COMPOUNDS. MONARCH PRODUCTS CO. INC., Shrewsbury, N. J.
Filed November 26, 1932. Serial No. 332,494. PUBLISHED JANUARY 10, 1933. Class 4.

302,070. TABLETS FOR PAINS, DYSMENORRHEA, HEADACHES, ETC. PROFESSIONAL PRODUCTS CORPORATION, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey.
Filed November 8, 1932. Serial No. 331,992. PUBLISHED JANUARY 17, 1933. Class 6.

302,071. SOAPS. CALITE MANUFACTURING CO. LTD., Los Angeles, Calif.
Filed November 29, 1932. Serial No. 332,575. PUBLISHED JANUARY 10, 1933. Class 4.

302,072. DENTAL CREAM. KAUFMANN DEPARTMENT STORES, INC., Pittsburgh, Pa.
Filed November 25, 1932. Serial No. 332,456. PUBLISHED JANUARY 10, 1933. Class 6.

302,073. MEDICINE FOR TREATMENT OF PAINS, COLDS, AND FEVER. EMBREY & HUDSON, doing business as Kephaldol Laboratories and Kephaldol Laboratory, Nashville, Tenn.
Filed November 23, 1932. Serial No. 332,407. PUBLISHED JANUARY 10, 1933. Class 6.

302,074. PREPARATION FOR FINISHING TEXTILE FABRICS. H. A. METZ & CO., INC., New York, N. Y.
Filed November 22, 1932. Serial No. 332,378. PUBLISHED JANUARY 10, 1933. Class 6.

302,075. LINIMENT TO RELIEVE PAIN DUE TO BRONCHITIS, NEURITIS, ETC. JACOB TESMAN, doing business as Tesman Drug Co., Philadelphia, Pa.
Filed November 18, 1932. Serial No. 332,327. PUBLISHED JANUARY 17, 1933. Class 6.

302,076. COSMETIC PREPARATIONS, TOOTH PASTE, CORN SALVE, ETC. FRANK C. REILLY, New York, N. Y.
Filed November 18, 1932. Serial No. 332,265. PUBLISHED JANUARY 10, 1933. Class 6.

302,077. DYES AND DYESTUFFS. JOHN CAMPBELL & Co., New York, N. Y.
Filed November 18, 1932. Serial No. 332,248. PUBLISHED JANUARY 10, 1933. Class 6.

302,078. SOAP. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill.
Filed November 18, 1932. Serial No. 332,251. PUBLISHED JANUARY 10, 1933. Class 4.

302,079. SANITARY NAPKINS. BERKELEY COMPANY, Chicago, Ill.
Filed November 5, 1932. Serial No. 331,916. PUBLISHED JANUARY 17, 1933. Class 44.

302,080. INSECTICIDES. BARIUM REDUCTION CORPORATION, Charleston, W. Va.
Filed November 5, 1932. Serial No. 331,913. PUBLISHED JANUARY 10, 1933. Class 6.

302,081. MASSAGE DEVICES OR APPLIANCES FOR MASSAGING AND CLEANSING THE SKIN. HINDES LIMITED, Birmingham, England.
Filed November 3, 1932. Serial No. 331,861. PUBLISHED JANUARY 10, 1933. Class 44.

302,082. CERTAIN MEDICINAL PREPARATIONS. HAMALL MEDICAL CO., Carter, Okla.
Filed October 31, 1932. Serial No. 331,735. PUBLISHED JANUARY 10, 1933. Class 6.

302,083. CLEANSING, SCOURING, AND POLISHING COMPOUNDS FOR ALUMINUM AND KITCHEN AND BATHROOM USE. FRAKSIN LABORATORIES, San Francisco, Calif.
Filed October 27, 1932. Serial No. 331,661. PUBLISHED JANUARY 10, 1933. Class 4.

302,084. SKIN PROTECTING COMPOUND. WILLIAM KALENSCHER, doing business as Zing Manufacturing Co., Inc., Miami, Fla.
Filed October 26, 1932. Serial No. 331,607. PUBLISHED JANUARY 10, 1933. Class 6.

302,085. COTTON PIECE GOODS. NASHUA MANUFACTURING COMPANY, Nashua, N. H.
Filed June 2, 1932. Serial No. 327,661. PUBLISHED JANUARY 10, 1933. Class 42.

302,086. THREAD. W. WARREN THREAD WORKS, Westfield, Mass.
Filed July 25, 1932. Serial No. 329,068. PUBLISHED JANUARY 3, 1933. Class 43.

302,087. HAIR NETS, SPORT NETS, LINEN TOWELS AND TOWELLING, SHEETS, TABLECLOTHS, TEXTILE BLANKETS, TEXTILE BATH TOWELS, MATTRESS TICKING, COUNTERPANES, WATER WAVE NETS, HANDKERCHIEFS, CRETONNE, TURKISH TOWELS, PILLOW CASES, NAPKINS, SEAMLESS TEXTILE RUGS, FACE CLOTHS, AND BEDSPREADS. S. H. KRESS & CO., New York, N. Y.
Filed July 26, 1932. Serial No. 329,087. PUBLISHED JANUARY 10, 1933. Class 42.

302,088. MALT SYRUP. LA CROSSE REFINING COMPANY, La Crosse, Wis.
Filed August 17, 1932. Serial No. 329,603. PUBLISHED JANUARY 10, 1933. Class 46.

302,089. COTTON GOODS IN THE PIECE. DAVISON-PAXON COMPANY, Atlanta, Ga.
Filed August 27, 1932. Serial No. 329,889. PUBLISHED JANUARY 3, 1933. Class 42.

302,090. ARTIFICIAL ORNAMENTAL TREES. BLOOMINGDALE BROS., INC., New York, N. Y.
Filed September 15, 1932. Serial No. 330,361. PUBLISHED JANUARY 17, 1933. Class 50.

302,091. BATHROOM FIXTURES—NAMELY, SOAP DISHES, TUMBLER HOLDERS, TOOTHBRUSH HOLDERS, TOWEL BARS, AND PAPER HOLDERS. NEW JERSEY PORCELAIN CO., Trenton, N. J.
Filed September 15, 1932. Serial No. 330,384. PUBLISHED JANUARY 17, 1933. Class 13.

302,092. LAMPSHADES MADE OF SILK, PARCHMENT, AND THE LIKE. MIRIAM FRANKEL, Brooklyn, N. Y.
Filed September 28, 1932. Serial No. 330,595. PUBLISHED JANUARY 17, 1933. Class 34.

302,093. MATS, ELECTROTYPES, STEREOTYPES, AND PHOTO ENGRAVINGS. ASHTON B. COLLINS, Birmingham, Ala.
Filed October 7, 1932. Serial No. 331,039. PUBLISHED JANUARY 17, 1933. Class 50.

302,094. CANDY, POPCORN, COFFEE, TEA, FRUIT PRESERVES, COCOA, COOKED AND UNCOOKED BREAKFAST CEREALS, BREAD, SALTED NUTS, PASTRY. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed October 21, 1932. Serial No. 331,484. PUBLISHED JANUARY 10, 1933. Class 46.

302,095. CANNED AND BOTTLED COMBINATIONS OF SEA FOODS AND VEGETABLES, NAMELY, CONCH CHOWDER AND/OR BROTH. BAHAMA ISLES FOODS CORPORATION, Dover, Del., and Miami, Fla.
Filed October 25, 1932. Serial No. 331,532. PUBLISHED JANUARY 10, 1933. Class 46.

302,096. BEDSPREADS. STEVENS MANUFACTURING CORPORATION, Fall River, Mass.
Filed October 25, 1932. Serial No. 331,567. PUBLISHED JANUARY 10, 1933. Class 42.

302,097. TEXTILE FABRICS IN THE PIECE OF COTTON, WOOL, SILK, RAYON, AND/OR COMBINATIONS THEREOF. LORRAINE MANUFACTURING CO., Pawtucket, R. I.
Filed November 1, 1932. Serial No. 331,796. PUBLISHED JANUARY 10, 1933. Class 42.

302,098. RUBBING, SQUEEGEEING, AND POLISHING DEVICES. WINDOWITCH COMPANY, Cleveland, Ohio.
Filed November 1, 1932. Serial No. 331,812. PUBLISHED JANUARY 17, 1933. Class 29.

302,099. TABLE NAPKINS. NEISLER MILLS INC., Kings Mountain, N. C.
Filed November 12, 1932. Serial No. 332,099. PUBLISHED JANUARY 3, 1933. Class 42.

302,100. RICE. STANDARD RICE COMPANY INC., Houston, Tex., and Memphis, Tenn.
Filed November 12, 1932. Serial No. 332,103. PUBLISHED JANUARY 10, 1933. Class 46.

302,101. YARNS OF COTTON, SILK, RAYON, WOOL, AND ANGORA, AND MIXTURES THEREOF. STEINBERGER BROS. INC., New York, N. Y.
Filed November 14, 1932. Serial No. 332,129. PUBLISHED JANUARY 10, 1933. Class 43.

302,102. THREAD AND YARN. THE CLARK THREAD COMPANY, Newark, N. J.
Filed November 16, 1932. Serial No. 332,177. PUBLISHED JANUARY 3, 1933. Class 43.

302,103. THREAD AND YARN. THE CLARK THREAD COMPANY, Newark, N. J.
Filed November 16, 1932. Serial No. 332,179. PUBLISHED JANUARY 3, 1933. Class 43.

302,104. THREAD AND YARN. THE CLARK THREAD COMPANY, Newark, N. J.
Filed November 16, 1932. Serial No. 332,180. PUBLISHED JANUARY 3, 1933. Class 43.

302,105. CONCENTRATED LIQUID MALT SYRUP USED FOR FOOD PURPOSES. THE BACHRACH-FELD COMPANY, INC., doing business as Malwort Concentrated Malt Co., Cincinnati, Ohio.
Filed November 18, 1932. Serial No. 332,244. PUBLISHED JANUARY 10, 1933. Class 46.

302,106. SILK CREPES IN THE PIECE. WILLIAM SKINNER & SONS, Holyoke, Mass., and New York, N. Y.
Filed November 16, 1932. Serial No. 332,201. PUBLISHED JANUARY 10, 1933. Class 42.

302,107. LAWN AND GRASS SEED. W. E. MARSHALL & CO., INC., New York, N. Y.
Filed November 22, 1932. Serial No. 332,437. PUBLISHED JANUARY 10, 1933. Class 1.

302,108. CANNED FISH. ITALIAN FOOD PRODUCTS COMPANY, INC., Long Beach, Calif.
Filed November 28, 1932. Serial No. 332,540. PUBLISHED JANUARY 10, 1933. Class 46.

302,109. FRESH FRUITS AND FRESH VEGETABLES. HAROLD OSBORNE, doing business as Harold Osborne Company, Hynes, Calif.
Filed November 28, 1932. Serial No. 332,544. PUBLISHED JANUARY 10, 1933. Class 46.

302,110. SALAD DRESSINGS AND TABLE SYRUPS. LOUISE DUFFY, Los Angeles, Calif.
Filed November 29, 1932. Serial No. 332,578. PUBLISHED JANUARY 10, 1933. Class 46.

302,111. TANNED LEATHER. R. NEUMANN & COMPANY, Hoboken, N. J.
Filed November 29, 1932. Serial No. 332,596. PUBLISHED JANUARY 10, 1933. Class 1.

302,112. PREPARED BISCUIT FLOUR. MAURY-COLE COMPANY, Memphis, Tenn.
Filed November 30, 1932. Serial No. 332,622. PUBLISHED JANUARY 10, 1933. Class 46.

302,113. LEATHER. R. NEUMANN & COMPANY, Hoboken, N. J.
Filed November 30, 1932. Serial No. 332,625. PUBLISHED JANUARY 10, 1933. Class 1.

302,114. CHEWING TOBACCO. BONUS TOBACCO COMPANY, Cincinnati, Ohio.
Filed December 8, 1932. Serial No. 332,874. PUBLISHED JANUARY 17, 1933. Class 17.

302,115. COIN-CONTROLLED AMUSEMENT DEVICE. E. D. CLEM, doing business as Standard Amusement Company, Beaumont, Tex.
Filed November 22, 1932. Serial No. 332,436. PUBLISHED JANUARY 17, 1933. Class 22.

302,116. WHISKY. WHITE HORSE DISTILLERS, LIMITED, Glasgow, Scotland.
Filed November 25, 1932. Serial No. 332,473. PUBLISHED JANUARY 17, 1933. Class 49.

302,117. WHISKY. WHITE HORSE DISTILLERS, LIMITED, Glasgow, Scotland.
Filed November 25, 1932. Serial No. 332,474. PUBLISHED JANUARY 17, 1933. Class 49.

302,118. WHISKY. ROBERT L. CRIGLER, Covington, Ky.
Filed December 8, 1932. Serial No. 332,875. PUBLISHED JANUARY 17, 1933. Class 49.

302,119. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. K B BEVERAGE COMPANY, Bay City, Mich.
Filed December 8, 1932. Serial No. 332,886. PUBLISHED JANUARY 17, 1933. Class 48.

302,120. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF OF ONE PER CENT OF ALCOHOL BY VOLUME. K B BEVERAGE COMPANY, Bay City, Mich.
Filed December 8, 1932. Serial No. 332,887. PUBLISHED JANUARY 17, 1933. Class 48.

302,121. ARTIFICIAL BAIT SUCH AS SPINNERS. THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio.
Filed December 12, 1932. Serial No. 332,996. PUBLISHED JANUARY 17, 1933. Class 22.

302,122. BOARD GAME PLAYED WITH MOVABLE PIECES. PARKER BROTHERS, INC., Portland, Me., and Salem, Mass.
Filed December 12, 1932. Serial No. 333,009. PUBLISHED JANUARY 17, 1933. Class 22.

302,123. HAIR TONIC. HARRY VOYAGES, New York, N. Y.
Filed May 3, 1932. Serial No. 326,725. PUBLISHED JANUARY 17, 1933. Class 6.

302,124. CERTAIN COSMETIC AND MANICURE PREPARATIONS. PEGGY SAGE, INC., New York, N. Y.
Filed July 7, 1932. Serial No. 328,622. PUBLISHED JANUARY 10, 1933. Class 6.

302,125. TOOTH PASTE. INDEPENDENT DRUGGISTS' ALLIANCE DISTRIBUTING CO., Chicago, Ill.
Filed May 23, 1932. Serial No. 327,358. PUBLISHED JANUARY 17, 1933. Class 6.

302,126. ELECTRIC VIBRATORS FOR THERAPEUTICAL USE AND ELECTRIC HAIRDRYERS. THE A. C. GILBERT COMPANY, New Haven, Conn.
Filed September 15, 1932. Serial No. 330,368. PUBLISHED JANUARY 17, 1933. Class 44.

302,127. METALLIC ABRASIVE POT CLEANERS. METAL TEXTILE CORPORATION, doing business as Mystic Mit Makers, West Orange, N. J.
Filed September 20, 1932. Serial No. 330,518. PUBLISHED JANUARY 17, 1933. Class 4.

302,128. SHOE POLISH AND SHOE BURNISHING INK. RELIANCE WAX PRODUCTS CORPORATION, LTD., Los Angeles, Calif.
Filed October 26, 1932. Serial No. 331,593. PUBLISHED JANUARY 10, 1933. Class 4.

302,129. LAUNDRY SOAP. IOWA SOAP COMPANY, Burlington, Iowa.
Filed September 24, 1932. Serial No. 330,628. PUBLISHED JANUARY 10, 1933. Class 4.

302,130. SOAPS AND DETERGENTS. NATIONAL MILLING & CHEMICAL COMPANY, Philadelphia, Pa.
Filed September 22, 1932. Serial No. 330,580. PUBLISHED JANUARY 17, 1933. Class 4.

302,131. TOYS—THAT IS, FIGURE TOYS, DOLLS, DOLL HOUSES, MECHANICAL TOYS AND CONSTRUCTION TOYS, AND ROLLER TOYS. STEPHEN SLESINGER, New York, N. Y.
Filed November 23, 1932. Serial No. 332,424. PUBLISHED JANUARY 17, 1933. Class 22.

302,132. GAMES—THAT IS, CARD GAMES, BOARD GAMES, EDUCATIONAL CARD GAMES, PUZZLES, AND PARLOR BOARD GAMES. STEPHEN SLESINGER, New York, N. Y.
Filed November 23, 1932. Serial No. 332,423. PUBLISHED JANUARY 17, 1933. Class 22.

302,133. TWINE MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and Brooklyn, N. Y.
Filed November 22, 1932. Serial No. 332,362. PUBLISHED JANUARY 17, 1933. Class 7.

302,134. ROPE OF JUTE AND HEMP. BRITISH ROPES LIMITED, London, England.
Filed November 5, 1932. Serial No. 331,921. PUBLISHED JANUARY 17, 1933. Class 7.

302,135. ROPE OF JUTE AND HEMP. BRITISH ROPES LIMITED, London, England.
Filed November 5, 1932. Serial No. 331,920. PUBLISHED JANUARY 17, 1933. Class 7.

302,136. ROPE OF JUTE AND HEMP. BRITISH ROPES LIMITED, London, England.
Filed November 5, 1932. Serial No. 331,919. PUBLISHED JANUARY 17, 1933. Class 7.

302,137. ROPE OF JUTE AND HEMP. BRITISH ROPES LIMITED, London, England.
Filed November 5, 1932. Serial No. 331,918. PUBLISHED JANUARY 17, 1933. Class 7.

302,138. WHISKY. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,786. PUBLISHED JANUARY 17, 1933. Class 49.

302,139. WHISKY. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,785. PUBLISHED JANUARY 17, 1933. Class 49.

302,140. WHISKY. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,784. PUBLISHED JANUARY 17, 1933. Class 49.

302,141. WHISKY. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,788. PUBLISHED JANUARY 17, 1933. Class 49.

302,142. WHISKY. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,782. PUBLISHED JANUARY 17, 1933. Class 49.

302,143. PORT WINE. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England.
Filed October 29, 1932. Serial No. 331,707. PUBLISHED JANUARY 17, 1933. Class 47.

302,144. SHERRY WINE. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England.
Filed October 29, 1932. Serial No. 331,703. PUBLISHED JANUARY 17, 1933. Class 47.

302,145. SCOTCH WHISKY. JOHN HARVEY & SONS, LIMITED, Bristol, England.
Filed October 25, 1932. Serial No. 331,552. PUBLISHED JANUARY 17, 1933. Class 49.

302,146. SCOTCH WHISKY. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland.
Filed September 19, 1932. Serial No. 330,454. PUBLISHED JANUARY 17, 1933. Class 49.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,147. (CLASS 45. BEVERAGES, NONALCOHOLIC.) GEORGE FREDERICK SCHNEIDER, Brooklyn, N. Y. Filed Feb. 20, 1933. Serial No. 335,140.

SCHNEIDER'S GRAND PRIZE

For Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks, and Sirups and Extracts for Making the Same.
Claims use since January, 1926.

302,148. (CLASS 45. BEVERAGES, NONALCOHOLIC.) SEMINOLE BOTTLING CO., Chattanooga, Tenn. Filed Feb. 2, 1933. Serial No. 334,580.

DOUBLE DRY

For Carbonated Nonalcoholic, Noncereal, Maltless Beverages Sold as Soft Drinks and Syrups and Extracts for Making the Same.
Claims use since Jan. 15, 1928.

302,149. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM M. GABLER, doing business as American Bird and Feed Store, Baltimore, Md. Filed Jan. 25, 1933. Serial No. 334,306.

GABLER'S

For Bird Foods and Fish Foods.
Claims use since 1922.

302,150. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Jan. 18, 1933. Serial No. 334,074.

WALL-TITE

For Certain-Named Paints, Varnishes, and Lacquers.
Claims use since July 3, 1925.

302,151. (CLASS 5. ADHESIVES.) RUSH CHEMICAL COMPANY, Hamilton, Ohio. Filed Jan. 12, 1933. Serial No. 333,866.

FASTITE

For Waterproof Adhesive Cement.
Claims use since Jan. 1, 1932.

302,152. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN FLEXIBLE COUPLING CO., Erie, Pa. Filed Dec. 29, 1932. Serial No. 333,469.

AMERICAN FLEXIBLE COUPLING

For Flexible Couplings for Shafts.
Claims use since June, 1929.

302,153. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) C. M. KIMBALL CO., Everett, Mass. Filed Jan. 7, 1933. Serial No. 333,732.

WIND-O-WASH

For A Preparation for Cleaning Glass, Porcelain, Painted Surfaces, and Metals.
Claims use since Dec. 7, 1931.

302,154. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NOSS PRETZEL AND CONE CO., Cleveland, Ohio. Filed Jan. 6, 1933. Serial No. 333,715.

Old Heidelberg

For Pretzels, Potato Chips, Noodles, and Cheese Sticks.
Claims use since March, 1931.

302,155. (CLASS 39. CLOTHING.) ROMAN STRIPE MILLS, INC., Easton, Pa. Filed July 13, 1931. Serial No. 316,896.

SPOTPROOF

For Hosiery.
Claims use since June 25, 1931.

302,156. (CLASS 2. RECEPTACLES.) THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed June 30, 1931. Serial No. 316,508.

ALASKA SUCKER

For Empty Wrappers and Bags Made of Glassine, Vegetable Parchment, Plain and/or Waxed Paper.
Claims use since June 26, 1928.

302,157. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JABEZ BURNS & SONS, INC., New York, N. Y. Filed Feb. 18, 1932. Serial No. 324,281.

COMPACTOR

For Machines and Parts Thereof for Grinding, Mixing, and Conveying Coffee and Other Comminuted Materials.
Claims use since Feb. 10, 1932.

302,158. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio. Filed Feb. 11, 1932. Serial No. 324,054.

WAX-BAR

For Floor Wax.
Claims use since Jan. 11, 1932.

302,159. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) AMES HARRIS NEVILLE CO., San Francisco, Calif. Filed Jan. 16, 1932. Serial No. 323,083.

DUSTORSHINE

For Polishing, Dusting, and/or Cleaning Cloth.
Claims use since Dec. 14, 1931.

302,160. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE WILLIAM CARTER COMPANY, Needham Heights, Mass. Filed Dec. 1, 1931. Serial No. 321,639.

INNERCOTTON

For Knitted Fabric of Wool, Cotton, Silk, Rayon, or Combinations Thereof.
Claims use since Sept. 25, 1931.

302,161. (CLASS 39. CLOTHING.) THE WILLIAM CARTER COMPANY, Needham Heights, Mass. Filed Nov. 10, 1931. Serial No. 320,974.

NEVABIND

For Infants' Undergarments.
Claims use since Oct. 8, 1931.

302,162. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN L. HITCHCOCK, Youngstown, Ohio. Filed Aug. 8, 1931. Serial No. 317,806.

DR. HITCHCOCK'S

For Chewing Gum.
Claims use since July 17, 1931.

302,163. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RILEY & JONES, Riverside, Calif., assignor to Citrus Packing Company, Inc., Riverside, Calif., a Corporation of California. Filed Nov. 28, 1932. Serial No. 332,551.

RIVERSIDE BEST

For Fresh Citrus Fruits.
Claims use since Aug. 28, 1931.

302,164. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FREDERICK F. LOWENFELS & SON, New York, N. Y. Filed Nov. 9, 1932. Serial No. 332,010.

HOTEL BARS

For Butter and Cheese.
Claims use since July 24, 1931.

302,165. (CLASS 5. ADHESIVES.) EDGAR R. SIMS, doing business as Restor Cement Laboratories, Seattle, Wash. Filed Aug. 12, 1932. Serial No. 329,546.

RESTOR CEMENT

For Cement Used for Repairing Glassware, Ivory, Marble, Chinaware, Kitchen Utensils, Galvanized Iron, Enamel, Porcelain, and Tile.
Claims use since Jan. 1, 1932.

302,166. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE CARDIFF-MARYLAND MARBLE CO., New York, N. Y. Filed May 12, 1932. Serial No. 327,004.

CARDIFF-GREEN-MARBLE CO.
LITE
GRANITO
CARDIFF, MD.

For Crushed Marble.
Claims use since Feb. 18, 1932.

302,167. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NONMETALLIC TIRES.) THE GENERAL TIRE & RUBBER COMPANY, Akron, Ohio. Filed May 6, 1932. Serial No. 326,817.

RETAIN-AIR

For Inner Tubes for Tires.
Claims use since Oct. 10, 1930.

302,168. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JACOB HORWITZ, doing business as Utica Cotton Products Company, Utica, N. Y. Filed Apr. 27, 1932. Serial No. 326,542.

LUSTRE DUSTER

For Chemically Treated Cloth for Dusting and Polishing Automobiles, Furniture, and Similar Surfaces.
Claims use since Feb. 1, 1932.

302,169. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) ONARGA NURSERY CO., Onarga, Ill. Filed Mar. 31, 1932. Serial No. 325,693.

Perfect-Pak

For Shrubs, Trees, Roses, Perennials, and Nursery Stocks, and Plants in General.
Claims use since Jan. 1, 1932.

302,170. (CLASS 2. RECEPTACLES.) AMERICAN DAIRY SUPPLY COMPANY, Washington, D. C. Filed Mar. 19, 1932. Serial No. 325,280.

LAUNDRIKORE

For Paper Tubular Rolls.
Claims use since January, 1932.

302,171. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) N J LEAVY, Los Angeles, Calif. Filed Dec. 5, 1932. Serial No. 332,777.

X-PEL SED-O-MENT
TRAP & BOTTLE CAP

For Combination Bottle Closure and Sediment Trap Made of Rubber and Glass.
Claims use since Nov. 21, 1930.

TRADE-MARK REGISTRATIONS RENEWED

36,215. MIXED DRINKS. Registered April 9, 1901. JOHN E. CASSIDY & SON, Boston, Mass. Renewed April 9, 1931, to Martini & Rossi S. A., Turin, Italy, a Corporation of Italy, assignee by mesne assignments.

90,242. SALVES. Registered February 11, 1913. HERBERT C. RATCLIFF, Columbus, Ohio. Renewed February 11, 1933, to Herbert C. Ratcliff, Kenton, Ohio.

90,255. COTTON-SEED. Registered February 11, 1913. HOMER H. SUMMEROUR, Duluth, Ga. Renewed February 11, 1933, to B. F. Summerour Seed Company, Norcross, Ga., a Firm, assignee by mesne assignments.

92,421. HEATING AND VENTILATING APPARATUS AND CERTAIN NAMED APPARATUS RELATING THERETO. Registered July 8, 1913. THE GRISCOM-RUSSELL COMPANY, New York, N. Y., a Corporation of Delaware. Renewed July 8, 1933.

92,981. A GREEN PASTE PAINT. Registered August 12, 1913. HEATH & MILLIGAN MFG. CO., Chicago, Ill. Renewed August 12, 1933, to Heath & Milligan Mfg. Co., Cleveland, Ohio, a Corporation of Illinois.

93,014. AN ANESTHETIC. Registered August 12, 1913. NOVOCOL CHEMICAL MFG. CO., New York, N. Y. Renewed August 12, 1933, to Novocol Chemical Mfg. Co. Inc., Brooklyn, N. Y., a Corporation of New York, assignee.

93,119. CERTAIN NAMED FOODS. Registered August 19, 1913. THE A. SANDER PACKING COMPANY, Cincinnati, Ohio, a Corporation of Ohio. Renewed August 19, 1933.

LABELS

REGISTERED MARCH 28, 1933

41,872.—*Title:* PUR POS. For Tooth Powder. CHARLES T. HAYWARD, doing business as Hayward Products, Chicago, Ill. Published December 17, 1932.

41,873.—*Title:* FAVORITE FEEDS. For Turkey Feeds. THE PAGE MILLING COMPANY, Luray, Va. Published January 26, 1933.

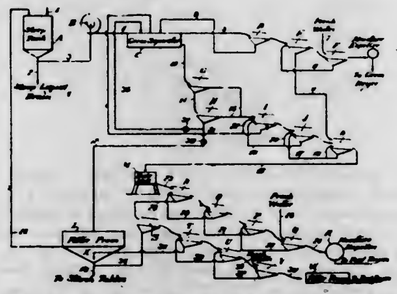
41,874.—*Title:* MALTESE CROSS. For Bevel Siding. SEATTLE CEDAR LUMBER MANUFACTURING COMPANY, Seattle, Wash. Published October 20, 1932.

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REISSUES

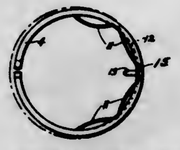
MARCH 28, 1933

18,775. MANUFACTURE OF STARCH. ROBERT F. SHERMAN, Pekin, Ill., assignor to Corn Products Refining Company, New York, N. Y., a Corporation of New Jersey. Original No. 1,554,301, dated Sept. 22, 1925, Serial No. 682,516, filed Dec. 24, 1923. Application for reissue filed Sept. 30, 1932. Serial No. 635,639. 24 Claims. (Cl. 127—67.)



1. In the process of manufacturing starch from corn which comprises disintegrating the corn and making a separation in water of the starch therein from the non-starch constituents, an improvement consisting in withdrawing from the disintegrated corn subjected to the aforesaid separation the bulk of the water employed in making such separation together with substantially all the residual solubles of the corn in solution therewith, reusing in the process substantially all of the soluble containing water so withdrawn and recovering the solubles therein.

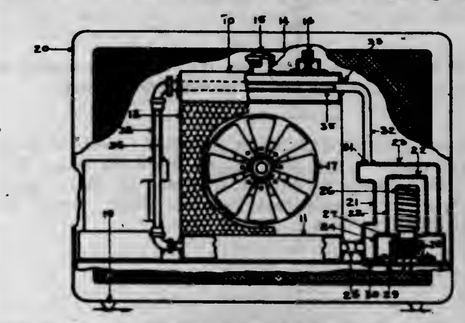
18,776. ANTISLAP RING. CHARLES RICHARD MCMINN, JAMES THOMAS ROBINSON, and JAMES BLAIR HOLLIDAY, Incompetent, Los Angeles, Calif., by Elsie C. Couch, guardian, Los Angeles, Calif., assignors, by mesne assignments, to The Simplex Piston Ring Company of America, Inc. Original No. 1,660,846, dated Feb. 28, 1928, Serial No. 148,307, filed Nov. 13, 1926. Application for reissue filed Dec. 6, 1929. Serial No. 412,253. 2 Claims. (Cl. 74—109.)



1. A cylinder, a piston having a groove around its periphery and loosely fitting said cylinder, a ring having an eccentric arcuate groove on its inner periphery and seated in the groove in said piston, a wave-like resilient expander seated in both of said grooves to exert a preponderance of radial pressure in one direction on said ring and to lock the ring yieldingly against rotation around said piston, said piston being provided with a recess, and a pin on said expander engaging said recess to prevent substantial bodily rotation of said expander around said piston.

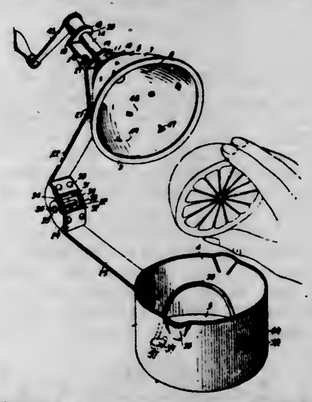
18,777. AIR HEATER. DONALD W. LAKE, Chicago, Ill. Original No. 1,767,082, dated June 24, 1930, Serial No. 238,253, filed Dec. 7, 1927. Application for reissue filed Feb. 12, 1932. Serial No. 592,813. 3 Claims. (Cl. 257—137.)

3. In a heat exchange device, a casing having one open face, a heat dissipating unit positioned adjacent said open face in such manner as to provide an air inlet portion and a draft opening in the open face of the casing, fluid heating means communicating with the heat dissipating unit,



and an air blowing unit associated with the heat dissipating unit in such manner that a warm air blast is projected therethrough.

18,778. FRUIT JUICE EXTRACTOR. CLARENCE E. ELLIOTT and LEONARD O. NICHOLS, Kansas City, Mo., assignors to Knapp Monarch Company, Inc., St. Louis, Mo., a Corporation of Missouri. Original No. 1,743,661, dated Jan. 14, 1930, Serial No. 249,258, filed Jan. 25, 1928. Application for reissue filed Jan. 13, 1932. Serial No. 586,448. 20 Claims. (Cl. 146—3.)



1. In a fruit juice extractor, a juice receiving member, pins on the member, a wire loop engaging the pins for deforming the fruit pulp, a fruit impaling member rotatable over the wire loop, and a crank for rotating the said impaling member during the juice extracting operation.

18,779. FUSE BLOCK. JOSEPH MESSING, Detroit, Mich., assignor to Bull Dog Electric Products Company, Detroit, Mich., a Corporation of West Virginia. Original No. 1,817,521, dated Aug. 4, 1931, Serial No. 421,278, filed Jan. 16, 1930. Application for reissue filed Oct. 21, 1932. Serial No. 638,984. 34 Claims. (Cl. 200—133.)

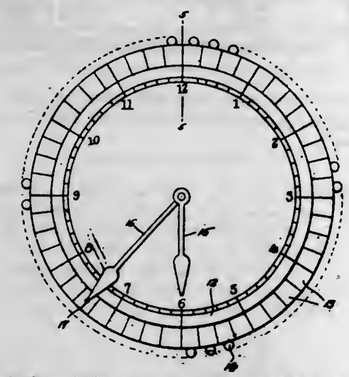
1. A fuse block having contact clips to receive a cartridge fuse and having a screw shell to receive a plug fuse, the screw shell having a shell contact and a center contact, the shell contact being connected to one of the clips, and the center contact being connected to the other one

of the clips, the block being adapted to receive a plug fuse or a cartridge fuse, the shell and the clips lying in sub-



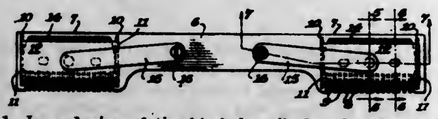
stantially the same plane, and the shell being slotted so that a cartridge fuse can lie therein, transversely.

18,780. TIME CONTROLLED SWITCH. ADOLF H. SAAR, Jr., Omaha, Nebr. Original No. 1,885,482, dated Nov. 1, 1932, Serial No. 537,703, filed May 15, 1931. Application for reissue filed Jan. 20, 1933. Serial No. 653,909. 1 Claim. (Cl. 200—37.)



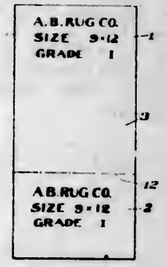
In a clock switch, a clock casing provided with a dial opening, the edge portion of the casing at the opening being provided with an inwardly disposed circumferentially extending flange, an annular wall extending outwardly from the flange and provided with a backwardly disposed circumferentially extending flange defining a trough, and removably disposed conductor blocks in the trough for engagement by one hand of the clock.

18,781. HAIR TRIMMER AND DRESSER. JOHN KEENAN, Cincinnati, Ohio. Original No. 1,789,234, dated Jan. 13, 1931, Serial No. 319,672, filed Nov. 15, 1928. Renewed July 3, 1930. Application for reissue filed Sept. 9, 1931. Serial No. 561,969. 10 Claims. (Cl. 30—12.)



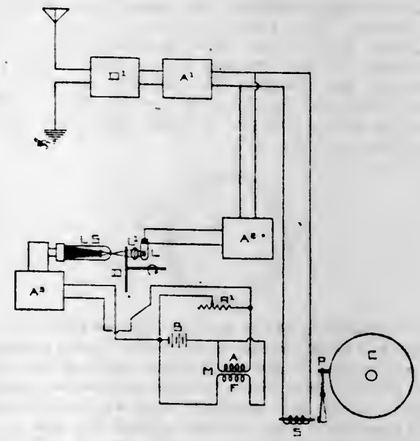
1. In a device of the kind described, a handle member, the handle formed to provide comb teeth at the edge of the member near one end thereof, a plate formed to hold a thin razor blade with a cutting edge substantially parallel with the toothed edge of the handle, yielding clamping means for holding the plate pressed against the handle and adapted to hold a blade between the handle and the plate, the plate arranged and adapted to be moved transversely of the handle for adjusting the cutting edge of a blade from and toward the points of the teeth of the comb, the plate and handle provided with a transversely extending inter-engaging guide rib and groove for retaining the cutting edge of the blade substantially parallel with the points of the comb teeth as the blade is adjusted transversely of the handle.

18,782. LABEL. ELLIOTT I. PETERSEN, Enfield, Conn., assignor to Bigelow-Sanford Carpet Co., Inc., Thompsonville, Conn., a Corporation of Massachusetts. Original No. 1,850,988, dated Mar. 22, 1932, Serial No. 572,490, filed Nov. 2, 1931. Application for reissue filed Nov. 3, 1932, Serial No. 640,977. 5 Claims. (Cl. 40—2.)



1. In combination with a floor covering, a double label formed of a relatively narrow strip of material and comprising two relatively movable end portions connected by a foldable intermediate portion, one end portion forming a back label permanently secured to the back of the floor covering, the other end portion forming a front label secured to and displayed at the upper edge of the floor covering while connected to the back label by said intermediate portion, said strip being looped around the adjacent edge of the floor covering and said intermediate portion being normally spaced from said edge.

18,783. SYNCHRONIZING SYSTEM. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Jenkins Laboratories, Inc., Silver Spring, Md., a Corporation of the District of Columbia. Original No. 1,766,644, dated June 24, 1930, Serial No. 207,515, filed July 21, 1927. Application for reissue filed Mar. 22, 1932. Serial No. 600,549. 12 Claims. (Cl. 178—69.5.)



11. The method of synchronising radiographic apparatus, which comprises producing at the transmitting station a continuous series of electrical signals of predetermined duration, in determinate order and of a strength variable in accordance with areas of an image to be transmitted; and, at a receiving station, varying an electric current in consonance with said signals and in proportion to simultaneous phase displacements existing between the apparatus in the two stations; and applying the varied current for synchronising.

DESIGNS

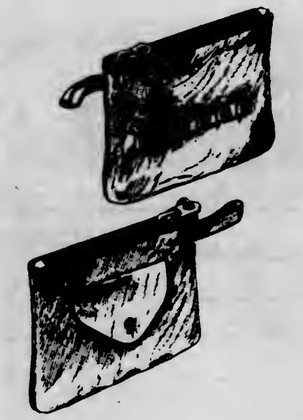
MARCH 28, 1933

89,544. RECEPTACLE COVER. FELIPE INOCENCIO, Glendora, Calif. Filed Dec. 29, 1932. Serial No. 46,653. Term of patent 7 years.



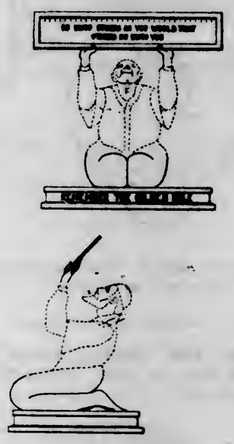
The ornamental design for a receptacle cover, as shown.

89,545. LADIES' HAND-BAG. EVELYN JAMNCKE, New Orleans, La. Filed June 24, 1932. Serial No. 44,190. Term of patent 7 years.



The ornamental design for ladies' hand bag as shown.

89,546. TABLE ORNAMENT. RALPH F. MANNING, Medford, Mass. Filed Nov. 29, 1932. Serial No. 46,197. Term of patent 14 years.



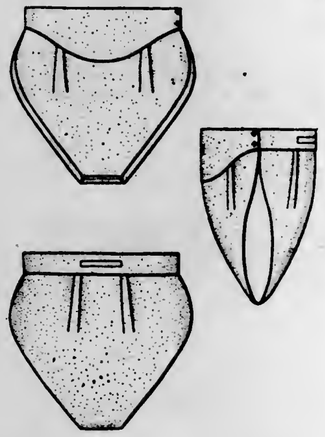
The ornamental design for a table ornament as shown and described.

89,547. STOCK BOX FOR TYPEWRITER RIBBONS. GEORGE D. ATWOOD, Brooklyn, N. Y., assignor to Decorated Metal Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Dec. 22, 1932. Serial No. 46,566. Term of patent 7 years.



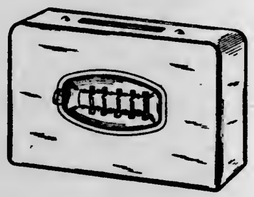
The ornamental design for a stock box for typewriter ribbons, substantially as shown.

89,548. UNDERGARMENT OR SIMILAR ARTICLE OF MANUFACTURE. WILLIAM W. BRADFORD, Clarendon, Va. Filed Oct. 4, 1932. Serial No. 45,212. Term of patent 3½ years.



The ornamental design for an undergarment or similar article of manufacture, as shown.

89,549. COIN BANK. SPENCER BABCK, Shaker Heights, Ohio. Filed May 15, 1931. Serial No. 39,862. Term of patent 14 years.



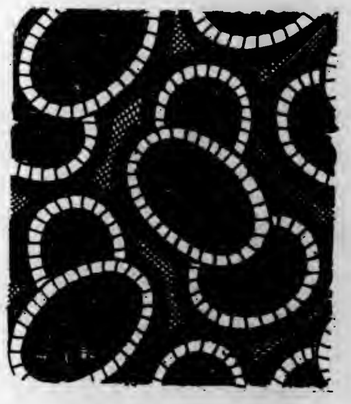
The ornamental design for a coin bank as shown and described.

89,550. SHADE FOR AN ELECTRIC LAMP. GLENN E. MCFADDEN, Buffalo, N. Y., assignor to Markel Electric Products, Inc., Buffalo, N. Y., a Corporation of New York. Filed Jan. 27, 1933. Serial No. 47,019. Term of patent 3½ years.



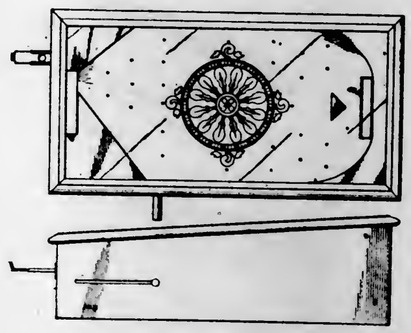
The ornamental design for a shade for an electric lamp substantially as shown.

89,551. LACE. JOHN MOOSHERR, New York, N. Y., assignor to Liberty Lace and Netting Works, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1933. Serial No. 47,084. Term of patent 3½ years.



The ornamental design for lace, substantially as shown.

89,552. PIN-BALL AMUSEMENT GAME DEVICE. ARTHUR D. PEARSON, Chicago, Ill. Filed Dec. 5, 1932. Serial No. 46,310. Term of patent 3½ years.



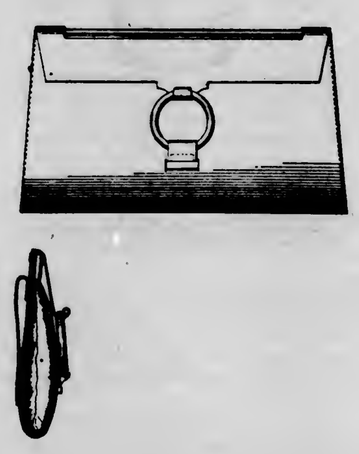
The ornamental design for a pin-ball amusement game device, as shown and described.

89,553. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,789. Term of patent 3½ years.



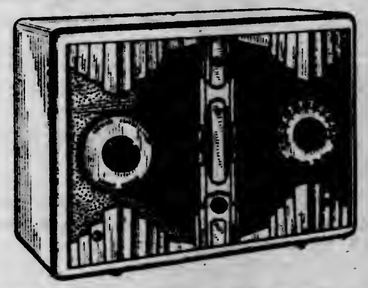
The ornamental design for a textile fabric or similar article as shown and described.

89,554. HAND-BAG. MORRIS WHITE, New York, N. Y., assignor to Morris White Mfg. Co. Inc., a Corporation of New York. Filed Jan. 26, 1933. Serial No. 46,992. Term of patent 3½ years.



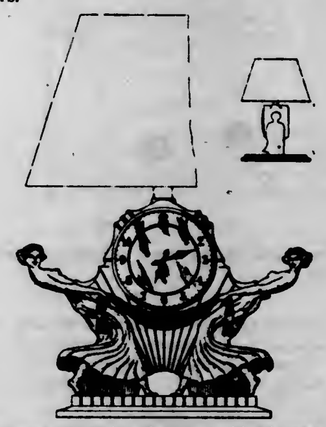
The ornamental design for a handbag as shown.

89,555. CABINET FOR RADIORECEIVERS. ISIDOR GOLDBERG, New York, N. Y., assignor to Pilot Radio and Tube Corporation, New York, N. Y., a Corporation of Delaware. Filed Jan. 7, 1933. Serial No. 46,759. Term of patent 3½ years.



The ornamental design for a cabinet for radio receivers, as shown.

89,556. COMBINED CLOCK CASE AND LAMP OR SIMILAR ARTICLE. JOSEPH GOTTLIEB, Jersey City, N. J. Filed Jan. 3, 1933. Serial No. 46,700. Term of patent 3½ years.



The ornamental design for a combined clock case and lamp or similar article, as shown and described.

89,557. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 29, 1932. Serial No. 45,142. Term of patent 3½ years.



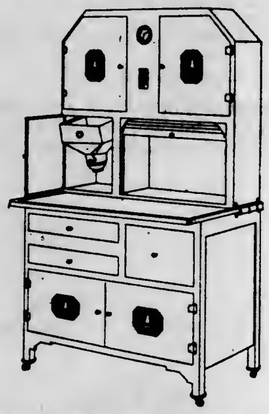
The ornamental design for a textile fabric or similar article as shown and described.

89,558. BOOT HOOK. THORVALD F. HAMMER, Branford, Conn. Filed Dec. 29, 1932. Serial No. 46,647. Term of patent 7 years.



The ornamental design for a boot hook, as shown.

89,559. KITCHEN CABINET. WILLIAM D. WILLIAMS, Junior, Richmond, Ind. Filed Dec. 9, 1932. Serial No. 46,403. Term of patent 7 years.



The ornamental design for a kitchen cabinet, substantially as shown.

89,560. CONTAINER CAP. GEORGES WILMET, New York, N. Y., assignor to Armstrong Cork Company, Lancaster, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1933. Serial No. 46,861. Term of patent 7 years.





The ornamental design for a container cap as shown.

89,561. SUGAR BOWL OR SIMILAR ARTICLE. CURTIS B. ILGENFRITZ, York, Pa., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1933. Serial No. 46,808. Term of patent 7 years.



The ornamental design for a sugar bowl or similar article, substantially as shown.

89,562. TUMBLER OR SIMILAR ARTICLE. CURTIS B. ILGENFRITZ, York, Pa., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1933. Serial No. 46,809. Term of patent 7 years.



The ornamental design for a tumbler or similar article, substantially as shown.

PATENTS

GRANTED MARCH 28, 1933

1,902,809. PLUNGER TYPE PEN. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 24, 1930. Serial No. 497,939. 9 Claims. (Cl. 120—47.)



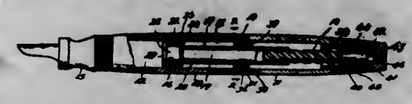
1. A fountain pen having in combination, a barrel portion presenting a tubular reservoir, a piston axially reciprocable in said reservoir, a piston stem therefor, a steep pitch screw-drive for said piston including a screw member, means for swivelly mounting said screw member in said barrel portion, and a short sleeve in said barrel having an angular bore engaging a similarly shaped exterior surface on said stem.

1,902,810. PLUNGER TYPE PEN. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 20, 1931, Serial No. 531,567. Renewed Sept. 21, 1932. 9 Claims. (Cl. 120—47.)



1. A fountain pen including in combination, a barrel presenting a tubular reservoir, a piston and piston rod reciprocable in said reservoir, a sleeve member mounted in said barrel, a screw member arranged within said sleeve member and swivelly mounted in said sleeve member at one end of the latter, means for operatively connecting said piston rod and screw member whereby said piston may be reciprocated upon rotation of said screw member, said piston rod being hollow to telescopically receive said screw member, and means presenting an extended bearing surface carried by said sleeve for slidably but non-rotatably supporting said piston rod, the latter telescoping within said sleeve.

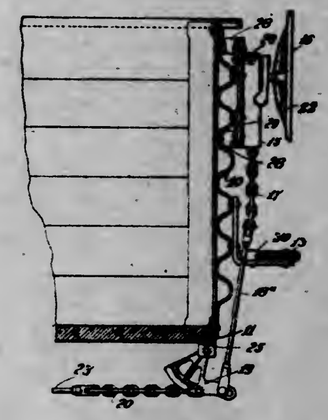
1,902,811. PLUNGER TYPE PEN. ANDREAS BIENENSTEIN, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed July 5, 1932. Serial No. 620,960. 10 Claims. (Cl. 120—47.)



1. In a fountain pen, a barrel portion presenting a tubular reservoir, a piston reciprocable in said reservoir, said barrel being formed in two sections, and means non-rotatively associated with the interior of the ends of the barrel sections at the parting line of the sections and concealed thereby for slidably and non-rotatably mounting said piston.

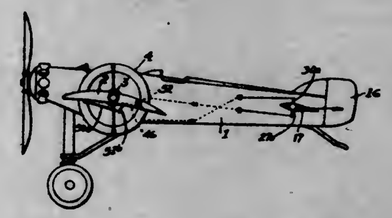
1,902,812. MEANS FOR MOUNTING RAILWAY CAR HAND BRAKES. RICHARD W. BURNETT, Chicago, Ill. Filed May 27, 1926. Serial No. 111,909. 1 Claim. (Cl. 74—121.)

In combination with a brake rigging and the corrugated end wall of a railway car, a hand brake for operating said brake rigging comprising a housing, a hand wheel, and a flexible connector adapted to be tightened by rotation of said hand wheel, and means for securing said housing



to the end wall of the car comprising a U-shaped bracket, one flange of which is secured to the flat marginal portion of the wall and the other flange of which extends over and is secured to the crest of an adjacent corrugation.

1,902,813. AEROPLANE. GEORGE CROMPTON, Jr., New York, N. Y. Filed Apr. 9, 1930. Serial No. 442,931. 10 Claims. (Cl. 244—14.)



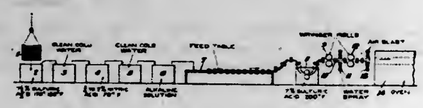
1. In an aeroplane, a main plane mounted to rotate freely on an horisontal axis, and ailerons provided by said main plane.

1,902,814. RECORDING OF SOUNDS. FREDERICK KENNETH CROWTHER, New Malden, England. Filed Dec. 23, 1930, Serial No. 504,437, and in Great Britain Aug. 25, 1930. 8 Claims. (Cl. 176—122.)



1. An electrical discharge device for photographically recording sound comprising an hermetically sealed container an insulator within said container having a narrow longitudinal slot, a long cathode located at the bottom of said longitudinal slot, an anode adjacent said cathode and connections to establish electrical circuit.

1,902,815. MANUFACTURE OF STEEL SHEETS. ARCHIE R. GOODHUE, Vandergrift, Pa., assignor to American Sheet and Tin Plate Company, a Corporation of New Jersey. Filed Nov. 21, 1931. Serial No. 576,596. 5 Claims. (Cl. 148—8.)



1. The method of producing scale-free, clean, high silicon electrical steel sheets, which consists in spacing the sheets, after being annealed, maintaining a batch of said sheets in spaced relation, pickling said sheets in a hot sulfuric acid solution, washing said pickled sheets in clean water to remove loose scale, pickling said washed sheets in a nitric acid solution, washing said sheets after said last named pickling step in clean water, then immersing said sheets in an alkaline bath, passing said sheets through a sulfuric acid solution, washing said sheets to remove all traces of acid and then drying said sheets.

1,902,816. COMBINED EYE AND EYELASH FOR DOLLS. VICTOR KENNY, Woodside, N. Y. Filed Apr. 11, 1931, Serial No. 529,469. Renewed July 25, 1932. 10 Claims. (Cl. 46—40.)



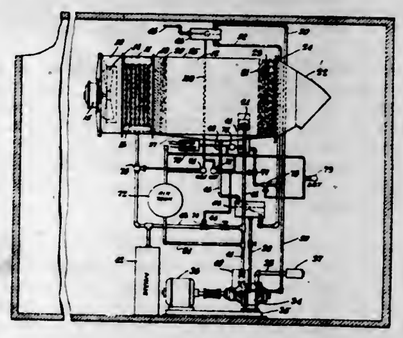
1. A combined eye and lash member for dolls, comprising a sheet metal member for extending transversely across an eye opening of a doll and having resilient inwardly directed edges, and eyelashes supported outside of said edges, said resilient inwardly directed edges holding the eye and eyelash in place in the eye opening of a doll.

1,902,817. COMMUNICATION WITH MOVING TRAINS. HERMAN A. AFFEL, Ridgewood, and ESTILL I. GREEN, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Oct. 2, 1929. Serial No. 396,893. 15 Claims. (Cl. 179—2.5.)



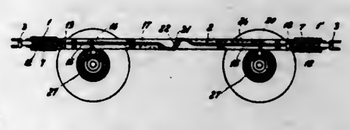
1. In a signaling system to and from moving trains, a transmission line along the route of the trains, means for electrically dividing said line into a plurality of sections, a fixed carrier frequency signaling station near the middle of each section and associated for two-way signaling with the transmission line, and a plurality of trains each provided with inductive means for two-way signaling with said line, each train in a section being provided for signaling on a different pair of carrier frequencies and each fixed station being equipped for signaling simultaneously on the pairs of carrier frequencies associated with the plurality of trains.

1,902,818. AIR CONDITIONING CONTROL. SAMUEL M. ANDERSON, Sharon, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Company. Filed Sept. 10, 1930. Serial No. 481,012. 16 Claims. (Cl. 261—13.)



1. An air conditioning system comprising a ventilating unit, a heater unit, a spray chamber, and means responsive to the temperature of the water returned from said spray chamber for controlling the temperature of said heater unit.

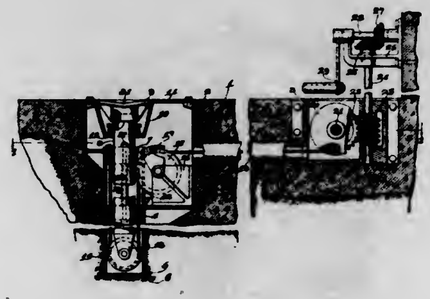
1,902,819. BRAKE CONTROL FOR VEHICLE WHEELS. ACHILLE ARATO, Turin, Italy. Filed Nov. 12, 1930, Serial No. 495,260, and in Italy Nov. 25, 1929. 4 Claims. (Cl. 188—142.)



1. In a device for automatic control of the brakes of a trailer on said trailer approaching a leading vehicle, a draft member resiliently mounted to reciprocate in a support in the frame of said trailer, brake gears on said trailer, an oscillating member connected with said brake gears for their actuation, and a bar supported in the trailer frame and adapted to move along its own axis, said bar having one end connected with said brake gear actuating member and its other end opposite to and spaced from the inner end of said draft member.

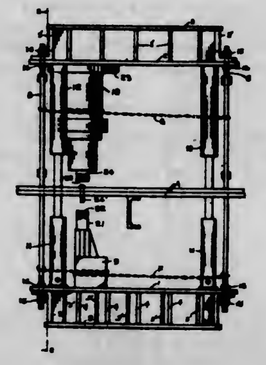
1,902,820. AUTOMOBILE LIFT. GEORGE P. BALL, Allentown, Pa. Filed Feb. 13, 1931. Serial No. 515,462. 1 Claim. (Cl. 254—148.)

A lifting device comprising an imbedded casing, a guide cylinder in said casing rigidly connected therewith, an embedded gear casing spaced from the first casing, a guide tube connecting the casings together, a bearing cap fitted in the upper end of the cylinder, a second bearing secured in the cylinder in spaced relation to the bearing cap, a standard slidably mounted in the bearings, a lifting head on the upper end of the standard, a pulley carried by the lower end of the standard, a winding drum rotatably mounted in the gear casing, a pulley rotatably mounted in the first casing adjacent to the upper end of the cylinder and one end of the guide tube, a cable secured to the bearing cap and trained over said pulleys and threaded through the guide tube and wound upon said drum, an operating shaft rotatably mounted in the gear casing and



extending externally thereof, means for rotating the shaft, and a worm and a worm-wheel connected between the shaft and drum.

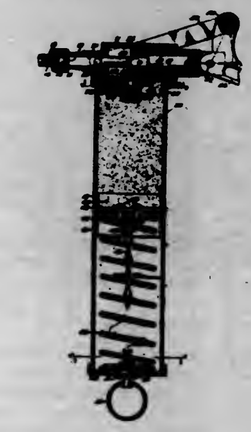
1,902,821. APPARATUS FOR RIVETING PLATES OF SHIPS. GEORGE H. BATES, Cranford Township, Union County, N. J., assignor to United Dry Docks, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 18, 1930. Serial No. 445,240. 6 Claims. (Cl. 78—48.)



2. In a device of the character described, a riveter and an anvil adapted to be placed on opposite sides of plates to be riveted with a rivet to be squeezed between them, separate backing members for the said riveter and anvil with respect to which they are mounted to be laterally and vertically movable and members spacing and connecting said backing members, adapted to extend through said plates and located at points removed from the zone of operation of said riveter and anvil.

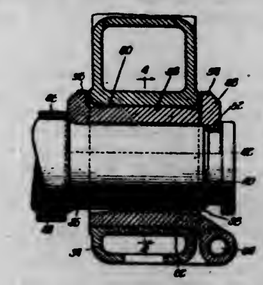
1,902,822. GREASE DISPENSING DEVICE. JULIUS H. BECKER, San Francisco, Calif., assignor, by direct and mesne assignments, to Alemite Corporation, a Corporation of Delaware. Filed Sept. 9, 1926. Serial No. 134,375. 5 Claims. (Cl. 221—473.)

2. In a portable grease dispensing device a tubular grease reservoir, a cap therefor, a passageway extending through said cap, a plunger comprising a pair of concentrically mounted pistons, a bore in said passageway for each of said concentric pistons, an inlet port in the larger of said bores communicating with said reservoir,



a hand lever mounted on said head adapted to reciprocate said plunger, and a valved discharge outlet at the outer end of the smaller of said bores.

1,902,823. TRUCK FRAME MOUNTING. FREDERIC H. BENDER, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Mar. 22, 1929. Serial No. 349,217. 9 Claims. (Cl. 308—40.)

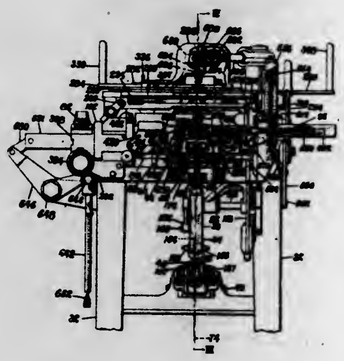


1. In a side frame, the combination of a journal box receiving portion including spaced jaws defining a seat therebetween, the lower ends of said jaws being connected by a transverse member, a normally stationary axle extending through said journal box receiving portion and provided with a channel outwardly of said jaws, a friction bearing received between said jaws and disposed in direct contacting relation to said axle and in direct supporting relation to said side frame on said seat, said bearing having portions embracing said side frame, and a portion received in said channel whereby an interlock is provided between said side frame and axle.

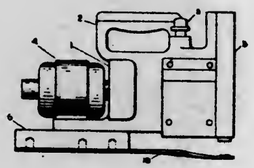
1,902,824. HEEL-SEAT FITTING MACHINE. EARL A. BESSOM, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 29, 1931. Serial No. 540,990. 109 Claims. (Cl. 12—81.5.)

1. A heel-seat fitting machine having, in combination, a pair of plates constructed and arranged to engage within the rand crease of a shoe at opposite sides of the shoe,

a gage constructed and arranged for engagement with the rear portion of the shoe for positioning the sole of the shoe lengthwise thereof upon said plates, said plates being mounted for adjustment lengthwise of the shoe relatively to the gage, and means for so adjusting the crease plates relatively to the gage that when the rear portion of the shoe engages said gage the plates will terminate substantially at the breast line of the sole.



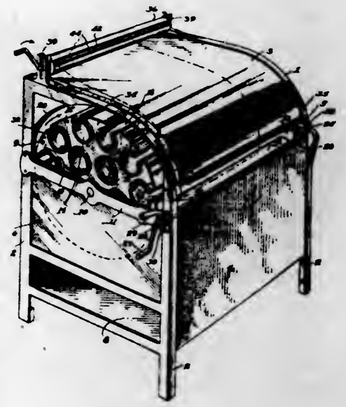
1,902,825. STITCHING MACHINE ANVIL. HERBERT R. BLISS and HOWARD G. ALLEN, Niagara Falls, N. Y., assignors to H. R. Bliss Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Aug. 16, 1930. Serial No. 475,780. 2 Claims. (Cl. 1—48.)



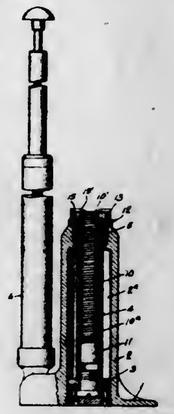
1. A stitching machine comprising in combination, a portable machine having a stitcher head, means for operating it, and a handle by means of which the machine may be manipulated, a blade anvil carried by the machine comprising a laterally angularly and downwardly angularly extending shank with a gradual continuous slope adapted to lie in between container flaps, a relatively sharply reversely bent neck portion, and an anvil portion projecting from the neck portion and adapted to lie in under both flaps, said reversely bent neck portion extending downwardly angularly, and the downwardly angularly extent of the shank and neck being substantially continuous.

1,902,826. STORAGE AND DISPENSING DEVICE FOR SCREEN WIRE AND THE LIKE. HENRY S. BOSO, Greenfield, Ohio. Filed Feb. 26, 1930. Serial No. 431,477. 2 Claims. (Cl. 242—55.3.)

1. A device for storing and dispensing sheet material, a reel for winding up the dispensed material, a shaft on which the reel is loosely mounted, said reel provided with a longitudinal slot in its periphery, a member secured to said reel and extending inwardly thereof, an arm on said shaft for cooperating with said member for gripping the free edge of the sheet material and for imparting a rotary movement to the reel.



1,902,827. HYDRAULIC JACK. HARRY W. BOLENS, Port Washington, Wis. Filed Nov. 22, 1928. Serial No. 321,162. 2 Claims. (Cl. 138—9.)



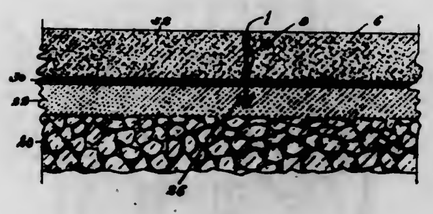
1. A hydraulic jack including a base, a lifting cylinder carried thereby, a lifting piston fitted in said cylinder, a hollow piston rod connected to the piston and projecting exteriorly to the cylinder, a combined spring connecting member and nut abutting the upper end of the piston rod, retractile coil springs between the combined spring connecting member and nut and the base operating to bias the piston to its lowermost position in the cylinder and to releasably hold the combined connecting member and nut against rotation and an extension member slidably fitted in the hollow piston rod and threaded through the combined connecting member and nut.

1,902,828. WELL BORE ANGLE DETECTOR AND RECORDER. WILLIAM G. BOTTOM, Tulsa, Okla. Filed Aug. 27, 1930. Serial No. 478,121. 7 Claims. (Cl. 234—1.)



1. In a device of the character described, a housing, a carrier rotatably mounted in the housing, a plate supported by the carrier, means for recording on the plate the degree of inclination of the housing, and means responsive to vibration of the housing for deferring said recording process until the housing has come to complete rest.

1,902,829. FLOOR CONSTRUCTION. JESSE R. BOWMAN, Newburyport, Mass. Filed Mar. 6, 1931. Serial No. 520,590. 8 Claims. (Cl. 94—4.)



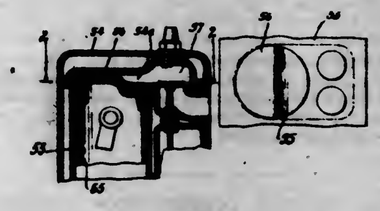
1. In a flooring construction, in combination, a foundation member, a plurality of mold forming strips vertically arranged, said strips being secured to said foundation member, a plurality of cross strips cooperatively associated with the aforesaid mold forming strips and forming a plurality of individual molds therewith, plastic material filling said molds, and means for preventing bonding of said plastic material and said foundation member whereby the blocks formed by the plastic material are restrained from movement only by the engagement with said strips, said strips being constructed and arranged to permit a floating action of the blocks retained thereby.

1,902,830. SEAL FOR GEMS. ABBE BULOVA, New York, N. Y., assignor to Bulova Watch Company, Inc., New York, N. Y., a Corporation of New York. Filed May 17, 1932. Serial No. 611,762. 10 Claims. (Cl. 63—1.)



1. A jewelry sales unit comprising an article of jewelry having a gem setting; a stone mounted in the setting; and a hollow transparent cover over the stone and sealed to the setting.

1,902,831. INTERNAL COMBUSTION ENGINE. JAMES P. BUAKS, Newark, N. J., assignor of twenty per cent to James MacIntosh, Norristown, Pa., of twenty per cent to Kenneth W. Mackey, and of ten per cent to Sidney I. Howell, Montclair, N. J. Filed Mar. 30, 1929. Serial No. 351,279. 1 Claim. (Cl. 123—91.)



An L-head internal combustion engine, including a cylinder, a head therefor, said head being constructed to have a space in registry with the cylinder, said space being of comparatively small uniform depth, said head having a combustion pocket positioned substantially wholly laterally and above the cylinder, said pocket being deeper than the said space and having unrestricted communication therewith, gas fuel and air intake and exhaust valves at said pocket, the said pocket being otherwise closed, fuel ignition means for the pocket, a piston in the cylinder, said piston in the position of greatest compression thereof entering said space and approaching in comparatively close proximity to the opposed wall of the head, said piston having a recess of substantially uniform depth in the upper end thereof, said recess being adjacent to the combustion pocket, said recess forming with said pocket an unrestricted combustion compartment in the position of greatest compression of the piston, said combustion compartment providing the total volume of space for combustion and being comparatively small for high compression of the fuel and air, said opposed wall of the head having a transverse corner at the junction of said space and the combustion pocket and the intake valve being arranged opposite to said opposed wall and in proximity to said corner for increasing turbulence and mixing of the fuel and air.

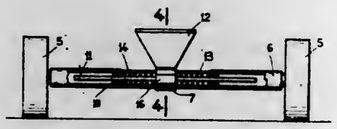
1,902,832. MINERAL FEED. PAUL CALDWELL, Quincy, Ill., assignor to Moorman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 29, 1931. Serial No. 571,855. 10 Claims. (Cl. 167—58.)

7. A mineral feed for animals, comprising highly porous substantially water insoluble particles of calcined rock phosphate from which substantially all of the fluorine has been removed.

1,902,833. METHOD OF TREATING TEXTILE THREADS. WILLIAM HALE CHARCH, Buffalo, N. Y., assignor to Du Pont Rayon Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1929. Serial No. 357,608. 2 Claims. (Cl. 8—5.)

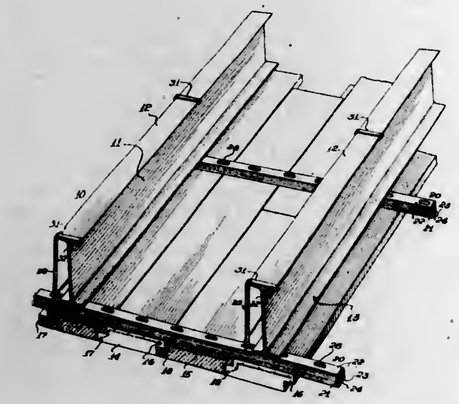
1. In a method of treating artificial thread, the step of subjecting said thread to a nonaqueous composition comprising a thread conditioning compound and a methyl violet base dissolved therein, whereby the thread is simultaneously tinter and conditions, said conditioning compound and color being readily removable.

1,902,834. TAIL-SUPPORTING TRUCK FOR AEROPLANES. CARLO COHEN-VENEZIAN, Turin, Italy. Filed Feb. 25, 1931, Serial No. 518,189, and in Italy Feb. 26, 1930. 3 Claims. (Cl. 280—53.)



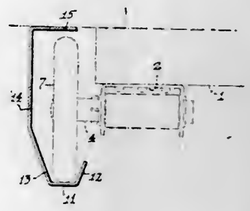
1. A two-wheel truck for supporting and shifting an aeroplane tail over the ground, comprising an axle, means for propelling and steering said axle, an aeroplane tail engaging member, means associated with said axle for mounting said member to move along a line substantially parallel with said axle, and spring means also associated with said axle for resiliently restricting said motion of said member in both directions.

1,902,835. CEILING CONSTRUCTION. CHARLES R. BRADSEY, Oak Park, Ill., assignor to The United States Gypsum Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1930. Serial No. 474,132. 14 Claims. (Cl. 72—68.)



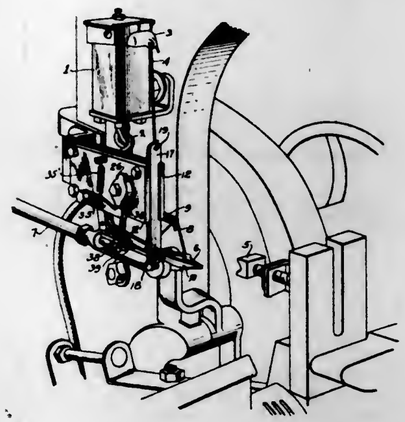
12. A building construction comprising a plurality of spaced, parallel support members, a plurality of relatively thin, elongated, precast slabs of gypsum-like material provided with interlocking edges and supported by said members, said slabs being longer than the spacing between said members so that at least one end of a slab extends beyond a given pair of support members, and being supported largely by cooperative action with adjoining slabs.

1,902,836. ROLLER TRACK. CLARENCE G. JOHNSON, Hartford City, Ind. Original application filed Dec. 1, 1926, Serial No. 151,884, and in Canada Aug. 20, 1928. Divided and this application filed Aug. 12, 1929. Serial No. 385,293. 5 Claims. (Cl. 16—96.)



1. A channel track for a vertical lift door on which a plurality of single roller units are mounted on horizontally-disposed shafts at the vertical margins thereof, which channel comprises a pair of parallel and oppositely-spaced treads between which the rollers at the adjacent margin of the door are disposed to hold the door in vertical position, a web uniting the said treads and positioned at the margin thereof remote from the door, a portion of which web is inclined away from the door to thereby space the web from the rollers in said channel, a wall at the margin adjacent the door leading from one of said treads and inclined toward the door and extending part of the distance toward the opposite tread, the inclined portion of the web and the inclined wall constituting portions of an auxiliary channel for the rollers to guide them during lateral shifting of the door in its vertical movement by contacting the rollers only at a point adjacent the periphery of each.

1,902,837. TIMING DEVICE FOR LOOM STOP MECHANISM. WILLIAM P. CRAIG, Shelby, N. C., assignor of one-half to Cleveland Cloth Mill Company, Shelby, N. C., a Corporation of North Carolina. Filed Mar. 29, 1932. Serial No. 601,861. 7 Claims. (Cl. 139—371.)



1. A control device for looms having a knock-off lever movable into and out of the path of the lay and a shuttle feeler operable by the exhaustion of weft from the shuttle; comprising an operating member movable into and out of the path of the lay, means operatively connecting said member with the shuttle feeler device in such manner that said member is moved into the path of the lay upon exhaustion of the weft, and selective means connecting the knock-off lever and said operating member whereby the striking of said last mentioned member by the lay will operate after a predetermined number of picks to throw the knock-off lever into the path of the lay.

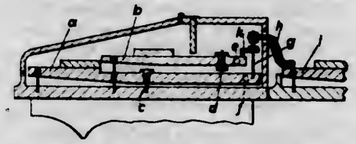
1,902,838. PROCESS OF ORE FLOTATION AND FLOTATION REAGENT. ORIN D. CUNNINGHAM, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Feb. 19, 1931. Serial No. 517,126. 18 Claims. (Cl. 209—166.)

1. A process which comprises floating ore material in the presence of a reaction product of a phosphorus sulfide on an unsaturated fatty acid substance and a phenol-like substance, as herein specified.

1,902,839. PROCESS OF FROTH FLOTATION AND MATERIAL EMPLOYED TO EFFECT THE SAME. ORIN D. CUNNINGHAM, Indianapolis, Ind., assignor to Peter C. Reilly, Indianapolis, Ind. Filed Aug. 3, 1931, Serial No. 554,954. Renewed Nov. 10, 1932. 14 Claims. (Cl. 209—166.)

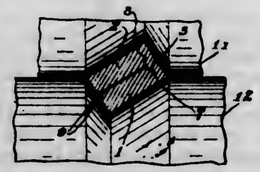
1. A process which comprises froth flotation of ore material in the presence of a reaction product of a hydrocarbonaceous substance, phosphorus, sulfur, a phenol-like substance and an unsaturated fatty acid compound.

1,902,840. COUPLING DEVICE FOR KEYBOARDS. LEONHARD DEUTSCH, Vienna, Austria. Filed July 15, 1930, Serial No. 468,116, and in Austria July 19, 1929. 4 Claims. (Cl. 84—235.)



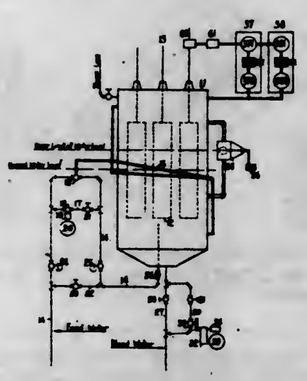
2. In a device for increasing the range of a keyboard in a musical instrument, a plurality of rows of keys, each row embracing corresponding successive octaves, corresponding octaves being separated by the space of one octave, and connecting means between corresponding keys of corresponding octaves and the corresponding keys of the instrument keyboard.

1,902,841. PROCESS OF FORMING NUT BAR FOR THE MANUFACTURE OF GRIP NUTS AND APPARATUS FOR PERFORMING THE SAME. GEORGE C. EASTER, Baltimore, Md., assignor, by mesne assignments, to The Vulcan Steel Products Company, Baltimore, Md., a Corporation of Maryland. Filed July 30, 1928. Serial No. 296,191. 4 Claims. (Cl. 80—60.)



1. The method of forming a nut bar from which individual nuts are adapted to be cut, punched and threaded, which consists in subjecting a bar of metal stock, to successive passes between differently shaped rolls to progressively fold different portions of the bar into superimposed relation, and then subjecting the bar to pressure between rolls to squeese the superimposed portions together to eliminate the space between said portions.

1,902,842. APPARATUS FOR REGULATING ELECTRIC STEAM GENERATORS. MILTON EATON, Shawinigan Falls, Quebec, Canada. Filed Apr. 25, 1930. Serial No. 447,291. 33 Claims. (Cl. 219—40.)



1. Means for regulating electric steam generators to maintain a selected condition of operation substantially constant including, in combination, an electric steam generator; a bleed valve therefor; and control apparatus arranged to open and close said bleed valve in response to variations in the generator steam pressure and generator current input.

1,902,843. BATHING SUIT. ALBERT FERRARI, Drexel Hill, and SIDNEY W. DEVERS, Philadelphia, Pa. Filed May 26, 1930. Serial No. 455,824. 2 Claims. (Cl. 2—67.)

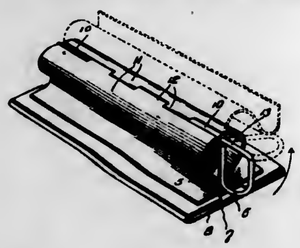


1. A bathing suit comprising a nether garment having a slit formed entirely across the back and curved to continue downwardly along the remote sides of the legs forming a flap having rounnded corners, strips of relatively non-stretchable material reinforcing the edges of the slit, and a sliding closure intimately connecting the margins of the flap and garment throughout the entire extent of the slit.

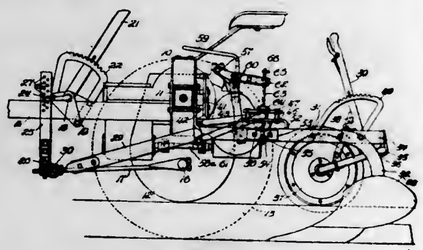
1,902,844. ABRADING, POLISHING, OR LIKE SURFACING TOOL. ALPHONSE FISET, Cambridge, Mass. Filed Mar. 21, 1932. Serial No. 600,330. 5 Claims. (Cl. 51—187.)

2. A tool of the character described comprising a flat base having a rigid upstanding body in the form of a rib, a hinge pin parallel with and journaled in the upper edge

of said body, and combined hand grip forming and sheet clamping members arranged at opposite sides of the body and provided with hinge barrels at their upper edges frictionally receiving said hinge pin, said hinge pin having a projecting end formed to provide a handle for manipulating said members.

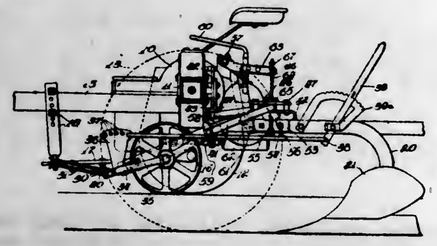


1,902,845. TRACTOR PLOW. WILLIAM S. GRAHAM and ARTHUR D. GALLAGHER, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed Aug. 19, 1931. Serial No. 558,034. 7 Claims. (Cl. 97—50.)



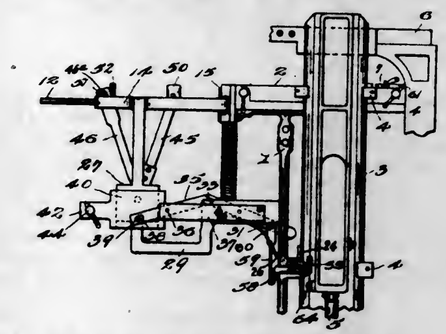
1. The combination with a tractor comprising a rear axle structure, of a plow having a beam extending forwardly below the axle, a vertically adjustable draft connection between the forward end of the beam and the tractor, a vertically adjustable land wheel on the plow beam, and lifting and lowering means on the axle structure connected to the plow beam substantially midway between its ends, said connection including pivots for adjustment of the beam and plow about a longitudinal and a transverse axis.

1,902,846. PLOW ATTACHMENT FOR TRACTORS. WILLIAM S. GRAHAM, Canton, Ill., assignor to International Harvester Company, a Corporation of New Jersey. Filed Sept. 24, 1931. Serial No. 564,823. 6 Claims. (Cl. 97—50.)



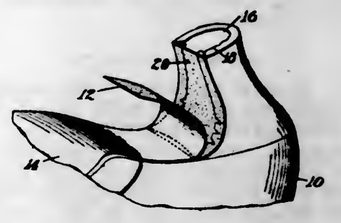
1. The combination with a tractor of a horisontal drawbar carried thereby having a transversely extending portion, a draft element comprising a link having its forward end connected to the transverse portion of the drawbar for movement laterally and vertically and a transverse link pivotally connected to its rear end, a plow beam pivoted on a horisontal axis at its forward end to said transverse link, means carried by the draft element for adjusting the angular relation of said links, a transversely extending stop bar on the drawbar positioned to prevent upward movement of the draft element into the horizontal plane of the drawbar, and a ground engaging support on the forward end of the plow beam.

1,902,847. SLUG CASTING MACHINE. ARCHIE V. GILBERT, Spokane, Wash. Filed Mar. 12, 1931. Serial No. 522,034. 10 Claims. (Cl. 199—50.)



1. In a slug casting machine, the combination of a pair of opposed, relatively movable jaws, duplex means for operating the jaws, means for rendering one of the jaws inactive, actuating means for the operating means, a justification rod and means carried thereby for co-action with the actuating means in centering the jaws, an elevator slide, and means carried by the slide for co-action with the actuating means in re-setting the jaws.

1,902,848. COVERING BREASTS OF HEELS. JOSEPH GOULDBOURN and GEORGE HAZELTON, Leicester, England, assignors to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 3, 1930, Serial No. 418,372, and in Great Britain Jan. 17, 1929. 12 Claims. (Cl. 12—142.)

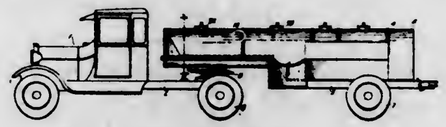


1. That improvement in methods of making shoes in which a covering flap is provided upon the sole of the shoe for the breast of the heel attached to said shoe which consists in providing a film of dried glue between said flap and the breast of the heel, directing a jet of steam upon said film to bring it to a tacky condition, applying steam to the outer surface of the covering flap to temper it, and then laying the flap against the breast of the heel.

1,902,849. TRAILER TRUCK TANK CONSTRUCTION. OTTO N. GRENDELL, Kansas City, Mo., assignor to Standard Steel Works, North Kansas City, Mo., a Corporation of Missouri. Filed July 8, 1929. Serial No. 376,788. 8 Claims. (Cl. 280—5.)

8. In a device of the character described, a frame including horisontal longitudinal sills having upwardly offset

front portions, and a tank mounted on said frame including a reduced front end portion having a bottom and downwardly extending side walls forming a depending skirt,



and means including plates secured to said skirt and having edges fixed respectively to the frame and to the bottom for stabilizing the tank.

1,902,850. DENTAL INSTRUMENT. JOHN H. GREENE, Philadelphia, Pa. Filed Mar. 5, 1931, Serial No. 520,863. Renewed Aug. 18, 1932. 3 Claims. (Cl. 32—10.)



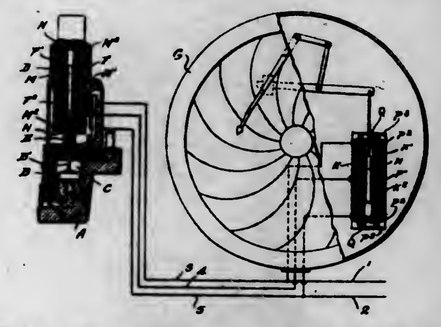
1. A dental instrument of the type described comprising a tubular body, the said body having one side thereof substantially shorter than a diametrically opposed side and longitudinally and circumferentially resilient.

1,902,851. OVERSHOT. AUDREY L. HAMPTON, Houston, Tex. Filed Feb. 26, 1932. Serial No. 595,270. 4 Claims. (Cl. 294—102.)



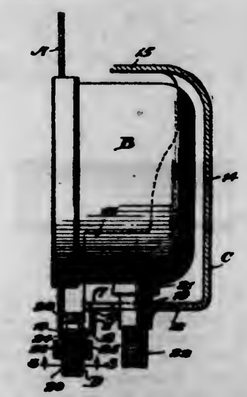
1. An overshot for engaging and pulling a pipe in a well, comprising a tubular body having a downwardly converging inside seat, a tubular slip in said body shaped to surround the pipe and having engaging jaws whose outer surfaces taper downwardly and whose inner surfaces have pipe engaging teeth, a tubular nipple having a threaded connection with said body, said slip and nipple being provided, one with a longitudinal bearing and the other with a flexible arm having a projection which works in said bearing.

1,902,852. METER MECHANISM. THOMAS RANDOLPH HARRISON, Wyncote, Pa., assignor to The Brown Instrument Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1929. Serial No. 331,934. 7 Claims. (Cl. 177—351.)



7. An inductance bridge having a pair of axially aligned juxtaposition coils, an armature extending partially into each coil, a magnetic member positioned at the distant ends of each of the coils for increasing the effective measuring stroke of the armature, said member being distortable to balance the bridge.

1,902,853. MEANS TO PREVENT DETACHMENT OF SPEEDOMETER OR DISCONNECTION OF ITS DRIVE MEANS. FRED HENNIG, Pittsburgh, Pa., assignor to Pittsburgh Taximeter Company, Pittsburgh, Pa., a Corporation. Filed July 14, 1931. Serial No. 550,798. 4 Claims. (Cl. 264—1.)

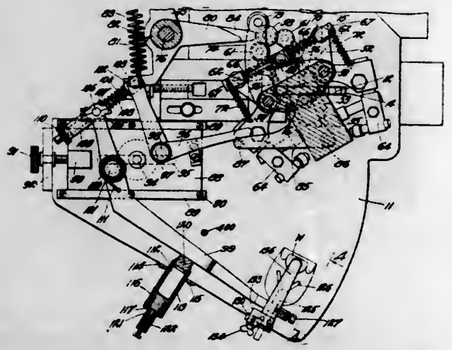


1. In combination, a support having a channel formation, a device mounted on said support, a cover disposed in enclosing relation to the device and provided with a formation seated in the channel formation of the support to hold the cover firmly with respect to the support, and means for fastening the cover to the support.

1,902,854. PROCESS OF MANUFACTURING SUBSTITUTED SECONDARY AMINES OF THE BENZYL-ANILID TYPE. WILHELM HERRMANN, Berlin-Wilmersdorf, and HANS LAUER, Berlin-Friedenau, Germany, assignors, by mesne assignments, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 13, 1926, Serial No. 101,782, and in Germany Apr. 15, 1925. 4 Claims. (Cl. 260—128.)

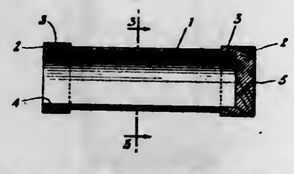
1. The process which comprises reacting on a primary aralkylamine with a nitrochlor benzene compound in which the chlorine is easily exchanged, in an aqueous solution and in the presence of an alkali at a temperature not exceeding the boiling point.

1,902,855. HEEL CONCAVING MACHINE. MERTON W. HOWARD, Lynn, Mass., assignor to Pope Machinery Corporation, Haverhill, Mass., a Corporation of Massachusetts. Filed Dec. 1, 1931. Serial No. 578,251. 10 Claims. (Cl. 12—46.)



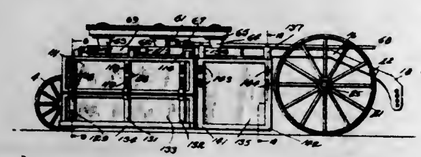
1. A machine for concaving heels having, in combination, a cutter, means for holding a heel including a heel clamp, means for moving the heel holding means continuously through a predetermined path which path includes a heel cutting range, a heel ejecting range and a heel loading range, means operative to open said clamp and eject the heel while the heel holding means is moving through the ejecting range, and means to move a heel into said open clamp, and close the clamp while the heel holding means is moving through the heel loading range.

1,902,856. CARRIER FOR PNEUMATIC DISPATCH SYSTEMS. VICTOR H. JACKSON, Metuchen, N. J., assignor to New York Stock Exchange, New York, N. Y. Filed Sept. 2, 1931. Serial No. 560,697. 6 Claims. (Cl. 243—35.)



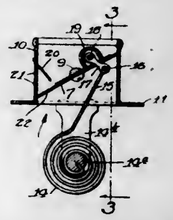
1. A carrier for pneumatic dispatch systems, comprising a substantially cylindrical body portion, enlarged end portions adapted to support the carrier within the tubing of the system, a closure at one end, said end portions and closure being formed integral with said body portion, said carrier being of material which does not retain a permanent deformation when subjected to pressure, and means encircling said end portions to prevent the passage of air around said carrier.

1,902,857. PULVERIZER. CHARLES C. JAMIESON, Jacksonville, Fla. Filed Oct. 28, 1930. Serial No. 491,802. 12 Claims. (Cl. 97—43.)



1. A pulverizer comprising vertically mounted rotating blades, means to direct packed earth into said blades, and means to obstruct passage of the earth through the blades.

1,902,858. THERMOSTATIC CONTROLLING DEVICE. PETER J. JORGENSEN and CLARENCE H. JORGENSEN, Chicago, Ill. Filed Aug. 2, 1930. Serial No. 472,647. 8 Claims. (Cl. 236—34.)



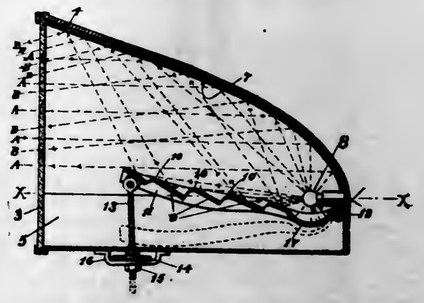
1. A thermostatic controlling device comprising a valve, a support therefor having a passageway closed by said valve, a thermostatic element connected with said valve for moving said valve in response to variations in temperature, a baffle projecting into said passageway and against which the liquid flowing past the valve while it is being opened strikes said liquid rebounding and striking the valve so as to apply an opening pressure to it.

1,902,859. FOUNTAIN TOOTHBRUSH. RUDOLPH JULIUS JOSEPH, New York, N. Y. Filed Mar. 25, 1931. Serial No. 525,071. 8 Claims. (Cl. 15—137.)



1. A fountain tooth brush comprising a cylindrical container having an open end through which its contents may be removed, a nozzle at the other end provided centrally thereof with a threaded opening, a plunger having a sliding but non-rotatable tight fit in the container, ejecting means for advancing the plunger towards the nozzle, a brush having a back provided with a set of bristles and having an S-shaped shank having a threaded end demountably screwed into the nozzle, said back and shank provided with a passageway extending therethrough in substantially the same general direction and terminating in a straight discharge vent parallel to the length of the back and opening therefrom at the extreme end of the brush beyond the bristles, a manually actuated finger disk for advancing the ejecting rod and thus cause the plunger to advance the contents of the container out through the discharge vent.

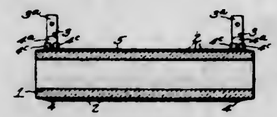
1,902,860. HEADLIGHT. WILLIAM H. KAY and ESKEL MCDANIEL, St. Louis, Mo. Filed Mar. 7, 1932. Serial No. 597,298. 2 Claims. (Cl. 240—41.35)



1. A headlight comprising the upper half of a parabolic reflector, a lamp mounted therein, a casing having a curved top and vertical sides below the horizontal axis which are

connected by a substantially trapezoidal bottom, an auxiliary multifaced reflector of substantially trapezoidal shape corresponding to said bottom and hinged at its straight rear edge for adjustment between said straight sides of the casing, and adjusting means therefor, substantially as described.

1,902,861. RESISTANCE UNIT. LEONARD KEBLER, Bronxville, N. Y., assignor to Ward Leonard Electric Company, a Corporation of New York. Filed July 19, 1930. Serial No. 469,043. 8 Claims. (Cl. 201—64.)



7. A resistance device comprising a tubular support, a resistive conductor wound thereon, a sheet metal element embracing said support and having enlarged outwardly extending portions, a conductive sheet metal terminal between said outwardly extending portions and extending beyond the same, said sheet metal element having higher tensile strength and a lower coefficient of expansion than the metal of said conductive sheet metal terminal, said resistive conductor being directly mechanically and electrically connected to said conductive sheet metal terminal, and an insulating coating covering said resistive conductor and at least a part of said element.

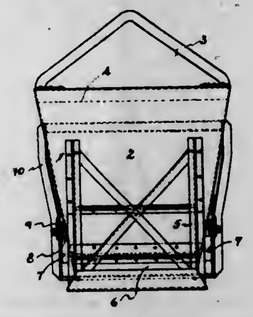
1,902,862. PRESSURE DRUM. HOWARD J. KERR, Westfield, and GEORGE D. EBERTS, Kenilworth, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 27, 1928. Serial No. 308,824. 3 Claims. (Cl. 220—40.)



1. The combination with a container having an opening of a closure arranged to fit within the wall of said opening, an outwardly extending flange on said closure formed so as to lie flush with the surface of the container around said opening, a metal weld closing the seam between said flange and said surface and interlocking flanges on said container and said closure for securing said closure in place.

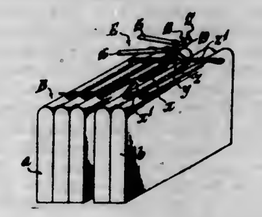
1,902,863. CONCRETE BUCKET. BERNARD H. KERSTING, Ben Avon, Pa., assignor to The Dravo Contracting Company, a Corporation of Pennsylvania. Filed Aug. 19, 1932. Serial No. 629,435. 3 Claims. (Cl. 294—69.)

1. A bottom-dump bucket provided with opposite walls downwardly inclined to a central discharge orifice, a gate consisting of an upwardly concave closure plate arranged beneath the discharge orifice and pivoted on an axis which intersects the opposite bucket walls and which is eccentric with respect to plate curvature, whereby on the swinging of the plate from closed position its heel rises and its toe descends and at every point it recedes from



the edges of the bucket orifice, the said plate and its heel extending upwardly beyond the horizontal plane in which, when the bucket is new, it meets the bucket wall, whereby compensation for wear is afforded, and the gate continues effective during prolonged use.

1,902,864. METHOD OF AND MECHANISM FOR EXTRACTING INTERCONNECTING THREADS BETWEEN STITCHED BOOKS. OSCAR KLEINSCHMIT, Leipzig-Plagwitz, Germany, assignor to Gebruder Brehmer, Leipzig-Plagwitz, Germany, a Limited Partnership of Germany. Filed Apr. 21, 1932, Serial No. 606,748, and in Germany June 4, 1931. 19 Claims. (Cl. 112—252.)



1. A method of extracting the severed interconnecting threads of a stitched book-pad from the loops of the adjacent stitches, which includes positively engaging a looped thread length with a thread-guiding device and thereby guiding the thread length so that by the normal progression of the stitched book-pad the thread length after the severance thereof is caused to withdraw from the adjacent interdepending thread loop.

1,902,865. DRAFTING INSTRUMENT. JOHN V. KOSTER, Los Angeles, Calif., assignor to Eugene Morrison, Los Angeles, Calif. Filed Sept. 8, 1930. Serial No. 480,495. 1 Claim. (Cl. 33—42.)

A drafting instrument comprising a straight handle having a fixed head disposed at right angles to the longitudinal axis thereof and provided with branches of substantially equal length projecting radially from the handle at one end of the latter, a scribing portion extending from one of the branches, and a guiding portion extending from the other of the said branches and disposed in parallelism

with the said scribing portion and being of equal length therewith, whereby the scribing portion is adapted to occupy a perpendicular position during movement of the



guiding portion over a straight surface of a straight edge and a position where the lower end thereof is in a plane with the lower end of the said guiding portion.

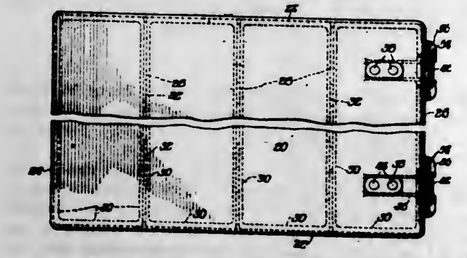
1,902,866. ACETALS OF CYCLIC KETONES WITH POLYHYDRIC ALCOHOLS AND PROCESS OF PREPARING THE SAME. GEORG KRÄNZLEIN, Frankfort-on-the-Main-Hochst, EWALD DICKHÄUSER, Gersthofen near Augsburg, and ARTHUR VOSS, Frankfort-on-the-Main-Hochst, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Mar. 3, 1932, Serial No. 596,672, and in Germany Mar. 4, 1931. 19 Claims. (Cl. 260—54.)

1. The process which comprises causing a cyclic ketone to act upon a polyhydric alcohol containing at least 6 carbon atoms and more than two hydroxy groups united with adjacent carbon atoms.

1,902,867. ALLO-MS-NAPHTHODIANTHRONES. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929, Serial No. 410,869, and in Germany Dec. 8, 1928. 5 Claims. (Cl. 260—61.)

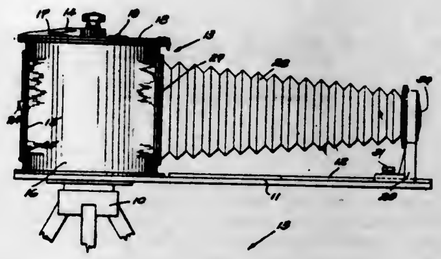
5. As a new article of manufacture tribromo-allo-ms-naphthodianthrone, which forms an orange red paste and a brown red powder, when dried, crystallizes from organic solvents of high boiling point in needles, dissolves to a green solution in concentrated sulphuric acid and dyes cotton from a violet vat powerful and brilliant scarlet shades.

1,902,868. CAST STEEL BOTTOM DROP DOOR. JOHN A. LAMONT and FREDERICK A. LORENS, Jr., Chicago, Ill., assignors to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 24, 1929. Serial No. 357,630. 36 Claims. (Cl. 105—280.)



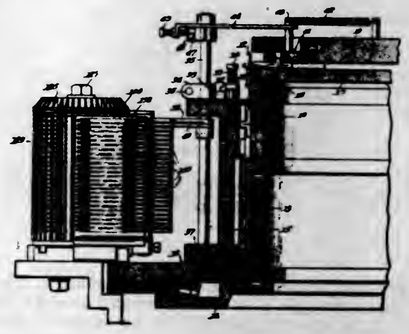
1. In a mechanism of the character described, the combination of a cast drop door provided with stiffening ribs, hinges for attaching the door to a mounting, means for securing the movable hinge elements to the door, and recesses formed within said door for receiving these elements, so designed as to relieve the securing means from stress when the door is in the normally closed position.

1,902,869. ROTATABLE TURRENT CAMERA BACK FOR EXPOSING LIGHT SENSITIVE PHOTOGRAPHIC PLATES. FRED A. LATHE, Oakland, Calif., assignor to Gabriel Moulin, San Francisco, Calif. Filed Aug. 26, 1931. Serial No. 559,439. 4 Claims. (Cl. 95—19.)



1. In a camera the combination of: a lens; bellows communicating with said lens; a turret housing communicating with said bellows; a rotatable turret in said turret housing, said turret being provided with a multiplicity of plate holder receiving openings; and a removable member in the side of said turret housing opposite the side communicating with the bellows.

1,902,870. CONTROLLING MEANS FOR KNITTING MACHINES. NATHAN LEVIN, Trenton, N. J., assignor to H. Brinton Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 24, 1931. Serial No. 559,077. 24 Claims. (Cl. 66—25.)

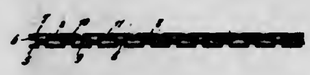


1. In a dial and cylinder knitting machine, a knitting head including stationary needle beds, needles therein, revolving needle cams comprising a plurality of sets corresponding to the number of yarn feeds in the machine, a pattern device on a stationary part of the machine adjacent the knitting head, said device having a plurality of operating levels at different heights relative to said knitting head, means revolving with said needle cams including rockarms at different heights on the knitting head said arms being operatively connected to the respected needle cams, and transmitting means between each rockarm and an individual operating level of said pattern device.

1,902,871. REENFORCED VULCANIZED RUBBER ARTICLES AND PROCESS OF MAKING THE SAME. GEORGE R. LOCKHART, Providence, R. I., assignor to Manville Jenckes Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed May 18, 1929. Serial No. 364,322. 6 Claims. (Cl. 18—54.)

3. The process of manufacturing viscose rayon thread which comprises washing the thread to remove the injurious acids and subjecting the thread to the action of formaldehyde while in the undesulphurized condition.

1,902,872. ROOFING. LEONARD F. LONG, Montreal, Quebec, Canada, assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 22, 1928. Serial No. 327,839. 5 Claims. (Cl. 154—51.)



1. As an article of manufacture, a sheet of roofing material comprising a plurality of superimposed felt sheets, at least one of which is formed with projections forming pockets for the reception of coating material and extending toward an adjacent sheet so that the space between the surfaces of the projections and the overlying portions of the adjacent sheet is of less extent than the space between the recesses intervening said projections and the overlying portions of the adjacent sheet, a heavy coating of bituminous material being provided between the sheet having projections and the adjacent sheet and filling said intervening recesses.

1,902,873. CHAIN CONVEYING APPARATUS. ALFREDO MARONE, Santa Vittoria d'Alba, Italy. Filed May 28, 1930, Serial No. 456,414, and in Italy June 17, 1929. 1 Claim. (Cl. 198—189.)



In an endless conveyor, in combination with an endless chain with interlocked rings carrying means for conveying the articles, a tubular guide having a triangular cross section and a longitudinal slot substantially on the axis of one of the sides of the triangle, said guide closely embracing alternate chain rings, the outer rings partly engaging said slot, so as to prevent lateral displacements of the chain in the tubular guide during its travel in said guide.

1,902,874. DUST PROTECTOR DEVICE. JOHN F. MARTIN, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed Feb. 26, 1931. Serial No. 518,482. 5 Claims. (Cl. 286—5.)



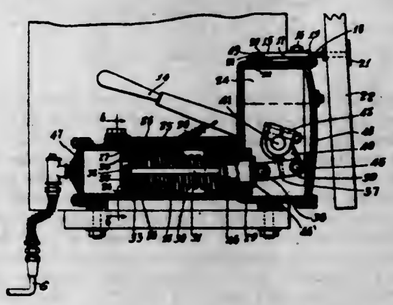
1. A protective device for apparatus arranged in an enclosing casing, with a rotary shaft entering the casing to drive said apparatus, said device including a member on the shaft and an element affixed within the casing adjacent one end and encircling said member adjacent the opposite end to be put under stress when the shaft revolves to cause the member to engage the shaft tightly and seal said casing.

1,902,875. PLOT MARKER. RALPH R. MASON, Pittsburgh, Pa. Filed Mar. 11, 1931. Serial No. 521,678. 2 Claims. (Cl. 189—21.3.)



1. A plot marker formed as a single metallic driving piece comprising a shank formed of intersecting ground engaging webs, a flattened marker head on said shank disposed at right angles to the longitudinal axis of the shank, one of said intersecting webs extended terminally to form a plane ground penetrating and engaging member with a penetrating edge lying at right angles to the longitudinal axis of the shank and extending in opposed directions outwardly from the shank, said member being of substantial depth throughout its lateral extent to present terminally disposed surfaces of relatively great area resisting turning movement of the marker when driven.

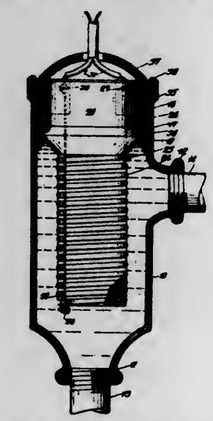
1,902,876. TANK TRUCK EMERGENCY VALVE SYSTEM AND CONTROLLER. JOSEPH H. MCEACHERN, San Francisco, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Original application filed Nov. 4, 1924, Serial No. 747,784. Divided and this application filed July 19, 1926. Serial No. 123,330. 7 Claims. (Cl. 60—54.5.)



7. In a hydraulic control system including hydraulic bellows for actuating parts in the system, the combination of pipes carrying liquid under pressure, a cylinder connected with the pipes, a piston having a forward head freely movable in the cylinder and having a rear head freely movable in the cylinder, a spring located between the said heads, a rod connecting said heads and limiting the separation of said heads by the spring, said rod being capable of a relatively sliding movement with respect

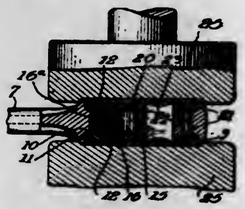
to the rear head when the same is moved forwardly, and means for forcing the rear head forwardly to apply pressure to liquid in the cylinder, said spring operating to limit said pressure.

1,902,877. ELECTRIC FLUID HEATER. WALTER J. BAKER, Wyckoff, N. J. Filed Sept. 18, 1931. Serial No. 563,600. 5 Claims. (Cl. 219—39.)



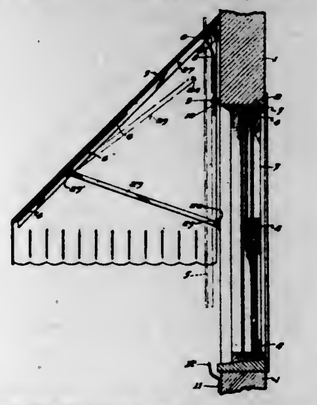
1. An electric fluid heater comprising an outer casing having a fluid inlet and a fluid outlet, an internal flange extending around said casing, a heating element, an enlarged annular portion on said heating element for engagement with said flange, and means having threaded engagement with said outer casing for securing said heating element in engagement with said flange.

1,902,878. RATCHET WRENCH. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed June 16, 1932. Serial No. 617,522. 1 Claim. (Cl. 81—61.)



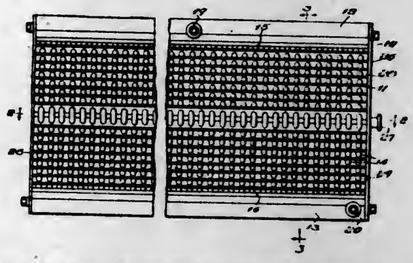
A ratchet wrench comprising a handle member having an opening extending through it at the end thereof for the reception of a socket-ratchet member, a pawl and a spring bearing thereagainst, flanges on each side of the handle member extending in opposite directions and circumscribing said opening, seats occupying parallel planes within the confines of the respective flanges and extending between said opening and the bases of said flanges, side plates resting against said seats and accurately lying within the embrace of said flanges, the thickness of said side plates being less than the height of said respective flanges, a socket ratchet occupying said opening and confined therein by said side plates for coaction with said pawl, said socket ratchet having cylindrical extremities, said side plates having opposed, aligned circular apertures which receive and constitute bearings for the cylindrical extremities of the socket-ratchet member, the outer edges of said flanges in the finished article overhanging and contacting the outer margins of said side plates firmly and permanently to retain the several parts of the wrench in assembled relation.

1,902,879. COMBINED AWNING AND SHUTTER. CHARLES F. MILLER, Miami, Fla. Filed Nov. 18, 1929. Serial No. 408,045. 15 Claims. (Cl. 20—59.)



1. A protective device for a window opening of a building involving a rigid member adapted to be disposed in a substantially vertical position to serve as a shutter for the opening and adapted to be moved bodily upward into an elevated and downwardly inclined position above said opening to serve as an awning for the latter, means secured to the building wall for supporting said rigid member in vertical position, means secured to the building wall above the said first-named means engageable with said rigid member to support the latter in elevated position, and members adapted to be interposed between the building and rigid member for maintaining the latter in an inclined position.

1,902,880. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Mar. 25, 1927, Serial No. 178,491. Divided and this application filed May 8, 1930. Serial No. 450,729. 9 Claims. (Cl. 257—136.)

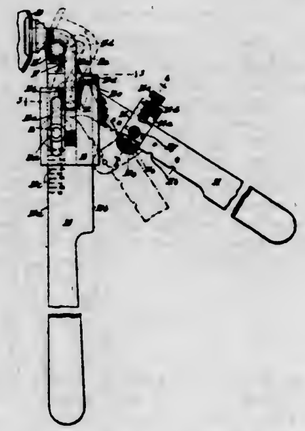


1. In a heat exchange device, the combination of a plurality of vertical spaced tubes, headers arranged at the opposite ends of said tubes and providing means connecting said tubes, a casing extending from one header to the other, a plurality of spaced fins in contact with said tubes arranged transversely of said tubes and at an angle to the vertical, said fins being arranged in sets, the fins of one set being disposed at an angle to the fins of another set and providing means for heating and inducing the directing of air into and out of said casing.

1,902,881. VALVE BENDING TOOL. GERRY A. MORGAN, Garden City, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 10, 1930. Serial No. 480,858. 6 Claims. (Cl. 81—15.)

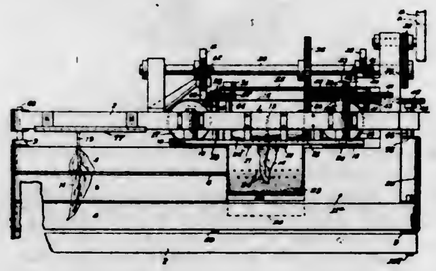
1. A tire valve bending tool comprising a pair of pivotally connected arms, a slide-block longitudinally adjustable

on one of said arms, said slide-block having a socket for receiving the inflating end of a valve stem and a curved surface over which said valve stem can be bent, and means



on the other of said arms for engaging the valve stem to bend it over said curved surface as the pivoted arms are moved relatively to each other.

1,902,882. TOBACCO LEAF STEMMING AND STRAIGHTENING MACHINE. JOHN O. MORRIS, deceased, Washington, D. C., by Carrie B. Morris, administratrix, Washington, D. C., assignor, by mesne assignments, to Tobacco Stemming Corporation, Dover, Del., a Corporation of Delaware. Continuation of application Serial No. 693,184, filed Feb. 16, 1924. This application filed Nov. 24, 1926. Serial No. 150,591. 13 Claims. (Cl. 131—57.)

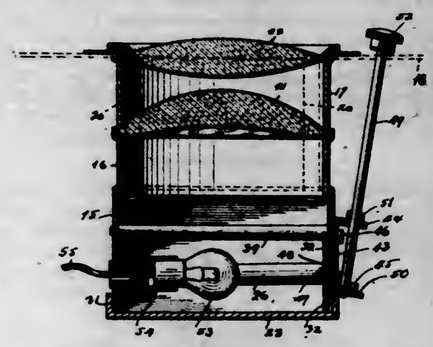


1. A tobacco stemming machine including intermittently operated stem gripping means, continuously operated stemming rolls and intermittently operated suction means to convey the stemmed leaf away from said gripping means, said rolls and suction means being arranged on opposite sides of the gripping means.

1,902,883. PRODUCTION OF VAT DYESTUFFS OF THE DIBENZANTHRONE SERIES. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, and JULIUS MUELLER, Mannheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Sept. 22, 1926, Serial No. 221,396, and in Great Britain Feb. 14, 1927. Divided and this application filed Aug. 4, 1928. Serial No. 297,551. 2 Claims. (Cl. 260—29.)

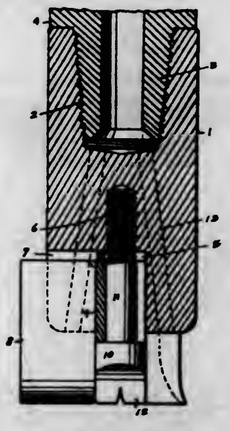
1. The process of producing a new valuable brown vat dyestuff which comprises treating with an oxidising agent the vat dyestuff obtainable by treating in an alcoholic caustic potash melt at between 120 and 200° C. aminobensanthrone, which is derived from the nitrobensanthrone obtainable by treating bensanthrone with nitric acid in boiling glacial acetic acid.

1,902,884. MAP DISPLAY DEVICE FOR MOTOR VEHICLES. WALTER WAGNER, Park Ridge, Ill. Filed Nov. 9, 1931. Serial No. 574,013. 9 Claims. (Cl. 40—95.)



1. In a map display device of the character described, a casing, magnifying lenses set into one end of the casing, a pair of map drums journaled in the casing below the lenses with the strip run of the map traversing the lenses, illuminating means in the casing inwardly of the strip run, gear connections between the map drums and operating means for the gear connections disposed exteriorly of the casing, and including a bracket plate on the outer side of the casing having angle arms, a shaft journaled in said angle arms, a gear on said shaft and said casing having an opening therein through which the last named gear extends for communication with the gear connections between the map drums.

1,902,885. DRILL. JEDDY D. NIXON, Houston, Tex. Filed June 29, 1931. Serial No. 547,609. 5 Claims. (Cl. 255—61.)

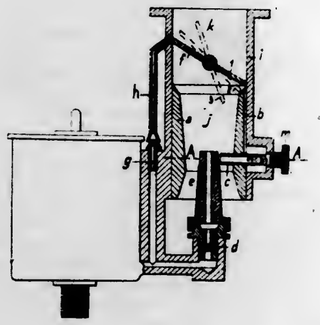


1. A drill including a head, detachable blades therein said head having downwardly flared slots and said blades having upwardly tapered portions in said slots, arcuate tenons on the inner margins of the blades, a center drill engageable against the lower ends of said tenons and having a shaft fitted between, and surrounded by the tenons which has a threaded connection with said head, said center drill being turnable, relative to the head during drilling operations, to exert a pressure against said blade tenons.

1,902,886. PREPARED FUEL AND METHOD OF PRODUCING IT. BENJAMIN F. J. ODELL, Chicago, Ill. Filed Jan. 9, 1931. Serial No. 507,762. 5 Claims. (Cl. 44—6.)

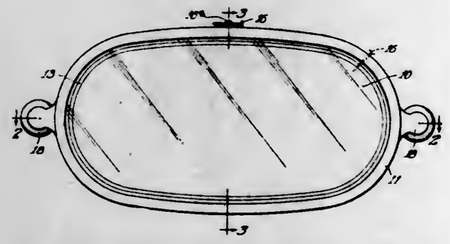
1. The method of producing a prepared fuel, comprising spraying on the surface of a solid fuel an atomized emulsified mixture of water, and an oil-like material comprised only of components boiling at temperatures above those of benzol and naphthalene, the amount of said oil-like material in the emulsion being 20 to 50 per cent.

1,902,887. CARBURETOR. RENÉ OPPENHEIM, Gennevilliers, France, assignor to Société Anonyme le Carbone, Gennevilliers, France. Filed Dec. 30, 1930, Serial No. 505,541, and in France Jan. 7, 1930. 4 Claims. (Cl. 261—41.)



1. A carburetor including the combination of two nozzles, one of which is for slow speed and the other nozzle for normal speed, a porous hollow body associated with the normal speed nozzle and forming the terminus thereof, a conduit for the slow speed nozzle, an auxiliary conduit terminating at one end in the vicinity of the normal speed nozzle and a controllable valve for opening and closing the other end of said auxiliary conduit at will.

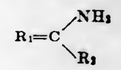
1,902,888. FROST ELIMINATOR FOR VEHICLES. HERMAN PAQUETTE, Chicago, Ill. Filed Oct. 26, 1931. Serial No. 571,194. 3 Claims. (Cl. 20—40.5.)



1. A device of the class described comprising a panel formed of transparent material adapted to be secured to a window in spaced parallel relation thereto, a frame surrounding the marginal edges of said panel and secured thereto, a continuous resilient flange extending rearwardly from the frame and adapted to be pressed against the window upon applying the device to the latter, and means operable upon pressing the flange against the window to permit the air in the space defined by the flange to escape.

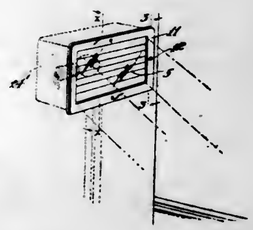
1,902,889. UREA CONDENSATION PRODUCTS AND PROCESS OF MAKING THEM. MAX PAQUIN, Konigstein-on-Taunus, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Original application filed Sept. 30, 1927, Serial No. 223,232, and in Germany Oct. 4, 1926. Divided and this application filed Aug. 31, 1928. Serial No. 303,368. 12 Claims. (Cl. 260—2.)

1. The process of preparing condensation products, which comprises causing to act upon each other at a temperature between about 0 and about 300° C. an amidocarbonic acid derivative of the following constitution:



wherein R_1 stands for oxygen or sulfur and R_2 for NH_2, NH-acyl, °-alkyl or °-aryl and an excess of a compound containing an alcoholic hydroxy group and a metal selected from the group consisting of the alkaline and alkali-earth metals, zinc and cadmium.

1,902,890. WALL FIXTURE. RICHARD O. PFEIFFER, Newark, N. J. Filed June 8, 1931. Serial No. 542,893. 8 Claims. (Cl. 240—73.)

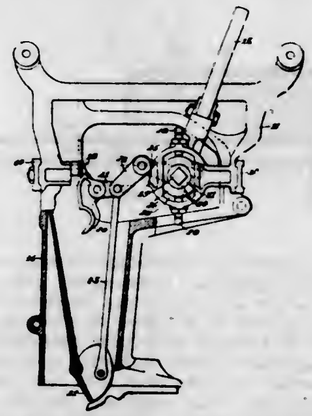


1. In a device of the character described, a base member provided with an upstanding bracket having a series of spaced apertures, a strip removably secured to said base member opposite said bracket and provided with aligned apertures, and a plurality of louvers provided with reduced ends loosely passing through the apertured portions of said bracket and strip, and a fulcrum plate provided with apertures, said louvers being further provided with fulcrum pins extending beyond said bracket and loosely passing through the apertures in the fulcrum plate, said bracket having a series of spaced recessed portions to receive the fulcrum pins when the louvers are moved to their closed position.

1,902,891. CHECK ROW PLANTER. JAMES H. PINSON, Richmond, Ind., assignor to International Harvester Company, a Corporation of New Jersey. Filed Jan. 14, 1931. Serial No. 508,735. 4 Claims. (Cl. 111—38.)

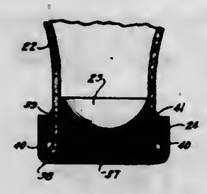
1. In a grain planter a frame structure, seed dispensing means mounted thereon at laterally spaced locations, seed depositing means extending downwardly from the dispensing means, each of the depositing means comprising a boot formed with a seed passage therethrough, a discharge valve controlling said seed passage, an actuating

link extending upwardly from the valve, a check row rock shaft mounted transversely of the frame structure, lever arms joining each of the valve actuating links to



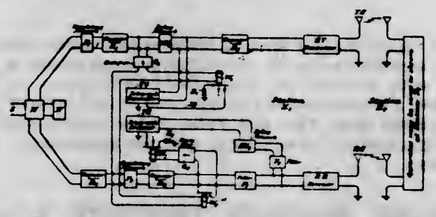
the rock shaft, and means for vertically adjusting the ends of the rock shaft with respect to the frame structure whereby the discharge timing of the valves is altered.

1,902,892. BOTTLE STOPPER AND FLASK CONNECTER. FRANCIS M. POTTENGER, JR., Monrovia, and EDWIN G. HOUSE, Los Angeles, Calif. Filed Aug. 29, 1931. Serial No. 560,072. 6 Claims. (Cl. 215—41.)



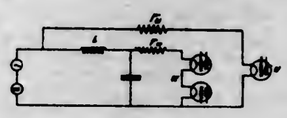
1. The combination with a bottle of: a rubber plug inserted in the mouth of the bottle; a rubber skirt integral with the plug and rolled over the rim of the bottle; and two spaced, divergent, annular flanges integral with the skirt embracing the bottle neck, the two flanges forming with the skirt and bottle neck a vacuum-sustaining annular space.

1,902,893. SIGNALING SYSTEM. RALPH K. POTTER, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Mar. 1, 1928, Serial No. 258,378. Renewed May 27, 1929. 6 Claims. (Cl. 250—9.)



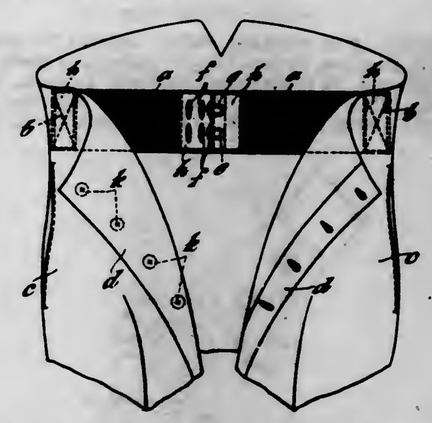
1. A radio signaling station comprising a voice frequency circuit including a hybrid coil and a balancing network, said voice frequency circuit being capable of transmitting and receiving voice frequency signals without distortion, a telegraph transmitter for generating telegraph signals, a telegraph receiver for receiving telegraph signals, a transmitting radio antenna, a receiving radio antenna, a radio transmitter including a source of current of high frequency upon which the signals to be transmitted through said radio transmitter may become modulated, a radio receiver including a similar source of current of high frequency for demodulating signals received through said receiving radio antenna, automatic means to prevent the telegraph transmitter from generating telegraph signals when voice frequency signals are being transmitted through said voice frequency circuit, and automatic means including a rectifier and a relay responsive to received voice frequency signals to prevent the telegraph receiver from receiving telegraph signals when the receiving antenna is receiving modulated voice frequency signals.

1,902,894. CURRENT SOURCES. RUDOLF RECHNITZER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany., Filed Nov. 14, 1929, Serial No. 407,097, and in Germany Nov. 8, 1928. 4 Claims. (Cl. 250—27.)



1. In apparatus for supplying the filaments of thermionic tubes having different amplification factors, a source of pulsating direct current, means for connecting the filaments of the high amplication tubes in series through an inductance and resistance with said source, and means for connecting the remaining tube filaments through said resistance in series with said source.

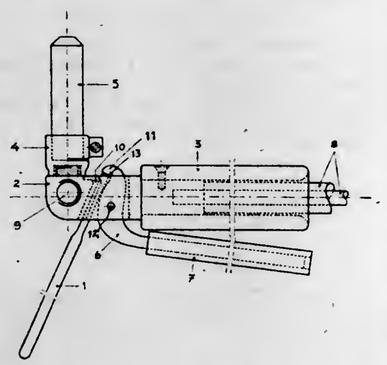
1,902,895. SUPPORTING MEANS FOR TROUSERS AND THE LIKE. FREDERICK JOSEPH CHARLES SMITH, London, England, assignor to Tenova Limited, London, England, a British Company. Filed Nov. 19, 1932, Serial No. 643,483, and in Great Britain Oct. 30, 1931. 2 Claims. (Cl. 2—287.)



1. A supporting means for trousers and like garments provided with usual complementary front fastening devices, said supporting means comprising aligned bands having elastic sections, each band being provided at its outer end with a reinforcing tab of substantially non-elastic material and said tabs being adapted for permanent securement to the garment and within the waist band thereof at about the wearer's hips, the inner meeting ends of said bands being provided with a series of complemen-

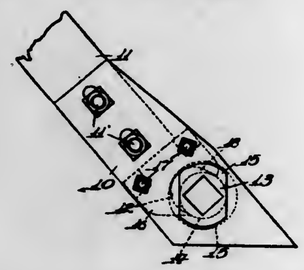
tary detachable fasteners whereby the effective length of the bands may be adjusted, said bands, when fastened as aforesaid, extending across the abdomen of the wearer and acting as a support therefor, and the bands being otherwise unattached to the garment whereby the front fastening devices thereof may be undone independently of the supporting means and without affecting the support provided the garment by said supporting means.

1,902,896. DEVICE FOR THE ELECTROTHERMIC TREATMENT OF METALS. WILLIAM SCHABELITZ, Lucerne, Switzerland. Filed Feb. 27, 1931, Serial No. 518,875, and in Switzerland Feb. 28, 1930. 1 Claim. (Cl. 219—8.)



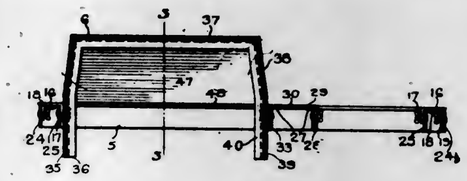
An electrical soldering or welding device comprising an insulated handle having a head provided with sockets at a right angle to each other, said sockets being each constructed to hold a preheating electrode, said head being also constructed with an opening for holding a welding electrode, and means for clamping said electrodes to said head, said clamping means for the preheating electrode consisting of a clamping sleeve fitting either of said sockets, and said clamping means for the welding electrode consisting of a cam lever.

1,902,897. ROD WEEDER SHOE. CHARLES W. ROBINSON, Hamilton, Ontario, Canada, assignor, by mesne assignments, to International Harvester Company, Chicago, Ill., a Corporation of New Jersey. Filed Dec. 18, 1931. Serial No. 581,828. 4 Claims. (Cl. 97—42.)



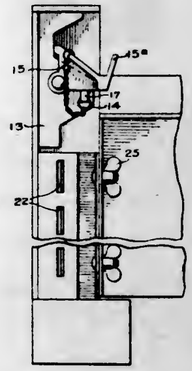
1. A rod weeder shoe comprising a flat thin shoe member substantially uniform in thickness, a transverse opening formed therein, a rotatable journal member extending through said opening, said shoe member forming a narrow bearing surface at the front of said journal member, and a bearing member removably supported on the shoe member and presenting a wide bearing surface at the rear of the journal member.

1,902,898. APPARATUS FOR FORMING CONCRETE FLOORS. HENRY W. ROOS, Cincinnati, Ohio. Filed Mar. 13, 1930. Serial No. 435,466. 2 Claims. (Cl. 25—131.5.)



2. A unit form for concrete floor molds comprising a substantially rectangular frame having a pair of openings therein and cut away at its corners to engage the sides of shore tops in the plane of which the frame is adapted to be mounted, said frame comprising side and end members and a bridge connecting said end members and separating the openings of said pair, each of said side members and bridge comprising two parts, a downwardly projecting flange on the outer side of each part of said side members, a plurality of brackets on the side members of one of said parts having downwardly projecting flanges spaced inwardly from said first mentioned flanges, bars secured to and between the flanges on said brackets and side member and projecting therefrom to overlap and engage the flanges on the side members of the other part of the frame, and means for securing said bars to said flanges on the other part for retaining the parts of the frame in adjusted position.

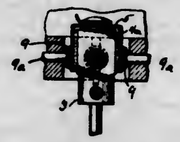
1,902,899. APPARATUS FOR FORMING CONCRETE FLOORS. HENRY W. ROOS, Cincinnati, Ohio. Filed Mar. 13, 1930. Serial No. 435,468. 8 Claims. (Cl. 25—131.5.)



1. Apparatus for forming concrete floor molds, comprising a shore having an upright support comprising a pair of walls arranged at substantially right angles to each other, a top secured to the upper end of said support with its edges flush with said walls, and a bracket mounted on the support between said walls for supporting a floor form.

1,902,900. ELECTRICAL PHONOGRAPH PICK-UP. SAMUEL RUBEN, New Rochelle, N. Y. Filed Oct. 24, 1930. Serial No. 490,903. 14 Claims. (Cl. 179—100.4.)

1. A phonograph pick-up comprising a vibratory stylus and a pressure sensitive electrode composed of vanadium pentoxide, said electrode constituting a part of an electrical circuit and said stylus being adapted to vary the



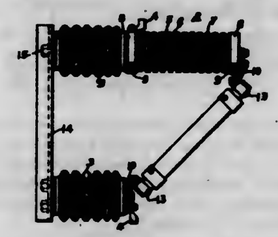
pressure on said electrode in accordance with mechanically recorded vibrations to translate the latter into electrical undulations in the electrical circuit.

1,902,901. ELECTRICAL STUNNING DEVICE. HENRY DELANO TEFFT, Chicago, Ill. Filed Jan. 21, 1932. Serial No. 588,015. 5 Claims. (Cl. 175—265.)



1. A device for stunning animals electrically, comprising an operating handle, an arcuated skull engaging electrode on the handle, and a movable forehead engaging electrode on the handle.

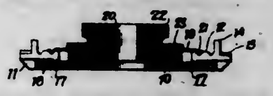
1,902,902. COMBINATION FUSE AND CURRENT LIMITING RESISTOR. JEROME SANDIN, East Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 16, 1928. Serial No. 285,799. 13 Claims. (Cl. 201—63.)



1. A fuse structure comprising a fuse, a pair of insulating supports therefor and a resistor in series with the fuse and mounted coaxial with one of said supports.

12. The combination with a fuse of a pair of insulating supports therefor, a resistor having an insulating body separate from said fuse and supported solely from one of said insulating supports and electrically connected in series with said fuse and said fuse being removable from said pair of insulating supports independently of said resistor.

1,902,903. DESIGN WHEEL. JOSEPH J. SANDERS, Philadelphia, Pa., assignor to H. Brinton Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 8, 1931. Serial No. 549,558. 2 Claims. (Cl. 66—50.)



1. In a design wheel, a body member having radially extending slots in a side face thereof, inserts in said slots movable into an outer active position or an inner inactive position, a resilient disk bearing on the inner ends of said inserts, and rigid means for holding the disk in place.

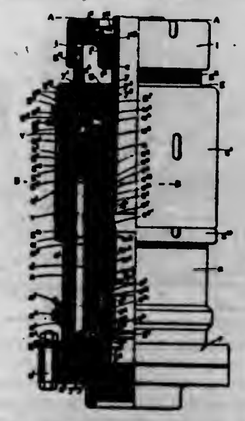
1,902,904. PROCESS FOR PREPARING THYMOL. KARL SCHÖLLKOPF, Dusseldorf-Oberkassel, and ARTHUR SERINI, Dusseldorf-Heerdt, Germany, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung, Dusseldorf-Oberkassel, Germany, a German Company. Filed Jan. 5, 1931, Serial No. 506,747, and in Germany Oct. 12, 1927. 11 Claims. (Cl. 260—154.)

1. A process for preparing thymol (5-hydroxy-1-methyl-4-isopropyl-benzene) which consists in causing propane derivatives in which one hydrogen atom of propane is substituted by a negative group to react with m-cresol at temperatures from 100° C. to 400° C. and subjecting the reaction product obtained to fractional distillation.

1,902,905. PROCESS OF WORKING MAGNESIUM AND HIGH PERCENTAGE MAGNESIUM ALLOYS BY ROLLING. GUSTAV SCHREIBER, Bitterfeld, Germany, assignor, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Filed Dec. 10, 1931, Serial No. 580,220, and in Germany Dec. 16, 1930. 6 Claims. (Cl. 148—21.3.)

1. A process of producing rolled articles from magnesium and high percentage magnesium alloys, which comprises subjecting the metal as cast to a plastic deformation by the application of specific pressures which are moderate as compared with those exercised by a rolling mill, and which act on a considerable portion of the boundary surfaces of the cast metal, and then rolling such deformed metal.

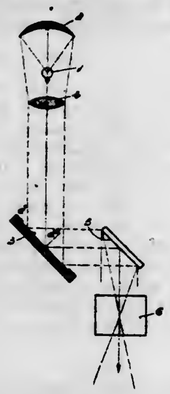
1,902,906. CASING HEAD EQUIPMENT. LEWIS MERVYN CECIL SEAMARK, Outer Down, Chagford, England. Filed Sept. 3, 1931, Serial No. 560,998, and in Great Britain Aug. 12, 1931. 20 Claims. (Cl. 166—14.)



1. A casing head equipment comprising a stationary casing, a rotor within the said casing, a packing device within the said roter and adapted to be contracted under

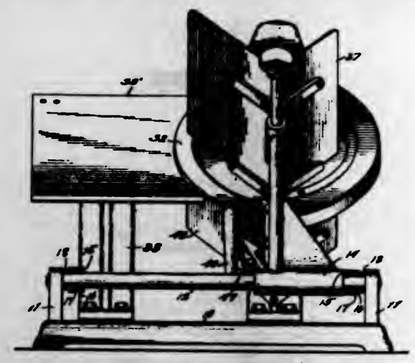
pressure externally applied, means for the application of pressure externally to the said packing device, jointing faces on parts of the said rotor, packers for the said jointing faces, and means to render the said packers accessible to the pressure applied externally to the said packing device.

1,902,907. EPISCOPIC PROJECTOR. CHRISTIAN SEMENITZ, Berlin, Charlottenburg, Germany, assignor to Reinhold Kupfer, Berlin, Germany. Filed July 22, 1931, Serial No. 552,471, and in Germany July 23, 1930. 2 Claims. (Cl. 88—24.)



1. A device for recording or reproducing pictures applied upon a non-transparent image band having a reflecting surface, comprising a source of light, a support for the image band and a mirror of reflection, said elements being so disposed that the light rays fall at an angle of less than 25° on the surface of the image band and are reflected by said image band at an angle of equal value, the reflecting surface of the image band being so highly polished that the surface acts as a mirror which reflects substantially all the rays falling on the image at the said small angle, at an angle of reflection of about the same value.

1,902,908. CUSHIONING DEVICE FOR SLICING MACHINES. ANTON C. SENSOW, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Jan. 28, 1928. Serial No. 250,101. 4 Claims. (Cl. 146—102.)



1. In a slicing machine having a slicing knife and a work support, a slide rod upon which said work support is slidably mounted for reciprocation past the edge of said knife, said work support having oppositely directed recesses therein, a spring in each of said recesses, an abutment member against which one end of each spring bears,

stationary contact members, said abutment members each having a contact face adapted to engage one of said contact members at the end of each reciprocative movement to compress said springs and yieldingly retard the motion of said work support, one of said contact members being adjustably mounted on said slide rod to vary the length of the path of reciprocative movement of said work support.

1,902,909. DIESTOCK. VERNON L. WHEELER, Sault Ste. Marie, Mich. Filed Mar. 25, 1932. Serial No. 601,218. 1 Claim. (Cl. 10—128.)



A die stock comprising a socket forming a ring-shaped part having an internal flange spaced from its outer end forming a seat for a die placed in the socket part, a screw passing through a portion of the wall of the ring-shaped part for engaging a die placed in the socket part, a pair of opposed legs each having one end connected to an edge portion of the ring-shaped part, said legs converging upwardly and having straight parallel parts at their upper ends, and a tubular part having its lower edge connected to the upper ends of said legs, the bore of said tubular part being adapted to receive a handle or a member for knocking the die from the ring-shaped part and said bore and that portion of the handle received therein being of non-circular shape in cross section, said tubular part being formed integrally with the upper ends of the legs and having its exterior walls tapering upwardly.

1,902,910. ANTIFRICTION WHEEL AND AXLE CONSTRUCTION. ALFRED H. OELKERS, Chicago, Ill., assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 11, 1927. Serial No. 182,734. 78 Claims. (Cl. 295—36.)

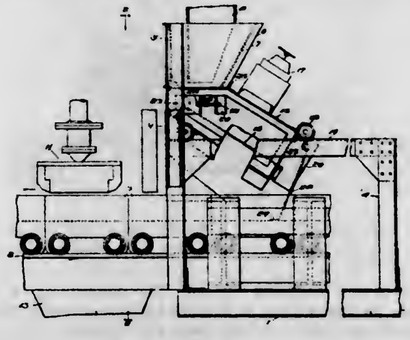


1. A railroad car axle construction comprising a tubular axle, and wheels fixed on the ends thereof, said axle being constructed to selectively receive anti-friction bearings at its ends and a stationary axle therethrough supported within said bearings, or a journal bearing member in fixed relation with said tubular axle.

1,902,911. SINTERING MACHINE. EDWARD W. SHALLOCK, Chicago, Ill., assignor to American Ore Reclamation Company, Chicago, Ill., a Corporation of New York. Filed Mar. 21, 1930. Serial No. 437,649. 7 Claims. (Cl. 266—21.)

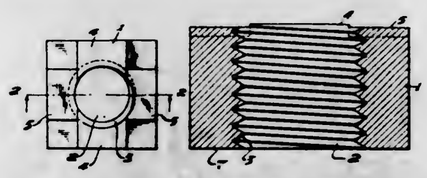
1. In a continuously operating sintering machine, a screen, pallets travelling in one direction beneath the screen, said screen being inclined downwardly and contra to the direction of travel of the pallets, said pallets having

grates for reception of material to be sintered and the space beneath the screen and between the underface thereof and the pallet grates being unobstructed, and means for



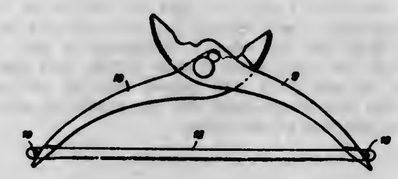
delivering upon the upper face of the screen and adjacent the upper end thereof material to be sintered and including both fines and aggregates.

1,902,912. LOCK NUT AND PROCESS OF MAKING. WILLIAM E. SHARP, Chicago, Ill. Filed Mar. 5, 1930. Serial No. 433,373. 14 Claims. (Cl. 151—21.)



1. The process of making a lock nut, comprising forming a blank with a ridge extending across one face thereof and intersected by the bolt hole, and another ridge angularly disposed with respect to the first ridge, intersected by the bolt hole, and with its top face at a different elevation, forming a thread in said nut, and thereafter applying pressure to the ridges, whereby parts of the threads in line with the higher ridge on each side of the bolt hole are deflected to form locking portions, and parts of the threads in line with the other ridge squeezed together, to take up the normal slack with respect to the threads on a corresponding bolt.

1,902,913. PLIERS. FREDERICK SIEVERS, McKeesport, Pa. Filed Jan. 9, 1931. Serial No. 507,658. 1 Claim. (Cl. 7—4.)

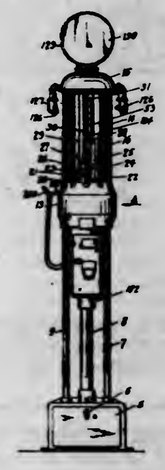


Pliers having the outer ends of their handles bifurcated for the reception of a blade which is provided with transversely-extending pins at its ends, the outer sides of the bifurcated portions serving as seats for the pin and lying upwardly and inwardly-inclined positions when the plier handles are spread for engagement with a saw blade.

1,902,914. DUPLICATING STENCIL. HANS SIMON, Hanover, Germany, assignor to Gunther Wagner, Hanover, Germany, a Corporation of Germany. Filed June 15, 1931, Serial No. 544,701, and in Germany Apr. 20, 1931. 12 Claims. (Cl. 41—38.6.)

9. A coating for duplicating stencils comprising a mixture of hardened gelatin, a softening agent and a permanent finely divided substantially insoluble organic filler.

1,902,915. AUTOMATIC VENDING MACHINE. LEWIS P. STARKEY, Fort Collins, Colo. Filed Dec. 1, 1930. Serial No. 499,321. 15 Claims. (Cl. 221—100.)



1. In an apparatus for dispensing liquids, a liquid supply, a measuring chamber, a pump to transfer liquid from the supply to the measuring chamber, a motor for the pump, a circuit for the motor, two switches connected in series in said circuit, one switch being normally in a circuit breaking position, the other switch being normally in a circuit closing position, a coin controlled circuit adapted to move the first noted switch to a circuit closing position whereby to actuate the pump, and a float controlled by overflowing liquid pumped to the measuring chamber, to move the second noted switch to a circuit breaking position at a predetermined point in the operation of the apparatus.

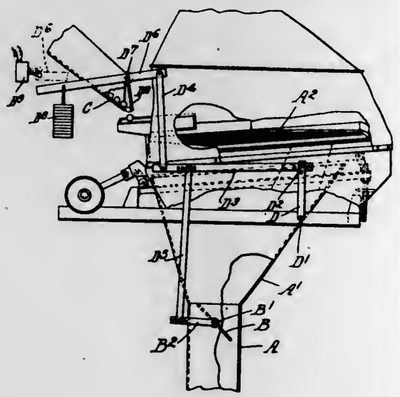
1,902,916. PROCESS FOR DECOMPOSING PLANT FIBER MATERIAL BY COOKING WITH PHENOLATES. OTTO HEINRICH STRECKER, Darmstadt, Germany, assignor to the Firm Dr. Otto C. Strecker, Darmstadt, Germany, a Company of Germany composed of Otto Carl Strecker and Gerald Strecker and Otto Heinrich Strecker. Filed June 7, 1930, Serial No. 459,843, and in Germany June 7, 1929. 8 Claims. (Cl. 92—9.)

1. A process for the purposes set forth, characterized in that the content of free phenol or the like is from time to time during the boiling process, at least about half as great as the amount which corresponds to the alkali content of the phenolates present.

1,902,917. CLASSIFYING TABLE. EARL STUMP, Chicago, Ill., assignor to Roberts and Schaefer Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 18, 1929. Serial No. 413,715. 8 Claims. (Cl. 209—502.)

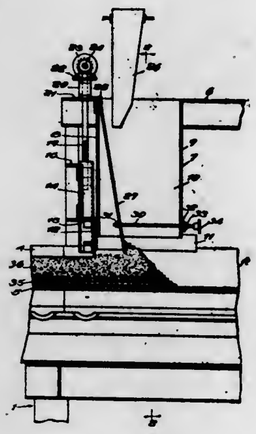
1. In combination with a material classifier, a continuous air supplying means therefor for forcing a constant supply of air through the classifier, means for feeding ma-

terial thereto and regulating means to vary the volume of said air supply, adapted to operate automatically in response to variations in the feed of material to said classifier whereby the supply of air is adjusted in accordance



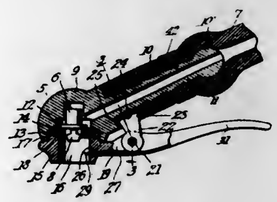
with requirements on the classifier table due to variations in the feed of material thereto, said regulated means arranged to permit a minimum of air to pass, irrespective of its setting.

1,902,918. SINTERING MACHINE. GEORGE E. SWINEHART, Buffalo, N. Y., assignor, by mesne assignments, to American Ore Reclamation Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1930. Serial No. 436,924. 4 Claims. (Cl. 214—35.)



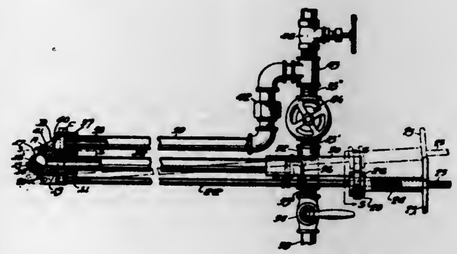
1. In combination in a sintering machine, a plate, a grate structure traveling beneath the plate, the plate being inclined downwardly and contra to the direction of travel of the grate structure, and means for delivering material to be sintered to the plate remote from the lower end thereof and in a freely flowing stream against the rear inclined face of the plate.

1,902,919. COUPLING. FRANK A. TALBOT, Greenville, S. C. Filed June 28, 1928. Serial No. 288,967. 16 Claims. (Cl. 285—173.)



1. A pump coupling or the like comprising a body portion having a bore, a flexible locking member slidable into said bore and normally extending therein, and means for flexing said member to slide the same outwardly in said bore.

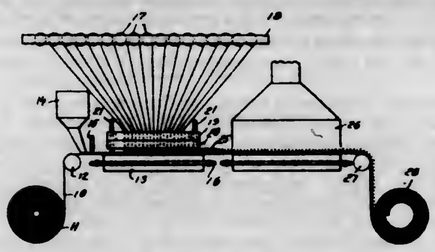
1,902,920. BURNER FOR LIQUID OR SEMILIQUID FUEL. REGINALD W. TITMAS, London, England, and ROBERT S. HICKISH, La Ceiba, Spanish Honduras, assignors to Titmas Company, Inc., New Orleans, La., a Corporation of Louisiana. Filed Aug. 24, 1931. Serial No. 559,084. 2 Claims. (Cl. 299—143.)



1. A burner of the class described, comprising a nozzle for steam or other atomizing agent and a passage for liquid fuel, said fuel passage being located below said nozzle, a valve seat extending across said passage and having a lip located between said valve seat and said nozzle, and a valve rotatably mounted in said valve seat and having a groove presenting a bottom wall sloping forwardly from said fuel passage in the direction of said nozzle in all open positions of said valve, said valve groove also presenting a front wall extending upwardly from the front edge of said bottom wall and located forwardly beyond said lip in all open positions of the valve, the inclination of said bottom wall with relation to said fuel passage and the upward inclination of said front wall from the front edge of said bottom wall and the position of said front wall beyond said lip serving to deflect the fuel transversely into the atomizing agent in all open positions of the valve.

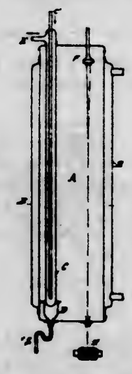
1,902,921. METHOD OF MAKING PILE FABRICS. GARFIELD J. UNDERWOOD, Amsterdam, N. Y., assignor to Mohawk Carpet Mills, Inc., Amsterdam, N. Y., a Corporation of New York. Filed Jan. 23, 1932. Serial No. 588,355. 8 Claims. (Cl. 154—2.)

1. A method of making pile fabrics, which comprises producing a base having an adhesive surface, guiding and separately embedding in said surface the ends of a plurality of pile yarns drawn from separate supplies to be



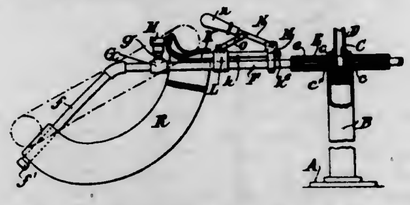
bound to the base by said surface, and severing said yarns between said surface and the sources of supply.

1,902,922. APPARATUS FOR DRY-SPINNING ARTIFICIAL TEXTILE FIBERS WITH RECOVERY OF THE VOLATILE SOLVENTS. ETTORE VIVIANI, Milan, Italy. Filed Sept. 19, 1928, Serial No. 306,940, and in Italy Apr. 7, 1928. 16 Claims. (Cl. 18—8.)



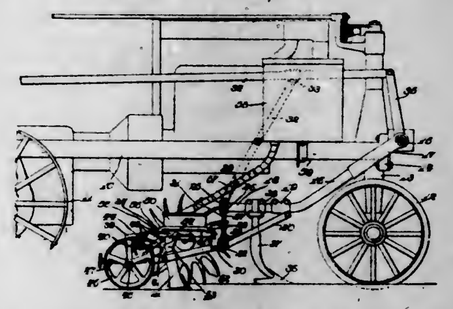
1. In the apparatus for dry spinning artificial textile fibers with recovery of the solvent contained in the spinning solution, the combination of a spinning cell provided with a spinning nozzle, means for effecting vaporization and condensation of the solvent within the cell while in direct open communication with the body of the vapors therein, and means for collecting the condensate.

1,902,923. DEFLATING MACHINE. JOHN WAHL, Rosedale, N. Y., assignor to A. Schrader's Son, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 5, 1930. Serial No. 433,371. 10 Claims. (Cl. 154—9.)



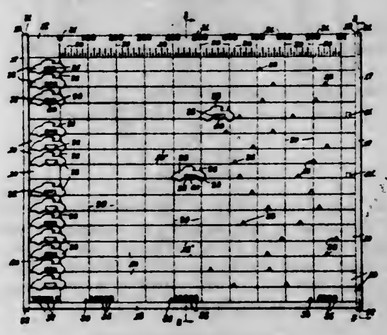
1. In a deflating machine for pneumatic tubes or the like, a valve opener, means for bodily supporting the tube, said means being movable with the tube to present the free end of the tube valve to the opener, and means normally urging the tube supporting means toward the opener.

1,902,924. PLANTER ATTACHMENT FOR TRACTORS. WILLIAM F. WAMHOFF, Emblem, Wyo., and WILLIAM H. THOMPSON, Canton, Ill., assignors to International Harvester Company, a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,820. 10 Claims. (Cl. 111—63.)



1. A tractor seed planter comprising the combination with a tractor frame of a draft means pivotally secured at the front of the tractor frame laterally thereof on a transverse axis, a planter frame structure attached to the draft means, a rolling support for said structure, a seed dispensing mechanism and a seed hopper mounted thereon, a shaft adapted to operate said mechanism, a wheel mounted on said shaft operable to engage the ground and to drive said mechanism, a seed tank mounted on the tractor frame, and means adapted to deliver seed from said tank to the hopper.

1,902,925. SALES INDICATOR. GEORGE M. WARD, East Weymouth, Mass. Filed July 15, 1932. Serial No. 622,585. 16 Claims. (Cl. 116—135.)

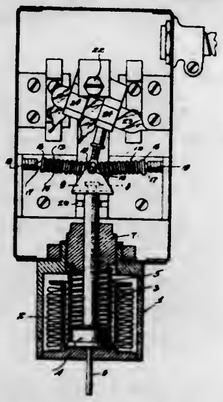


1. A board provided with a plurality of parallel slots; a name plate movably mounted in each slot; a graduated scale above and parallel with said slots; a plurality of movable pointers adapted to be positioned in said slots; and a plurality of clips provided with figures adapted to be clamped to said scale.

1,902,926. CONTROL DEVICE FOR ELECTRIC CIRCUITS. FRANK R. WEST and THOMAS E. CARPENTER, Detroit, Mich.; said Carpenter assignor to said West. Filed Dec. 24, 1927. Serial No. 242,490. 9 Claims. (Cl. 200—67.)

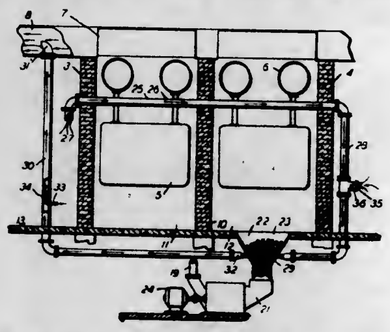
9. A control switch for electrical circuits, comprising in combination a pivotally mounted bulb of the mercury spaced terminal type, a power operated plunger movable toward and from said pivotally mounted mercury bulb, a shoe carried by the top of said plunger and having a lost motion connection therewith, a pin in the top of said shoe, spring pressed toggle levers operatively contacting

with said pin and adjustably mounted in a position substantially at right angles with the movement of said plunger, and an adjustable link connecting said shoe and



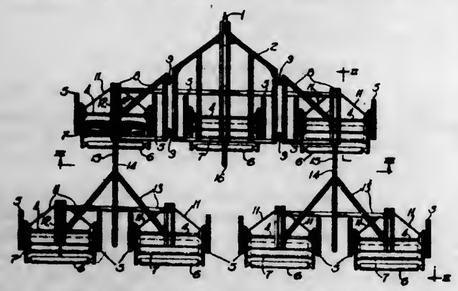
said pivotally mounted mercury bulb, the connection between said link and said shoe being by means of a pin-and-slot.

1,902,927. HEATING AND DRYING APPARATUS. WILLIAM E. WESTON, Kansas City, Mo. Filed May 12, 1930. Serial No. 451,790. 6 Claims. (Cl. 34—18.)



1. In combination with a furnace having a flue, and means including a fuel containing chamber member for supplying fuel to the furnace, an air conduit located to receive heat from the furnace and having a portion located to transmit heat to said chamber member and an outlet end extending into the flue.

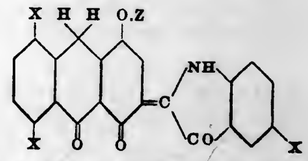
1,902,928. GANG LAWN MOWER. CHARLES C. WORTHINGTON, Dunfield, N. J. Filed July 29, 1931. Serial No. 553,709. 5 Claims. (Cl. 56—7.)



1. A gang lawn mower comprising a center front frame section, a side section horizontally hinged to each side thereof, lawn mower units respectively connected to each of said sections by means holding their several wheel-axes to a common vertical transverse plane, a tail piece on each hinged section and a rear row unit flexibly coupled to said tail piece.

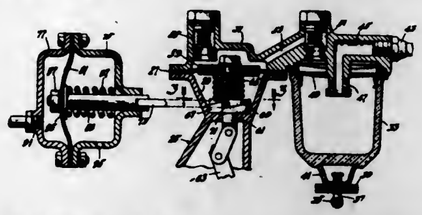
1,902,929. CONDENSATION PRODUCT OF ISATIN-α-ANILIDE AND SUBSTITUTED ANTHRONES AND PROCESS OF PRODUCING SAME. KARL ZAHN, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 4, 1930, Serial No. 459,260, and in Germany July 16, 1929. 9 Claims. (Cl. 260—49.)

5. As new products, compounds of the following general formula:



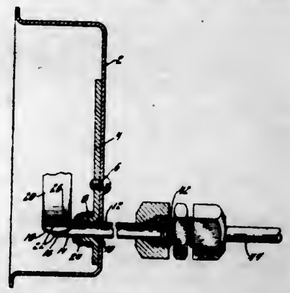
wherein X stands for hydrogen or chlorine and Z for methyl or ethyl being vat dyestuffs of very good fastness properties.

1,902,930. FUEL PUMP. JOSEPH ZUBATY, Flint, Mich. Filed Mar. 9, 1928. Serial No. 260,419. 6 Claims. (Cl. 123—139.)



1. In a fuel supply system for internal combustion engines, a carburetor having a sealed float chamber and an air inlet, a supercharger delivering air under pressure to said air inlet, a conduit from said air inlet to said float chamber, a pump having a yielding member to effect a discharge stroke, a movable abutment therefor, a variable volume chamber, a conduit therefrom to said air inlet, a plunger reciprocable by air pressure in said chamber, said plunger operably connected to said variable abutment whereby the potential energy of the yielding member is modified by movements of the plunger.

1,902,931. PRESSURE GAUGE. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 20, 1928 Serial No. 307,068. 4 Claims. (Cl. 73—109.)



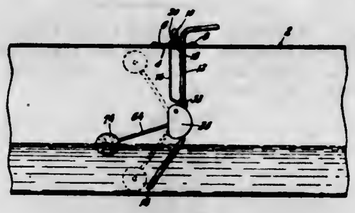
4. In a gauge, a casing, a frame mounted in said casing, an integral projection on said frame extending inwardly of said casing, a pressure transmitting tube of uniform cross section in said projection and extending a short way into said casing, a soldered connection between said tube and projection extending entirely over said projection, and a Bourdon tube having a portion thereof mounted directly in said pressure tube and extending at right angles thereto.

1,902,932. INSTRUMENT MOUNTING. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Aug. 23, 1929. Serial No. 387,966. 6 Claims. (Cl. 236—34.)



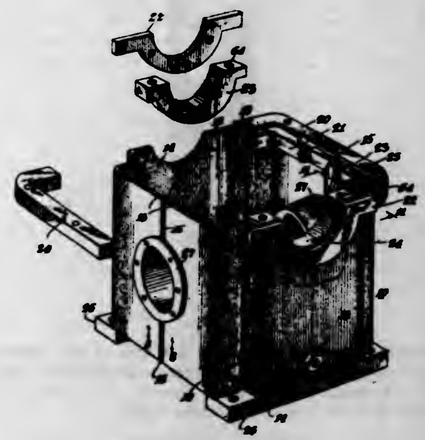
1. In combination with an internal combustion engine having a cooling system, an adapter comprising a folded metallic member having a retaining member formed therein, said adapter positioned at a joint in said system, and said retaining member adapted to receive a heat responsive member and to deliver heat thereto, said retaining member being positioned outside the joint and outside the cooling system.

1,902,933. ELECTRIC GASOLINE GAUGE. JOSEPH ZUBATY, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Sept. 29, 1930. Serial No. 485,107. 2 Claims. (Cl. 201—48.)



1. In an electric liquid level indicator for application to liquid containers, a pipe for the outflow of the liquid from the container, a bracket secured to and extending into the container adjacent the pipe, a housing within the container and secured to both pipe and bracket, means to secure said pipe and bracket permanently and rigidly together, a float arm pivotally mounted in the housing, a resistance in the housing, a float on one end of the arm movable in response to changes in liquid level caused by the outflow through the pipe, and a contact on the other end of the arm in the housing and adapted to move over the resistance in response to movements of the float.

1,902,934. GEAR CASING. GEORGE H. ACKER, Cleveland, Ohio, assignor to The Cleveland Worm and Gear Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 27, 1931. Serial No. 559,636. 8 Claims. (Cl. 74—56.)



1. In a casing for gearing, side and end walls, inner and outer members welded to said side walls and extending slightly above the upper edge thereof and forming an oil groove therewith, bearing pieces welded to said end walls and connecting with said groove, and means for supplying oil to said groove.

1,902,935. SLIDE. CARL E. ANDERSON, East Orange, N. J., assignor to Eastern Tool & Mfg. Co., Bloomfield, N. J. Filed June 12, 1931. Serial No. 543,891. 3 Claims. (Cl. 24—186.)

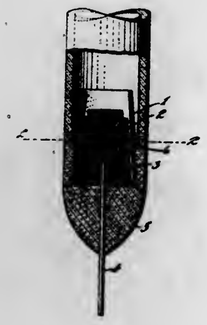


1. A slide consisting of a single sheet of metal punched to form three parallel bars and end bars, the top bar and the end bars being concavo-convex in cross section with the concave side at the back, the center bar being U-shaped with its recessed part toward the front, the bottom bar being elliptical in cross section with its rear portion formed of material bent over from above the bottom bar whereby a pair of jaws is formed for grasping and holding a strap when the jaws are squeezed together.

1,902,936. ELECTRODE FOR VAPOR GAS ELECTRIC DEVICES. WILLIAM T. ANDERSON, Jr., Newark, N. J., assignor to Hanovia Chemical and Manufacturing Company, Newark, N. J., a Corporation of New Jersey. Filed Mar. 8, 1932. Serial No. 597,461. 5 Claims. (Cl. 176—126.)

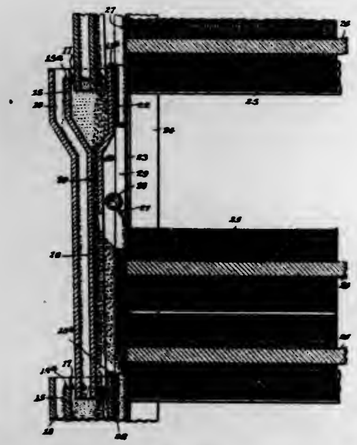
1. An electrode for vapor electric devices, comprising a gas tight vessel, an electrode mass formed of alkaline

earth oxide intimately mixed with weakly basic metallic oxides, a sleeve surrounding said electrode mass, and a plurality of pieces of metal distributed throughout the



electrode mass and contacting the wall of the sleeve, said metal pieces being of higher thermal conductance than the electrode mass to conduct a portion of the heat of the electrode mass to the wall of the sleeve.

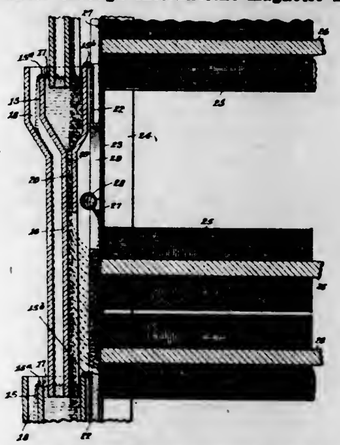
1,902,937. METHOD FOR AUTOMATIC ELECTROMAGNETIC WET SEPARATION. HARRY B. ARDEN, New York, N. Y. Filed Oct. 11, 1928, Serial No. 311,869. Renewed Feb. 24, 1932. 6 Claims. (Cl. 209—214.)



1. The method of automatic, electro-magnetic wet separation which consists in passing downwardly a substantially vertical, smooth-flowing stream of magnetic ore and water through an intermittent magnetic field which separates the magnetic from the non-magnetic material carried by the stream.

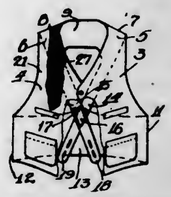
1,902,938. MEANS FOR AUTOMATIC ELECTROMAGNETIC WET SEPARATION. HARRY B. ARDEN, New York, N. Y. Refile of application Serial No. 502,117, filed June 14, 1909. This application filed Oct. 11, 1928. Serial No. 311,870. Renewed Feb. 24, 1932. 16 Claims. (Cl. 209—232.)

1. Means for automatic, electro-magnetic, wet separation which consists of means for passing downwardly a substantially vertical, smooth-flowing stream of magnetic ore and water through intermittent magnetic fields, and



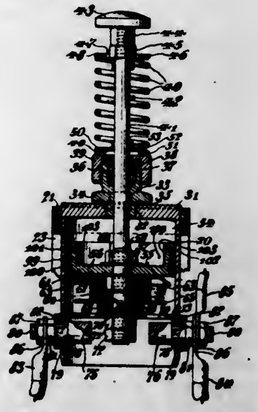
means for creating such fields whereby the magnetic material of the stream may be separated from the rest of the stream.

1,902,939. COMBINATION VEST AND SUSPENDERS. MARCUS ADLER, Chicago, and JOSEPH C. JANOSIK, Cicero, Ill. Filed Nov. 3, 1932. Serial No. 640,988. 8 Claims. (Cl. 2—102.)



1. In a vest and suspender combination, a vest front including shoulder portions, a swinging pocket secured to the vest front adjacent the upper edge of the pocket, suspender straps extending below said pocket and secured to the lower free edge of the pocket to uniformly distribute stress across the front and shoulder portions of the vest above said pocket without distorting the front of the vest.

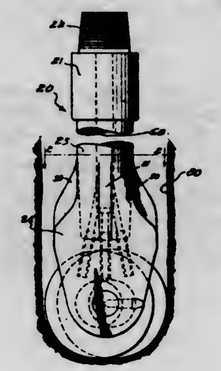
1,902,940. VACUUM CONTROLLED SWITCH FOR STARTING MOTORS. ARTHUR B. ALTHOUSE, Drexel Hill, Pa. Filed Mar. 17, 1931. Serial No. 523,221. 4 Claims. (Cl. 200—82.)



1. An automobile starter switch of the kind described comprising, a casing, a piston slidably mounted in said

casing, a rod secured to the piston, and a circuit-completing member secured to said rod and arranged between shock-absorbing material fastened to the rod, said circuit-completing member being coactingly engageable with contact members secured to the casing for completing an electric circuit.

1,902,941. ROTARY BIT. WALTER C. BAILEY, Norwalk, Calif. Filed Oct. 19, 1927. Serial No. 227,103. 12 Claims. (Cl. 255—71.)



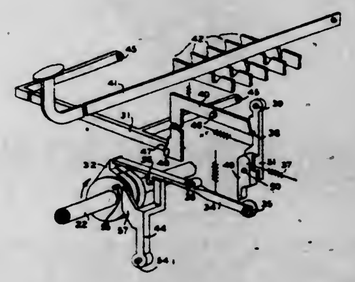
1. A rotary bit for drilling wells comprising: a drill bit body adapted to support a pair of cutters, there being a pair of pockets formed in said body on opposite sides of the axis thereof, said pockets being disaligned with each other, and a hole in said body which is aligned with each of said pockets; cutter bushings adapted to fit into said pockets, there being openings in said bushings adapted to be aligned with said hole in said body; cutters adapted to rotate upon said bushings; a locking pin adapted to extend into said body hole and into the openings in said bushings; and means disposed between and interlocking with said bushings for preventing rotation of said bushings relative to each other.

1,902,942. CAPACITOR. WILLIAM M. BAILEY, Lynn, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed June 8, 1929. Serial No. 369,293. 9 Claims. (Cl. 175—41.)



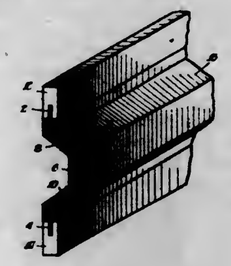
1. A capacitor of the character described, including, in combination, an elongated insulating supporting plate, a condenser stack positioned on the plate, foil tabs of opposite polarity extending from opposite sides of the stack; terminal screws passing through the plate and in good electrical and thermal connection with the foil tabs; a resilient compression member overlying the stack, and a casing adapted to compress the stack members, being compressed thereagainst by the engagement therewith of a plurality of casing clamping screws passing through the supporting plate and out of contact with the terminal screws; and terminal strips connected to the terminal screws and extending outwardly therefrom around the ends of the supporting plate to form terminals of high heat dissipating capacity.

1,902,943. KEYBOARD TRANSMITTER. ERWIN P. BANCROFT, Brooklyn, N. Y., assignor to International Communications Laboratories, Inc., New York, N. Y., a Corporation of New York. Filed May 1, 1931. Serial No. 534,295. 18 Claims. (Cl. 178—17.5.)



1. A keyboard transmitter comprising a plurality of depressible key levers for setting up signal combinations, means for transmitting signals corresponding to the combination set up by the depression of one of said key levers, means under control of the signal transmitting means for rendering another of said key levers depressible for transmitting signals corresponding to combinations set up by its depression and before all the signals corresponding to the first combination have been transmitted.

1,902,944. COMBINED EXPANSION AND CONTRACTION JOINT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed May 19, 1927. Serial No. 192,710. 3 Claims. (Cl. 94—18.)

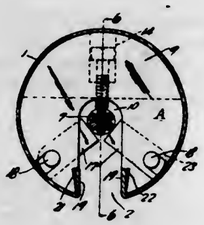


1. A combined expansion and contraction joint adapted to interlock monolithic sections comprising a flexible, metallic strip having upper and lower flanged portions lying in substantially the same plane and joined by an intermediate portion lying to one side of such planes, the flanged portions being capped with bituminous slabs and the intermediate portions carrying a relatively thick coating of bituminous material.

1,902,945. GUY STRAND GUARD AND LOCK. JASPER BLACKBURN, Webster Groves, Mo. Filed Mar. 3, 1932. Serial No. 596,459. 18 Claims. (Cl. 189—31.5.)

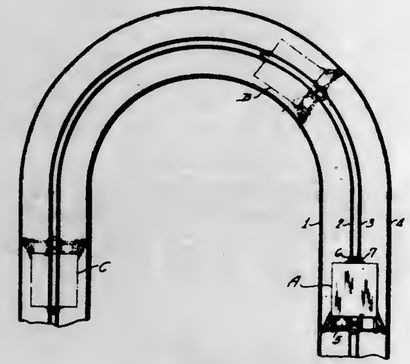
13. A gravity control lock for mounting a guard upon a guy strand, the said lock comprising a supporting ele-

ment mounted upon the guard and having a cable-way opening out through one margin and locking members



movably supported upon the element and adapted by gravity to lockingly engage the guy strand as it passes transversely into the said cable-way.

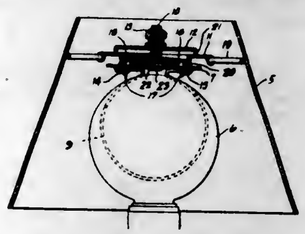
1,902,946. SAFETY CABLELESS MULTIPLE ELEVATORS. MAURICE E. BREED, St. Louis, Mo. Filed July 16, 1930. Serial No. 468,363. 7 Claims. (Cl. 187—16.)



1. An elevator system comprising separate ascending and descending shaft portions having arcuate shaft connection at their upper and lower ends respectively, an elevator car in said shaft, parallel endless racks mounted rigidly in said shaft portions and shaft connections, mechanism supported at one end of said car and engaging said racks for propelling said car upwardly through said ascending portion and downwardly in inverted position through said descending portion of said shaft, a guide device in said shaft, and means in connection with the opposite end of said car from said mechanism engaging said guide device, said elevator car being propelled through said arcuate shaft connections from said ascending shaft portion to said descending shaft portion and from the latter to the former and guided throughout by said guide device and guide means.

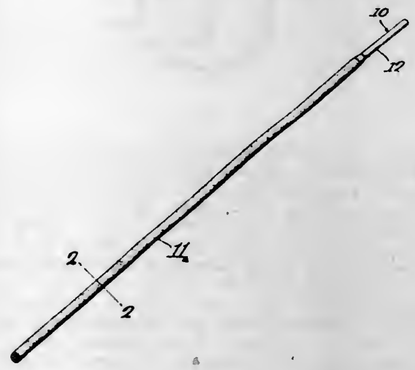
1,902,947. SHADE HOLDER. EDWARD W. CARPENTER, Fairfield, CHARLES LA REAU, Bridgeport, and HENRY MORGAN KELLOGG, Stratford, Conn., assignors to The E. W. Carpenter Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed June 15, 1931. Serial No. 544,352. 7 Claims. (Cl. 240—138.)

1. In a lamp shade holder, a mounting member, a pair of looped clamping members to engage over a bulb, said mounting member having a pair of portions pressed therefrom, each of said loops formed of a length of wire having its end portions extending laterally of the loop, and



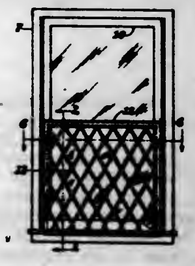
said laterally extending end portions disposed beneath the said pressed-up portions of the mounting member and securing the loops to the mounting member.

1,902,948. WELDING ELECTRODE. ALFRED C. CASTLE, Lake Forest, Ill., assignor to A. M. Castle & Co., a Corporation of Illinois. Filed Aug. 14, 1931. Serial No. 557,010. 5 Claims. (Cl. 219—8.)



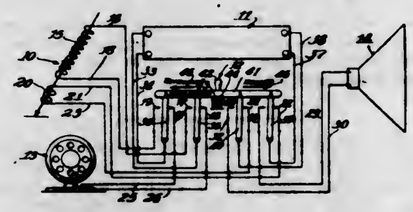
2. A welding electrode comprising a metallic rod composed principally of ferrous material, coating attached directly to the surface of said rod, said coating comprising carbon not over 1% of the mass, silica approximately 30% of the mass, magnesium and sodium carbonate each less than 1% of the mass, all in a finely divided state, and ferrotite as a binder.

1,902,949. COMBINED WINDOW GUARD AND SCREEN. JOSEPH P. CONDON, Omaha, Nebr. Filed Aug. 8, 1932. Serial No. 627,849. 1 Claim. (Cl. 20—71.)



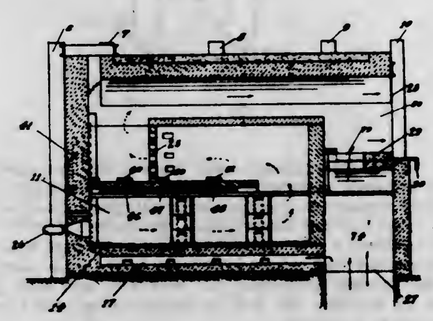
In a grid for a window frame provided with channels and parting-strips, a grid having a frame adapted to be fitted into the window frame, a locking-bar rigid with one end of the grid for engaging in a channel and having a projection for engaging a parting-strip, a locking-bar mounted to have a swinging movement on the opposite end of the grid for entering a channel of the window frame and having a projection for engaging a parting-strip, and means on the last named locking-bar for preventing a swinging movement thereof.

1,902,950. COMBINED REPRODUCING AND RECORDING DEVICE. ROY DALLY, Racine, Wis., assignor to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Oct. 29, 1931. Serial No. 571,727. 4 Claims. (Cl. 179—100.4.)



1. A combined reproducer and recorder comprising an amplifier, a speaker, a microphone, and a pick-up having windings adapted to be substituted for said microphone for reproduction and having windings adapted to be substituted for said speaker for recording.

1,902,951. FURNACE EQUIPMENT. WILLIAM A. DARRAH, Chicago, Ill. Filed Jan. 7, 1929, Serial No. 330,870. Renewed Aug. 12, 1932. 25 Claims. (Cl. 263—19.)



22. In a gas heater a combustion chamber, a housing surrounding said chamber, a duct in said housing directing a portion of the flow of gas being heated in contact with said combustion chamber, and a duct located in said housing and arranged to bypass said directing duct.

1,902,952. ARCH SUPPORT. JOHN H. GOLDEN, Porterville, Calif., assignor of one-half to Chester M. Sewell, Porterville, Calif. Filed July 6, 1931. Serial No. 548,861. 1 Claim. (Cl. 36—71.)

An arch support comprising: a flexible inner sole having a pocket underlying the ball of the foot; a rubber cushion incorporated in the inner sole, forming a longitudinally extending arch support tapering laterally downward from the outer longitudinal side of the foot towards the inner longitudinal side of the foot; a flange integral with the inner sole extending upward along the outer longitudinal side of the inner sole adjacent said arch; and a plurality of rubber disks of different diameters in



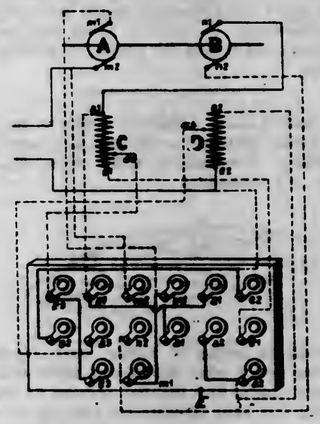
said pocket of the inner sole, said disks being cemented together face to face in concentric relation and arranged in a progressive series with the smallest disk uppermost.

1,902,953. METHOD AND APPARATUS FOR THE MANUFACTURE OF FILAMENTARY MATERIAL. EARDLEY HAZELL, New York, N. Y., assignor to Revere Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 11, 1931. Serial No. 521,641. 15 Claims. (Cl. 18—8.)



1. The process of making rubber filaments from an aqueous dispersion of rubber which comprises streaming said dispersion through an orifice having outwardly concave sides and cusped corners.

1,902,954. SMALL VARIABLE POTENTIAL ELECTRIC MOTOR. ARNO HOCHFELD, Berlin, Germany, assignor to Deutsche Telephonwerke und Kabelindustrie Aktiengesellschaft, Berlin, Germany, a Corporation. Filed Jan. 30, 1930, Serial No. 424,543, and in Germany July 9, 1929. 13 Claims. (Cl. 172—276.)

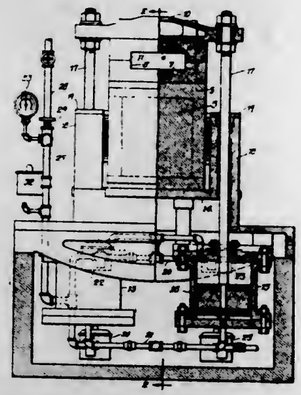


1. A small variable potential electric motor, comprising a field structure and an armature structure, windings thereon, a terminal board with contact devices thereon

connected to said field and armature windings, said contact devices being so arranged that a set of jumpers of given relative position applied to said terminal board will connect the motor windings for one voltage or another according to the position in which such set of jumpers is placed upon the board, and a connector embodying jumpers in said given relative position adapted to be placed in different positions on the terminal board and to cooperate with the contact devices thereon to establish different connections in each different position.

2. An electric motor comprising two armature windings, two field windings, two current-supply connections one of which leads to one end of one of the field windings and the other to one end of one of the armature windings, a connection from one end of the other field winding to one end of the other armature winding, and means for variably connecting the field windings and the other ends of said armature windings.

1,902,955. WELDING APPARATUS. HENRY S. HOLMES, Brooklyn, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Sept. 24, 1928. Serial No. 307,886. 13 Claims. (Cl. 219—4.3.)



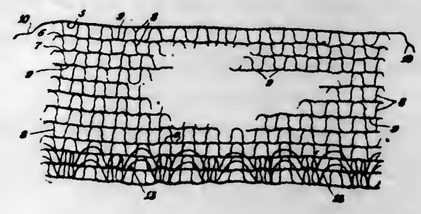
6. A welding machine comprising a movable electrode, fluid pressure cylinders for operating the same, pipes communicating with the upper ends of the cylinders and with their lower ends respectively, a solenoid-operated admission valve and a solenoid-operated exhaust valve in each of said pipes and automatic means for operating said valves simultaneously to raise or lower the electrode, a second electrode and means for passing a current between the electrodes.

1,902,956. METALLIC AIRFOIL. EDWIN A. HUGHES, Seattle, Wash., assignor to Boeing Airplane Company, Seattle, Wash. Filed May 6, 1930. Serial No. 450,149. 9 Claims. (Cl. 244—31.)



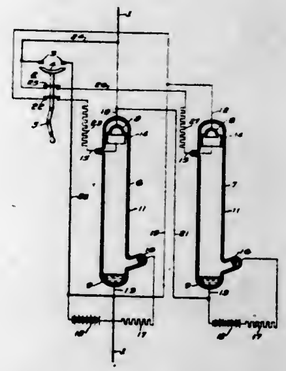
1. An airfoil including a frame work consisting of front and rear spars, ribs notched at their upper edges to receive said spars, and secured thereto an upper and lower covering for said framework, said upper covering being one continuous sheet and cap strips disposed above the upper covering, across the notches receiving the spars, and secured through the upper covering to the rib beneath, at each side of such notch.

1,902,957. VEIL. MILTON J. HINLEIN, Philadelphia, Pa. Filed May 18, 1932. Serial No. 611,976. 5 Claims. (Cl. 66—171.)



5. A resilient open meshwork face veil formed of weather-proof threads of pyroxaline, the threads running in the same direction in the fabric being interlooped so as to maintain the open meshwork arrangement but permit temporary shaping of the veil to the face without taking a permanent set.

1,902,958. CIRCUIT BREAKER. RAY P. JACKSON, Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,879. 5 Claims. (Cl. 175—294.)



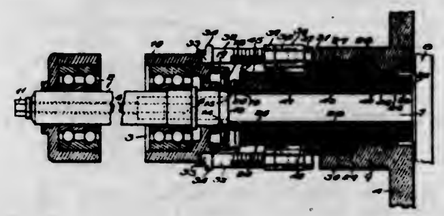
1. In an alternating-current circuit, the combination with a circuit interrupter therefor, of two rectifiers oppositely disposed in parallel circuit relation to each other and to said circuit interrupter a "keep-alive circuit" for said rectifiers, a grid disposed in the current path through each rectifier and means responsive to the open position of said circuit interrupter for rendering said grid negative to interrupt the flow of current after said circuit interrupter is opened.

1,902,959. UNFERMENTED ACIDOPHILUS MILK. ROBERT P. MYERS, Baltimore, Md., assignor to Research Laboratories of National Dairy Products Corporation, Inc., Baltimore, Md., a Corporation of Maryland. Filed Apr. 16, 1930. Serial No. 444,864. 18 Claims. (Cl. 99—11.)

1. A sweet unfermented *Lactobacillus acidophilus* milk of milk-like consistency, and comprising sweet milk and *Lactobacillus acidophilus* present in numbers to give a therapeutically effective product.

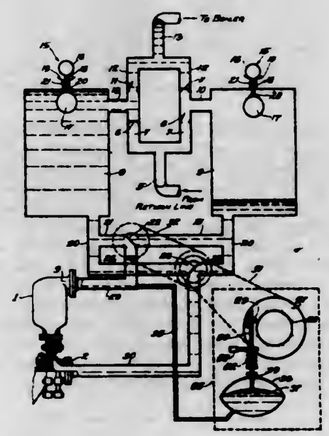
9. The process of preparing Lactobacillus milk which comprises adding to sweet milk *Lactobacillus acidophilus* in numbers to give a therapeutically effective product and maintaining the milk at a temperature sufficiently low to inhibit growth of the organisms and formation of lactic acid and prevent souring of the milk.

1,902,960. PACKING GLAND. HARRY E. LA BOUR, Chicago Heights, Ill. Filed Oct. 6, 1927. Serial No. 224,849. 17 Claims. (Cl. 286—7.)



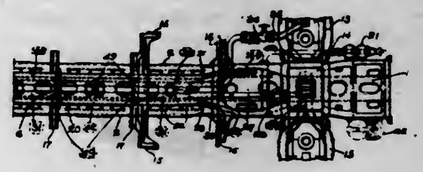
1. In combination, a hollow boss adapted to receive a compressible packing, a rotatable shaft extending loosely through said boss and having a flat flange, a rigid antifriction ring embracing the shaft and having contact therewith and having a flat end face engaging said flat flange, said engaging faces maintaining a tight joint for rotary motion and for motion of translation between them, yielding means for holding said faces in engagement, a compressible packing for sealing the space between the ring and the boss, and means in the shaft embracing face of said ring for holding a sealing fluid between said face and the shaft.

1,902,961. PUMPING SYSTEM. HARRY E. LA BOUR, Elkhart, Ind. Filed July 14, 1930. Serial No. 467,830. 22 Claims. (Cl. 103—165.)



1. The method of pumping a mixture of gas and liquid which comprises trapping said mixture in two separate bodies to separate the gas and liquid in each, pumping out the liquid from one body until gas passes over, pumping liquid from the second body and directing the same into said first body whereby to drive off the gas, continuing said pumping until gas passes over from the second body, reversing the pumping operation to again pump liquid from the first body into the second to drive off the gas therein, and continuing said pumping operation until gas passes over from the first body.

1,902,962. LOCOMOTIVE STRUCTURE. WILLIAM L. LENTS, Tuckahoe, N. Y., and HARRY M. PFLAGER, St. Louis, Mo., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed Dec. 3, 1931. Serial No. 578,650. 37 Claims. (Cl. 105—172.)



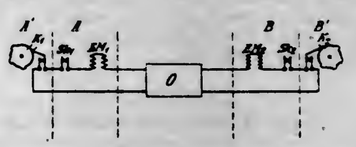
1. A cradle for a locomotive underframe including spaced side elements, one of said elements being hollow and serving as a fluid conduit.

1,902,963. PACKAGE OPENER. FRANÇOIS LEPAGE and ANTOINE MARTINEAU, Montreal, Quebec, Canada. Filed Dec. 24, 1931. Serial No. 583,075. 3 Claims. (Cl. 229—11.)



1. In a package, the combination with an exterior package section and an interior section slidable within the exterior section, of an opening cord having one end attached to the interior section and slidably secured to the outside section, said cord being arranged on each section so that by predetermined pulling the fastening seal of the package will be severed, the interior container section slidably extended to a limited dispensing position and the top portion of the inner section swung from a covering to an open position.

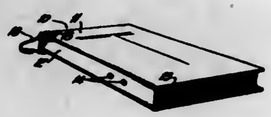
1,902,964. SUPERVISORY DEVICE FOR TELEGRAPH APPARATUS. ERWIN LEISER, Berlin, and WILHELM KRUSE, Wilhelmshagen near Berlin, Germany, assignors to C. Lorenz A. G., Berlin, Germany. Filed Mar. 26, 1931, Serial No. 525,414, and in Germany Mar. 29, 1930. 8 Claims. (Cl. 178—2.)



1. In a telegraph system, the combination of a calling station, a called station connected thereto, supervisory apparatus at the called station, and means at the calling sta-

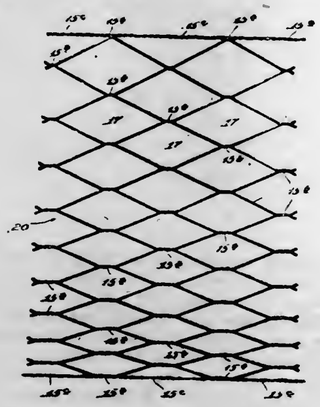
tion for causing said apparatus to send back station identification signal only if the called station remains conditioned for reception.

1,902,965. BINDER. JAMES J. LYNCH and ERNEST F. BARVOETS, Albany, N. Y., assignors to J. B. Lyon Company, Albany, N. Y., a Corporation of New York. Filed Aug. 20, 1931. Serial No. 558,250. 4 Claims. (Cl. 281—19.)



1. A binder comprising two covers joined by a back, an integral bar having a supporting portion secured to said back, and end of said bar being bent inwardly and then reversely with respect to the supporting portion adapting said reversely bent portion to be received between the leaves of a book, and means for clamping said covers against the sides of a book.

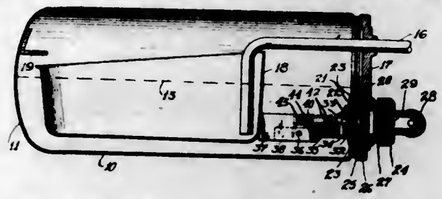
1,902,966. METHOD OF MAKING EXPANDED METAL FENCES. CHESTER M. MACCHESNEY, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1929. Serial No. 384,225. 9 Claims. (Cl. 164—6.5.)



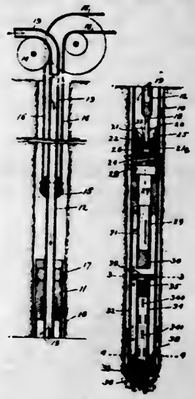
8. The method of forming expanded metal fencing which consists in providing a metal sheet with a plurality of transverse series of longitudinal parallel slits increasing in length progressively from one edge of the sheet toward the other and having the ends of the slits of each series overlapping the ends of the slits of the next adjacent series, the extent of overlap increasing progressively from one edge of the sheet toward the other, then expanding said sheet transversely to the length of the slits to form a plurality of meshes increasing in area from one side of the expanded sheet toward the other, and then contracting to a progressively decreasing extent from said first-mentioned edge of said sheet toward the other edge those walls of said meshes which extend substantially parallel to the longitudinal edges of the sheet.

1,902,967. FLOAT VALVE STRUCTURE. HAROLD ROY MCPHAIL, Detroit, Mich., assignor to Norge Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 17, 1930. Serial No. 428,877. 5 Claims. (Cl. 137—104.)

8. An evaporator header tank for refrigerating apparatus, comprising a float chamber closed at one end, a head sealingly engaging the other end thereof, a shouldered float valve body projecting inwardly through a shouldered aperture in said head, the shoulders on the body and in the aperture serving to locate said valve body, a retaining member abutting against said valve body, an external packing gland for clamping said retainer member and valve body shoulder against the aperture shoulder, a valve seat aligned with a valve guide apertuse in said valve body, a valve stem engaging in one position against said seat, and float mechanism for actuating said valve stem.

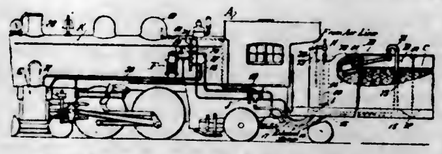


1,902,968. EARTH BORING APPARATUS. JAMES F. MELLOR, El Dorado, Ark. Filed Apr. 2, 1927. Serial No. 180,528. 5 Claims. (Cl. 121—18.)



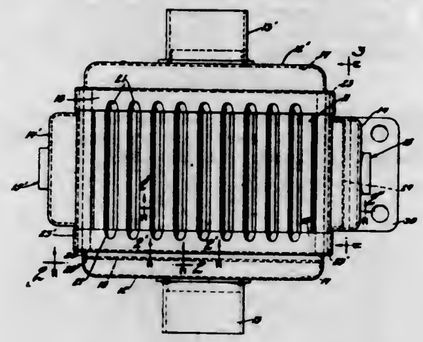
1. The combination in a motor of a longitudinally movable cylinder element, a pipe for the supply of fluid under pressure extending into the cylinder element, valve mechanism within the cylinder subject to fluid pressure in the cylinder and adapted to open under a predetermined pressure comprising two parts with outwardly directed contacting surfaces, one of which is supported by said pipe, said two parts being relatively movable to open and close a passage between them, and means to maintain them in a closed position until a predetermined extent of movement of the cylinder has taken place said cylinder having a pressure-receiving head spaced from said valve mechanism between which and said valve mechanism fluid is received for the exertion of pressure thereon.

1,902,969. FEED WATER HEATER FOR LOCOMOTIVES. WALTER PARKS, Denver, Colo. Filed June 3, 1929. Serial No. 368,048. 3 Claims. (Cl. 122—434.)



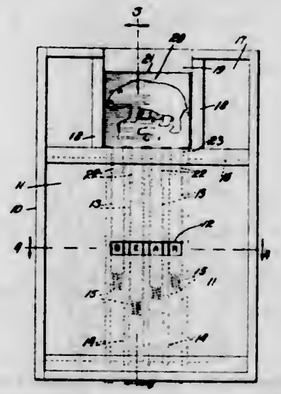
1. In combination with a locomotive boiler and feed water tank, a partition dividing the tank into cold and hot water compartments which communicate below the bottom of the said partition, there being a well extending below the bottom of the compartments into which the partition projects, means for introducing exhaust steam into the hot water compartment at a constant distance below the surface of the water in the tank, means for withdrawing water from the hot water compartment and introducing the same into the boiler, a thermostat arranged in the hot water compartment near the water outlet and mechanism actuated thereby for controlling the flow of exhaust steam to said hot water compartment.

1,902,970. OIL COOLER. WALTER R. RAMSAUR, Lockport, N. Y., and THERON P. CHASE, Detroit, Mich., assignors to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 16, 1929. Serial No. 407,730. 24 Claims. (Cl. 257—242.)



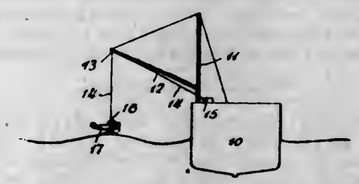
1. In a tubular-core oil cooler: a set of parallel tubes arranged in rows; a pair of side plates engaging end portions of said tubes; and a pair of oil headers so engaging end rows of said tubes and end portions of said plates as to compel oil, advancing between said headers, to pass in streams whose thinness is determined by the cross-sectional configuration and spacing of said tubes.

1,902,971. TOY. FRANCIS FELIX CLAUDE RIPPON, New York, N. Y. Filed Aug. 18, 1932. Serial No. 629,275. 6 Claims. (Cl. 35—9.)



1. A new toy comprising a container having a window, a movable element in the container bearing a series of indicia exposable one at a time through the window, means for initially and displaceably positioning said movable element to conceal said indicia, an operating element bearing an indicium and having a key adapted to displace said movable element so as to expose through the window a predetermined indicium thereon related to the indicium on the operating element.

1,902,972. MOORING AND HOISTING APPARATUS. WARREN E. ROUAN, Waterbury, Conn., assignor to The Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 29, 1932. Serial No. 606,181. 16 Claims. (Cl. 9—22.)



1. In a device of the kind described including a rotatable drum, and a cable attached to an object floating in water subject to the rise and fall through wave action and leading to said drum, that improvement which comprises pressure fluid actuated means for operating said drum, and means for by-passing said pressure fluid to automatically regulate and control the volume operatively effective upon said motor in predetermined accordance with the rise and fall of said floating object whereby said drum is operated to automatically maintain said cable against slack in harmony with the rising and falling movements of said object.

1,902,973. WINDOW CONSTRUCTION. WILLIAM A. SCHOMMING, Chicago, Ill. Filed July 2, 1931. Serial No. 548,844. 8 Claims. (Cl. 20—49.)



1. A window construction comprising the combination with a window frame having vertical side grooves, of runners slidable in said grooves, a window sash pivoted to said runners to swing vertically into open or closed positions, means for assisting swinging movement of the sash to closed position, and means interposed between the sash and runners for holding the sash in various open positions against the action of said assisting means.

1,902,974. CAR TRUCK. WILLIAM M. SHEEHAN, St. Louis, Mo., and WILLIAM S. MCGILVRAY, Granite City, Ill., assignors to General Steel Castings Corporation, Granite City, Ill., a Corporation of Delaware. Filed May 23, 1930, Serial No. 455,017, and in Italy Apr. 15, 1930. 15 Claims. (Cl. 105—208.)



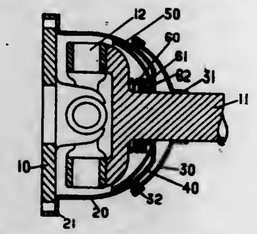
1. In a truck of the class described, a frame, swinging links suspended from said frame, a spring plank having rectangular openings extending vertically through its end portions and receiving and surrounding the lower ends of said swinging links, and pivot pins extending through said links and the adjacent walls of said openings.

1,902,975. METHOD OF AND APPARATUS FOR MAKING EXTRUDED SEAMLESS METAL SHAPES. STANLEY W. SPARKS, Brooklyn, N. Y., assignor to Charles H. Bickell, trustee. Filed May 11, 1929. Serial No. 362,255. 21 Claims. (Cl. 207—2.)



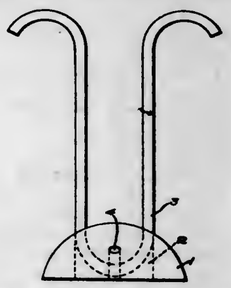
1. The method of extruding tubular shapes of ferrous metal which consists in heating a mass of metal, of sufficient cubical content to form a tubular shape of the desired length, to a plastic condition and well below the melting point thereof, quickly introducing the same into a die, then inserting said die into a die-pot having an exit orifice of a diameter corresponding to the external diameter of the shape desired, subjecting the metal while confined in said die-pot to a pressure sufficient to effect the extrusion thereof through said orifice while simultaneously opposing the free passage of metal through said orifice by subjecting the metal during the extrusion to a centrifugal forming action of a rapidly rotating arbor of an external diameter corresponding to the internal diameter of the desired tubular shape, whereby the shape is extruded over said arbor, withdrawing said arbor, while still rotating, from said shape, cutting off the desired length of the tubular shape and recovering the severed length thereof so obtained.

1,902,976. CASING FOR UNIVERSAL JOINTS. CLARENCE WINFRED SPICER, Plainfield, and GURDON LUCIUS TARBOX, North Plainfield, N. J. Filed Apr. 10, 1929. Serial No. 354,087. 7 Claims. Cl. 64—89.)



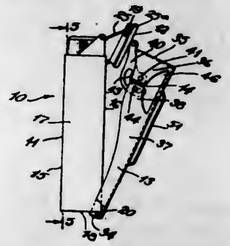
1. A casing for a universal joint comprising an inner and outer casing, the latter being partly spherical, the inner casing provided with a bell shaped mouth, the extreme edge thereof adapted to ride on the inside surface of the partly spherical casing, said bell shaped mouth set at a permanent acute angle to the tangent at the point of contact with the casing and contacting only through its edge with the inside of the partly spherical casing.

1,902,977. MOLD FOR CAST STONE AND PROCESS OF USING THE SAME. PETER TAMAGNO, Natick, Mass. Filed Feb. 26, 1932. Serial No. 595,358. 5 Claims. (Cl. 25—128.)



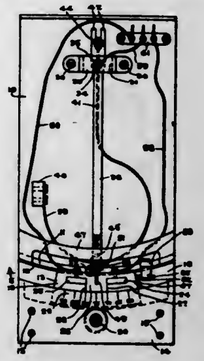
3. A pocket pattern and eye holding member for use with a mold for semi-fluid material comprising a member of yielding and elastic material with an eye holding aperture and an aperture for a pattern securing means therein.

1,902,978. RECEPTACLE. ARTHUR VON FRANKENBERG, New York, N. Y. Filed Jan. 10, 1929. Serial No. 331,489. 14 Claims. (Cl. 206—38.)



1. In a water tight receptacle, a container, a cover hinged thereto, and means for clamping said cover to said container, said means comprising a detachable member having a portion for pivotally engaging said container and a portion for slidably engaging said cover.

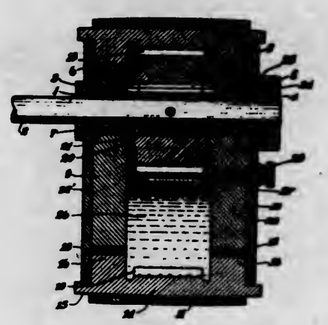
1,902,979. THERMOSTAT. FRANK A. WHITELEY, Minneapolis, Minn. Filed Mar. 18, 1932. Serial No. 599,617. 12 Claims. (Cl. 200—138.)



1. A thermostat, comprising a contact piece having a plane surface formed with limits comprising segments of concentric circles, means to move said piece in the arcs of said circles to adjust temperature limits, a swinging arm pivoted at the center of said circles, a contact member pivoted to said arm to move transversely to the plane

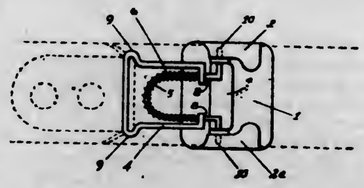
of movement of the arm, a spring holding said contact member in constant yielding engagement with the surface of the piece, and a thermostatic member supported independently of the arm to move the arm.

1,902,980. BELT TIGHTENING PULLEY. HAROLD F. WILHELM, East Orange, N. J., assignor, by mesne assignments, to Wearn's Inventions, Ltd., Auckland, New Zealand, a Corporation of New Zealand. Filed May 24, 1927, Serial No. 193,773. Renewed Aug. 23, 1932. 7 Claims. (Cl. 64—5.)



1. A power transmitting wheel comprising a supporting shaft, a first gear affixed to said shaft, an eccentric sheave loosely mounted on said shaft, an annular gear having an outer band supporting surface and internal teeth having driving relation with the teeth on said first gear, said annular gear also having a bearing surface rotatably mounted on said sheave.

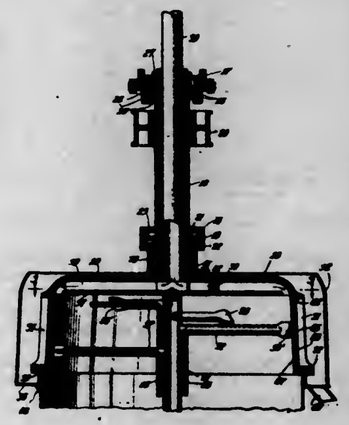
1,902,981. BELT BUCKLE. DORSEY M. WIRTH, Bucyrus, Ohio. Filed Aug. 25, 1932. Serial No. 630,386. 3 Claims. (Cl. 24—168.)



1. A belt buckle of the class described comprising a buckle body having flanges thereon, and a belt connector assembly, said connector assembly comprising a yoke having the ends of the member forming the yoke connected with the flanges of the buckle body, a belt connector having one end carried by the yoke, and a belt connecting portion at the other end of the connector, a spring on the yoke cooperating with the belt connector for resisting longitudinal movement of the connector on the yoke, and a belt engaging jaw carried by said assembly for cooperating with said buckle body for retaining the free end of the belt.

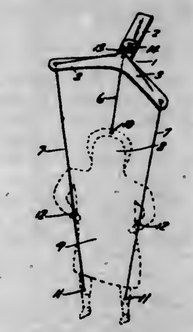
1,902,982. CENTRIFUGAL FILTERING DEVICE. HARRY W. ABBOTT, Chicago, Ill. Filed July 24, 1930. Serial No. 470,287. 5 Claims. (Cl. 210—69.)

1. In a centrifugal filtering device, a rotatable head having a perforated side wall, a top plate having means for admitting material to the wall, the lower end of the wall being open, a plurality of arms extending into close proximity to said perforated wall, means for supplying a blast of air through said arms, and shares carried by



the arms and through which the air blast is delivered for aiding in turning over the material collected on said wall, and removed therefrom by said air blasts.

1,902,983. MARIONETTE CONTROL FRAME AND CORD WIND-UP. STELLA ADLER and CORA BARNES BLANK, St. Louis, Mo. Filed Mar. 4, 1932. Serial No. 596,736. 17 Claims. (Cl. 46—40.)

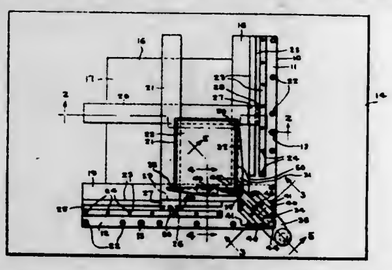


1. In a device of the kind described, a frame having three cord apertures pierced therethrough at points triangularly positioned relative to one another, three separate cords loosely strung through said apertures, and means upon the frame for drawing up said cords through said apertures.

1,902,984. ADJUSTABLE MASK FOR PHOTOPRINTING MACHINES. JOSEPH L. BARBER, Greeley, Colo. Filed Sept. 5, 1931. Serial No. 561,898. 25 Claims. (Cl. 95—79.)

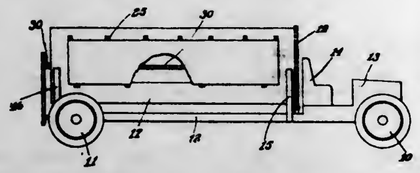
1. An adjustable mask for photographic printing machines, comprising a pair of fixedly carried negative supporting members arranged perpendicularly to each other and a pair of adjustably carried negative supporting members also arranged perpendicularly to each other and constituting, together with said fixedly carried negative supporting members, an expansible and contractible negative

support of rectangular configuration, and an element of unitary structure, including arms arranged in perpendicular relation to each other, constituting an adjustable,



releasable holder for said negative, said unitary element also constituting an adjustable guide and margin adjuster for the printing paper.

1,902,985. REFUSE DISPOSAL TRUCK. JOHN BAJI, New York, N. Y. Filed Mar. 5, 1931. Serial No. 520,185. 4 Claims. (Cl. 214—67.)



1. In a device of the class described, a rotating cylinder, means for rotating said cylinder, said cylinder having an opening therein adapted to receive and discharge refuse, and a blade rotatably mounted inside said cylinder on the axis thereof dividing said cylinder into two equal compartments.

1,902,986. PROCESS OF PRODUCING ACTIVATED CHARCOAL FROM CHARCOAL FINES. MAURICE E. BARKER, Edgewood Arsenal, Md. Filed Dec. 22, 1930. Serial No. 504,205. 20 Claims. (Cl. 252—3.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A process for forming primary charcoal comprising wetting a mixture of charcoal fines and wood flour with an acid solution containing a dehydrating agent and carbonaceous material, drying the wetted mass, compressing the mass into briquettes, and heating the briquettes until thoroughly carbonized.

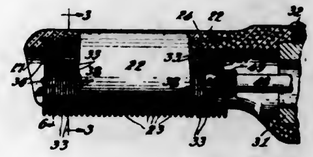
20. A carbonaceous adsorbent produced from a mixture of wood flour and charcoal fines wetted with a solution of zinc chloride and a carbonaceous binder, dried, compressed into briquettes, and heated until thoroughly carbonized.

1,902,987. SAFETY GLASS SEALING INSTRUMENT. FRANK H. BELL, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 15, 1931. Serial No. 562,929. 3 Claims. (Cl. 18—3.5.)



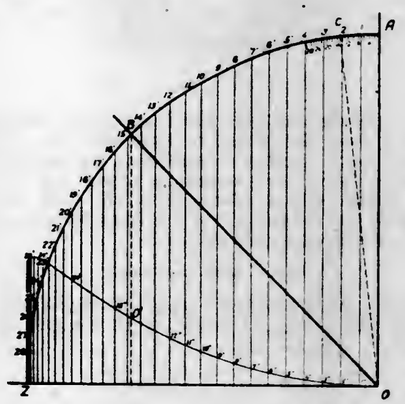
1. An instrument for the purpose set forth comprising a nozzle having a transverse parallel sided guide groove the walls of which are of yieldable material and a duct opening into the groove.

1,902,988. SHAVING MACHINE. GEORGE R. BOTT, Stamford, Conn. Filed Mar. 7, 1931. Serial No. 520,795. 24 Claims. (Cl. 30—12.)



2. Shearing means comprising a molded body having an open gap along one side thereof, together with a series of members molded in said body in fixed spaced-apart relation and curving across said open gap, and the inside faces of said members being ground to provide shearing edges.

1,902,989. ANGLE MULTISECTOR. STUART E. BRAY, U. S. Navy. Filed Sept. 29, 1931. Serial No. 565,808. 2 Claims. (Cl. 33—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

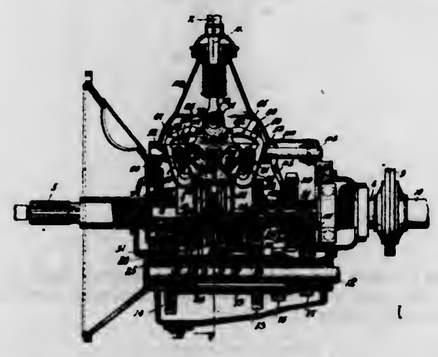


2. An article of manufacture known as an angle multisector, consisting of a draftman's curve, for use in dividing an angle into "n" equal parts, "n" being any integer, which comprises a straight-edged base of convenient length and a curved edge which is the locus of points determined by the inersections of perpendiculars to a first side from points on the arc of an associated quadrant and arcs of radii equal to the radius of the quadrant with centers which mark one "nth" of the arcs intervening between a second side of the quadrant and the points from which the respective perpendiculars are dropped substantially as herein shown and described.

1,902,990. CLUTCH MECHANISM. LEON J. CAMPBELL, Buchanan, Mich., assignor to Hand's Constant Mesh Transmission Company, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 23, 1930, Serial No. 477,362. Divided and this application filed Feb. 9, 1931. Serial No. 514,668. 15 Claims. (Cl. 192—53.)

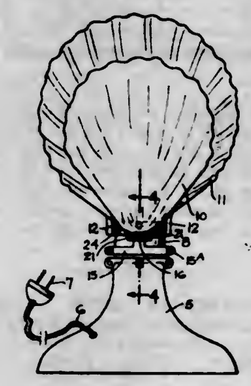
1. In a clutch mechanism, the combination with a driving shaft, of a driven shaft disposed in alinement therewith, and means for coupling said shafts including a friction clutch having a driving member positively rotated by the driving shaft and a driven member splined to the driven shaft, a ring normally disengaged from the driven shaft and positively rotatable by the driving shaft, said ring being movable longitudinally relative to the driven shaft and connected with the driven clutch member to

bodily move therewith into and out of positive clutching engagement with the driven shaft, and means for first bodily moving the driven clutch member into frictional engagement with the driving clutch member to synchro-



nize said shafts and for subsequently moving the driven clutch member out of engagement with the driving clutch member and for bodily moving the ring into positive engagement with the spline of the driven shaft.

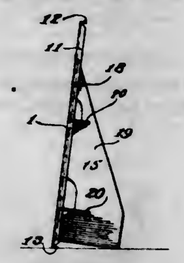
1,902,991. SHELL LAMP. HENRY CARDON, Hillsdale, N. J. Filed Oct. 1, 1930. Serial No. 485,595. 1 Claim. (Cl. 240—108.)



The combination with a lamp comprising a light bulb support, of separable, semi-circular clamp rings arranged to be positioned about said support, means for securing the clamp rings together, an upstanding hinge eye formed on each of said rings, a hinge pin in each of the eyes, a bracket pivoted on each of said pins, a decorative translucent shade on each of said brackets, one of said shades fitting partly within the other shade to substantially conceal said light bulb, ears on said brackets, and springs connecting the brackets of opposite sides to draw the shades toward each other and a screw in each of the brackets for engaging the bulb support for limiting the movement of the shades toward each other.

1,902,992. DISPLAY CARD. ELBERT C. CHITTUM, Catonsville, Md. Filed Dec. 20, 1932. Serial No. 648,054. 7 Claims. (Cl. 40—146.)

1. The method of making a display card of a single piece of material which consists in printing the subject matter to be displayed on a coardboard of a thickness which can be handled in a cylinder press, cutting the card from the printed surface inwardly toward the back and part way through only, the said cuts forming lines near

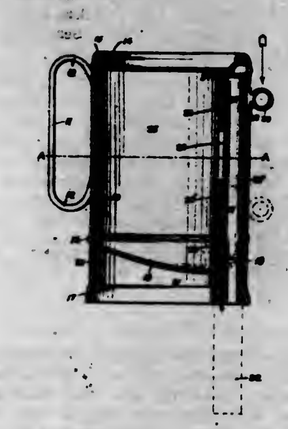


to and substantially parallel to the edges to provide hinged edge fins, and turning the fins backwardly to hold the card in flat condition substantially as described.

1,902,993. METHOD OF FORMING CELLULAR PRODUCTS. WILLIAM L. ELLERBECK, Salt Lake City, Utah. Filed May 5, 1930. Serial No. 450,066. 2 Claims. (Cl. 106—84.)

1. A method of producing cellular gypsum comprising the addition of perborate salts and water to the gypsum to produce a cellular slow crystallization product.

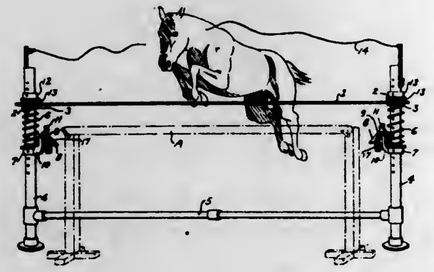
1,902,994. OIL CAN. WILLIAM T. FAUX, Santa Barbara, Calif. Filed July 26, 1930. Serial No. 470,790. 1 Claim. (Cl. 221—27.)



In a device as described the combination of an oil can formed upon one side with an elongated slot, a tubular casing secured against the inner circumference of the can so as to bear in tight contact with the slotted portion thereof, laterally of the medial part of the can, said tubular casing extending practically the full length of the can, being closed at its upper end and open at its lower end, a slide tube snugly and frictionally telescoping in said casing and of a co-extensive length therewith, an eyelet-shaped handle carried by the upper end of the tube, said casing having a slot thru which the handle slidably projects, as the tube is moved downwardly so that its open lower end may project below the can and provide an oil-pouring spout, a floor extending transversely in said can above the lower end thereof, and inclining downwardly towards said casing, said casing being formed with a lateral opening in a plane with said floor, said tube being also formed with a lateral opening of a length

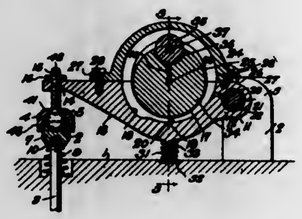
greater than the lateral opening of the casing, the bottom edge of the two slots being located at such a point that when the handle rests thereupon, when the tube is pushed downwardly, the upper part of the lateral opening of the tube will register with the opening of the casing while the lower part thereof will be below the floor of the can.

1,902,995. JUMP-TRAINING DEVICE. PAUL B. FLYNN, St. Louis, Mo. Filed Mar. 11, 1932. Serial No. 598,105. 7 Claims. (Cl. 119—1.)



1. A jump-training device for animals, comprising an upwardly movable bar, means for actuating said bar upwardly, and control means operable during the jump of said animal over said bar for controlling the upward movement of said bar by said actuating means.

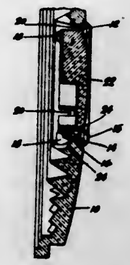
1,902,996. VALVE ACTUATING MECHANISM FOR INTERNAL COMBUSTION ENGINES. PAUL GERARD, Laurel, Mont. Filed Mar. 14, 1930. Serial No. 435,976. 7 Claims. (Cl. 123—90.)



1. A valve actuating mechanism comprising a lever means for flexibly mounting the lever with a valve body means for pivotally mounting the lever resilient means normally urging said lever upwardly, a shaft extending transversely of the lever, a collar carried by the lever and surrounding said shaft, collars carried by said shaft surrounding said shaft and enclosing said collar which is a part of said lever, a cam roller carried by said shaft which is adapted to be surrounded by said collar which is a part of said lever, a cam surface forming a part of said collar which is a part of said lever and adapted to be engaged by said roller.

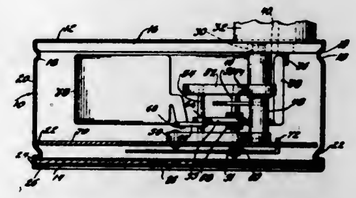
1,902,997. LENS MOUNTING. CHARLES E. GODLEY, Ypsilanti, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 21, 1931. Serial No. 576,446. 8 Claims. (Cl. 240—151.)

1. An annular lens, a bezel fitted in the aperture in the lens, and having a portion engaging one face of the lens to limit its insertion in the aperture, a lens in the bezel, said bezel being provided with tabs extending between the lenses, said lenses being provided with opposed notches opposite said tabs and having upwardly inclined faces, said tabs being twisted in spiral fashion so as to



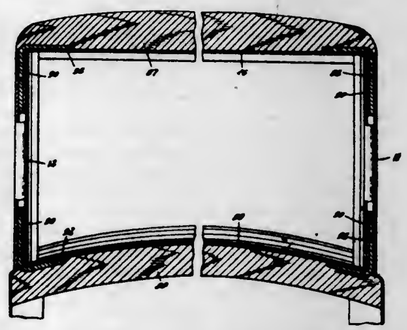
cause portions thereof to engage said inclined faces drawing said lense and bezel into tight engagement with each other and holding them there.

1,902,998. GAUGE. EDMUND E. HANS, Detroit, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 17, 1928. Serial No. 255,060. 11 Claims. (Cl. 73—109.)



6. In a gauge having a pointer and a Bourdon tube, a base plate, a plurality of supporting plates supported from said base plate by a common post mounted near the edge of the base plate, and means connected to said tube and mounted by said plates for operating said pointer, said means including a member having a substantially straight line motion on a line passing through the tube end and the post.

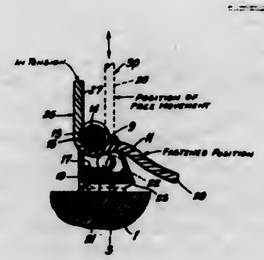
1,902,999. AUTOMOBILE BODY. FRANK HUMER, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed July 8, 1929. Serial No. 375,781. 4 Claims. (Cl. 296—28.)



1. In a body construction for vehicles having a windshield, hollow door posts at opposite sides of said windshield, a cross brace extending between said posts, and bent ends on said brace received and secured in the hollow of said posts.

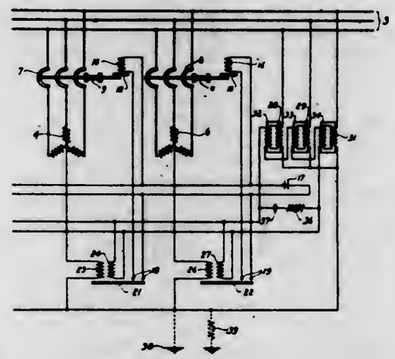
CARNEGIE LIBRARY OF ATLANTA

1,903,000. FASTENER. ACHILLES E. JANNOPOULO, Webster Groves, Mo. Filed June 6, 1932. Serial No. 615,574. 4 Claims. (Cl. 24—136.)



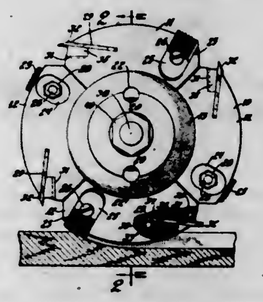
1. A fastener comprising a body member having spaced walls, a grooved roller rotatable between said walls having a cord in said groove, one reach of which cord is normally tensioned and the other of which is normally loose, a member inclined toward said roller and located between said walls, a second member angularly located with respect to said inclined member, a ball imprisoned between the said walls and said angularly located members and the roller, said normaly loose reach of the cord being clear of the ball in one range of positions and engaging the ball in the normally loose position to cause the ball to approach the grooved roller and grip the cord upon incipient movement thereof.

1,903,001. PROTECTIVE SYSTEM. JULIUS JONAS, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Jan. 18, 1930, Serial No. 421,677, and in Germany Jan. 21, 1929. 9 Claims. (Cl. 175—294.)



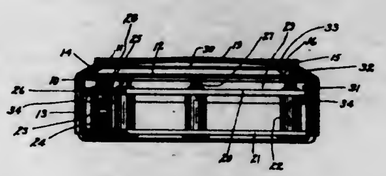
1. In a system for selectively protecting electrical devices from short circuits, a polyphase line, a plurality of polyphase electrical devices each having a neutral point, said devices each being connected to said line, and common means connected between the neutral point of each of said devices and said line for selectively causing the disconnection from said line of any one said devices upon the occurrence of a fault therein.

1,903,002. GAINING HEAD. THOMAS J. JOHNSON, Flint, Mich. Filed Sept. 6, 1928. Serial No. 304,800. 1 Claim. (Cl. 144—218.)



In a device of the class described, a body portion including two parts each of which includes a substantially circular central portion, diametrically opposite projections extending outwardly from each of the central portions and adapted to interfit with the projections on the other central portion to form a substantially circular head, axial recesses formed in the juxtaposed faces of the two central portions, a boss extending axially from one of said central portions and into an axial bore in the other of said central portions, an adjusting member located in said recesses and in screw-threaded engagement with said boss, gear teeth on the periphery of said adjusting member, and a bore through one of said central portions through which a key having gear teeth thereon is adapted to be inserted to engage the teeth thereof with the teeth on the adjusting member to adjust the two parts of the body portion axially.

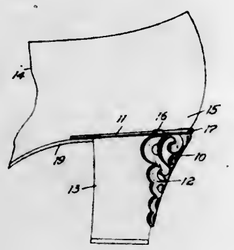
1,903,003. WATCH. ARTHUR L. MANSFIELD, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Apr. 28, 1930. Serial No. 447,858. 2 Claims. (Cl. 58—127.)



1. In a watch, the combination with the case-shell formed with an integral inwardly-turned crystal-retaining flange; of a crystal seated against the said flange; a move-

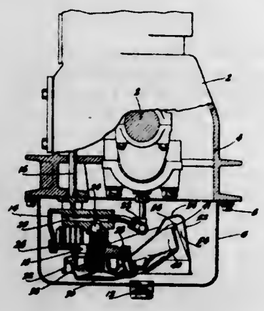
ment installed in the said case-shell; a dial-plate also installed in the said shell; means carried by the said movement independently of the case-shell for supporting the said dial-plate in spaced relation with respect to said movement; and a ring secured to the said movement within the said case-shell, engaging the upper surface of the said dial-plate for retaining the same in place, and formed with an inturned crystal-retaining flange complementing the crystal-retaining flange of the said case-shell for holding the said crystal in place thereagainst.

1,903,004. SHOE HEEL ORNAMENT. PAUL MARIANI, New York, N. Y. Filed Oct. 13, 1930. Serial No. 488,286. 2 Claims. (Cl. 41—10.)



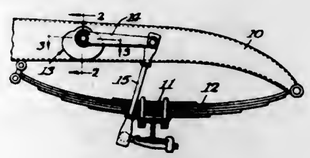
1. A shoe heel ornament as characterized, comprising an attaching means for a pendant, said attaching means comprising wire-like material flattened so as to have a less height than width thereby obtaining rigidity in the direction of greatest width and enabling the attaching means to rest entirely between the last of a shoe and an attached part by virtue of the flattening of said material.

1,903,005. OIL PUMP SCREEN. CHARLES LE ROY MCCUEN, Lansing, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 20, 1930. Serial No. 496,928. 4 Claims. (Cl. 184—6.)



1. In combination with an oil receptacle and an oil pump located therein, a screen between the pump inlet and the oil receptacle, said screen having a portion thereof extending above the oil level in the receptacle, and means for causing the oil to flow over said portion to the inlet when the screen becomes impervious to oil.

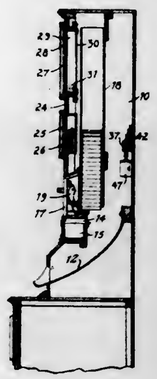
1,903,006. SHOCK ABSORBER. GEORGE KENNETH MCKEE, Cincinnati, Ohio. Filed June 15, 1931. Serial No. 544,423. 14 Claims. (Cl. 188—89.)



1. A hydraulic shock absorber comprising a casing and a piston therein and having a restricted by-pass and an auxiliary passage for the flow of liquid around the piston, and a pressure-operated valve normally closing said auxiliary passage and arranged to gradually restrict the flow through said passage as the valve is moved away form its normal closed position.

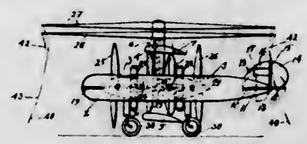
1,903,007. [WITHDRAWN.]

1,903,008. VENDING MACHINE SIGN ILLUMINATING MECHANISM. STEPHEN MICHLIK, Brooklyn, and CHARLES L. O'REILLY, New York, N. Y., assignors to Sanitary Automatic Candy Corporation, a Corporation of New York. Filed Feb. 28, 1930. Serial No. 432,028. 3 Claims. (Cl. 40—130.)



1. In a vending machine, a sign to be illuminated, electric lighting units to illuminate the same, a circuit supplying current to said units and means to control the energising of the same, said means including a second circuit, a solenoid therein, a switch actuated by the solenoid and included in said first circuit to make and break the same, and means actuated by the operation of the vending mechanism to energize said second circuit.

1,903,009. FLYING MACHINE. GEORGE FRANCIS MYERS, New York, N. Y. Original application filed Nov. 4, 1926, Serial No. 146,092. Divided and this application filed Jan. 22, 1931. Serial No. 510,873. 29 Claims. (Cl. 244—15.)



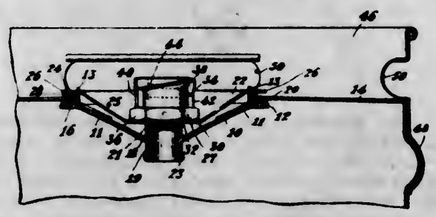
1. In combination with a flying machine, of a helicopter propeller, and a tail unit comprising an elevator, a stabilising plane, a fixed fin, an airplane rudder, and a helicopter rudder mounted longitudinally in line with the said airplane rudder and contiguous thereto.

1,903,010. HEAD RETAINER FOR DRUMS AND THE LIKE. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed May 18, 1931, Serial No. 536,971. Renewed June 3, 1932. 14 Claims. (Cl. 220—61.)



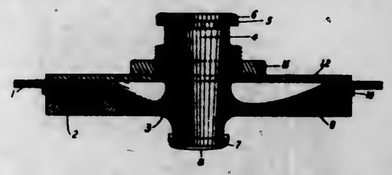
1. A head retaining device for metal containers, comprising a split resilient ring adapted to be contacted into and expanded out of embracing relation to relatively seated rim portions of the drum and its head, a saddle plate pivoted at its rear end on one of the meeting ends of said ring and movable vertically into and out of overlying seated relation to the opposite end, and a lever having a pivotal mounting on said ring and a pivotal connection to said saddle plate, said lever being vertically shiftable for effecting contraction and expansion of said ring.

1,903,011. CLOSURE FOR METAL CONTAINERS. EMILIO ROSENBLUETH, Mexico, Mexico, assignor, by mesne assignments, to A. Gusmer, Inc., Woodbridge, N. J. Filed Oct. 22, 1931, Serial No. 570,379, and in Mexico Nov. 18, 1930. 3 Claims. (Cl. 220—25.)



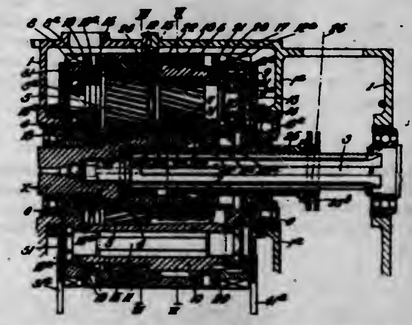
1. In combination with a shipping container having a clean out opening in its wall, an outwardly flanged outer closure plate for said opening arranged within the container and provided with a central opening therethrough and oppositely disposed recesses in the flanged portions thereof, an outwardly flanged inner curvate plate for the opening arranged in contact with the inner wall around the opening, a threaded tube extending through the center of the inner plate and the opening of the outer plate, a ring attached at right angles to the plane surface of the inner plate, a pair of oppositely disposed lugs projecting from the inner marginal edge of the flanged portion of the inner plate and contained by the recesses of the outer plate, a gasket surrounding the ring and lying intermediate the inner plate and all around the opening of the container thereof, and threaded removable means for engagement with the tube whereby to draw the plates in clamping position against the wall of the container around the opening of said container to effect a leakage proof closure.

1,903,012. CLOSURE FOR METALLIC BARRELS OR CONTAINERS. EMILIO ROSENBLUETH, Mexico, Mexico. Filed May 10, 1930, Serial No. 451,218, and in Mexico Apr. 21, 1930. 3 Claims. (Cl. 220—24.)



1. In a barrel or container, a closure device comprising a lower plate having an upper and lower extension with a bored portion protruding above and below said plate, an upper plate with an opening container the upper extension of the lower plate, said upper extension being threaded, and means for making engagement with the threaded portion of the extension whereby to bring the plates in close contact against the barrel or container wall.

1,903,013. POWER TRANSMISSION MECHANISM. PIERO MARIANO SALERNI, Westminster, England. Filed Oct. 7, 1930, Serial No. 486,997, and in Great Britain Oct. 16, 1929. 34 Claims. (Cl. 74—34.)



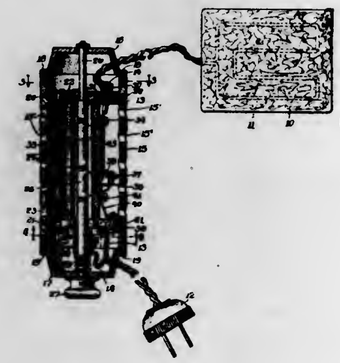
1. In power transmission mechanism or epicyclic gearing of the kind in which there is a rotatable member which is adapted to reverse its direction of rotation and adapted to be held against such reversal rotation in order to establish a driving connection, means for engaging and locking the member to be held against such rotation, means adapted to be operated to permit the said locking means to engage with the said member when the said member starts to reverse its direction of rotation, and means whereby the locking means are caused to engage with the said member at or about the instant when its rotation reverses.

1,903,014. UNFERMENTED MILK PRODUCT. ROBERT P. MYERS, Baltimore, Md., assignor to Research Laboratories of National Dairy Products Corp. Inc., Baltimore, Md., a Corporation of Maryland. Filed Oct. 21, 1931. Serial No. 570 258. 2 Claims. (Cl. 99—11.)

1. The process of making a sweet unfermented acidophilus milk of milk-like consistency which comprises homog-

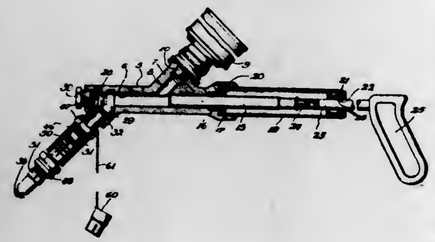
enizing sweet milk, pasteurising, and suspending in the homogenised, pasteurized milk *Lactobacillus acidophilus* in numbers to produce a therapeutically effective product and maintaining the milk at a temperature sufficiently low to inhibit growth of the organisms and formation of lactic acid and prevent souring of the milk.

1,903,015. ELECTRIC HEATING PAD AND CONTROL THEREFOR. GODFREY STEBBUP, Maywood, Ill., assignor to Seric Products Company, Chicago, Ill., a Partnership consisting of Henry L. Charbonneau and Francis J. Dashner. Filed Sept. 29, 1930. Serial No. 485,028. 4 Claims. (Cl. 219—46.)



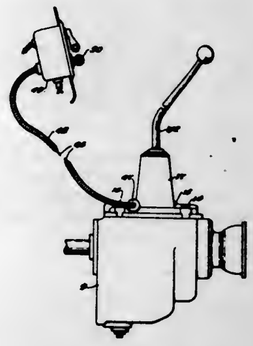
1. The combination with a pad having a heating element, of a normally open thermostatic switch in the circuit of said heating element and outside of said pad, and a heating resistor for closing said switch connected in series with said heating element, said switch being arranged to short circuit said heating resistor, and said resistor, when in circuit, reducing the flow of current through said heating element.

1,903,016. DECARBONIZING APPARATUS. GEORGE F. THOMAS, Berwyn, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 17, 1930. Serial No. 461,812. 11 Claims. (Cl. 299—99.)



7. In a device for supplying a carbon removing liquid to the combustion chamber of an internal combustion engine, a discharge nozzle adapted to enter the spark plug port of a combustion engine, means for supplying liquid to said nozzle, and an adjustable sleeve frictionally engaging said nozzle and having a shoulder for limiting the depth at which such nozzle shall be lowered into the combustion chamber.

1,903,017. TRANSMISSION LOCK. EDWARD F. WARREN and HERMAN SCHWARZE, Birmingham, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 30, 1927. Serial No. 236,832. 23 Claims. (Cl. 70—127.)



1. A cover for a change-speed mechanism case, a supporting plate secured to the cover, a shifter-plate slidably mounted on the supporting plate, means for operating the shifter plate, a channel-shaped locking member adapted to be moved upon movement of the shifter plate in one direction, and means to lock the locking member against movement.

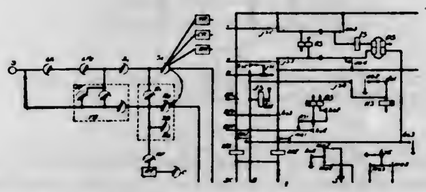
1,903,018. MOPSTICK HEAD. JOSEPH W. WOHLHIETER, East Orange, N. J., assignor to Keystone Stamping Corporation, a Corporation of New Jersey. Filed Mar. 25, 1931. Serial No. 525,066. 5 Claims. (Cl. 15—147.)



1. In a mopstick head construction, the combination of a head member having a securing portion by which it may be attached to a handle stick and having a projecting terminal socket portion of substantially rectangular cross section, said socket portion having two parallel walls and two outwardly flaring walls, each of said parallel walls being provided with a longitudinal slot, a pair of T-shaped mop-gripping members the T-heads of which form parallel gripping jaws and the stems of which extend into said socket portion respectively adjacent to its flaring walls, pivot means connecting the inner ends of said stems and slidable in said slots, the edge portions of said flaring walls and the adjacent outer sides of said stems forming cooperating cam elements which draw said gripping jaws together when said pivot means is retracted along said slots, a spring acting to retract said pivot

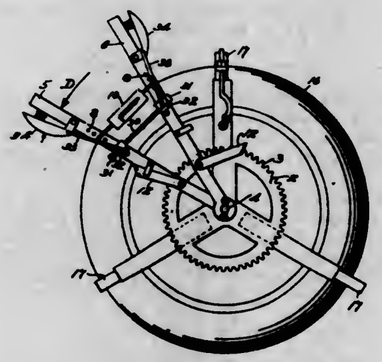
means along the said slots for causing said jaws to grip the mop, and manually operable means for releasing said spring and for thereafter moving said pivot means outwardly along said slots for thereby permitting said gripping jaws to open.

1,903,019. AUTOMATIC OR SEMIAUTOMATIC TELEPHONE EXCHANGE SYSTEM. EDMOND PHILIP GOODWIN WRIGHT and GEORGE CLIFFORD HARTLEY, Aldwych, London, England, assignors to International Standard Electric Corporation, New York, N. Y. Filed Jan. 6, 1931, Serial No. 506,884, and in Great Britain Jan. 7, 1930. 18 Claims. (Cl. 179—18.)



1. In a telephone system comprising a plurality of exchanges and junction lines interconnecting said exchanges, the combination of register translators at said exchanges, means independent of said register translators for establishing a direct connection between one exchange and another, means for establishing an indirect connection between said exchanges under control of said register translators, and means whereby calls over said direct connection may be set up independently of said register translators under direct control of a calling party.

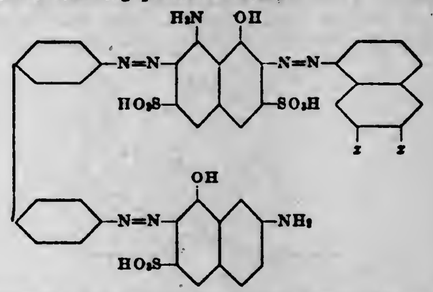
1,903,020. BRAKE TESTER. JOHN ZENZ and HOMER R. KENNEDY, Los Angeles, Calif.; said Zenz assignor to said Kennedy. Filed Feb. 24, 1931. Serial No. 517,783. 5 Claims. (Cl. 265—1.)



3. A brake tester of the class described and having a pair of levers, a force indicator connecting the levers, and manually operative means to lock and operate the levers together without function of the indicator and releasable at will while the levers are in action to throw the indicator into effect.

1,903,021. TRISAZO DYE. FRITHJOF ZWILGMEYER, Hamburg, N. Y., assignor to National Aniline and Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 18, 1930. Serial No. 445,527. 2 Claims. (Cl. 260—72.)

1. A trisazo dye which in the free state corresponds with the following probable formula:



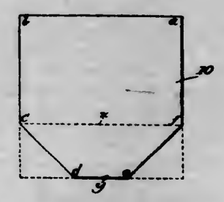
wherein one *a* is a hydrogen atom and the other *a* is a sulfo-group, said dyestuff in the dried and pulverised state in the form of its sodium salt being a black powder soluble in water, and soluble in concentrated sulfuric acid to give a blue solution; and dyeing cotton gray to blue-black shades.

1,903,022. PLUNGER TYPE PEN. GERALD L. BASSETT, Toledo, Ohio, assignor to The Conklin Pen Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 20, 1931, Serial No. 531,568. Renewed Sept. 21, 1932. 10 Claims. (Cl. 120—47.)



1. In a fountain pen, a barrel presenting a tubular reservoir, a piston reciprocable in said reservoir, a pair of telescoping interconnected screw members, and a telescoping non-rotatable connection between one of said screw members and said piston.

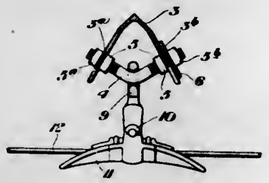
1,903,023. BUILDING COVERING. EDWARD ROSCOE BLACK, Chicago, Ill., assignor to Black Systems, Inc., Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1931. Serial No. 558,236. 3 Claims. (Cl. 108—8.)



1. A building covering unit comprising a sheet of weather-proof material defined by six straight edges arranged to form six enclosing angles, two of said angles

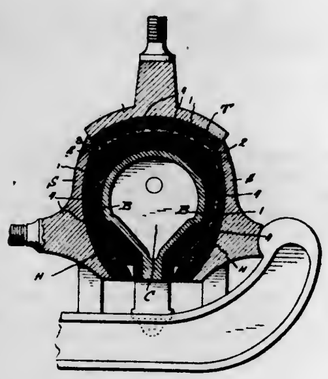
being of substantially ninety degrees each and the remaining four angles being of substantially one hundred thirty-five degrees each, and the length and breadth of the unit being substantially equal.

1,903,024. SUSPENSION HANGER. WILLIAM M. BROCK, East Windsor, Ontario, Canada. Filed Nov. 26, 1932. Serial No. 644,528. 4 Claims. (Cl. 248—31.)



1. A suspension hanger comprising an angle beam having a hole in one flange thereof, a slot in the other flange of said angle beam disposed opposite said hole, a bolt extending through said hole and said slot, a pair of nuts on said bolt, one on either side of said hole, a nut on said bolt adjacent said slot, a plate having a hole through which the bolt extends from said slot, a nut on the end of said bolt and in abutment with said plate, and means to secure said plate to said flange.

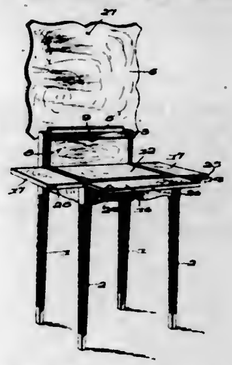
1,903,025. TIRE REPAIR VULCANIZER. JAMES H. BROWNE, East Liverpool, Ohio. Filed July 10, 1931. Serial No. 550,031. 5 Claims. (Cl. 18—18.)



1. As a new article of manufacture, a deformable cushion adapted to be disposed over the inner face of the pressure plate of a vulcanizer, said cushion being provided with a pocket, a potential heating means carried by the cushion and arranged at the base of the pocket, a flexible heating pad made of heat conductive material arranged within the pocket and having portions directly contacting with the potential heating means.

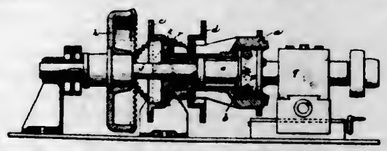
1,903,026. COMBINATION TABLE. LEO J. BUCKLEY, Binghamton, N. Y. Continuation of application Serial No. 533,742, filed Apr. 29, 1931. This application filed Feb. 4, 1932. Serial No. 590,954. 15 Claims. (Cl. 45—70.)

1. In a cabinet, the combination of a shelf, a back, and front walls, and sides, a top hinged to the back wall and arranged for closing the walls and sides and for raising to an elevated position, and a hinge for the lower



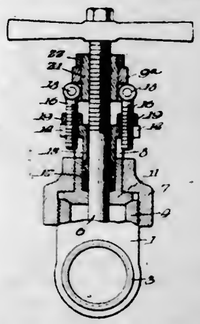
edge of the front wall arranged to lower said wall to an approximately horizontal position.

1,903,027. APPARATUS FOR FORMING SINE TRACKS. HENRI CAPDET, Toulouse, France. Original application filed Nov. 29, 1929, Serial No. 410,591, and in France Nov. 12, 1929. Divided and this application filed Nov. 25, 1930. Serial No. 498,195. 6 Claims. (Cl. 90—13.4.)



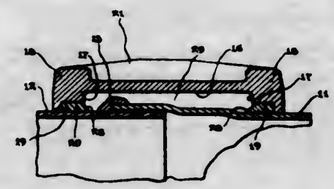
1. An apparatus for cutting a sine track at the end of a guide cylinder, comprising a tool having a stationary axis and adapted to cut the end portion of said cylinder, in combination with a rotary shaft adapted to rotate the cylinder about its axis, means for causing the cylinder to reciprocate on said shaft, a toothed crown integral with said shaft, two pinions meshing with said toothed crown, two cams having a circular edge and mounted each eccentrically on the axis of one pinion, two plates integral with said reciprocating cylinder, perpendicular to the axis thereof and adapted to bear on the edge of said cams, whereby a sinusoidal movement is given the cylinder while the tool cuts the sine track therein.

1,903,028. EXTERNALLY SUSPENDED GLAND STUD. RALPH G. CARLSON, Chicago, Ill., assignor to Crane Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 5, 1931. Serial No. 555,271. 2 Claims. (Cl. 286—31.)



2. In a valve structure, a body having a valve stem extending therethrough surrounded by a stuffing box, a packing gland arranged to compress the packing around said stem, a yoke extending from said body, a removable stem bushing secured to said yoke above said box, a pair of studs pivoted to said bushing and means thereon arranged to force the gland into said stuffing box.

1,903,029. PIPE COUPLING. WILLIAM B. DAMSEL, New York, N. Y., assignor to Victaulic Company of America, New York, N. Y., a Corporation of New Jersey. Filed May 7, 1930. Serial No. 450,535. 4 Claims. (Cl. 285—99.)

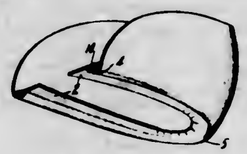


1. A repair ring for pipe lines or the like, comprising a sectional sleeve encircling the pipe line, and endless gaskets bearing against the exterior of the pipe line and secured in position by said sections, each gasket having parti-circular side portions and portions connecting the side portions and extending axially of the ring.

1,903,030. PROCESS FOR THE MANUFACTURE AND PURIFICATION OF PARANITRANILINE. ALEX BROOKING DAVIS, Cincinnati, Ohio, assignor to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 18, 1929. Serial No. 333,528. 2 Claims. (Cl. 260—130.5.)

1. The process of removing dinitrodiphenylamines from commercial paranitraniline by dissolving the diphenylamine compounds out with hot aqua ammonia of approximately 1% ammonia strength.

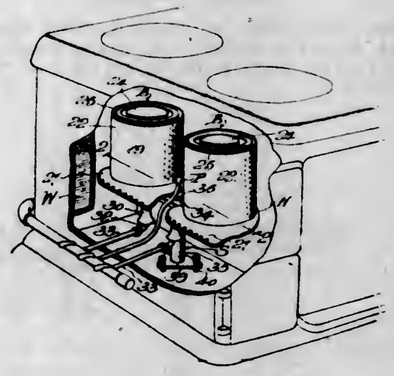
1,903,031. COUNTER STIFFENER. MILTON L. DODGE, Newburyport, Mass. Filed Apr. 19, 1930. Serial No. 445,582. 4 Claims. (Cl. 36—68.)



1. A counter stiffener having a sole-attaching flange, said flange having a thickened margin formed to present a substantially flat upper face and a downwardly extending bead extending a substantial distance inwardly of the inner side wall of the stiffener about its margin on its lower face.

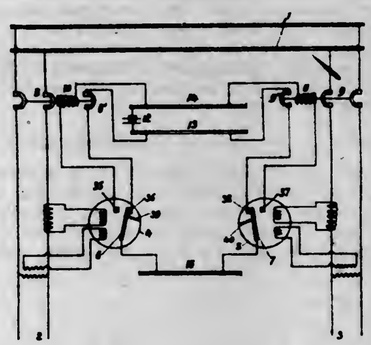
1,903,032. BURNER. HOMER D. DUFAULT, Easthampton, Mass., assignor, by direct and mesne assignments, of one-sixth to Alderic Fugere, one-sixth to Euclide Fugere, one-sixth to Adam Boucher, one-sixth to Henry Bernier and one-sixth to Hiram Bernier, Easthampton, Mass. Filed Mar. 28, 1932. Serial No. 601,679. 3 Claims. (Cl. 158—116.)

1. In a burner, a horizontal upwardly discharging burner ring, a short substantially straight horizontal fuel conduit joined to and communicating with said ring, said conduit being substantially tangential to the outer periphery of said ring and having fuel discharge means



adapted to outwardly discharge fuel for heating a waterback or the like, and a fuel inlet for said ring and conduit.

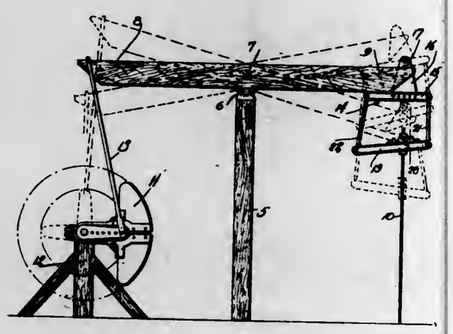
1,903,033. PROTECTING DEVICE FOR ELECTRIC DISTRIBUTING SYSTEMS. LUCIEN GEORGES DUPUIS and GEORGES TINEL, Paris, France, assignors to Union d'Electricite, Paris, France, a Company of France. Filed Nov. 3, 1927, Serial No. 230,874, and in France Mar. 5, 1927. 3 Claims. (Cl. 175—294.)



1. A protective device for electric distributing systems constituted by networks connected by groups of feeders working in parallel, comprising a circuit breaker at each end of each feeder, a trip coil adapted to open said circuit breaker, a directional watt-metrical relay including a working contact, a rest contact and a movable part adapted to come into contact with either of the first mentioned contacts, means normally retaining the movable part on the rest contact and acting to permit the movable part to engage the working contact when the feeder receives an amount of energy above a predetermined value; means connecting said relay with the corresponding feeder whereby the movable part may engage the working contact when the feeder receives energy by the considered end, a source of electric supply at each station for each group of feeders, a first and a second conductor connected each with one pole of said source, an auxiliary conductor, means connecting one end of the trip coils of the group of feeders with the first conductor, means connecting the second end of said trip coils with the auxiliary conductor when the movable part of the corresponding relay engages

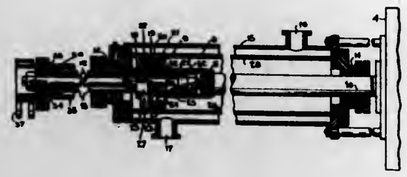
the working contact, means connecting the auxiliary conductor with the second conductor when the movable part of one at least of the relays is engaged with the rest contact.

1,903,034. STRAIGHT LIFT BEAM HANGER FOR OIL WELL PUMPING RIGS. CARL EURIT, Tulsa, Okla. Filed June 24, 1932. Serial No. 619,150. 10 Claims. (Cl. 74—5.)



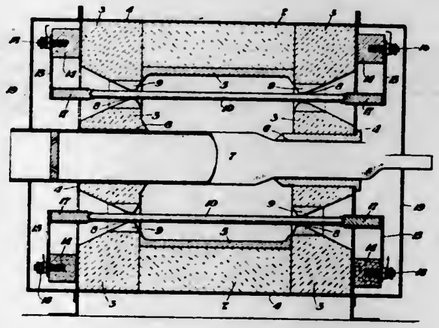
1. In a straight lift beam hanger for oil well pumping rigs, in combination, the pumping end of a walking beam, the upper end of a polish rod and a link frame structure interposed between the walking beam and polish rod and being of trapezium form, the link frame structure including upper and lower link members formed of spaced bars, a pivot block for the walking beam between the bars of the upper link member and notched blocks on the bars of the lower link member for the pivotal support of a polish rod clamp.

1,903,035. RETARDING DEVICE FOR MACHINERY. SYDNEY EDWARD THACKER EWING and ARTHUR LINDSEY EGAN, Johannesburg, Transvaal, Union of South Africa. Filed Aug. 17, 1931, Serial No. 557,686, and in Union of South Africa Aug. 18, 1930. 10 Claims. (Cl. 188—96.)



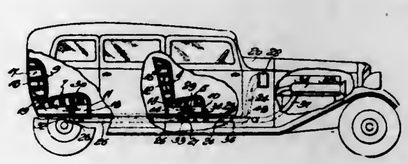
1. A braking device comprising a cylinder adapted to contain liquid, a piston reciprocable therein, a piston rod and tail rod of equal diameter extending from the piston through the cylinder ends, said piston comprising relatively rotatable units providing a passage through the piston the effective area of which is varied by relative rotation of the piston units, and said tail rod being rotatable and connected to one of said piston units to rotate the latter, and means for preventing rotation of another of said piston units.

1,903,036. CARBON COMBUSTION FURNACE. CHARLES B. FRANCIS, Pittsburgh, Pa. Filed July 14, 1931. Serial No. 550,778. 10 Claims. (Cl. 219—36.)



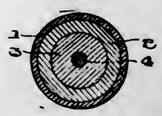
10. In a furnace of the kind described a mume tube having an end reduced to provide a shoulder bearing against a wall of the furnace, the reduced end extending out through said wall.

1,903,037. CAR HEATING, COOLING, AND VENTILATING MEANS. IVAN N. FRAVER, West Reading, Pa. Filed Aug. 14, 1931. Serial No. 557,179. 5 Claims. (Cl. 98—2.)



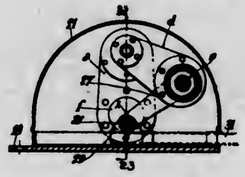
5. In combination with a motor driven car having a cowl, said cowl being provided with air admission openings in opposite sides and with vanes for directing air into said openings; an air conducting pipe having a branched end portion whose branches communicate at their outer ends with said openings, said branches extending downwardly to the body portion of the pipe, the latter extending rearwardly under the floor of the car and upwardly through said floor, and a power operable blower whose outlet communicates with said pipe between said branches.

1,903,038. FELT RUBBER ROLLER. TOKUTARO FUJII, Azabu Ku, Tokyo, Japan, assignor to Eijiro Yamamoto, Tokyo, Japan. Filed Sept. 29, 1930, Serial No. 485,333, and in Japan Dec. 10, 1929. 2 Claims. (Cl. 91—67.8.)



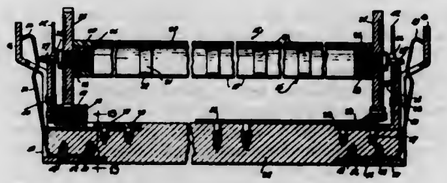
1. An inking roller comprising a stock, a layer of felt wound around the stock, a layer of spongy rubber on the felt layer, and a tubular felt covering impregnated with vulcanized rubber compound.

1,903,039. DEVICE FOR INTERLOCKING TWO MOVEMENTS. MARCEL LOUIS GIANOLI, Paris, France. Filed June 2, 1930, Serial No. 459,004, and in France June 7, 1929. 5 Claims. (Cl. 74—14.)



4. In a device for connecting two members journalled about the same axis, one of said members having a slide extending through and beyond its pivoting axis, a link pivoted at one end to the free end of the other member, a guide member carried by said link and engaging said slide, and means for moving the guide member into coaxial relation to the axis of rotation of said members to permit free rotation of the latter.

1,903,040. BEAM AND MOUNTING FRAME FOR AXMINSTER LOOMS. JOSEPH GOCH, Amsterdam, N. Y. Filed Apr. 22, 1932. Serial No. 606,996. 13 Claims. (Cl. 139—10.)



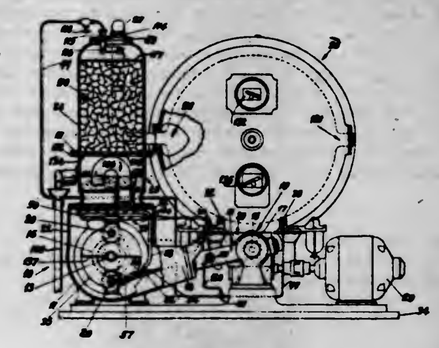
1. In a beam and mounting frame for Axminster machines, a beam of tubular formation longitudinally slotted along one side whereby the ends of yarn to be wound on the beam are adapted to be moved through the slot and confined within the tubular beam by frictional engagement with the walls thereof.

1,903,041. WATER TREATMENT. RALPH E. HALL and HENRY A. JACKSON, Mount Lebanon, Pa., assignors to John M. Hopwood, Dormont, Pa. Filed Nov. 28, 1929. Serial No. 409,416. 18 Claims. (Cl. 210—23.)

1. The process of treating the water in a steam boiler, which comprises supplying to the boiler water a chemical containing a molecularly dehydrated phosphate radical which is rehydrated in the water in the boiler to a condition of greater alkali-neutralising capacity.

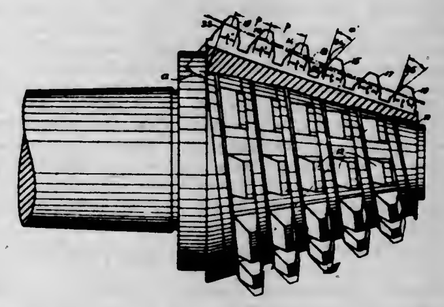
1,903,042. OIL GAS GENERATOR. LEONARD B. HARRIS, New York, N. Y., assignor to H. O. G. Holding Corp., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1931. Serial No. 512,897. 14 Claims. (Cl. 48—94.)

1. In apparatus for generating oil gas, an oil gas generating chamber, a plurality of continuously heated heating elements rotatably mounted in said chamber, each heating element being alternately brought into an oil



spraying zone in said chamber and out of said zone into a non-spraying zone.

1,903,043. METHOD OF CUTTING GEARS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Original application filed Nov. 28, 1928, Serial No. 322,498. Divided and this application filed July 16, 1930. Serial No. 468,353. 20 Claims. (Cl. 90—4.)



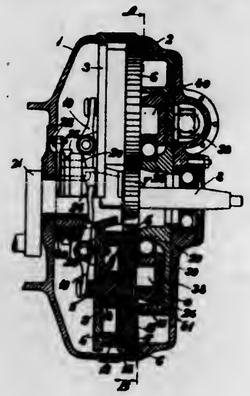
1. The method of cutting a tapered gear which comprises positioning a hob, whose teeth are arranged in a thread, the pitch of which conforms to a definite law, but in which some of the teeth measured on a surface of revolution coaxial with the hob vary in thickness from the normal thickness of corresponding teeth of a thread of the selected pitch, so that said hob extends diagonally across the face of the tapered blank from the outer to the inner end of the tooth zone thereof and rotating said hob and blank continuously in intermeshing engagement.

16. The method of cutting a tapered gear which comprises positioning a taper hob, having teeth arranged in a continuous thread, which are of uniform thickness measured lengthwise of the hob along a circular arc, and which have cutting edges of varying pressure angle from one end of the hob to the other, so that said hob extends diagonally across the face of a tapered gear blank from the outer to the inner end of the tooth zone thereof, and rotating the hob and blank continuously in intermeshing engagement.

1,903,044. POWER TRANSMISSION MECHANISM. CHARLES EDOUARD HENRIOD, Areuse, Switzerland. Filed Feb. 4, 1931, Serial No. 513,411, and in France Feb. 17, 1930. 4 Claims. (Cl. 74—54.)

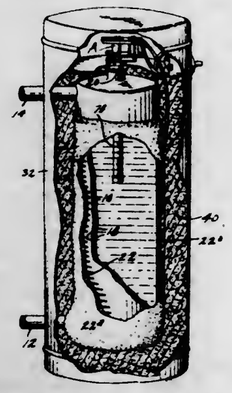
1. In a progressive change speed mechanism, the combination of a drive shaft, a flywheel on the drive shaft and

having one face provided with a series of rings, a driven shaft in axial alignment with the drive shaft and carrying a sun wheel, a planetary wheel mounted on each of said rings on the flywheel and being guided in rotation by the exterior surface of the ring, a disc carrying a crank pin mounted and guided in rotation in the interior of each of said rings, a member slidable in parallel direction to the axis of said shafts in the center of each planetary wheel and disc and extending through the flywheel, a lever for each slidable member oscillatably mounted on the flywheel and operatively connected to said slidable member, means acted upon by each said sliding member



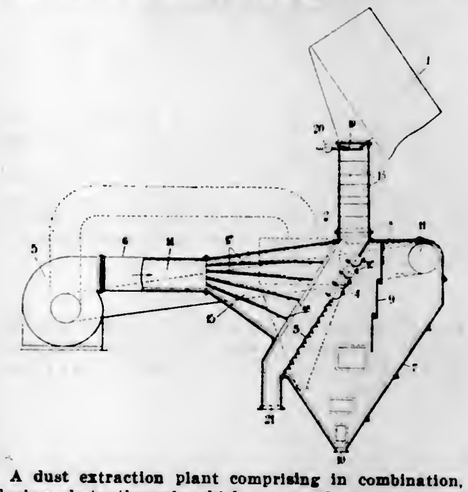
for locking each said planetary wheel to each said disc provided with the crank pin, a disc movable about an axis parallel to the axis of said shafts, an operating shaft connected to said disc, a ring movable on said disc and forming an annular passageway engaging the crank pin of the disc mounted in the interior of each of said rings on the flywheel, a cam arranged to coact with said levers and rotatable around the central axis of the flywheel, means for operatively connecting the cam with the operating shaft, an axially movable cam adapted to act on said lever, and means for operatively connecting said second mentioned cam to the operating shaft.

1,903,045. METHOD OF MANUFACTURING AN ELECTRIC WATER HEATER. LEE WALLIS HODGES, Defiance, Ohio, assignor, by mesne assignments, to Lectrolite Corporation, Defiance, Ohio, a Corporation of Ohio. Filed May 23, 1932. Serial No. 612,975. 1 Claim. (Cl. 219—39.)



The method of making a water heater comprising applying a coat of initially plastic, heat conducting insulating material to the outside of the tank, the material having the property of drying rough and hard, drying the coat until it is hard, tightly winding around the coated tank a flexible electric coil which retains its wound shape and its position by virtue of the relative friction between the coat and the coil, applying a second coat of initially plastic material outside the first coat and the coil, and drying the second coat, the second coat, in drying, adhering to the first coat in a manner to protect the coil and the first coat.

1,903,046. PLANT OR INSTALLATION FOR EXTRACTING DUST FROM MINERALS SUCH AS COAL. SHERWOOD HUNTER, Newlyn, Penzance, England. Filed Nov. 17, 1930, Serial No. 496,275, and in Great Britain Nov. 21, 1929. 1 Claim. (Cl. 209—135.)



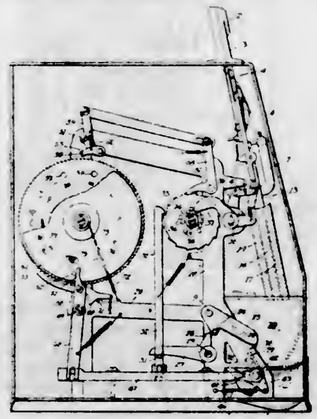
A dust extraction plant comprising in combination, a sloping chute through which passes the material to be freed from dust, louvres in one wall of said chute, a fan producing an air blast, a first divergent chamber for said air blast, such chamber having parallel horizontal top and bottom walls and divergent side walls, partitions arranged within said chamber, a second divergent chamber arranged in series with the first chamber, and having parallel vertical side walls and divergent top and bottom walls, partitions in such chamber arranged at right angles to the partitions in the first chamber, the small end of such first chamber being connected to the fan, the larger end of the second chamber forming one wall of the said chute.

1,903,047. SIGNAL FOR USE ON COMMERCIAL AND OTHER RECORDS. FRANCIS LEVITT IMPEY, Northfield, Birmingham, England, assignor to Morland & Impey Limited, Birmingham, England. Filed Mar. 31, 1932, Serial No. 602,311, and in Great Britain May 4, 1931. 6 Claims. (Cl. 40—1.)



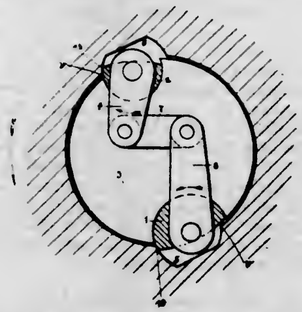
1. A device of the character described comprising a thin flat signal magnetic on one surface and carrying an adhesive on its opposite surface, a stick magnetized sufficiently to lift the loose signal but insufficiently to lift the signal when the adhesive side is stuck to a sheet of paper.

1,903,048. COIN CONTROLLED DEVICE. ODE D. JENNINGS, Palatine, and EMERY MIHALEK, Chicago, Ill., assignors to O. D. Jennings & Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 20, 1931. Serial No. 517,289. 5 Claims. (Cl. 194—1.)



1. In a coin controlled device, a coin chute, a hopper arranged to receive coins from said chute, a plurality of receptacles arranged to receive coins from said hopper, means for varying the position of said hopper to cause it to deliver coins to each of said receptacles in predetermined order, and means for varying the order of delivery from said hopper, said latter means comprising a wheel arranged to be rotated through a certain arc at each operation of the device, pins projecting from said wheel at varying radial distances from the axis of said wheel, a pivoted arm engaging said pins and connections from said pivoted arm to said hopper, whereby the position of said hopper is controlled by the engagement of said arm with said pins.

1,903,049. ROTARY KEY CLUTCH. FERDINAND JOHN, Dusseldorf-Oberkassel, Germany. Filed Mar. 11, 1927, Serial No. 174,614, and in Germany Nov. 23, 1925. 10 Claims. (Cl. 192—29.)



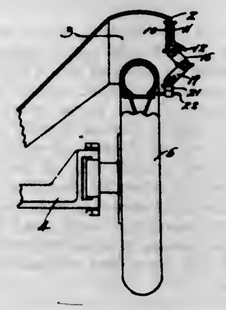
1. A rotary key clutch comprising a driving member, a driven member, and a driving key for establishing and interrupting a driving connection between said driving member and said driven member, a locking member for the driven member, and elements connecting the driving key with the locking member, said elements being adapted to transmit motion from the driving key to the locking member with increased amplitude.

1,903,050. COUNTER STIFFENER AND METHOD OF FORMING IT. HUGH A. JORDAN, Newburyport, Mass., assignor to Milton L. Dodge, Newburyport, Mass. Filed May 11, 1931. Serial No. 536,365. 4 Claims. (Cl. 12—146.)



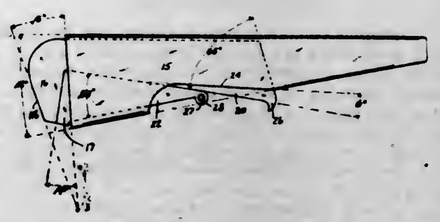
1. A counter stiffener having an attaching flange, said flange having an external marginal bead, said bead at the heel end of said stiffener being of substantially solid cross section and being formed from gathered flange material.

1,903,051. WHEEL ALIGNING GAUGE. HOMER R. KENNEDY, Los Angeles, Calif. Filed Nov. 5, 1930. Serial No. 493,581. 4 Claims. (Cl. 33—203.)



1. A vehicle wheel alignment gauge comprising, in combination, a clamp device with jaws adapted to be closed on the flange or rim of the fender of such vehicle so as to permit adaptation of the gauge conveniently to the upper outside of the wheel to be tested, and an articulated arm pivotally attached to said clamp and provided with a scribing device to engage the wheel.

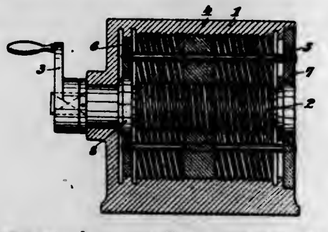
1,903,052. WRENCH. JAMES R. KERLIN, Los Angeles, Calif. Filed Sept. 11, 1930. Serial No. 481,191. 3 Claims. (Cl. 81—154.)



1. A wrench comprising a hollow handle tapered on its narrow sides from its open to its closed end, and with a longitudinal recessed slot in one of the narrow sides thereof between its ends, an outer jaw with its shank increasing in width from the jaw and slidable in said handle, an inner jaw with a tapering shank slidable in said handle and engaging the edge of the shank of the outer jaw, so that the portions of the jaw shanks not ex-

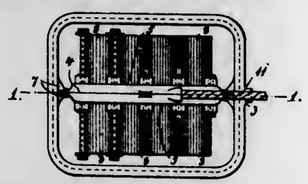
tending out beyond the large end of the handle will be enveloped by the handle for their full length, a hooked lug integral with the inner end of the outer jaw shank adapted to be limited in movement by the inner end wall of said slot and whereby the outer jaw may be moved by the thumb in either direction, a lug integral with the end of the inner jaw shank, and a pin extending transversely through said lug adapted to contact with the outer end wall of said slot to limit the movement of said shank out of said handle.

1,903,053. SCREW GEAR. FRANZ KUBA, Vienna, Austria. Filed Dec. 11, 1931, Serial No. 580,417, and in Austria Dec. 11, 1930. 4 Claims. (Cl. 74—40.)



1. Screw gear for converting a rotary movement into a rotary movement of different speed, comprising in combination a case with an internal screw thread, a rotatable but axially immovable screw shaft axially passing through said case, the pitch of said screw shaft differing from the pitch of said internal screw thread, an annular disk rotatably mounted at each side of said internal screw thread, a collar fixed at each side of the screw threaded part of said shaft and rotatably mounted in said disk, an internally and externally screw threaded nut rotatable on said shaft and co-operating with said internal screw thread of the case, means passing through holes in said nut and fixed to said disks, and means on said shaft for rotating the same.

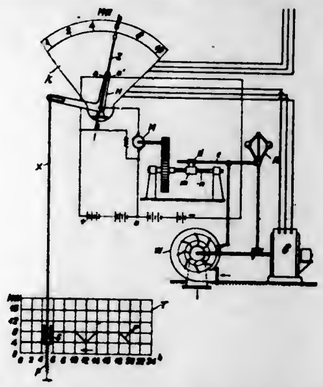
1,903,054. LOADING COIL BOX. TORBERN LAURENT, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Apr. 24, 1931, Serial No. 532,682, and in Sweden May 5, 1930. 4 Claims. (Cl. 178—46.)



1. A loading coil arrangement comprising in combination, a distribution box formed on the outside with a supporting plate, a plurality of loading coils divided into groups, a plurality of cylindrical protecting coverings enclosing each one of said groups of coils and bearing with their flat bases against the plane supporting plate of said box, means for detachably securing the cylindrical coverings to the box, and external sheathed junction cables extending through said supporting plate and connecting the groups of coils individually with the distribution box.

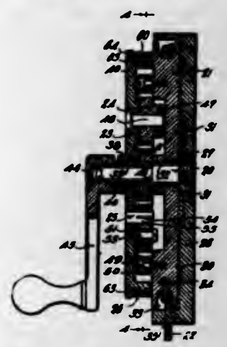
1,903,055. SYSTEM OF AUTOMATIC CONTROL. JOSEF LEONPACHER, Munich, Germany, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed June 7, 1928, Serial No. 283,697, and in Germany June 11, 1927. 1 Claim. (Cl. 171—312.)

Means for controlling the output of an electric generating plant comprising a strip of sheet material the width of which at any point corresponds to a given power output, a following device adapted to follow variations in the width of said strip, means for conveying said strip past said following device, a pair of relatively fixed contacts adapted to be moved by said following device, a third contact situated between said relatively fixed contacts, means



for moving the third contact in accordance with the output of the plant and means for increasing the output of the plant when the third contact contacts with one of the said relatively fixed contacts and decreasing the output of the plant when the third contact contacts with the other relatively fixed contact.

1,903,056. CLOSURE OPERATING DEVICE. THOMAS B. MATTINGLY, Huntington Park, Calif. Filed Oct. 15, 1930. Serial No. 488,868. 11 Claims. (Cl. 268—129.)

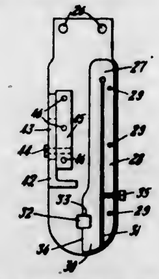


1. A device for operating a slidable closure, including a sheave for reeling a line attached to the closure, manually operable means for rotating the sheave in one direction to wind the line onto the sheave to operate the closure, a rotatable element, releasable brake means normally holding the element against rotation including a friction brake band surrounding the element, and means connecting the sheave with the element to normally hold the sheave against rotation in the other direction and to cause it to rotate therewith in the said other direction when the brake means is released.

1,903,057. BLIND STITCH BUTTON SEWING MACHINE. MICHAEL MCCANN, St. Albans, N. Y., assignor to Frederick Osann Company, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1930. Serial No. 444,867. 10 Claims. (Cl. 112—110.)

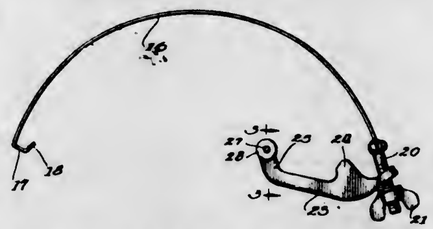
1. In combination, a cloth plate, a gage projecting from the upper face of said cloth plate and against which the folded edge of cloth may be placed, a clamp for

holding a button above the work with one stitching hole above the work and another stitching hole beyond said folded edge, said button clamp having a foot positioned to clamp the cloth against the work plate when said but-



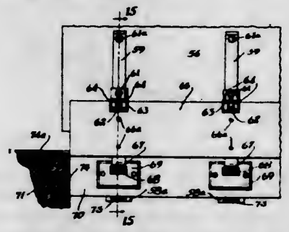
ton is so held, and means for passing stitches alternately through said holes in the button, said stitches passing through the work when through the hole in the button thereabove.

1,903,058. MEANS AND METHOD FOR APPLYING BRAKE SHOE LININGS. NORRIS F. MCNAUGHT and EDWARD H. PETERSON, Chicago, Ill., assignors to Duro Metal Products Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 27, 1932. Serial No. 595,488. 5 Claims. (Cl. 29—84.)



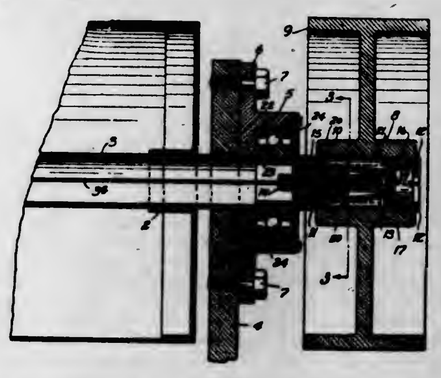
1. In an apparatus for use in applying a lining to a brake shoe having a convex surface to be lined, a flexible metal band adapted to overlie a lining disposed on the convex surface of such a shoe, said flexible metal band being provided with a plurality of apertures through which the lining may be drilled and riveted, and a hook at one end of the band adapted to engage one end of the shoe, a threaded stem at the other end of the band, a bracket having an opening through which said threaded stem extends, means for securing said bracket to the shoe, and a wing nut threaded on said stem adapted to cooperate with said bracket to place said band under tension while the said hook and bracket are in engagement with the shoe.

1,903,059. HINGE. EWALD MEININGHAUS, Lancaster, N. Y. Filed Aug. 15, 1929. Serial No. 386,105. 2 Claims. (Cl. 16—135.)



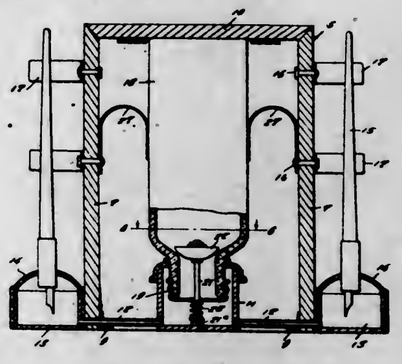
1. A hinge comprising a horisontal fixed hinge member, a movable hinge member pivoted to said fixed hinge member, a latch bar pivoted to said movable member and adapted to engage a catch on said fixed hinge member when said hinge is opened and hold said hinge members open and a deflector secured to said latch bar whereby any substance moving toward said fixed hinge member will be deflected away therefrom.

1,903,060. SHAFT MOUNTING FOR ROTATABLE CYLINDERS. ORVILLE MITCHELL, Dallas, Tex. Filed June 18, 1931. Serial No. 545,218. 5 Claims. (Cl. 287—58.)



1. In combination with a tube having a split end, means for expanding the end portion of the tube into binding engagement with a surrounding body, comprising a cylindrical member in two parts inserted in the end of said tube having substantially the diameter of the bore of said tube, at its outer end having a flange engaging the outer end of said tube, and near its outer end having an interior seat, each of said parts having an interior tapered surface, a nut tapered to engage the tapered surfaces of said member, and a screw engaging said nut and having a head monnted in the end of said member and engaging the seat thereof.

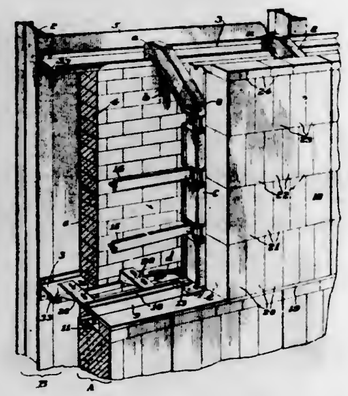
1,903,061. INKSTAND. RAY W. NEWMAN, Wagner, S. Dak. Filed May 18, 1932. Serial No. 612,107. 1 Claim. (Cl. 120—59.)



An inkstand comprising a cabinet, a well in the cabinet, dipping wells exteriorly of the cabinet, ducts connecting the first named well with the dipping wells, an ink container in the form of a bottle having a neck portion adapted to extend into the first named well, a yieldable apertured cap arranged upon the neck portion of said bottle and fitting over the open upper end of said first-named well for properly positioning said neck portion in said first-named well, a valve member for said neck of the bottle, a stem extended from said valve through the neck

and adapted to engage against the bottom of the first named well, and means for moving said valve into a closed position relative to the neck when the bottle is removed from the cabinet in an inverted position.

1,903,062. FURNACE WALL. OSCAR NYGAARD, Saugus, Mass. Filed Feb. 3, 1930. Serial No. 425,448. 19 Claims. (Cl. 72—101.)



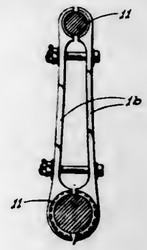
6. A furnace wall comprising front and rear wall sections with an air space between them, a structural steel frame in said rear section, said frame including horizontal beams, a plurality of hangers suspended on said beams, a plurality of horizontal bars connecting the members of each adjacent pair of hangers and supported by them, the hangers having sockets in which the ends of said bars are removably positioned, and refractory blocks located in and forming part of the front section of said wall and held in alinement by their engagement with said bars.

1,903,063. DRYING DEVICE FOR WOOD, BRICK, POTTERY, ETC., PROVIDED WITH HEAT RECOVERING DEVICES. JOHAN GUSTAF OLSSON, Lidingon, and FRANS IVAR EUGÉN STENFORS, Alsten, Sweden, assignors to Aktiebolaget Svenska Fläktfabriken, Stockholm, Sweden. Filed May 1, 1930, Serial No. 448,971, and in Sweden May 7, 1929. 6 Claims. (Cl. 34—46.)



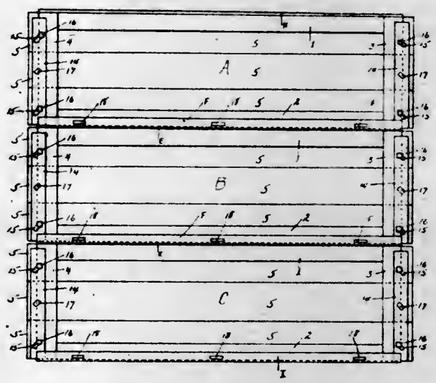
3. Drying device of the class described including a canal for the material to be dried, heat supplying means at one part of the canal, heat exchange tubes at another part of the same and an air-preheater placed independently of the canal, air propelling means adapted to drive drying air repeatedly into contact with the tubes and with the heat supplying means, said tubes and air-preheater being connected in series to each other and to the warmest part of the canal to lead off moist air from the canal, whereby the tubes transfer heat from said moist air to the contacting air, said air-preheater being connected to the tubes with one canal system and to the drying canal with another canal system and being adapted to transfer heat from the moist air exhausted from the canal, to the fresh air to be supplied to the canal.

1,903,064. CONNECTING ROD. JACOB T. ONSTOTT, Yuba City, Calif. Filed Oct. 6, 1930. Serial No. 486,609. 1 Claim. (Cl. 74—17.)



A connecting rod comprising a pair of separate resilient web members, means to connect the webs and adjustably pull their ends together against the spring tension of the webs, opposed and cooperating hub sections at one end of the webs, and segmental cooperating bushing elements in the hub sections, each hub section and its bushing being less than semicircular in extent with their opposite ends disposed in substantially a common plane longitudinally of the rod.

1,903,065. SECTIONAL DOOR. CHARLES EDWARD PAGET, Huntsville, Ontario, Canada. Filed Aug. 29, 1931. Serial No. 560,116. 12 Claims. (Cl. 20—16.)



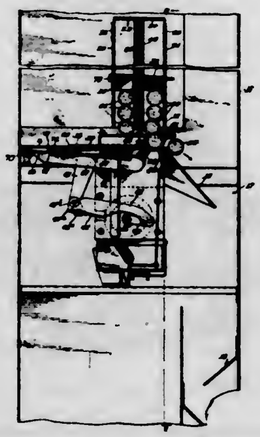
9. A sectional door comprising a plurality of units superposed in edge to edge relation and vertically and laterally adjustable locking plates at each end of each unit.

1,903,066. HAIR CURLING DEVICE. ROCCO PEZZELLA, Washington, D. C. Filed Jan. 9, 1932. Serial No. 585,775.. 14 Claims. (Cl. 132—33.)



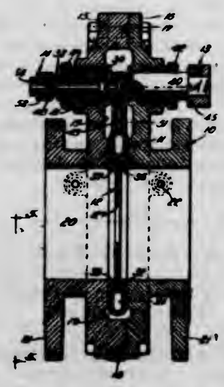
1. A mandrel for curling hair and on which the hair is to be wound, said mandrel having a transverse recessed hair-receiving seat at one end, a holding tongue pivoted to the mandrel and having a reversely disposed hair-receiving seat coacting with the seat of the mandrel, and means for locking the tongue against pivotal movement and with the seats in opposing coacting relation.

1,903,067. VENDING MACHINE. MYRON H. RICHARDSON, Chicago, and ALBERT E. GEBERT, Wilmette, Ill., assignors to Advance Machine Company, Chicago, Ill., a Corporation of Illinois. Filed June 29, 1929. Serial No. 374,873. 8 Claims. (Cl. 312—47.)



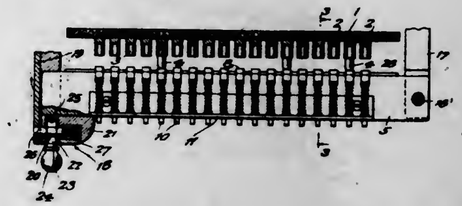
1. A vending machine embodying means for holding a pair of containers having therein the articles to be vended, said containers being open at their bottom, a platform beneath the containers to receive the articles therefrom, means fixed against bodily movement with relation to the containers and projectable above the platform between the articles from the two containers for maintaining the articles separated, an ejector for ejecting the articles, and means whereby the last said means will be responsive in its operation to the actuation of said ejector.

1,903,068. CONSTRUCTION FOR ORIFICE METER FITTINGS. HENRY H. ROBINSON, Los Angeles, Calif., assignor to Robinson Orifice Fitting Company, Los Angeles, Calif., a Corporation of Nevada. Filed Mar. 4, 1931. Serial No. 520,098. 21 Claims. (Cl. 137—75.)



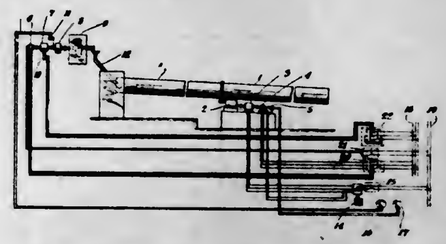
3. An orifice meter fitting including, a body having a fluid passage, spaced opposed seats in the body around the passage, an expandible sealing member for co-operating with the seats, means for mounting an orifice disc on the member, and fluid pressure means for expanding the member.

1,903,069. ELECTRIC CIRCUIT CONTROL. ARTHUR ROSS, Lynbrook, N. Y., assignor to Warner Bros. Pictures, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,491. 1 Claim. (Cl. 200—46.)



Switching mechanism, comprising the combination of a coordinate array of contacts, the contacts in each row being electrically connected together, and a linear array of contacts relatively movable with respect to said coordinate array of contacts and extending thereacross, and means for supporting said linear array of contacts, comprising a cross-bar of insulating material, each of the contacts supported thereby comprising a pivoted contact member having an inclined contact face for sliding engagement with a linear array of said coordinate contacts, a stop member mounted on said cross-bar and common to said pivoted contacts thereon for limiting the movement of said linear array of contacts toward said coordinate array of contacts, a tail member for each of said pivoted contacts, a spring on each of said tail members for urging said pivoted contacts toward said stop member, and an apertured backbar attached to said crossbar, the apertures in said backbar cooperating with said tail member for guiding purposes and for electrically connecting said pivoted contacts, and an electrical terminal for one of said pivoted contacts.

1,903,070. CONTROL SYSTEM FOR ROTARY KILNS AND THE LIKE. VIGGO SAHMEL, Forest Hills, N. Y., assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Feb. 18, 1930. Serial No. 429,251. 4 Claims. (Cl. 222—7.)

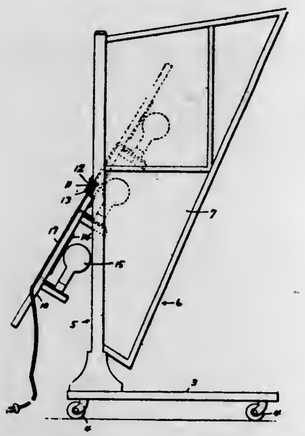


1. The combination with a rotary kiln of an alternating current generator, operating devices for the generator whereby the frequencies of the current generated are a direct function of the speed of the kiln, a feeding mechanism for the kiln, an alternating current motor for the feeding mechanism operated in substantial synchronism with the generator, electrical connections between the generator and the motor, whereby the feeding mechanism is driven at a speed proportionate to the speed of rotation of the kiln, and independent means for controlling the rate of feed of the feeding mechanism.

1,903,071. PHOTOGRAPHY LIGHT REFLECTOR. FRANK SIMPSON, Fort Worth, Tex. Filed Jan. 23, 1932. Serial No. 588,378. 1 Claim. (Cl. 240—1.3.)

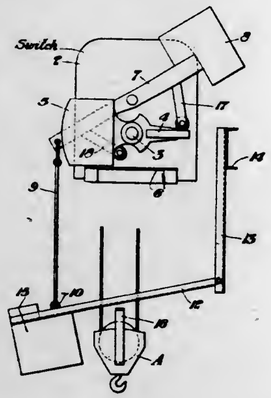
In a structure of the class described, a portable base, an upright carried thereby, a forwardly projecting multiple

walled light concentrating shield carried by said upright, a panel mounted on horizontal axes in said upright for tiltable adjustment with respect to the shield, the reflecting surface of said panel being coated with aluminum, a



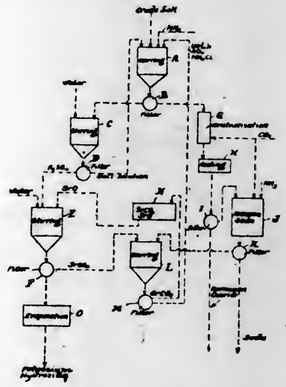
plurality of vertically spaced horizontal rows of mirrors mounted on the aluminum coated surface of the panel, and a plurality of distinguishable electric bulbs carried by the panel each bulb being arranged in spaced relation in front of a mirror.

1,903,072. LIMIT STOP. ROBERT STERRETT, Ambridge, Pa. Filed Feb. 23, 1932. Serial No. 594,584. 2 Claims. (Cl. 192—142.)



1. The combination with a crane having a hoisting mechanism including a hoist sheave block, of a limit switch and means operated by said sheave block for actuating said switch, said means comprising a counterweighted arm fixedly mounted intermediate its ends to an actuating shaft of said switch, a counterweighted rocking arm pivotally mounted on said switch at a point above said first named arm, depending actuating legs carried by said rocking arm and adapted to engage the end of said first named arm opposite its counterweight whereby said rocking arm is moved about its pivotal mounting so as to lift said first named arm against its counterweight, and means normally tending to hold said rocking arm in one position against the pull of the counterweight of said arm, said means being actuated by the movement of said hoist sheave block to release said rocking arm to the pull of its counterweight.

1,903,073. PROCESS FOR THE PRODUCTION OF SODA AND POTASSIUM HYDROXIDE. CARL THEODOR THORSELL, Kassel, Germany. Original application filed July 3, 1930, Serial No. 465,798, and in Germany July 13, 1929. Divided and this application filed June 24, 1931. Serial No. 546,673. 1 Claim. (Cl. 23—184.)

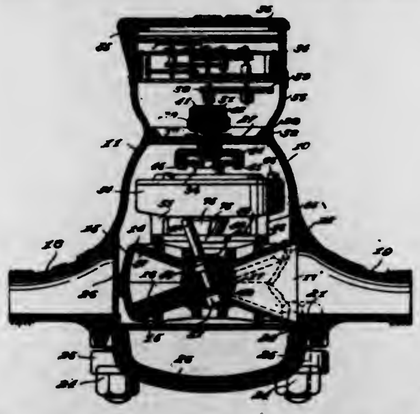


A process of producing soda and potassium hydroxide while simultaneously obtaining ammonium chloride from sylvinitic crude potassium salts, ammonia and carbonic acid by passing alkaline-earth sulfate in a cyclic process through the following stages: First, a solution containing ammonium chloride and ammonium bicarbonate obtained when carrying out the process is stirred up with alkaline-earth sulfate also obtained during the process and separating the alkaline-earth carbonate formed; second, the mother liquor obtained from the first stage is then stirred up with sylvinitic crude potassium salt and ammonia added whereupon the resulting precipitate consisting of glaserite and potassium chloride is separated and decomposed with cold water to potassium sulfate; third, the mother liquors obtained from the second stage are combined and the free ammonia removed, whereupon the mother liquors are cooled for the purpose of separating a part of the ammonium chloride contained therein; fourth, the remaining mother liquor is worked up into sodium bicarbonate and soda respectively according to the ammonia-soda-process, whereby the solution containing the ammonium chloride and ammonium bicarbonate indicated in the first step is formed; fifth, the alkaline-earth carbonate obtained from the first stage is converted into alkaline-earth oxide and alkaline-earth hydroxide respectively according to known processes and decomposed in water with the potassium sulfate, obtained from the second stage, whereby a solution of potassium hydroxide and alkaline-earth sulfate is obtained, and finally the separated alkaline-earth sulfate is treated, as in the first stage, and potassium hydroxide is obtained from the solution by evaporation.

1,903,074. METER. HARRY G. WEYMOUTH, Pittsburgh, Pa., assignor to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1929. Serial No. 353,186. 4 Claims. (Cl. 73—98.)

4. A liquid meter having a supporting casing; a measuring chamber rigidly positioned therein; a registering mechanism rigidly positioned in said casing in fixed cooperative relation to said measuring chamber; a train of five sets of reduction gears disposed in said casing between said measuring chamber and said registering mechanism, and having driving and driven shafts associated therewith; a housing formed of a cup shaped container and a cover completely enclosing said reduction gears fixedly mounted in said casing between said registering

mechanism and said measuring chamber, said housing and gears therein being readily insertible into a meter having a lesser number of sets of reduction gears; said driving shaft extending through the bottom of said container; an



elongated bushing carried solely by said container and supporting said driving shaft; said driven shaft extending through said cover, and an elongated bushing carried solely by said cover and supporting said driven shaft.

1,903,075. ELECTRICAL TRANSFORMER. PETER WILLIAM WILLANS, Towcester, and MARK WARD, London, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 11, 1924, Serial No. 749,128, and in Great Britain Dec. 17, 1923. 4 Claims. (Cl. 179—171.)



2. The combination of a pair of valves and a low frequency coupling therebetween, said low frequency coupling comprising a winding in the output circuit of one of said valves that has an impedance which is large compared to the impedance of that valve whereby substantially uniform amplification is obtained over the audio frequency range and a winding in the input circuit of the other one of said valve that has an impedance which is large compared to the impedance of the first mentioned winding when said first mentioned winding is open-circuited whereby a substantial step-up of voltage is possible and which is small compared to the impedance of the first mentioned winding when said first mentioned winding is short-circuited whereby tight coupling is attained.

1,903,076. WOOD PLATE. KURT WINKLER, Finsterwalde, Niederlausitz, Germany. Filed July 7, 1930, Serial No. 466,260, and in Germany July 1, 1929. 1 Claim. (Cl. 20—91.)



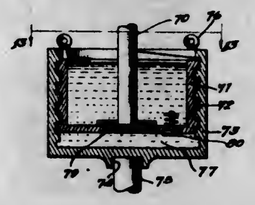
A plate of wood comprising a plurality of joined boards arranged side by side and provided in their abutting faces with more than two slits, the slits in one board being displaced relatively to the slits in the other board and the slits of one board being covered by the plane edge surface of the adjacent board, said slits forming passages through the boards to admit air to glue joining the boards and to uniformly dry said glue.

1,903,077. METHOD OF UNITING DISSIMILAR METALS. HARRY R. WOLF, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 22, 1930. Serial No. 503,994. 3 Claims. (Cl. 76—101.)



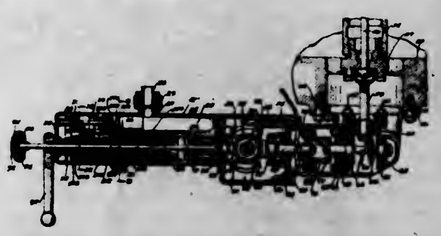
1. The method of securing a tantalum carbide cutting member to its tool comprising in cleaning the tool at the place of receiving the member, cleaning and then coating the member with copper, placing the copper coated member at the cleaned place, then heating the tool and member in a hydrogen gas until the copper is melted.

1,903,078. VALVE MECHANISM. NELSON E. WOOLMAN, Hermosa Beach, Calif., assignor to General Motors Research Corporation. Filed Jan. 8, 1929. Serial No. 331,110. 9 Claims. (Cl. 123—90.)



1. In a poppet valve operating mechanism, a pair of coaxial, threadedly connected members, means acting to produce an axial force along both members, means for producing a rotational force between them, and means providing a liquid buffer between the members.

1,903,079. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 8, 1929. Serial No. 390,072. 41 Claims. (Cl. 60—44.)

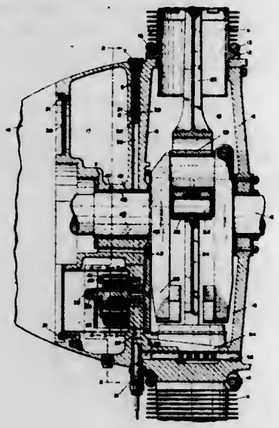


1. In a gun starter device for internal combustion engines, a barrel member having a cartridge receiving chamber, a breech member aligned with the barrel, said breech member having an interior chamber, a firing pin reciprocable in the breech chamber and adapted to fire a cartridge in the barrel chamber when released, a trigger in the breech chamber adapted to hold the firing pin in retracted position, means in said breech chamber urging said firing pin into extended firing position, trigger release means extending through said barrel and into said breech chamber, and engine actuated means associated with the release means beyond the barrel to cause a pin releasing movement thereof.

7. In combination with cylinders and the crankshaft of an internal combustion engine, a gun starter device

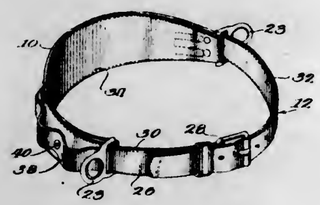
comprising a barrel member having a plurality of cartridge receiving chambers, means connecting each of said barrel chambers with the interior of an engine cylinder, and means for firing a cartridge in each of the barrel chambers, said means being actuated manually to fire the first cartridge and then being actuated from the engine crankshaft to fire the other cartridges.

1,903,080. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 19, 1928. Serial No. 326,917. 14 Claims. (Cl. 184—6.)



1. In an engine, a crank case, a partition separating said casing into compartments, shaft bearing means formed with said partition and extending through one of the compartments, a hollow crank shaft extending through the bearing, said bearing and partition being formed with the passage through which lubricant is conducted from one of the compartments to the interior of the crank case, and pump means associated with the partition for moving the lubricant from the compartment through the passage in the partition and bearing.

1,903,081. LINEMAN'S BELT. HENRY H. WOTHERSPOON, Lawrence, Mass., assignor to Mathias Klein & Sons, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1931. Serial No. 555,716. 7 Claims. (Cl. 227—8.)



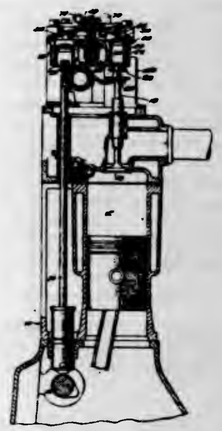
1. A lineman's belt comprising a strap having a tapering widened mid-portion adapted to fit about the back of the wearer, a back support of relative soft, porous material secured inside said widened portion of said strap, said back support being of substantially the same shape as the widened portion of the strap, and fastening means secured at the ends of said back support whereby a substantial part of the strain placed upon the belt is sustained by said back support.

1,903,082. NOVELTY TOY. SOREN S. ADAMS, Asbury Park, N. J. Filed Sept. 12, 1932. Serial No. 632,652. 4 Claims. (Cl. 46—40.)



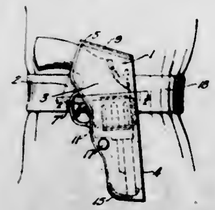
1. In a surprise toy, a toy snake or the like which is adapted to be released upon opening of the toy, means for defining an enclosed space in the toy apart from said snake or the like and a plurality of freely movable sound producing elements in the enclosed space for creating a sound effect upon the shaking of the toy closely simulating that which would be obtained if the toy actually held the contents which it is represented to enclose.

1,903,083. HYDRAULIC MECHANISM. JOHN O. ALMEN, Royal Oak, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed Dec. 22, 1927. Serial No. 241,949. 16 Claims. (Cl. 123—90.)



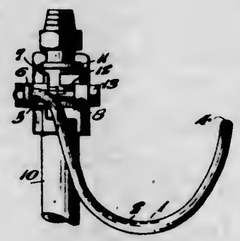
8. Hydraulic valve mechanism comprising an hydraulic chamber, operating and operated members working in the chamber, a supply chamber, and a fitting provided with a passage establishing communication between the upper portion of the hydraulic chamber and the supply chamber for the discharge of air from the former, said fitting being accessible from outside said chambers and readily removable therefrom for replacement or repair, and thermally operated means for controlling said passage.

1,903,084. PISTOL HOLSTER. ISIDOR ARTH, Oakland, Calif., assignor to Isidor Arth & Son, Oakland, Calif., a Copartnership composed of Isidor Arth and Raymond Arth. Filed July 2, 1930. Serial No. 465,326. 2 Claims. (Cl. 224—2.)



1. In a holster, an elongated casing like body closed at its ends and open only along one side thereof whereby a gun may be inserted into the holster and removed therefrom through said open side, said body being arranged to house a gun therein with the handle and trigger guard projecting laterally through said open side and exposed for the gripping thereof with the hand exteriorly of said housing, and a snap fastener to releasably hold said open side closed at a point beneath the portion thereof through which the trigger guard extends, and arranged to be forced apart by pressure of the gun upon withdrawal thereof from the holster.

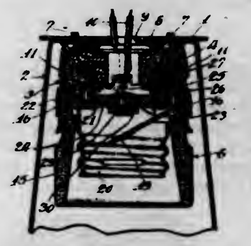
1,903,085. HOSE RACK. WILFRED BARNES, Jr., Glenolden, Pa. Filed July 28, 1932. Serial No. 625,443. 1 Claim. (Cl. 248—28.5.)



In a device of the character stated, a hose supporting member formed of a continuous element deflected to form two parallel U-shaped members integral at their front ends and having their rear ends permanently secured to a transverse bar, a coupling adapted to engage a water outlet, said U-shaped members adapted to receive a coiled hose having one end thereof engaging said coupling, bolts carried by said transverse bar, and a sectional clamp carried by and adapted to be tightened by said bolts around the end of said hose engaging said coupling member.

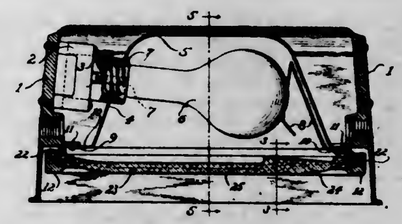
1,903,086. SHOCK ABSORBING SOCKET. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Mfg. Co., Des Plaines, Ill., a Corporation of Illinois. Filed Oct. 19, 1929. Serial No. 400,811. 9 Claims. (Cl. 173—342.)

2. An electrical receptacle construction comprising a spring socket-supporting yoke having spring arms for embracing a socket therebetween, an insulating supporting member detachably secured between the upper portions of the spring arms of the yoke, a wiring terminal and contact mounted thereon, and an insulating housing



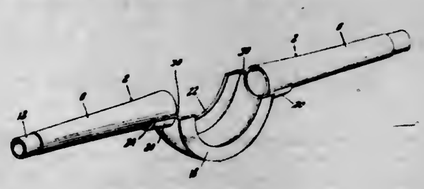
member surrounding said contact, and covering said wiring terminal and detachably mounted between the lower ends of said spring arms.

1,903,087. LIGHTING CONSTRUCTION. REUBEN B. BENJAMIN and JOHN H. WATERBURY, Chicago, Ill., assignors to Benjamin Electric Manufacturing Company, Des Plaines, Ill., a Corporation of Illinois. Filed July 2, 1931. Serial No. 548,390. 7 Claims. (Cl. 240—1.)



2. A lighting construction to be installed in the ceiling of a tunnel adjacent the side wall thereof comprising an elongated dished reflector to be installed in the ceiling with its open side down and extending in a transverse direction, a housing for said reflector, a lamp socket adjacent one end of the reflector and mounted on said housing for supporting a lamp in substantially horizontal position in said rflector, and a lens lying in a general horizontal plane across the open side of said dished reflector, said lens having a first zonal portion nearest the side wall of the tunnel provided with a prismatic formation for causing the light rays passing therethrough to diverge forwardly and rearwardly along the side wall of the tunnel to prevent vertical light streaks.

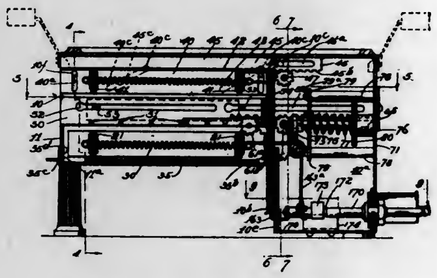
1,903,088. AXLE HOUSING AND METHOD OF MAKING THE SAME. LLOYD BLACKMORE, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Sept. 8, 1930. Serial No. 480,438. 3 Claims. (Cl. 29—153.1.)



8. The method of making a banjo-type axle consisting of forming from flat stock two similar tubular end sections, welding the seams of said end sections, forming from flat

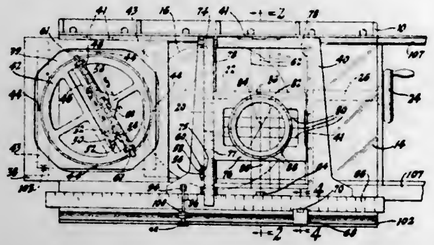
stock two similar channelled semi-circular mid-section halves with end extensions, fitting said mid-section halves in abutting position with the end extensions enveloping the inner ends of said tube sections, and welding said center sections toegther.

1,903,089. AUTOMATICALLY TIMED APPARATUS FOR HEAT TREATMENT. GEORGE BROWNING, Wilmette, Ill., assignor to Chicago Flexible Shaft Company, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 15, 1927. Serial No. 213,179. Divided and this application filed Sept. 25, 1929. Serial No. 395,100. 2 Claims. (Cl. 53—5.)



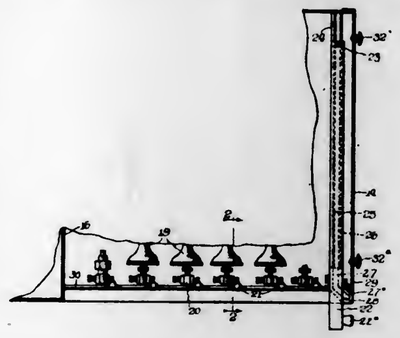
1. In a construction for the purpose stated comprising a heating means and a carrier for contents to be heat-treated mounted for movement to and reverse movement from heat treatment position, the heating means consisting of two heating elements positioned for entrance of the carrier and its contents between them, one of said heating elements being mounted for movement toward and from the other, means for guiding the movable element in such movement consisting of transversely extending slots in opposite lateral members of said movable element, side plates for enclosing said heat treating device having abutments engaging said slots, and means for causing movement of said movable heating element consisting of a longitudinally moving member having oblique slots, abutments protruding from said side plates engaging said oblique slots, and means for moving said longitudinally moving member at will; whereby the oblique slots serve as cams to propel the heating element directly in the direction of said transverse guide slots.

1,903,090. MEASURING DEVICE. THEODORE E. CLARK, Redford, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 26, 1930. Serial No. 447,560. 20 Claims. (Cl. 88—14.)



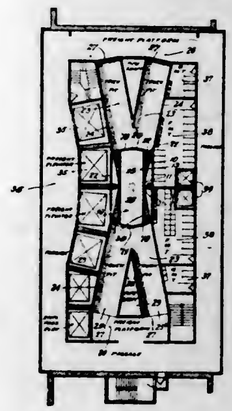
5. In a measuring device, a frame, a shiftable measuring slide mounted on said frame, a flat image-reflecting means spaced from and mounted parallel with said slide and receiving the object to be measured, said slide being shiftable over said means, and measuring means on said slide reflected in said reflecting means to measure the object on the reflecting means.

1,903,091. COOK STOVE. WILLIAM L. COOPER, Kankakee, Ill. Filed Apr. 6, 1931. Serial No. 527,990. 5 Claims. (Cl. 126—37.)



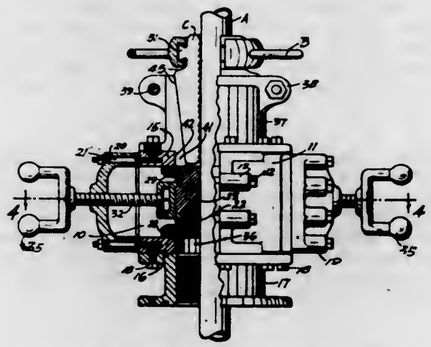
1. In a stove having a substantially flat face, the combination of a burner box having an open forward face and top, bottom and side walls, one of said side walls terminating short of said flat face of the stove, a door for closing said open face adapted when in its closed position to overlie and conceal the forward end of said one of said side walls, pins at the top and bottom of said door adjacent one end thereof, and guide members having slots therein engaging said pins to permit pivotal and sliding movement of the door relative to said members, said members extending into said burner box along said one of the side walls to guide said door for sliding movement into said box, and the forward ends of said slots being formed to extend angularly toward the plane of said one of the side walls to permit movement of the end of said door into concealing relation to the forward end of the wall.

1,903,092. INDUSTRIAL ELEVATOR ARRANGEMENT. RUSSELL G. CORY, Montclair, and WALTER M. CORY, Mahwah, N. J. Filed Oct. 12, 1929, Serial No. 399,196. Renewed Aug. 6, 1932. 21 Claims. (Cl. 104—29.)



1. In a building of the class described, having a plurality of floors, a truck elevator serving the various floors, and having a fixed floor dimensioned with minimum total horizontal area to receive a truck in any of several angular positions, and restricted truck landing spaces on various of the floors at one end of the elevator and dimensioned to receive trucks in various positions in substantial alignment with their positions on the elevator.

1,903,093. OIL SAVER. CHARLES S. CRICKMER, Dallas, Tex., assignor to The Guiberson Corporation, Dallas, Tex., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,597. 4 Claims. (Cl. 288—1.)

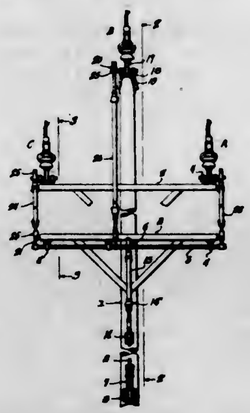


1. A packing member for an oil saver including, a semi-circular elastic member having upper and lower arcuate lips extending from its rear side, said lips being flat, and a metallic cage having upper and lower rearwardly extending flanges embedded within said lips.

1,903,094. PROCESS OF TREATING PETROLEUM OILS. MARIUS S. DARROW, St. Louis, Mo., and LEO S. SWEENEY, Granite City, Ill. Filed May 3, 1928. Serial No. 274,957. 1 Claim. (Cl. 196—33.)

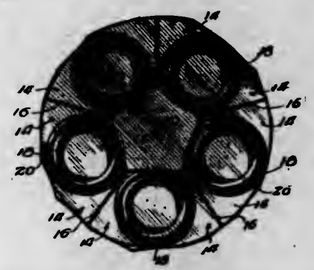
The continuous process of treating oils which consists in simultaneously neutralizing the acid bodies in the oil and filtering the discoloring bodies from the oil by passing the oil stock through a filter bed including fuller's earth, sodium hydroxide and lead oxide compounded in the following proportions by weight: fuller's earth 48 7/8 percent; sodium hydroxide, 28 7/8 percent; and lead oxide 22 1/4 percent.

1,903,095. GANG OPERATED SWITCH. JOHN J. DESMOND, Hubbard Woods, Ill., assignor to Line Material Company, South Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 5, 1930. Serial No. 441,797. 2 Claims. (Cl. 200—48.)



1. A gang operated switch comprising a plurality of switch units, an insulating structure supporting said switch units in laterally and vertically spaced relation, each switch unit having a blade carried by a rock shaft distinct and separate from the rock shaft of each of the remaining switch units, and each switch unit having a rock arm carried by its rock shaft, a metallic rock shaft spaced from each switch unit and provided with a plurality of rock arms, insulating links joining said last mentioned rock arms with the rock arms of the said switch units, and means spaced from said last mentioned rock shaft for operating said rock shaft.

1,903,096. DISPLAY PACKAGE. JOHN R. DOW, Kansas City, Mo., assignor to Interstate Bakeries Corporation, Kansas City, Mo., a Corporation of Delaware. Filed Apr. 29, 1932. Serial No. 608,204. 10 Claims. (Cl. 206—46.)



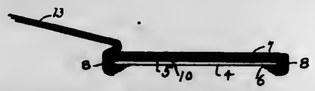
1. A display package for food articles comprising a central top wall adapted to receive advertising matter, and walls forming a plurality of open-top and open-ended receptacles arranged around said top wall, some of said walls being substantially radially disposed partitions between adjacent ones of the compartments, each compartment having a bottom wall, and a wrapper of substantially transparent material around the package and being folded over upon the bottom of the device and there secured to hold the wrapper in position.

1,903,097. WEEDER. RAY E. DUNFORD and ELI W. F. MCMILLAN, Everett, Wash. Filed Feb. 15, 1932. Serial No. 593,098. 3 Claims. (Cl. 55—148.)



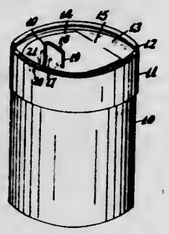
1. A weeder comprising a handle, a strip secured to the lower portion thereof, a substantially circular portion formed with said strip, a blade disposed at an inclination and being formed with the substantially circular portion, toothed members journaled on the substantially circular portion, pins extending from the toothed members, means for operating the toothed members and receiving the pins, a stem included in the operating means, an ear formed with the strip for receiving the stem for slidable movement therein, a lever pivotally secured at the upper end of the handle and having connection with the stem for operating the toothed members for disposing the teeth thereof in cooperative association with respect to each other and with the blade respectively.

1,903,098. CARD HOLDER. WILL J. ECKER, Jr., St. Louis, Mo. Filed July 13, 1931. Serial No. 550,493. 2 Claims. (Cl. 206—57.)



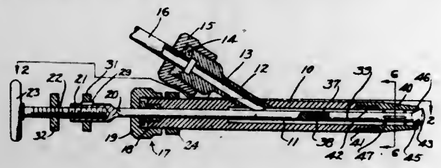
1. In combination with a plate, a card, said card positioned on said plate, a sheet of tissue paper positioned above said card, a second card positioned on said sheet of tissue paper, and a second sheet of tissue paper positioned on said second card, said sheets of tissue paper secured to each other, and to said plate, thereby detachably securing said cards between said sheets of tissue paper, and securing said cards detachably to said plate.

1,903,099. CONTAINER CLOSURE. JOHN W. ERHARD and ANTONETTE ERHARD, New York, N. Y. Filed July 29, 1931. Serial No. 553,726. 4 Claims. (Cl. 229—5.5.)



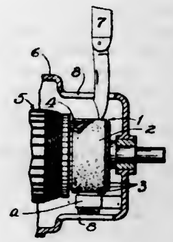
1. A container closure, comprising a container top having an encircling rolled edge and a flap cut from the top adapted to assume opened and closed position, and means on said flap for coacting with the rolled edge to keep the flap closed, comprising a swivelled member on said flap engageable below a portion of said rolled edge, and said portion of the rolled edge being in the form of a tongue movable out of the path of motion of said swivelled member.

1,903,100. OIL BURNER. WILLIAM M. ESTERLING, Long Beach, Calif., assignor of forty-five per cent to Robert S. Hay, and ten per cent to Raymond E. Spencer, San Pedro, Calif. Filed June 30, 1930. Serial No. 464,807. 2 Claims. (Cl. 299—130.)



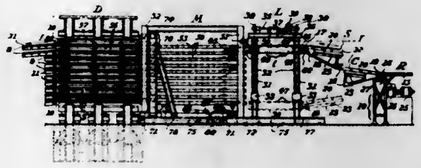
1. A fuel burner comprising a tubular body having a central cylindrical bore therein, a nozzle tip detachably secured to the outer end of the body and having a central bore in longitudinal alignment with that of the body, the outer end of the bore of the nozzle tip being outwardly tapered, a frusto conical valve member disposed at the outer end of said body and having its tapered wall parallel to the outwardly flaring mouth of the nozzle tip, a valve rod connected with the valve member extending longitudinally through the bore of the body, packing means at the rear of the body to accommodate said rod, a saddle secured to the rear of the body and through which the body extends, a cross-tie plate in spaced relation to the saddle, parallel guide rods securing the cross-tie plate and the saddle to each other and being disposed upon opposite sides of the longitudinal center of the burner, a crosshead disposed between the saddle and the cross-tie and slidably mounted upon the guides, a head formed at the outer end of the valve rod and splined through the crosshead, and an adjusting screw threaded through the cross-tie plate and threaded into the head of the valve stem with reverse threads from those in the portion extending through the crosshead whereby rotation of the adjusting screw will produce reciprocation of the cross-head and the valve rod.

1,903,101. METHOD OF AND MEANS FOR SANDING-IN ARMATURE BRUSHES FOR GENERATORS, MOTORS, MOTOR-GENERATORS, OR STARTERS AND THE LIKE. LLOYD T. FALEY, Hermosa Beach, Calif.; Garnet Faley, administratrix of said Lloyd T. Faley, deceased, assignor of one-half to Arthur F. Larrabee, Los Angeles, Calif. Filed Apr. 29, 1926. Serial No. 105,615. 4 Claims. (Cl. 51—185.)



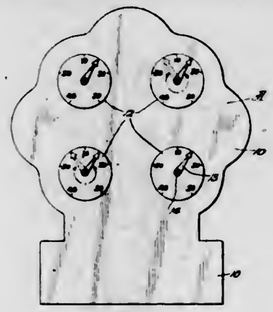
4. The method of sanding-in armature brushes and the like, which method comprises securing an extensible and contractible band having an abrasive associated therewith to the commutator of an armature, and which band is extended to receive the commutator and will automatically secure itself to the commutator by its natural contractibility; then assembling the armature in its respective housing so that the armature brushes rest upon said band; then rotating said armature to sand-in said brushes; and then removing said band from said commutator.

1,903,102. FIBER BOARD MANUFACTURE AND APPARATUS THEREFOR. FRANCIS S. FARLEY, Trenton, N. J., assignor to Daniel Manson Sutherland, Jr., Morrisville, Pa. Filed Oct. 31, 1930. Serial No. 492,474. 10 Claims. (Cl. 34—48.)



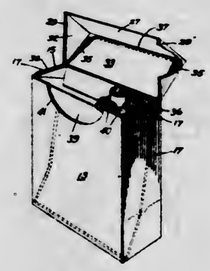
1. An improvement in the manufacture of fiber board from raw fiber pulp sheets produced in succession and treated in batches in a multi-plate drier; which improvement comprises skin-drying and thereby hardening the raw sheets sufficiently to stiffen them for handling, and thereafter introducing the hardened sheets into the multi-plate drier.

1,903,103. ADVERTISING DEVICE. FRED D. FISHER, Chicago, Ill., assignor to Scientific Brake Service Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 21, 1932. Serial No. 612,736. 8 Claims. (Cl. 40—126.)



1. An advertising device comprising two boards, each having a plurality of dials, a shaft extending from each dial on one face to a dial on the other face, a pointer on each end of each shaft adapted to move over said dial, and means for moving said pointers in unison.

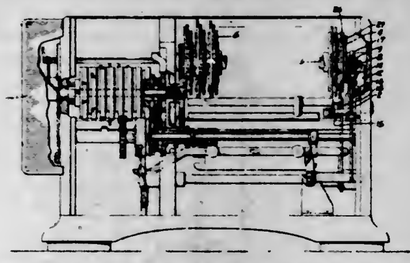
1,903,104. CONTAINER. FRANCESCO FORTUNA and SABATINO GIANNANGELO, Niagara Falls, N. Y. Filed June 25, 1931. Serial No. 546,848. 14 Claims. (Cl. 206—41.)



1. A cigarette box comprising outer bottom and side walls, an inner side wall lying adjacent one of said side walls and providing a space therebetween, a cover hinged to one of said side walls, and resilient means within said space and connected to the cover for normally retaining it in closed position, said inner side wall acting to protect the contents of the box from the resilient means.

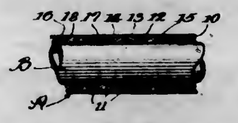
1,903,105. CALCULATING MACHINE. CARL M. F. FRIDEN, Oakland, Calif., assignor to Marchant Calculating Machine Company, Emeryville, Calif., a Corporation of California. Filed Nov. 7, 1928. Serial No. 317,734. 10 Claims. (Cl. 235—79.)

1. In a calculating machine having an overdraft control, an actuating member, stop operating mechanism normally out of operative relation with the actuating member, means controlled by an overdraft registration in the register for positively moving the operating mechanism into



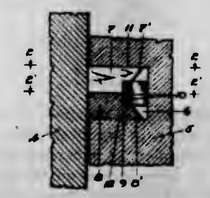
operative relation with the actuating member and means for positively removing said stop operating mechanism from said operative relation.

1,903,106. WATERPROOF HEAT INSULATING TAPE. WILLIAM R. GILLIES, Chicago, Ill., assignor to Union Asbestos & Rubber Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1931. Serial No. 555,738. 12 Claims. (Cl. 154—44.)



1. In a heat insulated pipe, the combination of a member to be insulated with a spirally wrapped tape of asbestos insulating tape and a layer of waterproofing material protected from said member by said insulating tape and carried by said tape, said waterproofing material extending across one side of the tape and over the edges sufficiently to engage the waterproofing material on adjacent turns of tape with the edges of said waterproofing material in contacting relation to form a substantially continuous waterproof layer with a dead air space between said member and said waterproof layer.

1,903,107. COMPRESSION RING. GERALD M. M. GRANT, Los Angeles, Calif. Filed Oct. 18, 1932. Serial No. 638,293. 4 Claims. (Cl. 74—109.)



1. A compression ring of the character referred to having formed in its inner side a spring-receiving seat of rectangular form in cross section and having an inner side beveled inwardly to the inner edge of the bottom horizontal wall of said seat, and a spring of rectangular form in cross section to fit into said seat, said beveled edge operating to guide said spring into said seat as the ring and spring are placed in a piston groove.

1,903,108. LIQUID DISPLACEMENT GAS COMPRESSOR. DONALD G. GRISWOLD, Los Angeles, Calif. Filed Dec. 14, 1931. Serial No. 580,869. 12 Claims. (Cl. 230—90.)

1. A gas compressor of the class described embodying: a housing having a main compressing chamber and an

auxiliary float and outlet chamber; a check valve between said chambers; a liquid inlet and a liquid outlet in said main compressing chamber; an air inlet in said main



compressing chamber; valve means in said liquid inlet and said liquid outlet; and float means in said chambers for controlling the actuation of said liquid inlet and said outlet valves.

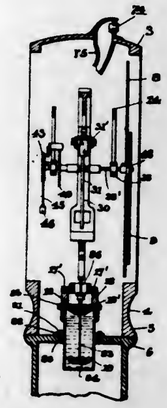
1,908,109. SPEAR. AUDREY L. HAMPTON, Houston, Tex. Filed Feb. 8, 1932. Serial No. 591,518. 8 Claims. (Cl. 294—86.)



1. A spear comprising a mandrel, a sectional expander around the mandrel, said mandrel being connected to the sections of the expander by reversely pitched threads, an expansible pipe engaging means on the expander connected to the upper section thereof, means interconnecting the said section to permit their relative longitudinal movement but to prevent the relative rotation.

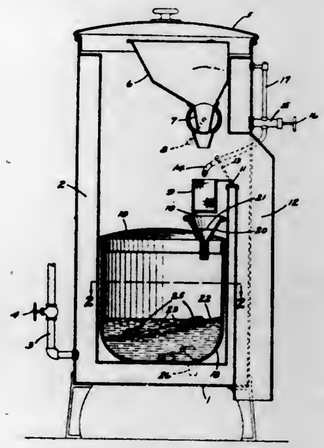
1,903,110. COIN-CONTROLLED WEIGHING MACHINE. HARLAN A. HADLEY, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, a Corporation of Vermont. Filed Dec. 30, 1927. Serial No. 243,576. 7 Claims. (Cl. 194—47.)

1. In a device of the character described, the combination with a weighing mechanism and an indicator assembly including an indicator shaft, actuating means for the said shaft, a ratchet wheel fixed to said shaft and having a radially extending pin thereon, a locking mechanism comprising a pivotally mounted trip arm carrying a locking pawl substantially intermediate the ends of the said trip arm and adapted to engage the said ratchet wheel and radial pin thereon, and coin-actuated means for temporarily holding the said trip arm and the coin pan in their inoperative position upon a coin leaving the pan comprising a heart-shaped cam pivotally mounted on the upper end of the said trip arm having its side co-operating with the periphery of a tripping wheel when the locking mechanism is in its operative position and its apex resting in engagement with the periphery of the said tripping



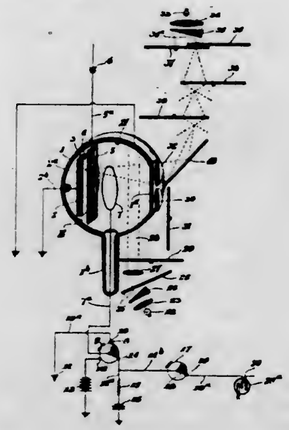
wheel when the locking mechanism is temporarily released, the said weighing mechanism comprising cooperating pivoted levers including a shelf lever, and means for operating the said tripping wheel under control of the shelf lever of the weighing mechanism, whereby the tripping wheel is turned and the cam caused to move into its operative position and thus permit the arm to drop and the locking pawl to engage the said ratchet wheel and radial pin and thus lock the said indicator assembly.

1,903,111. COFFEE MAKING MACHINE. HARRY HARPER, Minneapolis, Minn. Filed Dec. 8, 1930. Serial No. 500,846. 4 Claims. (Cl. 53—3.)



1. In a coffee making machine, a receptacle adapted to receive successive charges of fresh liquid coffee, and a removable partition in said receptacle spaced from the bottom thereof and normally immersed in said liquid coffee for temporarily separating a succeeding charge from the residue of a previous charge remaining in said receptacle, said partition having an unrestricted aperture therein establishing communication between the space in said receptacle above said partition and the space below the same.

1,903,112. TELEVISION. FRANÇOIS CHARLES PIERRE HENROTEAU, Ottawa, Ontario, Canada. Filed May 29, 1929, Serial No. 367,084. Renewed Aug. 18, 1931. 6 Claims. (Cl. 178—6.)



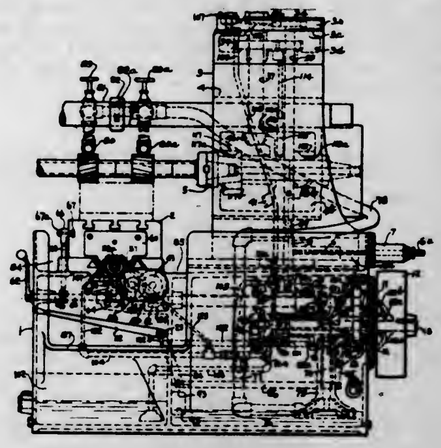
1. Television apparatus comprising a photoelectric cell having therein only an anode and a cathode with a photosensitive surface, means for projecting an image of a view on said cathode, means for interrupting the projecting of said image, means for thereafter scanning said cathode by a beam of light to cause the photosensitive surface of the latter to emit electrons and means for causing said anode to absorb a number of electrons, said member varying solely by reason of the potential of the elements from which the electrons were emitted.

1,903,113. TELEVISION. FRANÇOIS CHARLES PIERRE HENROTEAU, Ottawa, Ontario, Canada. Original application filed May 29, 1929, Serial No. 367,084, and in Canada May 16, 1929. Divided and this application filed Sept. 8, 1930. Serial No. 480,480. 13 Claims. (Cl. 178—6.)



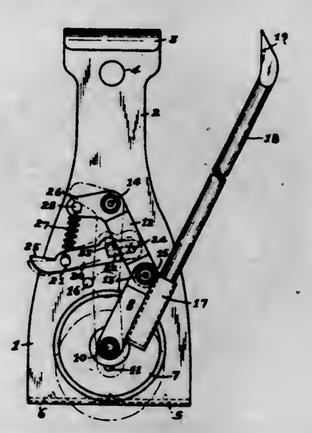
1. In a television process, the steps which comprise projecting an image upon a photoelectric screen then interrupting the light beam forming the image on the screen and then scanning the screen.

1,903,114. MACHINE TOOL. EDWARD J. KEARNEY and JOSEPH B. ARMITAGE, Wauwatosa, Wis., assignors to Kearney & Trecker Corporation, West Allis, Wis., a Corporation of Wisconsin. Original application filed Sept. 16, 1929, Serial No. 392,805. Divided and this application filed June 1, 1931. Serial No. 541,300. 4 Claims. (Cl. 184—6.)



2. In a milling machine the combination of a supporting structure, a table supported therefrom for horisontally reciprocatory movement, bearing surfaces associated with said structure for establishing the path of table movement and defined between longitudinally extended side portions, a lubricant reservoir associated with said structure, a power driven pump, a closed channel for the circulation of lubricant fluid between said reservoir and said bearing surfaces and including said pump, and means substantially preventing escape of fluid laterally from said bearing surfaces including a plurality of elements respectively longitudinally extended adjacent different of said side portions and each adapted to prevent movement of fluid past the element in a direction transverse to the extension thereof.

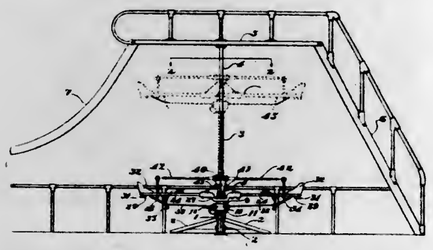
1,903,115. CONVEYING JACK. ALBERT L. KERN, Jackson, Mich. Filed Oct. 13, 1931. Serial No. 568,549. 2 Claims. (Cl. 280—44.)



1. A load conveying jack comprising a supporting member provided with an oblong slot, a load engaging element carried at the lower end of said supporting member, a

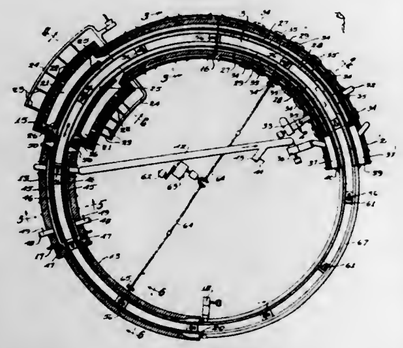
pair of bearing arms, a wheel mounted between said bearing arms, a bearing bolt pivotally connecting said wheel to the lower end of said pair of bearing arms and shiftably engaging in said slot, a connecting arm having its upper end pivotally connected to said supporting member, the lower end of said connecting arm having a toggle joint connection with the upper ends of said pair of bearing arms, said pair of bearing arms and said connecting arm bearing operable for projecting a portion of said wheel below said load engaging element and for releasing said wheel above the latter, and means for limiting the movements of said bearing and connecting arms when shifting to their projecting positions.

1,903,116. AMUSEMENT DEVICE. KILLIAN KOSCHKA, St. Paul, Minn. Filed July 30, 1932. Serial No. 626,765. 3 Claims. (Cl. 272—30.)



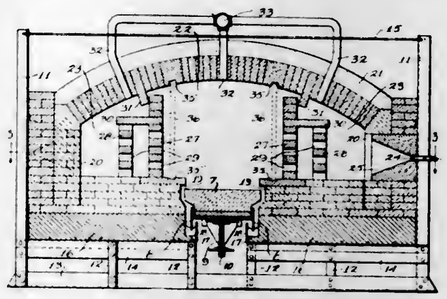
1. An amusement device of the character described, comprising a vertical threaded post, a rotatable threaded member having threaded engagement therewith, a seat supporting member rotatably mounted on said post to rest on said threaded member to be supported thereby and to normally be free for relative rotation with respect to said threaded member, lock means to secure said seat support member to said threaded member, a beam tiltably mounted on said seat support at approximately the center of said beam, a seat mounted on each end of said beam, releasable means mounted to lock said beam against tilting with respect to said seat support member, and actuating means operatively engaging said post and positioned to extend adjacent said seats to permit rotation of said seats with respect to said post.

1,903,117. KILN. LESTER L. LADD, Lockport, Ill. Filed Sept. 28, 1931. Serial No. 565,501. 16 Claims. (Cl. 25—142.)



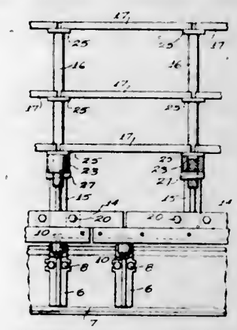
1. A tunnel kiln comprising a tunnel having a central ware passage and defining a preheating zone, a firing zone, and a cooling zone through which the ware travels successively, said tunnel having a combustion chamber in the firing zone and having an air chamber in the preheating zone, said air chamber communicating with said combustion chamber and with said ware passage, and exhaust means communicating with said air chamber for withdrawing some of the air and combustion gases from said preheating zone.

1,903,118. KILN. LESTER L. LADD, Lockport, Ill. Filed Sept. 28, 1931. Serial No. 565,502. 4 Claims. (Cl. 25—142.)



1. A kiln comprising a tunnel having a ware passage and a contiguous combustion chamber communicating with each other at their lower ends, a substantially imperforate baffle separating the upper portions of said ware passage and combustion chamber from each other, and means at the upper end of said combustion chamber for withdrawing the lighter combustion gases.

1,903,119. KILN FURNITURE. LESTER L. LADD, Lockport, Ill. Filed Sept. 28, 1931. Serial No. 565,503. 5 Claims. (Cl. 25—142.)

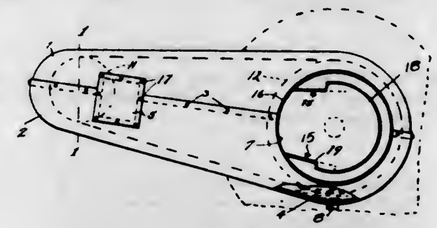


1. Kiln furniture comprising a horizontal shelf having openings therein, and a plurality of standards extending through said openings for supporting said shelf, said standards being appreciably smaller in cross section than said openings to permit said shelf to move longitudinally and transversely relative to said standards.

1,903,120. GUARD FOR TRUCK CHAINS. JOHN F. LAFFERTY, Haddon Heights, N. J. Filed July 23, 1930. Serial No. 470,018. 1 Claim. (Cl. 74—56.)

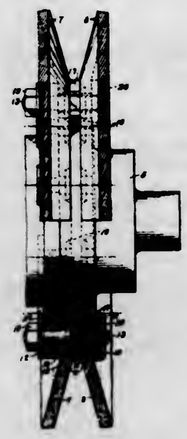
A guard for motor truck drive chains comprising two similar sections, the meeting edges of which telescope and are fastened together, the outer wall having an opening therein to fit the rear brake drum and also provided with an access opening, a flange surrounding the first mentioned opening, a cover plate removably mounted across the access opening, the inner wall having a circular opening to fit over the bearing of the drive sprocket shaft

and an irregular longitudinal opening to fit the radius rod and rear wheel housing, an outwardly projecting flange surrounding the circular opening, an inwardly projecting



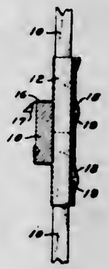
flange surrounding the irregular opening, and means to rigidly fasten the guard to the radius rod and rear wheel housing.

1,903,121. DUAL WHEEL STRUCTURE. ALPHONSE LARRAINE LUSSIER, Springfield, Mass. Filed June 25, 1932. Serial No. 619,338. 4 Claims. (Cl. 301—36.)



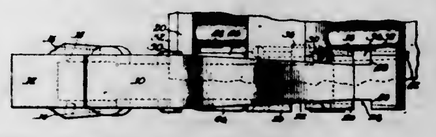
2. The combination of a wheel-hub having an apertured flange, threaded bolts secured in the apertures of said flange, two wheel-discs each having eccentric bolt-holes through which said bolts extend, said wheel-discs each having V-shaped annular grooves around its respective bolt-holes, centrally apertured and internally threaded spacing and securing units each having V-shaped annular ridges normally fitting in the respective annular grooves of said wheel-discs while the internal threads thereof are engaged with the threads of the respective bolts and combined with said bolts for clamping one of said wheel-discs against said flange, and means combining with said bolts for clamping the other one of said wheel-discs against said spacing and securing units.

1,903,122. KNOCKDOWN ASSEMBLAGE. OTTO H. MERK, West Allis, RAYMOND A. ARNDT, Wauwatosa, and CARL B. LANGE, Racine, Wis., assignors to Convertible Door Mfg. Co., West Allis, Wis., a Corporation of Wisconsin. Filed Nov. 16, 1931. Serial No. 575,282. 10 Claims. (Cl. 47—47.)



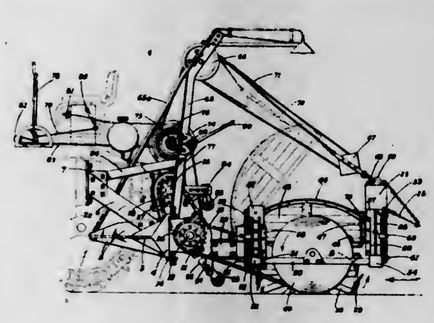
4. A trellis-work comprising, end coacting alined strips, a strip extending across the end plane of said end coacting strips, and a single fastener for rigidly connecting all of said strips.

1,903,123. DIPPER. DANIEL HENRY MEYER, Wilmington, Ill., assignor to American Manganese Steel Company, Chicago, Ill., a Corporation of Maine. Filed July 26, 1930. Serial No. 470,785. 9 Claims. (Cl. 37—141.)



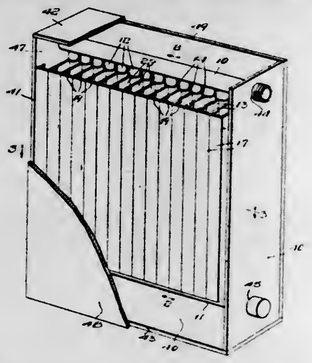
2. A tooth base for dippers including a pair of prongs so spaced as to straddle a dipper front, and a forwardly facing shoulder on each of said prongs extending laterally therefrom.

1,903,124. ROTARY GROUND WORKING IMPLEMENT. TONY S. MILLER, LOOK L. CHONG, JUE L. CHONG, and SAM L. CHONG, Isleton, Calif. Filed May 17, 1932. Serial No. 611,840. 16 Claims. (Cl. 97—40.)



1. An earth working implement comprising a frame, a digging unit mounted therein, and a hood mounted on the frame over the upper portion of the unit; said hood comprising strips of resilient material disposed in close side by side relation.

1,903,125. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Dec. 26, 1930. Serial No. 504,717. 8 Claims. (Cl. 257—141.)



2. In a device of the kind described, the combination of a plurality of tubular elements providing passages for a heating media, a manifold arranged at the opposite ends of said tubular elements, members providing indirect heat transferring surfaces, said members being arranged longitudinally of said tubular elements and having an edge thereof in direct engagement therewith, with the opposite edge extended therefrom, and engaging an adjacent member and providing a wall of an air duct bounded by said indirect heat transferring members and fins engaging said tubes providing air passages located in said ducts.

1,903,126. ANTIOXIDANT FOR FATS AND OILS. ROY C. NEWTON and DONALD P. GRETTIE, Chicago, Ill., assignors to Swift and Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1932. Serial No. 604,649. 16 Claims. (Cl. 99—11.)

9. An improved stabilized oil and/or fat containing a small amount of natural resin, gum guaiac.

1,903,127. INSULATING HOLDER FOR COOPER-HEWITT TUBES AND INERT GAS TUBES GENERALLY. LAWRENCE O'ROURKE, San Francisco, Calif. Filed June 1, 1931. Serial No. 541,258. 2 Claims. (Cl. 240—52.)



1. An insulating bracket comprising a curved base bearing bolt-openings, a body portion extending rightangularly from the front edge of said base and ending in a semi-circular seat having upon its either side and adjacent thereto a bolt-opening, and a section bearing a semi-circular concavity having bolt-openings upon either side thereof and adjacent thereto and adapted to register with the aforementioned bolt-openings for the accommodation of retaining bolts, said section being hingedly connected to the semi-circular seat section borne by the body portion, one of said bolts serving as a hinge pintle and the other as a locking means.

1,903,128. RECORDING LAMP. CHARLES A. PACKARD, Dallas, Tex. Filed Mar. 1, 1929. Serial No. 343,809. 1 Claim. (Cl. 176—124.)



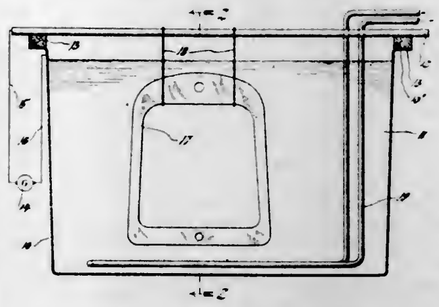
A lamp of the character described including a gas filled, transparent tube having a pair of electrodes therein, one of which consists of a spiral winding of fine resistance wire closely adjacent and parallel to the other electrode, means for maintaining potential gradient in said illuminable electrode and means connecting said electrodes for maintaining a potential difference between the same.

1,903,129. COTTER KEY. JOHN W. PETERSON, Cairo, Ill. Filed Jan. 29, 1932. Serial No. 589,576. 14 Claims. (Cl. 74—8.)



1. A cotter key comprising a pair of leg portions conjoined by a head portion and elastically constrained toward a spread relationship, and a latching member carried adjacent the end of a leg portion independently of the other leg portion whereby the leg portions may be latched, under elastic tension, in positions relatively close together.

1,903,130. CHROMIUM PLATING PROCESS. WILLIAM M. PHILLIPS, Birmingham, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 15, 1927. Serial No. 161,349. 2 Claims. (Cl. 204—1.)



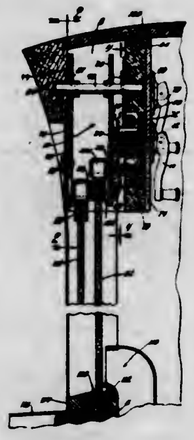
2. The process of treating a bath for depositing chromium electrolytically, said bath containing chromic acid and a compound recoverable upon analysis in the form of Cr_2O_3, and in which bath is employed an iron or steel anode, comprising passing current through the bath in a direction opposite to that employed for depositing chromium, the iron or steel anode becoming cathode and another anode being used with such relation to the cathode as to oxidize the reduced chromium.

1,903,131. AERIAL ADVERTISING DEVICE. JOHN PICCO, New York, N. Y. Filed Apr. 18, 1931. Serial No. 531,219. Renewed July 30, 1932. 8 Claims. (Cl. 40—127.)



4. The combination with an aerial vehicle having a body, of a roller mounted on the body, winding drums on the ends of the roller, cables trained over the winding drums, means for winding one of said cables and unwinding the other cable, a display sheet constructed to display an advertisement carried thereby, cables connected to the ends of the display sheet and connected to the roller, and stiffening means extending across the display sheet.

1,903,132. ADJUSTABLE SUN VISOR. HARRY A. PLATT, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Jan. 31, 1930. Serial No. 424,844. 3 Claims. (Cl. 296—95.)



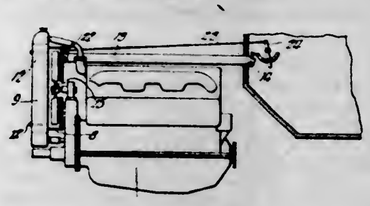
1. In an automotive vehicle: a stationary header organization supported by posts and providing a pocket; a windshield plate slidable relatively to said pocket to vary an opening therebelow; a visor plate movable to and from said pocket; and positioning means for each of said plates, including separate handles accessible from within said vehicle and mechanical trains housed within said pocket and extending from said handles to said plates,—said plates being of substantially equal length and provided with substantially parallel guides carried by said posts; and one of said trains including a shaft which extends across said pocket above the range of movement of said plates.

1,903,133. GAME. HOLLAND R. POLAK, St. Louis, Mo. Filed Sept. 20, 1930. Serial No. 483,199. 8 Claims. (Cl. 273—129.)



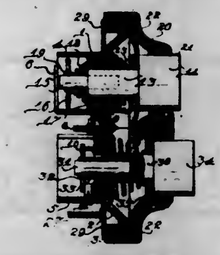
1. A device for playing a game comprising an effigy of a golf player having an upper body portion and a lower body portion, a shaft mounted for rotation in the lower portion and secured to the upper portion, a leg section secured to the shaft and separated from the remaining part of the bottom portion, and a club secured to the upper portion whereby the club may be moved to strike a ball positioned in front of the device by manual manipulation of the said leg section.

1,903,134. AUTOMOBILE HEATING SYSTEM. ARTHUR REAM, Chicago, Ill. Filed Mar. 21, 1930. Serial No. 437,654. 2 Claims. (Cl. 128—174.)



1. A device for use with an automobile having a radiator and a fan therefor, comprising an open faced drum-like casing for closely enclosing the back and sides of the fan and adapted to be mounted against the inside face of radiator whereby the fan may create a pressure in the casing by air drawn through the radiator, a manually rotatable multiple opening shutter mounted upon the rear wall of the casing to control the amount of air admitted through the radiator to control the temperature thereof, and a conduit connected to the casing and adapted to lead ino the automobile body to heat the interior thereof.

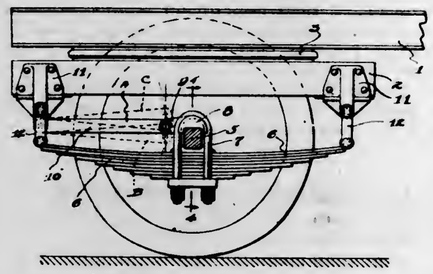
1,903,135. PUSH BUTTON ELECTRIC SWITCH. MACKWORTH G. REES, Detroit, Mich. Filed Feb. 6, 1930. Serial No. 426,283. 2 Claims. (Cl. 200—159.)



2. In a switch, a housing having a bottom wall, a pair of fixed contacts carried by said housing beneath said wall, a head push button having a sliding fit in said housing and wall, a movable contact carried by said button and adapted to engage said fixed contacts, a gasket snugly surrounding said push button between said head and wall, a

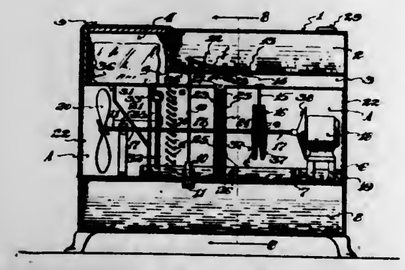
washer loosely surrounding said push button beneath said wall, a compressed conical coiled spring surrounding said push button between said wall and gasket, another compressed conical coiled spring surrounding said push button between said movable contact and washer, whereby said springs press said gasket and washer respectively against said head and wall, said springs being adapted to be compressed into a substantially flat condition.

1,903,136. RADIUS ROD AND AXLE CONSTRUCTION. FREDERICK MALCOLM REID, Detroit, Mich., assignor to Fruehauf Trailer Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 31, 1926. Serial No. 158,310. 2 Claims. (Cl. 280—1065.)



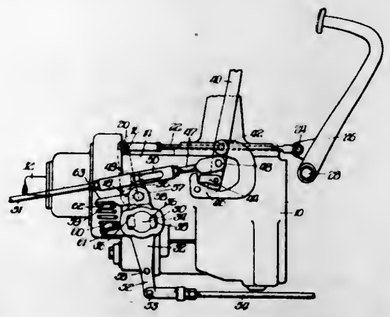
1. In a trailer, the combination of a trailer frame, a relatively short subframe underneath one end of the trailer frame for supporting the same, a fifth wheel between the trailer frame and the subframe whereby the subframe is dirigible, an axle, a spring connected to the axle with its two ends connected to the subframe substantially at the front and rear ends of the subframe and with its ends movable relative to the subframe, said spring being adapted to flex under load, a radius rod having one end pivotally connected to the axle and its other end pivotally connected to the subframe for positioning the axle with respect to the subframe, one end of the radius rod moving in an arc with respect to the other and upon flexing of the spring, said radius rod being so positioned that under normal load it lies substantially parallel with the subframe so that in the flexing of the spring due to road irregularities or the like the longitudinal movement of the axle with respect to the subframe is divided into forward and rearward components of the arcing movement whereby the total amount of longitudinal movement of the axle with respect to the frame is reduced to a minimum.

1,903,137. AIR CONDITIONING APPARATUS. LOUIS P. REISS, Dallas, Tex. Filed June 11, 1931. Serial No. 543,574. 7 Claims. (Cl. 261—90.)



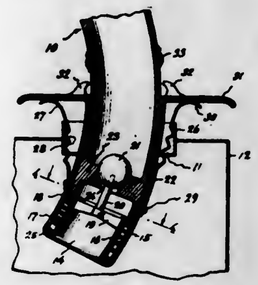
1. An air conditioning machine including a housing, a fluid reservoir and a superimposed fluid receptacle, a shaft, means carried by said shaft for transferring fluid from said reservoir to said receptacle in a continuous circular stream, a diffusing disc also carried by said shaft, means for continuously feeding fluid by gravity to said diffusing disc during rotation of said shaft, a fan carried by said shaft and means disposed between said fan and said fluid transferring means for separating moisture from the air currents during their passage through said machine.

1,903,138. BRAKE OPERATING MECHANISM. EDWARD A. ROCKWELL, Chicago, Ill. Filed Jan. 31, 1930. Serial No. 424,791. 13 Claims. (Cl. 188—204.)



1. In combination a primary power brake unit, means for actuating said power brake, secondary front and rear wheel brakes, non-resilient connections from the power brake unit to the front wheel brakes, resiliently limited connections to the rear wheel brakes and independent means for actuating said front and rear brakes without operation of the power brake unit through non-resilient connections.

1,903,139. NOZZLE. DAVID TROMPETER, Amityville, N. Y., assignor to Miriam Sugerman, Baldwin, Long Island, N. Y. Filed Dec. 5, 1930. Serial No. 500,839. 5 Claims. (Cl. 251—115.)

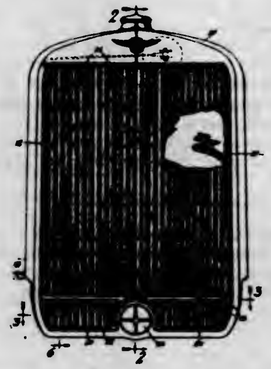


2. A discharge nozzle for hose lines and the like including a tubular body and valve means for controlling the flow of liquid through said body, said valve means including a tubular nosepiece surrounding the end of said body, said nosepiece having a stem extending inwardly within said body, a valve supported on said stem, said body including an endpiece beneath said valve and surrounding said stem, said endpiece having a seat for said valve, means effective between said body and said nosepiece to urge said nosepiece away from the end of said body to maintain said valve on its seat, frictional gripping members on said nosepiece adapted to engage the wall of a tank filling opening, means to limit the penetration of said nozzle in said filling opening, and means cooperating with said nosepiece and said body to releasably retain said nozzle body in a forward valve opening position.

1,903,140. TERTIARY XANTHATE FLOTATION PROCESS. LUDWIG ROSENSTEIN, San Francisco, Calif., assignor to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed Feb. 1, 1932. Serial No. 590,322. 7 Claims. (Cl. 209—166.)

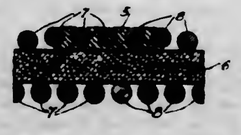
1. A method of recovering minerals from ores which comprises: subjecting an ore to a froth flotation operation in the presence of a salt of a tertiary xanthic acid as a promoter.

1,903,141. RADIATOR. ERNEST W. SEAHOLM and GUY E. PARKER, Detroit, Mich., assignors to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 31, 1928. Serial No. 266,317. 11 Claims. (Cl. 257—132.)



1. A radiator assembly comprising a shell, a core in the shell, vertically arranged shutters mounted in front of the core, the shell being apertured, a removable finishing plate covering said aperture, said plate being provided with an inwardly extending flange serving as a support for the pivots of the shutters.

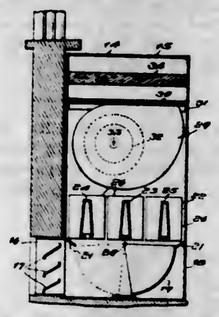
1,903,142. RESISTANCE STRIP AND METHOD OF MAKING SAME. NEWTON C. SCHELLENGER, Elkhart, Ind., assignor to Chicago Telephone Supply Company, Elkhart, Ind., a Corporation of Indiana. Filed Apr. 30, 1930. Serial No. 448,520. 8 Claims. (Cl. 201—63.)



5. A resistance element comprising, an insulating strip, a resistance wire space wound thereon and a piece of lead of varying cross-section engaging the end few turns of the wire, said lead being partly disposed in the spaces between those turns to hold the wire on the strip, and to taper the resistance value per turn as the end of the element is approached.

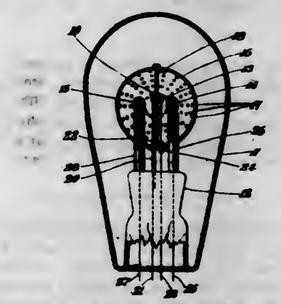
1,903,143. UNIT VENTILATOR. WILFRED SHURTLEFF, Moline, Ill., assignor to The Herman Nelson Corporation, Moline, Ill., a Corporation of Illinois. Filed Oct. 3, 1930. Serial No. 486,202. 11 Claims. (Cl. 257—137.)

4. A unit device of the class described, comprising a casing provided with an inlet for air and with an outlet for the discharge of air therefrom in the top portion of the casing, a sheet-metal-extended-surface radiator group consisting of a plurality of at least three relatively shallow sections, each extending substantially from end to end of the casing and the group substantially filling the space crosswise of the casing, regulating steam valve means for controlling the selective heating of one or more of



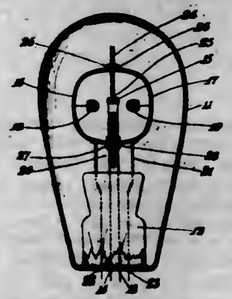
the radiator sections, and suction means for inducing a flow of air through the radiator sections and through the outlet.

1,903,144. RECTIFYING TUBE. HANS J. SPANNER, Berlin, Germany, and ULRICH DOMRING, New York, N. Y., assignors to Electrons, Inc., a Corporation of Delaware. Filed Mar. 11, 1929, Serial No. 346,119, and in Germany June 19, 1928. 8 Claims. (Cl. 250—27.5.)



1. A gas filled rectifying device comprising a tube, a heatable cathode positioned therein, a pair of anodes disposed on opposite sides of the cathode, and a small inclosing shell surrounding said cathode and anodes and having a partition separating the anodes, said partition having an opening in which is disposed the cathode.

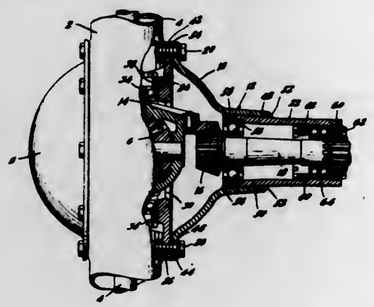
1,903,145. RECTIFYING TUBE. HANS J. SPANNER, Berlin, Germany, and ULRICH DOMRING, New York, N. Y., assignors to Electrons, Inc., a Corporation of Delaware. Filed Mar. 11, 1929, Serial No. 346,120, and in Germany June 19, 1928. 11 Claims. (Cl. 250—27.5.)



1. A gas filled rectifying device comprising a tube, a heatable cathode positioned therein, a conducting shell surrounding and substantially inclosing the cathode and di-

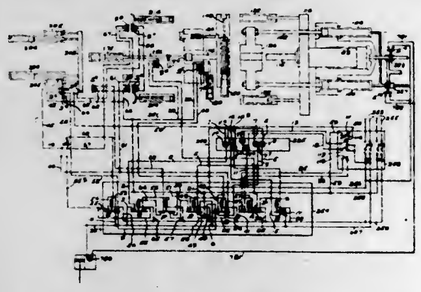
vided into a plurality of parts, each part forming an independent anode for cooperation with said cathode, and a partition separating adjacent anodes, said partition being formed of insulating material that retains its insulating properties and does not emit gases throughout the temperature range to which it is subjected, and a metallic plate embedded in the inner portion of said partition.

1,903,146. REAR AXLE CARRIER. CLAUDE H. STERLING, Syracuse, N. Y., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed June 9, 1930. Serial No. 459,918. 3 Claims. (Cl. 74—56.)



1. In an axle carrier comprising a pressed steel bowl portion, a pressed steel barrel portion welded to said bowl portion, a bearing ring secured at the junction of said bowl and barrel portion, said carrier having formed therein a lubricant opening at said ring and a forged saddle portion secured to said bowl portion.

1,903,147. POWER CONTROL APPARATUS. DAVID L. SUMMEY, Waterbury, Conn.; The Colonial Trust Company and Richard P. Weeks Summey executors of said David L. Summey, deceased. Original application filed Mar. 12, 1926, Serial No. 94,334. Divided and this application filed Sept. 21, 1928. Serial No. 307,541. 8 Claims. (Cl. 60—97.)



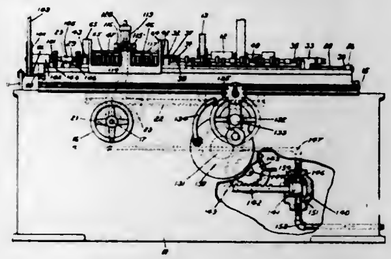
1. In combination, mechanism including a plurality of cooperating devices for performing different operations in a production cycle, a fluid pressure power unit for actuating each of said devices, means including a solenoid for controlling the operation of each power unit, a circuit including the coil of said colenoid and terminals for a contactor, a solenoid-operated contactor cooperating with said terminals, a circuit including the coil of said contactor solenoid, a switch in said last-named circuit, an actuating element for said switch, and a second make-and-break device in said last-named circuit whereby the closing of such circuit by said switch depends upon the prior closing thereof by said make-and-break device.

1,903,148. ROPE CLAMP. SAMUEL C. SWISHER, San Jose, Calif. Filed Feb. 3, 1932. Serial No. 590,622. 1 Claim. (Cl. 24—115.)



A rope clamp of the character indicated comprising, a pair of grooved members adapted to encompass a cable, one member having a pair of stop fingers formed thereon adjacent each end thereof and adapted to embrace the other member, and having a pair of spaced eyes formed on one side thereof and a pair of spaced hooks formed on the other side thereof in offset relation to said eyes, and the other member having a pair of spaced eyes formed thereon in offset relation to the hooks on the first member when the parts are in an operative position and having a hook formed thereon between said eyes but on the opposite side of the member and an eye formed thereon aligning with said hook, and a cable passing through said eyes and having its two ends permanently secured to corresponding ends of said members but on opposite sides thereof.

1,903,149. CAM GRINDING APPARATUS. CHARLES G. TREFETHEN, Worcester, Mass., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 16, 1930. Serial No. 452,932. 9 Claims. (Cl. 51—101.)

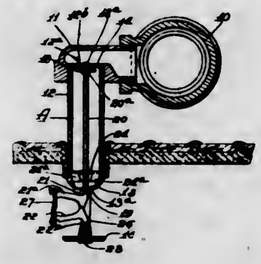


1. A cam grinding machine comprising a grinding wheel and a support for a set of cam blanks movable relative thereto, master cams and cam followers which are relatively movable, means associated therewith for moving the cam blanks and wheel relatively in accordance with the relative movement between a master cam and its follower to grind a desired cam contour, said master cams being arranged as two sets, each set having a follower co-acting therewith, and mechanism for automatically indexing one of the followers longitudinally relative to its set of cams while the other remains inoperative and thereafter indexing the second follower while the first remains inoperative.

1,903,150. PENDANT SPRINKLER SYSTEM. EMIL TYDEN, Hastings, Mich. Filed Apr. 4, 1932. Serial No. 602,938. 8 Claims. (Cl. 169—17.)

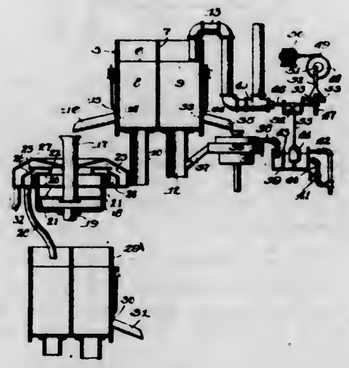
1. A discharge head for a fire extinguishing system arranged to be mounted dependently from the water pipe of the system and comprising a conduit element of substantial length having a valve-controlled inlet port at the upper end, and a continuously downward flow passage from end to end, and a downwardly opening discharge nozzle terminal at the lower end; an upwardly seating valve at the inlet port; a valve operating stem extending from connection with said inlet valve through the flow passage and protruding from the nozzle discharge; a stop member carried by the pipe element unobstructingly with respect to the nozzle discharge and spaced downwardly

therefrom in alignment with the protruding end of the stem at the position of said stem for holding the valve seated; means displaceably interposed between the end of the stem and said stop member at valve-seating position of the stem, whereby upon displacement of said interposed



means the valve is released for opening under pressure in the system water pipe, and water flows in continuously downward course for discharge at the nozzle, and an upwardly facing spreader carried by the pipe element interposed in the path of discharge from the nozzle.

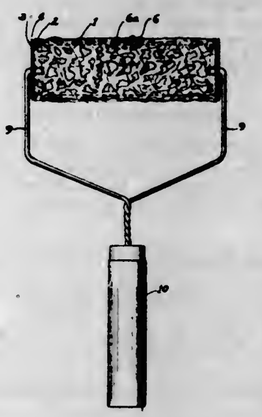
1,903,151. APPARATUS FOR FEEDING PULP OR FIBER TO PAPER MAKING MACHINERY. ARTHUR G. WAKEMAN, Appleton, Wis. Filed Apr. 23, 1932. Serial No. 607,042. 5 Claims. (Cl. 92—46.)



1. Mechanism for feeding pulp or fiber to paper making machinery comprising a chamber for mixing pulp stock or fiber and water and water, a conduit leading from said mixing chamber, a receiving tube co-operatively related with said conduit, a rotor for generating centrifugal action axially related with said receiving tube, baffles associated with said rotor, annular chambers co-operating with said baffles to respectively receive the baffled and unbaffled discharge from said rotor, and conduits leading from said respective annular channels to a paper making machine and the stock supply for said mixing chamber.

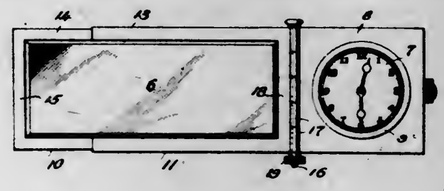
1,903,152. MURAL DECORATION. GEORGE V. E. WATSON and ROBERT O. STUBBINS, Seattle, Wash. Filed June 29, 1931. Serial No. 547,749. 2 Claims. (Cl. 41—5.5.)

2. A stippling tool comprising a frame, a roller rotatably carried by said frame, metal disks having a sharpened serrated periphery secured to the ends of the roller, the serrated portion projecting beyond the roller a predetermined distance to engage the surface to be stippled, and



strips of sponge material wound spirally around the roller, the surface of the sponge extending slightly beyond the outer edge of the serrated portion of the disks.

1,903,153. CLOCK AND MIRROR HOLDER. JAMES B. WEIR, New Dorp, N. Y., assignor, by mesne assignments, to Standard Mirror Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed May 27, 1929. Serial No. 366,473. 1 Claim. (Cl. 45—97.)



A panel and instrument holder comprising a back plate made in two sections, each section having inturned flanges at opposite edges to grip a panel, said flanges being slidable one within the other to adjust the length of the plate, and one of the sections being bent over at its ends to form hinge ears, a plate having an opening to receive an instrument, and a hinge pintle connecting the last mentioned plate to said ears, said pintle being provided with a nut to hold the plates at adjustment.

1,903,154. ELECTROMAGNET. WICHARD W. WULLERT and WILLIAM E. BENNETT, Bend, Oreg. Filed Jan. 19, 1932. Serial No. 587,530. 3 Claims. (Cl. 175—367.)



1. In a device of the class described, the combination of a core, heads fixedly secured to the oppositely disposed ends of the core, the head forming the inner end of the

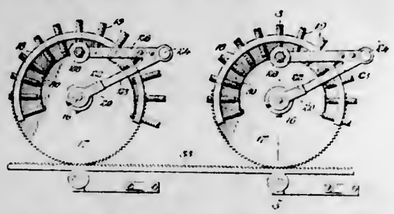
core being elongated, reduced and internally threaded to facilitate its attachment to a handle, a hollow handle threadably attachable to the core, an electric conductor extending longitudinally within the handle and terminating in a magnetic coil disposed about the core, a non-magnetic jacket disposed about the head assembly and so secured thereto as to form a liquid tight head, and a switch disposed in the conductor and adjacent the outer end of the handle.

1,903,155. LICENSE PLATE. OLIVER H. ANDERSON, Superior, Ariz., assignor to Safeway Auto License System, Inc., a Corporation of Tennessee. Filed Oct. 8, 1932. Serial No. 636,915. 10 Claims. (Cl. 40—125.)



1. A license plate or the like comprising a plate having characters thereon, openings in the plate adjacent one or more of the characters, a character plate having portions receivable through the openings so as to position the character plate in relation to the other characters, and spring means engaged with the back of the plate and having portions offset away from the back of the plate for engaging the portions of the character plate which are extended through the openings, for holding the character plate in place.

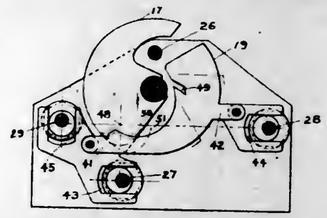
1,903,156. RADIO APPARATUS. DORSEY F. ASBURY, Broomes Island, Md. Filed Mar. 16, 1926. Serial No. 95,138. 2 Claims. (Cl. 175—41.5.)



1. In mechanism of the class described consisting of a plurality of instrumentalities in cooperative relation and adapted to be adjusted from a single point of control, a main rotatable controlling element adapted to impart movement in equal degree to each of said instrumentalities, rotatable members comprised in each of said instrumentalities and connected with said main controlling element and adapted to be rotated in equal degree by movement imparted therefrom, complementary elements cooperating with said rotatable elements and connections therefor, said connections comprising in each instance an individually adjustable cam track and a member cooperating therewith and adapted to impart independent compensatory movements to the complementary elements in an amount variably determined by the configuration of the cam track, substantially as described.

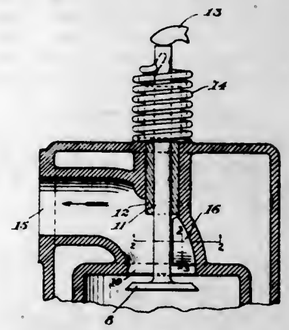
1,903,157. VARIABLE CONDENSER. DORSEY F. ASBURY, Broomes Island, Md. Filed Aug. 14, 1929. Serial No. 385,839. 4 Claims. (Cl. 175—41.5.)

1. A condenser, comprising in combination, a plate, a second plate and means for moving it in its own plane to produce amounts of overlapping area between it and the first said plate, and means whereby the first said plate may be moved back and forth in each of three different directions to respectively find and establish the



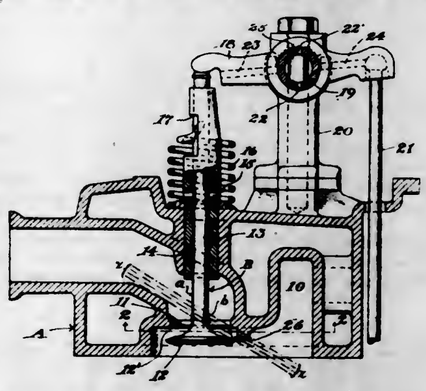
desired amounts of overlapping area between the plates for three certain amounts of movement of the said second plate.

1,903,158. EXHAUST VALVE STEM SHIELD. DORSEY F. ASBURY, Broomes Island, Md. Filed May 6, 1931. Serial No. 535,525. 4 Claims. (Cl. 123—177.)



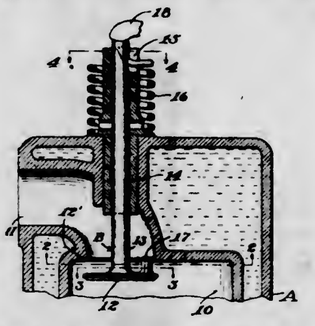
1. In a gas engine structure, a cylinder including a gas port having entrance and discharge ends, a poppet valve controlling the entrance end of the port, said valve including a head and a stem with the latter having a length thereof exposed to gas current in the port, and means shielding from the gas current only that side of the exposed length of the stem which is remote from the discharge end of the port.

1,903,159. INTERNAL COMBUSTION ENGINE. DORSEY F. ASBURY, Broomes Island, Md. Filed Nov. 20, 1931. Serial No. 576,388. 3 Claims. (Cl. 123—191.)



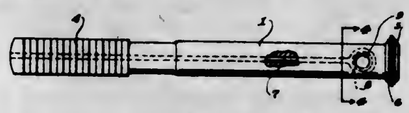
1. In a gas engine structure, a cylinder including a gas port having entrance and discharge ends, a poppet valve controlling the entrance end of the port, said valve including a head and a stem with the latter having a length thereof exposed to gas current in the port, and means inside the combustion chamber shielding from the gas current only that side of the exposed length of the stem which is remote from the discharge end of the port.

1,903,160. INTERNAL COMBUSTION ENGINE STRUCTURE. DORSEY F. ASBURY, Broomes Island, Md. Filed May 13, 1932. Serial No. 611,199. 4 Claims. (Cl. 123—191.)



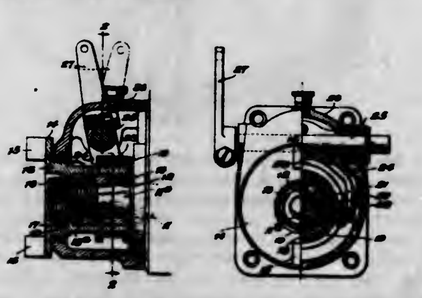
1. In a gas engine structure, a cylinder including a gas port having entrance and discharge ends, a poppet valve controlling the entrance end of the port, said valve including a head and a stem with the latter having a length thereof exposed to gas current in the port, and means on the valve head shielding from the gas current only that side of the exposed length of the stem which is remote from the discharge end of the port.

1,903,161. TOOTHBRUSH. IRVING BARKAN, Philadelphia, Pa. Filed Aug. 19, 1931. Serial No. 558,126. 2 Claims. (Cl. 15—188.)



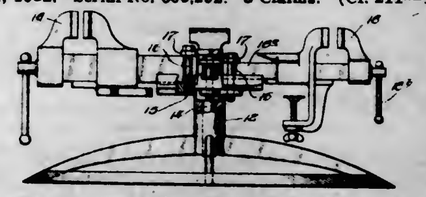
1. In a brush of the class described, the combination of a handle, of a disk at the outside of said handle, and a series of pointed teeth on the periphery of said disk for cleaning the crevices between the teeth of the user.

1,903,162. SHAFT COUPLING. OTTMAR BAUR, Stuttgart, and HERMANN LEMPP, Feilbach, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Jan. 17, 1930. Serial No. 421,514. 5 Claims. (Cl. 64—90.)



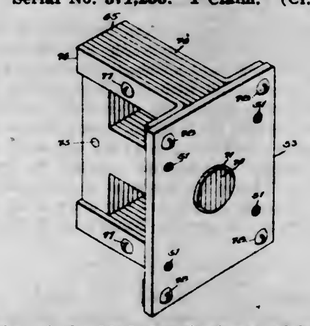
1. A coupling comprising two members one rotatably but non-slidably mounted on the other, a shaft, a single screw element for releasably connecting both of said members to said shaft, a third member slidably mounted on the outer of the first two members and formed with inwardly extending projections passing through slots having sides parallel to the axis of the coupling formed in said outer member and engaging helically disposed recesses in the inner of the first two members and means for moving said third member axially with respect to the first two members to vary the angular relationship between the latter.

1,903,163. VISE DISPLAY STAND. WARREN U. BOTSFORD, Moline, Ill., assignor to Rock Island Mfg. Co., Rock Island, Ill., a Corporation of Illinois. Filed Mar. 21, 1932. Serial No. 600,292. 3 Claims. (Cl. 211—13.)



1. A base; a supporting member rotatably mounted on the base, said supporting member including a part with radial troughs having holes in their inner ends; and means for holding the ends of the beams of vises in said troughs, said means including clamping members adapted to engage the upper surfaces of the ends of said beams and co-operating with the holes in the troughs.

1,903,164. LOUD SPEAKER. HAROLD KARL BOUVIER, La Grange, Ill., assignor to Temple Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 15, 1929. Serial No. 371,285. 1 Claim. (Cl. 179—115.5.)

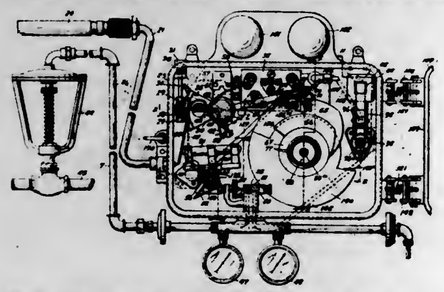


A device of the kind described comprising a substantially E-shaped magnet member formed entirely of flat laminations superimposed upon each other, the arms of said magnet member being rectangular in cross-section and the middle arm having its free end formed into a cylindrical pole tip, a plate secured to said E-shaped magnet member and apertured to surround said pole tip, said apertured plate and said pole tip co-operating to provide an annular magnetic field, a diaphragm, and means re-acting with said magnetic field for actuating said diaphragm.

1,903,165. INSTRUMENT FOR CONTROLLING TEMPERATURES. ROY W. BROWN, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Original application filed July 17, 1924, Serial No. 726,611, Patent No. 1,768,349, dated June 24, 1930. Divided and this application filed Apr. 9, 1930. Serial No. 442,802. 8 Claims. (Cl. 161—1.)

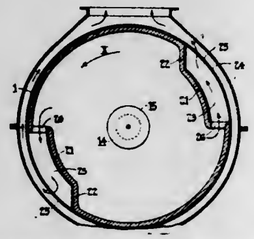
1. Apparatus of the class described comprising a clock, a cam member driven by said clock, an electrically operated means for resetting said cam member, a contactor,

a remote control switch connected in an electrical circuit with said means and said contactor, and means actuated



by said clock for operating said contactor, said contactor being adapted to automatically break the circuit to the switch as the cam member is reset.

1,903,166. MILL FOR PULVERIZING AND THE LIKE. DAVID YULE BRYANT, Sarnia, Ontario, Canada. Filed Aug. 3, 1931. Serial No. 554,910. 2 Claims. (Cl. 83—9.)



1. In an apparatus for grinding, blending or the like, a rotatable drum having a deflector member on the interior surface thereof, said member comprising a partially cylindrical wall coaxial with the drum, and an integral wall connecting said cylindrical wall with said drum at the forward or leading end thereof, said deflector member forming a pocket which is open at its rearward or trailing end and which encloses an opening in the drum, said integral wall being arranged at a steep angle with respect to the interior surface of the drum so as to form a ledge from which the material being treated periodically cascades.

1,903,167. PRESSURE VESSEL FOR SOLID CARBON DIOXIDE. ALMON J. CORDREY, Detroit, Mich., assignor to Zero Ice Corporation, a Corporation of Michigan. Filed Mar. 12, 1931. Serial No. 522,112. 5 Claims. (Cl. 62—91.5.)



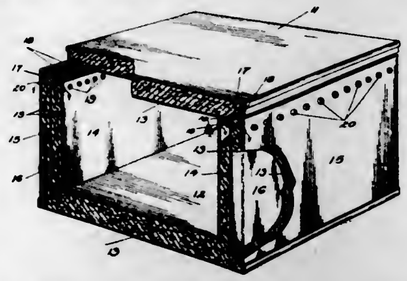
1. A pressure vessel for liquefying solid carbon dioxide, comprising an elongated hollow body having an end charging opening of lesser size than the interior of the body, and a rack in said vessel of substantially greater length than width, the width of said rack being greater than the size of said opening whereby it cannot be removed from said pressure vessel without deformation.

1,903,168. PRESSURE VESSEL FOR SOLID CARBON DIOXIDE. ALMON J. CORDREY, Detroit, Mich., assignor to Zero Ice Corporation, a Corporation of Michigan. Filed Mar. 20, 1931. Serial No. 524,171. 6 Claims. (Cl. 220—24.)



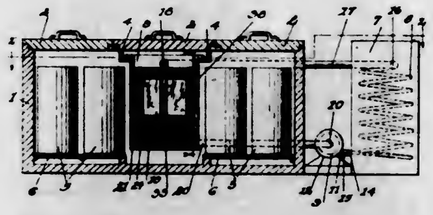
1. A pressure vessel for liquifying solid carbon dioxide and the like comprising a tubular receptacle having an open end, a closure plug adapted to engage within said end and removable therefrom, means secured to said receptacle for retaining said plug in position, a sealing member on the inner side of said plug having a peripheral flange, a packing means between the flange and plug, and means for drawing said member towards said plug to compress said packing means against the inner wall of said receptacle, said sealing member being free to move toward said plug to further compress said packing means when pressed by gas pressure generated within the receptacle.

1,903,169. INSULATED CONTAINER FOR SOLID CARBON DIOXIDE. ALMON J. CORDREY, Detroit, Mich., assignor to Zero Ice Corporation, a Corporation of Michigan. Filed Apr. 16, 1931. Serial No. 530,622. 4 Claims. (Cl. 220—9.)



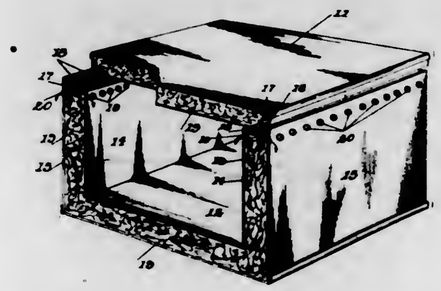
1. An insulated receptacle for a substance vaporizable by heat, comprising a side wall having inner and outer gas tight faces, the inner face being perforated at the top to permit passage of gas from within the receptacle into the intervening wall space, porous insulation in said intervening space, and a sheet-like baffle extending downward from the top edge of said wall and terminating above the lower edge thereof, said baffle dividing the insulation into layers communicating at their lower edges, and perforations in the outer wall face to permit escape of gas from said intervening space.

1,903,170. SOLID-CO_2 REFRIGERATING SYSTEM. ALMON J. CORDREY, Detroit, Mich., assignor to Zero Ice Corporation, a Corporation of Michigan. Filed Dec. 21, 1931. Serial No. 582,410. 21 Claims. (Cl. 62—91.5.)



1. A method of refrigeration comprising circulating a low-freezing liquid refrigerant in heat transfer relation with a space to be cooled, submerging solid-CO_2 in a portion of said refrigerant to produce the cooling effect desired, and controlling the temperature of the refrigerant by the effective exposure of the solid-CO_2 to said refrigerant.

1,903,171. SOLID CO_2 RECEPTACLE. ALMON J. CORDREY, Detroit, Mich., assignor to Zero Ice Corporation, a Corporation of Michigan. Filed Jan. 7, 1932. Serial No. 585,352. 9 Claims. (Cl. 62—91.5.)

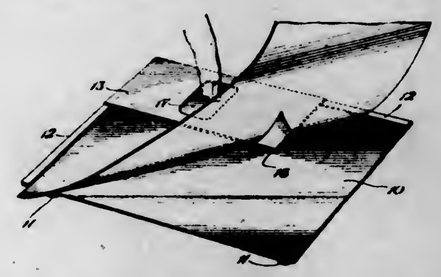


1. An insulated receptacle for a substance vaporizable into a gas denser than air, having a removable closure and comprising side walls having inner and outer gas tight faces oppositely perforated near the top to permit the passage of gas freely into and out of the entire intervening wall space, thereby displacing less dense gases from the wall space and permitting convection circulation of the gas within the side wall space.

1,903,172. PROCESS OF PREPARING SOYA BEAN PROTEIN CONTAINING MATERIAL FOR THE MANUFACTURE OF AN ADHESIVE, AND THE PRODUCT THEREOF. LEO W. EILERTSEN, CHARLES N. CONE, GLENN DAVIDSON, IRVING F. LAUCKS, and HARRY P. BANKS, Seattle, Wash., assignors to I. F. Laucks Inc., Seattle, Wash., a Corporation of Washington. Filed June 14, 1926. Serial No. 116,010. 3 Claims. (Cl. 87—17.)

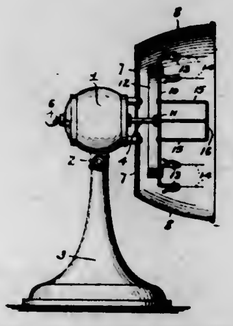
1. In the process of preparing soya bean protein containing material for the manufacture of an adhesive, the steps of reducing the cake, derived by removing the oil content in whole or in part by pressure or by solvents, to the form of a coarse meal; drying the same; treating in heater to live steam; and storing the product for further gradual processing.

1,903,173. TEAR-OFF DEVICE. JOHN B. EUTH, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1931. Serial No. 526,480. 2 Claims. (Cl. 33—33.)



1. In combination: a base-plate provided with supporting legs, and having guide-strips on at least two of its marginal edge-portions to facilitate positioning of a paper-sheet on said base-plate; and a top-plate fixedly mounted on said guide-strips in spaced relation to said base-plate so as to overlie a sheet resting thereon, the edges of said top-plate which extend over said sheet being sharpened to form tear-off edges, and said top-plate being provided with a finger-opening through which the sheet may be gripped during a tearing-operation.

1,903,174. FILM DEVELOPER AND DRIER. JAMES WALTER FERGUSON, Marion, Ill. Filed July 25, 1931. Serial No. 553,185. 6 Claims. (Cl. 95—100.)

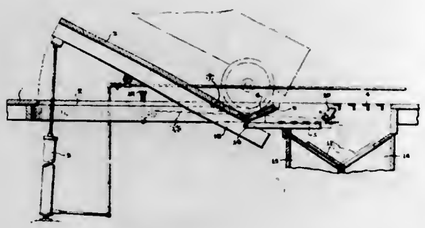


1. A developer and drier for photographic films comprising a frame, a clip on the frame adapted to grasp a film, a supporting member associated with the frame of a height slightly greater than the combined length of the film and clip whereby the frame may be supported in a bath with the film depending almost to the bottom of the bath, and means for removably associating the frame with a rotary shaft.

1,903,175. DYEING ANIMAL FIBERS. ALFRED FISCHER, Frankfort-on-the-Main-Fechenheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 4, 1930, Serial No. 473,124, and in Germany Sept. 2, 1929. 3 Claims. (Cl. 8—5.)

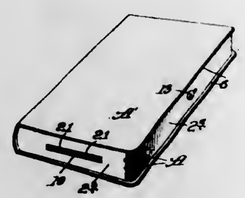
2. Process which comprises dyeing animal fibers, which are previously dyed and partially coated with a wax-resist, in the cold with a bath containing sulfuric acid ester salts of leuco compounds of vat dyestuffs, an alkali of the group consisting of alkali metal carbonates and triethanol-amine and formaldehyde sulfoxylate and developing the dyeing with a bath containing an acid and oxidising agents of the group consisting of persulfate and chromate.

1,903,176. VEHICLE DUMP. LESLIE D. FISKIN, Darrousett, Tex. Filed Sept. 22, 1931. Serial No. 564,451. 5 Claims. (Cl. 214—49.)



1. In a vehicle dump and in combination with the dumping platform, a grate pivoted to the discharge end of the dumping platform to move therewith and drop to a position lower than said platform as the platform tilts to clear the vehicle and prevent injury to the equipment thereof, means for limiting the drop of the grate, and latch means for supporting the grate in normal position.

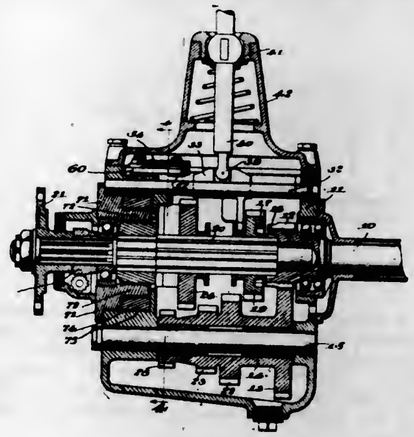
1,903,177. SAVINGS BANK. ALBERT C. GRUNWALD, Chicago, Ill., assignor to The Automatic Recording Safe Company, Chicago, Ill., a Corporation of Illinois. Original application filed Aug. 23, 1930, Serial No. 477,431. Divided and this application filed Mar. 21, 1932. Serial No. 600,259. 2 Claims. (Cl. 232—55.)



1. A savings bank comprising a casing having one wall provided with a coin-slot and having another wall at right angles thereto; a bracket comprising a flange secured to said second-mentioned wall and a bowed spring-portion having a free extremity disposed adjacent to said first-mentioned wall; and a slot-guard having an angular head portion confined between the free end of the spring and said second-mentioned wall, and having a slot-guard portion extending through a recess in the extremity of said spring.

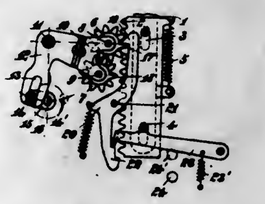
1,903,178. DEVICE FOR PREVENTING RETROGRADE MOVEMENT OF AN AUTOMOBILE. JOHN LOUIS GONARD, Englewood Cliffs, N. J. Filed Oct. 22, 1931. Serial No. 570,438. 7 Claims. (Cl. 192—4.)

1. In a transmission mechanism for power driven vehicles, means associated with the transmission mechanism for preventing retrograde movement of the vehicle during neutral and forward speeds and comprising a driven shaft, a one-way brake element on the shaft, a lever for releasing the brake, a gear shifting element in the transmission for controlling the low and reverse speed provided with a pin, a lever pivotally mounted at one end, means connecting the free ends of the levers together, the second lever being provided with a slot intermediate the ends thereof and having a straight portion in line with the movement of the shifting element, receiving the pin during neutral and forward speeds, and retaining the brake lever against movement, one end of the slot being extended laterally to receive the pin when the shifting



element is moved to reverse position for rocking both levers to release said brake to permit retrograde movement of the vehicle.

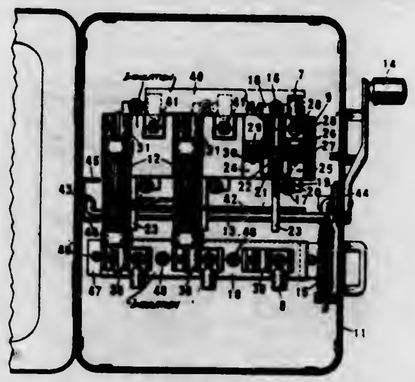
1,903,179. CALCULATING MACHINE. JOHN EMIL WILLIAM GREVE, Chemnitz, Germany, assignor to Astrawerke Aktiengesellschaft, Chemnitz, Germany. Filed July 15, 1931, Serial No. 550,956, and in Austria May 23, 1931. 2 Claims. (Cl. 235—60.)



1. Counting mechanism for calculating and registering machines, comprising tens carrying levers, a pair of counting wheels, one for addition and one for subtraction, co-operating with one another upon several axes as a reversing gear, driving means for the counting wheels, means to bring either of the counting wheels into engagement with the driving means at will, a carrying cam on each of the counting wheels, and a single carrying nose upon the tens carrying lever adapted to be directly operated by the carrying cam on whichever of the counting wheels is for the time being engaged by the driving means.

1,903,180. ELECTRIC SWITCH. HERMAN J. HAMMERLY, New Britain, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Aug. 6, 1932. Serial No. 627,692. 12 Claims. (Cl. 200—114.)

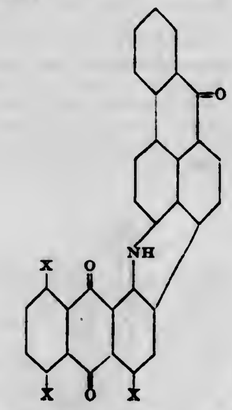
1. An electric switch including a box, an actuating crank shaft pivoted in opposite sides of the box, an insulating block mounted in the box at one side of the crank shaft and a second block mounted in the box at the opposite side of the crank shaft, one of said blocks having a passage extending through it at right angles to the crank shaft and a contact chamber at one end of said passage, a stationary contact mounted within said chamber at each side of said passage, an insulating plate slidable in said passage and carrying a switch member adapted to connect said contacts, said plate having a slot open at one edge in which said crank shaft loosely fits, means for actuating said crank shaft and the associated switch



member, each block having a fuse clip mounted thereon and a fuse mounted in said clips and extending over the crank shaft between the blocks.

1,903,181. PROCESS OF MAKING NITROGENOUS VAT DYESTUFFS OF THE ACRIDINE SERIES. ERNST HONOLD, Frankfort-on-the-Main-Fechenheim, and GEORG BOEHNER, Friedrichsfeld in Baden, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 15, 1931, Serial No. 544,702, and in Germany July 1, 1930. 4 Claims. (Cl. 260—86.)

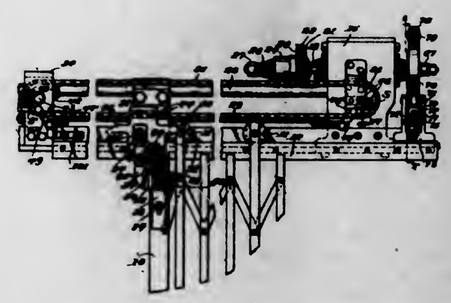
1. A process for producing nitrogenous vat dyestuffs which comprises condensing a product corresponding to the general formula



wherein two X's means hydrogen and one X represents the amino-group, with an aromatic compound which contains in its molecule at least one replaceable halogen or nitro group.

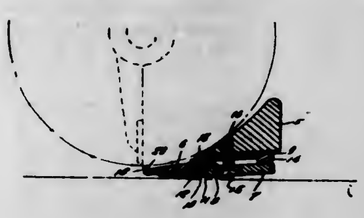
1,903,182. DOOR OPERATING MECHANISM. CHARLES W. HORTON, Miami, Fla. Filed Jan. 26, 1931. Serial No. 511,402. 5 Claims. (Cl. 187—52.)

2. An operating mechanism for an elevator door comprising a motor carried by the elevator and in open circuit with a source of electric supply, a transmission device connected with the motor, a friction clutch interposed between the motor and transmission device, a track rail leading from the transmission device, a carriage movable upon the track rail and carrying the elevator door, means operatively connecting the transmission device with the carriage, switches located at the ends of the path of movement of the carriage and including terminals electrically connected with the motor and terminals electrically



ly connected with a source of electric supply and circuit closers engageable with said terminals, and arms carried by the carriage and adapted to engage the circuit closers and move them to open positions when the carriage arrives at the ends of its path of movement.

1,903,183. MOWER BLADE. STEPHEN C. JESSUP, Salem, Ohio. Filed May 22, 1931. Serial No. 539,355. 2 Claims. (Cl. 56—294.)

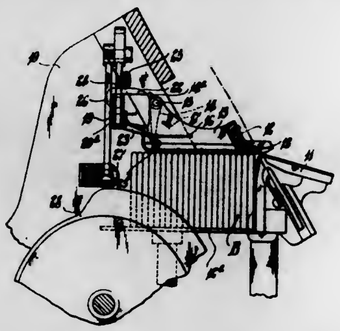


1. In a structure of the class described, a mower blade having an elongated body abruptly reduced at each longitudinal edge portion thereof to define shoulders and extensions less in thickness than the thickness of the major portion of the body, said extensions being extended upwardly and downwardly respectively in spaced parallel relation to said shoulders to cooperate with the shoulders in the formation of grooves immediately in back of the extensions, and clamping plates engaging the upper and lower surfaces of said body, one of said clamping plates having a groove therein for the insertion of one of the extensions.

1,903,184. METHOD OF AND MECHANISM FOR MECHANICALLY EXTRACTING THE INTERCONNECTING THREADS BETWEEN STITCHED BOOKS. OSCAR KLEINSCHMIT and OSKAR MÜLLER, Leipsig-Plagwitz, Germany, assignors to Firm Gebruder Brehmer, Leipsig-Plagwitz, Germany. Filed Feb. 11, 1931, Serial No. 515,068, and in Germany Oct. 29, 1930. 16 Claims. (Cl. 112—252.)

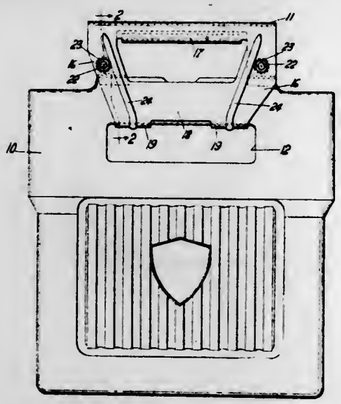
1. A method of extracting, by mechanical means, the severed interlooped terminal threads of the adjacent books of a stitched book-pad, which comprises engaging the fore-

most book of the book-pad with a separating member, severing the requisite thread during the movement of the separating member, and forcing the foremost book away



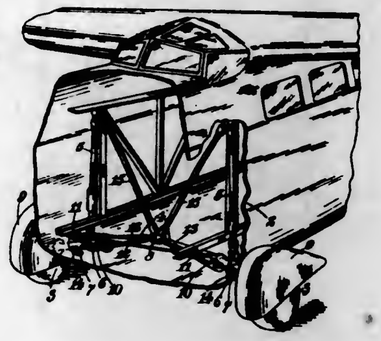
from the remainder of the book-pad by means of the separating member to effect the extraction of the severed thread.

1,903,185. RECEPTACLE HAVING A HANDLE. ROBERT H. LEWIS, Akron, Ohio, assignor to Firestone Battery Company, Akron, Ohio, a Corporation of Delaware. Filed Mar. 31, 1931. Serial No. 526,609. 1 Claim. (Cl. 16—114.)



The combination with a battery box having an upwardly extending portion above an upper edge thereof and a recess on an outer face thereof below said upwardly extending portion, said recess defining a shoulder, of a handle comprising a metallic loop provided with downwardly extending inner and outer leg members, said members being spaced apart, said inner leg member having a shoulder thereon for seating on the upper edge of said upwardly extending portion and having a downwardly extending portion below the shoulder on said inner leg member for engaging the inner face of said upwardly projecting portion above the upper edge of the box, said outer leg member having a portion thereon for engaging below the shoulder on the outer face of the box, and bolts extending through the leg members above said upwardly projecting portion for drawing said legs toward each other tightly against the box, said leg members being spaced apart sufficiently to permit tightening of said bolts so as to spring said leg members without contacting one another whereby the handle will not rattle on the box and whereby the bolts will not loosen under vibrations.

1,903,186. LANDING GEAR FOR AIRCRAFT. JOHN LLOYD, Coventry, England, assignor to Sir W. G. Armstrong Whitworth Aircraft Limited, Coventry, England. Filed Aug. 6, 1931, Serial No. 555,616, and in Great Britain Aug. 22, 1930. 4 Claims. (Cl. 244—2.)

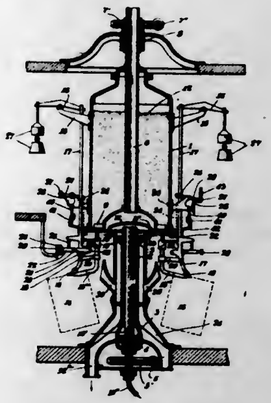


3. In combination with an aircraft body, a landing gear comprising a landing member, an axle supporting said landing member exteriorly of the body, said axle extending through an opening in the wall of the body, means universally supporting the inner end of said axle within the body, an oleo-leg connected to said axle.

1,903,187. PREPARED SILICA AND PROCESS OF MAKING SAME. FRANCIS M. MCCLENAHAN, Monmouth, Ill. Filed Sept. 16, 1929. Serial No. 393,122. 6 Claims. (Cl. 23—182.)

1. A process of treating ammonium-silico-fluoride, comprising adding ammonium-hydroxide to a water solution of ammonium-silico-fluoride, precipitating silicic acid, and quickly furnacing said precipitated product not substantially below 500° C.

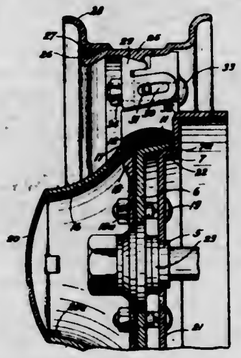
1,903,188. PACKING MACHINE FOR PULVERULENT MATERIAL. KRISTIAN MIDDELBOE, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Mar. 24, 1931, Serial No. 524,799, and in Great Britain Apr. 7, 1930. 5 Claims. (Cl. 249—59.)



1. In a machine for filling bags with a definite weight of pulverous material the combination with a filling tank rotatable about a vertical axis, of a number of filling spouts

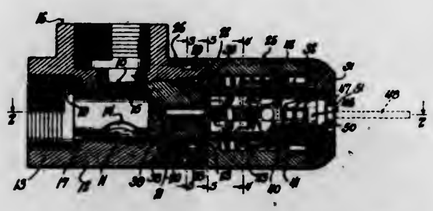
extending from the lower part of the said filling tank and each adapted to serve as a carrier and feeding device for a bag, and each provided with an individual weighing mechanism supported by the tank for weighing the contents of the bag carried by the spout and with a cut-off for the material fed by the spout into the bag, said cut-off being controlled by the said weighing mechanism.

1,903,189. MOTOR VEHICLE WHEEL. PHILIP M. MILLER, Cleveland, Ohio, assignor to Miller Devices Inc., New York, N. Y., a Corporation of New York. Filed Mar. 14, 1930. Serial No. 435,815. 6 Claims. (Cl. 301—6.)



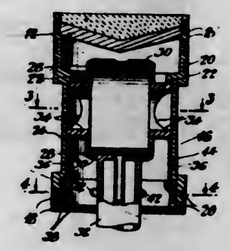
1. A wheel assembly for motor vehicles comprising a hub formed with an annular disk-like radial wall which terminates in a tapered peripheral flange, a spoked spider member mounted on the outer face of said flange, means for clamping the spider member in position on the flange, and a drum member having a driving connection with the hub and formed with an annular shoulder which fits against the inner face of said flange and reinforces the latter.

1,903,190. VALVE LOCK. STEPHEN W. NELDNER, Milwaukee, Wis. Filed Nov. 24, 1930. Serial No. 497,764. 3 Claims. (Cl. 70—124.)



1. In a device of the character described the combination of a housing, a member movable therein, a second member outside of said housing for operating said member, a recess in one of said members, an element permanently engaged with the other of said members and engageable in said recess to form an operating connection between said members, yieldable means urging said element out of engagement with said recess to render said connection ineffective, and lock controlled yieldable means for advancing said element into engagement with said recess to thereby render said connection effective.

1,903,191. PISTON AND WRIST PIN CONSTRUCTION. CHARLES A. NEVINS, New York, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed July 17, 1931. Serial No. 551,345. 2 Claims. (Cl. 74—108.)

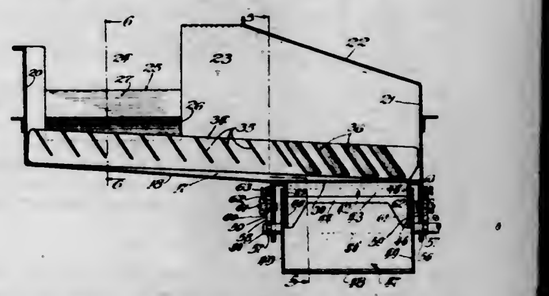


1. The combination with a piston having a chamber therein provided with an open end, a wrist pin seat in the wall of said chamber facing said open end, a pin having ends seated upon said seat, a collar having a portion for embracing said ends to hold the same to said seat and fastening means adjacent the open end of said piston for holding said collar in position.

1,903,192. ALLOY OF NICKEL, SILVER, TIN, AND COPPER. RUDOLF OLBERGER, Vienna, Austria. Filed Dec. 21, 1929, Serial No. 415,788, and in Germany Dec. 22, 1928. 2 Claims. (Cl. 75—1.)

1. An alloy comprising copper, nickel, tin and silver, the copper predominating and being over ninety percent by weight, the nickel 0.1–3.8 percent by weight, the tin 6–9 percent by weight, and the silver 0.1–1.8 percent by weight.

1,903,193. MILK DUMPING DEVICE. WALTER H. PAULSON, Chicago, Ill., assignor to Harry D. Lathrop, Chicago, Ill. Filed Dec. 13, 1929. Serial No. 413,796. 15 Claims. (Cl. 221—69.)

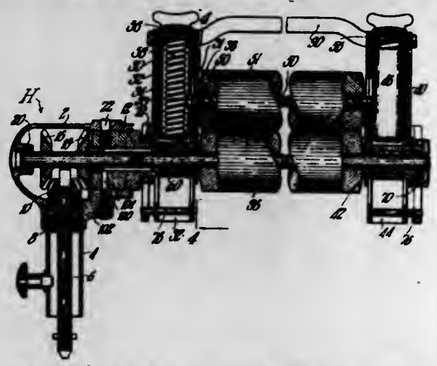


1. The herein described milk handling device comprising a receiving hopper having an inclined bottom provided with an outlet opening at the lower end thereof, a flow-checking baffle in said hopper adjacent to the bottom thereof, and a reversible deflector arranged cooperatively beneath the outlet opening of said hopper, whereby to direct the milk discharged through said outlet opening to either side of a median line with respect thereto.

1,903,194. WRINGER. JULIAN L. PERKINS, West Springfield, Mass. Filed Apr. 6, 1931. Serial No. 528,094. 22 Claims. (Cl. 68—32.)

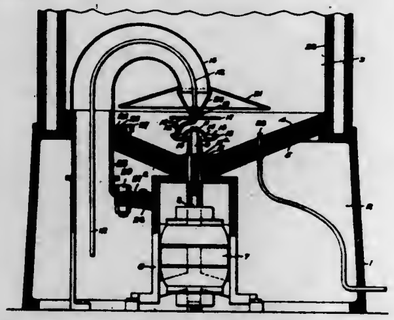
1. A wringer construction comprising in combination, a support, a shaft having a free end extending therefrom, guides associated with said free end of the shaft disposed in a spaced relation, connections between said guides to hold them against relative movements, carriers slidable

in said guides, levers oscillatably associated with said guides having cam surfaces, parts on said carriers adapted to be releasably engaged by said cam surfaces whereby



the said guides and carriers are held against movement in one direction and means associated with said carriers tending to urge them in another direction.

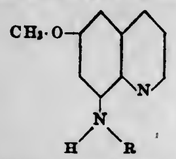
1,903,195. OIL BURNER. FREDERICK A. ROBINSON, Boston, Mass., assignor to Sarah L. Robinson, Boston, Mass. Filed May 7, 1931. Serial No. 535,611. 1 Claim. (Cl. 158—4.)



An oil burning apparatus comprising, in combination, a combustion chamber, a rotatable oil holding cup, an air passage beneath the cup leading into the chamber, a cool air duct over the cup, an oil feed pipe therein, a hood over the cup acting with the bottom of the combustion chamber to compel intimate contact of the air and gas to promote ignition and a perforated flame and cool air spreader over the cup.

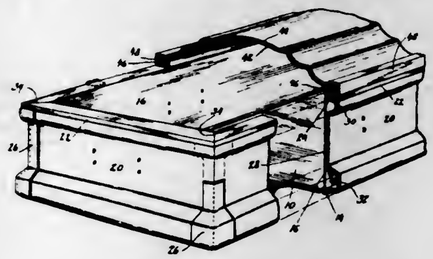
1,903,196. SUBSTITUTED AMINO QUINOLINES AND PROCESS OF MAKING THE SAME. WERNER SCHULEMANN, Vohwinkel near Elberfeld, and FRITZ SCHÖNHÖFER and AUGUST WINGLER, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 16, 1927, Serial No. 240,620, and in Germany Dec. 20, 1926. 14 Claims. (Cl. 260—88.)

1. The compounds of the general formula



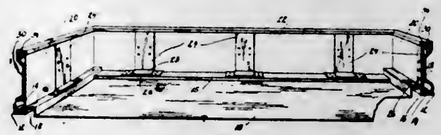
wherein R represents a hydroaromatic radical which is substituted by secondary or tertiary amino groups being suitable for pharmaceutical purposes.

1,903,197. CASKET. ALLISON F. H. SCOTT, Detroit, Mich., assignor to Woodall Industries Incorporated, a Corporation of Michigan. Filed Nov. 18, 1930. Serial No. 496,439. 6 Claims. (Cl. 27—3.)



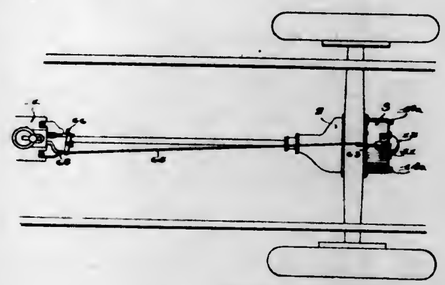
1. A casket comprising, in combination, a continuous surfaced rigid frame, and an outer covering of molded thermo-plastic material secured thereto, the securing means therefor including a portion of the continuous surfaced rigid frame.

1,903,198. CASKET. ALLISON F. H. SCOTT, Detroit, Mich., assignor to Woodall Industries Incorporated, a Corporation of Michigan. Filed Nov. 18, 1930. Serial No. 496,440. 12 Claims. (Cl. 27—3.)



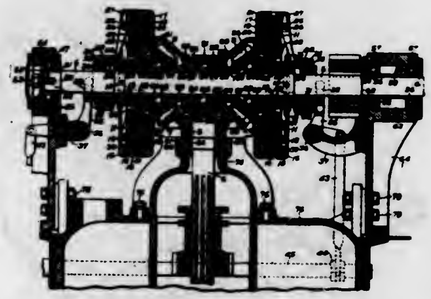
1. A casket comprising, in combination, a rigid bottom, rigid side and end walls, the outer periphery of said bottom being turned upwardly to form a flange, a U-shaped channel extending adjacent each edge of said bottom spaced from said flange, and an outer covering secured along its bottom edge between said channel and said flange.

1,903,199. AUTOMATIC SAFETY REVERSE MOTION LOCK. ALFRED B. SMALL, Miami, Fla. Filed Mar. 5, 1930. Serial No. 433,333. 6 Claims. (Cl. 192—4.)



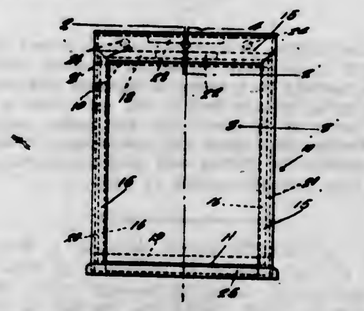
1. In a one-way brake for use on rotatable shafts, a freely rotatable friction ring positioned about said shaft having notches, means engageable with said friction ring and actuated by said shaft for stopping rotation of said shaft in one direction, a plunger for engaging said notches to fix said ring against rotation, a cam follower integral with said plunger and a cam adapted to engage said follower for reciprocating said plunger.

1,903,200. REVERSING MECHANISM. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed Dec. 2, 1929. Serial No. 410,897. 1 Claim. (Cl. 74—59.)



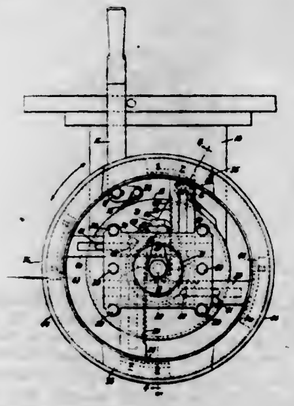
In a reversing mechanism, the combination of a driven shaft, a driving shaft extending across one end of said driven shaft, a bevel gear secured to said driven shaft, two bevel pinions meshing with said bevel gear and coaxial with said driving shaft, two clutches by which power may be transmitted from said driving shaft to either of said pinions, thereby to cause said driven shaft to be driven in either direction, said clutches comprising driving members secured to said driving shaft and driven members between said driving member and having driving connection with said pinions, respectively, two bearings which afford support for said pinions, respectively, on and about said driving shaft between said driving members, a frame presenting a fixed support between said driving members, two bearings deriving support from and held against axial movement with relation to said fixed support and in turn afford support for said pinions, respectively, and holding said pinions against axial movement, an intermediate bearing deriving support from said fixed support and in turn supporting said driving shaft between said pinions, said driving members cooperating with said intermediate bearing and said support to restrain said driving shaft against axial movement, and two end bearings deriving support from said frame and affording floating supports for the outer ends of said driving shaft.

1,903,201. SOUND MODIFYING DEVICE. JACQUES B. STEUR and CHARLES H. BROWN, San Francisco, Calif. Filed Sept. 8, 1932. Serial No. 632,286. 5 Claims. (Cl. 181—30.)



1. A sound modifying and noise minimizing device of the class described comprising a substantially open front enclosure, an interior lining for said enclosure including a plurality of sound deadening walls attached to corresponding walls of the enclosure and spaced therefrom, the top wall of the lining being spaced from the top of the enclosure and formed with a central opening to define a sound trapping chamber, said chamber being provided with air circulation and sound wave relief holes.

1,903,202. COLLAPSIBLE TIRE FORM. HORACE D. STEVENS, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 11, 1931. Serial No. 521,644. 14 Claims. (Cl. 154—9.)



1. In a collapsible tire building form, the combination of a pair of key sections and a pair of intermediate sections constituting an annular form, respective racks secured to each of said sections, and pinions engaging said racks, said pinnions being adapted for concurrent rotary movement, and so constructed as successively to move the key sections and the intermediate sections radially inward in a predetermined definite sequence.

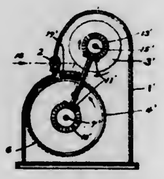
3. In a collapsible tire-building form, the combination of a plurality of arcuate form-sections constituting an annular form, means for moving one of said sections radially inward, and means connected to said moving means for moving other of said sections radially inward after said first section has moved inward to a predetermined degree.

1,903,203. COMBINED PENCIL AND LIGHTER. ARTHUR G. STEVENSON, Rochester, N. Y. Filed Nov. 22, 1929. Serial No. 409,031. 6 Claims. (Cl. 67—7.1.)



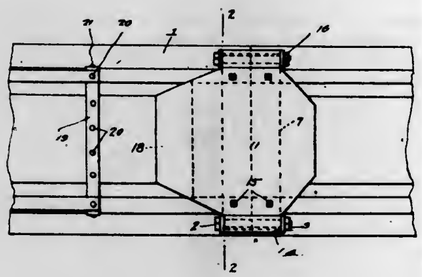
2. In a device of the character described, a container element, a reinforcing cap at one end of the container element, a pair of fasteners disposed at diametrically opposite points relative to the container element and the cap for fastening the cap to the container element, said fasteners having outwardly projecting ends, and a closure cap mounted by means of the projecting ends of said pins for longitudinal and pivotal movements between covering and uncovering positions with respect to the end of the container element.

1,903,204. PHOTOGRAPHING DEVICE FOR HIGH SPEED MOVING PICTURES. TOYOTARO SUHARA, Tokyo, Japan. Filed Feb. 15, 1928, Serial No. 254,532, and in Japan Mar. 8, 1927. 4 Claims. (Cl. 88—16.8.)



2. A high speed moving picture photographing device comprising a revolving mirror composed of successively angled reflecting surfaces of a truncated convex polygonal body, a disc mounted on a revolving shaft which is parallel to the revolving axis of said mirror for attaching the film around its periphery in such a manner that said film is made to cooperate with the successive reflecting surfaces of said mirror, a lens secured to the camera in such relative position that the light projected therethrough onto said mirror focuses on the film, and means for driving said mirror and said film carrying disc in substantially such direction and at the same peripheral speed that there is no relative speed between the film and the images focused thereon.

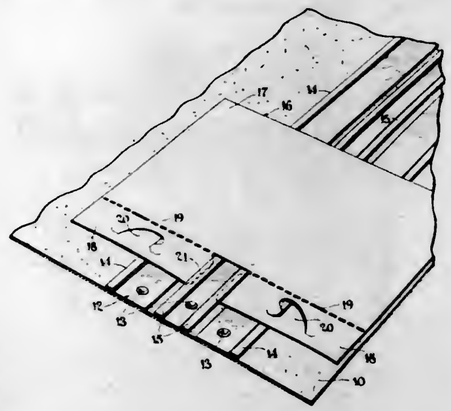
1,903,205. ATTACHMENT FOR PREVENTING BUCKLING OF COAL CONVEYER TROUGHS. JOHN VALKO, Aguilar, Colo. Filed Sept. 24, 1931. Serial No. 564,906. 4 Claims. (Cl. 198—220.)



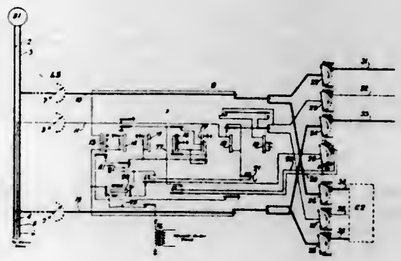
1. An anti-buckling attachment for a conveyer having trough sections formed with sleeves on the sides thereof at adjacent ends, and bolt and nut means engaging alined sleeves to secure the said ends jointed together; said anti-buckling device comprising a plate adapted to bridge the joint between the ends of the sections and provided at its side edges with channels receiving said sleeves, and rings fixed at the ends of the channels alining with the sleeves and accommodating the bolts.

1,903,206. INDEX. FRANK LLOYD WASSELL, Buffalo, N. Y., assignor to Remington Rand Inc., Buffalo, N. Y. Filed Feb. 17, 1931. Serial No. 516,472. 10 Claims. (Cl. 129—16.)

7. In an index or file, the combination of a panel, a support mounted on the panel, an index or reference card having a reference-bearing portion and stub portions hinged to one margin thereof, and a plurality of support-engaging means on each stub portion for detachably engaging the support.



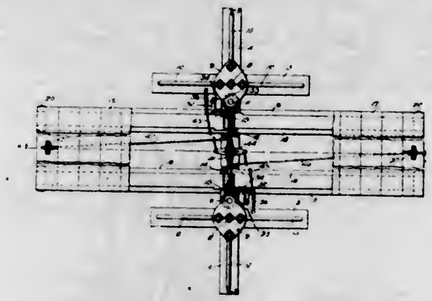
1,903,207. TELEPHONE SYSTEM. JOHN WICKS, Oak Park, RODNEY G. RICHARDSON, Chicago, and JOHN I. BELLAMY, Brookfield, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1931, Serial No. 519,310. Renewed June 10, 1932. 35 Claims. (Cl. 179—18.)



2. In combination, an automatic switch, groups of lines terminating in the bank thereof, said switch being arranged to respond to a series of impulses and being of a fast-operating type so that it will move over a group of lines during an impulse cycle, and means responsive to each impulse of a series and independent of the end of such impulse for driving said switch into association with the next succeeding group of lines.

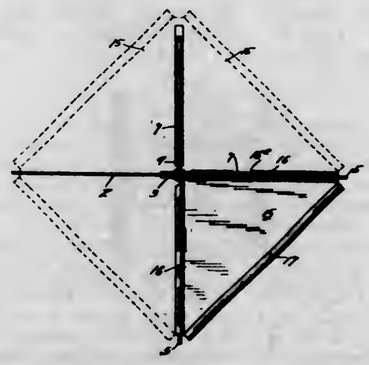
1,903,208. AUTOMATIC GATE. ARMAND A. WILLIAMS, Ghent, W. Va., assignor of one-fourth to Louis Fink and one-fourth to George K. Sweeney, Ghent, W. Va. Filed Aug. 11, 1932. Serial No. 628,389. 6 Claims. (Cl. 39—55.)

6. In a vehicle actuated gate, vertical posts rotatably mounted in spaced relation to each to define a gateway, gates carried by said posts to extend across and close the gateway, treadles approaching the gateway from opposite directions, said treadles being pivotally mounted at their outer ends and having their inner ends terminating close to each other in the gateway, a horizontal rod extending between said posts and yieldably supported in an elevated position, arms carried by inner ends of said treadles and engaging said rod to depress the rod when either treadle is swung downwardly by a vehicle moving over the same towards the gateway and cause the treadles to move in unison, said posts being each provided with a track



having branches extending spirally about the posts and intersecting at their upper ends, and ends of the rod being engaged in the tracks to rotate the posts and swing said gates into and out of a closed position when the treadles are moved.

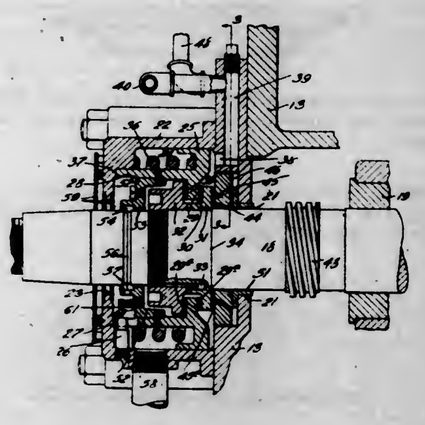
1,903,209. COLLAPSIBLE CAMP TABLE AND COVER STRUCTURE. WILLIAM H. BUTLER, Monrovia, Calif. Filed Feb. 15, 1932. Serial No. 592,996. 4 Claims. (Cl. 45—116.)



2. A camp table comprising a collapsible stand including extensible legs and table arms which are pivotally attached to the legs, and means for securing the same in relatively extended and closed positions, and a set of independent table sections applicable to the extended arms and forming a table top thereon.

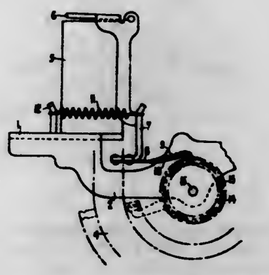
1,903,210. SEALING AND THRUST BALANCING MEANS. WILLIS H. CARRIER, Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Feb. 28, 1929. Serial No. 343,398. 4 Claims. (Cl. 286—9.)

1. The combination with a rotary shaft and a casing having a shaft opening through which said shaft extends, of means for sealing said shaft opening comprising a sealing member rotatable with said shaft, a sealing chamber in which said sealing member rotates and at one end of which is an opposing seat for said sealing member, an annular piston movable axially in said sealing chamber and engaging said sealing member, said piston fitting closely in said sealing chamber and having a portion closely surrounding said shaft at the opposite end of said sealing member from said seat, and means for admitting to the sealing chamber liquid under pressure which acts



on said piston to move and hold said sealing member out of contact with said seat and maintains liquid under pressure in said sealing chamber and in the interior of said piston to provide a seal for said shaft opening.

1,903,211. ELECTROMAGNETIC SWITCH. DAVID ADAM CHRISTIAN, London, England, assignor to Siemens Brothers & Company Limited, London, England. Filed Sept. 21, 1931, Serial No. 563,953, and in Great Britain Oct. 8, 1930. 15 Claims. (Cl. 179—18.)



1. In an automatic switch, two sets of wipers, two banks associated with said two sets of wipers, respectively, each bank comprising a plurality of sets of bank contacts, common driving means for said wiper sets, and means controlled by said driving means for moving said wiper sets to connect each set of contacts in one bank to every set of contacts in the other bank.

1,903,212. PIE PACKAGE. GEORGE S. FROST, Baldwin, N. Y., assignor to New York Pie Baking Co., New York, N. Y., a Corporation of New York. Filed Aug. 3, 1931. Serial No. 554,931. 3 Claims. (Cl. 206—44.)

1. A package for a food product comprising a plate having a compartment to receive a food product and having a flange around said plate, said flange having a bead around the same, a sheet of transparent material adapted to cover the top of the food product and extending over

said plate flange, an annular member or flange having a bead adapted to nest with the bead of said plate flange, said annular member being adapted to be secured to said

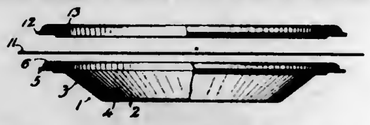
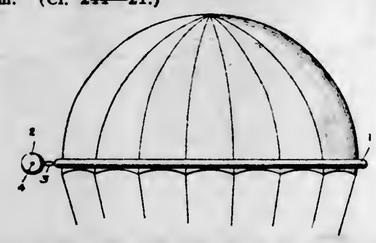


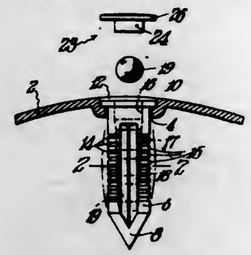
plate flange with the outer portion of said sheet clamped between said flanges, and means for securing said flanges together.

1,903,213. PARACHUTE. WILLIAM J. GLEASON, Houston, Tex. Filed Aug. 14, 1930. Serial No. 475,213. 1 Claim. (Cl. 244—21.)



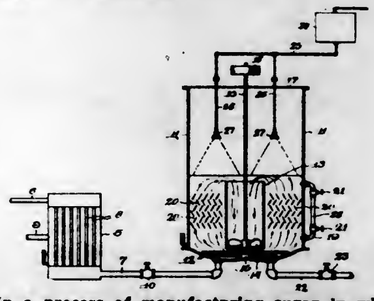
A new and useful improvement in the pneumatic type of opening device for parachutes, comprising a light metal tank or container for air or gas to be attached directly with a nipple and valve to the rubber tube mounted on the periphery of the canopy of the parachute.

1,903,214. ANCHORING DEVICE. OSCAR F. GORANSSON, Springfield, Mass. Filed Oct. 21, 1930. Serial No. 490,142. 2 Claims. (Cl. 94—1.5.)



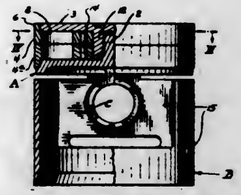
1. The combination of a marking plate for a roadway or the like provided with a central opening therethrough and a recess therearound in the upper face thereof with an anchoring device for securing said plate to a roadway comprising in combination, a bolt having a unitary body portion for extending downwardly through the opening in the plate and adapted to be driven into a roadway, a head on said bolt receivable in said recess, the said bolt being pointed at its lower end and provided with a continuous stepped axial bore extending downwardly from the upper side thereof and terminating adjacent the lower pointed end, the said bore having alternate connected straight and tapering portions and the said straight portions decreasing successively in diameter downwardly from the upper end of the bore, the said body portion having longitudinally spaced corrugations on its outer side and being provided with spaced longitudinal slots in its sides opening into said bore and terminating at a distance from the lower and upper ends thereof, a wedge member having a curved surface and adapted to slip through the uppermost straight portion of the bore and being of greater size than successive portions of the bore so that it may be driven downwardly in said bore into a certain straight portion thereof to expand the sides of the body between its opposite ends, whereby the body is bulged between its ends to cause the said certain straight portion of the bore to contract above said wedge member and lock the same in said certain straight portion.

1,903,215. METHOD FOR THE PURIFICATION OF SOLUTIONS. WALTON C. GRAHAM, Denver, Colo., assignor to Gilchrist & Company, a Corporation of Delaware. Filed Feb. 13, 1925. Serial No. 9,030. 13 Claims. (Cl. 127—48.)



9. In a process of manufacturing sugar in which the sugar bearing juice is treated to precipitate impurities, the step which comprises agitation of the treated juice for a period sufficient to obtain substantially complete flocculation and at a rate adequate to maintain a substantially uniform suspension of all flocs but insufficient to prevent the formation and maintenance of flocs of substantially maximum size.

1,903,216. PISTON. WILLIAM R. HEWITT, New York, N. Y. Filed Jan. 12, 1931. Serial No. 508,017. 3 Claims. (Cl. 74—108.)



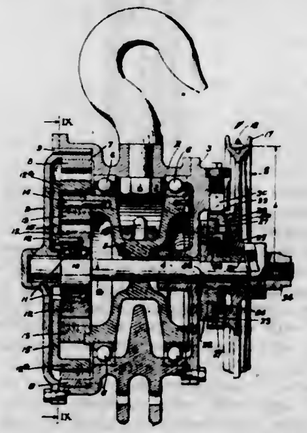
1. In a piston of the character described a ring comprising a disc-shaped member having a central opening formed therein, an annular flange formed on the peripheral edge of the disc, said disc having openings formed therein between the central opening and the flange, said flange and disc being split radially to permit expansion and contraction of the ring, and a combination supporting and expanding member insertable in the central opening.

1,903,217. BALL BEARING. GEORGE O. HODGE, Plainville, Conn., assignor to Standard Steel and Bearings Incorporated, Plainville, Conn., a Corporation of Delaware. Filed Oct. 10, 1929. Serial No. 398,762. 2 Claims. (Cl. 308—187.)



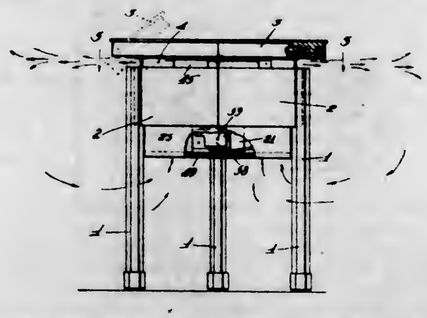
1. In a ball bearing, inner and outer rings with balls therebetween, a lubricant retainer of sheet metal of annular form supported by its periphery from said outer ring and projected inwardly towards the axis so as to overhang the inner ring, the overhanging portion of said retainer being constructed and arranged to prevent escape of lubricant from the bearing under operating conditions, said retainer being provided with a perforation of such small diameter to permit of being plugged by lubricating material under such operating conditions and being sufficiently large to permit of passage of lubricant for charging the bearing under pressure conditions and the border walls of said perforation being pressed outwardly in conical form so as to facilitate cooperation with a lubricant charging device and to reinforce said border walls.

1,903,218. CHAIN BLOCK. ELIAS KNIGHT, San Francisco, Calif. Filed Aug. 31, 1931. Serial No. 560,387. 4 Claims. (Cl. 192—15.)



1. In a chain block of the character described, a drive shaft, a friction clutch keyed to the shaft, spring means normally maintaining contact between the friction faces of said clutch, a pull chain sprocket rotatable with relation to the clutch and the shaft, and means whereby rotation of the sprocket in one direction is transmitted through the clutch to form a driving connection between the sprocket and the drive shaft and rotation of the sprocket in the opposite direction causes slipping of the friction clutch.

1,903,219. ELECTRIC HEATER. HUGH G. LANDIS, Los Angeles, Calif. Filed Aug. 17, 1928, Serial No. 300,334. Renewed Aug. 2, 1932. 23 Claims. (Cl. 219—39.)



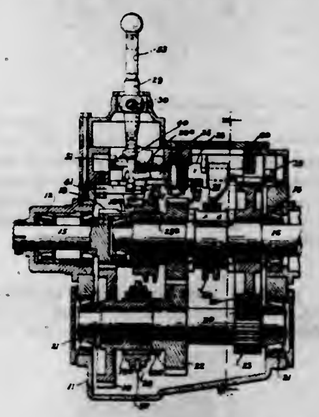
1. An electric heater comprising a central air passage, a fan mounted to rotate horizontally above said passage and constructed to discharge air laterally, horizontal guiding means for discharging air, and a humidifier surrounding said passage and having an exposed evaporating surface forming part of said guiding means and being in contact with the air discharged by the fan.

1,903,220. FLANGE PROTECTOR. LOUIS J. LEMERT, Beverly, N. J., assignor to United States Pipe & Foundry Company, Burlington, N. J., a Corporation of New Jersey. Filed Nov. 25, 1931. Serial No. 577,217. 2 Claims. (Cl. 137—91.)



1. A flange protector for conduits consisting of a flat plate adapted to extend over the face of the flange, having bendable lugs extending from the outer edge of the flat plate and adapted to extend over the edge of the flange and be bent under the inner face thereof and a separable cylindrical ring adapted to surround and protect the edge of the flange and to be held in place by the bendable lugs.

1,903,221. AUTOMOTIVE TRANSMISSION. PHILIP MACKENZIE, Oakland, Calif., assignor of one-fourth to Robert Mann, Oakland, Calif., and one-fourth to Joseph Mann, Berkeley, Calif. Filed Aug. 6, 1929. Serial No. 383,934. 7 Claims. (Cl. 74—59.)

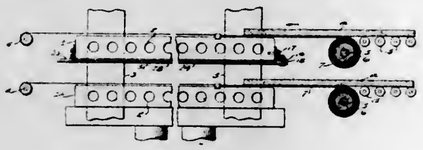


1. A transmission including a casing, a drive shaft projecting into the casing, a driven shaft journalled in the casing in alignment with the drive shaft, a countershaft in the casing arranged parallel to the drive and driven shafts, a drive gear fixed on the drive shaft, a first gear rotatable on the countershaft and in constant mesh with the drive gear, a compound gear and a driven gear rotatably mounted on the driven shaft, a second gear and a third gear fixed on the countershaft in constant mesh with the compound gear and the driven gear, a clutch on the driven shaft operatively associated with the compound gear and with the driven gear, a clutch associated with the countershaft and the first countershaft gear, a shift lever operatively connected with said clutches whereby a transverse shift of said lever in one direction from neutral position will clutch the compound gear to the driven shaft, and a transverse shift in the other

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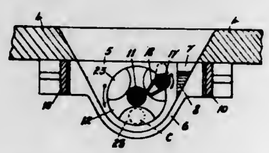
direction from neutral position will clutch the driven gear to the driven shaft, and a longitudinal shift after the lever has assumed one transverse position will engage the clutch associated with the countershaft gear.

1,903,222. PRESS. WILLIAM H. MASON, Laurel, Miss., assignor to Masonite Corporation, Laurel, Miss., a Corporation of Delaware. Filed Apr. 24, 1929. Serial No. 357,737. 10 Claims. (Cl. 34—16.)



1. In a press, a wire mesh screen for supporting material to be pressed, and means for drawing said support into said press comprising a transverse bar, a flexible tension member applied to either end thereof, and means for moving said tension members.

1,903,223. MEANS FOR CIRCULATING GLASS IN GATHERING BASINS. ALEXANDER FRANCIS MCNISH, Perth, Scotland, assignor of one-half to John Moncrieff Limited, Perth, Scotland. Filed Sept. 3, 1931, Serial No. 560,980, and in Great Britain Sept. 19, 1930. 19 Claims. (Cl. 49—56.)



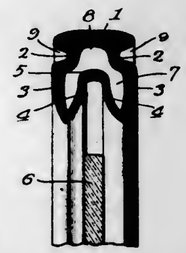
6. The combination with a glass furnace, of a gathering basin open to the furnace, a series of conveying means having a scoop-like effect open laterally for the reception of the glass, means for successively moving said conveying means stepwise all around in the gathering basin in an orbital path and a wiping device for wiping the glass out of the conveying means after they have left the gathering position.

1,903,224. SPRING AND MATTRESS CONSTRUCTION. ERNEST A. OEHRL, Grand Rapids, Mich. Filed Apr. 28, 1930. Serial No. 447,845. 1 Claim. (Cl. 5—75.)



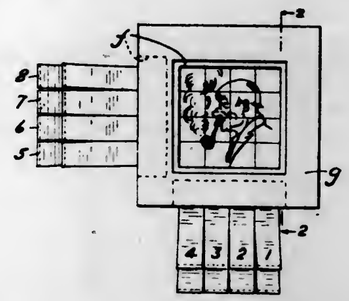
In a construction having a frame and a head rest pivoted thereto the combination of means for supporting the head rest at different positions comprising, a depending bar pivotally connected to the underside of the head rest and having a pin through its lower end, a stirrup secured to and extending inwardly from the adjacent end of the frame between the sides of which the bar passes, and a retaining plate pivotally mounted on said stirrup having an opening through which the bar snugly passes, said stirrup and retaining plate being provided with cooperating wedging surfaces, said pin abutting against the retaining plate when the head rest is elevated to a predetermined position whereby the said wedging surfaces come into engagement and thus hold the said plate in its upper position.

1,903,225. RUBBER WEATHER-STRIP. FREDERICK C. PALENSKE, St. Joseph, Mich., assignor to Industrial Rubber Goods Company, St. Joseph, Mich., a Corporation of Michigan. Filed Aug. 11, 1931. Serial No. 556,345. 7 Claims. (Cl. 296—44.5.)



1. A hollow rubber weather strip for the edge of a glass window or other movable member, having its longitudinal interior air space normally closed at all points in the length thereof, comprising, in the normal condition or shape thereof, when viewed in cross-section, an integral base portion for attaching the strip in stationary position to a suitable support, outer side walls integrally connected with said base, free to bend toward and away from each other, and inner side walls normally spaced from and integral with the outer edges of said outer side walls, forming an outwardly flaring channel between them, said inner side walls being normally spaced a distance from said base, and adapted to engage the inner and outer surfaces of the window or other member, thereby in effect forming flexible hollow side portions with their interiors normally intercommunicating and with a channel between them to receive the edge portion of said member, each double wall side portion thus provided remaining hollow with an air space therein while said member is between them, as well as when said member is withdrawn, but with the interior of one side portion cut off from communication with the interior of the other side portion when said member is between them.

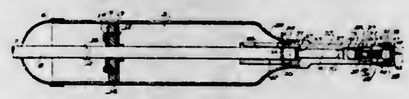
1,903,226. MULTIPLE PICTURE AMUSEMENT DEVICE. HARRY LAWSON PERRY, Jamaica, N. Y. Filed Aug. 8, 1930. Serial No. 473,840. 2 Claims. (Cl. 46—37.)



1. An amusement device comprising two series of independent strips, the strips of each series being in parallel relation, the strips of one series extending at an angle to

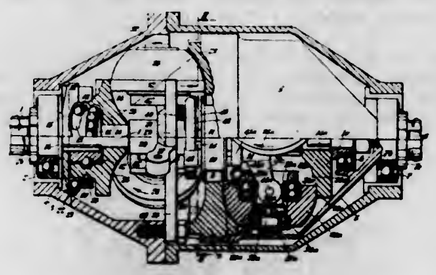
the strips of the other series and being interwoven therewith by extending alternately thereover and thereunder, each strip being provided with areas containing picture units adapted, when grouped with other picture units of other strips of the same series and with picture units of strips of the other series, to form different complete pictures, said strips being longitudinally movable independently of each other to visually expose different combinations of picture units.

1,903,227. GREASE GUN. JOHN LINCOLN SNODGRASS, Chicago, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Sept. 2, 1925. Serial No. 53,982. 25 Claims. (Cl. 221—47.4.)



1. In a lubricating device, in combination, a chamber for containing a lubricant, a cylinder communicating with said chamber having two portions of different diameters, and an outlet from one of said portions, and flexibly connected pistons operable in said cylinder portions.

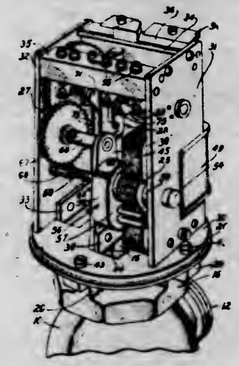
1,903,228. FRICTIONAL GEARING. BERNARD THOMSON, Woldingham, England, assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 1, 1928, Serial No. 309,650, and in Great Britain Oct. 21, 1927. 27 Claims. (Cl. 74—26.)



1. In friction gearing, a shaft, disk-like members coaxially arranged in relation to said shaft and acting as driving and driven members, one of said members being connected to said shaft to rotate therewith and another being rotatable relatively thereto, intermediate roller members between said disk-like members, a spider, the arms of which space said roller members, said spider having a hub concentric with said shaft and relatively rotatable disk-like member, a control sleeve concentric with said shaft and passing thru said relatively rotatable disk-like member, means coacting with said sleeve for positioning said intermediate roller members to vary the gear ratio, and means for moving said sleeve in order to effect a ratio change.

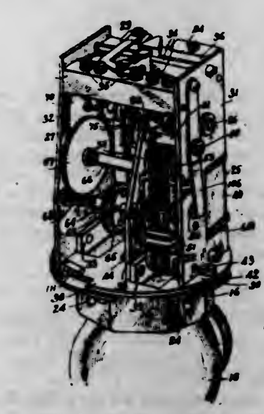
1,903,229. ELECTRIC VALVE OPERATOR. HOWARD D. COLMAN and DUNCAN J. STEWART, Rockford, Ill.; said Stewart assignor to said Colman. Filed Jan. 2, 1930. Serial No. 417,989. 26 Claims. (Cl. 137—139.)

1. An electrically driven operator for radiator control valves and the like comprising, in combination with a valve casing having a valve member movable axially toward and from a seat in the casing, a rotatably mounted shaft disposed transversely of and substantially intersecting the axis of the valve member, an electric motor having a torque-multiplying driving connection with said shaft, an actuating device comprising a reciprocatory member and an actuating element fast on the shaft and operable upon said member in the operation of the motor in one direction to impart positive movements of fixed length to said member in opposite directions, a yieldable lost-motion connection between said reciprocatory member and said valve member through which the valve member is opened and closed in the reciprocation of said mem-



ber, and a controlling switch mechanism for the motor actuated in the rotation of said shaft to define successive valve opening and closing cycles, said lost-motion connection including a spring, and said actuating device being operable during the valve closing cycle first to move the valve member into engagement with its seat and then in the continued movement of said reciprocatory member to tension said spring, and said device being further operable through said spring upon the termination of the closing cycle to hold the valve member to its seat with a predetermined pressure.

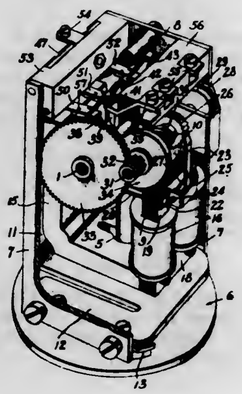
1,903,230. ELECTRIC VALVE OPERATOR. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed July 18, 1929. Serial No. 378,118. 10 Claims. (Cl. 137—139.)



1. An electric valve operator comprising, in combination with a valve having a reciprocable operating stem projecting axially from the casing, a main frame comprising a base plate adapted to be secured to said casing and having a central aperture through which said valve operating

stem projects, said frame further comprising a pair of laterally spaced substantially parallel side plates secured at their lower ends to said base plate, a main operating shaft having its opposite ends mounted in said plates in parallel relation to the base plate but spaced a substantial distance therefrom, a reciprocable actuator connected to and axially alined with said valve stem, said actuator having an operative connection with said main operating shaft so as to be reciprocable in the rotation of said shaft, an electric motor comprising a stator in the form of a substantially flat open frame with a rotor mounted transversely of one side member of the frame and an energizing coil mounted on an opposite side member, said motor being disposed within said main frame between said actuator and one of said side plates, a multiplying gear connection between the rotor and said operating shaft, and a controlling switch mechanism supported between the upper ends of the side plates and above the motor, said operating shaft having means for actuating said switch mechanism.

1,903,231. ELECTRIC CONTROL UNIT. HOWARD D. COLMAN and DUNCAN J. STEWART, Rockford, Ill.; said Stewart assignor to said Colman. Filed Feb. 15, 1929, Serial No. 340,217. Renewed May 2, 1932. 9 Claims. (Cl. 172—126.)



3. An electrically driven control device comprising a frame, a shaft journaled in said frame, a member yieldably mounted in the frame, an electromagnet carried by said member, an armature for said magnet also mounted on said member for vibratory movements relative to the magnet, a rotary element operatively connected with said shaft and journaled in said member, and means operable in the vibratory movements of the armature to impart rotational movement to said element.

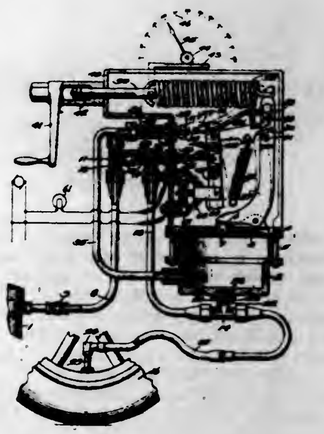
1,903,232. DEEP WELL DRILL. RUSSELL GIESEY, Oklahoma City, Okla., assignor to Reed Roller Bit Company, Houston, Tex., a Corporation of Texas. Filed Oct. 10, 1932. Serial No. 637,018. 7 Claims. (Cl. 255—72.)

1. A drill having a stem; a bit to which fluid may be pumped through said stem; a core barrel in said stem and having an open flared upper end communicating with the interior of said stem; a valve guiding member in said stem above said core barrel; a float valve having a stem movable in said member; a spring surrounding said valve stem and serving to yieldably hold said float valve closed; a relief valve releasably secured to said float valve; a relief valve releasing pin movable in said valve stem; a spring surrounding said pin and serving to yieldably hold said pin in its inactive position; and a pin actuator



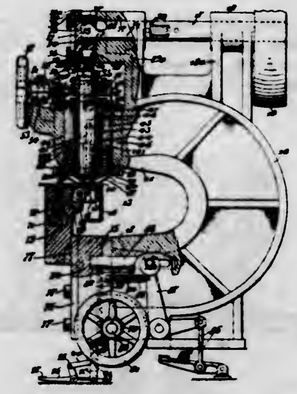
movable downwardly in said stem to move said pin into its active position to permit movement of said relief valve into said opening.

1,903,233. APPARATUS FOR SUPPLYING AIR UNDER PRESSURE. GEORGE W. GILLE, Bryan, Ohio, assignor to Service Station Equipment Company, Bryan, Ohio, a Corporation of Delaware. Filed Feb. 16, 1928. Serial No. 254,803. 1 Claim. (Cl. 50—5.)



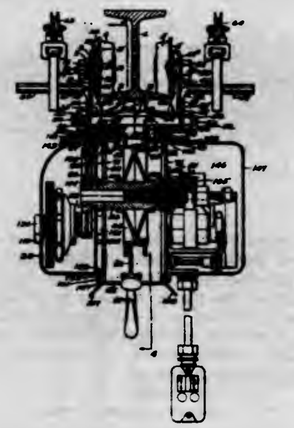
In apparatus for supplying air under pressure to a receiver, a source of air under comparatively high pressure, a conduit leading from said source and adapted to be connected with a receiver, a main valve between said source and said conduit, an expansible chamber connected to said passage by a restricted opening, means actuated by the expansion and contraction of said chamber to close and open said main valve, a relief valve for said chamber and means for opening the relief valve when the chamber contracts to a predetermined volume and for closing said relief valve upon the completeion of the contraction of said chamber.

1,903,234. CUTTING MACHINE. CHARLES B. GRAY, Millbourne, Pa. Filed Sept. 30, 1930. Serial No. 485,448. 14 Claims. (Cl. 164—47.)



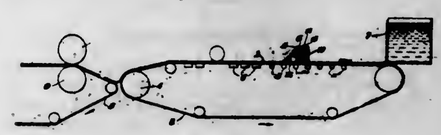
1. In a cutting or slotting machine of the punch type, a frame having upper and lower arms, a vertical bearing carried by the upper arm, a head fitting the bearing and provided with a ram bore, a ram fitting the bore, a tool carried by the ram, a die cooperating with the tool and carried by the lower arm, an arm, means for clamping the arm to the ram above the head in any desired angular position, an upwardly-extending head projection, means providing a spline-like connection between the arm and the projection, and means for rotarily adjusting the head.

1,903,235. HOISTING APPARATUS. WILLARD A. HUMMEL, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 18, 1929. Serial No. 364,239. 6 Claims. (Cl. 212—124.)



1. In a hoist, a motor housing, a supporting member therefor having an aperture affording one end of said motor housing a seat, a second supporting member provided with an aperture through which said motor housing extends, and means for securing said motor housing in position on said supporting members.

1,903,236. PAPER MANUFACTURE. BJARNE JOHNSEN, Erie, Pa., assignor to Hammermill Paper Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 18, 1930. Serial No. 482,687. 6 Claims. (Cl. 92—40.)

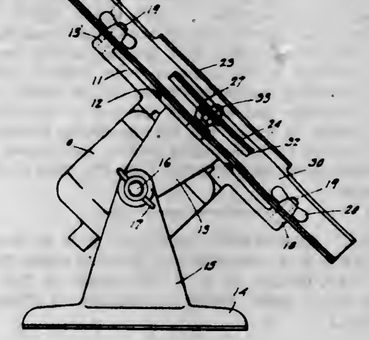


1. That improvement in the art of paper manufacture which comprises adding sizing material to paper stock during the travel of the latter on a Fourdrinier wire.

1,903,237. METHOD OF PRODUCING A CARBONIZED FUEL BRIQUETTE. LEMUEL M. JOHNSTON, Parco, Wyo. Filed Feb. 27, 1926. Serial No. 91,268. 2 Claims. (Cl. 202—15.)

1. The method of producing a hard fuel briquette, which includes mixing pulverized petroleum coke containing heavy mineral oil with water to form a thick paste, pressing the paste into coherent briquettes, destructively distilling the briquettes in the presence of steam to drive off volatiles and carbonise heavy mineral oils in the coke and form dense, hard briquettes.

1,903,238. ROLL AND BUN SPLITTER. SVEN P. LARSON, Berkeley, Calif. Filed July 29, 1932. Serial No. 625,826. 2 Claims. (Cl. 146—73.)

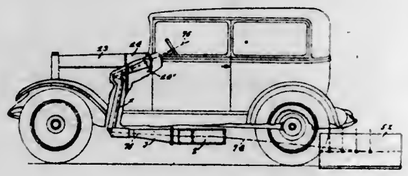


1. A roll splitter comprising a base, a bracket hingedly supported by said base for varying the angular relation therebetween, a motor having a shaft and mounted on, and depending from said bracket, a rotary knife adjustably secured on said shaft, a chute having sides and mounted on said bracket in a plane parallel to said knife, means for adjusting the width of the chute.

1,903,239. REAR AND PARKING VIEW ATTACHMENT. PAUL W. LEEFLAND, Arlington, Tex. Filed July 9, 1929. Serial No. 376,979. 10 Claims. (Cl. 88—1.)

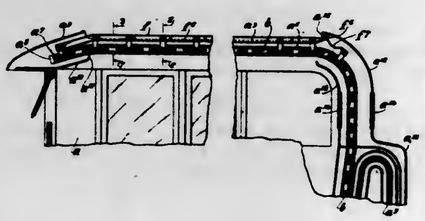
4. A rear view attachment for an automobile machine comprising a series of casing sections connected together and disposed at angles with relation to each other, the initial casing sections extending forwardly from the instrument board of the automobile machine and the ter-

minal casing section being located under the body of the machine and disposed rearwardly, mirrors located in the casing sections and disposed across the apices of



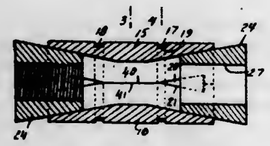
the angles, a mirror pivotally mounted in the terminal casing section and manually operable means for turning the last mentioned mirror upon the pivot.

1,903,240. CONVERTIBLE VEHICLE TOP. HEINRICH MAYER, Arbon, Switzerland, assignor to Société Anonyme Adolphe Saurer, Arbon, Switzerland, a Corporation of Switzerland. Filed Dec. 4, 1930, Serial No. 499,896, and in Germany June 17, 1930. 6 Claims. (Cl. 296—105.)



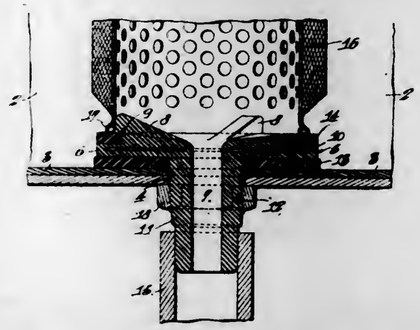
1. In combination with a motor vehicle body having fore and aft top supporting members, a flexible top, guide means for the top at each side of the body, a plurality of guide engaging means movable in each guide, bowed spacing means mounted between the opposed guide engaging means in the respective guides, said spacing means having recessed portions in the opposite ends thereof, tensioning strips extending outwardly from the recessed portions, means to secure the sides of the top to the tensioning strips, means to mount the spacing means movably with respect to the guide engaging means, and means to urge the tensioning strips outwardly from the sides of the spacing means.

1,903,241. EXPANSION SHIELD. ROY E. MCINTOSH, New York, N. Y., assignor to J. Edward Ogden Company, Inc., East Orange, N. J., a Corporation of New Jersey. Filed Oct. 7, 1930. Serial No. 486,920. 7 Claims. (Cl. 85—2.8.)



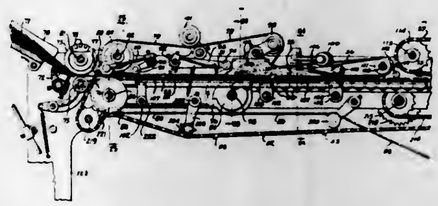
6. An expansion shield comprising a pair of sections and a pair of expanding elements longitudinally movable therein, each of said elements being less than half the length of said sections and having an outer surface with opposite portions tapered in one plane and other opposite portions parallel to each other, said sections having inner surfaces, less than half the length of said sections and corresponding in shape and taper to the outer surfaces of the respective expanding elements, and fully contacting therewith in all positions of engagement of the expanding elements with said shield, each of said sections being substantially crescent shaped in transverse sections through the tapered portions thereof.

1,903,242. SEALING MEANS. OSCAR O. OPPENLAENDER, Elizabethton, and RALPH H. CARTER, Johnson City, Tenn., assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 20, 1931. Serial No. 558,310. 2 Claims. (Cl. 8—19.)



1. A sealing means for use in the liquid treatment of a tier of spools, including a circular base member upon which the bottom spool of the tier rests, a centrally formed bore in said base, a plurality of spaced upstanding spool centering lugs extending from the bore toward the periphery of the base member; the said lugs and the surfaces of the base member therebetween sloping downwardly from the periphery to the bore.

1,903,243. MACHINE FOR MAKING COLLAPSED CARTONS. FRANK GUY PECK, New Haven, Conn., assignor, by mesne assignments, to The Guardian Trust Company, Cleveland, Ohio, a Corporation of Ohio, trustee. Filed Mar. 23, 1931. Serial No. 524,427. 8 Claims. (Cl. 93—49.)

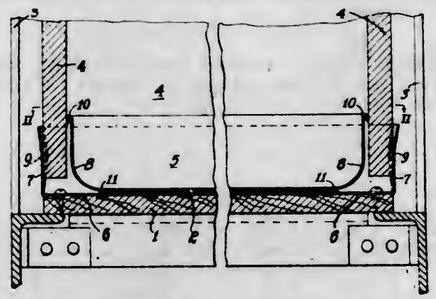


1. In a paper products machine, means to feed a blank through the machine, a pair of side cams for initially deflecting selected side portions of the blank out of the line of travel of the blank, stationary inclined guide rods for further deflecting said side portions as the feeding progresses, a pair of folding belts, one on each side moving with said feeding means to turn said side portions against the body of the blank.

1,903,244. METALLIC BASEBOARD ELEMENT. HENRY M. REED, Jr., Louisville, Ky., assignor to Standard Sanitary Manufacturing Company, a Corporation of New Jersey. Filed Aug. 1, 1931. Serial No. 554,590. 4 Claims. (Cl. 189—85.)

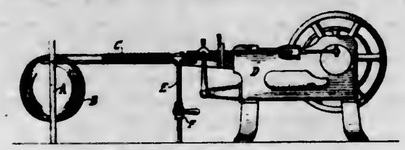
1. A metallic mold board for sheet metal wall construction having a base, a longitudinally extending upstanding member along one edge of said base and having an

inwardly projecting shoulder intermediate of its height, and a longitudinally extending upstanding member along the opposite edge of said base and being gradually curved



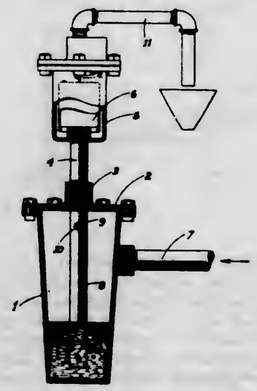
inwardly from said base to the top thereof, said members being spaced apart to form a panel-receiving recess therebetween.

1,903,245. MANUFACTURE OF BLANKS AND SIMILAR ARTICLES WITH JUMPED HEADS. MAX OTTO RUSKA, Voerde, near Hagen, Germany. Filed Apr. 29, 1930, Serial No. 448,273, and in Germany May 1, 1929. 1 Claim. (Cl. 10—27.)



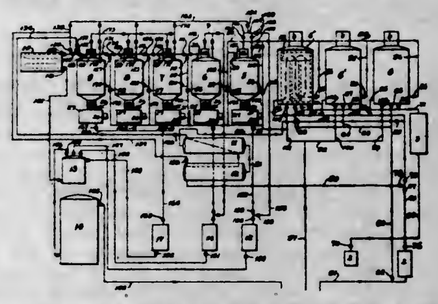
In a process of making screw blanks and similar articles, the steps of continuously heating a portion of a wire made of a non-rusting acid-proof and seawater-proof metal alloy which is unworkable in a cold state of the type comprising Delta metal and Selva metal to a temperature ranging between 250° C. and 350° C., operating on the end of the heated portion in a one blow press and then cutting off a piece of the heater portion, the cut off piece being cooled after the last-mentioned step.

1,903,246. STEAM CONDENSING WELL. LOUIS E. SANDERS, Sacramento, Calif. Filed Apr. 5, 1932. Serial No. 603,260. 2 Claims. (Cl. 137—103.)



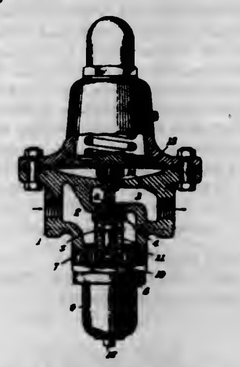
1. In combination with a steam trap having a steam inlet, a well below the trap, said well being closed on top, a conduit extending upwardly from inside the well and through the top thereof to a connection with the steam inlet of the trap, said conduit being open at the bottom and terminating a short distance from the bottom of the well, and a steam inlet passage to the well toward the top; the conduit having a steam bleed opening therein within the well but above the plane of the steam inlet.

1,903,247. METHOD FOR THERMAL DECOMPOSITION OF NATURAL GAS. CHARLES EDWARD STARR, Omaha, Nebr. Filed Sept. 2, 1930. Serial No. 479,293. 12 Claims. (Cl. 134—60.)



1. The method of cracking natural gas which method comprises pre-heating natural gas; then subjecting such pre-heated natural gas to a cracking temperature to crack the same; then passing such cracked stock through a series of chambers each having a temperature lower than the cracking temperature; then shocking such cracked stock in each chamber, the shocking medium in some of the chambers being cool hydrogen gas; and then removing carbon black from such shocked stock.

1,903,248. VALVE. PAULSEN SPENCE, Orange, N. J. Filed Mar. 12, 1929. Serial No. 346,347. 4 Claims. (Cl. 50—23.)



1. In a valve, a valve seat member, a valve member cooperating therewith, said valve member having a passageway therethrough, a removable member secured to said valve and having a restricted passageway in communication with said first mentioned passageway, whereby when said valve is off its seat pressure fluid may pass between said valve and seat and be throttled through said restricted passageway in said removable member.

1,903,249. HAIR CLAMP FOR PERMANENT HAIR WAVING. KARL GEORG STRÖHER, Rothenkirchen, Germany. Filed Aug. 27, 1930. Serial No. 478,188. 3 Claims. (Cl. 132—36.1.)

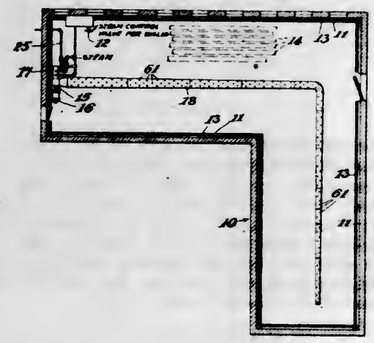
1. A hair clamp for permanent hair waving, comprising a pair of hingedly connected arms, a pair of insulating

jackets enclosing said arms, means connected with said arms for closing the clamp, parts of the exterior surfaces of said jackets being adapted to come in contact with each



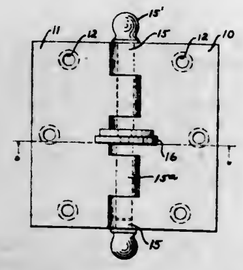
other when the clamp is closed, and grooves formed on other parts of the exterior surfaces of said jackets to provide for a circulation of air.

1,903,250. AIR CONDITIONING APPARATUS. DWIGHT TENNEY, Montclair, N. J. Filed Nov. 11, 1930. Serial No. 494,841. 6 Claims. (Cl. 257—8.)



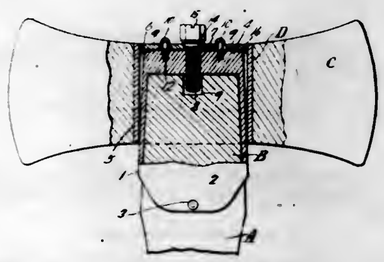
1. Apparatus for maintaining the air of a chamber at a predetermined temperature which comprises heat-delivery means located along the walls of the chamber, said heat-delivery means being of sufficient capacity to supply a major portion of the required heat, insulating shields disposed on the chamber side of the heat-delivery means, an air conditioning duct through which air from the chamber is circulated, auxiliary heating means for supplying the remainder of the required heat to the air passing through the conditioning duct, and a thermostat disposed to automatically control the auxiliary heating means according to the temperature of the main body of air of the chamber.

1,903,251. HINGE CONSTRUCTION. HARRY E. AHRENS, Pasadena, Calif. Filed Nov. 23, 1931. Serial No. 576,763. 5 Claims. (Cl. 16—191.)



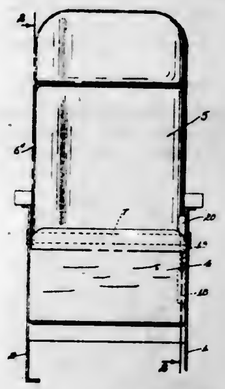
1. In a hinge construction, a pair of plates having interfitting knuckles, a pintle pin passing through said knuckles, a locking member having means to prevent rotation between said locking member and said one hinge plate and a stop member including a shoulder adapted to engage the other plate and means to restrain said stop member to move with said locking member, said means being removable.

1,903,252. TOOL. CHARLES WILLMAN, Retsil, Wash. Filed Dec. 7, 1931. Serial No. 579,370. 4 Claims. (Cl. 306—30.)



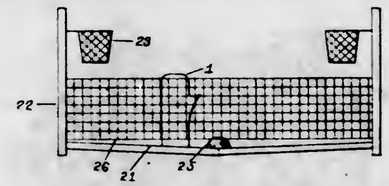
1. In a device of the kind described, in combination with a handle and a tool having a straight socket, a tapered cap secured to the end of the handle and adapted to enter the said socket in the tool, and means on the end of the cap for engaging the said socket to hold the tool on the handle, the said means comprising dogs slidably mounted on the cap, and a screw threaded in the cap and adapted to force the dogs outward against the inner side of the said socket in the tool.

1,903,253. CHAIR. DWIGHT E. AUSTIN, PERCY R. BISSELL, and EDWARD W. CRUTCHFIELD, Los Angeles, Calif. Filed Aug. 4, 1930. Serial No. 472,796. 12 Claims. (Cl. 155—161.)



1. In a chair of the class described, a supporting means, a seat in connection therewith, a back pivotally supported from said supporting means with its lower portion adjacent to the back of the seat, a friction rod connected to the lower portion of the back and extending forwardly, a locking lever pivotally mounted on the supporting means, and a pair of opposed friction jaws pivotally mounted relative to each other on the lever and receiving therebetween one end of the friction rod, the shifting of the lever causing angular shifting of the jaws relative to the lever and causing variation of the space between the jaws.

1,903,254. BASKET BALL GAME. ALOIS STANLEY BISHOP, Kohler, Wis. Filed Oct. 16, 1930. Serial No. 489,130. 7 Claims. (Cl. 273—85.)



6. In a game apparatus, the combination of a playing floor, a plurality of playing positions defined on said playing floor and a projector independent of said playing floor and adapted to be positioned at any of the aforesaid playing positions.

1,903,255. ANTIKNOCK FUEL. FRANK E. L. BUSCH, Erie, Pa. Filed July 15, 1929. Serial No. 378,582. 1 Claim. (Cl. 44—19.)

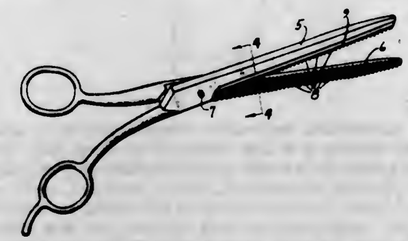
As an anti-knock fuel suitable for use in internal combustion engines, a mixture of gasoline and para-cymene, the latter substance being present in a proportion of more than 2% by volume of the total mixture.

1,903,256. ARTIFICIAL BAIT. JULES W. CATARAU, Seattle, Wash. Filed Oct. 23, 1931. Serial No. 570,571. 4 Claims. (Cl. 43—41.)



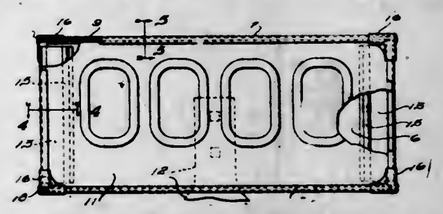
1. A body member for an artificial bait, said body member including a container for scent material, said container being positioned intermediate the ends of body member, and having upper and lower walls each of which is curved outwardly from the longitudinal axis of the container and has slits, one of said slits being of greater width than the others to permit the scent material to be inserted into the container.

1,903,257. SHEARS. CHARLES DAHL, Fernwood, Idaho. Filed Feb. 23, 1932. Serial No. 594,429. 1 Claim. (Cl. 30—13.)



A pair of shears having two pivotally connected blades, teeth extending transversely of the inner faces of both blades, said teeth arcuately disposed concentric with the pivotal connection of the blades, the inner ends of the teeth projecting beyond the inner edges of the blades, small grooves extending longitudinally of the blades across the outer projecting edges of the teeth, and the teeth on one blade arranged to mesh with the teeth on the other blade when the blades are closed.

1,903,258. AUTOMOBILE LICENSE PLATE HOLDER. CLARENCE R. DAVIS, Detroit, Mich., assignor to Davis Tool & Engineering Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 12, 1932. Serial No. 586,186. 10 Claims. (Cl. 40—125.)



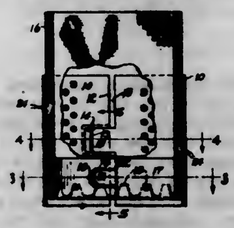
1. An automobile license plate holder including a back plate having longitudinal flanged edge portions, a plurality of independent end members each having a flanged edge portion, said flanged portion corresponding in size and shape to the flanged portion of said longitudinal flanged edges of said back plate, a plurality of corner members adapted to telescope over the flanged portions of the edges of said back portion and the flanged portion of said end members, and means concealed within said longitudinal flanged edges and extending through said corner members for securing the said end members in place, and means secured to said back plate for securing said holder to an automobile.

1,903,259. SHOULDER STRAP RETAINER. JENNIE FRIEDMAN, New York, N. Y. Filed Apr. 8, 1932. Serial No. 604,070. 1 Claim. (Cl. 24—78.)



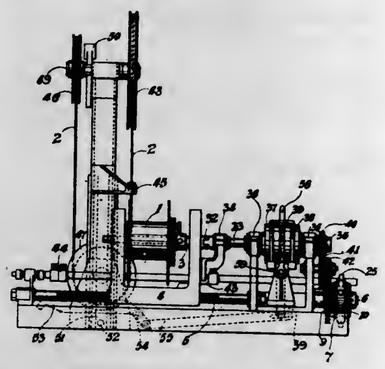
A shoulder strap retainer of the class described comprising a safety pin adapted for connection with an outer garment, the stationary bar of said pin having a substantially U-shaped portion intermediate its ends, the bight of which is of considerable length, a small link of substantially ring shape slidably arranged on said stationary bar and engaging the bight portion of the U-shaped part, a snap fastener part formed with a marginal flange having an opening therein through which the said link passes, a shoulder strap receiving loop and a second snap fastener part permanently fastened to a portion of the loop and adapted to engage the first part to connect the loop to the pin.

1,903,260. WICK CARRYING MEANS. NATHAN F. FRETTER, Cleveland Heights, Ohio. Filed Aug. 18, 1930. Serial No. 475,932. 10 Claims. (Cl. 67—69.)



2. In combination, a perforated cylindrical sleeve, a wick carrier comprising a split resilient ring adapted to have a wick attached thereto, and projections on said carrier adapted to engage the perforations of said sleeve and thereby hold the carrier and wick in position within the sleeve.

1,903,261. BOBBIN OR SPOOL WINDING MACHINE. THOMAS CHARLES HUGHES, Newcastle-upon-Tyne, England, assignor to Larmuth & Bulmer Limited, Manchester, England. Filed Aug. 29, 1931, Serial No. 560,110, and in Great Britain Sept. 27, 1930. 1 Claim. (Cl. 242—43.)



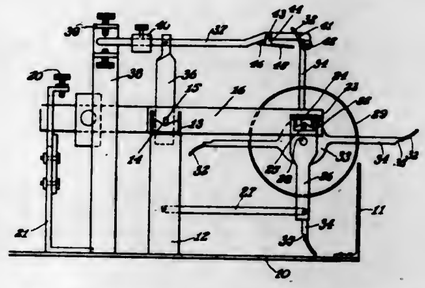
In a winding machine, a direction reversing mechanism for laying windings side by side in superposed layers, comprising in combination, a reversing shaft a bevel wheel secured to the said shaft to rotate therewith, a bevel wheel mounted loose on the said shaft, a driven gear wheel provided on the second named bevel wheel for driving the same direct, a carrier disc mounted loose on the said shaft between the said bevel wheels, a bevel pinion rotatably mounted on the disc and in constant mesh with both of the said bevel wheels, a ring mounted on the periphery of the carrier disc and circularly displaceable thereon, a tooth fixed to the ring for engaging and locking the bevel pinion against rotation, spring means on the ring for yieldingly holding the tooth in locking engagement with the bevel pinion, external stops on the ring, and a displaceable abutment on the mechanism for cooperation with the said stops in positively locking the ring against rotary movement and thereby disengaging the said tooth against the action of the spring means.

1,903,262. TABLE OR SHELF FOR A STOVE. BILTON B. GOINGS, Export, Pa. Filed Sept. 20, 1932. Serial No. 634,069. 1 Claim. (Cl. 126—332.)



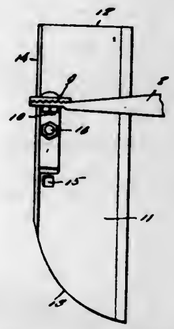
An attachment for a stove comprising a table, hook members connected to one side of the table and having their hook portions engaging parts of the stove, a pair of strips connected with the under side of the table and each having a depending part provided with a longitudinally extending row of holes, a pair of brace members, each of substantially U-shape, and having a substantially straight vertically arranged bight and the limbs extending upwardly and outwardly from the bight with one limb longer than the other and both limbs having their free ends bent to engage certain holes in the strips, the bight portions resting against a side of the stove and a bar having bent ends engaging the lower limbs of the U-shaped members for holding said members together in spaced relation.

1,903,263. WEIGHING AND DELIVERY MACHINE. FRANK MUSCH, New York, N. Y. Filed Nov. 19, 1931. Serial No. 576,027. 4 Claims. (Cl. 249—19.)



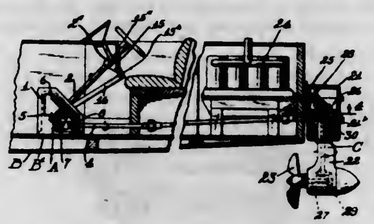
1. A device of the class described comprising a beam, a pivot supporting said beam intermediate its length, means rotatably mounted on one end of said beam, adjustable weights on the other end of said beam, shelves extending from said rotatable means, means normally preventing rotation of said rotatable means, means on said rotatable means normally engaging said means for preventing rotation, said shelves being adapted to receive slices of a material being sliced, the weight of the slices thus received being predetermined by adjusting the said weights, said beam being tilted downward on the side containing the rotatable means when the weight of the received slices equals said predetermined weight, said downward movement causing disengagement of said normally engaging means from the means for preventing rotation and thereby allowing rotation of the rotatable means by the weight of received slices on said shelves, and means for removing the received slices from said shelves.

1,903,264. HOE, MULCHER, AND WEED DESTROYER. FRED C. PALIN, Newton, Ind. Filed Apr. 27, 1931. Serial No. 533,291. 1 Claim. (Cl. 306—17.)



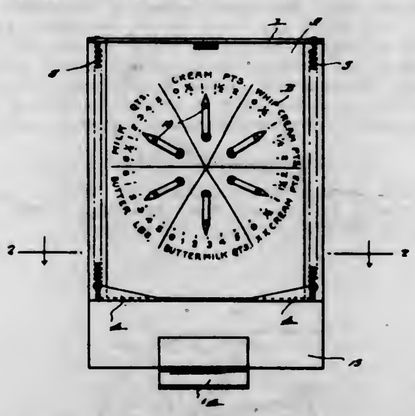
An agricultural implement comprising a blade having a major portion and also having at the back edge of the major portion a straight flange disposed at right angles to the plane of the major portion, a handle, a right angle shank having a portion joined to the handle in fixed relation and also having an arm or free limb extending at right angles to said portion and disposed against one side of the major portion of the blade and also disposed at the inner side of and against the blade flange, the major portion of the blade being provided with a series of apertures adjacent to the flange and the said arm or free limb of the shank being provided with an aperture at an intermediate point in the length of the arm or free limb and adapted to be registered with any one of the apertures of the blade, a headed bolt constituting the sole connection between said shank and blade, said bolt being disposed in the registered apertures of the blade portion and the arm or free limb of the shank, and a nut threaded on said bolt and arranged against the arm or free limb of the shank.

1,903,265. STEERING MECHANISM FOR BOATS. ELMER E. PECK, Long Beach, Calif. Filed June 16, 1930. Serial No. 461,568. 4 Claims. (Cl. 115—35.)



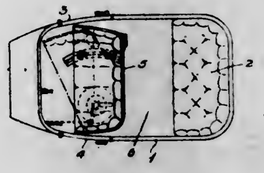
1. In a steering mechanism of the class described, a pair of shafts, one of said shafts having a steering wheel mounted thereon, sets of gears in connection with said shafts, said sets of gears being of different ratios, one gear of one of said sets of gears being slidable longitudinally on one of the shafts, said slidable gear having a clutch portion on one end thereof for engaging a corresponding clutch portion on one of the gears of another set, means for sliding said slidable gear longitudinally of said shaft, and means for non-rotatably connecting said slidable gear to said shaft.

1,903,266. BOX FOR MILK BOTTLES AND OTHER ARTICLES. DANIEL S. KOCH and WAYNE NEWBERRY, St. Paul, Minn. Filed Apr. 2, 1932. Serial No. 602,806. 2 Claims. (Cl. 232—41.)



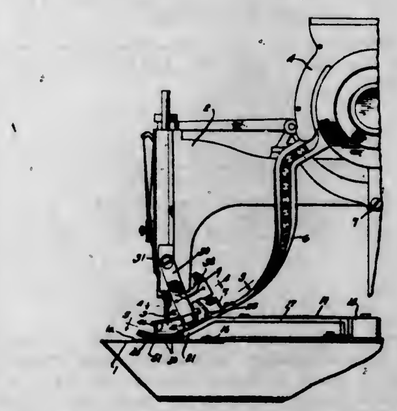
1. A device of the class described comprising a box having its upper and lower ends open, a downwardly opening door hingedly connected to the rear of the box, for closing the lower end of the box, an upwardly opening door hingedly connected to the rear of the box at the top thereof for closing the upper end of the box, springs connecting the two doors together and located exteriorly of the box and holding both doors in closed position, insulated strips arranged adjacent one side of the box, within the same, with one strip adjacent the upper end of the box and the other strip adjacent the lower end thereof, a spring plunger carried by each strip, said plungers engaged by the doors when said doors are closed, for moving portions of the plungers away from the strips, and contacts on each strip engaged by said portions when the plungers are disengaged by the doors.

1,903,267. AUTOMOBILE SEAT. CLARK L. ROBERTS, Nampa, Idaho. Filed May 4, 1931. Serial No. 534,927. 2 Claims. (Cl. 155—95.)



1. A vehicle seat mounting including a hollow standard having an upper bearing surface, a bearing plate fixed to the bottom of the seat and engaging the upper bearing surface of the standard, a pin keyed to the bearing plate and extending through the standard, means for rotating said pin, an arcuate track, a bracket secured to the seat and having enlarged extremities engaging said track, and spring means for holding said seat in its normal position.

1,903,268. MACHINE AND METHOD FOR SEWING BUTTONS ONTO FABRIC OR THE LIKE. FREDERICK N. ROSS, Detroit, Mich., assignor to Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 21, 1928. Serial No. 255,944. 6 Claims. (Cl. 112—113.)

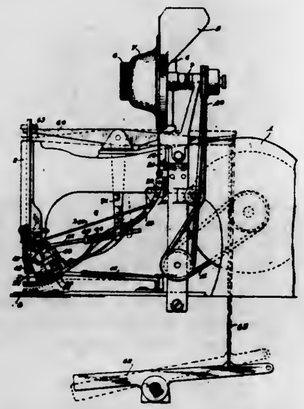


1. The method of positioning buttons to a sewing machine for attaching the buttons to a fabric or the like, which comprises attaching one button, and simultaneously feeding another button to position and rotating this other button to properly position the eyes thereof, by removal of the said attached button from attaching position.

1,903,269. MACHINE FOR ATTACHING BUTTONS. FREDERICK N. ROSS, Detroit, Mich., and FRANKLIN R. WHITE, Waterbury, Conn., assignors to The Patent Button Co., Waterbury, Conn., a Corporation of Connecticut. Filed Jan. 12, 1931. Serial No. 508,088. 16 Claims. (Cl. 112—113.)

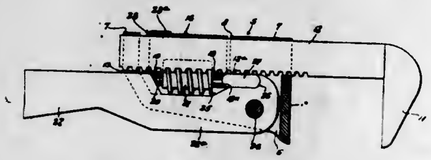
1. In a button attaching machine, the combination of a sewing head, supporting means therefor extending to the rear of the sewing head away from the side of the sewing head where an operator is adapted to sit, a button hopper having a base and having a rotatable hopper part disposed on a horizontal axis substantially paralleling said sewing head support and extending toward and away from the

operator and with the rotatable part positioned toward the operator, said hopper being arranged to feed the buttons so that the buttons lie in a substantially vertical plane substantially perpendicular to said axis and direct-



ly before the operator, and a twisted chute extending from the hopper to a point near sewing position for turning the buttons substantially through 180° as they pass through the chute.

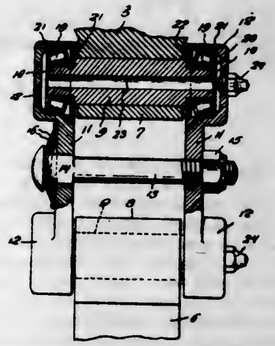
1,903,270. WRENCH. ROLLEN SANDOZ, The Dalles, Oreg. Filed May 16, 1932. Serial No. 611,731. 2 Claims. (Cl. 81—126.)



1. A wrench comprising a main hollow body provided with a jaw, a jaw complementing the first named jaw and provided with a shank extending through said body; an auxiliary hollow body surrounding the shank and working in an opening formed in the main body, and also provided with longitudinally spaced alined bearing lugs; a worm, a supporting pin for the worm journalled in the bearing lugs; teeth on said shank and with which the worm is engaged; a spring mounted on the auxiliary body member and having a bifurcated end straddling said shank and bearing against an adjacent part of said main body; a handle having a head pivoted within the main body and provided with a shoulder normally alined with the bearing lugs; and a link interposed between said shoulder and an adjacent one of said bearing lugs.

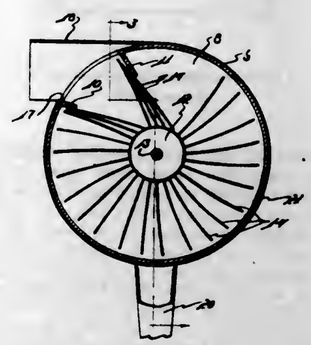
1,903,271. SPRING SHACKLE. RUDOLPH SCHIAVULLI, Providence, R. I. Filed May 13, 1931. Serial No. 537,134. 1 Claim. (Cl. 267—54.)

A device of the character described comprising in combination with a vehicle frame and spring having end bearings, of shafts fixed in said end bearings and having reduced ends, shackle plates at the ends of said bearings having cup-shaped end portions arranged over the reduced ends of the shafts, said cup-shaped end portions having internal shoulders spaced from the bottoms thereof, roller bearings between the reduced ends of the shafts and the cup-shaped portions of the shackle plates, each bearing comprising an inner tapered race fitted on the reduced portion of the adjacent shaft and an outer tapered race tightly fitted within and against the internal shoulder of the adjacent cup-shaped portion of the associated shackle plate, washer closing the inner side of each cup-shaped portion and fitted on the adjacent reduced end portion of the shaft between the inner bearing race and the shoulder provided by reducing the adjacent end of the shaft, an assembly bolt passing through the intermediate portions of and connecting the shackle plates and having



an angular stem portion, and an elongated outwardly curved spring plate carried by said assembly bolt and interposed between the outer side of one shackle plate and the head of said assembly bolt to yieldingly draw the shackle plates together and thereby automatically and uniformly adjust the roller bearings to compensate for wear, said spring plate and one of the shackle plates having an angular opening to engage the angular stem portion of the assembly bolt to prevent relative turning thereof, the opening of the spring plate being elongated longitudinally of the latter to prevent breaking of said spring plate when compressed toward a straight condition.

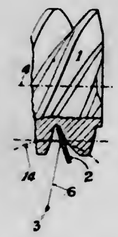
1,903,272. TOY ANIMATION PICTURE DEVICE. SILAS B. TEBEAU, East Detroit, Mich. Filed Mar. 2, 1931. Serial No. 519,371. 2 Claims. (Cl. 88—19.)



1. A device of the class described, comprising: a drum-like housing having oppositely disposed side walls; a circular wall spacing said side walls apart; radially inturned

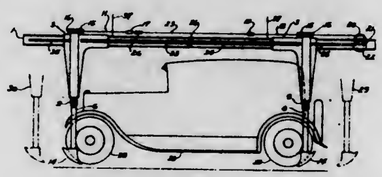
ends on said circular wall, one of said ends being turned in a distance greater than the other; a spool in said housing; a spindle carried by said spool and journaled in the oppositely disposed side walls of said housing, one end of said spindle projecting beyond said housing; a handle mounted on said projecting end for rotating said spool; a plurality of display members swingably mounted at one end of the periphery of said spool and spaced around said spool, said display members being engageable successively with said inturned ends.

1,903,273. WORM GEARING. HARRY WALKER, Milnrow, near Rochdale, England, assignor of one-half to John Holroyd & Company Limited, Milnrow, near Rochdale, England. Filed Nov. 30, 1931, Serial No. 578,045, and in Great Britain Feb. 20, 1931. 3 Claims. (Cl. 74—41.)



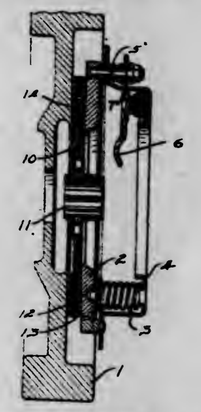
1. Worm gearing comprising a worm of the parallel type having a worm thread profile which is such as would be produced, whilst the worm rotates, by a straight line which turns about an external axis traversed along a path parallel with the axis of the worm and lies in a plane which is offset from the worm axis.

1,903,274. GARAGE HANDLING MECHANISM. ARCHIE S. WATSON, Highland Park, Mich. Filed Sept. 10, 1930. Serial No. 481,028. 20 Claims. (Cl. 294—67.)



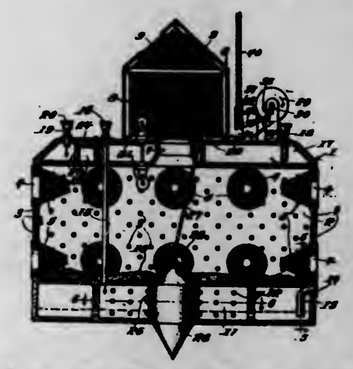
1. In a garage handling mechanism, the combination of members for supporting a motor vehicle, means for moving said members into engagement with said motor vehicle, and means for controlling the engaging pressure of said members with said motor vehicle, said means comprising members automatically operated to contactual and non-contactual positions relative to one another.

1,903,275. CLUTCH. ERNEST E. WEMP, Detroit, Mich. Filed Jan. 18, 1930. Serial No. 421,690. 14 Claims. (Cl. 192—52.)



9. A pressure plate for a clutch comprising a one-piece ring-like member having one face thereof machined to present a frusto-conical surface, said plate being distortable so that under packing pressure in a cultch said frusto-conical surface is caused to take a position substantially perpendicular to the axis of the plate.

1,903,276. FISH TRAP. ELEUTERIO SUSI YANGA, Valladolid, Occidental Negros, P. I. Filed Sept. 6, 1932. Serial No. 631,911. 7 Claims. (Cl. 43—102.)



1. A fish trap comprising a body having a main compartment provided with entrances to permit fish to enter said compartment while the body is submerged in water, means to prevent the escape of fish from said compartment by way of said entrances, a cage carried by the body and having communication with the main compartment, means to prevent the return of fish from the cage to the main compartment, and means to cause submerging of the body and the automatic ascent thereof to the surface of the water after the expiration of a period of time.

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LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Alumni Association of the Massachusetts Institute of Technology, Cambridge, Mass. Magazine. Serial No. 334,341; Apr. 4. Class 38.

American Optical Company, Southbridge, Mass. Prescription ophthalmic lenses. Serial No. 319,196; Apr. 4. Class 26.

Anchor Cap & Closure Corporation, Long Island City, N. Y. Closure caps. Serial No. 334,342; Apr. 4. Class 50.

Ansley Radio Corporation, New York, N. Y. Electric phonograph. Serial No. 334,588; Apr. 4. Class 36.

Arcady Laboratories, Inc., Chicago, Ill. Medicinal preparations for animals and poultry. Serial No. 334,630; Apr. 4. Class 6.

Arechabala, José, S. A., Cardenas, Cuba. Rum, brandy, cognac, etc. Serial Nos. 333,177–8; Apr. 4. Class 49.

Argus Manufacturing Company, Chicago, Ill. Handcuffs or manacles. Serial No. 334,631; Apr. 4. Class 25.

Auto-Car-A-Van Trailer Co. (See Lewis, Joseph.)

B-B Chemical Works, Inc., Atlanta, Ga. Preparation for cleaning, mending, and repairing of radiators, etc. Serial No. 333,787; Apr. 4. Class 6.

Baby Bear Products Corporation, Buffalo, N. Y. Bread. Serial No. 333,870; Apr. 4. Class 46.

Baker, C. W., & Sons, Aberdeen, Md. Canned vegetables. Serial No. 334,594; Apr. 4. Class 46.

Bastian-Morley Co., doing business as Gas and Electric Heater Co., La Porte, Ind. Oil water heaters. Serial No. 331,273; Apr. 4. Class 34.

Bauer, Beatrice M., doing business as The Pinx Company, Burbank, Calif. Stomach medicine and breath purifier. Serial No. 333,817; Apr. 4. Class 6.

Blue Bird Malt Company, Brooklyn, N. Y. Malt syrup. Serial No. 277,992; Apr. 4. Class 46.

Bluman Engineering Corp., Brooklyn, N. Y. Electric fuse plugs. Serial No. 335,178; Apr. 4. Class 21.

Bonta, Vincent J., Brooklyn, N. Y. Oranges, grapefruit, and lemons. Serial No. 334,346; Apr. 4. Class 46.

Burton, W., & Co., Inc., Brooklyn, N. Y. Flavoring extracts and imitations thereof. Serial No. 316,762; Apr. 4. Class 46.

Buttonless Tire Cover Company, The, Canton, Ohio. Embossed textile fabrics. Serial No. 323,809; Apr. 4. Class 50.

Candy Products Corporation, Owosso, Mich. Candies. Serial No. 332,989; Apr. 4. Class 46.

Carlson, James A., doing business as Redicide Co., Minneapolis, Minn. Insecticides. Serial No. 328,660; Apr. 4. Class 6.

Champion Hardware Company, The, Geneva, Ohio. Sash lifts, push plates, spring hinges, etc. Serial No. 330,447; Apr. 4. Class 13.

Chemosan-Union und Fritz-Pesoldt A. G., Vienna, Austria. Bay-active ointment. Serial No. 334,485; Apr. 4. Class 6.

Chic Manufacturing Company, Peoria, Ill. Dresses, pajamas, uniforms, etc. Serial No. 333,965; Apr. 4. Class 39.

Clemson Bros., Inc., Middletown, N. Y. Saws and saw blades. Serial No.323,029; Apr. 4. Class 23.

Climax Tube Company, Mystic, Conn. Paper tubes or cores. Serial No. 334,954; Apr. 4. Class 2.

Crown Products Corporation, San Francisco, Calif. Salad oil, vinegar, syrup, etc. Serial Nos. 333,921–2; Apr. 4. Class 46.

Curtis Lighting, Inc., Chicago, Ill. Glass reflectors. Serial No. 332,876; Apr. 4. Class 33.

Dawson, Francis E., Decatur, Ill. Health powder for cattle. Serial No. 333,785; Apr. 4. Class 6.

Dill Co., The, Norristown, Pa. Insect spray. Serial No. 334,556; Apr. 4. Class 6.

Du Pont, Adele, Inc., New York, N. Y. Face creams. Serial No. 333,702; Apr. 4. Class 6.

Edeleanu Gesellschaft m. b. H., Berlin, Germany. Gasoline and oil. Serial No. 325,821; Apr. 4. Class 15.

Empire Twine & Yarn Co., Inc., New York, N. Y. Thread and yarn. Serial No. 330,340; Apr. 4. Class 43.

Endurette Corporation of America, New York, N. Y. Chemically translucent silk and sateen piece goods. Serial No. 328,577; Apr. 4. Class 50.

Equalizer Company. (See Watkins, Ann.)

Essex Rubber Company, Trenton, N. J. Rubber heels. Serial Nos. 334,432–3; Apr. 4. Class 39.

Filtrol Company of California, Los Angeles, Calif. Chemically treated colloidal clay. Serial No. 334,434; Apr. 4. Class 6.

Garfinkel & Ritter, New York, N. Y. Slips. Serial Nos. 334,332–3; Apr. 4. Class 39.

Gas and Electric Heater Co. (See Bastian-Morley Co.)

General Fire Extinguisher Company, Providence, R. I. Automatic sprinkler systems. Serial No. 334,794; Apr. 4. Class 13.

General Mills, Inc., Minneapolis, Minn. Wheat flour and cereal breakfast foods. Serial No. 326,469; Apr. 4. Class 46.

General Motors Corporation, Detroit, Mich. Ventilating windows for automobiles, busses, trucks, etc. Serial Nos. 332,880–1; Apr. 4. Class 19.

Glaser, Isaac, doing business as H. Glaser & Son, Boston, Mass. Hosiery, underwear, shirts, etc. Serial No. 334,602; Apr. 4. Class 39.

Glatfelter, P. H., Company, Spring Grove, Pa. Writing and printing paper. Serial No. 334,962; Apr. 4. Class 37.

Globe Envelope & Printing Company, Inc., The, Richmond, Va. Church collection envelopes. Serial No. 334,870; Apr. 4. Class 37.

Golden, Asher, New York, N. Y. Ball and roller bearings. Serial No. 334,796; Apr. 4. Class 23.

Gorman-Nathan Co. Inc., New York, N. Y. Suits, overcoats, and topcoats. Serial No. 330,744; Apr. 4. Class 39.

Graham, W. L., Salt Lake City, Utah; Seattle, Wash.; and Portland, Oreg. Special kind of fried chicken sandwich, chicken pie, etc. Serial Nos. 333,419–20; Apr. 4. Class 46.

Grossman, Isidore, doing business as Grossman Clothing Co., New York, N. Y. Suits, overcoats, trousers, etc. Serial No. 334,559; Apr. 4. Class 39.

Gulbransen Company, Chicago, Ill. Table board game. Serial No. 334,560; Apr. 4. Class 22.

Gum, Inc., Philadelphia, Pa. Chewing gum. Serial No. 334,837; Apr. 4. Class 46.

Hamilton Machine Company, The. (See Wolfe, Graff F.)

Hamilton Rubber Manufacturing Company, Trenton, N. J. Power transmission belts. Serial No. 334,461; Apr. 4. Class 35.

Harper Company. (See Personeni, Harry.)

Helm, Ray P., doing business as The Helm Company, Benton Harbor, Mich. Antiseptic vaginal suppositories. Serial No. 334,750; Apr. 4. Class 6.

Holloway, M. J., & Company, Chicago, Ill. Candy. Serial No. 334,751; Apr. 4. Class 46.

Houghton, E. F., & Co., Philadelphia, Pa. Leather belting. Serial No. 333,725; Apr. 4. Class 35.

Household Paper Products, Detroit, Mich. Sanitary napkins. Serial No. 332,531; Apr. 4. Class 44.

Howard Jackley Company, The, Philadelphia, Pa. Laxatives. Serial No. 330,298; Apr. 4. Class 6.

Indiana Breweries, Inc., Indianapolis, Ind. Malt beverage. Serial No. 334,709; Apr. 4. Class 45.

Iorns, Clifford L., doing business as VIPro Corporation, St. Louis, Mo. Soy oleum. Serial No. 334,823; Apr. 4. Class 46.

Ishibashi, Shojiro, Kurume, Japan. Rubber tires, tubes, patches, etc. Serial No. 319,250; Apr. 4. Class 35.

Johns-Manville Corporation, New York, N. Y. Packing. Serial No. 330,299; Apr. 4. Class 35.

Johnson, Johnson & Johnson, Hartford, Conn. Squeegees. Serial No. 333,707; Apr. 4. Class 23.

Juvenile Shoe Corporation of America, The, Aurora, Mo. Shoes and slippers. Serial No. 334,567; Apr. 4. Class 39.

Karreth, August, doing business as Lultpold-Werk, Chemisch-pharmazeutische Fabrik, Munich, Germany. Nerve tonics. Serial No. 331,862; Apr. 4. Class 6.

Kinkade, James G., Pasadena, Calif. Brushes. Serial No. 330,094; Apr. 4. Class 29.

Klein Brothers, New York, N. Y. Silk, satin, linen, etc. Serial No. 334,362; Apr. 4. Class 42.

Krich Products Corporation, Vineland, N. J. Cubes or tablets for aiding the digestion, etc. Serial No. 325,104; Apr. 4. Class 6.

Lea Manufacturing Company, The, Waterbury, Conn. Abrasive composition. Serial No. 334,533; Apr. 4. Class 4.

Lewis, Joseph, doing business as Auto Car-A-Van Trailer Co., Detroit, Mich. Automobile camp trailer and coach. Serial No. 330,414; Apr. 4. Class 19.

Lithographic Technical Foundation, Inc., New York, N. Y. Material adapted for the treatment and preservation of the plates and parts of printing and lithographing presses. Serial No. 330,751; Apr. 4. Class 6.

Lultpold-Werk, Chemisch-pharmazeutische Fabrik. (See Karreth, August.)

MacDowell Brothers, Ogdensburg, N. Y. Yeast. Serial No. 333,358; Apr. 4. Class 46.

Magic Flote Novelty Corp., Chicago, Ill. Pneumatic toys. Serial No. 334,925; Apr. 4. Class 22.

Maguire, Fred, San Francisco, Calif. Toilet tissue. Serial Nos. 329,963–4; Apr. 4. Class 37.

Maison Jeurelle, Inc., Chicago, Ill. Perfume. Serial No. 334,611; Apr. 4. Class 6.

Manhattan Soap Company, Inc., New York, N. Y. Toilet soaps. Serial No. 334,109; Apr. 4. Class 4.

Marcus & Wiesen, Inc., New York, N. Y. Sanitary aprons, pads, napkins, etc. Serial No. 333,978; Apr. 4. Class 44.

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[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Mars, Incorporated, Chicago, Ill. Candy. Serial No. 332,136; Apr. 4. Class 46.
Marshall, James, (Glasgow) Limited, Glasgow, Scotland. Oat flour, semolina, rice flour, etc. Serial No. 333,162; Apr. 4. Class 46.
Meyers, Louis, & Son, Incorporated, New York, N. Y. Leather gloves. Serial No. 333,598; Apr. 4. Class 39.
Moorman, Albert S., West Englewood, N. J. Card game. Serial No. 333,809; Apr. 4. Class 22.
National Funeral Directors' Association of the United States, Inc., Cincinnati, Ohio. Periodicals. Serial No. 335,095; Apr. 4. Class 38.
National Grange Feeds, Inc., Buffalo, N. Y. Animal feeds. Serial No. 315,364; Apr. 4. Class 46.
National Tube Company, Pittsburgh, Pa. Metal pipes, tubes, and casings. Serial No. 328,033; Apr. 4. Class 13.
Naumkeag Steam Cotton Company, Salem, Mass. Sheets and pillow cases. Serial No. 334,444; Apr. 4. Class 42.
New York Medical Pharmaceutical Laboratories. (See Reichman, Zoltan.)
Northrup, King & Co., Minneapolis, Minn. Corn seed. Serial No. 325,994; Apr. 4. Class 1.
Parkersburg Rig & Reel Company, The, Parkersburg, W. Va. Brakes for hoists and wall rigs. Serial No. 334,617; Apr. 4. Class 23.
Parsons Paper Company, Holyoke, Mass. Bond and ledger papers. Serial No. 323,464; Apr. 4. Class 37.
Peerless Sport Apparel Co. Inc., New York, N. Y. Sweaters and dresses. Serial No. 333,450; Apr. 4. Class 39.
Perfect Manufacturing Co., The, doing business as So-Lo Works, Cincinnati, Ohio. Adhesive preparation for shoe-resoling and repairing compound. Serial No. 329,200; Apr. 4. Class 6.
Personeni, Harry, doing business as Harper Company, New York, N. Y. Preparation for stomach disorders. Serial No. 334,318; Apr. 4. Class 6.
Pinx Company, The. (See Bauer, Beatrice M.)
Pismo Beach Creamery, Pismo Beach, Calif. Frozen milk confections. Serial No. 332,073; Apr. 4. Class 46.
Pittsburgh Plate Glass Company, Pittsburgh, Pa. Paints, paint primers, etc. Serial No. 333,360; Apr. 4. Class 16.
Popular Mechanics Co., Chicago, Ill. Leaflet. Serial No. 331,701; Apr. 4. Class 38.
Progressive Games Company, Cincinnati, Ohio. Table board game. Serial No. 334,760; Apr. 4. Class 22.
Red Top Malt Company, Cincinnati, Ohio. Malt beverage. Serial No. 334,809; Apr. 4. Class 48.
Redicide Co. (See Carlson, James A.)
Reichman, Zoltan, doing business as New York Medical Pharmaceutical Laboratories, New York, N. Y. Compressed tablets for urinary and biliary antiseptic. Serial No. 334,618; Apr. 4. Class 6.
Republic Paper Board Company, The, Cincinnati, Ohio. Pasted board. Serial No. 334,072; Apr. 4. Class 37.
Rick-Rack Co., Columbus, Ga. Toy novelty. Serial No. 334,408; Apr. 4. Class 22.
Riegel Paper Corporation, Riegelsville, N. J. Wrapping papers. Serial No. 321,504; Apr. 4. Class 37.
Rubel Baking Company, The, Cincinnati, Ohio. Bread. Serial No. 334,326; Apr. 4. Class 46.
S. M. A. Corporation, Cleveland, Ohio. Protein free maltose and dextrins. Serial No. 328,963; Apr. 4. Class 6.
Sachs, Morris B., Chicago, Ill. Overcoats, suits, dresses, etc. Serial No. 334,482; Apr. 4. Class 39.
Sanderson, William, & Son, Limited, Leith, Scotland. Scotch whisky. Serial No. 333,951; Apr. 4. Class 49.
Schliemann Companies, Inc., New York, N. Y. Oils and grease. Serial No. 327,747; Apr. 4. Class 15.
Sears, Roebuck and Co., Chicago, Ill. Toy velocipedes and wagons, golf balls, etc. Serial No. 333,201; Apr. 4. Class 22.
Sears, Roebuck and Co., Chicago, Ill. Asphalt roofing, asbestos, etc. Serial No. 334,849; Apr. 4. Class 12.
Seward, Adet (Stè Anonyme), Bordeaux, France. Brandy. Serial No. 333,087; Apr. 4. Class 49.
Shadowplay Publishing Company, Chicago, Ill. Periodicals. Serial No. 334,943; Apr. 4. Class 38.
Shenandoah Milling Company, Inc., Shenandoah, Va. Self rising flour and wheat flour. Serial No. 334,851; Apr. 4. Class 46.
Société à Responsabilité Limitée Rodier, Paris, France. Velvets, cretonnes, silks, etc. Serial No. 330,385; Apr. 4. Class 42.
So-Lo Works. (See Perfect Manufacturing Co.)
Southern Friction Fabric Company, Charlotte, N. C. Brake lining. Serial No. 334,269; Apr. 4. Class 35.
Standard-Coosa-Thatcher Company, Chattanooga, Tenn. Cotton thread. Serial Nos. 334,812–17; Apr. 4. Class 43.
Standard Safety Razor Corporation, Wilmington, Del., and East Norwalk, Conn. Razors and razor blades. Serial No. 334,540; Apr. 4. Class 28.
Steinberger Bros. Glove Corp., San Francisco, Calif., and New York, N. Y. Leather and fabric gloves. Serial No. 334,475; Apr. 4. Class 39.
Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Rye bread and pumpernickel. Serial No. 334,776; Apr. 4. Class 46.
Stuzin, Albert, Brooklyn, N. Y. Prophylactic rubber articles for the prevention of contagious diseases. Serial No. 334,654; Apr. 4. Class 44.
Style-Craft Lingerie, Inc., New York, N. Y. Panties, dansettes, chemises, etc. Serial No. 334,449; Apr. 4. Class 39.
Sun-A-Sured, Inc., Minneapolis, Minn. Milled grain products and preparations thereof. Serial No. 331,758; Apr. 4. Class 46.
Tumbler, J. A., Laboratories, Baltimore, Md. Polish. Serial No. 330,766; Apr. 4. Class 16.
Uerling, F. P., Hastings, Nebr. Gasoline and lubricating oil. Serial No. 335,041; Apr. 4. Class 15.
U-No-Jaunty Dress, Inc., New York, N. Y. Dresses, pajamas, vests, etc. Serial No. 334,779; Apr. 4. Class 39.
Upjohn Company, The, Kalamazoo, Mich. Medicated troche for the throat. Serial No. 334,591; Apr. 4. Class 6.
ViPro Corporation. (See Iorns, Clifford L.)
Virginia Stationery Company, Inc., Richmond, Va. Puzzles and board games. Serial No. 334,819; Apr. 4. Class 22.
Voit, William, Company, Inc., New York, N. Y. Musical instruments. Serial No. 331,810; Apr. 4. Class 36.
Wabash Appliance Corp., Brooklyn, N. Y. Ultra violet ray health lamps. Serial No. 333,620; Apr. 4. Class 44.
Wallingford Laboratories, Inc., The, Wallingford, Conn. Astringent, liquid powder, tissue cream, etc. Serial No. 331,274; Apr. 4. Class 6.
Warwick Chemical Company, West Warwick, R. I. Finishing products and softeners. Serial No. 334,507; Apr. 4. Class 6.
Watkins, Ann., doing business as Equaliser Company, Memphis, Tenn. Laxative preparation. Serial No. 333,869; Apr. 4. Class 6.
Werner Mfg. Co., Brooklyn, N. Y. Sets of perfumed pads and pad holders. Serial No. 334,724; Apr. 4. Class 6.
White & Bagley Company, The, Worcester, Mass. Lubricant oils. Serial No. 334,480; Apr. 4. Class 15.
Wolfe, Graff F., doing business as The Hamilton Machine Company, Minneapolis, Minn. Coin-controlled amusement device. Serial No. 334,375; Apr. 4. Class 22.
Wolverine-Empire Refining Co., New York, N. Y. Lubricating oils and greases. Serial No. 334,338; Apr. 4. Class 15.
Worcester Salt Co., New York, N. Y. Tooth paste and powder, and mouth wash. Serial No. 332,503; Apr. 4. Class 6.
Wrigley, Wm., Jr, Company, Chicago, Ill. Chewing gum. Serial Nos. 334,625–6; Apr. 4. Class 46.
Zip Abrasive Company, The, Cleveland, Ohio. Lubricating oils and grease. Serial No. 334,971; Apr. 4. Class 15.

LIST OF REGISTRANTS OF TRADE-MARKS

American Bemberg Corporation. (See Bemberg, I. P., Aktiengesellschaft, assignor.)
American Maize-Products Company, New York, N. Y. Corn syrup. 302,203; Apr. 4; Serial No. 332,213; published Jan. 17, 1933. Class 46.
Beech-Nut Packing Company, Canajoharie, N. Y. Chewing gum. 302,181; Apr. 4; Serial No. 324,694; published Jan. 17, 1933. Class 46.
Belcraft Sales Corporation, New York, N. Y. Hosiery and lingerie sleeping garments, etc. 302,191; Apr. 4; Serial No. 331,482; published Jan. 3, 1933. Class 39.
Bemberg, I. P., Aktiengesellschaft, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y. Filaments of artificial silk. 302,186; Apr. 4; Serial No. 329,618; published Jan. 10, 1933. Class 42.
Berkshire Knitting Mills, Wyomissing, Pa. Hosiery. 302,207–9; Apr. 4; Serial Nos. 332,109–11; published Jan. 3, 1933. Class 39.
Biltrite Motor Equipment Co. Inc., New York, N. Y. Lubricating oils and greases. 302,202; Apr. 4; Serial No. 332,218; published Jan. 17, 1933. Class 15.
Boye, James H., Manufacturing Co., Chicago, Ill. Electric floor lamps. 302,222; Apr. 4; Serial No. 331,946; published Jan. 17, 1933. Class 21.
Brauhaus Würsburg, Aktiengesellschaft, Wursburg, Germany. Malt beverage. 302,273; Apr. 4. Class 48.
Brown & Wells, Inc., Boston, Mass. Necktles. 302,175; Apr. 4; Serial No. 321,983; published Jan. 3, 1933. Class 39.
Buhlmann, Adolph W., New York, N. Y. Finishing machine for processing fabrics. 302,281; Apr. 4. Class 23.

California Fruit Growers Exchange, Los Angeles, Calif. Maltlese fruit juices, fruit juice concentrates, syrups, etc. 302,251; Apr. 4; Serial No. 332,997; published Jan. 24, 1933. Class 46.
Clark Thread Company, The, Newark, N. J. Thread and yarn. 302,206; Apr. 4; Serial No. 332,178; published Jan. 3, 1933. Class 43.
Cluett, Peabody & Co., Inc., Troy, N. Y. Collars, shirts, union suits, etc. 302,190; Apr. 4; Serial No. 332,113; published Jan. 10, 1933. Class 39.
Colgate-Palmolive-Peet Company, Chicago, Ill. Detergent emulsion. 302,269; Apr. 4. Class 4.
Commonwealth Flour Mills, Inc., St. Louis, Mo. Flour. 302,250; Apr. 4; Serial No. 332,444; published Jan. 17, 1933. Class 46.
Conant Ball Company, Boston, Mass. Household furniture. 302,214; Apr. 4; Serial No. 331,040; published Jan. 17, 1933. Class 32.
Dana, Charles A., and J. B. Pierce, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., and Cudahy, Wis. Vehicle tires and inner tubes. 302,197; Apr. 4; Serial No. 326,461; published Jan. 10, 1933. Class 35.
Dental Laboratory Supply Company, Inc., New York, N. Y. Molding composition. 302,196; Apr. 4; Serial No. 314,198; published Jan. 24, 1933. Class 44.
Dovedown Hosiery Mills, Griffin, Ga. Hosiery. 302,189; Apr. 4; Serial No. 331,854; published Jan. 3, 1933. Class 39.
Edwards, S. T., & Co., Inc., Chicago, Ill. Dried skim milk. 302,237; Apr. 4; Serial No. 326,286; published Jan. 17, 1933. Class 46.
Electric Auto-Lite Company, The, Toledo, Ohio. Time indicating and registering apparatus and parts thereof. 302,198; Apr. 4; Serial No. 326,581; published Jan. 17, 1933. Class 27.
Electric Auto-Lite Company, The, Toledo, Ohio. Time indicating and registering apparatus and parts thereof. 302,200; Apr. 4; Serial No. 326,583; published Jan. 17, 1933. Class 27.
Ellanay Frocks, Inc., Los Angeles, Calif. Women's frocks. 302,255; Apr. 4; Serial No. 332,337; published Jan. 17, 1933. Class 39.
Evans Products Company, Detroit, Mich. Mechanical apparatus for loading and suspension of motor vehicles within freight cars. 302,278; Apr. 4. Class 23.
Fiberbilt Sample Case Co., Inc., New York, N. Y. Drum cases, sample trunks, dressing cases, etc. 302,262; Apr. 4. Class 3.
Fisk Rubber Company, The. (See Dana, Charles A., and J. B. Pierce.)
Fleischer Studios, Incorporated, New York, N. Y. Motion picture cartoons. 302,233; Apr. 4; Serial No. 332,712; published Jan. 17, 1933. Class 26.
Fraser, Alexander, doing business as A. Fraser & Co., Manchester, England. Whisky. 332,226; Apr. 4; Serial No. 331,779; published Jan. 24, 1933. Class 49.
Frederick Bros., Inc., Chicago, Ill. Malt beverages. 302,270; Apr. 4. Class 48.
General Mills, Inc., Minneapolis, Minn. Wheat germ. 302,230; Apr. 4; Serial No. 319,483; published Nov. 8, 1931. Class 46.
Gold Maid Hosiery Mills, Inc., Chicago, Ill. Hosiery. 302,192; Apr. 4; Serial No. 331,550; published Jan. 3, 1933. Class 39.
Goldberg, Rose, Brooklyn, N. Y. Safety razor blades. 302,221; Apr. 4; Serial No. 331,857; published Jan. 17, 1933. Class 28.
Goodrich Electric Company, Chicago, Ill. Unitary electric lighting fixtures. 302,275; Apr. 4. Class 21.
Gordon-East Coast Company, Moundsville, W. Va. Shirts. 302,194; Apr. 4; Serial No. 331,823; published Jan. 3, 1933. Class 39.
Great Atlantic & Pacific Tea Company, doing business as The Quaker Maid Co., Inc., New York, N. Y. Bird gravel. 302,239; Apr. 4; Serial No. 329,896; published Jan. 17, 1933. Class 1.
Greenebaum, J., Tanning Company, Chicago, Ill.; Boston, Mass.; and Milwaukee, Wis. Leather. 302,264; Apr. 4; Serial No. 331,733; published Jan. 17, 1933. Class 1.
Gruhn, M. Mitchell, New York, N. Y. Radio receiving sets, television sets, and parts therefor. 302,172; Apr. 4; Serial No. 314,955; published Feb. 2, 1933. Class 21.
Harrington & Waring, New York, N. Y. Hosiery. 302,185; Apr. 4; Serial No. 329,468; published Jan. 3, 1933. Class 39.
Heath-Sweetser, Inc., New York, N. Y. Shirts and collars. 302,195; Apr. 4; Serial No. 332,040; published Jan. 3, 1933. Class 39.
Hilliard, Perley A., Newtonville, Mass. Candy. 302,280; Apr. 4. Class 46.
Huth, Frank G., doing business as Frank Huth Tool & Machine Works, Fort Wayne, Ind. Electric water heaters. 302,265; Apr. 4. Class 21.
I. & P. Home Products Company, Inc., Port Chester, N. Y. Percolated compound for culinary flavoring. 302,224; Apr. 4; Serial No. 331,183; published Jan. 17, 1933. Class 46.
Industrial Oil Corporation, Warren, Pa. Motor lubricating oils. 302,249; Apr. 4; Serial No. 332,455; published Jan. 17, 1933. Class 15.
International Nickel Company, Inc., The, New York, N. Y. Sinks. 302,234; Apr. 4; Serial No. 332,719; published Jan. 17, 1933. Class 13.
International Nickel Company, Inc., The, New York, N. Y. Table tops. 302,235; Apr. 4; Serial No. 332,720; published Jan. 17, 1933. Class 32.
Kaynee Company, The, Cleveland, Ohio. Shirts. 302,205; Apr. 4; Serial No. 332,120; published Jan. 10, 1933. Class 39.
Kentucky Consumers Oil Company, Inc., Louisville, Ky. Lubricant. 302,247; Apr. 4; Serial No. 332,457; published Jan. 17, 1933. Class 15.
Keonts, Edwin E., Kansas City, Mo. Chocolate covered cone. 302,179; Apr. 4; Serial No. 319,998; published Jan. 17, 1933. Class 46.
Kresge Department Store Corporation, Newark, N. J. Hosiery, lingerie. 302,174; Apr. 4; Serial No. 330,730; published Jan. 3, 1933. Class 39.
Kuner Pickle Company, The, Brighton, Colo. Peas, sugar corn, cherries, hominy, etc. 302,177; Apr. 4; Serial No. 318,152; published Jan. 17, 1933. Class 46.
Kurts Bros., Clearfield, Pa. Wall calendars. 302,279; Apr. 4. Class 38.
La Crosse Refining Company, La Crosse, Wis. Malt syrup. 302,260; Apr. 4; Serial No. 331,645; published Jan. 17, 1933. Class 46.
Lamm, Jacob C., Baltimore, Md. Pants, suits, and coats, etc. 302,276; Apr. 4. Class 39.
Langbein, William, Bro's., Brooklyn, N. Y. Dishes, trays, buckets, etc. 302,267; Apr. 4. Class 2.
Léon, Inc., Los Angeles, Calif., and Peabody, Mass. Sheep skins. 302,257; Apr. 4; Serial No. 331,287; published Jan. 17, 1933. Class 1.
Loeb, H., & Co. Inc., New York, N. Y. Underwear, bathing suits, sport coats, etc. 302,176; Apr. 4; Serial No. 324,716; published Dec. 13, 1932. Class 39.
Macy, R. H., & Co., Inc., New York, N. Y. Dresses, suits, and coats. 302,210; Apr. 4; Serial No. 327,022; published June 21, 1932. Class 39.
Markowitz, Samuel L., Inc., New York, N. Y. Nails. 302,219; Apr. 4; Serial No. 331,621; published Jan. 17, 1933. Class 13.
Marsh, C. A., Inc., Orlando, Fla. Citrus fruits. 302,178; Apr. 4; Serial No. 319,824; published Jan. 17, 1933. Class 46.
May Oil Burner Corporation, Baltimore, Md. Heating furnace fuel oils. 302,248–4; Apr. 4; Serial Nos. 332,592–3; published Jan. 17, 1933. Class 15.
McLaren, L. M., Yuma, Ariz. Vegetables. 302,180; Apr. 4; Serial No. 321,651; published Jan. 17, 1933. Class 46.
Mechanical Improvements Corporation, Camden, N. J. Metal key holders. 302,241; Apr. 4; Serial No. 332,657; published Jan. 17, 1933. Class 18.
Meisel, C., Inc., New York, N. Y. Violins, violas, violoncellos, etc. 302,220; Apr. 4; Serial No. 331,882; published Jan. 17, 1933. Class 36.
Mexican Importing Company, New York, N. Y. Chile sauce and ketchup. 302,225; Apr. 4; Serial No. 331,288; published Jan. 17, 1933. Class 46.
Meyer, George, doing business as The Puissant Co., St. Louis, Mo. Lubricating compound. 302,254; Apr. 4; Serial No. 332,246; published Jan. 17, 1933. Class 15.
National Silk Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. 302,246; Apr. 4; Serial No. 332,496; published Jan. 17, 1933. Class 39.
National Washboard Company, Chicago, Ill. Ironing tables. 302,274; Apr. 4. Class 24.
Nelson Knitting Company, Rockford, Ill. Hosiery. 302,187; Apr. 4; Serial No. 330,549; published Jan. 17, 1933. Class 39.
North Pacific Nut Growers' Cooperative, Lebanon, Oreg. Canned nuts. 302,258; Apr. 4; Serial No. 331,409; published Jan. 17, 1933. Class 46.
Parks-Cramer Company, Fitchburg, Mass. Humidifiers. 302,215–16; Apr. 4; Serial Nos. 331,315–16; published Jan. 17, 1933. Class 34.
Pauly and Ramsey, Tulsa, Okla. Cereal breakfast foods. 302,262; Apr. 4; Serial No. 331,714; published Jan. 17, 1933. Class 46.
Petroleum Heat and Power Company, New York, N. Y. Heating-furnace oils. 302,248; Apr. 4; Serial No. 332,466; published Jan. 17, 1933. Class 15.
Phoenix Hosiery Company, Milwaukee, Wis. Hosiery. 302,253; Apr. 4; Serial No. 332,349; published Jan. 10, 1933. Class 39.
Piqua Hosiery Company, Inc., The, Piqua, Ohio. Sweaters. 302,204; Apr. 4; Serial No. 332,199; published Jan. 10, 1933. Class 39.
Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meters, gauges, and meter provers. 302,211; Apr. 14; Serial No. 327,961; published Jan. 17, 1933. Class 26.
Popsicle Corporation of the United States, The, New York, N. Y. Frozen confections. 302,259; Apr. 4; Serial No. 331,563; published Jan. 17, 1933. Class 46.
Prietzel, Edward H., St. Louis, Mo. Poultry roosts. 302,277; Apr. 4. Class 50.
Puissant Co., The. (See Meyer, George.)
Quaker Maid Co., The. (See Great Atlantic & Pacific Tea Company, The.)
Red & White Corporation, Buffalo, N. Y. Gelatine dessert. 302,232; Apr. 4; Serial No. 331,758; published Jan. 17, 1933. Class 46.
Reynolds Wire Co., Dixon, Ill. Wire cloth. 302,213; Apr. 4; Serial No. 330,944; published Jan. 17, 1933. Class 18.

Riddell, John T., Inc., Chicago, Ill. Shoe cleats. 302,272; Apr. 4. Class 13.
Roseth Corporation, Brooklyn, N. Y. Moth and vermin repellent bags and boxes. 302,238; Apr. 4; Serial No. 327,986; published Jan. 24, 1933. Class 2.
Royal Baking Powder Company, New York, N. Y. Pudding and pie filling. 302,229; Apr. 4; Serial No. 321,219; published Jan. 17, 1933. Class 46.
Russell, Robert H., Cleveland, Ohio. Industrial liquid fuel burners and atomizers, furnace retorts, and furnace air registers. 302,242; Apr. 4; Serial No. 332,632; published Jan. 17, 1933. Class 34.
Sandeman, Geo. G., Sons & Co. Limited, London, England. Wines. 302,268; Apr. 4; Serial No. 331,705; published Jan. 24, 1933. Class 47.
Sandusky Crayon Company, Inc., Sandusky, Ohio. Crayons. 302,231; Apr. 4; Serial No. 325,347; published Jan. 10, 1933. Class 37.
Seagram, Joseph E., & Sons Limited, Waterloo, Ontario, Canada. Potable spirits, whisky, and liquors. 302,182; Apr. 4; Serial No. 333,084; published Jan. 24, 1933. Class 49.
Sears, Roebuck and Co., Chicago, Ill. Linoleum and oil cloth. 302,183; Apr. 4; Serial No. 333,202; published Jan. 24, 1933. Class 20.
Sears, Roebuck and Co., Chicago, Ill. Lawn mowers. 302,217; Apr. 4; Serial No. 331,415; published Jan. 17, 1933. Class 23.
Security Products Company, St. Louis, Mo. Flush valves. 302,245; Apr. 4; Serial No. 332,553; published Jan. 17, 1933. Class 13.
Shoreham Coffee Company, Washington, D. C. Coffee. 302,173; Apr. 4; Serial No. 316,224; published Jan. 17, 1933. Class 46.
Silex Company, The, Hartford, Conn. Gas and spirit stoves. 302,212; Apr. 4; Serial No. 330,639; published Jan. 17, 1933. Class 34.
Simplex Piston Ring Company of America, Inc., The, Cleveland, Ohio. Brake linings. 302,199; Apr. 4; Serial No. 329,243; published Jan. 17, 1933. Class 35.
Singer, Philip A., & Bro. Inc., Newark, N. J. Furs. 302,223; Apr. 4; Serial No. 330,713; published Dec. 13, 1932. Class 1.
Siesinger, Stephen, Inc., New York, N. Y. Games, toys, etc. 302,240; Apr. 4; Serial No. 332,700; published Jan. 24, 1933. Class 22.
Souhegan Apple Packing Association, Wilton, N. H. Apples. 302,227; Apr. 4; Serial No. 331,910; published Jan. 17, 1933. Class 46.
Standard Brands Incorporated, New York, N. Y. Invertase preparation. 302,261; Apr. 4; Serial No. 331,655; published Jan. 17, 1933. Class 46.
Star Union Overall Co., Inc., The, South Norwalk, Conn. Pajamas and night shirts. 302,201; Apr. 4; Serial No. 332,315; published Jan. 10, 1933. Class 39.
Sun Radio, Inc., Akron, Ohio. Golf clubs, balls, and bags. 302,268; Apr. 4. Class 22.
Tetley, Joseph, & Co., Inc., New York, N. Y. Tea. 302,228; Apr. 4; Serial No. 331,938; published Jan. 17, 1933. Class 46.
Union Oil Company, Parsons, Kans., and North Kansas City, Mo. Vehicle tires and inner tubes. 302,256; Apr. 4; Serial No. 331,272; published Jan. 17, 1933. Class 35.
Utica Radiator Corporation, Utica, N. Y. Heating radiators. 302,271; Apr. 4. Class 34.
Waldfoger-Abrams Company, Boston, Mass. Overcoats. 302,184; Apr. 4; Serial No. 328,080; published Jan. 17, 1933. Class 39.
Wanamaker, John, Philadelphia, Philadelphia, Pa. Dresses. 302,193; Apr. 4; Serial No. 331,811; published Jan. 3, 1933. Class 39.
Wayne Knitting Mills, Fort Wayne, Ind. Hosiery. 302,252; Apr. 4; Serial No. 332,359; published Jan. 10, 1933. Class 39.
Whitaker, Fred A., Columbus, Ga. Toy. 302,236; Apr. 4; Serial No. 332,793; published Jan. 24, 1933. Class 22.
Whitall Tatum Company, Millville, N. J. Electrical insulators. 302,218; Apr. 4; Serial No. 331,522; published Jan. 17, 1933. Class 21.
Winget Knickernick Company, Minneapolis, Minn. Bloomers, combination garments, etc. 302,188; Apr. 4; Serial No. 330,589; published Jan. 10, 1933. Class 39.
Wittenberg Shimberg Corp., New York, N. Y. Coats. 302,256; Apr. 4. Class 39.

LIST OF REGISTRANTS OF LABELS

A. P. W. Paper Company, Inc., Albany, N. Y. A. P. W. Soft White a Toilet Tissue for Women. For Toilet Tissue. 41,875; Apr. 4.
Apple Growers Association, Hood River, Oreg. Hood River Brand. For Apples. 41,876; Apr. 4.
Bird & Son, Inc., East Walpole, Mass. True Values. For Footwear. 41,877; Apr. 4.
Bird & Son, Inc., East Walpole, Mass. Leed's. For Footwear. 41,878; Apr. 4.
Bird & Son, Inc., East Walpole, Mass. BB Footwear. For Footwear. 41,879; Apr. 4.
California Medicinal Wine Co., Los Angeles, Calif. California. For Angelica. 41,880; Apr. 4.
Columbia Knitting Mills, Portland, Oreg. Crossbuck. For Sweaters. 41,881; Apr. 4.
Diamond Springs Lime Company, doing business as El Dorado Chemical Company, Diamond Springs, Calif. Comet Targets. For Targets. 41,882; Apr. 4.
Economy Wholesale Grocery Company, Fall River, Mass. Mount Hope. For Tomatoes. 41,883; Apr. 4.
El Dorado Chemical Company. (See Diamond Springs Lime Company.)
Globe Grain and Milling Company, Los Angeles, Calif. Globe "A1" Complete Biscuit Flour. For Complete Biscuit Flour. 41,884; Apr. 4.
Golden Brand Food Products Co., Philadelphia, Pa. Golden Brand Mayonnaise. For Mayonnaise. 41,885; Apr. 4.
Harris, P. E., & Co., Seattle, Wash. Spartan. For Canned Salmon. 41,886; Apr. 4.
Havens, G. B., doing business as G. B. Havens and Co., Mobile, Ala. Haven's Elixir. For an Elixir for Use as an Aid to Digestion and for Treating Sour Stomach, Heartburn, Sour Eructations Etc. 41,887; Apr. 4.
Hoague-Sprague Corporation, Lynn, Mass. Sturdy Fut. For Boxes. 41,888; Apr. 4.
Jaeger, J. Edward, Los Angeles, Calif. Jaeger's Old Kentucky Sausage Seasoning. For Sausage Seasoning. 41,889; Apr. 4.
Kimball, H. B., Milwaukee, Wis. Rays of Health in Kimball Tablets. For Stomach Tablets. 41,890; Apr. 4.
Larson, L. P., Jr. Company, Chicago, Ill. Larson's Peptomint Gum. For Chewing Gum. 41,891; Apr. 4.
Leslie, Roy F., South Euclid, Ohio. Class 1 Butter. For Butter. 41,892; Apr. 4.
Nicolay, William H., Brooklyn, N. Y. Yankee Base Ball Puzzle. For Base Ball Puzzle. 41,893; Apr. 4.
Northam Trading Corporation, New York, N. Y. Safety Matches. For Safety Matches. 41,894; Apr. 4.
Page & Shaw, Inc., Cambridge, Mass. Page & Shaw Lolly-Ettes. For Lolly-Ettes (a Form of Lollypop). 41,895; Apr. 4.
Peerless Key Company, Inc., New York, N. Y. Peerless Rubber Typewriter Keys Protects Finger Nails Makes Typing Easier. For Rubber Typewriter Keys. 41,896; Apr. 4.
Pruden Chemical Company, Orlando, Fla. Apex Balsam A Stainless Ointment with the Fragrance of Flowers. For Ointment. 41,897; Apr. 4.
Royal Estates Tea Co., Jersey City and Hoboken, N. J. Thrif T (Yellow and Red Plaid Label—Orange Pekoe and Pekoe). For Tea. 41,898; Apr. 4.
Sears, Roebuck and Co., Chicago, Ill. Cross Country Motor Oil. For Motor Oil. 41,899; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Green Label Orange Pekoe and Pekoe Tea. For Tea. 41,900; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Bonita Brand Gunpowder Green Tea. For Tea. 41,901; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Nassau Brand Young Hyson Green Tea. For Tea. 41,902; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase & Sanborn's Basket Fired Japan Uncolored Tea. For Tea. 41,903; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tender Leaf Japan Green. For Tea Balls. 41,904; Apr. 4.
Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tender Leaf Orange Pekoe and Pekoe. For Tea Balls. 41,905; Apr. 4.
Stearns' Electric Paste Company, Inc., Chicago, Ill. Stearn's Electric Rat and Roach Paste. For Rat and Roach Paste. 41,906; Apr. 4.
Superior Packing Corp., New York, N. Y. Tasty-Malt. For Chocolate Flavored Healthful Malted Drink. 41,907; Apr. 4.
Unge, E. L., doing business as B. W. Unge, Topeka, Kans. Unge's Shrimp. For Canned Shrimp. 41,908; Apr. 4.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Licorice Gum. For Licorice Gum. 41,909–11; Apr. 4.

CARNEGIE LIBRARY OF ATLANTA

LIST OF REGISTRANTS OF PRINTS

Barrett Company, The, New York, N. Y. The American Farmer. For Nitrate of Soda. 14,124; Apr. 4.
Duvall, Stanley A., Edinburg, Tex. Flying Iron. For Electric Heated Sad-Irons and Stands. 14,125; Apr. 4.
Hoyt & Worthen Tanning Corp., Haverhill, Mass. Sunshine Chamois. For Chamois Leather. 14,126; Apr. 4.
Kleenex Company, Chicago, Ill. Pocket Packets Kleenex Disposable Tissues. For Pocket Packets of Disposable Tissue Handkerchiefs. 14,127; Apr. 4.
Orange-Crush Company, Chicago, Ill. Drink Orange-Crush and the Other Fresh Fruit Crushes. For Delicious Cooling Vitamin Drinks. 14,128; Apr. 4.
Swift & Company, Chicago, Ill. New Sunbrite Cleanser. For Cleansing and Scouring Powder. 14,129; Apr. 4.
Wrigley, Wm., Jr. Company, Chicago, Ill. Wrigley's Licorice Gum. For Licorice Gum. 14,130; Apr. 4.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Furs. Philip A. Singer & Bro. Inc. 302,223; Apr. 4; Serial No. 330,713; published Dec. 13, 1932.
Gravel, Bird. Great Atlantic & Pacific Tea Company. 302,239; Apr. 4; Serial No. 329,896; published Jan. 17, 1933.
Leather. J. Greenebaum Tanning Company. 302,264; Apr. 4; Serial No. 331,733; published Jan. 17, 1933.
Skins, Sheep. Léon, Inc. 302,257; Apr. 4; Serial No. 331,287; published Jan. 17, 1933.

CLASS 2

Bags and boxes, Moth and vermin repellent. Roseth Corporation. 302,238; Apr. 4; Serial No. 327,986; published Jan. 24, 1933.
Dishes, trays, buckets, etc. William Langbein Bro's. 302,267; Apr. 4.

CLASS 3

Cases, sample trunks, dressing cases, etc., Drum. Fiberbilt Sample Case Co. 302,282; Apr. 4.

CLASS 4

Detergent emulsion. Colgate-Palmolive-Peet Company. 302,269; Apr. 4.

CLASS 13

Cleats, Shoe. John T. Riddell, Inc. 302,272; Apr. 4.
Key holders, Metal. Mechanical Improvements Corporation. 302,241; Apr. 4; Serial No. 332,657; published Jan. 17, 1933.
Nails. Samuel L. Markowitz, Inc. 302,219; Apr. 4; Serial No. 331,621; published Jan. 17, 1933.
Sinks. International Nickel Company. 302,234; Apr. 4; Serial No. 332,719; published Jan. 17, 1933.
Valves, Flush. Security Products Company. 302,245; Apr. 4; Serial No. 332,553; published Jan. 17, 1933.
Wire cloth. Reynolds Wire Co. 302,213; Apr. 4; Serial No. 330,944; published Jan. 17, 1933.

CLASS 15

Lubricant. Kentucky Consumers Oil Company. 302,247; Apr. 4; Serial No. 332,457; published Jan. 17, 1933.
Lubricating compound. G. Meyer. 302,254; Apr. 4; Serial No. 332,346; published Jan. 17, 1933.
Oils and greases for motor vehicles, Lubricating. Biltrite Motor Equipment Co. 302,202; Apr. 4; Serial No. 332,218; published Jan. 17, 1933.
Oils, Heating-furnace. Petroleum Heat and Power Company. 302,248; Apr. 4; Serial No. 332,466; published Jan. 17, 1933.
Oils, Heating furnace fuel. May Oil Burner Corporation. 302,243–4; Apr. 4; Serial Nos. 332,592–3; published Jan. 17, 1933.
Oils, Motor lubricating. Industrial Oil Corporation. 302,249; Apr. 4; Serial No. 332,455; published Jan. 17, 1933.

CLASS 20

Linoleum and oil cloth. Sears, Roebuck and Co. 302,183; Apr. 4; Serial No. 333,202; published Jan. 24, 1933.

CLASS 21

Electric floor lamps. James H. Boye Manufacturing Co. 302,222; Apr. 4; Serial No. 331,946; published Jan. 17, 1933.
Electrical insulators. Whitall Tatum Company. 302,218; Apr. 4; Serial No. 331,522; published Jan. 17, 1933.
Heaters, Electric water. F. G. Huth. 302,265; Apr. 4.
Lighting fixtures, Unitary electric. Goodrich Electric Company. 302,275; Apr. 4
Radio receiving sets, television sets, and parts therefor. M. Mitchell Gruhn. 302,172; Apr. 4; Serial No. 314,955; published Feb. 2, 1932.

CLASS 22

Games, toys, etc. Stephen Slesinger, Inc. 302,240; Apr. 4; Serial No. 332,700; published Jan. 24, 1933.
Golf clubs, balls, and bags. Sun Radio, Inc. 302,268; Apr. 4.
Toy. F. A. Whitaker. 302,236; Apr. 4; Serial No. 332,793; published Jan. 24, 1933.

CLASS 23

Finishing machine for processing fabrics. A. W. Buhlmann. 302,281; Apr. 4.
Mechanical apparatus for loading and suspension of motor vehicles in freight cars. Evans Products Company. 302,278; Apr. 4.
Mowers, Lawn. Sears, Roebuck and Co. 302,217; Apr. 4; Serial No. 331,415; published Jan. 17, 1933.
Razor blades, Safety. R. Goldberg. 302,221; Apr. 4; Serial No. 331,857; published Jan. 17, 1933.

CLASS 24

Ironing tables. National Washboard Company. 302,274; Apr. 4.

CLASS 26

Meters, gauges, and meter provers. Pittsburgh Equitable Meter Company. 302,211; Apr. 4; Serial No. 327,961; published Jan. 17, 1933.
Picture cartoons, Motion. Fleischer Studios, Incorporated. 302,233; Apr. 4; Serial No. 332,712; published Jan. 17, 1933.
Time indicating and registering apparatus and parts thereof. Electric Auto-Lite Company. 302,198; Apr. 4; Serial No. 326,581; published Jan. 17, 1933.

CLASS 27

Time indicating and registering apparatus and parts thereof. Electric Auto-Lite Company. 302,200; Apr. 4; Serial No. 326,583; published Jan. 17, 1933.

CLASS 32

Furniture, Household. Conant Ball Company. 302,214; Apr. 4; Serial No. 331,040; published Jan. 17, 1933.
Table tops. International Nickel Company. 302,235; Apr. 4; Serial No. 332,720; published Jan. 17, 1933.

CLASS 34

Burners and atomizers, furnace retorts, and furnace air registers, Liquid. R. H. Russell. 302,242; Apr. 4; Serial No. 332,632; published Jan. 17, 1933.
Humidifiers. Parks-Cramer Company. 302,215–16; Apr. 4; Serial Nos. 331,315–16; published Jan. 17, 1933.
Radiators, Heating. Utica Radiator Corporation. 302,271; Apr. 4.
Stoves, Gas and spirit. Silex Company. 302,212; Apr. 4; Serial No. 330,639; published Jan. 17, 1933.

CLASS 35

Brake linings. Simplex Piston Ring Company of America, Inc. 302,199; Apr. 4; Serial No. 329,243; published Jan. 17, 1933.
Tires and inner tubes, Vehicle. Charles A. Dana and John B. Pierce. 302,197; Apr. 4; Serial No. 326,461; published Jan. 10, 1933.
Tires and inner tubes, Vehicle. Union Oil Company. 302,256; Apr. 4; Serial No. 331,272; published Jan. 17, 1933.

CLASS 36

Violins, violas, violoncellos, etc. C. Meisel, Inc. 302,220; Apr. 4; Serial No. 331,832; published Jan. 17, 1933.

CLASS 37

Crayons. Sandusky Crayon Company. 302,231; Apr. 4; Serial No. 325,347; published Jan. 10, 1933.

CLASS 38

Calendars, Wall. Kurtz Bros. 302,279; Apr. 4.

CLASS 39

Bloomers, combination garments, etc. Winget Kickernick Company. 302,188; Apr. 4; Serial No. 330,589; published Jan. 10, 1933.
Coats. Wittenberg Shimberg Corp. 302,266; Apr. 4.
Collars, shirts, union suits, etc. Cluett, Peabody & Co. 302,190; Apr. 4; Serial No. 332,113; published Jan. 10, 1933.
Dresses. John Wanamaker Philadelphia. 302,191; Apr. 4; Serial No. 331,811; published Jan. 3, 1933.

Dresses, suits, and coats. R. H. Macy & Co. 302,210; Apr. 4; Serial No. 327,022; published June 21, 1932.
Frocks, Women's. Ellansy Frocks, Inc. 302,255; Apr. 4; Serial No. 332,337; published Jan. 17, 1933.
Hosiery. Berkshire Knitting Mills. 302,207–9; Apr. 4; Serial Nos. 332,109–11; published Jan. 3, 1933.
Hosiery. Dovedown Hosiery Mills. 302,189; Apr. 4; Serial No. 331,854; published Jan. 3, 1933.
Hosiery. Gold Maid Hosiery Mills, Inc. 302,192; Apr. 4; Serial No. 331,550; published Jan. 3, 1933.
Hosiery. Harrington & Waring. 302,185; Apr. 4; Serial No. 329,468; published Jan. 3, 1933.
Hosiery. National Silk Hosiery Mills, Inc. 302,246; Apr. 4; Serial No. 332,406; published Jan. 17, 1933.
Hosiery. Nelson Knitting Company. 302,187; Apr. 4; Serial No. 330,549; published Jan. 17, 1933.
Hosiery. Phoenix Hosiery Company. 302,253; Apr. 4; Serial No. 332,349; published Jan. 10, 1933.
Hosiery. Wayne Knitting Mills. 302,252; Apr. 4; Serial No. 332,359; published Jan. 10, 1933.
Hosiery and lingerie sleeping garments, etc. Belcraft Sales Corporation. 302,191; Apr. 4; Serial No. 331,482; published Jan. 3, 1933.
Hosiery, lingerie. Kresge Department Store Corporation. 302,174; Apr. 4; Serial No. 320,730; published Jan. 3, 1933.
Neckties. Brown & Wells, Inc. 302,175; Apr. 4; Serial No. 321,983; published Jan. 3, 1933.
Overcoats. Waldfogel-Abrams Company. 302,184; Apr. 4; Serial No. 328,080; published Jan. 17, 1933.
Pajamas and night shirts. Star Union Overall Co. 302,201; Apr. 4; Serial No. 332,315; published Jan. 10, 1933.
Pants, suits, coats, etc. J. C. Lamm. 302,276; Apr. 4.
Shirts. Gordon-East Coast Company. 302,194; Apr. 4; Serial No. 331,823; published Jan. 3, 1933.
Shirts. Kaynee Company. 302,205; Apr. 4; Serial No. 332,120; published Jan. 10, 1933.
Shirts, and collars. Heath-Sweetser, Inc. 302,195; Apr. 4; Serial No. 332,040; published Jan. 3, 1933.
Sweaters. Piqua Hosiery Company. 302,204; Apr. 4; Serial No. 332,199; published Jan. 10, 1933.
Underwear, bathing suits, sport coats, etc. H. Loeb & Co. Inc. 302,176; Apr. 4; Serial No. 324,716; published Dec. 13, 1932.

CLASS 42

Silk. Filaments of artificial. I. P. Bemberg Aktiengesellschaft. 302,186; Apr. 4; Serial No. 329,618; published Jan. 10, 1933.

CLASS 43

Thread and yarn. Clark Thread Company. 302,206; Apr. 4; Serial No. 332,178; published Jan. 3, 1933.

CLASS 44

Molding composition. Dental Laboratory Supply Company. 302,196; Apr. 4; Serial No. 314,198; published Jan. 24, 1933.

CLASS 45

Fruit juices, fruit juice concentrates, syrups, etc., Maltless. California Fruit Growers Exchange. 302,251; Apr. 4; Serial No. 332,397; published Jan. 24, 1933.

CLASS 46

Apples. Souhegan Apple Packing Association. 302,227; Apr. 4; Serial No. 331,910; published Jan. 17, 1933.
Candy. P. A. Hilliard. 302,280; Apr. 4.
Canned nuts. North Pacific Nut Growers' Cooperative. 302,258; Apr. 4; Serial No. 331,409; published Jan. 17, 1933.
Chile sauce and ketchup. Mexican Importing Company. 302,225; Apr. 4; Serial No. 331,288; published Jan. 17, 1933.
Coffee. Shoreham Coffee Company. 302,173; Apr. 4; Serial No. 316,224; published Jan. 17, 1933.
Compound for culinary flavoring, Percolated. I. & P. Home Products Company. 302,224; Apr. 4; Serial No. 331,183; published Jan. 17, 1933.
Cone, Chocolate covered. E. E. Koontz. 302,179; Apr. 4; Serial No. 319,998; published Jan. 17, 1933.
Confections, Frozen. Popsicle Corporation of the United States. 302,259; Apr. 4; Serial No. 331,563; published Jan. 17, 1933.
Flour, Wheat. Commonwealth Flour Mills, Inc. 302,250; Apr. 4; Serial No. 332,444; published Jan. 17, 1933.
Foods, Cereal breakfast. Pauly and Ramsey. 302,262; Apr. 4; Serial No. 331,714; published Jan. 17, 1933.
Fruits, Citrus. C. A. Marsh, Inc. 302,178; Apr. 4; Serial No. 319,824; published Jan. 17, 1933.
Gelatine dessert. Red & White Corporation. 302,232; Apr. 4; Serial No. 331,753; published Jan. 17, 1933.
Gum, Chewing. Beech-Nut Packing Company. 302,181; Apr. 4; Serial No. 324,694; published Jan. 17, 1933.
Invertase preparation. Standard Brands Incorporated. 302,261; Apr. 4; Serial No. 331,655; published Jan. 17, 1933.
Milk, Dried skim. S. T. Edwards & Co. 302,237; Apr. 4; Serial No. 325,286; published Jan. 17, 1933.
Peas, sugar corn, cherries, hominy, etc. Kuner Pickle Company. 302,177; Apr. 4; Serial No. 318,152; published Jan. 17, 1933.
Pudding and pie filling. Royal Baking Powder Company. 302,229; Apr. 4; Serial No. 321,219; published Jan. 17, 1933.
Syrup, Corn. American Maize-Products Company. 302,203; Apr. 4; Serial No. 332,213; published Jan. 17, 1933.
Syrup, Malt. La Crosse Refining Company. 302,260; Apr. 4; Serial No. 331,645; published Jan. 17, 1933.
Tea. Joseph Tetley & Co. 302,228; Apr. 4; Serial No. 331,988; published Jan. 17, 1933.
Vegetables. L. M. McLaren. 302,180; Apr. 4; Serial No. 321,651; published Jan. 17, 1933.
Wheat germ. General Mills, Inc. 302,230; Apr. 4; Serial No. 319,483; published Nov. 3, 1931.

CLASS 47

Wines. Geo. G. Sandeman Sons & Co. Limited. 302,263; Apr. 4; Serial No. 331,705; published Jan. 24, 1933.

CLASS 48

Malt beverage. Brauhaus Würsburg, Aktiengesellschaft. 302,273; Apr. 4.
Malt beverages. Frederick Bros., Inc. 302,270; Apr. 4.

CLASS 49

Spirits, whisky, and liquors, Potable. Joseph E. Seagram & Sons Limited. 302,182; Apr. 4; Serial No. 333,084; published Jan. 24, 1933.
Whisky. A. Fraser. 302,226; Apr. 4; Serial No. 331,779; published Jan. 24, 1933.

CLASS 50

Poultry roosts. E. H. Prietzel. 302,277; Apr. 4.

LIST OF LABELS

A. P. W. Soft White, a Toilet Tissue for Women. For Toilet Tissue. A. P. W. Paper Company. 41,875; Apr. 4.
Apex Balsam a Stainless Ointment With The Fragrance of Flowers. For Ointment. Pruden Chemical Company. 41,897; Apr. 4.
BB Footwear. For Footwear. Bird & Son, Inc. 41,879; Apr. 4.
California. For Angelica. California Medicinal Wine Co. 41,880; Apr. 4.
Chase & Sanborn's Basket Fired Japan Uncolored Tea. For Tea. Standard Brands Incorporated. 41,903; Apr. 4.
Chase & Sanborn's Bonita Brand Gunpowder Green Tea. For Tea. Standard Brands Incorporated. 41,901; Apr. 4.
Chase & Sanborn's Green Label Orange Pekoe and Pekoe Tea. For Tea. Standard Brands Incorporated. 41,900; Apr. 4.
Chase & Sanborn's Nassau Brand Young Hyson Green Tea. For Tea. Standard Brands Incorporated. 41,902; Apr. 4.
Chase and Sanborn's Seal Brand Tender Leaf Japan Green. For Tea Balls. Standard Brands Incorporated. 41,904; Apr. 4.
Chase and Sanborn's Seal Brand Tender Leaf Orange Pekoe and Pekoe. For Tea Balls. Standard Brands Incorporated. 41,905; Apr. 4.
Class 1 Butter. For Butter. R. F. Leslie. 41,892; Apr. 4.
Comet Targets. For Targets. Diamond Springs Lime Company. 41,882; Apr. 4.
Cross Country Motor Oil. For Motor Oil. Sears, Roebuck and Co. 41,899; Apr. 4.
Crossbuck. For Sweaters. Columbia Knitting Mills. 41,881; Apr. 4.
Globe "A1" Complete Biscuit Flour. For Complete Biscuit Flour. Globe Grain and Milling Company. 41,884; Apr. 4.
Golden Brand Mayonnaise. For Mayonnaise. Golden Brand Food Products Co. 41,885; Apr. 4.
Haven's Elixir. For an Elixir for Use as an Aid to Indigestion and for Treating Sour Stomach, Heartburn, Sour Eructations, Etc. G. B. Havens. 41,887; Apr. 4.
Hood River Brand. For Apples. Apple Growers Association. 41,876; Apr. 4.
Jaeger's Old Kentucky Sausage Seasoning. For Sausage Seasoning. J. E. Jaeger. 41,889; Apr. 4.
Larson's Peptomint Gum. For Chewing Gum. L. P. Larson Jr. Company. 41,891; Apr. 4.
Leed's. For Footwear. Bird & Sons, Inc. 41,878; Apr. 4.
Mount Hope. For Tomatoes. Economy Wholesale Grocery Company. 41,883; Apr. 4.
Page & Shaw Lolly-Ettes. For Lolly-Ettes (a Form of Lolly-pop). Page & Shaw, Inc. 41,895; Apr. 4.

Peerless Rubber Typewriter Keys Protects Finger Nails Makes Typing Easier. For Rubber Typewriter Keys. Peerless Key Company. 41,896; Apr. 4.
Rays of Health in Kimball Tablets. For Stomach Tablets. H. B. Kimball. 41,890; Apr. 4.
Safety Matches. For Safety Matches. Northam Trading Corporation. 41,894; Apr. 4.
Spartan. For Canned Salmon. P. E. Harris & Co. 41,886; Apr. 4.
Stearns' Electric Rat and Roach Paste. For Rat and Roach Paste. Stearns' Electric Paste Company. 41,906; Apr. 4.
Sturdy Fut. For Boxes. Hoague-Sprague Corporation. 41,888; Apr. 4.
Tasty-Malt. For Chocolate Flavored Healthful Malted Drink. Superior Packing Corp. 41,907; Apr. 4.
Thrif T (Yellow and Red Plaid Label—Orange Pekoe and Pekoe). For Tea. Royal Estates Tea Co. 41,898; Apr. 4.
True Values. For Footwear. Bird & Son, Inc. 41,877; Apr. 4.
Unge's Shrimp. For Canned Shrimp. E. L. Unges. 41,908; Apr. 4.
Wrigley's Licorice Gum. For Licorice Gum. Wm. Wrigley Jr. Company. 41,909–11; Apr. 4.
Yankee Base Ball Puzzle. For Base Ball Puzzle. W. H. Nicolay. 41,893; Apr. 4.

LIST OF PRINTS

Drink Orange-Crush and the Other Fresh Fruit Crushes. For Delicious Cooling Vitamin Drinks. Orange-Crush Company. 14,128; Apr. 4.
Flying Iron. For Electric Heated Sad-Irons and Stands. S. A. Duvall. 14,125; Apr. 4.
New Sunbrite Cleanser. For Cleansing and Scouring Powder. Swift & Company. 14,129; Apr. 4.
Pocket Packets Kleenex Disposable Tissues. For Pocket Packets of Disposable Tissue Handkerchiefs. Kleenex Company. 14,127; Apr. 4.
Sunshine Chamois. For Chamois Leather. Hoyt & Worthen Tanning Corp. 14,126; Apr. 4.
The American Farmer. For Nitrate of Soda. Barrett Company. 14,124; Apr. 4.
Wrigley's Licorice Gum. For Licorice Gum. Wm. Wrigley Jr. Company. 14,130; Apr. 4.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 4TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrams, Theodore, Woodhaven, N. Y., assignor to Studio Couch Patents Co. Inc. Combination furniture. 1,903,404; Apr. 4.

Albright, Ida, administratrix. (See Albright, William.)

Albright, William, deceased, New York, N. Y., I. Albright, administratrix. Race track starter barrier gate and stall. 1,903,414; Apr. 4.

Alphonso, Peter R., Longview, Tex., assignor to The Argent Corporation, Shreveport, La. Liquid lift pump. 1,903,331; Apr. 4.

American Coating Mills. (See Colbert, C. C., and Preston, assignors.)

American Laundry Machinery Company, The. (See McDermott, Harry H., assignor.)

American Laundry Machinery Company, The. (See Reese, L. V., and Johnson, assignors.)

American Laundry Machinery Company, The. (See Staley, Alonso D., assignor.)

American Laundry Machinery Company, The. (See Wallace, George B., assignor.)

Ames, Warren, Waltham, Mass. Measuring gauge. 1,903,322; Apr. 4.

Amling, Albert J. and E. C., Orange, assignors to Amling Brothers, Santa Ana, Calif. Hybrid tea rose. Pl. Pt. 59; Apr. 4.

Amling Brothers. (See Amling, Albert J. and E. C., assignors.)

Amling, Ernst C. (See Amling, Albert J. and E. C.)

Anderson, Grover C., Gateway, Mont. Aerial bomb. 1,903,348; Apr. 4.

Animated Roboquin Display Company, The. (See Connor, James G., assignor.)

Argent Corporation, The. (See Alphonso, Peter R., assignor.)

Armstrong, L. E., Realty & Investment Co. (See Currie, Clare H., assignor.)

Backus, Oscar E., Milwaukee, Wis. Nozzle. 1,903,354; Apr. 4.

Barbiers, Ferdinand S., Lancaster, Ohio, assignor to The Diamond Match Company, Baltimore, Md. Combined match and ash tray or similar article. Des. 89,563; Apr. 4.

Barnes, Brien F., Hartford, Conn. Sink cleaning utensil. 1,903,277; Apr. 4.

Bassel, Rita, New Orleans, La., assignor to M. B. Klaholt, Kirkwood, Mo., as Provincial of and as representing the Central Province of the Ursulines of the Roman Union in the United States, and her successors. Finger ring. Des. 89,564; Apr. 4.

Battle Creek Bread Wrapping Machine Company. (See Littlefield, Carl, assignor.)

Bazzoni, Lewis J., Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel-covering apparatus. 1,903,278; Apr. 4.

Beard, Elmer E., Olympia, Wash. Producing linotype pellets from linotype slugs. 1,903,329; Apr. 4.

Beatty, George W. (See Dabrasky, A., and Beatty.)

Becket, Frederick M., New York, N. Y. Making iron-chromium nickel alloys. 1,903,409; Apr. 4.

Bellar, Charles J., and C. R. Yirava, Cleveland, Ohio. Attachment for dispensing and measuring pumps. 1,903,332; Apr. 4.

Berger, Joseph A., Chicago, Ill. Puncture sealing fluid container. 1,903,355; Apr. 4.

Bessom, Earl A., Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Rotary cutter. 1,903,279; Apr. 4.

Bessom, Earl A., Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Making rotary cutters. 1,903,280; Apr. 4.

Bitney, Dewey H., assignor to Union Steel Products Company, Albion, Mich. Reenforce chair. 1,903,356; Apr. 4.

Botel, Charles, New York, N. Y. Plumbing and leveling instrument. 1,903,333; Apr. 4.

Bowman, Samuel B., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Leer. 1,903,281; Apr. 4.

Bowman, Samuel B., Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Leer. 1,903,282; Apr. 4.

Bramberry, Harry M., Newcastle, Ind., assignor to Piston Research Corporation, Norfolk, Va. Piston and piston ring therefor. 1,903,396; Apr. 4.

Brauer, Elijah, Jersey City, N. J. Apparatus for unhairing skins. 1,903,363; Apr. 4.

Breed, Charles W., Western Springs, and G. R. Burkhardt, Chicago, Ill. Railway joint bar. Re18,786; Apr. 4.

Briggs & Stratton Corporation. (See Nicholson, Stanley W., assignor.)

Brödl, Jacob, Munich, Germany. Insole. 1,903,323; Apr. 4.

Brogden, Ernest M., and M. L. Trowbridge, Pomona, Calif., assignors to Brogdex Company, Winter Haven, Fla. Preparation of fresh fruit for market. 1,903,283; Apr. 4.

Brogdex Company. (See Brogden, E. M., and Trowbridge, assignors.)

Brown, Jack, and W. F. Reuter, Otoe, Nebr. Sickle grinder. 1,903,369; Apr. 4.

Buhrke, E. H., Company. (See Hester, Allen F., assignor.)

Burkhardt, George R. (See Breed, C. W., and Burkhardt.)

Burton, Stanley H., Detroit, Mich. Doorlock. 1,903,284; Apr. 4.

Campbell, Donald J., Muskegon Heights, Mich. Tire. 1,903,405; Apr. 4.

Capell, Carl F., and E. H. Pendleton, assignors to Pencap Corporation, Santa Monica, Calif. Electrical current controlling mechanism. 1,903,285; Apr. 4.

Carbide and Carbon Chemicals Corporation. (See Cox, Henry L., assignor.)

Cecil, William, New York, N. Y. Pipe rack. 1,903,410; Apr. 4.

Celanese Corporation of America. (See Dreyfus, C., and Platt, assignors.)

Celanese Corporation of America. (See Roberts, R. P., Dean, and Gregory, assignors.)

Chain Belt Company. (See Lindow, Rudolph F., assignor.)

Chicago Bridge & Iron Company. (See Griffin, Alvah M., assignor.)

Chicago Bridge & Iron Company. (See Williams, Djalma D., assignor.)

Chrystal, Joan O. (See Pierce, Maurice W., assignor.)

Codling, Allen B., Seattle, Wash. Electric broiler. 1,903,324; Apr. 4.

Colbert, Charles C., and G. E. Preston, assignors to American Coating Mills, Elkhart, Ind. Paper coating method and apparatus. 1,903,325; Apr. 4.

Connor, James G., assignor to The Animated Roboquin Display Company, Kansas City, Kans. Mechanical figure. 1,903,371; Apr. 4.

Continental Can Company. (See McKinnis, Ronald B., assignor.)

Continental-Divco Company. (See Nicol, John, assignor.)

Cooke, Bee, Davy, W. Va. Mine door. 1,903,334; Apr. 4.

Copell, Daniel, Atlantic City, N. J. Key holder. 1,903,372; Apr. 4.

Coty, Thomas E., Watertown, N. Y. Bag and forming the same. 1,903,286; Apr. 4.

Cowgill, Frank M. (See Symons, F. E., and Cowgill.)

Cox, Henry L., South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation. Corrosion inhibitor. 1,903,287; Apr. 4.

Crawley, Theodore B., West Point, Ky. Front sight for rifles. 1,903,326; Apr. 4.

Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve stem and adapter. 1,903,392; Apr. 4.

Crowley, John C., Cleveland Heights, assignor to The Dill Manufacturing Company, Cleveland, Ohio. Valve stem. 1,903,395; Apr. 4.

Currie, Clare H., Webster City, assignor, by mesne assignments, to L. E. Armstrong Realty & Investment Co., Fort Dodge, Iowa. Sewer pipe. Re18,785; Apr. 4.

Cushman Chuck Company, The. (See Sloan, H. E. and Highberg, assignors.)

Cuthbert, Thomas J., assignor to The Stetson Shoe Company, Inc., Weymouth, Mass. Shoe making. 1,903,374; Apr. 4.

Dabrasky, August, Washington, D. C., and G. W. Beatty, Decatur, Ill. Cartridge feed mechanism. 1,903,288; Apr. 4.

Dampier, Leon E., San Jose, and R. H. Dampier, San Mateo, Calif. Cabinet shelving. 1,903,334; Apr. 4.

Dampier, Roly H. (See Dampier, Leon E. and R. H.)

Dasso, Jerry H., New York, N. Y. Awning outrigging. 1,903,289; Apr. 4.

Dean, I. R. (See Roberts, R. P., Dean, and Gregory.)

Dennis, Alfred A., Grand Rapids, Mich. Veneer joining machine. 1,903,373; Apr. 4.

Detroit Steel Products Company. (See Kelly, Clyde W., assignor.)

Diamond Match Company, The. (See Barbiers, Ferdinand S., assignor.)

Dietrich, Fred. (See Mercier, C., and Dietrich.)

Dill Manufacturing Company, The. (See Crowley, John C., assignor.)

Dorner, Hermann I. A., Hanover, Germany, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,276; Apr. 4.
Dreyfus, Camille, New York, N. Y., and H. Platt, Cumberland, Md., assignors to Celanese Corporation of America. Treating cellulose derivative material and product thereof. 1,903,290; Apr. 4.
Eaton Manufacturing Company. (See Howe, James M., assignor.)
Eaton Manufacturing Company. (See Reid, James S., assignor.)
Eaton Manufacturing Company. (See Snell, Lyle K., assignor.)
Ellis, Bertie, New York, N. Y. Corn cure package. 1,903,312; Apr. 4.
Falkiner Cane Harvester Corporation of America. (See Falkiner, Ralph S., assignor.)
Falkiner, Ralph S., Melbourne, Australia, assignor to Falkiner Cane Harvester Corporation of America. Cane harvesting machinery. 1,903,335; Apr. 4.
Fifield, Albert F., St. Catherines, Ontario, Canada. Harmonic balancer. 1,903,336; Apr. 4.
Fish, Gilbert D., Pelham, N. Y., assignor to F. S. Lyon, Minneapolis, Minn. Suspended railway switch. 1,903,386; Apr. 4.
Fitzgerald Manufacturing Company, The. (See Fitzgerald, Patrick J., assignor.)
Fitzgerald, Patrick J., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Food mixing, juice extracting and grinding apparatus. Des. 89,565; Apr. 4.
Framburg, Henry A., Chicago, Ill. Lighting fixture. Des. 89,566; Apr. 4.
Frazier, Robert T., assignor to Tennessee Furniture Corporation, Chattanooga, Tenn. Refrigerator. Des. 89,567; Apr. 4.
Friedman, William, assignor to Lupé, Inc., New York, N. Y. Container. 1,903,357; Apr. 4.
Gahagan, Orren M., Oklahoma City, Okla. Cathead. Re18,789; Apr. 4.
Garr, Joseph M., Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind. Voting machine. 1,903,400; Apr. 4.
Garr, Joseph M., Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind. Voting machine. 1,903,401; Apr. 4.
Gillio, Battista Giovanni, Worcester, Mass. Electricity generating apparatus. 1,903,307; Apr. 4.
Globe Machine & Stamping Company, The. (See Green, Lee B., assignor.)
Gould, John H., assignor to McCord Radiator & Mfg. Co., Detroit, Mich. Heating system for motor vehicles. 1,903,349; Apr. 4.
Government and the People of the United States of America, The. (See Rabak, Frank, assignor.)
Grant, Winfield S., and F. H. Shoop, Detroit, Mich. Oil burner. 1,903,364; Apr. 4.
Gray, Daniel M., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Liner for receptacle closures. 1,903,319; Apr. 4.
Green, Lee B., Lakewood, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio. Radiator shell front. Des. 89,568; Apr. 4.
Greenberg, Irving, Union City, N. J. Slide fastener. 1,903,415; Apr. 4.
Gregory, Louis W. (See Roberts, R. P., Dean, and Gregory.)
Grimm, Alvah M., Los Angeles, Calif., assignor to Chicago Bridge & Iron Company, Chicago, Ill. Floating deck. 1,903,291; Apr. 4.
Groetchen, Richard. (See Klein, Carl F., assignor.)
H & E Standard Auto Parts et al. (See Patterson, Richard B., assignor.)
Hage, Louis, San Jose, Calif. Operating adding machines and the like. 1,903,337; Apr. 4.
Hall, Bicknell, Gloucester, Mass. Hanging door. 1,903,379; Apr. 4.
Haskins, Howard B., Highland Park, and E. G. Simpson, assignors to Ternstedt Manufacturing Company, Detroit, Mich. Combination dovetail and door bumper. 1,903,365; Apr. 4.
Hazel-Atlas Glass Co. (See Bowman, Samuel B., assignor.)
Hazel-Atlas Glass Co. (See Gray, Daniel M., assignor.)
Heeter, Allen F., Chicago, Ill., assignor to R. H. Buhrke Company. Golf club. Des. 89,569; Apr. 4.
Hercules Powder Company. (See Stuart, Joseph, 2d, assignor.)
Highberg, George A. (See Sloan, H. E., and Highberg.)
Hoe, R., & Co. (See Zuckerman, Adolph M., assignor.)
Holswarth Gas Turbine Co. (See Holzwarth, Hans, assignor.)
Holzwarth, Hans, Dusseldorf, Germany, assignor to Holswarth Gas Turbine Co., San Francisco, Calif. Explosion turbine. 1,903,292; Apr. 4.
Horne, Burchard E., Andover, Mass. Pressure regulating and relief valve. 1,903,338; Apr. 4.
Howe, James M., Cleveland Heights, assignor to Eaton Manufacturing Company, Cleveland, Ohio. Automobile heater. 1,903,387; Apr. 4.
Hulbert, William R., Chicago, Ill. Combustion device. 1,903,308; Apr. 4.
Humbert, Jacob Z., North Canton, Ohio. Lid straightening and sealing tool. 1,903,388; Apr. 4.
I. G. Farbenindustrie Aktiengesellschaft. (See Söll, Julius, assignor.)
I-T-E Circuit Breaker Co. (See Maple, Roy H., assignor.)
Isaacson, Max, Dayton, Ohio. Fluid brake. 1,903,293; Apr. 4.
Jacobs, Charles B., Baltimore, Md. Slip-on garment. 1,903,403; Apr. 4.
Johnson, George W. (See Reese, L. V., and Johnson.)
Johnson, William G., Milwaukee, Wis. Scotch marine boiler construction. 1,903,313; Apr. 4.
Jones & Laughlin Steel Corporation. (See Littler, Carl W., assignor.)
Karnes, James C., Buffalo, N. Y. Sound locating apparatus. 1,903,294; Apr. 4.
Kehoe, Thomas J., Perrysburg, Ohio. Air conditioner. 1,903,389; Apr. 4.
Kelly, Clyde W., assignor to Detroit Steel Products Company, Detroit, Mich. Window construction. 1,903,309; Apr. 4.
Kennedy, Harry E., Berkeley, Calif. Internal combustion engine. 1,903,381; Apr. 4.
Kerr, Alva L., Mansfield, Ohio. Latching mechanism. 1,903,327; Apr. 4.
Kessenich, Gregory J., Madison, Wis. Composite gun barrel. 1,903,295; Apr. 4.
Klaholt, Mary B. (See Bassel, Rita, assignor.)
Klein, Carl F., assignor to R. Groetchen, Chicago, Ill. Top for a game table or similar article. Des. 89,570; Apr. 4.
Kohut, Alexander, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,571; Apr. 4.
Krebs Pigment and Color Corporation. (See Mechlenburg, Werner, assignor.)
Landrum, John P., Birmingham, Ala. Transmission for outboard motors. 1,903,350; Apr. 4.
La Susa, Salvatore J., and W. Sambur, Jamaica, N. Y. Kitchen cabinet. Des. 89,572; Apr. 4.
La Susa, Salvatore J., and W. Sambur, Jamaica, N. Y. Kitchen cabinet. Des. 89,573; Apr. 4.
Launderville, Harold E., Ogdensburg, N. Y. Steam cooker. 1,903,310; Apr. 4.
Lindow, Rudolph F., assignor to Chain Belt Company, Milwaukee, Wis. Concrete mixing apparatus. 1,903,416; Apr. 4.
Lipman, Carl E. L., assignor to Lipman Patents Corporation, Chicago, Ill. Evaporator. 1,903,351; Apr. 4.
Lipman Patents Corporation. (See Lipman, Carl E. L., assignor.)
Littlefield, Carl, assignor to Battle Creek Bread Wrapping Machine Company, Battle Creek, Mich. Conveyer mechanism. 1,903,375; Apr. 4.
Littler, Carl W., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa. Apparatus for tube manufacture. 1,903,296; Apr. 4.
Locke, Sanford J., Syracuse, assignor to United States Hoffman Machinery Corporation, New York, N. Y. Garment press. 1,903,402; Apr. 4.
Lupé, Inc. (See Friedman, William, assignor.)
Lyon, Frank S. (See Fish, Gilbert D., assignor.)
Maple, Roy H., Indianapolis, Ind., assignor, by mesne assignments, to I-T-E Circuit Breaker Co. Self-soldering circuit breaker. Re18,784; Apr. 4.
McCord Radiator & Mfg. Co. (See Gould, John H., assignor.)
McCullough, Charles, Canonsburg, Pa. Bracket. 1,903,340; Apr. 4.
McDermott, Harry H., Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Garment pressing machine. 1,903,320; Apr. 4.
McDonnell, Frank S., Milton, Mass. Dandy. 1,903,311; Apr. 4.
McKinnis, Ronald B., Pittsburgh, Pa., assignor to Continental Can Company, Inc., New York, N. Y. Roasted coffee product and making same. 1,903,362; Apr. 4.
Mecklenburg, Werner, Moscow, Union of Soviet Socialist Republics, assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J. Production of titanium dioxides. Re18,790; Apr. 4.
Mercier, Clifford, and F. Dietrich, Lowell, Mass. Detachable sink strainer. 1,903,366; Apr. 4.
Mill Engineering and Supply Company. (See Winquist, Victor H., assignor.)
Miller, Pansy H., et al. (See Patterson, Richard B., assignor.)
Mitchell, Wayne B., Quebec, Quebec, Canada. Combination sliding subbase and scraper for auto jacks. 1,903,341; Apr. 4.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Hydraulic shock absorber. 1,903,377; Apr. 4.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Combination clutch and brake control mechanism. 1,903,378; Apr. 4.
Myers, Florence B., Los Angeles, Calif. Hose leak stop. Des. 89,584; Apr. 4.
Nicholson, Stanley W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Window regulator. 1,903,358; Apr. 4.

Nicol, John, assignor to Continental-Diveo Company, Detroit, Mich. House-to-house delivery vehicle body. Des. 89,574; Apr. 4.
Noble, Warren, Detroit, Mich. Hydraulic valve gear. 1,903,328; Apr. 4.
Nordberg Manufacturing Company. (See Talboys, Henry H., assignor.)
Ornberg, Arvid, Chicago, Ill. Windshield heater. 1,903,314; Apr. 4.
Packard Motor Car Company. (See Dorner, Hermann I. A., assignor.)
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Woolson, Lionel M., assignor.)
Patterson, Richard B., assignor of one-half to P. H. Miller and one-half to H & E Standard Auto Parts, Chicago, Ill. Ratchet wrench. 1,903,297; Apr. 4.
Pencap Corporation. (See Capell, C. F., and Pendleton, assignors.)
Pendleton, Edwin H. (See Capell, C. F., and Pendleton.)
Peoples Voting Machine Company. (See Garr, Joseph M., assignor.)
Petzke, Franklin J., Minneapolis, Minn. Food warmer. Des. 89,575; Apr. 4.
Pew, Arthur E., jr., Bryn Mawr, assignor to Sun Oil Company, Philadelphia, Pa. Preparing crude oil for distillation into lubricating oils. 1,903,407; Apr. 4.
Piercey, Maurice W., Norbury, London, England, assignor to Joan O. Chrystal, Summit, N. J. Gear. 1,903,390; Apr. 4.
Piston Research Corporation. (See Bramberry, Harry M., assignor.)
Platt, Herbert. (See Dreyfus, C., and Platt.)
Pollack, Walter. (See Young, A. M., and Pollack.)
Post, Claude L., Chicago, Ill. Feeding device. 1,903,361; Apr. 4.
Preston, George E. (See Colbert, C. C., and Preston.)
Priebe, Arthur W., assignor to A. O. Smith Corporation, Milwaukee, Wis. Pipe joint. 1,903,315; Apr. 4.
Putvin, George F., Munising, Mich. Seam for drier felts and making same. 1,903,406; Apr. 4.
Rabak, Frank, Washington, D. C., assignor to the Government and the People of the United States of America. Coating and sealing red cedar lumber to prevent the escape of cedar aroma. 1,903,342; Apr. 4.
Ralston Steel Car Company. (See Symons, F. E., and Cowgill, assignors.)
Ramsey, George M., Amarillo, Tex. Handgrip testing machine. 1,903,352; Apr. 4.
Reese, Lemuel V., and G. W. Johnson, assignors to The American Laundry Machinery Company, Cincinnati, Ohio. Safety device for paper pulp extractors. 1,903,367; Apr. 4.
Reid, James S., Cleveland Heights, assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,903,389; Apr. 4.
Reuter, William F. (See Brown, J., and Reuter.)
Rewald, Bruno, Hamburg, Germany. Separating fatty constituents from oleaginous materials. 1,903,397; Apr. 4.
Ritley, Joseph, Cleveland, Ohio. Combination poker and clinker tongs. 1,903,316; Apr. 4.
Roach, John P. (See Snowden, F. E., and Roach.)
Roberts, Eugene, Hastings, N. Y. Centrifugal machine. 1,903,298; Apr. 4.
Roberts, Robert P., R. I. R. Dean, and L. W. Gregory, Spondon, near Derby, England, assignors to Celanese Corporation of America. Production of artificial materials from cellulose derivatives. 1,903,299; Apr. 4.
Roberts, William P., Greensburg, Ind. Pinhole grinding or honing tool. 1,903,343; Apr. 4.
Rogers, Lore A., Washington, D. C. (dedicated to the free use of the Public). Valve. 1,903,344; Apr. 4.
Rollason, Charles H., assignor to Wheeling Steel Corporation, Wheeling, W. Va. Sheet metal container and head therefor. 1,903,300; Apr. 4.
Rosenow, Edward C., Rochester, Minn. Float and safety valve. Re18,788; Apr. 4.
Roy, Kurt H., and R. R. Sweaney, Los Angeles, Calif. Book end. Des. 89,576; Apr. 4.
Sambur, William. (See La Susa, S. J., and Sambur.)
Schiller, Sigge, Elisabeth, assignor to Traffic Signs & Signals, Inc., Paterson, N. J. Reflecting unit. 1,903,385; Apr. 4.
Schrader, Joseph, Cleveland, Ohio. Lamp. Des. 89,577; Apr. 4.
Sessions, Frank L., Lakewood, Ohio. Method of and apparatus for electric welding and heating of metals. 1,903,359; Apr. 4.
Shoop, Francis H. (See Grant, W. S., and Shoop.)
Simpson, Emory G. (See Haskins, H. B., and Simpson.)
Sloan, Harry E., Hartford, and G. A. Highberg, West Hartford, assignors to The Cushman Chuck Company, Hartford, Conn. Chuck. Re18,787; Apr. 4.
Smith, A. O., Corporation. (See Priebe, Arthur W., assignor.)
Snell, Lyle K., Detroit, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio. Closure. 1,903,391; Apr. 4.
Snowden, Frederic E., and J. P. Roach, Los Angeles, Calif. Air cooler and humidifier. 1,903,301; Apr. 4.
Söll, Julius, Frankfort-on-the-Main-Schwanheim, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing hydrofluoric acid. 1,903,408; Apr. 4.
Staley, Alonso D., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Unloading apron and drain trough for washers. 1,903,321; Apr. 4.
Steinmann, Frank, sr., De Soto, Mo. Flying machine. 1,903,345; Apr. 4.
Stetson Shoe Company, The. (See Cuthbert, Thomas J., assignor.)
Stormonth, James, Epping, New South Wales, Australia. Reclaiming oils. 1,903,370; Apr. 4.
Stuart, Joseph, 2d., assignor to Hercules Powder Company, Wilmington, Del. Package for blasting caps. 1,903,302; Apr. 4.
Studio Couch Patents Co. Inc. (See Abrams, Theodore, assignor.)
Sun Oil Company. (See Pew, Arthur E., jr., assignor.)
Sweaney, Ross R. (See Roy, K. H., and Sweaney.)
Symons, Francis E., and F. M. Cowgill, assignors to Ralston Steel Car Company, Columbus, Ohio. Filter press. 1,903,368; Apr. 4.
Talboys, Henry H., assignor to Nordberg Manufacturing Company, Milwaukee, Wis. Endless track vehicle. 1,903,380; Apr. 4.
Taylor Instrument Companies. (See Teague, Walter D., assignor.)
Teague, Walter D., Forest Hills, assignor to Taylor Instrument Companies, Rochester, N. Y. Combined thermometer and bracket. Des. 89,578; Apr. 4.
Tennessee Furniture Corporation. (See Frazier, Robert T., assignor.)
Ternstedt Manufacturing Company. (See Haskins, H. B., and Simpson, assignors.)
Tibbot, Guy B., Santa Cruz, Calif. Burner. 1,903,317; Apr. 4.
Tilling, Reinhold, Osnabruck, Germany. Flying rocket. 1,903,303; Apr. 4.
Townsley, Hugh B., Spokane, Wash. Vehicle wheel. 1,903,398; Apr. 4.
Traffic Signs & Signals, Inc. (See Schiller, Sigge, assignor.)
Trowbridge, Miles L. (See Brogden, E. M., and Trowbridge.)
Union Steel Products Company. (See Bitney, Dewey H., assignor.)
United Shoe Machinery Corporation. (See Bassoni, Lewis J., assignor.)
United Shoe Machinery Corporation. (See Bessom, Earl A., assignor.)
United States Hoffman Machinery Corporation. (See Locke, Sanford J., assignor.)
Van Horn, Arthur H. (See Vicek, Adolph A., assignor.)
Vicek, Adolph A., Cleveland, assignor of one-half to A. H. Van Horn, Lakewood, Ohio. Measuring instrument. 1,903,393; Apr. 4.
Vreeland Corporation. (See Vreeland, Frederick K., assignor.)
Vreeland, Frederick K., Montclair, assignor to Vreeland Corporation, Hoboken, N. J. Radiofrequency amplifier. 1,903,394; Apr. 4.
Walt, Clinton F., Pine Bluff, Ark. Levee machine. 1,903,399; Apr. 4.
Wallace, George B., Grantwood, N. J., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Loading apparatus for laundry washers and the like. 1,903,305; Apr. 4.
Weber, Walter B., Merwood Park, Pa. Office partition. Des. 89,579; Apr. 4.
Welsch, Gottlieb, Sheboygan, Wis. Composition for refinishing enameled surfaces. 1,903,346; Apr. 4.
Wensel, Edwin H., Whitefish Bay, Wis. Feeding hopper for pneumatic conveyers. 1,903,304; Apr. 4.
Wheeling Steel Corporation. (See Rollason, Charles H., assignor.)
Whelan, Joseph A., Greenwich, Conn. Mortar box. 1,903,347; Apr. 4.
Wildhaber, Ernest, Brooklyn, N. Y. Worm gearing. 1,903,318; Apr. 4.
Will, Harold N., Kettle Falls, Wash. Internal combustion engine starter mechanism. 1,903,360; Apr. 4.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,580; Apr. 4.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,581; Apr. 4.
Willheim, William, Co. (See Kohut, Alexander, assignor.)
Williams, Djalma D., Dallas, Tex., assignor to Chicago Bridge & Iron Company, Chicago, Ill. Sealing construction for tanks. 1,903,306; Apr. 4.
Wingard, Charles L., Portland, Oreg. Means for holding together parts having telescopic engagement. 1,903,353; Apr. 4.
Winquist, Victor H., assignor to Mill Engineering and Supply Company, Seattle, Wash. Conveyer drive means. 1,903,383; Apr. 4.

Winter, Curt O., Saylesville, R. I. Safety razor. Des. 89,582; Apr. 4.
Woolson, Emma F., executrix. (See Woolson, Lionel M.)
Woolson, Lionel M., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,411; Apr. 4.
Woolson, Lionel M., deceased, Detroit, by E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,412; Apr. 4.
Woolson, Lionel M., deceased, Detroit, by E. F. Woolson, executrix, Bloomfield Village, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903 413; Apr. 4.
Wooster, Philip A., San Francisco, Calif. Soap dispenser. Des. 89,583; Apr. 4.
Yirava, Charles R. (See Bellar, C. J., and Yirava.)
Young, Albert M., Brooklyn, and W. Pollack, Richmond Hill, N. Y. Multiple display lamp. 1,903,330; Apr. 4.
Zuckerman, Adolph M., assignor to R. Hoe & Co., Inc., New York, N. Y. Folding mechanism. 1,903,382; Apr. 4.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 4TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acid, Preparing hydrofluoric. J. Sill. 1,903,408; Apr. 4.
Adding machines and the like, Operating. L. Hage. 1,903,337; Apr. 4.
Air conditioner. T. J. Kehoe. 1,903,339; Apr. 4.
Air cooler and humidifier. F. E. Snowden and J. P. Roach. 1,903,301; Apr. 4.
Alloys, Making iron-chromium nickel. F. M. Becket. 1,903,409; Apr. 4.
Apron and drain trough for washers, Unloading. A. D. Staley. 1,903,321; Apr. 4.
Automobile heater. J. M. Howe. 1,903,387; Apr. 4.
Awning outrigging. J. H. Darno. 1,903,289; Apr. 4.
Bag and forming the same. T. E. Coty. 1,903,286; Apr. 4.
Bar: *See*—
Joint bar.
Boiler construction, Scotch marine. W. G. Johnson. 1,903,313; Apr. 4.
Box: *See*—
Mortar box.
Bomb, Aerial. G. C. Anderson. 1,903,348; Apr. 4.
Book end. K. H. Roy and R. E. Sweaney. Des. 89,576; Apr. 4.
Bracket. C. McCullough. 1,903,340; Apr. 4.
Brake: *See*—
Fluid brake.
Broiler, Electric. A. B. Codling. 1,903,324; Apr. 4.
Burner: *See*—
Oil burner.
Burner. G. B. Tibbot. 1,903,317; Apr. 4.
Cabinet, Kitchen. S. J. La Susa and W. Sambur. Des. 89,572–3; Apr. 4.
Cane harvesting machinery. R. S. Falkiner. 1,903,335; Apr. 4.
Cartridge feed mechanism. A. Dabrasky and G. W. Beatty. 1,903,288; Apr. 4.
Cathead. O. M. Gahagan. Re18,789; Apr. 4.
Cellulose derivative material and product thereof, Treating. C. Dreyfus and H. Platt. 1,903,290; Apr. 4.
Centrifugal machine. E. Roberts. 1,903,298; Apr. 4.
Chair: *See*—
Reenforce chair.
Chuck. H. E. Sloan and G. A. Highberg. Re18,787; Apr. 4.
Circuit breaker, Self-soldering. R. H. Maple. Re18,784; Apr. 4.
Closure. J. S. Reid. 1,903,389; Apr. 4.
Closure. L. K. Snell. 1,903,391; Apr. 4.
Clutch and brake control mechanism, Combination. A. Moorhouse. 1,903,378; Apr. 4.
Coffee product and making same, Roasted. R. B. McKinnis. 1,903,362; Apr. 4.
Combustion device. W. R. Hulbert. 1,903,308; Apr. 4.
Composition for refinishing enameled surfaces. G. Welsch. 1,903,346; Apr. 4.
Concrete mixing apparatus. R. F. Lindow. 1,903,416; Apr. 4.
Container: *See*—
Fluid container.
Container. W. Friedman. 1,903,357; Apr. 4.
Container and head therefor, Sheet metal. C. H. Rollason. 1,903,300; Apr. 4.
Conveyer drive means. V. H. Winquist. 1,903,393; Apr. 4.
Conveyer mechanism. C. Littlefield. 1,903,375; Apr. 4.
Cooker, Steam. H. E. Launderville. 1,903,310; Apr. 4.
Corn cure package. B. Ellis. 1,903,312; Apr. 4.
Corrosion inhibitor. H. L. Cox. 1,903,287; Apr. 4.
Current controlling mechanism, Electrical. C. F. Capell and E. H. Pendleton. 1,903,285; Apr. 4.
Cutter: *See*—
Rotary cutter.
Cutters, Making rotary. E. A. Bessom. 1,903,280; Apr. 4.
Dandy. F. S. McDonnell. 1,903,311; Apr. 4.
Deck, Floating. A. M. Griffin. 1,903,291; Apr. 4.
Door, Hanging. B. Hall. 1,903,379; Apr. 4.
Doorlock. S. H. Burton. 1,903,284; Apr. 4.
Door, Mine. B. Cooke. 1,903,384; Apr. 4.
Dovetail and door bumper, Combination. H. B. Haskins and E. G. Simpson. 1,903,365; Apr. 4.
Electricity generating apparatus. B. G. Gillio. 1,903,307; Apr. 4.
Engine: *See*—
Internal combustion engine.
Engine starter mechanism, Internal combustion. H. N. Will. 1,903,360; Apr. 4.
Evaporator. C. L. Lipman. 1,903,351; Apr. 4.
Fastener: *See*—
Slide fastener.
Fatty constituents from oleaginous materials, Separating. B. Rewald. 1,903,397; Apr. 4.
Feeding device. C. L. Post. 1,903,361; Apr. 4.
Figure, Mechanical. J. G. Connor. 1,903,371; Apr. 4.
Filter press. F. E. Symons and F. M. Cowgill. 1,903,368; Apr. 4.
Finger ring. R. Bassel. Des. 89,564; Apr. 4.
Float and safety valve. E. C. Rosenow. Re17,788; Apr. 4.
Fluid brake. M. Isaacson. 1,903,293; Apr. 4.
Fluid container, Puncture sealing. J. A. Berger. 1,903,355; Apr. 4.
Flying machine. F. Steinmann, sr. 1,903,345; Apr. 4.
Folding mechanism. A. M. Zuckerman. 1,903,382; Apr. 4.
Food mixing, juice extracting and grinding apparatus. P. J. Fitzgerald. Des. 89,565; Apr. 4.
Fruit for market, Preparation of fresh. E. M. Brogden and M. L. Trowbridge. 1,903,283; Apr. 4.
Furniture, Combination. T. Abrams. 1,903,404; Apr. 4.
Garment press. S. J. Locke. 1,903,402; Apr. 4.
Garment pressing machine. H. H. McDermott. 1,903,320; Apr. 4.
Garment, Slip-on. C. B. Jacobs. 1,903,403; Apr. 4.
Gate and stall, Race track starter barrier. W. Albright. 1,903,414; Apr. 4.
Gauge: *See*—
Measuring gauge.
Gear: *See*—
Valve gear.
Gear. M. W. Piercey. 1,903,390; Apr. 4.
Gearing, Worm. E. Wildhaber. 1,903,318; Apr. 4.
Golf club. A. F. Heeter. Des. 89,569; Apr. 4.
Grinder, Sickle. J. Brown and W. F. Reuter. 1,903,369; Apr. 4.
Grinding or honing tool, Pinhole. W. P. Roberts. 1,903,343; Apr. 4.
Gun barrel, Composite. G. J. Kessenich. 1,903,295; Apr. 4.
Harmonic balancer. A. F. Fifield. 1,903,336; Apr. 4.
Heater: *See*—
Automobile heater. Windshield heater.
Heating system for motor vehicles. J. H. Gould. 1,903,349; Apr. 4.
Heel-covering apparatus. L. J. Bassoni. 1,903,278; Apr. 4.
Holder: *See*—
Key holder.
Hopper for pneumatic conveyers, Feeding. E. H. Wensel. 1,903,304; Apr. 4.
Hose leak stop. F. B. Myers. Des. 89,584; Apr. 4.
Insole. J. Brödl. 1,903,328; Apr. 4.
Internal combustion engine. H. I. A. Dorner. 1,903,276; Apr. 4.
Internal combustion engine. H. R. Kennedy. 1,903,281; Apr. 4.
Internal combustion engine. L. M. Woolson. 1,903,411–13; Apr. 4.
Jacks, Combination sliding subbase and scraper for auto. W. B. Mitchell. 1,903,341; Apr. 4.
Joint: *See*—
Pipe joint.
Joint bar, Railway. C. W. Breed and G. R. Burkhardt. Re18,786; Apr. 4.
Key holder. D. Copell. 1,903,372; Apr. 4.
Lamp. J. Schrader. Des. 89,577; Apr. 4.
Lamp, Multiple display. A. M. Young and W. Pollack. 1,903,330; Apr. 4.
Latching mechanism. A. L. Kerr. 1,903,327; Apr. 4.
Leer. S. B. Bowman. 1,903,281–2; Apr. 4.
Levee machine. C. F. Wait. 1,903,399; Apr. 4.
Lid straightening and sealing tool. J. Z. Humbert. 1,903,333; Apr. 4.
Lighting fixture. H. A. Framburg. Des. 89,566; Apr. 4.
Liner for receptacle closures. D. M. Gray. 1,903,319; Apr. 4.
Linotype pellets from linotype slugs, Producing. E. E. Beard. 1,903,329; Apr. 4.
Liquid lift pump. P. R. Alphonso. 1,903,331; Apr. 4.
Loading apparatus for laundry washers and the like. G. B. Wallace. 1,903,305; Apr. 4.
Lumber to prevent the escape of cedar aroma, Coating and sealing red cedar. F. Rabak. 1,903,342; Apr. 4.
Materials from cellulose derivatives, Production of artificial. E. P. Roberts, E. I. E. Dean, and L. W. Gregory. 1,903,299; Apr. 4.
Measuring gauge. W. Ames. 1,903,322; Apr. 4.
Measuring instrument. A. A. Vicek. 1,903,393; Apr. 4.
Mortar box. J. A. Whelan. 1,903,347; Apr. 4.
Nozzle O. E. Backus. 1,903,354; Apr. 4.
Oil burner. W. S. Grant and F. H. Shoop. 1,903,364; Apr. 4.
Oil for distillation into lubricating oils, Preparing crude. A. E. Pew, jr. 1,903,407; Apr. 4.

Oils, Reclaiming. J. Stormonth. 1,903,370; Apr. 4.
Package for blasting caps. J. Stuart, 2d. 1,903,302; Apr. 4.
Paper coating method and apparatus. C. C. Colbert and G. E. Preston. 1,903,325; Apr. 4.
Partition, Office. W. B. Weber. Des. 89,579; Apr. 4.
Parts having telescopic engagement, Means for holding together. C. L. Wingard. 1,903,353; Apr. 4.
Pipe: *See*—
  Sewer pipe.
Pipe joint. A. W. Priebe. 1,903,315; Apr. 4.
Pipe rack. W. Cecil. 1,903,410; Apr. 4.
Piston and piston ring therefor. H. M. Bramberry. 1,903,396; Apr. 4.
Plumbing and leveling instrument. C. Botel. 1,903,333; Apr. 4.
Press: *See*—
  Filter press. Garment press.
Pressure regulating and relief valve. B. E. Horne. 1,903,338; Apr. 4.
Pump: *See*—
  Liquid lift pump. Reciprocating pump.
Pumps, Attachment for dispensing and measuring. C. J. Beller and C. R. Yirava. 1,903,332; Apr. 4.
Rack: *See*—
  Pipe rack.
Radiator shell front. L. B. Green. Des. 89,568; Apr. 4.
Radiofrequency amplifier. F. K. Vreeland. 1,903,394; Apr. 4.
Railway switch, Suspended. G. D. Fish. 1,903,386; Apr. 4.
Ratchet wrench. R. B. Patterson. 1,903,297; Apr. 4.
Razor, Safety. C. O. Winter. Des. 89,582; Apr. 4.
Reenforce chair. D. H. Bitney. 1,903,356; Apr. 4.
Reflecting unit. S. Schiller. 1,903,385; Apr. 4.
Refrigerator. R. T. Frasier. Des. 89,567; Apr. 4.
Regulator: *See*—
  Window regulator.
Rifles, Front sight for. T. B. Crawley. 1,903,326; Apr. 4.
Rocket, Flying. R. Tilling. 1,903,303; Apr. 4.
Rose, Hybrid tea. A. J. and E. C. Amling. Pl. Pt. 59; Apr. 4.
Rotary cutter. E. A. Bessom. 1,903,279; Apr. 4.
Safety device for paper pulp extractors. L. V. Reese and G. W. Johnson. 1,903,367; Apr. 4.
Sealing construction for tanks. D. D. Williams. 1,903,306; Apr. 4.
Seam for drier felts and making same. G. F. Putvin. 1,903,406; Apr. 4.
Sewer pipe. C. H. Currie. Re18,785; Apr. 4.
Shelving, Cabinet. L. E. and R. H. Dampier. 1,903,334; Apr. 4.
Shock absorber, Hydraulic. A. Moorhouse. 1,903,377; Apr. 4.
Shoe making. T. J. Cuthbert. 1,903,374; Apr. 4.
Skins, Apparatus for unhairing. E. Brauer. 1,903,363; Apr. 4.
Slide fastener. I. Greenberg. 1,903,415; Apr. 4.
Soap dispenser. P. A. Wooster. Des. 89,583; Apr. 4.
Sound locating apparatus. J. C. Karnes. 1,903,294; Apr. 4.
Strainer, Detachable sink. C. Mercier and F. Dietrich. 1,903,366; Apr. 4.
Switch: *See*—
  Railway switch.
Testing machine, Handgrip. G. H. Ramsey. 1,903,352; Apr. 4.
Textile fabric or similar article. A. Kohut. Des. 89,571; Apr. 4.
Textile fabric or similar article. W. Willheim. Des. 89,580–1; Apr. 4.
Thermometer and bracket, Combined. W. D. Teague. 89,578; Apr. 4.
Tire. D. J. Campbell. 1,903,405; Apr. 4.
Titanium dioxides, Production of. W. Mecklenburg. Re18,790; Apr. 4.
Tongs, Combination poker and clinker. J. Ritley. 1,903,316; Apr. 4.
Tool: *See*—
  Grinding or honing tool.
  Lid straightening and sealing tool.
Top for a game table or similar article. C. F. Klein. Des. 89,570; Apr. 4.
Transmission for outboard motors. J. P. Landrum. 1,903,350; Apr. 4.
Tray or similar article, Combined match and ash. F. S. Barbiers. Des. 89,563; Apr. 4.
Tube manufacture, Apparatus for. C. W. Littler. 1,903,296; Apr. 4.
Turbine, Explosion. H. Holzwarth. 1,903,292; Apr. 4.
Utensil, Sink cleaning. B. F. Barnes. 1,903,277; Apr. 4.
Valve: *See*—
  Float and safety valve.
  Pressure regulating and relief valve.
Valve. L. A. Rogers. 1,903,344; Apr. 4.
Valve gear, Hydraulic. W. Noble. 1,903,328; Apr. 4.
Valve stem. J. C. Crowley. 1,903,395; Apr. 4.
Valve stem and adapter. J. C. Crowley. 1,903,392; Apr. 4.
Vehicle body, House-to-house delivery. J. Nicol. Des. 89,574; Apr. 4.
Vehicle, Endless track. H. H. Talboys. 1,903,380; Apr. 4.
Vehicle wheel. H. B. Townsley. 1,903,398; Apr. 4.
Veneer joining machine. A. A. Dennis. 1,903,373; Apr. 4.
Voting machine. J. M. Garr. 1,903,400–1; Apr. 4.
Warmer, Food. F. J. Petzke. Des. 89,575; Apr. 4.
Welding and heating of metals, Method of and apparatus for electric. F. L. Sessions. 1,903,359; Apr. 4.
Wheel: *See*—
  Vehicle wheel.
Window construction. C. W. Kelly. 1,903,309; Apr. 4.
Window regulator. S. W. Nicholson. 1,903,358; Apr. 4.
Windshield heater. A. Ornberg. 1,903,314; Apr. 4.
Wrench: *See*—
  Ratchet wrench.

CLASSIFICATION OF PATENTS

ISSUED APRIL 4, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

2—	74: 1,903,403	50—	23: 1,903,338	82—	91: 1,903,329	144—	279: 1,903,373	198—	20: 1,903,375	340—	10: 1,903,320
4—	292: 1,903,366	51—184.1:	1,903,343	87—	6: 1,903,307	149—	8: 1,903,363	200—	116: R. 18,784	344—	14: 1,903,345
5—	17: 1,903,404		222: 1,903,360	88—	1: 1,903,385	152—	12: 1,903,305	202—	41: 1,903,408		18: 1,903,308
8—	20: 1,903,300		280: 1,903,346	89—	16: 1,903,295		13: 1,903,355	206—	47: 1,903,312	346—	209: 1,903,294
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47—	1: Pl. Pt. 59	81—	15.1: 1,903,388	131—	51: 1,903,410	192—	13: 1,903,378		146: 1,903,327	209—	139: 1,903,364
49—	47: 1,903,281		58: 1,903,307	132—	82: 1,903,357	196—	16: 1,903,370	237—	12.3: 1,903,349	302—	36: 1,903,304
	1,903,282	83—	73: 1,903,416	137—	68: R. 18,788		35: 1,903,407	238—	243: R. 18,786		

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Alberty, Guy W., doing business as Alberty Drug Co., Batavia, N. Y. Milk magnesia. Serial No. 334,088; Apr. 11. Class 6.

American Laundry Machinery Company, The, Cincinnati, Ohio. Laundry washing machines. Serial No. 334,787; Apr. 11. Class 24.

Apple Growers Association, Hood River, Oreg. Canned fruit. Serial No. 334,949; Apr. 11. Class 46.

Asbach & Co. Aktiengesellschaft, Rudesheim-on-the-Rhine, Germany. Wines. Serial No. 334,974; Apr. 11. Class 47.

Asbach & Co. Aktiengesellschaft, Rudesheim-on-the-Rhine, Germany. Cocoa, chocolate, baking powder, etc. Serial No. 334,975; Apr. 11. Class 46.

Bagwin Company, The. (See Gwynne, Walter L.)

Baker Clothes, Inc., Philadelphia, Pa. Men's woolen suits. Serial No. 334,727; Apr. 11. Class 39.

Baker Clothes, Inc., Philadelphia, Pa. Men's suits. Serial No. 334,728; Apr. 11. Class 39.

Barnett and Schulman Co. Inc., New York, N. Y. Paper, envelopes, Bristol board, etc. Serial No. 333,662; Apr. 11. Class 37.

Beardsley's, J. W., Sons, Newark, N. J. Prepared meat and fish products. Serial No. 303,989; Apr. 11. Class 46.

Bellmore Manufacturing Company, Gainesville, Ga. Coats, pants, and work shirts. Serial No. 334,457; Apr. 11. Class 39.

Bloomingdale Bros., Inc., New York, N. Y. Wooven floor rugs. Serial No. 333,963; Apr. 11. Class 42.

Blue Haven Corporation, The, North Kansas City, Mo. Clarifier for cleaning solvent, detergent, medicated soap, etc. Serial No. 335,051; Apr. 11. Class 4.

Böhme, H. Th., Aktiengesellschaft, Chemnitz, Germany. Chemical dye acids. Serial Nos. 334,861–4; Apr. 11. Class 6.

Bond Stores, Incorporated, New York, N. Y. Suits, trousers, coats, etc. Serial No. 329,701; Apr. 11. Class 39.

Botany Worsted Mills, Passaic, N. J. Neckties. Serial No. 334,789; Apr. 11. Class 39.

Brauhaus Würzburg, Aktiengesellschaft, Wurzburg, Germany. Malt beverage. Serial No. 309,372; Apr. 11. Class 48.

Breger & Wiener, Inc., New York, N. Y. Blouses and dresses. Serial No. 334,860; Apr. 11. Class 39.

British Mannesmann Tube Company Limited, The, London, England. Metal pipe and tubing and metal tubular poles and posts. Serial No. 333,024; Apr. 11. Class 18.

Burger Bros. Company, The, Cincinnati, Ohio. Malt syrup. Serial No. 334,660; Apr. 11. Class 46.

Butterfield, Fred, & Co., Inc., New York, N. Y. Fabrics. Serial No. 334,519; Apr. 11. Class 42.

Carson Pirie Scott and Company, Chicago, Ill. Radio receiving sets. Serial No. 335,107; Apr. 11. Class 21.

Celanese Corporation of America, New York, N. Y. Underwear. Serial Nos. 335,188–9; Apr. 11. Class 39.

Chappel Bros., Inc., Rockford, Ill. Composition used for medical treatment. Serial No. 335,110; Apr. 11. Class 6.

Cherniak, M. B., Mfg. Co., Inc., New York, N. Y. Glass lamp globes. Serial No. 332,755; Apr. 11. Class 32.

Cluff, William R., New York, N. Y. Pumice. Serial No. 335,231; Apr. 11. Class 22.

Colonial Coverlet Guild of America, Chicago, Ill. Year books and booklets. Serial No. 335,111; Apr. 11. Class 38.

Col-Tex Refining Company, Oklahoma City, Okla. Gasoline. Serial No. 334,880; Apr. 11. Class 15.

Columbia Plush & Puff Co., Inc., Brooklyn, N. Y. Nail cream, astringents, bleach creams, etc. Serial No. 325,980; Apr. 11. Class 6.

Continental Optical Company, Indianapolis, Ind. Ophthalmic frames and mountings. Serial No. 333,347; Apr. 11. Class 26.

Corn Products Refining Company, New York, N. Y. Publication. Serial No. 335,085; Apr. 11. Class 38.

Coulter, Herbert M., doing business as Sal Rheumatica Company, South Pasadena, Calif. Medicinal preparation. Serial No. 332,913; Apr. 11. Class 6.

Couvreur & Cie, Ay (Marne), France. Champagne wines. Serial No. 333,282; Apr. 11. Class 47.

Crisafulli, Stefano, New York, N. Y. Olive oil. Serial No. 334,987; Apr. 11. Class 46.

Cuno Engineering Corporation, The, Meriden, Conn. Mechanical fluid straining and filtering apparatus and parts thereof. Serial No. 333,281; Apr. 11. Class 23.

Davega-City Radio Stores, Inc., New York, N. Y. Golf balls. Serial No. 335,274; Apr. 11. Class 22.

Davidson, Lyman C., Cleveland, Ohio. Pamphlets, booklets, bulletins, etc. Serial No. 331,776; Apr. 11. Class 38.

De Bevoise, Chas. R., Co., Newark, N. J. Narrow brassières. Serial No. 334,143; Apr. 11. Class 39.

Dickinson, Albert, Company, The, Chicago, Ill. Popcorn dressing. Serial No. 334,555; Apr. 11. Class 46.

Dovedown Hosiery Mills, Griffin, Ga. Liquid substance to cement runs. Serial No. 331,855; Apr. 11. Class 6.

Drass, Andrew, Los Angeles, Calif. Wines. Serial No. 335,232; Apr. 11. Class 47.

Dunwoodie, Eml. Co., Philadelphia, Pa. Peat moss, charcoal, and crushed oyster shells, etc. Serial No. 330,611; Apr. 11. Class 1.

Duralith Corporation, New York, N. Y. Glazing compound. Serial No. 325,021; Apr. 11. Class 16.

Empire Brush Works. (See Gantz, Joseph.)

Endicott Johnson Corporation, Endicott, N. Y. Middle soles for shoes. Serial No. 334,674; Apr. 11. Class 39.

Essem Products Company, Milwaukee, Wis. Poker chips. Serial No. 334,390; Apr. 11. Class 22.

Evans, Norris, New York, N. Y. Coffeepots, teapots, vegetable dishes, etc. Serial No. 334,730; Apr. 11. Class 50.

Evans, Norris, New York, N. Y. Coffeepots, pitchers, urns, etc. Serial No. 334,731; Apr. 11. Class 50.

Fada Radio and Electric Corporation, Long Island City, N. Y. Radio receiving sets and loud speakers. Serial No. 334,305; Apr. 11. Class 21.

Fairchild Aerial Camera Corporation, Woodside, N. Y. Photographs. Serial No. 334,933; Apr. 11. Class 36.

Fillauer, George W., doing business as Red Star Drug and Surgical Co., Chattanooga, Tenn. Nasal cream. Serial No. 335,120; Apr. 11. Class 6.

Finch, Jos., & Company, New York, N. Y. Whiskey and other potable spirits. Serial No. 334,212; Apr. 11. Class 49.

Finlayson, Bousfield & Co., Ltd., Johnstone, Scotland. Fishing lines. Serial No. 334,526; Apr. 11. Class 22.

First Aid Medicine Co. Inc. (See Norton, John J.)

Forman, Jack, & Co., New York, N. Y. Fur skin pieces. Serial No. 334,748; Apr. 11. Class 1.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 334,529; Apr. 11. Class 42.

Fort Wayne Paper Box Company, Fort Wayne, Ind. Jig saw puzzles and puzzle work boards. Serial No. 335,194; Apr. 11. Class 22.

Fortune Tobacco Company, The, New York, N. Y. Cigarettes. Serial No. 335,195; Apr. 11. Class 17.

Freedom Oil Works Company, The, Freedom, Pa. Lubricating oils and greases. Serial No. 335,023; Apr. 11. Class 15.

Gantz, Joseph, doing business as Empire Brush Works, Port Chester, N. Y. Brooms and brushes. Serial No. 335,068; Apr. 11. Class 29.

Gardiner-Warring Company, Inc., Florence, Ala. Sweaters, sweat shirts, and underwear. Serial No. 333,120; Apr. 11. Class 39.

Gardiner-Warring Company, Inc., Florence, Ala. Sweaters and sweat shirts. Serial No. 333,121; Apr. 11. Class 39.

Gay Coal & Coke Company, The, Mount Gay, W. Va. Coal. Serial No. 334,915; Apr. 11. Class 1.

Geisman, Mualiner & Brightman, Inc., Brooklyn, N. Y. Leather. Serial No. 334,793; Apr. 11. Class 1.

Gilbert, A. C., Company, The, New Haven, Conn. Portable electrically driven devices. Serial No. 334,679; Apr. 11. Class 21.

Gordon Distributing Co., Inc., West New York, N. J. Maltless flavoring extracts. Serial No. 333,227; Apr. 11. Class 46.

Gregory-Robinson-Speas, Inc., Rogers, Ark. Vinegars. Serial Nos. 324,040–1; Apr. 11. Class 46.

Guillermo Boesch Suca, S. en C., Orizaba, Mex. Coffee. Serial No. 334,749; Apr. 11. Class 46.

Gwynne, Walter L., doing business as The Bagwin Company, New York, N. Y. Bags. Serial No. 318,874; Apr. 11. Class 2.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Fruit jar rings. Serial No. 334,671; Apr. 11. Class 35.

Hampshire Paper Company, Hadley Falls, Mass. Paper. Serial No. 334,944; Apr. 11. Class 37.

Hamrick Tank and Barrel Hard Shell Enameling Company. (See Kirk, Harry H.)

Herington, W. A., Green City, Mo. Fish lure. Serial No. 334,838; Apr. 11. Class 22.

Hers Cup Company, Incorporated, New York, N. Y. Paper drinking cups. Serial No. 335,200; Apr. 11. Class 2.

Hickok Manufacturing Company, Inc., Rochester, N. Y. Suspenders. Serial No. 329,334; Apr. 11. Class 39.

Hickok Manufacturing Company, Inc., Rochester, N. Y. Suspenders. Serial No. 329,349; Apr. 11. Class 39.

Hilger, Adam, Limited, London, England. Optical device for visual quantitative spectrum analysis. Serial No. 333,885; Apr. 11. Class 26.

Hirshfield, Frank, Mount Vernon, N. Y. Women's hosiery. Serial No. 334,709; Apr. 11. Class 39.

Houle, Joseph S., Manchester, N. H. Hand lotions, face and skin lotions. Serial No. 333,831; Apr. 11. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Howe & French, Inc., Boston, Mass. Liquid adhesive cement. Serial No. 331,618; Apr. 11. Class 5.
International Shoe Co., St. Louis, Mo. Boots and shoes. Serial No. 334,284; Apr. 11. Class 39.
Johns-Manville Corporation, New York, N. Y. Flax packing. Serial No. 324,439; Apr. 11. Class 35.
Jones, Howard B., Chicago, Ill. Toy drawing outfits. Serial No. 334,464; Apr. 11. Class 22.
Karagheusian, A. & M., Inc., New York, N. Y. Rugs and carpets. Serial No. 334,661; Apr. 11. Class 42.
Kempinski, M., & Co., Berlin, Germany. Wines and champagnes. Serial No. 335,123; Apr. 11. Class 47.
Kimberly-Clark Corporation, Neenah, Wis. Book paper. Serial No. 335,067; Apr. 11. Class 37.
Kirk, Harry H., doing business as The Hamrick Tank and Barrel Hard Shell Enameling Company, Philadelphia, Pa. Paint enamel. Serial No. 334,605; Apr. 11. Class 16.
Kress, S. H., & Co., New York, N. Y. Shoe polish. Serial No. 334,876; Apr. 11. Class 4.
Largman Gray Company, Croydon, Pa. Hosiery. Serial No. 335,094; Apr. 11. Class 39.
Larvex Corporation, The, New York, N. Y. Atomizers. Serial No. 334,643; Apr. 11. Class 23.
La Valle, Inc., New York, N. Y. Ladies' shoes. Serial No. 334,754; Apr. 11. Class 39.
Lecroy, John, & Son, Camden, N. J. Insecticides. Serial No. 334,683; Apr. 11. Class 6.
Lehrfeld, Manuel S., Philadelphia, Pa. Medicinal preparation. Serial No. 334,879; Apr. 11. Class 6.
Lopez, José, de Carrisosa y Martel, Marquis del Merito, Jerez-de-la-Frontera, Spain. Wines. Serial No. 333,472; Apr. 11. Class 47.
Lucha, Joseph, and Staff, Inc., Philadelphia, Pa. Educational literature. Serial No. 333,004; Apr. 11. Class 38.
Lunchour Food Products Co. (See Milani's, Inc.)
Maatschappij tot Exploitatie van Rademaker's Koninklijke Cacao & Chocoladefabrieken, The Hague, Netherlands. Coffee flavored candies. Serial No. 334,015; Apr. 11. Class 46.
Mallett, Ernest J., Riverdale, Md. Household cleaning preparation. Serial No. 334,966; Apr. 11. Class 4.
Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. Serial No. 334,758; Apr. 11. Class 28.
McDonald, William E., San Diego, Calif. Premium certificates. Serial No. 335,241; Apr. 11. Class 38.
Milani's, Inc., doing business as Lunchour Food Products Co., Seattle, Wash. Chicken broth with rice and egg noodle chicken dinner. Serial No. 331,977; Apr. 11. Class 46.
Mildner, Walter, Buenos Aires, Argentina. Hair tonics, cream for the hair, rouge, etc. Serial No. 332,261; Apr. 11. Class 6.
Moxie Company, The, Boston, Mass. Maltless beverages, and extracts and syrups therefor. Serial Nos. 335,152–3; Apr. 11. Class 45.
Musselman, C. H., Company, The, Biglerville, Pa. Canned fruits, fruit preserves, vinegar, etc. Serial No. 334,259; Apr. 11. Class 46.
National Radiator Corporation. (See Waters, Robert S., and Heiner.)
Naugatuck Chemical Company, The, New York, N. Y. Latex composition. Serial Nos. 327,885–6; Apr. 11. Class 1.
Norton, John J., doing business as First Aid Medicine Co. Inc., Laurel, Md. Medicinal oil. Serial No. 334,716; Apr. 11. Class 6.
Oelerich & Berry Co., Chicago, Ill. Cane and maple syrup. Serial No. 323,351; Apr. 11. Class 46.
Paramount Canning Co., Haines, Fla. Canned fruits and vegetables. Serial No. 333,437; Apr. 11. Class 46.
Parfumerie Roger et Gallet, Societe Anonyme, Paris, France. Toilet soaps. Serial No. 334,650; Apr. 11. Class 4.
Pepsodent Co., The, Chicago, Ill. Facial cream. Serial No. 334,468; Apr. 11. Class 6.
Perfumer and Cosmetic Guild Corporation, The, West Haven, Conn. Cold cream, wrinkle remover, deodorants, etc. Serial No. 334,289; Apr. 11. Class 6.
Pioneer Instrument Company, Inc., Brooklyn, N. Y. Compasses. Serial No. 334,498; Apr. 11. Class 26.
Popsicle Corporation of The United States, The, New York, N. Y. Vanilla flavored composition syrup, extract and concentrate used in the preparation of frozen confections. Serial No. 332,894; Apr. 11. Class 46.
Preserve Surface Co., Inc., Detroit, Mich. Synthetic varnish. Serial No. 333,406; Apr. 11. Class 16.
Prosperity Sales Plan Corporation, New York, N. Y. Fountain pens. Serial No. 332,629; Apr. 11. Class 37.
Randall Company, The, Cincinnati, Ohio. Typewriter ribbons. Serial No. 334,761; Apr. 11. Class 11.
Red Star Drug and Surgical Co. (See Fillauer, George W.)
Reed, E. P., & Company, Rochester, N. Y. Shoes. Serial No. 333,894; Apr. 11. Class 39.
Reilly Tar & Chemical Corporation, Indianapolis, Ind. Bituminous road-surfacing and road-resurfacing materials. Serial No. 334,885; Apr. 11. Class 12.
Robison, Ansel W., San Francisco, Calif. Bird seed and food. Serial No. 329,457; Apr. 11. Class 46.
Rossie Velvet Company, Mystic, Conn. Pile fabrics. Serial Nos. 334,764–72; Apr. 11. Class 42.
Sal Rheumatica Company. (See Coulter, Herbert M.)
Schweppes (Colonial & Foreign) Limited, London, England. Natural mineral and aerated drinking waters and ginger beer. Serial No. 335,087; Apr. 11. Class 45.
Sears, Roebuck and Co., Chicago, Ill. Touch-up paint enamel, automobile cleaner and polish. Serial No. 334,692; Apr. 11. Class 16.
Sears, Roebuck and Co., Chicago, Ill. Ice cream freezers. Serial No. 334,934; Apr. 11. Class 31.
Seneca Food Products Corporation, Utica, N. Y. Malt beverages. Serial No. 335,217; Apr. 11. Class 48.
Shellabarger Mill & Elevator Company, Salina, Kans. Grey shorts, wheat mixed feed and bran, and poultry feeds. Serial No. 312,017; Apr. 11. Class 46.
Shipping News, Inc., Portland, Oreg. Periodical. Serial No. 335,251; Apr. 11. Class 38.
Siegel Brothers, Inc., New York, N. Y. Coats. Serial No. 335,075; Apr. 11. Class 39.
Smith-Alsop Paint & Varnish Company, Inc., The, Terre Haute, Ind. Paint enamel. Serial No. 335,007; Apr. 11. Class 16.
Smith, Mrs. C. H., Noodle Company, Ellwood City, Pa. Alimentary pastes. Serial No. 334,075; Apr. 11. Class 46.
Souhegan Apple Packing Association, Wilton, N. H. Apples. Serial No. 331,911; Apr. 11. Class 46.
Standard Oil Company of New Jersey, Wilmington, Del. Motor fuel oils. Serial No. 335,009; Apr. 11. Class 15.
Standard Safety Razor Corporation, Wilmington, Del., and East Norwalk, Conn. Razor and razor blades. Serial Nos. 334,541–3; Apr. 11. Class 28.
Stevens Soap Corporation, Brooklyn, N. Y. Washing powder. Serial No. 334,937; Apr. 11. Class 4.
Stillwaggon, W. A., Inc., Jamaica and Richmond Hill, N. Y. Metal pipe and tubing, pipe clamps, etc. Serial No. 334,292; Apr. 11. Class 13.
Sunflower Refining Corporation, The, Abilene, Kans. Gasoline and kerosene. Serial No. 334,655; Apr. 11. Class 15.
Titus Nursery Company, Waynesboro, Va., and Baltimore, Md. Nursery products. Serial No. 333,240; Apr. 11. Class 1.
Tobe Deutschmann Corporation, Canton, Mass. Electrical filters, resistors, inductances, etc. Serial No. 331,296; Apr. 11. Class 21.
Ullman's, Julius, Sons, Reading, Pa. Leather. Serial No. 335,042; Apr. 11. Class 1.
Underwood, William, Company, Watertown, Mass. Canned meat hash. Serial No. 334,415; Apr. 11. Class 46.
Union Special Machine Company, Chicago, Ill. Magazine. Serial No. 335,262; Apr. 11. Class 38.
United Drug Company, Boston, Mass. Rubber gloves. Serial No. 333,641; Apr. 11. Class 39.
Van Houten, C. J., & Zoon, Weesp, Netherlands. Cocoa. Serial No. 325,835; Apr. 11. Class 46.
Virginia Sweet Foods, Inc., Indianapolis, Ind. Prepared flour. Serial No. 320,219; Apr. 11. Class 46.
Viviny Perfumers, Inc., West Haven, Conn. Cold cream, deodorants, depilatories, etc. Serial No. 334,294; Apr. 11. Class 6.
Vogue Brassiere Mfg. Co., Newark, N. J. Corsets, brassières, girdles, etc. Serial No. 334,585; Apr. 11. Class 39.
Walker, Hiram, & Sons, Limited, Walkerville, Ontario, Canada. Whisky. Serial Nos. 334,503–4; Apr. 11. Class 49.
Walker, Hiram, & Sons, Limited, Walkerville, Ontario, Canada. Gin. Serial No. 334,505; Apr. 11. Class 49.
Walker, Hiram, & Sons, Limited, Walkerville, Ontario, Canada. Whisky. Serial No. 334,506; Apr. 11. Class 49.
Waters, Robert S., and William G. Heiner, receivers for the National Radiator Corporation, Johnstown, Pa. Heat exchange apparatus. Serial No. 330,642; Apr. 11. Class 34.
Webb, A. M., & Co. Inc., New York, N. Y. Underwear shorts. Serial No. 332,936; Apr. 11. Class 39.
Webb, A. M., & Co., Inc., New York, N. Y. Underwear, hosiery, and bathing suits. Serial No. 332,937; Apr. 11. Class 39.
Welco Laboratories. (See Welicka, Frank J.)
Welicka, Frank J., doing business as Welco Laboratories, Jamaica, N. Y. Liniment. Serial No. 334,723; Apr. 11. Class 6.
Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa. Electronic tube controllers. Serial No. 333,957; Apr. 11. Class 21.
Winship, Charles N., doing business as Winship, Boit & Co., Wakefield, Mass. Bathing suits. Serial No. 335,046; Apr. 11. Class 39.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Wizard, Inc., Chicago, Ill. Insecticides. Serial No. 325,813; Apr. 11. Class 6.
Wolf, August, Eisenwarenfabrik Ges. m. beschr. Haftung, Betzdorf, Germany. Wooden tool handles. Serial No. 334,455; Apr. 11. Class 23.
Wonder-Wick Company, Holyoke, Mass. Wick. Serial No. 335,015; Apr. 11. Class 34.
Worthall, Ltd., New York, N. Y. Antacid salt. Serial No. 334,783; Apr. 11. Class 6.
X-Otic, Incorporated, New York, N. Y. Garment for infants and very young children in the nature of a sun suit. Serial No. 334,452; Apr. 11. Class 39.
Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Pasteboard, writing paper, cellulose wadding, etc. Serial No. 328,195; Apr. 11. Class 37.
Zellstofffabrik Waldhof, Mannheim-Waldhof, Germany. Pasteboard, cardboard, paper, etc. Serial No. 328,200; Apr. 11. Class 37.

LIST OF REGISTRANTS OF TRADE-MARKS

Aderer, Julius, Inc., New York, N. Y. Dental wire. 302,317; Apr. 11; Serial No. 332,673; published Jan. 31, 1933. Class 44.
Agar Packing & Provision Co., Chicago, Ill. Pork butts and spiced ham. 302,364; Apr. 11. Class 46.
Ainsley, J. C., Packing Co. to J. C. Ainsley Packing Co., Campbell, Calif., successor. Canned fruits and vegetables. 40,201–2; renewed May 19, 1933.
American Net & Twine Company. (See Burnham, Leonard A.)
Amieux, M., & Cie., to Maison Amieux Freres, Societe Anonyme, Nantes, France, successor. Canned sardines. 90,774; renewed Mar. 25, 1933.
Baltimore Belting Company, Baltimore, Md. Leather belting. 302,351; Apr. 11; Serial No. 321,093; published Jan. 24, 1933. Class 35.
Barrell, William L., Company, Inc., New York, N. Y. Cotton piece goods. 302,331; Apr. 11; Serial No. 332,217; published Jan. 17, 1933. Class 42.
Bassick Company, The. (See Schenck, M. B., Company, The, assignor.)
Beacon Falls Rubber Shoe Company, The, assignor to The Beacon Falls Rubber Shoe Company, Beacon Falls, Conn. Rubber boots, shoes, sandals, etc. 91,837; renewed June 3, 1933.
Berry Brothers, Detroit, Mich. Varnishes. 92,782; renewed July 29, 1933.
Biltrite Motor Equipment Co. Inc., New York, N. Y. Paint, paint enamels, stains, etc. 302,330; Apr. 11; Serial No. 332,219; published Jan. 17, 1933. Class 16.
Blue Ribbon Books, Inc., New York, N. Y. Printed books. 302,320; Apr. 11; Serial No. 332,140; published Jan. 17, 1933. Class 38.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 302,324; Apr. 11; Serial No. 332,082; published Jan. 17, 1933. Class 42.
Brown & Bigelow, St. Paul, Minn. Periodical. 92,944; renewed Aug. 12, 1933.
Burnham, Leonard A., Gloucester, to American Net & Twine Company, Boston, Mass., successor. Fish-lines. 92,178; renewed June 24, 1933.
Butterfield, Fred, & Co., Inc., New York, N. Y. Fabrics. 302,329; Apr. 11; Serial No. 332,247; published Jan. 17, 1933. Class 42.
Caliente Food Products Co., San Bernardino, Calif. Smoked fish, salads, pickles, etc. 302,301; Apr. 11; Serial No. 328,837; published Jan. 24, 1933. Class 46.
California Fruit Chimes Co. (See Johnson, W. A.)
California Fuel & Utilities, Inc., Los Angeles, Calif. Fuel briquettes. 302,334–6; Apr. 11; Serial Nos. 332,398–400; published Jan. 24, 1933. Class 1.
Campbell Cereal Company. (See Northern Light Milling Co., assignor.)
Canfield, H. O., Company, The, Bridgeport, Conn. Rubber goods. 92,396; renewed July 8, 1933.
Cellas', Inc. (See Petrocelli, Joseph, & Company, assignor.)
Central States Department Stores, Inc., Chicago, Ill. Red mouth wash, cold cream, skin tonic, etc. 302,359; Apr. 11. Class 6.
Champion Fibre Company, The, Hamilton, Ohio, to The Champion Fibre Company, Canton, N. C. Tanning extracts. 92,319; renewed July 1, 1933.
Champion Spark Plug Company, assignor to Champion Spark Plug Company, Toledo, Ohio. Spark-plugs. 92,949–50; renewed Aug. 12, 1933.
Chesebrough Manufacturing Company, Consolidated, New York, N. Y. Petroleum jelly. 92,534; renewed July 15, 1933.
Cloverdale Spring Co., Baltimore, Md. Malt beverages. 302,344; Apr. 11; Serial No. 333,312; published Jan. 31, 1933. Class 48.
Columbia River Packers Association, Astoria, Oreg., assignor to Portland Trust and Savings Bank, Portland, Oreg. Canned salmon. 93,077–8; renewed Aug. 19, 1933.
Columbia Tool Steel Company, Chicago Heights, Ill. Tool steel. 302,316; Apr. 11; Serial No. 332,646; published Jan. 24, 1933. Class 14.
Corona Chemical Company, Milwaukee, Wis., assignor to Pittsburgh Plate Glass Company, Pittsburgh, Pa. Insecticides. 91,758; renewed May 27, 1933.
Crossett, Lewis A., Inc., North Abington, Mass., assignor, by mesne assignments, to Crossett Shoe Co., Augusta, Me. Boots and shoes. 90,685; renewed Mar. 18, 1933.
Crouse-Hinds Company, Syracuse, N. Y. Electric fittings, receptacles, and parts thereof. 90,295; renewed Feb. 18, 1933.
Crucible Steel Company of America, Pittsburgh, Pa., to Crucible Steel Company of America, New York, N. Y. Tool steel. 89,792; renewed Feb. 10, 1933.
Dane, Ernest B., and A. J. Meserve, doing business as The Shepherd Worsted Mills, Newton, Mass. Fingering yarns for knitting and crocheting. 302,296; Apr. 11; Serial No. 330,810; published Jan. 17, 1933. Class 48.
Davidson & Finkelbrand, assignor to P & Q Shops Inc., New York, N. Y. Suits and overcoats. 91,651; renewed May 20, 1933.
Dielhenn Manufacturing Company, The, Massillon, Ohio. Undergarments. 89,994; renewed Mar. 31, 1933.
Droescher, Severin R., New York, N. Y. Razor hones. 40,136; renewed Apr. 21, 1933.
Droescher, Severin R., New York, N. Y. Razor hones. 40,823; renewed May 12, 1933.
Droescher, Severin R., New York, N. Y. Razors. 40,456–7; renewed May 26, 1933.
Eby-Loser Company, Rockford, Ill. Cigars. 302,291; Apr. 11; Serial No. 331,222; published Jan. 24, 1933. Class 17.
Endicott Johnson Corporation, Endicott, N. Y. Golf balls. 302,345; Apr. 11; Serial No. 303,882; published Nov. 4, 1930. Class 22.
Endicott Johnson Corporation, Endicott, N. Y. Golf balls. 302,346; Apr. 11; Serial No. 303,884; published Mar. 24, 1931. Class 22.
Europa Sales Corporation, New York, N. Y. Candy. 302,323; Apr. 11; Serial No. 332,088; published Jan. 24, 1933. Class 46.
Everlastik, Inc., Chelsea, Mass. Yarn. 302,300; Apr. 11; Serial No. 332,480; published Jan. 24, 1933. Class 48.
Farrow, Cary, Houston, Tex. Advertising sign frames. 302,348; Apr. 11; Serial No. 312,906; published Jan. 24, 1933. Class 50.
Federal Mill, Inc., Lockport, N. Y. Wheat flour and bread made from wheat flour. 302,298; Apr. 11; Serial No. 330,124; published Jan. 24, 1933. Class 46.
Ferry-Hanly Advertising Company, Kansas City, Mo. Trading stamps. 302,292; Apr. 11; Serial No. 331,178; published Jan. 17, 1933. Class 38.
Finch, Leon, Ltd., Los Angeles, Calif. Paints, paint colors, white lead, putty, etc. 302,307; Apr. 11; Serial No. 332,524; published Jan. 17, 1933. Class 16.
Florida Fruit Canners, Inc., Frostproof, Fla. Canned orange and grapefruit sections. 302,352; Apr. 11; Serial No. 321,203; published Jan. 24, 1933. Class 46.
Frank, L., & Son Company, assignor to Frank and Company, Milwaukee, Wis. Sausage. 90,525; renewed Mar. 4, 1933.
General Mills, Inc., Minneapolis, Minn. Poultry, dairy, and stock feed. 302,325; Apr. 11; Serial No. 332,088; published Jan. 24, 1933. Class 46.
Gleason-Tiebout Glass Company, New York, N. Y. Glass shades, globes, and reflectors for artificial illumination. 93,173; renewed Aug. 26, 1933.
Glendale Distributing Company. (See Sackett, Leon A.)
Gnome Bakery, Inc., New York, N. Y. Bread. 302,299; Apr. 11; Serial No. 329,680; published Jan. 24, 1933. Class 46.
Goldberg, Bowen & Co., San Francisco, Calif. Canned vegetables. 302,289; Apr. 11; Serial No. 331,308; published Jan. 24, 1933. Class 46.
Goldberg, Bowen & Co., San Francisco, Calif. Olive oil. 302,297; Apr. 11; Serial No. 330,513; published Jan. 3, 1933. Class 46.
Golden Bird Inc., The, Chicago, Ill. Seeds for birds. 302,355; Apr. 11; Serial No. 325,328; published Jan. 24, 1933. Class 46.
Goldstein, S., Monument Works, Inc., New York, N. Y. Finished monument stones. 302,288; Apr. 11; Serial No. 331,371; published Jan. 24, 1933. Class 50.
Gorham Manufacturing Company, Providence, R. I. Clocks, watches, and parts thereof. 302,342; Apr. 11; Serial No. 333,044; published Feb. 7, 1933. Class 27.
Graff, George B., Co., Cambridge, Mass. Indicator tabs, or file signals. 302,293; Apr. 11; Serial No. 330,961; published Jan. 17, 1933. Class 37.
Green-Hall, Inc., Chicago, Ill. Magazines. 302,339; Apr. 11; Serial No. 332,917; published Jan. 17, 1933. Class 38.

Gummed Products Company, The, Troy, Ohio. Gummed paper tape. 302,362; Apr. 11. Class 37.
Haller Baking Company, Pittsburgh, Pa. Bread. 302,347; Apr. 11; Serial No. 311,780; published Jan. 24, 1933. Class 46.
Hewlett, C. J., & Son, Limited, London, England. Remedies for diseases. 90,330; renewed Feb. 18, 1933.
Hirschy, Ernest D., Kewanee, Ill. Pharmaceutical preparations. 93,354; renewed Sept. 9, 1933.
Houghton, E. F., & Co., Philadelphia, Pa. Lubricating-oils. 90,889; renewed Apr. 1, 1933.
Hurlbut Paper Company, South Lee, Mass. Writing and printing paper. 302,326; Apr. 11; Serial No. 332,324; published Jan. 17, 1933. Class 37.
Hurley Shoe Company, Rockland, Mass. Boots and shoes. 92,427; renewed July 8, 1933.
Ingersoll-Rand Company, New York, N. Y. Coal picks. 302,366; Apr. 11. Class 28.
Jads Salts Company, The, New York, N. Y., assignor, by mesne assignments, to Wyeth Chemical Company, Jersey City, N. J. Granular effervescent salt. 92,989; renewed Aug. 12, 1933.
Johnson, W. A., doing business as California Fruit Chimes Co., San Gabriel, Calif. Toffy. 302,354; Apr. 11; Serial No. 322,047; published Jan. 24, 1933. Class 46.
K B Beverage Company, Bay City, Mich. Malt beverages. 302,338; Apr. 11; Serial No. 332,888; published Jan. 31, 1933. Class 48.
Kelly-Springfield Tire Company, The, New York, N. Y. Resilient vehicle tires and inner tubes. 302,343; Apr. 11; Serial No. 333,158; published Jan. 24, 1933. Class 35.
Kenny, C. D., Co., Baltimore, Md. Coffee. 302,315; Apr. 11; Serial No. 332,650; published Jan. 24, 1933. Class 46.
Klenz-Wel Products Company. (See Stone, Robert S.)
Koehler, Maurice, doing business as The Plastik Products Co., Massillon, Ohio. Metallic adhesive cement. 302,365; Apr. 11. Class 5.
Kolokraft Company. (See Wilson, Walter E.)
La Choy Food Products, Inc., Detroit, Mich. Bean sprouts, water chestnuts, bamboo shoots, etc. 302,283; Apr. 11; Serial No. 331,646; published Jan. 24, 1933. Class 46.
Lamm, Jacob C., Baltimore, Md. Pants, suits, coats, etc. 302,361; Apr. 11. Class 39.
Larkin, P. C., Toronto, Ontario, Canada, and New York, N. Y., assignor to Salada Tea Company, Inc., Boston, Mass. Cocoa. 92,805; renewed July 29, 1933.
Lindsay Farm Bureau Fruit Assn., Lindsay, Calif. Fresh citrus fruits. 302,368–9; Apr. 11. Class 46.
Mahdeen Company, The. (See Needham, John L.)
Maison Amieux Freres, Societe Anonyme. (See Amieux, M., & Cie.)
McLean, Dr. J. H., Medicine Company, St. Louis, Mo. Oil liniment. 91,890–1; renewed June 3, 1933.
McLean, Dr. J. H., Medicine Company, St. Louis, Mo. Medicine and preparation for the treatment of diseases. 91,984; renewed June 10, 1933.
McLean, Dr. J. H., Medicine Company, St. Louis, Mo. Medicines, preparations, compounds, etc. 91,986; renewed June 10, 1933.
Missouri Meerschaum Company, Washington, Mo. Corncob pipes. 93,006; renewed Aug. 12, 1933.
Moffat Incorporated, Boston, Mass. Cooking chocolate. 302,319; Apr. 11; Serial No. 332,196; published Jan. 24, 1933. Class 46.
Monarch Metal Weather Strip Company, to Monarch Metal Weather Strip Corporation, St. Louis, Mo., successor. Metal weather-strips. 90,722; renewed Mar. 18, 1933.
Mongelli, Caesar G., Brooklyn, N. Y. Spaghetti sauce. 302,327; Apr. 11; Serial No. 332,262; published Jan. 24, 1933. Class 46.
Moore, Donald S., doing business as Old Vienna Sales Co., Buffalo, N. Y. Malt syrup. 302,357; Apr. 11. Class 46.
Mullendore, Anna. (See Totten, James B., assignor.)
Munro, Walter J., New York, N. Y. Blankets and carriage sets and robes. 302,300; Apr. 11; Serial No. 328,892; published Jan. 17, 1933. Class 42.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 91,011; renewed Apr. 8, 1933.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 91,113; renewed Apr. 15, 1933.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 91,115; renewed Apr. 15, 1933.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 91,227; renewed Apr. 22, 1933.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 92,447; renewed July 8, 1933.
National Biscuit Company, Jersey City, N. J., and New York, N. Y., to National Biscuit Company, New York, N. Y. Biscuit. 93,009; renewed Aug. 12, 1933.
National City Dairy Company. (See Whitford, E. O., & Co.)
Needham, John L., to The Mahdeen Company, Nacogdoches, Tex., successor. Liquid remedy for dandruff. 93,012; renewed Aug. 12, 1933.
Newday Seeds, Inc., Fargo, N. Dak. Garden, flower, and field seeds. 302,321; Apr. 11; Serial No. 332,137; published Jan. 24, 1933. Class 1.
Newmarket Leather Co., Inc., New York, N. Y. Leather. 302,305; Apr. 11; Serial No. 332,348; published Jan. 24, 1933. Class 1.
New York Belting and Packing Company, as assignee of New York Belting & Packing Co. Ltd., assignor to New York Belting and Packing Company, New York, N. Y. Belting, hose, and packing. 91,013; renewed Apr. 8, 1933.
North American Paint & Chemical Co. Ltd., Los Angeles, Calif. Paints, paint colors, white lead, etc. 302,353; Apr. 11; Serial No. 321,815; published Jan. 17, 1933. Class 16.
Northern Light Milling Co., Owatonna, assignor to Campbell Cereal Company, Northfield, Minn. Buckwheat flour. 91,686; renewed May 20, 1933.
Ohio Grease Lubricant Co., The, by change of name to The Ohio Grease Company, Loudonville, Ohio. Grease and commutator compound. 92,572; renewed July 15, 1933.
Old Vienna Sales Co. (See Moore, Donald S.)
P & Q Shops Inc. (See Davidson & Finkelbrand, assignor.)
Package Machinery Company, Springfield, Mass. Machines for applying hoods to bottles. 302,303; Apr. 11; Serial No. 332,381; published Jan. 24, 1933. Class 23.
Patons & Baldwins, Limited, Halifax, England. Yarns. 302,322; Apr. 11; Serial No. 332,134; published Jan. 17, 1933. Class 43.
Peppard, J. G., Seed Co., Kansas City, Mo. Field-seeds. 90,374; renewed Feb. 18, 1933.
Petrocelli, Joseph, & Company, assignor, by mesne assignments, to Cellas', Inc., New York, N. Y. Olive-oil. 93,114; renewed Aug. 19, 1933.
Phoenix Trimming Co., Chicago, Ill. Drapes, curtains, portières, and attachable materials. 302,295; Apr. 11; Serial No. 330,828; published Jan. 3, 1933. Class 42.
Pittsburgh Plate Glass Company. (See Corona Chemical Company, assignor.)
Plastik Products Co., The. (See Koehler, Maurice.)
Portland Trust and Savings Bank. (See Columbia River Packers Association, assignor.)
Preston, Burton, & Co., Mansfield, Ohio. Granite and marble monuments and statues. 302,360; Apr. 11. Class 50.
Rice-Stix Dry Goods Co., St. Louis, Mo. Athletic underwear and outer garments. 92,829; renewed July 29, 1933.
Richards, Lester S., White Haven, Pa. Coal, charcoal, coke, and firewood. 302,290; Apr. 11; Serial No. 331,267; published Jan. 24, 1933. Class 1.
Richter & Hoffmann Harvard Gesellschaft mit beschränkter Haftung, Berlin, Germany. Wax and moulding compounds for dental surgery, filling material, and tooth polishing material. 302,285; Apr. 11; Serial No. 331,624; published Jan. 31, 1933. Class 44.
Robinson, Wm. C., & Son Co., Baltimore, Md., and Coraopolis, Pa., to Wm. C. Robinson & Son Co., Baltimore, Md. Lubricating-oil. 90,381; renewed Feb. 18, 1933.
Sackett, Leon A., doing business as Glendale Distributing Company, Glendale, Long Island, N. Y. Rose bush plants. 302,312; Apr. 11; Serial No. 332,599; published Jan. 31, 1933. Class 1.
Salada Tea Company, Inc. (See Larkin, P. C., assignor.)
Sandvikens Jernverks Aktiebolag, Sandviken, Sweden. Metal and metal castings and forgings. 90,845; renewed Mar. 25, 1933.
Schenck, M. B., Company, The, Meriden, assignor to The Bassick Company, Bridgeport, Conn. Casters. 90,585; renewed Mar. 4, 1933.
Schoenhofen, Peter, Brewing Company, The, assignor by mesne assignments to Schoenhofen Company, Chicago, Ill. Lager-beer. 92,371; renewed July 1, 1933.
Scott Paper Company, Chester, Pa. Paper towels in roll form. 302,349; Apr. 11; Serial No. 320,990; published Jan. 10, 1933. Class 37.
Sears, Roebuck and Co., Chicago, Ill. White paste. 302,341; Apr. 11; Serial No. 333,015; published Jan. 17, 1933. Class 5.
Segers Brothers, N. V., Lisse, Netherlands. Tulip bulbs. 302,350; Apr. 11; Serial No. 320,991; published Jan. 31, 1933. Class 1.
Seguin Milling & Power Company, Seguin, Tex. Corn meal, scratch feed, laying mash, etc. 302,333; Apr. 11; Serial No. 332,439; published Jan. 31, 1933. Class 46.
Seibert, William D., New York, N. Y. Binder for magazines. 302,304; Apr. 11; Serial No. 332,384; published Jan. 17, 1933. Class 37.
Seitzwerke Theo & Geo Seits, to Seitz-werke G. m. b. H., Kreuznach, Germany, successor. Chemically prepared substances for filtering purposes. 92,004; renewed June 10, 1933.
Shepherd Worsted Mills, The. (See Dane, Ernest B., and Meserve.)
Shuron Optical Company, Inc., Geneva, N. Y. Spectacles, eyeglasses, and parts thereof. 302,337; Apr. 11; Serial No. 332,788; published Jan. 24, 1933. Class 26.
Shu-Saver Co., Los Angeles, Calif. Shoe straighteners. 302,367; Apr. 11. Class 50.

Slater Bodger & Company Limited, Glasgow, Scotland. Whisky. 302,284; Apr. 11; Serial No. 331,997; published Jan. 31, 1933. Class 49.
Societe Anonyme le Carbone, Levallois-Perret, France. Electrical supplies. 89,624; renewed Jan. 6, 1933.
Stirn, L & E., Inc., New York, N. Y. Silk and rayon fabrics. 302,332; Apr. 11; Serial No. 332,202; published Jan. 17, 1933. Class 42.
Stone, Robert S., doing business as Klenz-Wel Products Company, Cleveland, Ohio. Water softener. 302,363; Apr. 11. Class 6.
Stylecraft, Los Angeles, Calif. Game. 302,310–11; Apr. 11; Serial Nos. 332,635–6; published Jan. 31, 1933. Class 22.
Swift Fertilizer Works, Chicago, Ill., and Atlanta, Ga., assignor to Swift and Company, Chicago, Ill. Manufactured fertilizers. 40,331; renewed May 12, 1933.
Tailby-Nason Company, South Berwick, Me., and Boston, Mass., to Tailby-Nason Company, Cambridge, Mass. Digestive tablets. 93,046; renewed Aug. 12, 1933.
Totten, James B., assignor to Anna Mullendore, Newark, N. J. Remedy for coughs. 93,049; renewed Aug. 12, 1933.
Tremblett & Davin, Chicago, Ill. Refrigerators. 302,287; Apr. 11; Serial No. 331,386; published Jan. 31, 1933. Class 31.
Truscon Laboratories, The, Detroit, Mich. Paints, paint enamels, stains, etc. 302,328; Apr. 11; Serial No. 332,241; published Jan. 17, 1933. Class 16.
Tyzack, W. A., & Co., Sheffield, England. Cutlery, machinery, and tools. 90,762; renewed Mar. 18, 1933.
Valencia Heights Orchards, Inc., Covina, Calif. Fresh citrus fruits. 302,306; Apr. 11; Serial No. 332,558; published Jan. 24, 1933. Class 46.
Victor Flour Mills, Inc., Pittsford, N. Y. Wheat flour. 302,308; Apr. 11; Serial No. 332,501; published Jan. 24, 1933. Class 46.
Vollrath, Jacob J., Mfg. Co., The, assignor to The Vollrath Company, Sheboygan, Wis. Metal kettles. 92,849; renewed July 29, 1933.
Walgreen Co., Chicago, Ill. Golf balls. 302,302; Apr. 11; Serial No. 327,954; published Jan. 31, 1933. Class 22.
Walgreen Co., Chicago, Ill. Golf balls. 302,356; Apr. 11; Serial No. 327,952; published Jan. 31, 1933. Class 22.
Walworth Manufacturing Co., by change of name to Walworth Company, Boston, Mass. Metal gate-valves and couplings. 91,532; renewed May 6, 1933.
Weddle Tea Company, New York, N. Y. Tea. 302,294; Apr. 11; Serial No. 330,941; published Jan. 24, 1933. Class 46.
Weinrich Pickle Co., Los Angeles, Calif. Pickles. 302,314; Apr. 11; Serial No. 332,561; published Jan. 24, 1933. Class 46.
Wesco Foods Company, Cincinnati, Ohio. Brooms. 302,340; Apr. 11; Serial No. 332,939; published Jan. 24, 1933. Class 29.
Whitford, E. O., & Co. to National City Dairy Company, Washington, D. C., successor. Butter. 88,865; renewed Sept. 2, 1932.
Wigder, Bernard, doing business as The Wigder Manufacturing Co., Newark, N. J. Manicure implements. 302,313; Apr. 11; Serial No. 332,562; published Jan. 31, 1933. Class 44.
Wilson, Walter E., doing business as Kolokraft Company, Detroit, Mich. Toy paint box kits. 302,318; Apr. 11; Serial No. 332,708; published Jan. 31, 1933. Class 22.
Wyeth Chemical Company. (See Jads Salts Company, The, assignor.)
Yobo, Jud, Youngstown, Ohio. Pencil. 302,358; Apr. 11. Class 37.
Young, Homer N., doing business as Zingo Products Company, Spokane, Wash. Breakfast cereals, pancake or waffle syrups, and pancake and waffle flour. 302,286; Apr. 11; Serial No. 331,602; published Jan. 24, 1933. Class 46.
Young-Mahood Company, to Young-Mahood Company, Pittsburgh, Pa., successor. Rice and blended coffee. 92,858; renewed July 29, 1933.
Zingo Products Company. (See Young, Homer N.)

LIST OF REGISTRANTS OF LABELS

B-B Chemical Works, Inc., Atlanta, Ga. Kwik-Soder. For Solder for Leaky Radiators and Cracks in Blocks and Cylinder Heads. 41,912; Apr. 11.
Backus Paint Products, Inc., Philadelphia, Pa. Interiall. For a Washable Finish for All Interiors. 41,913; Apr. 11.
Biloxi Canning & Packing Co., Inc., Biloxi, Miss. Sea Beach. For Canned Shrimp. 41,914; Apr. 11.
Boergermann, P. H., Brooklyn, N. Y. Applekrit. For Apple Jelly. 41,915; Apr. 11.
Drackett Chemical Company, The, Cincinnati, Ohio. Windex. For Liquid Cleaner for Vitreous Surfaces. 41,916; Apr. 11.
Floodwood Cooperative Creamery Association, Floodwood, Minn. Sweet Cream Butter. For Sweet Cream Butter. 41,917; Apr. 11.
Genesee County Fresh Egg Producers Association, also doing business as Genesee County Producers Ass'n., Flint, Mich. Genesee. For Eggs. 41,918; Apr. 11.
Hoague-Sprague Corporation, Lynn, Mass. Sturdy Fut. For Boxes. 41,919; Apr. 11.
Il Primo Olive Oil & Products Company, Philadelphia, Pa. Il Primo. For Tonno. 41,920; Apr. 11.
Manitowoc Products Co., Manitowoc, Wis. Certified Mineral Spring Water. For Mineral Spring Water. 41,921; Apr. 11.
Snower, M., & Company, Chicago, Ill. Snowflake Kolor Kloth. For Colored Cotton Piece Goods. 41,922; Apr. 11.
Swift and Company, Chicago, Ill. Swift's. For Gelatin. 41,923; Apr. 11.
Swift and Company, Chicago, Ill. Swift's Superwhip. For Gelatin. 41,924; Apr. 11.
Upholsterers', Carpet and Linoleum Mechanics' International Union of North America, New York, N. Y. Upholsterers', Carpet and Linoleum Mechanics' International Union of North America. For Awnings. 41,925; Apr. 11.
Vaughan, Eleanor F., College Point, N. Y. Wart Remedy. For Wart Remedy. 41,926; Apr. 11.

LIST OF REGISTRANTS OF PRINTS

Dairymen's League Co-Operative Association, Inc., Utica and New York, N. Y. Dairylea—Direct From our Farms to You. For Milk, Cream, and Buttermilk. 14,131; Apr. 11.
Duvall, Stanley A., Edinburg, Tex. Knocord Electric Iron. For Electric Heated Sadirons. 14,132; Apr. 11.
Kester Solder Company, Chicago, Ill. Kester Junior Mender. For Solder. 14,133; Apr. 11.
Tube-O Food Products Co., Philadelphia, Pa. Tube O. For Icing. 14,134; Apr. 11.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Bulbs, Tulip. Segers Brothers, N. V. 302,350; Apr. 11; Serial No. 320,991; published Jan. 31, 1933.
Coal, charcoal, coke, and firewood. L. S. Richards. 302,290; Apr. 11; Serial No. 331,267; published Jan. 24, 1933.
Fuel briquettes. California Fuel & Utilities, Inc. 302,334–6; Apr. 11; Serial Nos. 332,398–400; published Jan. 24, 1933.
Leather. Newmarket Leather Co. 302,305; Apr. 11; Serial No. 332,348; published Jan. 24, 1933.
Rose bush plants. L. A. Sackett. 302,312; Apr. 11; Serial No. 332,599; published Jan. 31, 1933.
Seeds, Field. J. G. Peppard Seed Co. 90,374; renewed Feb. 18, 1933.
Seeds, Garden, flower and field. Newday Seeds, Inc. 302,321; Apr. 11; Serial No. 332,137; published Jan. 24, 1933.

CLASS 4

Hones, Razor. S. R. Droescher. 40,136; renewed Apr. 21, 1933.
Hones, Razor. S. R. Droescher. 40,323; renewed May 12, 1933.

CLASS 5

Cement. M. Koehler. 302,365; Apr. 11.
Paste, White. Sears, Roebuck and Co. 302,341; Apr. 11; Serial No. 333,015; published Jan. 17, 1933.

CLASS 6

Digestive tablets. Tailby-Nason Company. 93,046; renewed Aug. 12, 1933.

Insecticides. Corona Chemical Company. 91,758; renewed May 27, 1933.
Liniment, Oil. Dr. J. H. McLean Medicine Company. 91,890–1; renewed June 3, 1933.
Liquid remedy for dandruff. J. L. Needham. 93,012; renewed Aug. 12, 1933.
Medicines and preparations. Dr. J. H. McLean Medicine Company. 91,984; renewed June 10, 1933.
Medicines, preparations, compounds, etc. Dr. J. H. McLean Medicine Company. 91,986; renewed June 10, 1933.
Mouth wash, cold cream, skin tonic, etc., Red. Central States Department Stores, Inc. 302,359; Apr. 11.
Petroleum jelly. Chesebrough Manufacturing Company. 92,534; renewed July 15, 1933.
Pharmaceutical preparations. E. D. Hirschy. 93,354; renewed Sept. 9, 1933.
Remedies for diseases. C. J. Hewlett & Son, Limited. 90,330; renewed Feb. 18, 1933.
Remedy for coughs. J. B. Totten. 93,049; renewed Aug. 12, 1933.
Salt, Granular effervescent. Jads Salts Company. 92,989; renewed Aug. 12, 1933.
Tanning extracts. Champion Fibre Company. 92,319; renewed July 1, 1933.
Water softener. R. S. Stone. 302,363; Apr. 11.

CLASS 8

Pipes, Corncob. Missouri Meerschaum Company. 93,006; renewed Aug. 12, 1933.

CLASS 10

Fertilisers, Manufactured. Swift Fertilizer Works. 40,331; renewed May 12, 1933.

CLASS 12

Weather-strips, Metal. Monarch Metal Weather Strip Company. 90,722; renewed Mar. 18, 1933.

CLASS 13

Casters. M. B. Schenck Company. 90,585; renewed Mar. 4, 1933.
Kettles, Metal. Jacob J. Vollrath Mfg. Co. 92,849; renewed July 29, 1933.
Valves and couplings, Metal gate. Walworth Manufacturing Co. 91,532; renewed May 6, 1933.

CLASS 14

Metal and metal castings and forgings. Sandvikens Jernverks Aktiebolag. 90,845; renewed Mar. 25, 1933.
Steel, Tool. Columbia Tool Steel Company. 302,316; Apr. 11; Serial No. 332,646; published Jan. 24, 1933.
Steel, Tool. Crucible Steel Company of America. 39,792; renewed Feb. 10, 1933.

CLASS 15

Grease and commutator compound. Ohio Grease Lubricant Co. 92,572; renewed July 15, 1933.
Oil, Lubricating. Wm. C. Robinson & Son Co. 90,381; renewed Feb. 18, 1933.
Oils, Lubricating. E. F. Houghton & Co. 90,889; renewed Apr. 1, 1933.

CLASS 16

Paint, paint enamels, stains, etc. Biltrite Motor Equipment Co. Inc. 302,330; Apr. 11; Serial No. 332,219; published Jan. 17, 1933.
Paints, paint colors, white lead, putty, etc. Leon Finch Ltd. 302,307; Apr. 11; Serial No. 332,524; published Jan. 17, 1933.
Paints, paint colors, white lead, putty, etc. North American Paint & Chemical Co. Ltd. 302,353; Apr. 11; Serial No. 321,815; published Jan. 17, 1933.
Paints, paint enamels, stains, etc. Truscon Laboratories. 302,328; Apr. 11; Serial No. 332,241; published Jan. 17, 1933.
Varnishes. Berry Brothers. 92,782; renewed July 29, 1933.

CLASS 17

Cigars. Eby-Loser Company. 302,291; Apr. 11; Serial No. 331,222; published Jan. 24, 1933.

CLASS 21

Electric fittings, receptacles, and parts thereof. Crouse-Hinds Company. 90,295; renewed Feb. 18, 1933.
Electrical supplies. Societe Anonyme le Carbone. 89,624; renewed Jan. 6, 1933.
Plugs, Spark. Champion Spark Plug Company. 92,949–50; renewed Aug. 12, 1933.

CLASS 22

Fish-lines. L. A. Burnham. 92,178; renewed June 24, 1933.
Game. Stylecraft. 302,310–11; Apr. 11; Serial Nos. 332,635–6; published Jan. 31, 1933.
Golf balls. Endicott Johnson Corporation. 302,345; Apr. 11; Serial No. 302,882; published Nov. 4, 1930.
Golf balls. Endicott Johnson Corporation. 302,846; Apr. 11; Serial No. 303,884; published Mar. 24, 1931.
Golf balls. Walgreen Co. 302,802; Apr. 11; Serial No. 327,954; published Jan. 31, 1933.
Golf balls. Walgreen Co. 302,356; Apr. 11; Serial No. 327,952; published Jan. 31, 1933.
Toy paint box kits. W. E. Wilson. 302,318; Apr. 11; Serial No. 332,708; published Jan. 31, 1933.

CLASS 23

Cutlery, machinery, and tools. W. A. Tyzack & Co. 90,762; renewed Mar. 18, 1933.
Machines for applying hoods to bottles. Package Machinery Company. 302,303; Apr. 11; Serial No. 332,381; published Jan. 24, 1933.
Picks, Coal. Ingersoll-Rand Company. 302,366; Apr. 11.
Razors. S. R. Droescher. 40,456–7; renewed May 26, 1933.

CLASS 26

Spectacles, eyeglasses, and parts thereof. Shuron Optical Company. 302,337; Apr. 11; Serial No. 332,788; published Jan. 24, 1933.

CLASS 27

Clocks, watches, and parts thereof. Gorham Manufacturing Company. 302,342; Apr. 11; Serial No. 333,064; published Feb. 7, 1933.

CLASS 29

Brooms. Wesco Foods Company. 302,340; Apr. 11; Serial No. 332,989; published Jan. 24, 1933.

CLASS 31

Chemically prepared substances for filtering purposes. Seitz-Werke Theo. & Geo. Seitz. 92,004; renewed June 10, 1933.
Refrigerators. Tremblett & Davin. 302,287; Apr. 11; Serial No. 331,386; published Jan. 31, 1933.

CLASS 33

Glass shades, globes, and reflectors for artificial illumination. Gleason-Tiebout Glass Company. 93,178; renewed Aug. 26, 1933.

CLASS 35

Belting, hose, and packing. New York Belting and Packing Company. 91,013; renewed Apr. 8, 1933.
Belting, Leather. Baltimore Belting Company. 302,351; Apr. 11; Serial No. 321,093; published Jan. 24, 1933.
Rubber goods. H. O. Canfield Company. 92,396; renewed July 8, 1933.
Tires and inner tubes. Kelly-Springfield Tire Company. 302,343; Apr. 11; Serial No. 333,158; published Jan. 24, 1933.

CLASS 37

Binder for magazines. W. D. Seibert. 302,304; Apr. 11; Serial No. 332,384; published Jan. 17, 1933.
Indicator tabs, or file signals. George B. Graff Co. 302,293; Apr. 11; Serial No. 330,951; published Jan. 17, 1933.
Paper towels. Scott Paper Company. 302,349; Apr. 11; Serial No. 320,990; published Jan. 10, 1933.
Paper, Writing and printing. Huribut Paper Company. 302,326; Apr. 11; Serial No. 332,324; published Jan. 17, 1933.
Pencil. J. Yoho. 302,358; Apr. 11.
Tape, Gummed paper. Gummed Products Company. 302,362; Apr. 11.

CLASS 38

Books, Printed. Blue Ribbon Books, Inc. 302,320; Apr. 11; Serial No. 332,140; published Jan. 17, 1933.
Magazines. Green-Hall, Inc. 302,339; Apr. 11; Serial No. 332,917; published Jan. 17, 1933.
Periodical. Brown & Bigelow. 92,944; renewed Aug. 12, 1933.
Stamps, Trading. Ferry-Hanly Advertising Company. 302,292; Apr. 11; Serial No. 331,178; published Jan. 17, 1933.

CLASS 39

Boots and shoes. Lewis A. Crossett, Inc. 90,685; renewed Mar. 18, 1933.
Boots and shoes. Hurley Shoe Company. 92,427; renewed July 8, 1933.
Boots, shoes, sandals, etc., Rubber. Beacon Falls Rubber Shoe Company. 91,837; renewed June 3, 1933.
Pants, suits, coats, etc. J. C. Lamm. 302,361; Apr. 11.
Suits and overcoats. Davidson & Finkelbrand. 91,651; renewed May 20, 1933.
Undergarments. Diehenn Manufacturing Company. 89,994; renewed Mar. 31, 1933.
Underwear and outer garments, Athletic. Rice-Stix Dry Goods Co. 92,829; renewed July 29, 1933.

CLASS 42

Blankets and carriage sets and robes. W. J. Munro. 302,300; Apr. 11; Serial No. 328,892; published Jan. 17, 1933.
Cotton piece goods. William L. Barrell Company. 302,331; Apr. 11; Serial No. 332,217; published Jan. 17, 1933.
Drapes, curtains, portières and attachable materials. Phoenix Trimming Co. 302,295; Apr. 11; Serial No. 330,828; published Jan. 3, 1933.
Fabrics. Fred Butterfield & Co. 302,329; Apr. 11; Serial No. 332,247; published Jan. 17, 1933.

Pile fabrics. Sidney Blumenthal & Co. Inc. 302,324; Apr. 11; Serial No. 332,082; published Jan. 17, 1933.
Silk and rayon fabrics. L. & E. Stirn, Inc. 302,332; Apr. 11; Serial No. 332,202; published Jan. 17, 1933.

CLASS 43

Yarn. Everlastik, Inc. 302,309; Apr. 11; Serial No. 332,480; published Jan. 24, 1933.
Yarns. Patons & Baldwins, Limited. 302,322; Apr. 11; Serial No. 332,134; published Jan. 17, 1933.
Yarns for knitting and crocheting, Fingering. Ernest B. Dane and Albert J. Meserve. 302,296; Apr. 11; Serial No. 330,810; published Jan. 17, 1933.

CLASS 44

Dental wire. Julius Aderer, Inc. 302,317; Apr. 11; Serial No. 332,673; published Jan. 31, 1933.
Manicure implements. B. Wigder. 302,313; Apr. 11; Serial No. 332,562; published Jan. 31, 1933.
Wax and moulding compounds for dental surgery, filling material, and tooth polishing material. Richter & Hoffmann Harvard Gesellschaft mit beschränkter Haftung. 302,285; Apr. 11; Serial No. 331,624; published Jan. 31, 1933.

CLASS 46

Bean sprouts, water chestnuts, bamboo shoots, etc. La Choy Food Products, Inc. 302,283; Apr. 11; Serial No. 331,646; published Jan. 24, 1933.
Biscuit. National Biscuit Company. 91,011; renewed Apr. 8, 1933.
Biscuit. National Biscuit Company. 91,113; renewed Apr. 15, 1933.
Biscuit. National Biscuit Company. 91,115; renewed Apr. 15, 1933.
Biscuit. National Biscuit Company. 91,227; renewed Apr. 22, 1933.
Biscuit. National Biscuit Company. 92,447; renewed July 8, 1933.
Biscuit. National Biscuit Company. 93,009; renewed Aug. 12, 1933.
Bread. Gnome Bakery, Inc. 302,299; Apr. 11; Serial No. 329,680; published Jan. 24, 1933.
Bread. Haller Baking Company. 302,347; Apr. 11; Serial No. 311,780; published Jan. 24, 1933.
Butter. E. O. Whitford & Co. 38,865; renewed Sept. 2, 1932.
Candy. Europa Sales Corporation. 302,323; Apr. 11; Serial No. 332,088; published Jan. 24, 1933.
Canned fruits and vegetables. J. C. Ainsley Packing Co. 40,391–2; renewed May 19, 1933.
Canned orange and grapefruit sections. Florida Fruit Canners, Inc. 302,352; Apr. 11; Serial No. 321,203; published Jan. 24, 1933.
Canned salmon. Columbia River Packers Association. 93,077–8; renewed Aug. 19, 1933.
Canned sardines. M. Amieux & Cie. 90,774; renewed Mar. 25, 1933.
Canned vegetables. Goldberg, Bowen & Co. 302,289; Apr. 11; Serial No. 331,308; published Jan. 24, 1933.
Cereals, pancake or waffle syrups, and pancake and waffle flour, Breakfast. H. N. Young. 302,286; Apr. 11; Serial No. 331,602; published Jan. 24, 1933.
Chocolate. Moffat Incorporated. 302,319; Apr. 11; Serial No. 332,196; published Jan. 24, 1933.
Cocoa. P. C. Larkin. 92,805; renewed July 29, 1933.
Coffee. C. D. Kenny Co. 302,315; Apr. 11; Serial No. 332,650; published Jan. 24, 1933.
Corn meal, scratch feed, laying mash, etc. Seguin Milling & Power Company. 302,333; Apr. 11; Serial No. 332,439; published Jan. 31, 1933.
Feed, Poultry, dairy, and stock. General Mills, Inc. 302,325; Apr. 11; Serial No. 332,038; published Jan. 24, 1933.
Fish, salads, pickles, etc., Smoked. Caliente Food Products Co. 302,301; Apr. 11; Serial No. 328,837; published Jan. 24, 1933.
Flour and bread made from wheat flour, Wheat. Federal Mill, Inc. 302,298; Apr. 11; Serial No. 330,124; published Jan. 24, 1933.
Flour, Buckwheat. Northern Light Milling Co. 91,686; renewed May 20, 1933.
Flour, Wheat. Victor Flour Mills, Inc. 302,308; Apr. 11; Serial No. 332,501; published Jan. 24, 1933.
Fruits, Fresh citrus. Lindsay Farm Bureau Fruit Assn. 302,368–9; Apr. 11.
Fruits, Fresh citrus. Valencia Heights Orchards, Inc. 302,306; Apr. 11; Serial No. 332,558; published Jan. 24, 1933.
Olive oil. Goldberg, Bowen & Co. 302,297; Apr. 11; Serial No. 330,513; published Jan. 3, 1933.
Olive-oil. Joseph Petrocelli & Company. 93,114; renewed Aug. 19, 1933.
Pickles. Weinrich Pickle Co. 302,314; Apr. 11; Serial No. 332,561; published Jan. 24, 1933.
Pork butts and spiced ham. Agar Packing & Provision Co. 302,364; Apr. 11.
Rice and blended coffee. Young-Mahood Company. 92,858; renewed July 29, 1933.
Sausage. L. Frank & Son Company. 90,525; renewed Mar. 4, 1933.
Seeds for birds. Golden Bird Inc. 302,355; Apr. 11; Serial No. 323,328; published Jan. 24, 1933.
Spaghetti sauce. C. G. Mongelli. 302,327; Apr. 11; Serial No. 332,262; published Jan. 24, 1933.
Syrup, Malt. D. S. Moore. 302,357; Apr. 11.
Tea. Weddle Tea Company. 302,294; Apr. 11; Serial No. 330,941; published Jan. 24, 1933.
Toffee. W. A. Johnson. 302,354; Apr. 11; Serial No. 322,047; published Jan. 24, 1933.

CLASS 48

Beer, Lager. Peter Schoenhofen Brewing Company. 92,371; renewed July 1, 1933.
Malt beverages. Cloverdale Spring Co. 302,344; Apr. 11; Serial No. 333,312; published Jan. 31, 1933.
Malt beverages. K B Beverage Company. 302,338; Apr. 11; Serial No. 332,888; published Jan. 31, 1933.

CLASS 49

Whisky. Slater Rodger & Company Limited. 302,284; Apr. 11; Serial No. 331,997; published Jan. 31, 1933.

CLASS 50

Advertising sign frames. C. Farrow. 302,348; Apr. 11; Serial No. 312,908; published Jan. 24, 1933.
Monument stones, Finished. S. Goldstein Monument Works, Inc. 302,288; Apr. 11; Serial No. 331,371; published Jan. 24, 1933.
Monuments and statues. Burton Preston & Co. 302,360; Apr. 11.
Shoe straighteners. Shu-Saver Co. 302,367; Apr. 11.

LIST OF LABELS

Applekrit. For Apple Jelly. P. H. Boergermann. 41,915; Apr. 11.
Certified Mineral Spring Water. For Mineral Spring Water. Manitowoc Products Co. 41,921; Apr. 11.
Genesee. For Eggs. Genesee County Fresh Egg Producers Association. 41,918; Apr. 11.
Il Primo. For Tonno. Il Primo Olive Oil & Producers Company. 41,920; Apr. 11.
Interiall. For Washable Finish for All Interiors. Backus Paint Products, Inc. 41,913; Apr. 11.
Kwik-Soder. For Solder for Leaky Radiators and Cracks in Blocks and Cylinder Heads. B-B Chemical Works, Inc. 41,912; Apr. 11.
Sea Beach. For Canned Shrimp. Biloxi Canning & Packing Co. 41,914; Apr. 11.
Snowflake Kolor Kloth. For Colored Cotton Piece Goods. M. Snower & Company. 41,922; Apr. 11.
Sturdy Fut. For Boxes. Hoague-Sprague Corporation. 41,919; Apr. 11.
Sweet Cream Butter. For Sweet Cream Butter. Floodwood Cooperative Creamery Association. 41,017; Apr. 11.
Swift's. For Gelatin. Swift and Company. 41,923; Apr. 11.
Swift's Superwhip. For Gelatin. Swift and Company. 41,924; Apr. 11.
Upholsterers', Carpet and Linoleum Mechanics' International Union of North America. For Awnings. Upholsterers', Carpet and Linoleum Mechanics' International Union of North America. 41,925; Apr. 11.
Wart Remedy. For Wart Remedy. E. F. Vaughan. 41,926; Apr. 11.
Windex. For Liquid Cleaner for Vitreous Surfaces. Drackett Chemical Company. 41,916; Apr. 11.

LIST OF PRINTS

Dairylea—Direct From our Farms to You. For Milk, Cream, and Buttermilk. Dairymen's League Co-Operative Association, Inc. 14,131; Apr. 11.
Kester Junior Mender. For Solder. Kaster Solder Company. 14,133; Apr. 11.
Knocord Electric Iron. For Electric Heated Sadirons. S. A. Duvall. 14,132; Apr. 11.
Tube O. For Icing. Tube-O Food Products Co. 14,134; Apr. 11.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 11TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abbe, Edward J., assignor to The Elwell Parker Electric Company, Cleveland, Ohio. Industrial truck. 1,903,431; Apr. 11.

Adey, Horace W., London, England. Radio receiving and transmitting apparatus. 1,903,665; Apr. 11.

Agfa Ansco Corporation. (See Bornmann, Carl A., assignor.)

Akashi, Kaoru, Los Angeles, Calif. Surgical thermometer. 1,903,432; Apr. 11.

Aktiebolaget Papyrus. (See Wendel, Reinhold M., assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Greco, Alfredo, assignor.)

Aktiengesellschaft Brown, Boveri & Cie. (See Roebel, Ludwig, assignor.)

Alexander, Harry H., deceased, Westfield, and A. W. Carroll; H. L. Wheeler, jr., Elizabeth, N. J., executor, assignor to said Harry H. Alexander. Metallurgy of copper. 1,903,497; Apr. 11.

Allen-Bradley Company. (See Wilms, Gustav O., assignor.)

Allen, William D., Kosse, Tex. Automatic nozzle or faucet. 1,903,605; Apr. 11.

Allendorff, Fritz, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Interrupter for ignition devices. 1,903,641; Apr. 11.

Alvey-Ferguson Company, The. (See Walter, J. C., and Vogt, assignors.)

Ambrose, Clyde B. (See Woolums, W. H., and Ambrose, assignors.)

American Lead Pencil Company. (See Reckford, Louis J., assignor.)

American Lurgi Corporation. (See von Girsewald, C. B., Weidmann, and Roesner, assignors.)

Anderson, Carl E., Brooklyn, N. Y. Rotary pump. 1,903,606; Apr. 11.

Andrews, Henry J., Fort Wayne, Ind., assignor, by mesne assignments, to Black Clawson Company, Hamilton, Ohio. Apparatus for reducing paper stock. 1,903,526; Apr. 11.

Andrus, Waddel P. (See Sturgis, Charles E., assignor.)

Annico, Joseph, Renaix, Belgium. Device for treating fabrics by means of a circulating bath. 1,903,585; Apr. 11.

Arnold, Heinrich, Waiblingen, E. Lutscher, Ravensburg, assignors to Robert Bosch Aktiengellschaft, Stuttgart, Germany. Switch control means for vehicle lamps. 1,903,586; Apr. 11.

Art Institute of Chicago, The. (See Smetko, Michael, assignor.)

Atlantic Elevator Company. (See Mechling, William H., assignor.)

Automatic Water Softener Company. (See Dotterweich, Andrew J., assignor.)

Auto Research Corporation. (See Bijur, Joseph, assignor.)

Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y. Moisture-proof covered bag. 1,903,666; Apr. 11.

Avery, True M., Glens Falls, assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y. Transparent covered tray. 1,903,734; Apr. 11.

Badma, Alex, Buffalo, N. Y. Radio receiving system. 1,903,420; Apr. 11.

Bailey Company. (See Bailey, David C., assignor.)

Bailey, David C., assignor to Bailey Company, Inc., Amesbury, Mass. Window glass channels. 1,903,541; Apr. 11.

Band, Charles E., Los Angeles, Calif. Trap-shooting apparatus or layout. 1,903,667; Apr. 11.

Barber, Alfred W., Boonton, N. J. Audion amplifier. 1,903,542; Apr. 11.

Barbour, Perley E. (See Barbour, Walter G., assignor.)

Barbour Walter G., assignor to P. E. Barbour, Quincy, doing business as Barbour Welting Company, Brockton, Mass. Making welting. 1,903,498; Apr. 11.

Barbour Welting Company. (See Barbour, Walter G.)

Barns, Frederick B. (See Laboon, J. F., and Barns.)

Barnhisel, Walter B., Los Angeles, Calif. Straining and pulp making machine. 1,903,527; Apr. 11.

Bartels, Ernst, Bandoeng, Java, Dutch East Indies. Leaf turner. 1,903,727; Apr. 11.

Bateson, Richard G., Princes Risborough, Bucks, England. Hygrometer. 1,903,617; Apr. 11.

Baule, Marie E. A., Chaville, France. Dynamometric log. 1,903,713; Apr. 11.

Beck, Leo L., Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y. White light tube. 1,903,494; Apr. 11.

Beck, Leo L., Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y. White light. 1,903,495; Apr. 11.

Beck, Leo L., Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y. Lighting system. 1,903,496; Apr. 11.

Beck, Leo L., Westfield, N. J., and A. E. Noble, Lynbrook, assignors, by mesne assignments, to General Tube Lights Corporation, New York, N. Y. Gas discharge light. 1,903,493; Apr. 11.

Belts, John S. (See Levin, N. D., and Belts.)

Bendel, Arthur F., Reading, Pa. Feeder and waterer. 1,903,742; Apr. 11.

Bensa, Felice. (See Pongratz, A., and Zinke, assignors.)

Bernhardt, Otto, Cassel-Wilhelmshohe, and E. Vormann, Cassel, Germany. Top member for fastening illuminating bodies to ceilings. 1,903,421; Apr. 11.

Bertin, Charles F. M. (See Marti, P. A. D., Bertin, and Nandillon.)

Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Lubricating installation and apparatus. 1,903,499; Apr. 11.

Birbeck, Francis V., Aromas, Calif. Crate. 1,903,560; Apr. 11.

Bjering, Helge, Buenos Aires, Argentina. Carburetor. 1,903,433; Apr. 11.

Black Clawson Company. (See Andrews, Henry J., assignor.)

Black & Decker Manufacturing Company, The. (See Preston, Henry C., assignor.)

Blair, Russell M. (See Jarvis, K. W., and Blair.)

Bogdany, Estanislao. (See Gaston, A., and Bogdany.)

Booth, William N., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Vehicle wheel. 1,903,567; Apr. 11.

Bornmann, Carl A., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Combined view finder and catch for cameras. 1,903,434; Apr. 11.

Bosch, Robert, Aktiengesellschaft. (See Allendorff, Fritz, assignor.)

Bosch, Robert, Aktiengesellschaft. (See Arnold, H., and Lutscher, assignors.)

Boyer, Frederick G. L., Dayton, Ohio. Air dashpot. 1,903,435; Apr. 11.

Briggs Manufacturing Company. (See Ross, Frederick N., assignor.)

Brintnall, Frank W., Detroit, Mich., assignor, by mesne assignments, to National Automotive Fibres, Inc., Wilmington, Del. Plait forming apparatus. 1,903,618; Apr. 11.

Brock, Jack F., Scio, Oreg. Automobile heater. 1,903,653; Apr. 11.

Brown, Edmund, Palmyra, N. J. Manufacture of pipe fittings. 1,903,436; Apr. 11.

Buchel, Jules, assignor of one-half to the Estate of C. Louque, one-twentieth to L. H. Rayner, and one-twentieth to J. F. Dupuy, New Orleans, La. Refrigerating device. 1,903,437; Apr. 11.

Bulls Eye Road Marker Company. (See Woolums, W. H., and Ambrose, assignors.)

Bunting Brass & Bronse Company, The. (See Yager, G. F., and Heath, assignors.)

Burney, Charles D., Westminster, England. Motor road vehicle. 1,903,693; Apr. 11.

Burney, Charles D., Westminster, England. Motor road vehicle. 1,903,694; Apr. 11.

Byerlein, Arthur A., Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio. Press. 1,903,438; Apr. 11.

Byfield, Ernest L., assignor to College Inn Food Products Company, Chicago, Ill. Dispensing container. Des. 89,601; Apr. 11.

Cain, John W., Chicago, Ill. Window wiper. 1,903,439; Apr. 11.

Calcott, William S., Penns Grove, F. B. Downing, Carneys Point, and D. H. Powers, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Synthetic rubber and its manufacture. 1,903,500; Apr. 11.

Calcott, William S., Penns Grove, N. J., A. S. Carter, Wilmington, Del., and F. B. Downing, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del. Hydrogenation of hydrocarbons. 1,903,501; Apr. 11.

Callsen, Jürgen, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Manufacture of halogen alcohols. 1,903,587; Apr. 11.

Cambridge, Walter R., Fort Bidwell, Calif. Helicopter device. 1,903,440; Apr. 11.

Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Air brake valve housing. 1,903,441; Apr. 11.
Campbell, Donald. (See Laboon, J. F., and Barns, assignors.)
Campbell, Malcolm D., Detroit, Mich. Optical perimeter. 1,903,502; Apr. 11.
Campbell, William S. (See Dugan, F. F., and Campbell.)
Canfield, Leo D., assignor to Superior Felt & Bedding Company, Chicago, Ill. Mattress. 1,903,619; Apr. 11.
Carbide & Carbon Chemicals Corporation. (See Cox, H. L., and Greer, assignors.)
Carroll, Alexander W. (See Alexander, H. H., and Carroll.)
Carter, Albert S. (See Calcott, W. S., Carter, and Downing.)
Carter, Russell, Washington, D. C. Cracking and distilling fuels. 1,903,749; Apr. 11.
Central Engineering & Sales Company. (See Uhri, William C., jr., assignor.)
Chamberlain, Alfred J., Milwaukee, Wis. Dispensing container. 1,903,442; Apr. 11.
Chance Brothers and Co. Limited. (See Spaink, Johann H. A., assignor.)
Chemische Fabrik Kalk Gesellschaft mit beschränkter Haftung. (See Oehme, Hermann, assignor.)
Cheney Brothers. (See Mouton, Paul, assignor.)
Cheru, Marcelo. (See Frias, P. J., Jones, and Cheru.)
Chobert, Jacques F. G., St.-Etienne, France. Adjustable turnbuckle. 1,903,695; Apr. 11.
Claude, Georges, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y. Luminescent tube. 1,903,492; Apr. 11.
Claude Neon Lights, Inc. (See Claude, Georges, assignor.)
Climax Motorenwerke und Schiffswerft Linz A. G. (See Mandler, Eugen, assignor.)
College Inn Food Products Company. (See Byfield, Ernest L., assignor.)
Columbus Dental Manufacturing Company, The. (See Gillespie, Robert H., assignor.)
Conn, Wallace T., Washington, D. C., assignor to the Government of the United States. Extracting oil and moisture from "fish press cake." 1,903,503; Apr. 11.
Container Corporation of America. (See Keller, Ira C., assignor.)
Continental Can Company. (See Kratz, Henry, assignor.)
Continental Divoo Company. (See Maurer, E. R., and Ferguson, assignors.)
Continental Motors Corporation. (See Meyer, Andre J., assignor.)
Cox, Henry L., South Charleston, and P. S. Greer, Charleston, W. Va., assignor to Carbide & Carbon Chemicals Corporation. Preservation of ethyl ether. 1,903,642; Apr. 11.
Cretcher, Leonard H. (See Karns, G. M., and Cretcher.)
Curle, Charles W., San Francisco, Calif. Combined slug gauge and thickness trimmer. 1,903,528; Apr. 11.
Curtis, Katheryn B. (See Partrick, M. H., and Curtis.)
Deck, Howard S., Dover, N. J. Apparatus for melting explosives. 1,903,504; Apr. 11.
Decker, George, assignor to The Philad Company, Cleveland, Ohio. Apparatus for hair waving. 1,903,743; Apr. 11.
Demag Aktiengesellschaft. (See Heetkamp, Heinrich, assignor.)
Dethier, Joseph, Brussels, Belgium. Regulator for winding on installations. 1,903,588; Apr. 11.
Deutsch, Hans, assignor to the Firm Alex Friedmann, Vienna, Austria. Preheater or economizer for locomotives. 1,903,696; Apr. 11.
Deutsch, Hans, assignor to Firm: Alex Friedmann, Vienna, Austria. Boiler feed apparatus with exhaust steam preheater. 1,903,697; Apr. 11.
Diamond Power Specialty Corporation. (See Snow, Norman L., assignor.)
Diamond Power Specialty Corporation. (See Snow, N. L., and Thomas, assignors.)
Dobson, William A., Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y. Typewriting machine. 1,903,505; Apr. 11.
Doering, Albert L., assignor to J. S. Thorn Company, Germantown, Pa. Roof deck. 1,903,543; Apr. 11.
Dolmage, Mihran M., Washington, D. C. Negative inductance. 1,903,610; Apr. 11.
Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Water softening apparatus. 1,903,611; Apr. 11.
Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Water softening apparatus. 1,903,612; Apr. 11.
Dotterweich, Andrew J., assignor to Automatic Water Softener Company, Pittsburgh, Pa. Water softening apparatus. 1,903,613; Apr. 11.
Dowald, Eugen, Wuppertal-Elberfeld, Germany. Spindle for wire covering machines. 1,903,698; Apr. 11.
Downing, Frederick B. (See Calcott, W. S., Carter, and Downing.)
Downing, Frederick B. (See Calcott, W. S., Downing, and Powers.)
Drzewiecki, Joseph, Detroit, Mich. Vehicle wheel and mounting therefor. 1,903,443; Apr. 11.
Dugan, Ferdinand F., and W. S. Campbell, Akron, Ohio. Display rack. Des. 89,585; Apr. 11.
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Carter, and Downing, assignors.)
Du Pont, E. I., de Nemours & Company. (See Calcott, W. S., Downing, and Powers, assignors.)
Dupuy, Joseph F., et al. (See Buchek, Jules, assignor.)
Dux, Walter. (See Scheiber, Johannes, assignor.)
Earle, Theodore, Denver, Colo. Milling machine. 1,903,444; Apr. 11.
Edwards, William C., Battle Creek, Mich. Tire pressure responsive switch. 1,903,589; Apr. 11.
Ehresmann, Adam, and L. Streibel, Karlsruhe, Germany. Soling machine. 1,903,422; Apr. 11.
Ellen, Samuel. (See Zullig, Emil G., assignor.)
Elwell Parker Electric Company, The. (See Abbe, Edward J., assignor.)
Ernst, Clemens J., Minster, Ohio. Hose and pipe coupling. 1,903,445; Apr. 11.
Esslinger, Frederick J., Petroleum, Hubbard Township, Trumbull County, Ohio, assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa. Weldrod coating. 1,903,620; Apr. 11.
Etablissements Ed. Jaeger. (See Planiol, René J. H., assignor.)
Evans Case Company. (See Lawrence, Cecil H., assignor.)
Farnsworth, Hiland R., assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Wire guide. 1,903,506; Apr. 11.
Favorite, William P., and H. A. Moler, Detroit, Mich. Traffic marker. Des. 89,606; Apr. 11.
Fehrle, Alfred. (See Streitwolf, K., Fehrle, and Herrmann.)
Ferguson, Donald M. (See Maurer, E. R., and Ferguson.)
Ferro Machine & Foundry Company, The. (See Hinz, Walter, assignor.)
Finch, Fred E., Reading, Pa. Count checking device for packaged coins. 1,903,621; Apr. 11.
Firestone, David, Canton, Ohio. Support for shade rollers and curtain and drapery rods. 1,903,728; Apr. 11.
Firth, David, assignor to Marvel Carburetor Company, Flint, Mich. Automatic control of exhaust gases for mixture heating. 1,903,446; Apr. 11.
Flintkote Corporation, The. (See Limburg, Hyman, assignor.)
Florman, Irving, New York, N. Y. Cigar lighter. 1,903,729; Apr. 11.
Fontaine, Eugene H., Pittsburgh, Pa. Machine for making chaplets and the like. 1,903,668; Apr. 11.
Forges & Ateliers de Constructions Electriques de Jeumont. (See Letrilliart, Pierre, assignor.)
Forgrove Machinery Company Limited, The, et al. (See Grover, Frederick, assignor.)
Foster, Claud H., Wickliffe, Ohio. Shock absorber. 1,903,423; Apr. 11.
Foster, Claud H., Wickliffe, Ohio. Shock absorber. 1,903,447; Apr. 11.
Frias, Pastor J., C. Jones, and M. Cheru, Buenos Aires, Argentina. System for the transmission of rotary motion. 1,903,714; Apr. 11.
Friedmann, Alex, the Firm. (See Deutsch, Hans, assignor.)
Frolander, Frank C., Elizabeth, N. J., assignor to Mergenthaler Linotype Company. Printing unit. 1,903,507; Apr. 11.
Furtney, John E., Detroit, Mich. Battery. 1,903,448; Apr. 11.
Garr, Joseph M., Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind. Voting machine. 1,903,544; Apr. 11.
Gastón, Angela, and Estanislao Bogdány, Barcelona, Spain. Purification of lubricating oil. 1,903,731; Apr. 11.
Gath, Kenneth E., Harrisburg, Pa. Flight indicator. 1,903,449; Apr. 11.
General Aniline Works, Inc. (See Schweitzer, Hugo, assignor.)
General Machinery Corporation. (See Byerlein, Arthur A., assignor.)
General Tube Lights Corporation. (See Beck, Leo L., assignor.)
General Tube Lights Corporation. (See Beck, L. L., and Noble, assignors.)
Gifford-Wood Company. (See Peebles, Frank B., assignor.)
Gillespie, Robert H., Little Rock, Ark., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio. Divisible tooth. 1,903,730; Apr. 11.
Glass, Leo, Brooklyn, N. Y. Bracelet. Des. 89,586; Apr. 11.
Goldsbrough, Robert E., Slough, England. Production of benzines, benzenes, and other hydrocarbons from coal tars and oils. 1,903,568; Apr. 11.
Goodman, Leslie B., Port Arthur, Tex. Cigarette container. 1,903,450; Apr. 11.
Gordon, Le-Roy V., Cleveland, and L. L. Williams, Cleveland Heights, Ohio. Upholstery pad. 1,903,424; Apr. 11.
Gordon, Le-Roy V., Cleveland, Ohio. Padding guide for sewing machines. 1,903,425; Apr. 11.
Gottlieb, Joseph, Jersey City, N. J. Clock case. Des. 89,587; Apr. 11.
Government of the United States. (See Conn, Wallace T., assignor.)
Grant, John A., Atlanta, Ga. Headlight. 1,903,417; Apr. 11.
Greco, Alfredo, Zurich, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Protective system for electric current rectifiers. 1,903,451; Apr. 11.

Greene, Curtis, San Diego, Calif. Yieldable door stop and catch. 1,903,669; Apr. 11.
Greer, Paul S. (See Cox, H. L., and Greer.)
Gresham, F. M. (See Robertson, Ivy B., assignor.)
Grimn, William M., assignor to Wayne Company, Fort Wayne, Ind. Fluid dispensing apparatus. Des. 89,588; Apr. 11.
Grimth, Earl G., Huntington Park, Calif. Box delivery device. 1,903,561; Apr. 11.
Grigsby-Grunow Company. (See Taylor, Joseph, assignor.)
Grison, Joseph, New York, N. Y. Air conditioning device. 1,903,452; Apr. 11.
Grover, Frederick, assignor to The Forgrove Machinery Company Limited, Leeds, and John Mackintosh & Sons Limited, Halifax, England. Mechanism for wrapping machines. 1,903,670; Apr. 11.
Groves, E. E., et al. (See Tatlock, Roberts, assignor.)
Gruman, Horace F., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Stitch forming mechanism for sewing machines. 1,903,590; Apr. 11.
Grumbach, Louis J., et al., executors and trustees. (See Reckford, Louis J.)
Gunn, Earl G., Racine, Wis. Shock absorber. 1,903,453; Apr. 11.
Gyrorector G. m. b. H., the Firm. (See Stöhr, Erich, assignor.)
Hacket, Ralph P., Allentown, Pa. Attachment for sewing machines. 1,903,671; Apr. 11.
Haimbaugh, Raymond C., and A. F. Hoesel, assignors to Peerless Ice Machine Company, Chicago, Ill. Flooded type refrigeration unit. 1,903,591; Apr. 11.
Hampton, Alvah T., Coulee, Wash. Current motor. 1,903,545; Apr. 11.
Harris, De Witt C., Lakeland, Fla. Record carrying or memorandum device. 1,903,454; Apr. 11.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Loading machine. 1,903,672; Apr. 11.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Loading machine. 1,903,673; Apr. 11.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Coal loader. 1,903,674; Apr. 11.
Hauge, Andrew, Michigan City, Ind., assignor to Sullivan Machinery Company. Loading machine. 1,903,675; Apr. 11.
Heald Machine Company, The. (See Heald, R. N., and Taylor, assignors.)
Heald, Roger N., and E. M. Taylor, assignors to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,903,562; Apr. 11.
Heath, Oliver J. (See Yager, G. F., and Heath.)
Heavey, Thomas J., U. S. Army, Fort Riley, Kans. Mounting for machine guns. 1,903,508; Apr. 11.
Heetkamp, Heinrich, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Rolling mill for widening out tubes. 1,903,676; Apr. 11.
Heinrich, Walter A., St. Louis, Mo. Electric switch. 1,903,455; Apr. 11.
Heltzel, John N., Warren, Ohio. Concrete joint. 1,903,456; Apr. 11.
Henderson, William F., assignor to The Visking Corporation, Chicago, Ill. Producing cellulose articles. 1,903,622; Apr. 11.
Herrmann, Walter. (See Streitwolf, K., Fehrle, and Herrmann.)
Heusser, Julius, and L. Tulgren, Clear Lake, Wis. Card deck holder. 1,903,744; Apr. 11.
Heyer, Benjamin F. W., Belleville, N. J. Combined charging and testing apparatus and stock stand. Des. 89,589; Apr. 11.
Hinz, Walter, East Cleveland, assignor to The Ferro Machine & Foundry Company, Cleveland, Ohio. Valve. 1,903,426; Apr. 11.
Hoesel, Anthony F. (See Haimbaugh, R. C., and Hoesel.)
Hojda, Henry, Moravska-Ostrava, Czechoslovakia. Parachute. 1,903,563; Apr. 11.
Holmes, Morris P., Claremont, N. H., assignor to Sullivan Machinery Company. Drilling mechanism. 1,903,648; Apr. 11.
Holstein, Adolph M., Syracuse, N. Y. Frictionally securing two parts together. 1,903,457; Apr. 11.
Hookless Fastener Company. (See Perrault, Joseph E., assignor.)
Hookless Fastener Company. (See Smith, Roscoe J., assignor.)
Horn, Emil A., Jamaica, assignor to Russell & Stoll Company, Inc., New York, N. Y. Electrical connecter. 1,903,715; Apr. 11.
Howe, Walter S., Ontario, Calif. Garbage holder for sinks. 1,903,628; Apr. 11.
Howland, Herbert H., Jeffersonville, Ind. Combined electric lamp and picture frame. Des. 89,590; Apr. 11.
Hunt, Franklin B., assignor to The Liquid Carbonic Corporation, Chicago, Ill. Refrigerating system. Re18,795; Apr. 11.
Hurley, Roy T., Dobbs Ferry, assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Motor fuel. 1,903,624; Apr. 11.
Hutchison, Miller R., jr., East Orange, N. J., assignor to Pioneer Instrument Company, Incorporated, New York, N. Y. Logarithmic gearing. 1,903,677; Apr. 11.
Imperial Chemical Industries Limited. (See Smith, Christopher C., assignor.)
Inland Steel Company. (See Sykes, Wilfred, assignor.)
International Pavement Company, The. (See Morrison, Robert F., assignor.)
Iodine Educational Bureau, Inc. (See Karns, G. M., and Cretcher, assignors.)
Jacobsson, Fritz M., assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden. Integrating meter for graded measurements. 1,903,418; Apr. 11.
Jameson, Charles V., Chicago, Ill. Scalp treating device. 1,903,646; Apr. 11.
Jarvis, Kenneth W., Cincinnati, and E. M. Blair, Norwood, Ohio. Electron tube. 1,903,569; Apr. 11.
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jeffrey Manufacturing Company, The. (See Levin, N. D., and Belts, assignors.)
Jensen, Louis, assignor to United Autographic Register Co., Chicago, Ill. Duplicating machine. 1,903,625; Apr. 11.
Johansson, Carl A., Gottenborg, Sweden. Air operated vehicle control. 1,903,699; Apr. 11.
Johnsen, Finn, Fuur, Denmark. Remedy for combating plant diseases and for the protection of plants against attacks from fungi and insects. 1,903,626; Apr. 11.
Johnson, Frank L., Akron, Ohio. Collapsible core. 1,903,458; Apr. 11.
Johnsson, Emil T., Chicago, Ill. Controlling apparatus. 1,903,459; Apr. 11.
Jones, Clemente. (See Frias, P. J., Jones, and Cheru.)
Jones, Harry W., Webster Groves, Mo., assignor to Sanford Investment Company, Wilmington, Del. Railway car. 1,903,509; Apr. 11.
Jones, Walter L., East Tawas, Mich. Antiskid device. 1,903,460; Apr. 11.
Källe, Torsten, Saffe, Sweden. Moisture indicator for paper making machines and pulp collecting machines and in similar apparatus. 1,903,716; Apr. 11.
Karns, George M., and L. H. Cretcher, Pittsburgh, Pa., assignor to Iodine Educational Bureau, Inc. Disinfecting solution. 1,903,614; Apr. 11.
Kaufmann, Joseph, Cleveland, Ohio. Combined clearer, waxer, and tension device. 1,903,546; Apr. 11.
Keller, Adolph, St. Louis, Mo. Combination table top and rotatable tray. 1,903,419; Apr. 11.
Keller, Ira C., Winnetka, assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill. Shipping and display box. 1,903,461; Apr. 11.
Kelly, William W., Cleveland Heights, Ohio, assignor to The Nut Products Company. Toasting and storage cabinet. 1,903,547; Apr. 11.
Kelsey-Hayes Wheel Corporation. (See Booth, William N., assignor.)
Klös, Heinrich. (See Mietzsch, F., and Klös.)
Knox, William A., Los Angeles, Calif. Headlight attachment for automobiles. 1,903,462; Apr. 11.
Koch, Frank, Sebewaing, Mich. Fish elevator. 1,903,627; assignor.)
Koch, Lydia B. (See Oliver, Ruth, assignor.)
Koch, William C., Cheviot, Ohio. Lighting fixture. 1,903,463; Apr. 11.
Konans, Herman J., Grantwood, N. J. Collapsible tube. 1,903,464; Apr. 11.
Koppitz, Carl G., and H. B. Massey, assignors to Railway and Industrial Engineering Company, Greensburg, Pa. Electric switch. 1,903,643; Apr. 11.
Kratz, Henry, Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y. Sheet feeding device. 1,903,678; Apr. 11.
Kreis, Harry G., Cleveland, Ohio. Slide hammer. 1,903,548; Apr. 11.
Kremmling, Aribert, Hemersleben near Oschersleben, Germany. Apparatus for depositing plastic or semifluid substances. 1,903,570; Apr. 11.
Krieger, Ernest, Winnipeg, Manitoba, Canada. Pipe washing and cleanout pump. 1,903,735; Apr. 11.
Kruse, Hermann, Bremen-Sebaldsbruck, Germany. Nailing machine. 1,903,700; Apr. 11.
Kubista, Charles L., Le Sueur, Minn. Ink fountain or dip well. 1,903,465; Apr. 11.
Kurckchee, David, Schenectady, N. Y. Bed spring. 1,903,679; Apr. 11.
Laboon, John F., Pittsburgh, Pa., and F. B. Barns, New York; said Barns assignor to D. Campbell, New York, N. Y. Plant construction. 1,903,510; Apr. 11.
Lacell, Elisa, executrix. (See Lacell, Harold G.)
Lacell, Harold G., deceased; by Elisa Lacell, executrix, Finchley, London, England. Dehydration of Magnesium chloride. 1,903,592; Apr. 11.
Landrum, John P., assignor of one-half to P. R. McCormack, Birmingham, Ala. Airplane propeller. 1,903,628; Apr. 11.
Lange, Aage L., Copenhagen, Denmark. Heat consumption meter. 1,903,717; Apr. 11.
Lasster, John J., St. Albans, N. Y., assignor to George T. Ritchings, Maplewood, N. J. Nonreusable coupling. 1,903,736; Apr. 11.
Lawler, James J., Mount Vernon, N. Y. Automatic humidifying apparatus. 1,903,745; Apr. 11.
Lawrence, Cecil H., Attleboro, assignor to Evans Case Company, North Attleboro, Mass. Hand mirror. Des. 89,602; Apr. 11.
Leatherless Plunger Pump Corporation. (See Ruthven, Albert F., assignor.)
Lesage, Aaron D. (See Shreffler, E. O., and Lesage.)

Letrilliart, Pierre, assignor to Forges & Ateliers de Constructions Electriques de Jeumont, Paris, France. Alternating current generator. 1,903,680; Apr. 11.
Levin, Nils D., and J. S. Belts, assignors to The Jeffrey Manufacturing Company, Columbus, Ohio. Electric equipment for mining machines. 1,903,701; Apr. 11.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Electrical control system for mining machinery. 1,903,702; Apr. 11.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Electric equipment for mining machines. 1,903,703; Apr. 11.
Levin, Nils D., and J. S. Belts, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Electric equipment for mining machines. 1,903,704; Apr. 11.
Lewis Invisible Stitch Machine Company. (See Gruman, Horace F., assignor.)
Limburg, Hyman, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass. Purifying sulphonic acids. 1,903,466; Apr. 11.)
Linn, Holman H., assignor to The Linn Manufacturing Corporation, Morris, N. Y. Vehicle brake. 1,903,629; Apr. 11.
Linn Manufacturing Corporation, The. (See Linn, Holman H., assignor.)
Liquid Carbonic Corporation, The. (See Hunt, Franklin B., assignor.)
Lively, James M., Gold Hill, Oreg. Smelting process and apparatus. 1,903,733; Apr. 11.
Locreille, Claude, Fauquez, Belgium. Process and apparatus for printing glass sheets. 1,903,718; Apr. 11.
Louque, Charles, Estate of, et al. (See Buchel, Jules, assignor.)
Lowitz, Frank. (See Richter, M. N., and Lowitz.)
Lutscher, Eugen. (See Arnold, H., and Lutscher.)
Luts, William H., San Francisco, Calif. Necktie support. 1,903,746; Apr. 11.
MacClatchie, John W., Compton, Calif. Protector for drill pipe and the like. 1,903,467; Apr. 11.
Mackintosh, John, & Sons Limited, et al. (See Grover, Frederick, assignor.)
Mandler, Eugen, assignor to the Firm Climax Motorenwerke und Schiffswerft Linz A. G., Vienna, Austria. Multicylinder internal combustion engine. 1,903,719; Apr. 11.
Manning, Joseph A., Pawtucket, R. I. Eye mounting for dolls. 1,903,549; Apr. 11.
Marti, Pierre, A D., Montbeliard, and C. F. M. Bertin, and A. E. G. Nandillon, Toulon, France. Emitting or receiving vibration device for submarine sounding. 1,903,720; Apr. 11.
Martin Brothers Electrical Company, The. (See Martin, Wendell L., assignor.)
Martin, Karl, Rathenow, Germany. Eyeglasses. 1,903,593; Apr. 11.
Martin, Wendell L., assignor to The Martin Brothers Electric Company, Cleveland, Ohio. Drier. 1,903,427; Apr. 11.
Marvel Carbureter Company. (See Firth, David, assignor.)
Massey, Hemsley B. (See Koppit Z, C. G., and Massey.)
Matt, Peter P., St. Louis, Mo. Shade sewing device. 1,903,468; Apr. 11.
Matter, Oskar, Cologne Marienburg, Germany. Preparing explosive charges. 1,903,594; Apr. 11.
Maurer, Edwin R., Detroit, and D. M. Ferguson, Highland Park, assignors, by mesne assignments, to Continental-Divco Company, Detroit, Mich. Drop center delivery vehicle. 1,903,529; Apr. 11.
McCarthy, John J., Malden, Mass. Engine. 1,903,511; Apr. 11.
McCormack, Perry R. (See Landrum, John P., assignor.)
McDougall Company. (See Miller, Leo L., assignor.)
McLaughlin, William I., Piedmont, and R. G. Wedemeyer, Palo Alto, said Wedemeyer assignor to Standard Oil Company of California, San Francisco, Calif. Instrument for recording inclination. 1,903,512; Apr. 11.
McManaman, Patrick J., Cleveland, Ohio. Electric switch. 1,903,428; Apr. 11.
McTwiggan, James N., U. S. Navy. Mercury contact switch. 1,903,513; Apr. 11.
Meader, Albert W., assignor of one-half to R. Mitchell, Detroit, Mich. Upholstery attaching device. 1,903,469; Apr. 11.
Mechling, William H., Whitemarsh, assignor to Atlantic Elevator Company, Philadelphia, Pa. Elevator braking system and actuating the same. 1,903,550; Apr. 11.
Meinderama, Wigger, Wassenaar, Netherlands. Fin propeller. 1,903,551; Apr. 11.
Mendel, William, Beverly, N. J. Making articles from celluloid and the like. 1,903,530; Apr. 11.
Merchant, Paul W., Port Arthur, Tex. Mixing device. 1,903,429; Apr. 11.
Mergenthaler Linotype Company. (See Frolander, Frank C., assignor.)
Merliss, Reuben, Detroit, Mich. Syringe. 1,930,681; Apr. 11.
Merriman, Henry H., Kalamazoo and F. W. Piché, Detroit, Mich. Wrench. 1,903,514; Apr. 11.
Merritt, Andrew J., Walseburg, Colo. Crate. 1,903,722; Apr. 11.
Meston, Archibald F., Middlesex, N. J., assignor to Research Corporation, New York, N. Y. Concentrated field precipitator. 1,903,644; Apr. 11.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Internal combustion engine. 1,903,531; Apr. 11.
Meyer, Andre J., assignor to Continental Motors Corporation, Detroit, Mich. Engine. 1,903,532; Apr. 11.
Meyer, Friedrich W., Vienna, Austria. Chain guiding device for portable motor tree saws. 1,903,571; Apr. 11.
Mietzsch, Fritz and H. Klöe, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Making 8-hydroxyquinoline compounds. 1,903,470; Apr. 11.
Miller, Leo L., assignor to McDougall Company, Frankfort, Ind. Kitchen cabinet. 89,591; Apr. 11.
Milnes, Albert V., West New Brighton, N. Y. Burial vault. 1,903,747; Apr. 11.
Minor, John C., New Canaan, Conn., assignor to William Wharton, Jr., & Company, Incorporated, Easton, Pa. Manufacture of gas cylinders. 1,903,630; Apr. 11.
Mitchell, Robert. (See Meader, Albert W., assignor.)
Moler, Harry A. (See Favorite, W. P., and Moler.)
Monroe, William S., Chicago, Ill. Boiler. 1,903,515; Apr. 11.
Moore, Emma E., Warren, Ohio. Pie sealer. 1,903,682; Apr. 11.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Motor vehicle. 1,903,595; Apr. 11.
Moorhouse, Alfred, assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,607; Apr. 11.
Morrison, Alfred J., Denver, Colo. Collapsible table. 1,903,631; Apr. 11.
Morrison, Robert F., Yonkers, assignor to The International Pavement Company, New York, N. Y. Apparatus for and method of treating asphalt blocks. 1,903,741; Apr. 11.
Moscato, Francis, Central Park, N. Y. Safety switch. 1,903,737; Apr. 11.
Moto Meter Gauge & Equipment Corporation. (See Hurley, Roy T., assignor.)
Motor Products Corporation. (See Pritchard, William S., assignor.)
Mouton, Jacques, administrator. (See Mouton, Paul.)
Mouton, Paul, deceased, by J. Mouton, administrator, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 89,603; Apr. 11.
Mouton, Paul, deceased, by J. Mouton, administrator, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric. Des. 89,604; Apr. 11.
Mueller, William N., Fredericksburg, Iowa. Air forcing apparatus for air furnaces. 1,903,552; Apr. 11.
Munn Corporation, The. (See Munn, Elvin R., assignor.)
Munn, Elvin R., Humansville, Mo., assignor to The Munn Corporation. Pump. 1,903,721; Apr. 11.
Munro, Alfred J., et al. (See Stocks, Harry B., assignor.)
Munson, Harry, Wantagh, assignor to Van Kannel Revolving Door Company, New York, N. Y. Silencer and regulator. 1,903,738; Apr. 11.
Murphy, Mortimer T., Imlay, Nev. Fluid heat exchange system. 1,903,471; Apr. 11.
Naamlooze Vennootschap; Vennootschap tot Exploitatie van Strijk-en Persmachine Octrooien (V. E. S. P. O.) (See Tol, Hermanus F., assignor.)
Nandillon, Albert E. G. (See Marti, P. A. D., Bertin, and Nandillon.)
National Automotive Fibres, Inc. (See Brintnall, Frank W., assignor.)
Nerger, Hans J., assignor to The Schwarzenbach Huber Co., New York, N. Y. Textile fabric or the like. Des. 89,592; Apr. 11.
New York Air Brake Company, The. (See Campbell, Charles A., assignor.)
Nikaido, Yasujuro, Bay City, Mich. Production of carbon of high activity and covering power. 1,903,705; Apr. 11.
Noble, Aubrey E. (See Beck, L. L., and Noble.)
Nut Products Company, The. (See Kelly, William W., assignor.)
Nute, George A., Sommerville, assignor of one-half to David H. Young, Willimansett, Mass. Pedestal for traffic signals or the like. 1,903,683; Apr. 11.
O. & S. Bearing Co. (See Skillman, Newton, assignor.)
O'Brien Varnish Company. (See Reece, Floyd M., assignor.)
Oehme, Hermann, Cologne, assignor to Chemische Fabrik Kalk Gesellschaft mit beschränkter Haftung, Cologne-Kalk, Germany. Extraction of ethylene glycol or its homologues. 1,903,472; Apr. 11.
Oestricher, Henry G., Los Angeles, Calif. Voltage amplifier. 1,903,654; Apr. 11.
Older, Clifford, Wilmette, Ill. Expansion joint, method and apparatus for the installation of the same. 1,903,608; Apr. 11.
Oliver, Ruth, assignor to L. B. Koch, New York, N. Y. Paper container. 1,903,632; Apr. 11.
Olson, Samuel, & Company. (See Olson, Samuel, assignor.)
Olson, Samuel, Oak Park, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Remote control conveyer switching system. 1,903,473; Apr. 11.
Oppenheim, Charles, Chicago, Ill. Watchcase. Des. 89,593; Apr. 11.

Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Mining apparatus. 1,903,649; Apr. 11.
Packard Motor Car Company. (See Moorhouse, Alfred, assignor.)
Packard Motor Car Company. (See Vincent, Jesse G., assignor.)
Page, Albert E., Brooklyn, assignor to Scott & Williams, Incorporated, New York, N. Y. Knitted fabric. 1,903,706; Apr. 11.
Palazzo, Fortunato. (See Palazzo, Francesco C. and F.)
Palazzo, Francesco C. and F., Florence, Italy. Simultaneous production of precipitated dicalcium phosphate and nitrates. 1,903,684; Apr. 11.
Palmer, Frank C., West Palm Beach, Fla. Mechanical friction brake ensemble. 1,903,723; Apr. 11.
Paper & Textile Company, The. (See Farnsworth, Hiland R., assignor.)
Parel, Karl, assignor to Telephon- und Telegraphenfabriks-A. G. Kapsch U. Söhne, Vienna, Austria. Telephone. 1,903,707; Apr. 11.
Parkin, Theodore D., et al. (See Stocks, Harry B., assignor.)
Parsons Paper Company. (See Perkins, Lester C., assignor.)
Partrick, Marion H., and K. B. Curtis, Tampa, Fla. Shredding palmetto and product produced thereby. 1,903,553; Apr. 11.
Peebles, Frank B., assignor to Gifford-Wood Company, Hudson, N. Y. Gate. 1,903,633; Apr. 11.
Peerless Ice Machine Company. (See Haimbaugh, R. C., and Hoesel, assignors.)
Peoples Voting Machine Corporation. (See Garr, Joseph M., assignor.)
Perkins, Lester C., assignor to Parsons Paper Company, Holyoke, Mass. Making paper. 1,903,655; Apr. 11.
Perrault, Joseph E., Watertown, Mass., assignor, by mesne assignments, to Hookless Fastener Company. Manipulating multiple fasteners. Re18,793; Apr. 11.
Petroleum Iron Works Co. of Ohio, The. (See Esslinger, Frederick J., assignor.)
Philad Company, The. (See Decker, George, assignor.)
Phillips Petroleum Company. (See Turner, Barry F., assignor.)
Piché, Frank W. (See Merriman, H. H., and Piché.)
Pioneer Instrument Company. (See Hutchinson, Miller R., jr., assignor.)
Planiol, René J. H., Paris assignor to Etablissements Ed. Jaeger, Levallois-Perret, France. Speed indicator. 1,903,685; Apr. 11.
Pongratz, Alfred, and A. Zinke, Graz, Austria, assignors to Felice Bensa, Genoa, Italy. Manufacturing vat dyestuffs of the perylene series. 1,903,708; Apr. 11.
Poston, George R., et al. (See Tatlock, Roberts, assignor.)
Powers, Donald H. (See Calcott, W. S., Downing, and Powers.)
Preston, Henry C., Baltimore County, assignor to The Black & Decker Manufacturing Company, Towson, Md. Valve seat reamer sleeve. 1,903,533; Apr. 11.
Pritchard, William S., assignor to Motor Products Corporation, Detroit, Mich. Lubricating system. 1,903,554; Apr. 11.
Railway and Industrial Engineering Company. (See Koppitz, C. G., and Massey, assignors.)
Rayner, Lester H., et al. (See Buchel, Jules, assignor.)
Reckford, John K., et al., executors and trustees. (See Reckford, Louis J.)
Reckford, Louis J., deceased, New York, N. Y.; L. K. Reckford, J. K. Reckford, and L. J. Grumbach, executors and trustees, assignors to American Lead Pencil Company, Hoboken, N. J. Eraser attachment for lead pencils. 1,903,474; Apr. 11.
Reckford, Louise K., et al., executors and trustees. (See Reckford, Louis J.)
Reece, Floyd M., assignor to O'Brien Varnish Company, South Bend, Ind. Nondrying oil and product thereof. 1,903,656; Apr. 11.
Reece, Floyd M., assignor to O'Brien Varnish Company, South Bend, Ind. Treatment of china wood oil to produce a liquid ungelled oil and product thereof. 1,903,686; Apr. 11.
Reed, William L., Miami, Fla. Cartridge. 1,903,657; Apr. 11.
Renault, Louis. (See Saives, Léon, assignor.)
Research Corporation. (See Meston, Archibald F., assignor.)
Research Corporation. (See Wintermute, Harry A., assignor.)
Revis, Solomon N., assignor to V. E. Revis, Ashland, Nebr. Corn sheller. 1,903,516; Apr. 11.
Revis, Vernon E. (See Revis, Solomon N., assignor.)
Rhodes, Charles J., Wakefield, England. Press for drawing sheet metal. 1,903,475; Apr. 11.
Richards, Curtis H., San Francisco, Calif. Convertible sled and wheeled coaster. 1,903,596; Apr. 11.
Richter, Maurice N., and F. Lowitz, New York, N. Y. Calendar mechanism. 1,903,430; Apr. 11.
Rime, Gilbert A., Northwood, N. Dak. Wind driven electric power plant. 1,903,534; Apr. 11.
Ritchings, George T. (See Lauster, John J., assignor.)
Roberson, Willard D., New York, N. Y. Textile fabric or the like. Des. 89,594; Apr. 11.
Robertson, Ivy B., assignor of one-half to F. M. Gresham, Charlotte, N. C. Pump. 1,903,555; Apr. 11.
Robinson, Robert T., Penetanguishene, Ontario, Canada. Grate. 1,903,634; Apr. 11.
Roebel, Ludwig, Mannheim, Germany, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Circuit-breaking apparatus. 1,903,476; Apr. 11.
Roesner, Gerhard. (See von Grisewald, C. B., Weidmann, and Roesner.)
Rohn, Wilhelm, Hanau-on-the-Main, Germany. Multihigh rolling mechanism. 1,903,724; Apr. 11.
Rolfson, Maude M., Portland, Oreg. Electric oven. 1,903,477; Apr. 11.
Ross, Frederick N., assignor, by mesne assignments, to Briggs Manufacturing Company, Detroit, Mich. Adjustable main conveyer. 1,903,478; Apr. 11.
Rumohr, Ernest C., Seattle, Wash. Tree sawing device. 1,903,479; Apr. 11.
Russell & Stoll Company. (See Horn, Emil A., assignor.)
Ruth Company, The. (See Ruth, Joseph P., jr., assignor.)
Ruth, Joseph P., jr., assignor to The Ruth Company, Denver, Colo. Cell construction for flotation machines. 1,903,517; Apr. 11.
Ruthven, Albert F., assignor to Leatherless Plunger Pump Corporation, Amarillo, Tex. Reciprocating pump. Re18,791; Apr. 11.
Ruwoldt, Johann A. L., Kewell, Victoria, Australia. Air cleaner for internal combustion engines. 1,903,597; Apr. 11.
Ryan, Herbert E., Clayton, Mo. Game apparatus. 1,903,480; Apr. 11.
Ryder, Frank P., Niagara Falls, N. Y. Pea threshing machine. 1,903,658; Apr. 11.
Saives, Léon, assignor to L. Renault, Billancourt, France. Operating locomotives having internal combustion engines. 1,903,635; Apr. 11.
Sanford Investment Company. (See Jones, Harry W., assignor.)
Schacht, Clifford A., Huntington, Ind. Sliding caster. 1,903,687; Apr. 11.
Schacht, Clifford A., Huntington, Ind. Sliding caster. 1,903,688; Apr. 11.
Schacht, Clifford A., Huntington, Ind. Sliding caster. 1,903,689; Apr. 11.
Schacht, Clifford A., Huntington, Ind. Sliding caster cup. 1,903,690; Apr. 11.
Schelber, Johannes, Leipzig, assignor to Walter Dux, Hanover, Germany. Shellac substitute. 1,903,598; Apr. 11.
Schoen, Murk J., Zaandam, Netherlands. Tightening composition. 1,903,709; Apr. 11.
Schröder, Johannes N., Leeuwarden, Netherlands. Machine for working, molding, and shaping dough. 1,903,572; Apr. 11.
Schultze, Willi, Halle-on-the-Saale, Germany. Distillation process. 1,903,573; Apr. 11.
Schwarzenbach Huber Co. (See Nerger, Hans J., assignor.)
Schweisthal, Fred G., assignor to Stewart-Warner Corporation. Chicago, Ill. Engine-operated pump. 1,903,481; Apr. 11.
Schweitzer, Hugo, Leverkusen-Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Monoazodyestuffs. 1,903,599; Apr. 11.
Schweitzer, Hugo, Leverkusen-Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs. 1,903,600; Apr. 11.
Schweizer, Jack, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,595; Apr. 11.
Scott, George T., Los Angeles, Calif. Cash drawer alarm device. 1,903,535; Apr. 11.
Scott & Williams, Incorporated. (See Page, Albert E., assignor.)
Senseney, Harvey G., jr., Florence, S. C. Portable road sign. 1,903,482; Apr. 11.
Shaffner, Samuel C., Chicago, Ill. Washing machine. 1,903,564; Apr. 11.
Shakespeare Company. (See Shakespeare, William, jr., assignor.)
Shakespeare, William, jr., assignor to Shakespeare Company, Kalamazoo, Mich. Fishing reel. 1,903,559; Apr. 11.
Shoemaker, Alvin H., Seattle, Wash. Automobile tire. 1,903,574; Apr. 11.
Shoemaker, Alvin H., Seattle, Wash. Radial cord pneumatic tire. 1,903,575; Apr. 11.
Shreffler, Elwyne O., and A. D. Lesage, Manteno, Ill. Vacuum controlled clutch and brake operating mechanism. 1,903,556; Apr. 11.
Simmons, John A. (See Simmons, Joseph W. and J. A.)
Simmons, Joseph W. and J. A., Salisbury, N. C. Stone saw. 1,903,518; Apr. 11.
Skeel, Lewis, and J. A. Spohr, Meadville, Pa. Floating tool. 1,903,576; Apr. 11.
Skelly Oil Company. (See Watkins, Walter G., assignor.)
Skillman, Newton, Highland Park, assignor to O. & S. Bearing Co., Detroit, Mich. Shaft mounting. 1,903,483; Apr. 11.
Skinner, Fred B., Coffeyville, Kans. Stretcher. 1,903,536; Apr. 11.
Smetko, Michael, Cicero, assignor to The Art Institute of Chicago, Chicago, Ill. Display cabinet. 1,903,484; Apr. 11.
Smith, Christopher C., Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Production of solid calcium nitrate. 1,903,636; Apr. 11.
Smith, Edmund O. (See Winther, William A., assignor.)

Smith, George W., jr., assignor to The White Motor Company, Cleveland, Ohio. Internal combustion engine. 1,903,485; Apr. 11.
Smith, James H. (See Smith, Joseph B. and J. H.)
Smith, Joseph B. and J. H., Emporium, Pa. Wrench. 1,903,660; Apr. 11.
Smith, Roscoe J., Glen Ridge, N. J., assignor to Hookless Fastener Company. Machine and method for applying fastener elements. 1,903,659; Apr. 11.
Smolko, Matthew, Chicago, Ill. Iron stand. 1,903,601; Apr. 11.
Snider, Guido, Milan, Italy. Apparatus for the commercial preparation of coffee beverages. 1,903,519; Apr. 11.
Snow, Norman L., assignor to Diamond Power Specialty Corporation, Detroit, Mich. Boiler cleaner. 1,903,486; Apr. 11.
Snow, Norman L., New Canaan, Conn., and W. P. Thomas, assignors to Diamond Power Specialty Corporation, Detroit, Mich. Blower for air heaters. 1,903,650; Apr. 11.
Snyder, Jay C., Toledo, Ohio. Sound recording and reproducing apparatus. 1,903,487; Apr. 11.
Soreng, Edgar M., assignor to Soreng-Manegold Company, Chicago, Ill. Portable water softener. Des. 89,596; Apr. 11.
Soreng-Manegold Company. (See Soreng, Edgar M., assignor.)
Spaink, Johann H. A., assignor to Chance Brothers and Co. Limited, West Smethwick, England. Automatic electric current generating apparatus. 1,903,712; Apr. 11.
Spohr, John A. (See Skeel, L., and Spohr.)
Standard Oil Company of California. (See McLaughlin, W. I., and Wedemeyer, assignors.)
Steel-Bound Container Corporation. (See Warren, Harold M., assignor.)
Stewart-Warner Corporation. (See Schweisthal, Fred G., assignor.)
Stibbs, Harry, Philadelphia, Pa. Conveyer system. 1,903,488; Apr. 11.
Stocks, Harry B., South Tottenham, assignor to A. J. Munro and T. D. Parkin, London, England. Reproduction of sounds. 1,903,637; Apr. 11.
Stöhr, Erich, assignor to the Firm Gyrorector G. m. b. H., Berlin, Germany. Gyroscopically stabilized pendulum. 1,903,710; Apr. 11.
Storey, William H., Southend-on-Sea, England. Appliance for playing games. 1,903,661; Apr. 11.
Strasberger, Max J., Brooklyn, N. Y. Combination indicator and score keeping device for bridge games or similar article of manufacture. Des. 89,597; Apr. 11.
Streibel, Ludwig. (See Ehresmann, A., and Streibel.)
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad Soden on Taunus, and W. Herrmann, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Benzimidazolone-stibonic acids. 1,903,602; Apr. 11.
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad Soden on Taunus, and W. Herrmann, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Crotonyl-aminobenzene-arsonic acids and salts thereof. 1,903,645; Apr. 11.
Struever, Henry, Faulkton, S. Dak. Pick-up for combine harvesters. 1,903,577; Apr. 11.
Stukes, Horace A., San Antonio, Tex. Fuel feeding tank. Des. 89,598; Apr. 11.
Sturgis, Charles E., assignor of one-half to W. P. Andrus, Rochester, N. Y. Abrading brush. 1,903,520; Apr. 11.
Sullivan Machinery Company (See Hauge, Andrew, assignor.)
Sullivan Machinery Company. (See Holmes, Morris P., assignor.)
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Sullivan, Theodore G., Rutherford, N. J. Making of rubber coloring material. 1,903,578; Apr. 11.
Superior Felt & Bedding Company. (See Canfield, Leo D., assignor.)
Sutliffe, Frank C., San Francisco, Calif. Illuminated sign. 1,903,537; Apr. 11.
Sweeney Bros. (See Sweeney, James T., assignor.)
Sweeney, James T., assignor to Sweeney Bros., Scranton, Pa. Road guard. 1,903,725; Apr. 11.
Swoyer, Fred, Silver Grove, Ky. Spike and nail extractor. 1,903,557; Apr. 11.
Sykes, Wilfred, assignor to Inland Steel Company, Chicago, Ill. Stretching machine. 1,903,638; Apr. 11.
Taggart, James M., Port Washington, N. Y. Furnace. 1,903,521; Apr. 11.
Taplin, Harold J., Wembley, London, England. Transfer press. 1,903,689; Apr. 11.
Tatlock, Roberts, assignor to E. E. Groves and George R. Poston, Gastonia, N. C. Depressible traffic signal. 1,903,739; Apr. 11.
Taylor, Edward M. (See Heald, R. N., and Taylor.)
Taylor, Joseph, assignor to Grigsby-Grunow Company, Chicago, Ill. Radiocabinet. Des. 89,599; Apr. 11.
Taylor, Rolland W., Remus, Mich. Artificial bait. 1,903,558; Apr. 11.
Taylor, William F. F., Norfolk, Va. Coin controlled chair and canopy. 1,903,579; Apr. 11.
Telefonaktiebolaget L. M. Ericsson. (See Jacobsson, Fritz M., assignor.)
Telephon- und Telegraphenfabriks-A. G. Kapsch U. Söhne. (See Parel, Karl, assignor.)
Thirlwell, Thomas W., St. Albans, W. Va. Automatic switch. 1,903,580; Apr. 11.
Thorn, J. S., Company. (See Doering, Albert L., assignor.)
Thorsen, Karl K. A., San Francisco, Calif. Tire vulcanizing machine. 1,903,538; Apr. 11.
Tol, Hermanus F., assignor to Naamlooze Vennootschap: Vennootschap tot Exploitatie van Strijk-en Persmachine Octrooien (V. E. S. P. O.) The Hague, Netherlands. Ironing machine. 1,903,691; Apr. 11.
Toledo Metal Furniture Company, The. (See Uhl, Clement R., assignor.)
Towt, Charles W., Lindsay, Calif., assignor to C. W. Towt and D. G. Towt, as trustees of The Charles Warren Towt Holding Company. Apparatus for preventing frost damage to vegetation. 1,903,615; Apr. 11.
Towt, Donald G., trustee. (See Towt, Charles W., assignor.)
Tulgren, Lester. (See Heusser, J., and Tulgren.)
Turner, Barry F., Holdenville, assignor to Phillips Petroleum Company, Bartlesville, Okla. Valve lock and housing. 1,903,581; Apr. 11.
Uhl, Clement R., assignor to The Toledo Metal Furniture Company, Toledo, Ohio. Glider for furniture legs. 1,903,609; Apr. 11.
Uhri, William C., jr., assignor to Central Engineering & Sales Company, St. Louis, Mo. Apparatus for producing a stream of atomized liquid. 1,903,522; Apr. 11.
Underwood Elliott Fisher Company. (See Dobson, William A., assignor.)
Union Bag & Paper Corporation. (See Avery, True M., assignor.)
United Autographic Register Co. (See Jensen, Louis, assignor.)
Usher, David T., deceased, Mountairy, N. C.; G. B. Usher administratrix. Fruit and vegetable container. 1,903,647; Apr. 11.
Usher, Geraldine B., administratrix. (See Usher, David T.)
Van Alstine, Bonnie E., San Francisco, Calif. Copy and book holder. 1,903,523; Apr. 11.
Van Kannel Revolving Door Company. (See Munson, Harry, assignor.)
Vartanian, Frank D., Portland, Me. Support for telephone head-sets. 1,903,565; Apr. 11.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,603; Apr. 11.
Visking Corporation, The. (See Henderson, William F., assignor.)
Vogt, Rudolph. (See Walter, J. C., and Vogt.)
Von Girsewald, Conway B., H. Weidmann, and G. Roesner, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y. Production of alkali phosphates from metal phosphorus compounds. 1,903,582; Apr. 11.
Vormann, Ernst. (See Bernhardt, O., and Vormann.)
Wagenhorst, James H., Detroit, Mich. Rim end connecting device. 1,903,566; Apr. 11.
Walter, John C., and R. Vogt, Cincinnati, assignors to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio. Conveyer. 1,903,782; Apr. 11.
Warner, Edward, Union City, N. J. Implement for playing the game of cat. 1,903,539; Apr. 11.
Warren, Charles W., Towt Holding Company, The. (See Towt, Charles W., assignor.)
Warren, Harold M., assignor to Steel-Bound Container Corporation, St. Petersburg, Fla. Container. Re18,792; Apr. 11.
Watkins, Walter G., assignor to Skelly Oil Company, El Dorado, Kans. Method and apparatus for producing fixed carbureted air gas. 1,903,583; Apr. 11.
Wayne Company. (See Griffin, William M., assignor.)
Webb, Samuel N., Johnstown, Pa., assignor to Roy Withers. Directional signal. 1,903,692; Apr. 11.
Webster, Henry L., assignor to Wm. Wrigley Jr. Company, Chicago, Ill. Package mailing card. 1,903,540; Apr. 11.
Webster, Robert A., Santa Monica, Calif. Hardness testing device. 1,903,524; Apr. 11.
Wedemeyer, Rupert G. (See McLaughlin, W. I., and Wedemeyer.)
Weidmann, Hans. (See Von Girsewald, C. B., Weidmann, and Roesner.)
Weitzman, Morris A., Chicago, Ill. Hat cleaning machine. 1,903,489; Apr. 11.
Wendel, Reinhold M., Hafverud, assignor to Aktiebolaget Papyrus, Molndal, Sweden. Manufacture of duplex or multiplex paper with different appearance on various spots. 1,903,711; Apr. 11.
Wettengel, George A., St. Louis, Mo. Automobile theft device. 1,903,584; Apr. 11.
Wharton, William, Jr., & Company. (See Minor, John C., assignor.)
Wheeler, Albert M., Catlettsburg, Ky. Blade sharpener. 1,903,651; Apr. 11.
Wheeler, Henry L., jr., executor. (See Alexander, H. H., and Carroll.)
White Motor Company, The. (See Smith, George W., jr., assignor.)
Whitlow, John B., Lexington, Ky. Transmission mechanism. 1,903,662; Apr. 11.
Wiegand, Edwin L., Pittsburgh, Pa. Forming electrical heating elements. 1,903,604; Apr. 11.

Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,605; Apr. 11.
Willheim, William, Co. (See Schweizer, Jack, assignor.)
Williams, Leo L. (See Gordon, Le-R. V., and Williams.)
Wilms, Gustav O., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Motor protective apparatus. 1,903,491; Apr. 11.
Wilson, Samantha A., Bell, Calif. Ice cream freezer. 1,903,652; Apr. 11.
Wintermute, Harry A., Plainfield, N. J., assignor to Research Corporation, New York, N. Y. Electrical precipitator. 1,903,640; Apr. 11.
Winther, William A., assignor to Edmund P. Smith, Menominee, Mich. Stencil printing device. 1,903,740; Apr. 11.
Winthrop Chemical Company, Inc. (See Callsen, Jürgen, assignor.)
Winthrop Chemical Company, Inc. (See Mietzsch, F., and Klös, assignors.)
Winthrop Chemical Company, Inc. (See Streitwolf, K., Fehrle, and Herrmann, assignors.)
Wise, Leslie M., McKeesport, Pa. Automatic feed control for carbide generators. 1,903,726; Apr. 11.
Withers, Roy. (See Webb, Samuel N., assignor.)
Wood, Cyrus B., Takoma Park, D. C. Bleaching compound. 1,903,525; Apr. 11.
Woodings, Emanuel, Oakmont, assignor to Woodings-Verona Tool Works, Verona, Pa. Splice bar. Re18,794; Apr. 11.
Woodings-Verona Tool Works. (See Woodings, Emanuel, assignor.)
Woolums, William H., and C. B. Ambrose; said Ambrose assignor to Bulls Eye Road Marker Company, Washington, D. C. Road marker. 1,903,748; Apr. 11.
Wrigley, Wm., Jr. Company. (See Webster, Henry L., assignor.)
Yager, George F., and O. J. Heath, assignors to The Bunting Brass & Bronze Company, Toledo, Ohio. Sprue forming and table locking mechanism. 1,903,616; Apr. 11.
Young, David H. (See Nute, George A., assignor.)
Yutts, Ralph, Miami, Fla. Fabric duster. 1,903,663; Apr. 11.
Yutts, Ralph, Miami, Fla. Duster and handle. 1,903,664; Apr. 11.
Zinke, Alois. (See Pongratz, A., and Zinke.)
Zullig, Emil G., Bergenfield, N. J., assignor to S. Ellen, New York, N. Y. Embroidered textile fabric trimmings. Des. 89,600; Apr. 11.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 11TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acids and salts thereof, Crotonyl-aminobenzene-arsonic. K. Streitwolf, A. Fehrle and W. Herrmann. 1,903,645; Apr. 11.
Acids, Benzimidazolone-stibonic. K. Streitwolf, A. Fehrle, and W. Herrmann. 1,903,602; Apr. 11.
Acids, Purifying sulphonic. H. Limburg. 1,903,466; Apr. 11.
Air cleaner for internal combustion engines. J. A. L. Ruwoldt. 1,903,597; Apr. 11.
Air conditioning device. J. Grison. 1,903,452; Apr. 11.
Air forcing apparatus for air furnaces. W. N. Mueller. 1,903,552; Apr. 11.
Airplane propeller. J. P. Landrum. 1,903,628; Apr. 11.
Alarm device, Cash drawer. G. T. Scott. 1,903,535; Apr. 11.
Alcohols, Manufacture of halogen. J. Callsen. 1,903,587; Apr. 11.
Alkali phosphates from metal phosphorus compound, Production of. C. B. von Girsewald, H. Weidmann, and G. Roesner. 1,903,582; Apr. 11.
Amplifier, Audion. A. W. Barber. 1,903,542; Apr. 11.
Antiskid device. W. L. Jones. 1,903,460; Apr. 11
Appliance for playing games. W. H. Storey. 1,903,661; Apr. 11.
Articles from celluloid and the like, Making. W. Mendel. 1,903,530; Apr. 11.
Asphalt blocks, Apparatus for and method of treating. R. F. Morrison. 1,903,741; Apr. 11.
Automatic switch. T. W. Thirlwell. 1,903,580; Apr. 11.
Automobile heater. J. F. Brock. 1,903,653; Apr. 11.
Automobile theft device. G. A. Wettengel. 1,903,584; Apr. 11.
Bag: *See*—
  Moisture-proof covered bag.
Bait, Artificial. R. W. Taylor. 1,903,558; Apr. 11.
Bar: *See*—
  Splice bar.
Battery. J. E. Furtney. 1,903,448; Apr. 11.
Bed spring. D. Kurkchee. 1,903,679; Apr. 11.
Benzines, benzenes, and other hydrocarbons from coal tars and oils. R. E. Goldsbrough. 1,903,568; Apr. 11.
Bleaching compound. C. B. Wood. 1,903,525; Apr. 11.
Blower for air heaters. N. L. Snow and W. P. Thomas. 1,903,650; Apr. 11.
Boiler. W. S. Monroe. 1,903,515; Apr. 11.
Boiler cleaner. N. L. Snow. 1,903,486; Apr. 11.
Boiler feed apparatus with exhaust steam preheater. H. Deutsch. 1,903,697; Apr. 11.
Box: *See*—
  Shipping and display box.
Box delivery device. E. G. Griffith. 1,903,561; Apr. 11.
Bracelet. L. Glass. Des. 89,586; Apr. 11.
Brake: *See*—
  Vehicle brake.
Brake ensemble, Mechanical friction. F. C. Palmer. 1,903,723; Apr. 11.
Brush, Abrading. C. E. Sturgis. 1,903,520; Apr. 11.
Cabinet, Display. M. Smetko. 1,903,484; Apr. 11.
Cabinet, Kitchen. L. L. Miller. Des. 89,591; Apr. 11.
Cabinet, Toasting and storage. W. W. Kelly. 1,903,547; Apr. 11.
Calcium nitrate, Production of solid. C. C. Smith. 1,903,636; Apr. 11.
Calendar mechanism. M. N. Richter and F. Lowitz. 1,903,430; Apr. 11.
Cameras, Combined view finder and catch for. C. A. Bornmann. 1,903,434; Apr. 11.
Car, Railway. H. W. Jones. 1,903,509; Apr. 11.
Carbon of high activity and covering power, Production of. Y. Nikaido. 1,903,705; Apr. 11.
Carburetor. H. Bjering. 1,903,433; Apr. 11.
Card deck holder. J. Heusser and L. Tulgren. 1,903,744; Apr. 11.
Card, Package mailing. H. L. Webster. 1,903,540; Apr. 11.
Cartridge. W. L. Reed. 1,803,657; Apr. 11.
Caster cup, Sliding. C. A. Schacht. 1,903,690; Apr. 11.
Caster, Sliding. C. A. Schacht. 1,903,687-9; Apr. 11.
Celloconstruction for flotation machines. J. P. Ruth, jr. 1,903,517; Apr. 11.
Cellulose articles, Producing. W. F. Henderson. 1,903,622; Apr. 11.
Chain guiding device for portable motor tree saws. F. W. Meyer. 1,903,571; Apr. 11.
Chair and canopy, Coin controlled. W. F. Taylor. 1,903,579; Apr. 11.
Charging and testing apparatus and stock stand, Combined. B. F. W. Heyer. Des. 89,589; Apr. 11.
Cigarette container. L. B. Goodman. 1,903,450; Apr. 11.
Circuit-breaking apparatus. L. Roebel. 1,903,476; Apr. 11.

Cleaner: *See*—
  Boiler cleaner.
Clearer, waxer, and tension device, Combined. J. Kaufmann. 1,903,546; Apr. 11.
Clock case. J. Gottlieb. Des. 89,587; Apr. 11.
Clutch and brake operating mechanism, Vacuum controlled. E. O. Shreffler and A. D. Lesage. 1,903,556; Apr. 11.
Coal loader. A. Hauge. 1,903,674; Apr. 11.
Coffee beverages, Apparatus for the commercial preparation of. G. Snider. 1,903,519; Apr. 11.
Collapsible table. A. J. Morrison. 1,903,631; Apr. 11.
Collapsible tube. H. J. Konanz. 1,903,464; Apr. 11.
Coloring material, Making of rubber. T. G. Sullivan 1,903,578; Apr. 11.
Concrete joint. J. N. Heltzel. 1,903,456; Apr. 11.
Connecter: *See*—
  Electrical connecter.
Container: *See*—
  Cigarette container. Paper container.
  Dispensing container.
  Fruit and vegetable container.
Container. H. M. Warren. Re18,792; Apr. 11.
Control of exhaust gases for mixture heating, Automatic. D. Firth. 1,903,446; Apr. 11.
Controlling apparatus. E. T. Johnsson. 1,903,459; Apr. 11.
Conveyer. J. C. Walter and R. Vogt. 1,903,732; Apr. 11.
Conveyer, Adjustable main. F. N. Ross. 1,903,478; Apr. 11.
Conveyer switching system, Remote control. S. Olson. 1,903,473; Apr. 11.
Conveyer system. H. Stibbs. 1,903,488; Apr. 11.
Copper, Metallurgy of. H. H. Alexander and A. W. Carroll. 1,903,497; Apr. 11.
Copy and book holder. B. E. Van Alstine. 1,903,523; Apr. 11.
Core, Collapsible. F. L. Johnson. 1,903,458; Apr. 11.
Count checking device for packaged coins. F. E. Finch. 1,903,621; Apr. 11.
Coupling: *See*—
  Hose and pipe coupling. Nonreusable coupling.
Crate. F. V. Birbeck. 1,903,560; Apr. 11.
Crate. A. J. Merritt. 1,903,722; Apr. 11.
Current generating apparatus, Automatic electric. J. H. A. Spaink. 1,903,712; Apr. 11.
Current generator, Alternating. P. Letrilliart. 1,903,680; Apr. 11.
Current motor. A. T. Hampton. 1,903,545; Apr. 11.
Cylinders, Manufacture of gas. J. C. Minor. 1,903,630; Apr. 11.
Dashpot, Air. F. G. L. Boyer. 1,903,435; Apr. 11.
Direction signal. S. N. Webb. 1,903,692; Apr. 11.
Disinfecting solution. G. M. Karns and L. H. Cretcher. 1,903,614; Apr. 11.
Dispensing container. E. L. Byfield. Des. 89,601; Apr. 11.
Dispensing container. A. J. Chamberlain. 1,903,442; Apr. 11.
Display rack. F. F. Dugan and W. S. Campbell. Des. 89,585; Apr. 11.
Distillation process. W. Schultze. 1,903,573; Apr. 11.
Drier. W. L. Martin. 1,903,427; Apr. 11.
Drilling mechanism. M. P. Holmes. 1,903,648; Apr. 11.
Duplicating machine. L. Jensen. 1,903,625; Apr. 11.
Duster and handle. R. Yutts. 1,903,664; Apr. 11.
Duster, Fabric. R. Yutts. 1,903,663; Apr. 11.
Dyestuffs, Azo. H. Schweitzer. 1,903,600; Apr. 11.
Dyestuffs of the perylene series, Manufacturing vat. A. Pongratz and A. Zinke. 1,903,708; Apr. 11.
8-hydroxyquinoline compounds, Making. F. Mietzsch and H. Klös. 1,903,470; Apr. 11.
Electric equipment for mining machines. N. D. Levin and J. S. Beltz. 1,903,701; Apr. 11.
Electric equipment for mining machines. N. D. Levin. 1,903,703; Apr. 11.
Electric equipment for mining machines. N. D. Levin and J. S. Beltz. 1,903,704; Apr. 11.
Electric switch. W. A. Heinrich. 1,903,455; Apr. 11.
Electric switch. C. G. Koppitz and H. B. Massey. 1,903,643; Apr. 11.
Electric switch. P. J. McManaman. 1,903,428; Apr. 11.
Electrical connecter. E. A. Horn. 1,903,715; Apr. 11.
Electrical control system for mining machinery. N. D. Levin. 1,903,702; Apr. 11.
Electrical heating elements, Forming. E. L. Wiegand. 1,903,604; Apr. 11.
Electrical precipitator. H. A. Wintermute. 1,903,640; Apr. 11.
Electron tube. K. W. Jarvis and R. M. Blair. 1,903,569; Apr. 11.

Elevator: *See*—
  Fish elevator.
Elevator braking system and actuating the same. W. H. Mechling. 1,903,550; Apr. 11.
Engine: *See*—
  Internal combustion engine.
Engine. J. J. McCarthy. 1,903,511; Apr. 11.
Engine. A. J. Meyer. 1,903,532; Apr. 11.
Engine-operated pump. F. G. Schweisthal. 1,903,481; Apr. 11.
Eraser attachment for lead pencils. L. J. Reckford. 1,903,474; Apr. 11.
Ethyl ether, Preservation of. H. L. Cox and P. S. Greer. 1,903,642; Apr. 11.
Explosive charges, Preparing. O. Matter. 1,903,594; Apr. 11.
Explosives, Apparatus for melting. H. S. Deck. 1,903,504; Apr. 11.
Extractor: *See*—
  Spike and nail extractor.
Eye mounting for dolls. J. A. Manning. 1,903,549; Apr. 11.
Eyeglasses. K. Martin. 1,903,593; Apr. 11.
Fabric: *See*—
  Knitted fabric.
Fabrics by means of a circulating bath, Device for treating. J. Annicq. 1,903,585; Apr. 11.
Fasteners, Manipulating multiple. J. E. Perrault. Re18,793; Apr. 11.
Feed control for carbide generators, Automatic. L. M. Wise. 1,903,726; Apr. 11.
Feeder and waterer. A. F. Bendel. 1,903,742; Apr. 11.
Field precipitator, Concentrated. A. F. Meston. 1,903,644; Apr. 11.
Fin propeller. W. Meindersma. 1,903,551; Apr. 11.
Fish elevator. F. Koch. 1,903,627; Apr. 11
Fishing reel. W. Shakespeare, jr. 1,903,559; Apr. 11.
Flight indicator. K. E. Gath. 1,903,449; Apr. 11.
Floating tool. L. Skeel and J. A. Spohr. 1,903,576; Apr. 11.
Fluid dispensing apparatus. W. M. Griffin. Des. 89,588; Apr. 11.
Freezer, Ice cream. S. A. Wilson. 1,903,652; Aug. 11.
Frost damage to vegetation, Apparatus for preventing. C. W. Towt. 1,903,615; Apr. 11.
Fruit and vegetable container. D. T. Usher. 1,903,647; Apr. 11.
Fuel feeding tank. H. A. Stukes. Des. 89,598; Apr. 11.
Fuel, Motor. R. T. Hurley. 1,903,624; Apr. 11.
Fuels, Cracking and distilling. R. Carter. 1,903,749; Apr. 11.
Furnace. J. M. Taggart. 1,903,521; Apr. 11.
Game apparatus. H. E. Ryan. 1,903,480; Apr. 11.
Gas discharge light. L. L. Beck and A. E. Noble. 1,903,493; Apr. 11.
Gas, Method and apparatus for producing fixed carbureted air. W. G. Watkins. 1,903,583; Apr. 11.
Gate. F. B. Peebles. 1,903,633; Apr. 11.
Gauge and thickness trimmer, Combined slug. C. W. Curle. 1,903,528; Apr. 11.
Gearing, Logarithmic. M. R. Hutchison, jr. 1,903,677; Apr. 11.
Generator: *See*—
  Current generator.
Glass sheets, Process and apparatus for printing. C. Locreille. 1,903,718; Apr. 11.
Glider for furniture legs. C. R. Uhl. 1,903,609; Apr. 11.
Glycol or its homologues, Extraction of ethylene. H. Oehme. 1,903,472; Apr. 11.
Grate. R. T. Robinson. 1,903,634; Apr. 11.
Grinding machine. R. N. Heald and E. M. Taylor. 1,903,562; Apr. 11.
Guard, Road. J. T. Sweeney. 1,903,725; Apr. 11.
Hair waving, Apparatus for. G. Decker. 1,903,743; Apr. 11.
Hammer, Slide. H. G. Kreis. 1,903,548; Apr. 11.
Hardness testing device. R. A. Webster. 1,903,524; Apr. 11.
Harvesters, Pickup for combine. H. Struever. 1,903,577; Apr. 11.
Hat cleaning machine. M. A. Weitzman. 1,903,489; Apr. 11.
Headlight. J. A. Grant. 1,903,417; Apr. 11.
Headlight attachment for automobiles. W. A. Knox. 1,903,462; Apr. 11.
Heat consumption meter. A. L. Lange. 1,903,717; Apr. 11.
Heat exchange system, Fluid. M. T. Murphy. 1,903,471; Apr. 11.
Heater: *See*—
  Automobile heater.
Helicopter device. W. R. Cambridge. 1,903,440; Apr. 11.
Holder: *See*—
  Card deck holder. Copy and book holder.
Holder for sinks, Garbage. W. S. Howe. 1,903,623; Apr. 11.
Hose and pipe coupling. C. J. Ernst. 1,903,445; Apr. 11.
Housing, Air brake valve. C. A. Campbell. 1,903,441; Apr. 11.
Humidifying apparatus, Automatic. J. J. Lawler. 1,903,745; Apr. 11.
Hydrocarbons, Hydrogenation of. W. S. Calcott, A. S. Carter, and F. B. Downing. 1,903,501; Apr. 11.
Hygrometer. R. G. Bateson. 1,903,617; Apr. 11.
Illuminated sign. F. C. Sutliffe. 1,903,537; Apr. 11.
Implement for playing the game of cat. E. Warner. 1,903,539; Apr. 11.
Indicator: *See*—
  Flight indicator. Speed indicator.
Indicator and score keeping device for bridge games or similar article of manufacture, Combination. M. J. Strasberger. Des. 89,597; Apr. 11.
Ink fountain or dip well. C. L. Kubista. 1,903,465; Apr. 11.
Instrument for recording inclination. W. I. McLaughlin and R. G. Wedemeyer. 1,903,512; Apr. 11.
Internal combustion engine. A. J. Meyer. 1,903,531; Apr. 11.
Internal combustion engine. A. Moorhouse. 1,903,607; Apr. 11.
Internal combustion engine. G. W. Smith, jr. 1,903,485; Apr. 11.
Internal combustion engine. J. G. Vincent. 1,903,608; Apr. 11.
Internal combustion engine, Multicylinder. E. Mandler. 1,903,719; Apr. 11.
Interrupter for ignition devices. F. Allendorff. 1,903,641; Apr. 11.
Iron stand. M. Smolko. 1,903,601; Apr. 11.
Ironing machine. H. F. Tol. 1,903,691; Apr. 11.
Joint: *See*—
  Concrete joint.
Joint, method and apparatus for the installation of the same, Expansion. C. Older. 1,903,608; Apr. 11.
Knitted fabric. A. E. Page. 1,903,706; Apr. 11.
Lamp and picture frame, Combined electric. H. H. Howland. Des. 89,590; Apr. 11.
Leaf turner. E. Bartels. 1,903,727; Apr. 11.
Light: *See*—
  Gas discharge light. White light.
Lighter, Cigar. I. Florman. 1,903,729; Apr. 11.
Lighting fixture. W. C. Koch. 1,903,463; Apr. 11.
Lighting system. L. L. Beck. 1,903,496; Apr. 11.
Liquid, Apparatus for producing a stream of atomised. W. C. Uhri, jr. 1,903,522; Apr. 11.
Loading machine. A. Hauge. 1,903,672; Apr. 11.
Loading machine. A. Hauge. 1,903,673; Apr. 11.
Loading machine. A. Hauge. 1,903,675; Apr. 11.
Locomotives having internal combustion engines, Operating. L. Saives. 1,903,635; Apr. 11.
Log, Dynamometric. M. E. A. Baule. 1,903,718; Apr. 11.
Lubricating installation and apparatus. J. Bijur. 1,903,499; Apr. 11.
Lubricating system. W. S. Pritchard. 1,903,554; Apr. 11.
Luminescent tube. G. Claude. 1,903,492; Apr. 11.
Machine and method for applying fastener elements. R. J. Smith. 1,903,659; Apr. 11.
Machine for making chaplets and the like. E. H. Fontaine. 1,903,668; Apr. 11.
Machine for working, molding, and shaping dough. J. N. Schröder. 1,903,572; Apr. 11.
Magnesium chloride, Dehydration of. H. G. Lacell. 1,903,592; Apr. 11.
Marker, Road. W. H. Woolums and C. B. Ambrose. 1,903,748; Apr. 11.
Marker, Traffic. W. P. Favorite and H. A. Moler. Des. 89,606; Apr. 11.
Mattress. L. D. Canfield 1,903,619; Apr 11.
Mercury contact switch. J. N. McTwiggan. 1,903,513; Apr. 11.
Meter: *See*—
  Heat consumption meter.
Meter for graded measurements, Integrating. F. M. Jacobsson. 1,903,418; Apr. 11.
Mill for widening out tools, Rolling. H. Heetkamp. 1,903,676; Apr. 11.
Milling machine. T. Earle. 1,903,444; Apr. 11.
Mining apparatus. C. F. Osgood. 1,903,649; Apr. 11.
Mirror, Hand. C. H. Lawrence. Des. 89,602; Apr. 11.
Mixing device. P. W. Merchant. 1,903,429; Apr. 11.
Moisture indicator for paper making machines and pulp collecting machines and in similar apparatus. T. Kille. 1,903,716; Apr. 11.
Moisture-proof covered bag. T. M. Avery. 1,803,666; Apr. 11.
Monoazodyestuffs. H. Schweitzer. 1,903,599; Apr. 11.
Motor: *See*—
  Current motor.
Motor protective apparatus. G. O. Wilms. 1,903,491; Apr. 11.
Mounting for machine guns. T. J. Heavey. 1,903,506; Apr. 11.
Mounting, Shaft. N. Skillman. 1,903,483; Apr. 11.
Multihigh rolling mechanism. W. Rohn. 1,903,724; Apr. 11.
Nailing machine. H. Kruse. 1,903,700; Apr. 11.
Necktie support. W. H. Lutz. 1,903,746; Apr. 11.
Negative inductance. M. M. Dolmage. 1,903,610; Apr. 11.
Nonreusable coupling. J. J. Lauster. 1,903,736; Apr. 11.
Nozzle or faucet, Automatic. W. D. Allen. 1,903,605; Apr. 11.
Oil and moisture from "fish press cake", Extracting. W. T. Conn. 1,903,503; Apr. 11.
Oil and product thereof, Nondrying. F. M. Reece. 1,903,656; Apr. 11.
Oil, Purification of lubricating. A. Gastón and E. Bogdány. 1,903,731; Apr. 11.

Oil to produce a liquid ungelled oil and product thereof, Treatment of China wood. F. M. Reece. 1,903,686; Apr. 11.
Optical perimeter. M. D. Campbell. 1,903,502; Apr. 11.
Oven, Electric. M. M. Rolfson. 1,903,477; Apr. 11.
Pad: *See*—
Upholstery pad.
Palmetto and poduct produced thereby, Shredding. M. H. Partrick and K. B. Curtis. 1,903,553; Apr. 11.
Paper container. R. Oliver. 1,903,632; Apr. 11.
Paper making. L. C. Perkins. 1,903,655; Apr. 11.
Paper stock, Apparatus for reducing. H. J. Andrews. 1,903,526; Apr. 11.
Paper with different appearance on various spots, Manufacture of duplex or multiplex. R. M. Wendel. 1,903,711; Apr. 11.
Parachute. H. Hojda. 1,903,563; Apr. 11.
Pea threshing machine. F. P. Ryder. 1,903,658; Apr. 11.
Pedestal for traffic signals or the like. G. A. Nute. 1,903,683; Apr. 11.
Pendulum, Gyroscopically stabilized. E. Stöhr. 1,903,710; Apr. 11.
Phosphate and nitrates, Simultaneous production of precipitated dicalcium. F. C. and F. Palazzo. 1,903,684; Apr. 11.
Pie sealer. E. E. Moore. 1,903,682; Apr. 11.
Pipe fittings, Manufacture of. E. Brown. 1,903,436; Apr. 11.
Pipe washing and clean out pump. E. Krieger. 1,903,735; Apr. 11.
Plait forming apparatus. F. W. Brintnall. 1,903,618; Apr. 11.
Plant construction. J. F. Laboon and F. B. Barns. 1,903,510; Apr. 11.
Plastic or semi-fluid substances, Apparatus for depositing. A. Kremmling. 1,903,570; Apr. 11.
Power plant, Wind driven electric. G. A. Rime. 1,903,534; Apr. 11.
Preheater or economizer for locomotives. H. Deutsch. 1,903,696; Apr. 11.
Press: *See*—
Transfer press.
Press. A. A. Byerlein. 1,903,438; Apr. 11.
Press for drawing sheet metal. C. J. Rhodes. 1,903,475; Apr. 11.
Printing unit. F. C. Frolander. 1,903,507; Apr. 11.
Protective system for electric current rectifiers. A. Greco. 1,903,451; Apr. 11.
Protector for drill pipe and the like. J. W. MacClatchie. 1,903,467; Apr. 11.
Pump: *See*—
Engine-operated pump. Rotary pump.
Pipe washing and cleaning pump.
Pump. E. R. Munn. 1,903,721; Apr. 11.
Pump. I. B. Robertson. 1,903,555; Apr. 11.
Radiocabinet. J. Taylor. Des. 89,599; Apr. 11.
Radio receiving and transmitting apparatus. H. W. Adey. 1,903,665; Apr. 11.
Radio receiving system. A. Badma. 1,903,420; Apr. 11.
Reciprocating pump. A. F. Ruthven. Re18,791; Apr. 11.
Record carrying or memorandum device. D. C. Harris. 1,903,454; Apr. 11.
Reel: *See*—
Fishing reel.
Refrigerating device. J. Buchel. 1,903,437; Apr. 11.
Refrigerating system. F. B. Hunt. Re18,795; Apr. 11.
Refrigeration unit, Flooded type. R. C. Haimbaugh and A. F. Hoesel. 1,903,591; Apr. 11.
Regulator for winding on installations. J. Dethier. 1,903,588; Apr. 11.
Remedy for combating plant diseases and for the protection of plants against attacks from fungi and insects. F. Johnsen. 1,903,626; Apr. 11.
Rim end connecting device. J. H. Wagenhorst. 1,903,566; Apr. 11.
Road sign, Portable. H. G. Senseney, jr. 1,903,482; Apr. 11.
Roof deck. A. L. Doering. 1,903,548; Apr. 11.
Rotary motion, System for the transmission of. P. J. Frias, C. Jones, and M. Cheru. 1,903,714; Apr. 11.
Rotary pump. C. E. Anderson. 1,903,606; Apr. 11.
Rubber and its manufacture, Synthetic. W. S. Calcott, F. B. Downing, and D. H. Powers. 1,903,500; Apr. 11.
Safety switch. F. Moscato. 1,903,737; Apr. 11.
Saw, Stone. J. W. and J. A. Simmons. 1,903,518; Apr. 11.
Scalp treating device. C. V. Jameson. 1,903,646; Apr. 11.
Securing two parts together, Frictionally. A. M. Holstein. 1,903,457; Apr. 11.
Sewing machines, Attachment for. R. P. Hacket. 1,903,671; Apr. 11.
Sewing machines, Padding guide for. Le-R. V. Gordon. 1,903,425; Apr. 11.
Sewing machines, Stitch forming mechanism for. H. F. Gruman. 1,903,590; Apr. 11.
Shade sewing device. P. P. Matt. 1,903,468; Apr. 11.
Sharpener, Blade. A. M. Wheeler. 1,903,651; Apr. 11.
Sheet feeding device. H. Kratz. 1,903,678; Apr. 11.
Shellac substitute. J. Scheiber. 1,903,598; Apr. 11.
Sheller, Corn. S. N. Revis. 1,903,516; Apr. 11.
Shipping and display box. I. C. Keller. 1,903,461; Apr. 11.
Shock absorber. C. H. Foster. 1,903,423; Apr. 11.
Shock absorber. C. H. Foster. 1,903,447; Apr. 11.
Shock absorber. E. G. Gunn. 1,903,453; Apr. 11.
Sign: *See*—
Illuminated sign. Road sign.
Signal: *See*—
Direction signal. Traffic signal.
Silencer and regulator. H. Munson. 1,903,738; Apr. 11.
Sled and wheeled coaster, Convertible. C. H. Richards. 1,903,596; Apr. 11.
Smelting process and apparatus. J. M. Lively. 1,903,733; Apr. 11.
Soling machine. A. Ehresmann and L. Streibel. 1,903,422; Apr. 11.
Sound recording and reproducing apparatus. J. C. Snyder. 1,903,487; Apr. 11.
Sound, Reproduction of. H. B. Stocks. 1,903,637; Apr. 11.
Speed indicator. R. J. H. Planiol. 1,903,685; Apr. 11.
Spike and nail extractor. F. Swoyer. 1,903,557; Apr. 11.
Spindle for wire covering machines. E. Dowald. 1,903,698; Apr. 11.
Splice bar. E. Woodings. Re18,794; Apr. 11.
Spring: *See*—
Bed spring.
Sprue forming and table locking mechanism. G. F. Yager and O. J. Heath. 1,903,616; Apr. 11.
Stand: *See*—
Iron stand.
Stencil printing device. W. A. Winther. 1,903,740; Apr. 11.
Stop and catch, Yieldable door. C. Greene. 1,903,669; Apr. 11.
Straining and pulp making machine. W. B. Barnhisel. 1,903,527; Apr. 11.
Stretcher. F. B. Skinner. 1,903,536; Apr. 11.
Stretching machine. W. Sykes. 1,903,638; Apr. 11.
Support: *See*—
Necktie support.
Support for shade rollers and curtain and drapery rods. D. Firestone. 1,903,728; Apr. 11.
Support for telephone head-sets. F. D. Vartanian. 1,903,565; Apr. 11.
Switch: *See*—
Automatic switch. Mercury contact switch.
Electric switch. Safety switch.
Tire pressure responsive switch.
Switch control means for vehicle lamps. H. Arnold and E. Lutscher. 1,903,586; Apr. 11.
Syringe. R. Merliss. 1,903,681; Apr. 11.
Table: *See*—
Collapsible table.
Table top and rotatable tray, Combination. A. Keller. 1,903,419; Apr. 11.
Telephone. K. Parel. 1,903,707; Apr. 11.
Textile fabric. P. Mouton. Des. 89,603–4; Apr. 11.
Textile fabric or similar article. J. Schweizer. Des. 89,595; Apr. 11.
Textile fabric or similar article. W. Willheim. Des. 89,605; Apr. 11.
Textile fabric or the like. H. J. Nerger. Des. 89,592; Apr. 11.
Textile fabric or the like. W. D. Roberson. Des. 89,594; Apr. 11.
Textile fabric trimming, Embroidered. E. G. Zulling. Des. 89,600; Apr. 11.
Thermometer, Surgical. K. Akashi. 1,903,432; Apr. 11.
Tightening composition. M. J. Schoen. 1,903,709; Apr. 11.
Tire, Automobile. A. H. Shoemaker. 1,903,574; Apr. 11.
Tire pressure responsive switch. W. C. Edwards. 1,903,589; Apr. 11.
Tire, Radial cord pneumatic. A. H. Shoemaker. 1,903,575; Apr. 11.
Tire vulcanizing machine. K. K. A. Thorsen. 1,903,538; Apr. 11.
Tool: *See*—
Floating tool.
Tooth, Divisible. R. H. Gillespie. 1,903,730; Apr. 11.
Top member for fastening illuminating bodies to ceilings. O. Bernhardt and E. Vormann. 1,903,421; Apr. 11.
Traffic signal, Depressible. R. Tatlock. 1,903,739; Apr. 11.
Transfer press. H. J. Taplin. 1,903,639; Apr. 11.
Transmission mechanism. J. B. Whitlow. 1,903,662; Apr. 11.
Trap-shooting apparatus or layout. C. E. Band. 1,903,667; Apr. 11.
Tray, Transparent covered. T. M. Avery. 1,903,734; Apr. 11.
Tree sawing device. E. C. Rumohr. 1,903,479; Apr. 11.
Truck, Industrial. E. J. Abbe. 1,903,431; Apr. 11.
Tube: *See*—
Collapsible tube. Luminescent tube.
Electron tube. White light tube.
Turnbuckle, Adjustable. J. F. G. Chobert. 1,903,695; Apr. 11.
Typewriting machine. W. A. Dobson. 1,903,505; Apr. 11.
Upholstery attaching device. A. W. Meader. 1,903,469; Apr. 11.
Upholstery pad. Le-R. V. Gordon and L. L. Williams. 1,903,424; Apr. 11.
Valve. W. Hinz. 1,903,426; Apr. 11.
Valve lock and housing. B. F. Turner. 1,903,581; Apr. 11.

Valve seat reamer sleeve. H. C. Preston. 1,903,533; Apr. 11.
Vault, Burial. A. V. Milnes. 1,903,747; Apr. 11.
Vehicle brake. H. H. Linn. 1,903,629; Apr. 11.
Vehicle control, Air operated. C. A. Johansson. 1,903,699; Apr. 11.
Vehicle, Drop center delivery. E. R. Maurer and D. M. Ferguson. 1,903,529; Apr. 11.
Vehicle, Motor. A. Moorhouse. 1,903,595; Apr. 11.
Vehicle, Motor road. C. D. Burney. 1,903,693; Apr. 11.
Vehicle, Motor road. C. D. Burney. 1,903,694; Apr. 11.
Vehicle wheel. W. N. Booth. 1,903,567; Apr. 11.
Vibration device for submarine sounding, Emitting or receiving. P. A. D. Marti, C. F. M. Bertin and A. E. G. Nandillon. 1,903,720; Apr. 11.
Voltage amplifier. H. G. Oestricher. 1,903,654; Apr. 11.
Volting machine. J. M. Garr. 1,903,544; Apr. 11.
Washing machine. S. C. Shaffner. 1,903,564; Apr. 11.
Watchcase. C. Oppenheim. Des. 89,593; Apr. 11.
Water softener, Portable. E. M. Soreng. Des. 89,596; Apr. 11.
Water softening apparatus. A. J. Dotterweich. 1,903,611–13; Apr. 11.
Weldrod coating. F. J. Esslinger. 1,903,620; Apr. 11.
Welting, Making. W. G. Barbour. 1,903,498; Apr. 11.
Wheel: *See*—
Vehicle wheel.
Wheel and mounting therefor, Vehicle. J. Drzewiecki. 1,903,443; Apr. 11.
White light. L. L. Beck. 1,903,495; Apr. 11.
White light tube. L. L. Beck. 1,903,494; Apr. 11.
Window glass channel. D. C. Bailey. 1,903,541; Apr. 11.
Wiper, Window. J. W. Cain. 1,903,439; Apr. 11.
Wire guide. H. R. Farnsworth. 1,903,506; Apr. 11.
Wrapping machines, Mechanism for. F. Grover. 1,903,670; Apr. 11.
Wrench. H. H. Merriman and F. W. Piche. 1,903,514; Apr. 11.
Wrench. J. B. and J. H. Smith. 1,903,660; Apr. 11.

CLASSIFICATION OF PATENTS

ISSUED APRIL 11, 1933

NOTE.—First number—class, second number—subclass, third number—patent number

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U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Adhor Creamery Company, Los Angeles, Calif. Milk, cream, butter, etc. Serial No. 333,060; Apr. 18. Class 46.

Adie Brothers Limited, Birmingham, England. Horological instruments. Serial No. 334,205; Apr. 18. Class 27.

Albestos Corporation, Philadelphia, Pa. Brake linings. Serial No. 335,226; Apr. 18. Class 35.

American Brewing Company, Inc., Rochester, N. Y. Malt beverage. Serial No. 334,550; Apr. 18. Class 48.

American Glanzstoff Corporation, New York, N. Y. Thread and yarn. Serial Nos. 326,192-3; Apr. 18. Class 43.

Antiseptic Rubber Products Company, Philadelphia, Pa. Medicated surgical dressings. Serial No. 333,128; Apr. 18. Class 6.

Arcidiaco, Giuseppe, Detroit, Mich. Maltless beverage. Serial No. 331,945; Apr. 18. Class 45.

Arkwright Merchandising Corporation, New York, N. Y. Catamenial bandages. Serial No. 335,049; Apr. 18. Class 44.

Arosa, J., & Company, Inc., New York, N. Y. Green coffee. Serial No. 331,963; Apr. 18. Class 46.

Atlas Supply Company, Wilmington, Del., and Newark, N. J. Cameras and sensitized films. Serial No. 334,552; Apr. 18. Class 26.

Bailey, David R., Hamlet, N. C. Soap, cleaning powder, soap chips, etc. Serial No. 324,136; Apr. 18. Class 4.

Bancroft, Joseph, & Sons Company, Wilmington, Del. Window shade fabrics. Serial No. 332,289; Apr. 18. Class 42.

Bee Hat & Cap Co., St. Louis, Mo. Hats and caps. Serial No. 334,243; Apr. 18. Class 39.

Benson Paint & Varnish Co., Birmingham, Ala. Paints and varnishes. Serial No. 333,096; Apr. 18. Class 16.

Best & Co., Inc., New York, N. Y. Hosiery, hats, underwear, etc. Serial No. 335,158; Apr. 18. Class 39.

Bonnell, Percival L., Saint John, New Brunswick, Canada. Dental tooth powder. Serial No. 331,420; Apr. 18. Class 6.

Boston Grinding Company, The. (See Franzmann, Frederick W.)

Boyle & Burger, New York, N. Y. Smoke-containing chewing gum. Serial No. 331,947; Apr. 18. Class 46.

Brake Linings Limited, Buxton, England. Brake linings. Serial No. 333,547; Apr. 18. Class 35.

Brink-Lewis Co., The, Logansport, Ind. Fishing coats, hunting vests, etc. Serial No. 334,960; Apr. 18. Class 39.

British Columbia Distillery Company Limited, The, Vancouver, British Columbia, Canada. Whisky. Serial No. 333,207; Apr. 18. Class 49.

Brock, Kurian & Company, Stamford, Conn. Razor blades. Serial No. 334,484; Apr. 18. Class 28.

Burndy Engineering Company, Inc., New York, N. Y. Non-ferrous alloys and metals. Serial No. 332,806; Apr. 18. Class 14.

Burt-Gerrans, James T., Toronto, assignor to Francis T. Routery, Kingsbury, Ontario, Canada. Rear and front signal lights for vehicles. Serial No. 328,978; Apr. 18. Class 21.

Carole, Inc., Chicago, Ill. Coats. Serial No. 332,643; Apr. 18. Class 39.

Catholic Boy, The, St. Paul, Minn. Periodical. Serial No. 335,575; Apr. 18. Class 38.

Celanese Corporation of America, New York, N. Y. Underwear. Serial No. 335,349; Apr. 18. Class 39.

Celanese Corporation of America, New York, N. Y. Underwear. Serial No. 335,351; Apr. 18. Class 39.

Champion Coated Paper Company, The, Hamilton, Ohio. Mineral and casein coated papers. Serial No. 324,591; Apr. 18. Class 37.

Claire Mfg. Co., Chicago, Ill. Washing compound. Serial No. 334,064; Apr. 18. Class 4.

Coast-2-Coast Oil Co., The. (See Vilas, Malcolm B.)

Consolidated Studios, Inc., New York, N. Y. Piece goods. Serial No. 335,159; Apr. 18. Class 42.

Continental Steel Corporation, Kokomo and Indianapolis, Ind., and Canton, Ohio. Alloy steel. Serial No. 333,467; Apr. 18. Class 14.

Drury, Abner, Brewery Inc., Washington, D. C. Malt beverages. Serial No. 335,625; Apr. 18. Class 48.

Duart Manufacturing Co. Ltd., formerly Pacific Hair Goods Company, Ltd., doing business as Duart Manufacturing Co. Ltd., San Francisco, Calif. Hair waving machines and permanent waving pads. Serial No. 333,791; Apr. 18. Class 44.

Duval Tobacco Co., Inc., The, New York, N. Y. Cigarettes. Serial No. 334,744; Apr. 18. Class 17.

Eisemann, Alfred S., New York, N. Y. Piece goods, dish cloths, doilies, etc. Serial No. 327,220; Apr. 18. Class 42.

Expander Company. (See Ives, Glade.)

Fay Wood Corporation, New York, N. Y. Toothpaste. Serial No. 331,631; Apr. 18. Class 6.

Flock Brewing Co., Williamsport, Pa. Malt beverages. Serial No. 335,523; Apr. 18. Class 48.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. Serial No. 335,067; Apr. 18. Class 42.

Franzmann, Frederick W., doing business as The Boston Grinding Company, Cuyahoga Falls, Ohio. Knives, shears, edge tools. Serial No. 332,395; Apr. 18. Class 23.

Furuya & Company, Seattle, Wash. Bean sauce and fried noodles. Serial No. 333,534; Apr. 18. Class 46.

Gittleman, Benjamin, doing business as Lincoln Lace & Braid Mfg. Co., Providence, R. I. Shoe laces. Serial No. 332,813; Apr. 18. Class 40.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. Serial No. 331,781; Apr. 18. Class 49.

Greeno, C. L., Co., Los Angeles, Calif. Springs. Serial No. 334,897; Apr. 18. Class 32.

Hall, Hartwell & Co. Inc., Troy, N. Y. Shirts, collars, and underwear. Serial No. 333,476; Apr. 18. Class 39.

Hartmann Trunk Company, Racine, Wis. Suitcases, hat boxes, etc. Serial No. 335,061; Apr. 18. Class 3.

Health Products Corporation, Newark, N. J. Laxative. Serial No. 334,435; Apr. 18. Class 6.

Heart of America Electric Company, Kansas City, Mo. Electric lamps and parts thereof. Serial No. 335,062; Apr. 18. Class 21.

Henderson, James A., Turlock, Calif. Insecticide. Serial No. 334,084; Apr. 18. Class 6.

Hercules Powder Company, Wilmington, Del. Liquid soap. Serial No. 334,872; Apr. 18. Class 4.

Herron, Charles V., doing business as White Ring Malt Extract Co., Evansville, Ind. Malt beverage. Serial No. 333,154; Apr. 18. Class 48.

Herschman, William S., Inc., New York, N. Y. Cotton pile fabrics. Serial No. 311,068; Apr. 18. Class 42.

Historical Toys. (See Paschal, Herbert F.)

Huber Baking Co., Wilmington, Del. Bread. Serial No. 334,532; Apr. 18. Class 46.

Isenburger, Herbert R., New York, N. Y. Chemical preparation. Serial No. 332,846; Apr. 18. Class 1.

Ives, Glade, doing business as Expander Company, Kansas City, Mo. Dental inlay investment. Serial No. 335,641; Apr. 18. Class 44.

Jenkins Bros., New York, N. Y. Rubber and composition washers, gaskets, and packings. Serial No. 335,321; Apr. 18. Class 35.

Kaiser, Fr., G. m. b. H., Wartemberg, Germany. Cough drops. Serial No. 333,001; Apr. 18. Class 6.

Killian Manufacturing Co., The, Akron, Ohio. Prophylactic rubber articles. Serial No. 334,920; Apr. 18. Class 44.

Kimball, Alden, New York, N. Y. Razors and razor blades. Serial No. 335,203; Apr. 18. Class 28.

Klenzit Company of New Jersey, doing business as The Pretone Co., Camden, N. J. Cleaning compound. Serial No. 335,278; Apr. 18. Class 4.

Ko-Lo Corporation, Cleveland, Ohio. Maltless concentrate. Serial No. 334,801; Apr. 18. Class 45.

Koppers Coal Company, The, Pittsburgh, Pa. Coal. Serial No. 328,434; Apr. 18. Class 1.

Kops Brothers, Inc., New York, N. Y. Corset girdles. Serial No. 334,107; Apr. 18. Class 39.

Lazarus, F. & R., and Company, The, Columbus, Ohio. Men's suits. Serial No. 306,728; Apr. 18. Class 39.

Lincoln Lace & Braid Mfg. Co. (See Gittleman, Benjamin.)

Living-Trust Clubs, Inc., Boston, Mass. Letter-heads, application blanks, registers, etc. Serial No. 333,735; Apr. 18. Class 38.

Lubi-Graph Corporation, The, Cleveland and Wickliffe, Ohio. Gasoline. Serial No. 330,303; Apr. 18. Class 15.

Macdonald, Greenlees Limited, Leith, Scotland. Scotch whisky. Serial No. 333,711; Apr. 18. Class 49.

Macdonald, Greenlees Limited, Leith, Scotland. Whisky. Serial Nos. 333,713–14; Apr. 18. Class 49.

Malouf, Abraham, Asbury Park, N. J. Ladies' aprons and dresses. Serial No. 334,999; Apr. 18. Class 39.

Manz, Henry A., New York, N. Y. Revolving cabinets. Serial No. 334,460; Apr. 18. Class 32.

Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. Serial No. 334,498; Apr. 18. Class 28.

Marathon Razor Blade Co., Inc., Irvington, N. J. Safety razor blades. Serial No. 335,126; Apr. 18. Class 28.

Master Laboratories, Inc., Omaha, Nebr. General tonic and mineral water crystals. Serial No. 334,402; Apr. 18. Class 6.

Melnick, Jacob A., Brooklyn, N. Y. Window frames, sash, doors and trim. Serial No. 333,682; Apr. 18. Class 12.

Meltron Tube Co. (See Triad Manufacturing Co., Inc.)

Moeller, Henry E., and Harold Gilles, Chicago, Ill. Publications. Serial No. 307,866; Apr. 18. Class 38.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Morris-Collier Corporation, The, Wilmington, Del., and Monett, Mo. Mechanical razor blade sharpener. Serial No. 325,007; Apr. 18. Class 23.
Nagel, Morris, & Co. Inc. of Manhattan, New York, N. Y. Coats. Serial No. 334,287; Apr. 18. Class 39.
Naox Company, Boston, Mass. Internal medicine. Serial No. 335,031; Apr. 18. Class 6.
National Silk Hosiery Mills, Inc., Indianapolis, Ind. Hosiery. Serial Nos. 335,363–4; Apr. 18. Class 39.
Naugatuck Chemical Company, The, New York, N. Y. Rubber adhesive. Serial No. 327,884; Apr. 18. Class 5.
Neumann, Morton G., doing business as Valmor Products Co., Chicago, Ill. Incense. Serial No. 334,156; Apr. 18. Class 6.
Norcross, New York, N. Y. Gift wrapping paper. Serial Nos. 335,286–7; Apr. 18. Class 37.
North American Brewing Company, Brooklyn, N. Y. Malt beverage. Serial No. 335,622; Apr. 18. Class 48.
Pacific Hair Goods Company. (See Duart Manufacturing Co. Ltd.)
Paschal, Herbert F., doing business as Historical Toys, Chicago, Ill. Toy boats, aeroplanes, jig-saw puzzles, etc. Serial No. 333,527; Apr. 18. Class 22.
Pretone Co., The. (See Klenzit Company of New Jersey.)
Progressive Knitted Rayon Fabric Mills, Inc., Brooklyn, N. Y. Knitted rayon and silk goods. Serial No. 335,034; Apr. 18. Class 42.
Pure Food Distributors, Inc., Hillside, N. J. Mayonnaise. Serial No. 335,171; Apr. 18. Class 46.
Rapid Fire Publications, Inc., The, New York, N. Y. Periodical. Serial No. 334,231; Apr. 18. Class 38.
Red Band Company, Inc., Johnson City, Tenn. Flour. Serial No. 333,014; Apr. 18. Class 46.
Reiffel, William, Tuckahoe, N. Y. Dental universal molding frame. Serial No. 334,884; Apr. 18. Class 44.
Reutter & Co. Société en Commandite Simple, Berchem, near Antwerp, Belgium. Fly paper. Serial No. 332,859; Apr. 18. Class 50.
Robertson & Baxter Limited, Glasgow, Scotland. Rum. Serial No. 331,801; Apr. 18. Class 49.
Robertson & Baxter Limited, Glasgow, Scotland. Whisky. Serial No. 331,803; Apr. 18. Class 49.
Rochester Co. Inc., The, Enid, Okla. Handkerchiefs. Serial No. 335,132; Apr. 18. Class 42.
Routery, Francis T. (See Burt-Gerrans, James T., assignor.)
Sandeman & Sons Limited, Edinburgh, Scotland. Whisky. Serial No. 335,249; Apr. 18. Class 49.
Sandfelder Bros. Co., Chicago, Ill. Girdles, brassières, etc. Serial No. 334,887; Apr. 18. Class 39.
Schwartz Merchandise Corporation, New York, N. Y. Candy. Serial No. 329,915; Apr. 18. Class 46.
Sears, Roebuck and Co., Chicago, Ill. Boots and shoes. Serial No. 334,410; Apr. 18. Class 39.
Sears, Roebuck and Co., Chicago, Ill. Harmonicas and violin string adjusters. Serial No. 334,848; Apr. 18. Class 36.
Sears, Roebuck and Co., Chicago, Ill. Writing inks, inking pads, and carbon paper. Serial No. 334,850; Apr. 18. Class 11.
Sears, Roebuck and Co., Chicago, Ill. Therapeutic bulbs, abdominal supporters, teething rings, etc. Serial No. 334,935; Apr. 18. Class 44.
Sears, Roebuck and Co., Chicago, Ill. Paints and paint dryer. Serial No. 335,141; Apr. 18. Class 16.
Siemon Company, The, Bridgeport, Conn. Buttons. Serial No. 334,372; Apr. 18. Class 40.
Sinclair Knitting Mills Inc., New York, N. Y. Bathing suits and suspenders. Serial No. 335,097; Apr. 18. Class 39.
Stewart Hartshorn Company, New York, N. Y. Window shade rollers. Serial No. 334,938; Apr. 18. Class 32.
Street & Smith Publications, Inc., New York, N. Y. Periodical. Serial No. 334,126; Apr. 18. Class 38.
Takara Laboratories, Portland, Oreg. Tablets and capsules. Serial No. 335,175; Apr. 18. Class 6.
Tennessee Eastman Corporation, Kingsport, Tenn. Molding composition. Serial No. 334,622; Apr. 18. Class 1.
Thornton, John, & Company, New York, N. Y. Needles. Serial No. 331,808; Apr. 18. Class 40.
Triad Manufacturing Co., Inc., doing business as Meltron Tube Co., Pawtucket, R. I. Radio and television tubes. Serial No. 335,303; Apr. 18. Class 21.
Utility Mfg. Co. Inc., Baltimore, Md. Ice picks, kitchen forks, spatulas, etc. Serial No. 330,940; Apr. 18. Class 23.
Valmor Products Co. (See Neumann, Morton G.)
Van Smith, Hurxthal, Tulsa, Okla. Picture puzzles. Serial No. 335,146; Apr. 18. Class 22.
Vilas, Malcolmb B., doing business as The Coast-2-Coast Oil Co., Cleveland, Ohio. Lubricating oils and greases. Serial No. 315,223; Apr. 18. Class 15.
Wait, Justin F., New York, N. Y. Lubricating oils and greases, gasoline, etc. Serial No. 335,176; Apr. 18. Class 15.
Western Auto Supply Agency of Los Angeles, Los Angeles, Calif. Automobile tires. Serial No. 329,412; Apr. 18. Class 35.
White Ring Malt Extract Co. (See Herron, Charles V.)
Wilkins-Rogers Milling Co., Inc., Washington, D. C. Wheat flour. Serial No. 335,147; Apr. 18. Class 46.
Wilson Brothers, Chicago, Ill. Shirts, pajamas, men's underwear, hosiery, and neckties. Serial No. 315,518; Apr. 18. Class 39.
Wilson Brothers, Chicago, Ill. Men's dress shirts. Serial No. 329,543; Apr. 18. Class 39.
Wolf Collieries Company, Inc., Freeland, Pa. Coal. Serial No. 326,627; Apr. 18. Class 1.
Youngs Rubber Corporation, Inc., New York, N. Y. Prophylactic rubber articles. Serial No. 335,265; Apr. 18. Class 44.
Zinsser & Co., Inc., Hastings-on-Hudson, N. Y. Printing ink. Serial No. 334,417; Apr. 18. Class 11.

LIST OF REGISTRANTS OF TRADE-MARKS

Abel, George H., Roslyn, Pa. Metallic arc welding electrodes and oxy-acetylene welding wire. 302,491; Apr. 18; Serial No. 333,136; published Jan. 31, 1933. Class 14.
Aberle, H. C., Co., Philadelphia, Pa. Hosiery. 302,499; Apr. 18. Class 39.
Aeronautical Industries Research. (See Sabor, Russell.)
Allen, Robert S. (See Pearson, A. R., and Allen.)
American Disinfecting Company, Sedalia, Mo. Liquid wax preparation. 302,385; Apr. 18; Serial No. 331,720; published Jan. 31, 1933. Class 16.
American Lead Pencil Company, Hoboken, N. J. to American Lead Pencil Company, New York, N. Y. Lead pencils. 40,090; renewed Apr. 14, 1933.
American Tobacco Company, The. (See Melachrino, M., & Co., Incorporated, assignor.)
Angert, Louis, doing business as Claremont Perfume Shop, Yonkers, N. Y. Astringents, bleach creams, face packs, etc. 302,506; Apr. 18. Class 6.
Anré, Cosmetician. (See Koenig, Harry D.)
Arden, Elisabeth, Inc., New York, N. Y. Perfumes and perfumery. 302,456; Apr. 18; Serial No. 331,884; published Jan. 24, 1933. Class 6.
Ballantine, P., & Sons, Newark, N. J. Malt syrup. 302,388; Apr. 18; Serial No. 330,191; published Jan. 24, 1933. Class 46.
Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. 302,408; Apr. 18; Serial No. 333,181; published Jan. 31, 1933. Class 17.
Berry, James B., Sons' Co., Oil City, Pa., and Chicago, Ill. Gasoline. 302,490; Apr. 18; Serial No. 326,125; published Sept. 13, 1932. Class 15.
Best Foods, Inc., The, New York, N. Y. Mayonnaise. 302,517; Apr. 18. Class 46.
Borun Bros., doing business as Rite Laboratories, Los Angeles, Calif. Pharmaceutical preparations. 302,428; Apr. 18; Serial No. 332,515; published Jan. 31, 1933. Class 6.
Boucher Cork Co., Inc., New York, N. Y. Strips of tipping material for cigarette paper. 302,509; Apr. 18. Class 8.
Brogirot, Incorporated, New York, N. Y. Pharmaceutical preparation. 302,416; Apr. 18; Serial No. 332,084; published Jan. 24, 1933. Class 6.
Brook Hill Laboratories, Inc., Genesee Depot, Wis., and Chicago, Ill. Medicine. 302,484; Apr. 18; Serial No. 331,541; published Jan. 24, 1933. Class 6.
Buckeye Soda Company, The, Painesville Township, Lake County, Ohio. Washing soda. 302,462; Apr. 18; Serial No. 332,223; published Jan. 17, 1933. Class 6.
Budd, Edward G., Manufacturing Company, Philadelphia, Pa. Aeroplanes, hydroplanes, pontoons, etc. 302,439; Apr. 18; Serial No. 329,130; published Jan. 17, 1933. Class 19.
California Spray-Chemical Corporation, Wilmington, Del., and Berkeley, Calif. Flotation sulphur. 302,398; Apr. 18; Serial No. 328,546; published Aug. 30, 1932. Class 6.
Campbell Laboratories, Inc., New York, N. Y. Cosmetics. 302,445; Apr. 18; Serial No. 331,142; published Jan. 24, 1933. Class 6.
Canady, William A., doing business as Neuresco Chemical Co., Raleigh, N. C. Liniment. 302,443; Apr. 18; Serial No. 330,649; published Jan. 10, 1933. Class 6.
Carr, Charles, Bridgeport, Conn. Storage batteries. 302,511; Apr. 18. Class 21.
Carter Macy Tea & Coffee Co., Inc., New York, N. Y. Tea. 302,493; Apr. 18. Class 46.
Castilla Company. (See Schultz, Lloyd G.)
Claremont Perfume Shop. (See Angert, Louis.)

Clark, W. L. M., Incorporated, St. Louis, Mo. Packet or package containing quilt patches, etc. 302,471; Apr. 18; Serial No. 330,896; published Jan. 3, 1933. Class 40.
Cohen, Arthur, Dress Corporation, New York, N. Y. Dresses. 302,501; Apr. 18. Class 39.
Columbia Phonograph Company, Inc., Bridgeport, Conn. Laundry cabinet dryers, dry cleaning machines, ironing boards, etc. 302,401; Apr. 18; Serial No. 320,711; published Nov. 29, 1932. Class 24.
Commercial Laboratories. (See Frants, John W.)
Creco Company, Inc., Long Island City, N. Y. Paper towels, toilet papers. 320,375; Apr. 18; Serial No. 332,401; published Jan. 31, 1933. Class 37.
Crosley Radio Corporation, The, Cincinnati, Ohio. Radio receiving sets. 302,476; Apr. 18; Serial No. 332,332; published Jan. 31, 1933. Class 21.
Crown Cork & Seal Company, Inc. (See New Process Cork Company, assignor.)
Day Chemical Company, Newark, N. J. Surgical lubricating jelly. 302,457; Apr. 18; Serial No. 332,087; published Jan. 17, 1933. Class 6.
De Ciny Paris. (See Sinykin, J. L.)
Dermatological Prescription Laboratories. (See Maloney, Peter W.)
Deshler Broom Factory, The, Deshler, Nebr. Whisk brooms. 302,402; Apr. 18; Serial No. 320,085; published Jan. 31, 1933. Class 29.
Diebold Safe & Lock Co., Canton, Ohio. Safes and metal structures and parts thereof. 302,510; Apr. 18. Class 25.
E-Cut Knitting Mills, The. (See Emmers, E., & Co., assignor.)
Edison, Thomas A., Incorporated, West Orange, N. J. Electrolyte and electrolyte material. 302,394; Apr. 18; Serial No. 331,252; published Jan. 31, 1933. Class 6.
Egry Register Company, The, Dayton, Ohio. Autographic registers and paper fillers therefor. 302,374; Apr. 18; Serial No. 332,369; published Jan. 31, 1933. Class 37.
Ellers, Paula S., doing business as Sani-Skalp Co., Beverly Hills, Calif. Oil shampoo. 302,480; Apr. 18; Serial No. 331,922; published Jan. 24, 1933. Class 6.
Eklund, Lillian, doing business as Sox-Saver Chemical Company, Philadelphia, Pa. Chemical preparation for prolonging the life of silk or cotton hosiery. 302,513; Apr. 18. Class 6.
Electric Moth Bomb Co., The. (See Riley, H. E., and Tannenbaum.)
Elmi Waters, Inc., Lincoln Park, Mich. Artificial mineralized water. 302,429; Apr. 18; Serial No. 332,560; published Jan. 31, 1933. Class 6.
Emmers, E., & Co., assignors to The E-Cut Knitting Mills, Royersford, Pa. Undervests. 92,660; renewed July 22, 1933.
Empire State Products Co., Yonkers, N. Y. Preparation for use as a carbon remover. 302,418; Apr. 18; Serial No. 331,820; published Jan. 24, 1933. Class 6.
Frants, John W., doing business as Commercial Laboratories, Chicago, Ill. Compound for cleaning typewriter parts and type and for dissolving ink. 302,400; Apr. 18; Serial No. 321,681; published Mar. 1, 1932. Class 4.
G. C. Medicine Company. (See Werner, John H.)
Gabler, William M., Baltimore, Md. Preparations for preventing and treatment of diseases of birds. 302,514; Apr. 18. Class 6.
Gar-Herb-A Co., The. (See Garner, George W.)
Garner, George W., doing business as The Gar-Herb-A Co., North Wales, Pa. Compound of herbs. 302,412; Apr. 18; Serial No. 331,780; published Jan. 24, 1933. Class 6.
Georgian Company, The, Atlanta, Ga. Newspaper. 91,473–4; renewed May 6, 1933.
Gray, Jean, Washington, D. C. Preparation for the treatment of the hair. 302,448; Apr. 18; Serial No. 331,373; published Jan. 24, 1933. Class 6.
Guba, Frank, doing business as St. Ann's Laboratory, Waterbury, Conn. Ointment, cough sirup, etc. 302,444; Apr. 18; Serial No. 331,046; published Jan. 17, 1933. Class 6.
Hammond Paint & Chemical Co., Inc., The, Beacon, N. Y. Insecticide chemicals. 302,391; Apr. 18; Serial No. 331,431; published Jan. 24, 1933. Class 6.
Hammond Paint, & Chemical Co., Inc., The, Beacon, N. Y. Insecticide chemicals. 302,449; Apr. 18; Serial No. 331,430; published Jan. 24, 1933. Class 6.
Hampden Sales Corporation, Springfield, Mass. Filling or sizing material for textiles. 302,481–2; Apr. 18; Serial Nos. 331,858–9; published Jan. 31, 1933. Class 6.
Havana Cigar & Tobacco Factories, Ltd., New York, N. Y., and Havana, Cuba, to The Habana Cigar and Tobacco Factories, Limited, Jersey City, N. J. Cigars. 92,892; renewed Aug. 5, 1933.
Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple juice. 302,518; Apr. 18. Class 46.
Heide, Henry, assignor to Henry Heide, Incorporated, New York, N. Y. Candy. 92,794; renewed July 29, 1933.
Henning, Dr. Georg Friedrich, Chemische Fabrik, Berlin, Germany. Preparation for producing narcosis and for anaesthetizing. 302,441; Apr. 18; Serial No. 327,793; published Jan. 24, 1933. Class 6.
Hering, Ardo, New York, N. Y. Dry cleaner, metal cleaner, metal polish, etc. 302,431; Apr. 18; Serial No. 322,425; published Jan. 31, 1933. Class 4.
Hipwell Manufacturing Company, Pittsburgh, Pa. Drain pipe solvent. 302,427; Apr. 18; Serial No. 332,411; published Jan. 31, 1933. Class 6.
Houbigant, Inc., New York, N. Y. Perfume, toilet water, face powder, etc. 332,417; Apr. 18; Serial No. 332,454; published Jan. 24, 1933. Class 6.
Hynson, Westcott & Dunning, Incorporated, Baltimore, Md. Antiseptics, bactericides, etc. 302,463; Apr. 18; Serial No. 332,255; published Jan. 17, 1933. Class 6.
Inecto Limited, assignor, by mesne assignments, to Rapidol Limited, London, England. Preparation for dyeing the hair. 93,179; renewed Aug. 26, 1933.
Institute of Feminine Hygiene, Inc., New York, N. Y. Vaginal syringes, sanitary napkins, bed pans, etc. 302,504; Apr. 18. Class 44.
International Distributing Co., Janesville, Wis. Porch shades. 302,384; Apr. 18; Serial No. 332,152; published Jan. 31, 1933. Class 32.
Kelly, Geo. J., Inc., Lynn, Mass. Shoe polish creams. 302,406; Apr. 18; Serial No. 290,182; published Jan. 31, 1933. Class 4.
Kelvinator Corporation, Detroit, Mich. Oil burners and parts thereof. 302,437; Apr. 18; Serial No. 328,429; published Jan. 31, 1933. Class 34.
Kennedy Valve Mfg. Co., The, Elmira, N. Y. Hydrants. 302,387; Apr. 18; Serial No. 330,750; published Jan. 31, 1933. Class 13.
Klein, Friedrich, Berlin-Neukolln, Germany. Pharmaceutical preparations. 302,399; Apr. 18; Serial No. 325,101; published Jan. 24, 1933. Class 6.
Klein, Friedrich, Berlin-Neukolln, Germany. Pharmaceutical preparations. 302,440; Apr. 18; Serial No. 325,103; published Jan. 24, 1933. Class 6.
Knapp-Monarch Company, Belleville, Ill. Insulated jugs and vacuum bottles. 302,382; Apr. 18; Serial No. 331,864; published Jan. 31, 1933. Class 2.
Knox Chemical Company. (See Ware, Macon.)
Koenig, Harry D., doing business as Anré, Cosmetician, New York, N. Y. Face powder, lipstick, face rouge, etc. 302,414; Apr. 18; Serial No. 331,863; published Jan. 24, 1933. Class 6.
Kress, S. H., & Co., New York, N. Y. Bottle caps. 302,500; Apr. 18. Class 50.
Kunett & Co., Inc., New York, N. Y. Cosmetics. 302,515; Apr. 18. Class 6.
Larkin Refrigerating Corporation, Atlanta, Ga. Pressure control valve. 302,381; Apr. 18; Serial No. 331,898; published Jan. 31, 1933. Class 13.
Larkin Refrigerating Corporation, Atlanta, Ga. Pressure control valve for refrigeration apparatus. 302,383; Apr. 18; Serial No. 331,830; published Jan. 31, 1933. Class 13.
Latham, Jack, doing business as Latham and Bower, Cocoa, Conn. Card tables. 302,379; Apr. 18; Serial No. 332,259; published Jan. 31, 1933. Class 32.
Laymon, Herman B., doing business as World's Products Co., Spencer, Ind. Aspirin. 302,516; Apr. 18. Class 6.
Leonhard, Theodor, Wax Co. Inc., Haledon, N. J. Beeswax. 302,477; Apr. 18; Serial No. 332,068; published Jan. 31, 1933. Class 6.
Levin Brothers Paper Co., Chicago, Ill. Toilet paper. 302,434; Apr. 18; Serial No. 325,715; published Jan. 31, 1933. Class 37.
Lockhart Bros. (See Vaughan, Erin L.)
Love, Everett, & Sons, Laredo, Tex. Fresh vegetables. 302,508; Apr. 18. Class 46.
Major Manufacturing Co., New York, N. Y. Cement. 90,820; renewed Mar. 25, 1933.
Maloney, Peter W., doing business as Dermatological Prescription Laboratories, San Francisco, Calif. Lotions, ointments, and powders. 302,496; Apr. 18. Class 6.
Mansfield, E. R., Co. Ltd., Los Angeles, Calif. Cosmetics, toilet preparations. 302,505; Apr. 18. Class 6.
Mayer, H. J., & Sons Co., Chicago, Ill. Meat curing compound. 302,410; Apr. 18; Serial No. 331,622; published Jan. 24, 1933. Class 6.
McKesson & Robbins, New York, N. Y. to McKesson & Robbins, Incorporated, Bridgeport, Conn., successor, Laxative medicine. 39,844; renewed Feb. 24, 1933.
McNeil, Robert, Philadelphia, Pa. Prophylactic astringent and anodyne, etc. 302,461; Apr. 18; Serial No. 332,157; published Jan. 17, 1933. Class 6.
Melachrino, M., & Co., Incorporated, as assignee of M. Melchrino & Co., assignor, by mesne assignments, to The American Tobacco Company, New York, N. Y. Cigarettes. 91,589; renewed May 13, 1933.
Melachrino, M., & Co., Incorporated as assignee of M. Melachrino & Co., assignor, by mesne assignments, to The American Tobacco Company, New York, N. Y. Cigarettes. 91,678; renewed May 20, 1933.
Metal Textile Corporation, West Orange, N. J. Dish mops. 302,395; Apr. 18; Serial No. 330,519; published Jan. 17, 1933. Class 4.
Midwest Hardware Company, Chicago, Ill. Moth-proofing materials. 302,458; Apr. 18; Serial No. 332,096; published Jan. 17, 1933. Class 6.
Montgomery-Frost Company, Boston, Mass. Eyeglasses, spectacles and lenses therefor. 302,512; Apr. 18. Class 26.
Nassour Brothers, Inc. Ltd., Los Angeles, Calif. Cosmetics. 302,494; Apr. 18. Class 6.

National Automatic Container Corporation, Baltimore, Md., and New York, N. Y. Container for packages of cigarettes. 302,421; Apr. 18; Serial No. 332,542; published Jan. 31, 1933. Class 8.
Naugatuck Chemical Company, The, New York, N. Y. Chemicals for controlling the odor of rubber and rubber compounds. 302,430; Apr. 18; Serial No. 332,959; published Jan. 31, 1933. Class 6.
Nelson, William R., Dallas, Tex. Preparation for scalp diseases, rheumatism, and skin diseases. 302,390; Apr. 18; Serial No. 331,604; published Jan. 24, 1933. Class 6.
Neuresco Chemical Co. (See Canady, William A.)
New Process Cork Company, New York, N. Y., assignor to Crown Cork & Seal Company, Inc., Baltimore, Md. Cork disks and washers. 92,905; renewed Aug. 5, 1933.
New Yorker Cosmetic Corp., The, New York, N. Y. Astringents, bleach creams, cold creams, etc. 302,474; Apr. 18; Serial No. 332,462; published Jan. 24, 1933. Class 6.
Norwich Pharmacal Company, The, Norwich, N. Y. Liquid medicinal preparations. 40,254; renewed May 5, 1933.
Nu-Ra Waxcoat Corporation, Brooklyn, N. Y. Polish. 302,438; Apr. 18; Serial No. 328,844; published Jan. 31, 1933. Class 16.
Pacific Manifolding Book Company, Emeryville, Calif. Paper and stationery. 302,371; Apr. 18; Serial No. 332,820; published Jan. 31, 1933. Class 37.
Page Perfumer. (See Talcum Puff Co. Inc.)
Park Drug Company, Inc., doing business as Park Laboratories, New York, N. Y. Liquid dentifrice and antiseptic. 302,418; Apr. 18; Serial No. 332,264; published Jan. 24, 1933. Class 6.
Park & Tilford, New York, N. Y. Perfumeries, lotions, etc. 302,450–1; Apr. 18; Serial Nos. 331,437–8; published Jan. 17, 1933. Class 6.
Pearson, Andrew R., and R. S. Allen, Washington, D. C. News columns and special articles. 302,409; Apr. 18; Serial No. 333,168; published Jan. 31, 1933. Class 38.
Pease, C. F., Company, The, Chicago, Ill. Arc lamp globes. 302,370; Apr. 18; Serial No. 332,960; published Jan. 31, 1933. Class 33.
Pechman Store Equipment Co. Inc., New York, N. Y. Refrigerators, refrigerated show cases, meat cases, etc. 302,498; Apr. 18. Class 31.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Rouge, cleansing cream, bleach cream, etc. 302,452; Apr. 18; Serial No. 331,590; published Jan. 24, 1933. Class 6.
Penney, J. C., Company, Wilmington, Del., and New York, N. Y. Rouge, cleansing cream, bleach cream, etc. 302,454; Apr. 18; Serial No. 331,591; published Jan. 24, 1933. Class 6.
Pennsylvania Distilling Company, Inc., Logansport, Pa., and Brooklyn, N. Y. Whiskey. 302,492; Apr. 18; Serial No. 333,421; published Feb. 7, 1933. Class 49.
Preserves & Honey, Inc. (See Root, A. I., Company, assignor.)
Producers Diamond Quality Oil & Gas Co., Topeka, Kans. Motor fuel oils, lubricating oils, gasoline, etc. 302,432; Apr. 18; Serial No. 328,840; published Jan. 31, 1933. Class 15.
Pure Oil Company, The, Chicago, Ill. Lubricating oils. 302,485; Apr. 18; Serial No. 331,440; published Jan. 31, 1933. Class 15.
Rapidol Limited. (See Inecto Limited, assignor.)
Raynorshine Products, Inc., San Antonio, Tex. Polish and wax. 302,378; Apr. 18; Serial No. 332,732; published Jan. 31, 1933. Class 16.
Reina, Salvatore A., doing business as Salva-Gene Chemical Laboratory, San Francisco, Calif. Internal medicine. 302,459; Apr. 18; Serial No. 332,101; published Jan. 17, 1933. Class 6.
Reise-Premier Pipe Co., West New York, N. J. Tooth paste. 302,487; Apr. 18; Serial No. 331,266; published Jan. 31, 1933. Class 6.
Rex-Hide Rubber Manufacturing Company, East Brady, Pa. Molded friction linings, and mineral wear-resisting materials. 302,472; Apr. 18; Serial No. 332,860; published Jan. 24, 1933. Class 35.
Reynolds Spring Co., Jackson, Mich. Receptacles of synthetic resin, etc. 302,436; Apr. 18; Serial No. 327,450; published Jan. 17, 1933. Class 2.
Riley, Herbert E., and H. J. Tannenbaum, doing business as The Electric Moth Bomb Co., New York, N. Y. Fumigating apparatus. 302,447; Apr. 18; Serial No. 331,292; published Jan. 24, 1933. Class 6.
Rimmel, Inc., West Orange, N. J. Astringents, astringent cerates, bleach creams, etc. 302,488; Apr. 18; Serial No. 331,164; published Jan. 31, 1933. Class 6.
Rite Laboratories. (See Borun Bros.)
Root, A. I., Company, The, Medina, Ohio, assignor to Preserves & Honey, Inc., New York, N. Y. Honey. 93,026; renewed Aug. 12, 1933.
Rustvold Products, Inc., Long Island City, N. Y. Liquid preparation. 302,453; Apr. 18; Serial No. 331,595; published Jan. 17, 1933. Class 6.
Sabor, Russell, doing business as Aeronautical Industries Research, Minneapolis, Minn. Floor seals and paint preservatives, paints, varnishes, polishes, etc. 302,435; Apr. 18; Serial No. 326,162; published Jan. 31, 1933. Class 16.
St. Ann's Laboratory. (See Guba, Frank.)
Salva-Gene Chemical Laboratory. (See Reina, Salvatore A.)
Sani-Skalp Co. (See Eilers, Paula S.)
Schultz, Lloyd G., doing business as Castilla Company, New York, N. Y. Tooth soap. 302,507; Apr. 18. Class 6.
Sears, Roebuck and Co., Chicago, Ill. Smokers' pipes. 302,407; Apr. 18; Serial No. 333,208; published Jan. 31, 1933. Class 8.
Settlement Cook Book Company, The, Milwaukee, Wis. Printed books. 302,377; Apr. 18; Serial No. 332,076; published Jan. 31, 1933. Class 38.
Siegelman Laboratories, Inc., Los Angeles, Calif. Lotion. 302,495; Apr. 18. Class 6.
Sinykin, J. L., doing business as De Ciny Paris, St. Paul, Minn. Perfumes, toilet water, face powder, etc. 302,415; Apr. 18; Serial No. 331,875; published Jan. 24, 1933. Class 6.
Skoot Company, The, Hamilton and Dayton, Ohio. Liniment. 302,411; Apr. 18; Serial No. 331,054; published Jan. 24, 1933. Class 6.
Slesinger, Stephen, Inc., New York, N. Y. Chinaware, pottery, globes, etc. 302,372; Apr. 18; Serial No. 332,668; published Jan. 31, 1933. Class 30.
Smith, Elisur G., Portland, Oreg. Medicine. 302,397; Apr. 18; Serial No. 328,844; published Jan. 24, 1933. Class 6.
"Société Française Hispano-Suiza", The, Bois-Colombes, France. Motor vehicles, speedboats, aeroplanes, etc., and parts thereof. 302,433; Apr. 18; Serial No. 325,442; published Jan. 31, 1933. Class 19.
Soluol Corporation, Providence, R. I. Sizing and treatment material. 302,460; Apr. 18; Serial No. 332,128; published Jan. 17, 1933. Class 6.
Southern Coal Company, Inc., Memphis, Tenn. Coal. 302,396; Apr. 18; Serial No. 329,157; published Oct. 4, 1932. Class 1.
Sox-Saver Chemical Company. (See Eklund, Lillian.)
Standard Brands Incorporated, New York, N. Y. Amylolytic or starch-liquefying preparation. 302,486; Apr. 18; Serial No. 331,516; published Jan. 31, 1933. Class 6.
Standard Envelope Manufacturing Company, The, Cleveland, Ohio. Envelopes. 302,373; Apr. 18; Serial No. 332,472; published Jan. 31 1933. Class 37.
Standard Oil Company of New Jersey, Wilmington, Del. Oils and greases. 302,405; Apr. 18; Serial No. 298,725; published Nov. 29, 1932. Class 15.
Strathmore Paper Company, West Springfield, Mass. Writing and printing paper. 302,389; Apr. 18; Serial No. 329,432; published Jan. 31, 1933. Class 37.
Superior Laboratories, Inc., Cleveland, Ohio. Face cream, lotion, powder, etc. 302,503; Apr. 18. Class 6.
Talcum Puff Co. Inc., doing business as Page Perfumer New York, N. Y. Face creams, face and hand lotions, rouge, etc. 302,446; Apr. 18; Serial No. 331,270; published Jan. 24, 1933. Class 6.
Tancré, Carl A., Naumburg-on-the-Saale, Germany. General tonic. 302,393; Apr. 18; Serial No. 331,295; published Jan. 31, 1933. Class 6.
Tark Electric Razor Co., Inc., Long Island City, N. Y. Electric razors and blades therefor. 302,475; Apr. 18; Serial No. 332,387; published Jan. 31, 1933. Class 23.
Texaco Salt Products Company, New York, N. Y. Calcium chloride. 302,419; Apr. 18; Serial No. 332,278; published Jan. 24, 1933. Class 6.
Tinsky, Samuel, Brooklyn, N. Y. Brushless shaving cream. 302,392; Apr. 18; Serial No. 331,324; published Jan. 31, 1933. Class 4.
Tustin, Clinton, Denver, Colo. Hair oil. 302,455; Apr. 18; Serial No. 331,879; published Jan. 24, 1933. Class 6.
Union Publishing Company, Dallas, Tex. Magazines. 302,376; Apr. 18; Serial No. 332,132; published Jan. 31, 1933. Class 38.
United States Ozone Company of America, The, Scottdale, Pa. Water-purifying machinery and parts thereof. 302,483; Apr. 18; Serial No. 331,599; published Jan. 31, 1933. Class 23.
Vaughan, Erin L., doing business as Lockhart Bros., Selma, Ala. Preparation for use as a blood purifier. 302,479; Apr. 18; Serial No. 331,939; published Jan. 24, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary nerve tonic. 302,423; Apr. 18; Serial No. 332,279; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicinal preparation. 302,425; Apr. 18; Serial No. 332,278; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicine. 302,426; Apr. 18; Serial No. 332,277; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicine. 302,464–5; Apr. 18; Serial Nos. 332,274–5; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Medicinal preparation for man or beast. 302,466; Apr. 18; Serial No. 332,276; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Medicinal preparation for swollen tendons, etc. 302,467; Apr. 18; Serial No. 332,280; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary medicinal preparation. 302,468; Apr. 18; Serial No. 332,282; published Jan. 17, 1933. Class 6.

Veterinary Products Laboratory, Inc., Jamaica, N. Y. Medicinal preparation for skin diseases of man or beast. 302,469; Apr. 18; Serial No. 332,283; published Jan. 17, 1933. Class 6.
Veterinary Products Laboratory, Inc., Jamaica, N. Y. Veterinary tonic. 302,470; Apr. 18; Serial No. 332,284; published Jan. 17, 1933. Class 6.
Victory Granite Company, Barre, Vt. Memorials. 302,502; Apr. 18. Class 50.
Vio-Ray Company, New York, N. Y. Article of manufacture as a substitute for window glass. 302,497; Apr. 18. Class 50.
Ware, Macon, doing business as Knox Chemical Company, East Falls Church, Va. Rubbing liniment. 302,442; Apr. 18; Serial No. 329,812; published Nov. 15, 1932. Class 6.
Warner Bros. Pictures, Inc., New York, N. Y. Series of different motion picture films. 302,380; Apr. 18; Serial No. 332,203; published Jan. 31, 1933. Class 26.
Weed Destroyer Co., Inc., Aberdeen, Wash. Weed guns and parts thereof. 302,404; Apr. 18; Serial No. 310,317; published Jan. 31, 1933. Class 23.
Werner, John H., doing business as G. C. Medicine Company, Clarksville, Ark. Preparation for the treatment of gonorrhea. 302,478; Apr. 18; Serial No. 331,971; published Jan. 24, 1933. Class 6.
Winarick, Ar., Inc., New York, N. Y. Powder puffs, dusting mittens, dish mops, etc. 302,422; Apr. 18; Serial No. 332,288; published Jan. 31, 1933. Class 29.
Winthrop Chemical Company, Inc., New York, N. Y. Antimalarial preparation. 302,479; Apr. 18; Serial No. 332,745; published Jan. 31, 1933. Class 6.
World's Products Co. (See Laymon, Herman B.)
Wray, Carl E., Salina, Kans. Medicinal preparation for the treatment of tubercular and lung diseases. 302,480; Apr. 18; Serial No. 330,076; published Jan. 24, 1933. Class 6.
Wurtele, G. F., doing business as G. F. Wurtele Company, Philadelphia, Pa. Medicinal preparations. 302,405; Apr. 18; Serial No. 319,129; published June 21, 1932. Class 6.
Yeast-Vite (U. S. A.) Inc., Niagara Falls, N. Y. Tonic. 302,424; Apr. 18; Serial No. 330,009; published Jan. 31, 1933. Class 6.
Zahoray, Julia, South St. Paul, Minn. Palliative for the treatment of lung diseases. 302,420; Apr. 18; Serial No. 332,287; published Jan. 24, 1933. Class 6.
Zobel, Harry L 3d, Sea Bright, N. J. Motor boats and cruisers. 302,386; Apr. 18; Serial No. 331,020; published Jan. 31, 1933. Class 19.

LIST OF REGISTRANTS OF LABELS

Acme Metal Goods Mfg. Co., Newark, N. J. The Acme Safety Grater. For Grater Implement for Kitchen Use. 41,927; Apr. 18.
Ajux Company, Dallas, Tex. Ajux Line Guide. For Line Guide. 41,928; Apr. 18.
Blue Heven Corporation, The, North Kansas City, Mo. Blue Heven. For Detergents. 41,929; Apr. 18.
Casazza, V., & Bro., New York, N. Y. Royal George Scotch Whisky. For Scotch Whisky. 41,930; Apr. 18.
Connecticut Cigar Mfg. Co., Inc., Manchester, Conn. Connecticut Newstone. For Cigars. 41,931; Apr. 18.
Fox-Cross Candy Company, Oakland, Calif. All American. For Chocolate Covered Candy Bars. 41,932; Apr. 18.
General Mills, Inc., Minneapolis, Minn. Wheaties. For Whole Wheat Flakes. 41,933; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Sport Shoes. For Boxes. 41,934; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Rose Marie. For Boxes. 41,935; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Sportster. For Boxes. 41,936; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. The John Adams Shoe. For Boxes. 41,937; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Will Wear Well. For Boxes. 41,938; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. The Strong-Wear Line. For Boxes. 41,939; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. The Riviera Shoe. For Boxes. 41,940; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. The Safety Toe. For Boxes. 41,941; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Super Fashion Stouts. For Boxes. 41,942; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. The Resorter. For Boxes. 41,943; Apr. 18.
Hoague-Sprague Corporation, Lynn, Mass. Ginger Sport Girl. For Boxes. 41,944; Apr. 18.
McCormick & Co., Inc., Baltimore, Md. Midnight Sun Tea. For Tea. 41,945; Apr. 18.
Menasha Products Company, The, Menasha, Wis. Menasha Butter. For Butter. 41,946; Apr. 18.
Menasha Products Company, The, Menasha, Wis. Menasha Ice Cream. For Ice Cream. 41,947; Apr. 18.
Mitchell, James C., Joplin, Mo. Zip. For an Insecticide. 41,948; Apr. 18.
Phillips-Jones Corporation, New York, N. Y. "The Genuine Van Heusen Collar" Van Heusen—Collar Attached Shirt. For Shirts. 41,949; Apr. 18.
Popper, Gray & Company, Inc., New York, N. Y. Eiffel Tower. For Butter. 41,950; Apr. 18.
Romar Cigar Company, Waterbury, Conn. Romar Cigars—3 for 5—a Real Short Smoke. For Cigars. 41,951; Apr. 18.
Royal, Thomas M., & Co., Philadelphia, Pa. Air-O-Seal. For Coffee Bags. 41,952; Apr. 18.
Self-Locking Carton Company, Chicago, Ill. One Dozen Eggs. For Eggs. 41,953; Apr. 18.
Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. The Wonder Mat Box Spring. For Box-Springs. 41,954; Apr. 18.
Teleon Mfg. Co., The, Chicago, Ill. Telecleaner. For Cleaning Fluid. 41,955; Apr. 18.
Tuco Work Shops, The, Lockport, N. Y. Tuco Picture Puzzle. For Picture Puzzles. 41,956; Apr. 18.
Vapor-Gas Crystals Company, Sharpsburg, Pa. Vapor-Gas Crystals. The Twenty Minute Rug Cleaner. For Cleaner for Rugs, Carpets, Upholstered Furniture, and Auto Upholstery. 41,957; Apr. 18.

LIST OF REGISTRANTS OF PRINTS

Bettis, Wm. Chas., San Francisco, Calif. Greased Lightning. For Lubricating Gasoline. 14,135; Apr. 18.
General Mills, Inc., Minneapolis, Minn. Peeps-and-Squeals. For Flour. 14,136; Apr. 18.
Hecker-H-O Company, Inc., Buffalo, N. Y. Force Toasted Whole Wheat Flakes. For Cereal Food Products. 14,137; Apr. 18.
Hills Bros., San Francisco, Calif. Hills Bros' Patented Process "Does Right" by the Rare Blend of Coffees. For Coffee. 14,138; Apr. 18.
Hills Bros., San Francisco, Calif. They Call It "The World's Finest Coffee" . . . And Here Is The Reason. For Coffee. 14,139; Apr. 18.
Hills Bros., San Francisco, Calif. When You Taste Hills Bros. Coffee, You'll Realize The Importance of Perfect Roasting. For Coffee. 14,140; Apr. 18.
McCarty, George L., Washington, D. C. Health 10¢ Gallon. For Mineral Water Crystals. 14,141; Apr. 18.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Coal. Southern Coal Company. 302,396; Apr. 18; Serial No. 329,157; published Oct. 4, 1932.

CLASS 2

Jugs and vacuum bottles, Insulated. Knapp-Monarch Company. 302,382; Apr. 18; Serial No. 331,864; published Jan. 31, 1933.
Receptacles for synthetic resin, etc. Reynolds Spring Co. 302,436; Apr. 18; Serial No. 327,450; published Jan. 17, 1933.

CLASS 4

Abradant dish mops. Metal Textile Corporation. 302,395; Apr. 18; Serial No. 330,519; published Jan. 17, 1933.
Cleaner, metal cleaner and polish, etc., Dry. A. Hering. 302,431; Apr. 18; Serial No. 322,425; published Jan. 31, 1933.
Compound for cleaning typewriter parts and type and for dissolving ink. J. W. Frantz. 302,400; Apr. 18; Serial No. 321,631; published Mar. 1, 1932.
Cream, Brushless shaving. S. Tinsky. 302,392; Apr. 18; Serial No. 331,324; published Jan. 31, 1933.

Creams, Shoe polish. Geo. J. Kelly, Inc. 302,406; Apr. 18; Serial No. 290,182; published Jan. 31, 1933.

CLASS 5

Cement. Major Manufacturing Co. 90,820; renewed Mar. 25, 1933.

CLASS 6

Amylolytic or starch-liquefying preparation. Standard Brands Incorporated. 302,486; Apr. 18; Serial No. 331,516; published Jan. 31, 1933.
Antimalarial preparation. Winthrop Chemical Company. 302,473; Apr. 18; Serial No. 332,745; published Jan. 31, 1933.
Antiseptics, bactericides, etc. Hynson, Westcott & Dunning, Incorporated. 302,463; Apr. 18; Serial No. 332,255; published Jan. 17, 1933.
Aspirin. H. B. Laymon. 302,516; Apr. 18.
Astringents, astringent cerates, bleach creams, etc. Rimmel, Inc. 302,488; Apr. 18; Serial No. 331,164; published Jan. 31, 1933.
Astringents, bleach and cold creams, etc. New Yorker Cosmetic Corp. 302,474; Apr. 18; Serial No. 332,462; published Jan. 24, 1933.
Astringents, bleach creams, face packs, etc. L. Angert. 302,506; Apr. 18.
Beeswax. Theodor Leonhard Wax Co. Inc. 302,477; Apr. 18; Serial No. 332,068; published Jan. 31, 1933.
Calcium chloride. Texaco Salt Products Company. 302,419; Apr. 18; Serial No. 332,278; published Jan. 24, 1933.
Chemical preparation. L. Eklund. 302,513; Apr. 18.
Chemicals for controlling the odor of rubber and rubber compounds. Naugatuck Chemical Company. 302,430; Apr. 18; Serial No. 332,959; published Jan. 31, 1933.
Chemicals, Insecticide. Hammond Paint & Chemical Co. 302,391; Apr. 18; Serial No. 331,431; published Jan. 24, 1933.
Compound of herbs. G. W. Garner. 302,412; Apr. 18; Serial No. 331,780; published Jan. 24. 1933.
Cosmetics. Campbell Laboratories, Inc. 302,445; Apr. 18; Serial No. 331,142; published Jan. 24, 1933.
Cosmetics. Kunett & Co. 302,515; Apr. 18.
Cosmetics. Nassour Brothers, Inc. Ltd. 302,494; Apr. 18.
Cosmetics, toilet preparations. E. R. Mansfield Co. Ltd. 302,505; Apr. 18.
Cream, lotion, powder, etc., Face. Superior Laboratories, Inc. 302,503; Apr. 18.
Creams, face and hand lotions, rouge, etc., Face. Talcum Puff Co. Inc. 302,446; Apr. 18; Serial No. 331,270; published Jan. 24, 1933.
Dentifrice and antiseptic, Liquid. Park Drug Company, Inc. 302,418; Apr. 18; Serial No. 332,264; published Jan. 24, 1933.
Electrolyte and electrolyte material. Thomas A. Edison, Incorporated. 302,394; Apr. 18; Serial No. 331,252; published Jan. 31, 1933.
Filling or sizing material for textiles. Hamoden Sales Corporation. 302,481–2; Apr. 18; Serial Nos. 331,858–9; published Jan. 31, 1933.
Fumigating apparatus. H. E. Riley and H. J. Tannebaum. 302,447; Apr. 18; Serial No. 331,292; published Jan. 24, 1933.
Hair oil. C. Tustin. 302,455; Apr. 18; Serial No. 331,879; published Jan. 24, 1933.
Insecticide chemicals. Hammond Paint & Chemical Co. 302,449; Apr. 18; Serial No. 331,430; published Jan. 24, 1933.
Liniment. W. A. Canady. 302,443; Apr. 18; Serial No. 330,649; published Jan. 10. 1933.
Liniment. Skoot Company. 302,411; Apr. 18; Serial No. 331,654; published Jan. 24, 1933.
Liniment, Rubbing. M. Ware. 302,442; Apr. 18; Serial No. 329,812; published Nov. 15, 1932.
Liquid preparation. Rustvoid Products, Inc. 302,453; Apr. 18; Serial No. 331,595; published Jan. 17, 1933.
Lotion. Siegelman Laboratories, Inc. 302,495; Apr. 18.
Lotions, ointments, and powders. P. W. Maloney. 302,496; Apr. 18.
Meat curing compound. H. J. Mayer & Sons Co. 302,410; Apr. 18; Serial No. 331,622; published Jan. 24. 1933.
Medicinal preparation. C. E. Wray. 302,489; Apr. 18; Serial No. 330,076; published Jan. 24, 1933.
Medicinal preparation for man or beast. Veterinary Products Laboratory, Inc. 302,466; Apr. 18; Serial No. 332,276; published Jan. 17, 1933.
Medicinal preparation for skin diseases of man or beast. Veterinary Products Laboratory, Inc. 302,469; Apr. 18; Serial No. 332,283; published Jan. 17, 1933.
Medicinal preparation for swollen tendons, etc. Veterinary Products Laboratory, Inc. 302,467; Apr. 18; Serial No. 332,280; published Jan. 17, 1933.
Medicinal preparation, Veterinary. Veterinary Products Laboratory, Inc. 302,425; Apr. 18; Serial No. 332,278; published Jan. 17, 1933.
Medicinal preparation, Veterinary. Veterinary Products Laboratory, Inc. 302,468; Apr. 18; Serial No. 332,282; published Jan. 17, 1933.
Medicinal preparations. G. F. Wurtele. 302,403; Apr. 18; Serial No. 319,129; published June 21, 1932.
Medicinal preparations, Liquid. Norwich Pharmacal Company. 40,254; renewed May 5, 1933.
Medicine. Brook Hill Laboratories, Inc. 302,484; Apr. 18; Serial No. 331,541; published Jan. 24, 1933.
Medicine. S. A. Reina. 302,459; Apr. 18; Serial No. 332,101; published Jan. 17, 1933.
Medicine. E. G. Smith. 302,397; Apr. 18; Serial No. 329,723; published Jan. 24, 1933.
Medicine, Laxative. McKesson & Robbins. 39,844; renewed Feb. 24, 1933.
Medicine, Veterinary. Veterinary Products Laboratory, Inc. 302,426; Apr. 18; Serial No. 332,277; published Jan. 17, 1933.
Medicine, Veterinary. Veterinary Products Laboratory, Inc. 302,464–5; Apr. 18; Serial Nos. 332,274–5; published Jan. 17, 1933.
Mineralized water, Artificial. Elmi Waters, Inc. 302,429; Apr. 18; Serial No. 332,560; published Jan. 31, 1933.
Moth-proofing materials. Midwest Hardware Company. 302,458; Apr. 18; Serial No. 332,096; published Jan. 17, 1933.
Ointment, cough sirup, etc. F. Guba. 302,444; Apr. 18; Serial No. 331,046; published Jan. 17, 1933.
Palliative for the treatment of lung diseases. J. Zahoray. 302,420; Apr. 18; Serial No. 332,287; published Jan. 24, 1933.
Perfume, toilet water, face powder, etc. Houbigant, Inc. 332,417; Apr. 18; Serial No. 332,454; published Jan. 24, 1933.
Perfumeries, lotions, etc. Park & Tilford. 302,450–1; Apr. 18; Serial Nos. 331,437–8; published Jan. 17, 1933.
Perfumes and perfumery. Elizabeth Arden, Inc. 302,456; Apr. 18; Serial No. 331,884; published Jan. 24, 1933.
Perfumes, toilet water, face powder, etc. J. L. Sinykin. 302,415; Apr. 18; Serial No. 331,875; published Jan. 24, 1933.
Pharmaceutical preparation. Brogirol, Incorporated. 302,416; Apr. 18; Serial No. 332,084; published Jan. 24, 1933.
Pharmaceutical preparations. Borun Bros. 302,428; Apr. 18; Serial No. 332,515; published Jan. 31, 1933.
Pharmaceutical preparations. F. Klein. 302,399; Apr. 18; Serial No. 325,101; published Jan. 24, 1933.
Pharmaceutical preparations. F. Klein. 302,440; Apr. 18; Serial No. 325,108; published Jan. 24, 1933.
Powder, lipstick, face rouge, etc., Face. H. D. Koenig. 302,414; Apr. 18; Serial No. 331,863; published Jan. 24, 1933.
Preparation for dyeing the hair. Inecto Limited. 93,179; renewed Aug. 26, 1933.
Preparation for producing narcosis and for anæsthetising. Dr. George Friedrich Henning Chemische Fabrik. 302,441; Apr. 18; Serial No. 327,798; published Jan. 24, 1933.
Preparation for scalp diseases, rheumatism, and skin diseases. W. R. Nelson. 302,390; Apr. 18; Serial No. 331,604; published Jan. 24, 1933.
Preparation for the treatment of gonorrhea. J. H. Werner. 302,478; Apr. 18; Serial No. 331,971; published Jan. 24, 1933.
Preparation for the treatment of the hair. J. Gray. 302,448; Apr. 18; Serial No. 331,878; published Jan. 24, 1933.
Preparation for use as a blood purifier. E. L. Vaughan. 302,479; Apr. 18; Serial No. 331,939; published Jan. 24, 1933.
Preparation for use as a carbon remover. Empire State Products Co. 302,413; Apr. 18; Serial No. 331,820; published Jan. 24, 1933.
Preparations for prevention and treatment of diseases of birds. W. M. Gabler. 302,514; Apr. 18.
Prophylactic astringent and anodyne, etc. R. McNeil. 302,461; Apr. 18; Serial No. 332,157; published Jan. 17, 1933.
Rouge, cleansing cream, bleach cream, etc. J. C. Penney Company. 302,452; Apr. 18; Serial No. 331,590; published Jan. 24, 1933.
Rouge, cleansing cream, bleach cream, etc. J. C. Penney Company. 302,454; Apr. 18; Serial No. 331,591; published Jan. 24, 1933.
Shampoo, Oil. P. S. Ellers. 302,480; Apr. 18; Serial No. 331,922; published Jan. 24, 1933.
Sizing and treatment material. Soluol Corporation. 302,460; Apr. 18; Serial No. 332,128; published Jan. 17, 1933.
Soap, Tooth. L. G. Schultz. 302,507; Apr. 18.
Soda, Washing. Buckeye Soda Company. 302,462; Apr. 18; Serial No. 332,223; published Jan. 17, 1933.
Solvent, Drain pipe. Hipwell Manufacturing Company. 302,427; Apr. 18; Serial No. 332,411; published Jan. 31, 1933.
Sulphur, Flotation. California Spray-Chemical Corporation. 302,398; Apr. 18; Serial No. 328,546; published Aug. 30, 1932.
Surgical lubricating jelly. Day Chemical Company. 302,457; Apr. 18; Serial No. 332,087; published Jan. 17, 1933.
Tonic. Yeast-Vite (U. S. A.) Inc. 302,424; Apr. 18; Serial No. 330,609; published Jan. 31, 1933.
Tonic, General. C. A. Tancré. 302,393; Apr. 18; Serial No. 331,295; published Jan. 31, 1933.
Tonic, Veterinary. Veterinary Products Laboratory, Inc. 302,470; Apr. 18; Serial No. 332,284; published Jan. 17, 1933.

Tonic, Veterinary nerve. Veterinary Products Laboratory, Inc. 302,423; Apr. 18; Serial No. 332,279; published Jan. 17, 1933.
Tooth paste. Reims-Premier Pipe Co. 302,487; Apr. 18; Serial No. 331,266; published Jan. 31, 1933.

CLASS 8

Container for packages of cigarettes. National Automatic Container Corporation. 302,421; Apr. 18; Serial No. 332,542; published Jan. 31, 1933.
Pipes, Smokers'. Sears, Roebuck and Co. 302,407; Apr. 18; Serial No. 333,203; published Jan. 31, 1933.
Strips of tipping material for cigarette papers. Boucher Cork Co. 302,509; Apr. 18.

CLASS 13

Hydrants. Kennedy Valve Mfg. Co. 302,387; Apr. 18; Serial No. 330,750; published Jan. 31, 1933.
Valve for refrigerating apparatus, Pressure control. Larkin Refrigerating Corporation. 302,388; Apr. 18; Serial No. 331,890; published Jan. 31, 1933.
Valve, Pressure control. Larkin Refrigerating Corporation. 302,381; Apr. 18; Serial No. 331,898; published Jan. 31, 1933.

CLASS 14

Electrodes and wire, Welding. G. H. Abel. 302,491; Apr. 18; Serial No. 333,136; published Jan. 31, 1933.

CLASS 15

Gasoline. James B. Berry Sons' Co. 302,490; Apr. 18; Serial No. 326,125; published Sept. 18, 1932.
Oils and greases. Standard Oil Company of New Jersey. 302,405; Apr. 18; Serial No. 298,725; published Nov. 29, 1932.
Oils, gasoline, etc., Fuel and lubricating. Producers Diamond Quality Oil & Gas Co. 302,432; Apr. 18; Serial No. 323,340; published Jan. 31, 1933.
Oils, Lubricating. Pure Oil Company. 302,485; Apr. 18; Serial No. 331,440; published Jan. 31, 1933.

CLASS 16

Floor seals and paint preservatives, paints, varnishes, polishes, etc. R. Sabor. 302,435; Apr. 18; Serial No. 326,162; published Jan. 31, 1933.
Polish. Nu-Ra Waxcoat Corporation. 302,438; Apr. 18; Serial No. 328,844; published Jan. 31, 1933.
Polish and wax. Raynorshine Products, Inc. 302,378; Apr. 18; Serial No. 332,732; published Jan. 31, 1933.
Wax preparation, Liquid. American Disinfecting Company. 302,385; Apr. 18; Serial No. 331,720; published Jan. 31, 1933.

CLASS 17

Cigarettes. M. Melachrino & Co. 91,589; renewed May 13, 1933.
Cigarettes. M. Melachrino & Co. 91,678; renewed May 20, 1933.
Cigars. Bayuk Cigars Incorporated. 302,406; Apr. 18; Serial No. 333,181; published Jan. 31, 1933.
Cigars. Havana Cigar & Tobacco Factories, Lt'd. 92,892; renewed Aug. 5, 1933.

CLASS 19

Aeroplanes, hydroplanes, pontoons, etc. Edward G. Budd Manufacturing Company. 302,439; Apr. 18; Serial No. 329,130; published Jan. 17, 1933.
Boats and cruisers, Motor. H. L. Zobel, 3d. 302,386; Apr. 18; Serial No. 331,020; published Jan. 31, 1933.
Vehicles, speedboats, aeroplanes, and parts thereof. Motor. "Société Française Hispano-Suiza." 302,433; Apr. 18; Serial No. 325,442; published Jan. 31, 1933.

CLASS 21

Batteries, Storage. C. Carr. 302,511; Apr. 18.
Radio receiving sets. Crosley Radio Corporation. 302,476; Apr. 18; Serial No. 332,332; published Jan. 31, 1933.

CLASS 23

Guns and parts thereof, Weed. Weed Destroyer Co. 302,404; Apr. 18; Serial No. 310,317; published Jan. 31, 1933.
Razors and blades therefor, Electric. Tark Electric Razor Co. 302,475; Apr. 18; Serial No. 332,387; published Jan. 31, 1933.
Water-purifying machinery and parts thereof. United States Ozone Company of America. 302,483; Apr. 18; Serial No. 331,599; published Jan. 31, 1933.

CLASS 24

Laundry cabinet dryers, dry cleaning machines, ironing boards, etc. Columbia Phonograph Company. 302,401; Apr. 18; Serial No. 320,711; published Nov. 29, 1932.

CLASS 25

Safes and metal structures and parts thereof. Diebold Safe & Lock Co. 302,510; Apr. 18.

CLASS 26

Eyeglasses, spectacles, and lenses therefor. Montgomery-Frost Company. 302,512; Apr. 18.
Films, Series of different motion picture. Warner Bros. Pictures, Inc. 302,380; Apr. 18; Serial No. 332,208; published Jan. 31, 1933.

CLASS 29

Brooms, Whisk. Deahler Broom Factory. 302,402; Apr. 18; Serial No. 320,065; published Jan. 31, 1933.
Powder puffs, dusting mittens, dish mops, etc. Ar. Winarick, Inc. 302,422; Apr. 18; Serial No. 332,288; published Jan. 31, 1933.

CLASS 30

Chinaware, pottery, globes, etc. Stephen Slesinger, Inc. 302,372; Apr. 18; Serial No. 332,663; published Jan. 31, 1933.

CLASS 31

Refrigerators, refrigerated show cases, meat cases, etc. Pechman Store Equipment Co. Inc. 302,498; Apr. 18.

CLASS 32

Shades, Porch. International Distributing Co. 302,384; Apr. 18; Serial No. 332,152; published Jan. 31, 1933.
Tables, Card. J. Latham. 302,379; Apr. 18; Serial No. 332,559; published Jan. 31, 1933.

CLASS 33

Globes, Arc lamp. C. F. Pease Company. 302,370; Apr. 18; Serial No. 332,960; published Jan. 31, 1933.

CLASS 34

Burners and parts thereof, Oil. Kelvinator Corporation. 302,437; Apr. 18; Serial No. 328,429; published Jan. 31, 1933.

CLASS 35

Disks and washers, Cork. New Process Cork Company. 92,905; renewed Aug. 5, 1933.
Linings, and mineral wear-resisting materials, Molded friction. Rex-Hide Rubber Manufacturing Company. 302,472; Apr. 18; Serial No. 332,860; published Jan. 24, 1933.

CLASS 37

Envelopes. Standard Envelope Manufacturing Company. 302,373; Apr. 18; Serial No. 332,472; published Jan. 31, 1933.
Paper and stationery. Pacific Manifolding Book Company. 302,371; Apr. 18; Serial No. 332,820; published Jan. 31, 1933.
Paper, Toilet. Levin Brothers Paper Co. 302,434; Apr. 18; Serial No. 325,715; published Jan. 31, 1933.
Paper, Writing and printing. Strathmore Paper Company. 302,389; Apr. 18; Serial No. 329,432; published Jan. 31, 1933.
Pencils, Lead. American Lead Pencil Company. 40,090; renewed Apr. 14, 1933.
Registers and paper fillers therefor, Autographic. Egry Register Company. 302,374; Apr. 18; Serial No. 332,369; published Jan. 31, 1933.
Towels, toilet papers, Paper. Creco Company. 302,375; Apr. 18; Serial No. 332,401; published Jan. 31, 1933.

CLASS 38

Books, Printed. Settlement Cook Book Company. 302,377; Apr. 18; Serial No. 332,076; published Jan. 31, 1933.
Columns, and special articles, News. A. R. Pearson and R. S. Allen. 302,409; Apr. 18; Serial No. 333,168; published Jan. 31, 1933.
Magazines. Union Publishing Company. 302,376; Apr. 18; Serial No. 332,132; published Jan. 31, 1933.
Newspaper. Georgian Company. 91,473–4; renewed May 6, 1933.

CLASS 39

Dresses. Arthur Cohen Dress Corporation. 302,501; Apr. 18.
Hosiery. H. C. Aberle Co. 302,499; Apr. 18.
Undervests. E. Emmers & Co. 92,660; renewed July 22, 1933.

CLASS 40

Packet or package containing quilt patches, etc. W. L. M. Clark, Incorporated. 302,471; Apr. 18; Serial No. 330,396; published Jan. 3, 1933.

CLASS 44

Syringes, sanitary napkins, bed pans, etc., Vaginal. Institute of Feminine Hygiene, Inc. 302,504; Apr. 18.

CLASS 46

Candy. H. Heide. 92,794; renewed July 29, 1933.
Honey. A. I. Root Company. 93,026; renewed Aug. 12, 1933.
Juice, Canned pineapple. Hawaiian Pineapple Company. 302,518; Apr. 18.
Mayonnaise. Best Foods, Inc. 302,517; Apr. 18.
Syrup, Malt. P. Ballantine & Sons. 302,388; Apr. 18; Serial No. 330,191; published Jan. 24, 1933.
Tea. Carter Macy Tea & Coffee Co. 302,493; Apr. 18.
Vegetables, Fresh. Everett Love & Sons. 302,508; Apr. 18.

CLASS 49

Whiskey. Pennsylvania Distilling Company. 302,492; Apr. 18; Serial No. 333,421; published Feb. 7, 1933.

CLASS 50

Article of manufacture as a substitute for window glass. Vio-Ray Company. 302,497; Apr. 18.
Caps, Bottle. S. H. Kress & Co. 302,500; Apr. 18.
Memorials. Victory Granite Company. 302,502; Apr. 18.

LIST OF LABELS

Air-O-Seal. For Coffee Bags. Thomas M. Royal & Co. 41,952; Apr. 18.
Ajux Line Guide. For Line Guide. Ajux Company. 41,928; Apr. 18.
All American. For Chocolate Covered Candy Bars. Fox-Cross Candy Company. 41,932; Apr. 18.
Blue Heven. For Detergents. Blue Heven Corporation. 41,929; Apr. 18.
Connecticut Newstone. For Cigars. Connecticut Cigar Mfg. Co. 41,931; Apr. 18.
Eiffel Tower. For Butter. Popper, Gray & Company. 41,950; Apr. 18.
Ginger Sport Girl. For Boxes. Hoague-Sprague Corporation. 41,944; Apr. 18.
Menasha Butter. For Butter. Menasha Products Company. 41,946; Apr. 18.
Menasha Ice Cream. For Ice Cream. Menasha Products Company. 41,947; Apr. 18.
Midnight Sun Tea. For Tea. McCormick & Co. 41,945; Apr. 18.
One Dozen Eggs. For Eggs. Self-Locking Carton Company. 41,953; Apr. 18.
Romar Cigars—3 for 5—A Real Short Smoke. For Cigars. Romar Cigar Company. 41,951; Apr. 18.
Rose Marie. For Boxes. Hoague-Sprague Corporation. 41,935; Apr. 18.
Royal, George Scotch Whisky. For Scotch Whisky. V. Casazza & Bro. 41,930; Apr. 18.
Sport Shoes. For Boxes. Hoague-Sprague Corporation. 41,934; Apr. 18.
Sportster. For Boxes. Hoague-Sprague Corporation. 41,936; Apr. 18.
Super Fashion Stouts. For Boxes. Hoague-Sprague Corporation. 41,942; Apr. 18.
Telecleaner. For Cleaning Fluid. Teleon Mfg. Co. 41,955; Apr. 18.
The Acme Safety Grater. For Grater Implement for Kitchen Use. Acme Metal Goods Mfg. Co. 41,927; Apr. 18.
"The Genuine Van Heusen" Van Heusen-Collar Attached Shirt. For Shirts. Phillips-Jones Corporation. 41,949; Apr. 18.
The John Adams Shoe. For Boxes. Hoague-Sprague Corporation. 41,937; Apr. 18.
The Resorter. For Boxes. Hoague-Sprague Corporation. 41,943; Apr. 18.
The Riviera Shoe. For Boxes. Hoague-Sprague Corporation. 41,940; Apr. 18.
The Safety Toe. For Boxes. Hoague-Sprague Corporation. 41,941; Apr. 18.
The Strong-Wear Line. For Boxes. Hoague-Sprague Corporation. 41,939; Apr. 18.
The Wonder Mat Box Spring. For Box-Springs. Sleeper Products, Inc. 41,954; Apr. 18.
Tuco Picture Puzzle. For Picture Puzzles. Tuco Work Shops. 41,956; Apr. 18.
Vapor-Gas Crystals, The Twenty Minute Rug Cleaner. For Cleaner for Rugs, Carpets, Upholstered Furniture, and Auto Upholstery. Vapor-Gas Crystals Company. 41,957; Apr. 18.
Wheaties. For Whole Wheat Flakes. General Mills, Inc. 41,933; Apr. 18.
Will Wear Well. For Boxes. Hoague-Sprague Corporation. 41,938; Apr. 18.
Zip. For an Insecticide. J. C. Mitchell. 41,948; Apr. 18.

LIST OF PRINTS

Force Toasted Whole Wheat Flakes. For Cereal Food Products. Hecker-H-O Company. 14,137; Apr. 18.
Greased Lightning. For Lubricating Gasoline. Wm. Chas. Bettis. 14,135; Apr. 18.
Health 10¢ Gallon. For Mineral Water Crystals. G. L. McCarty. 14,141; Apr. 18.
Hills Bros' Patented Process "Does Right" By The Rare Blend of Coffees. For Coffee. Hills Bros. 14,138; Apr. 18.
Peeps-and-Squeals. For Flour. General Mills, Inc. 14,136; Apr. 18.
They Call It "The World's Finest Coffee" . . . And Here Is The Reason. For Coffee. Hills Bros. 14,139; Apr. 18.
When You Taste Hills Bros Coffee, You'll Realize the Importance of Perfect Roasting. For Coffee. Hills Bros. 14,140; Apr. 18.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 18TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. B. C. Metal Corp. (See Manhan, John, assignor.)
A/S Farmakon. (See Aagaard, T. B., Samdahl, and Hopstock, assignors.)
Aagaard, Thorvald B., and B. Samdahl, Oslo, and F. P. Hopstock, assignors to A/S Farmakon, Kragero, Norway. Preparation of a product containing all opium alkaloids. 1,903,770; Apr. 18.
Aanenson, Christ J., Magnolia, Minn. Radio ground. 1,904,773; Apr. 18.
Abbott, Charles C., Pittsfield, Mass., assignor to General Electric Company. Electric heater. 1,904,594; Apr. 18.
Abercrombie, James S. (See Benson, Arthur C., assignor.)
Achard, Jean, Paris, France. Device for the control of electric arc welding machines. 1,904,112; Apr. 18.
Activated Sludge, Inc. (See Coombs, James A., assignor.)
Adams, James L., jr., assignor of nine-tenths to Graver Corporation, East Chicago, Ill. Metal fabricating machine. 1,904,913; Apr. 18.
Adams, Lester V., Schenectady, N. Y., assignor to General Electric Company. Resinous composition. 1,904,595; Apr. 18.
Adams, Royal E., assignor to E. Pederson, trustee, Los Angeles, Calif. Electrical control means for brakes. 1,903,801; Apr. 18.
Adams, Walter A., Rochester, N. Y. Workbench. 1,904,708; Apr. 18.
Adamson, Andrew G., assignor to W. M. Still & Sons Limited, London, England, and himself. Film for photographic purposes. 1,904,113; Apr. 18.
Adler, Rudolf, Karlsbad, Czechoslovakia. Purifying and sterilising water. 1,903,889; Apr. 18.
Asmisegger, Jean, Bergenfield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Embroidered textile fabric. Des. 89,622; Apr. 18.
Aerol Engine Corporation. (See Hehr, Frederick G., assignor.)
Agerell, William C., Chicago, Ill. Internal combustion engine. 1,903,802; Apr. 18.
Agfa Ansco Corporation. (See Frankenburger, W., and Roesaler, assignors.)
Agfa Ansco Corporation. (See Hagedorn, Max, assignor.)
Agfa Ansco Corporation. (See Matheson, Avery A., assignor.)
Agfa Ansco Corporation. (See Ollendorff, Gerhard, assignor.)
Ahnström, Erik. (See Engberg, Axel O.)
Ainsworth, Chester D., Wollaston, assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass. Electric switch. 1,904,897; Apr. 18.
Air Reduction Company. (See Anderson, James L., assignor.)
Air-Way Electric Appliance Corporation. (See Riebel, Frederick, jr., assignor.)
Ajax Electrothermic Corporation. (See Northrup, Edwin F., assignor.)
Aki, Shozaburo, Mill Hill, London, England. Brush. 1,904,260; Apr. 18.
Aktiebolaget Svenska Kullagerfabriken. (See Palmgren, Per G., assignor.)
Aktiebolaget Svenska Kullagerfabriken. (See Rydbeck, Patrik S., assignor.)
Aktiebolaget Svenska Kullagerfabriken. (See Wistrand, Gunnar, assignor.)
Aktiengesellschaft Brown Boveri & Cie. (See Widmer, Stefan, assignor.)
Albert, George G., New York, N. Y. Cementing machine. 1,904,812; Apr. 18.
Alberts, Walter, Duisburg-Ruhrort, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Arch, particularly for use in metallurgical furnaces. 1,904,596; Apr. 18.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Combined building column and display case. Des. 89,607; Apr. 18.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Combined building column and display case. Des. 89,608; Apr. 18.
Aldrich, Ralph N., assignor to Standard Stations, Inc., San Francisco, Calif. Combined building column and display case. Des. 89,609; Apr. 18.
Alex, Max, Alhambra, Calif., assignor to York Water Corporation, Ltd. Olla shell. Des. 89,667; Apr. 18.
Allen-Bradley Company. (See Bradley, Lynde, assignor.)
Allen, John M., Toronto, Ontario, Canada, assignor to Scott & Williams, Incorporated, New York, N. Y. Seamless hosiery and making same. 1,904,036; Apr. 18.
Allgrunn, Carl G. (See Knapp, E., and Allgrunn.)
Allin, Edwin F., Oklahoma City, Okla., assignor to American Hard Rubber Company, New York, N. Y. Comb. 1,904,705; Apr. 18.
Allis-Chalmers Manufacturing Company. (See Marples, Derek B., assignor.)
Allyne, Edmund E., Lantana, Fla. Refrigerating apparatus. 1,904,597; Apr. 18.
Almond, Lester L., North Troy, R. Herrington, Troy, N. Y., and F. A. Matthews, Kitchener, Ontario, Canada, assignors to Cluett, Peabody & Co., Inc., Troy, N. Y. Method of and apparatus for sewing seams. 1,904,898; Apr. 18.
Alpern, Maxwell, assignor to American Engineering Company, Philadelphia, Pa. Automatic fluid control system. 1,904,846; Apr. 18.
Altek Compagnie d'Etude et d'Exploitation d'Appareils Frigorifiques pour le Transport. (See Thomson, Arthur Lindsay, assignor.)
Althor, Joseph G. (See Morrell, J. C., and Althor.)
Aluminium Industrie Aktiengesellschaft. (See von Zeerleder, Alfred, assignor.)
Amann, William. (See Schulze, A., and Amann.)
Ambrosius, Julius R., Mexico, Mexico. Luggage carrier for motor vehicles. 1,904,114; Apr. 18.
Amer, Donald F. (See Christie, J., and Amer.)
American Brass Company, The. (See Dinkler, A. M., and Smith, assignors.)
American Brass Company, The. (See Smith, Cyril S., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Chain Company. (See Lashar, Walter B., assignor.)
American Engineering Company. (See Alpern, Maxwell, assignor.)
American Engineering Company. (See Weingartner, Anthony E., assignor.)
American Fabrics Company, The. (See Aemisegger, Jean, assignor.)
American Face Brick Corporation. (See Lee, Sherman Q., assignor.)
American Fork & Hoe Company, The. (See Dennis, Charles H., assignor.)
American Fork & Hoe Company, The. (See Withington, Winthrop, assignor.)
American Hard Rubber Company. (See Allin, Edwin F., assignor.)
American Hard Rubber Company. (See Boyer, Edwin S., assignor.)
American Mills Company, The. (See Vacher, John, assignor.)
American Optical Company. (See Cozzens, Charles O., assignor.)
American Propeller Company, The. (See Heath, Spencer, assignor.)
American Smelting and Refining Company. (See Swarts, C. E., and Phillips, assignors.)
American Telephone and Telegraph Company. (See Henneberger, Thomas C., assignor.)
American Telephone and Telegraph Company. (See Holden, W. H. T., assignor, and Jutson.)
American Telephone and Telegraph Company. (See Matte, Andrew L., assignor.)
American Telephone and Telegraph Company. (See Mitchell, Doren, assignor.)
American Telephone and Telegraph Company. (See Taylor, Edmund R., assignor.)
American Telephone and Telegraph Company. (See Wright, S. B., and Mitchell, assignors.)
American Tobacco Company, The. (See Molins, W. E., and Chalmers, assignors.)
Andersen, Poul S. R., Copenhagen, Denmark. Exposure and copying of photographs and cinematographic records in natural colors. 1,904,600; Apr. 18.
Anderson, Albert & J. M., Manufacturing Company. (See Huse, Ralph L., assignor.)
Anderson, Alexander, Fullerton, Calif. Bore hole surveying apparatus. 1,903,969; Apr. 18.
Anderson, Arthur W. (See Wideman, L., Anderson, and Rider.)
Anderson, Frithiof B., Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Testing system. 1,904,598; Apr. 18.
Anderson, Homer A., Brooklyn, N. Y. Radio apparatus. 1,904,668; Apr. 18.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Wire feed device. 1,903,953; Apr. 18.
Anderson, James L., Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y. Method of welding and apparatus therefor. 1,904,599; Apr. 18.
Anderson, James W. (See Snyder, Louis M., assignor.)

Anderson, Ren M., Cincinnati, Ohio. Combined animated and changeable sign. 1,904,966; Apr. 18.
Andrews, James A., Augusta, Me. Support for clearer rolls. 1,904,344; Apr. 18.
Anheuser, Ernest A., and G. S. Remiker, Milwaukee, Wis. Molding flask. 1,904,037; Apr. 18.
Anthes, Eugen. (See Krauch, C., Pier, and Anthes.)
Anthony Company, The. (See Anthony, W. C., and Wachter, assignors.)
Anthony, William C., and L. Wachter, assignors to The Anthony Company, Streator, Ill. Hydraulic hoist dumping body. 1,904,845; Apr. 18.
Anzelewitz, Abraham, Far Rockaway, N. Y. Cigar and cigarette holder. 1,904,814; Apr. 18.
Aoki, Koichi, Tokyo, Japan, assignor to General Electric Company. Constant level lubricating device. 1,904,601; Apr. 18.
Apple, Vincent G., Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Electric controller. 1,904,813; Apr. 18.
Apple, Vincent G., and W. H. Petit, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind. Vehicle control mechanism. 1,904,943; Apr. 18.
Archea, Walter D., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine collet. 1,904,641; Apr. 18.
Arlt, John L., assignor to F. W. Stork and J. L. Arlt, doing business as Ideal Manufacturing Company, Saginaw, Mich. Washtub. 1,903,908; Apr. 18.
Armacost, Wilbur H., assignor to The Superheater Company, New York, N. Y. Superheater arrangement for cylindrical shell boilers. 1,903,970; Apr. 18.
Armspear Manufacturing Company. (See Pixley, J. S., and Bender, assignors.)
Artisan Shoe Company. (See Rizzo, Samuel, assignor.)
Arvey Corporation. (See Horwath, Julius, assignor.)
Asch, Abraham B. (See Laughlin, W. C., and Ashe.)
Ashworth, Fred, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Heel breasting machine. 1,904,346; Apr. 18.
Asmussen, August J., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich. Refrigerating mechanism. 1,903,848; Apr. 18.
Associated Electric Laboratories, Inc. (See Richardson, Rodney G., assignor.)
Associated Electric Laboratories, Inc. (See Saunders, N. H., and Lomax, assignors.)
Associated Electric Laboratories, Inc. (See Tharp, V. S., and Lomax, assignors.)
Atchison Revolving Door Co., The. (See Uhrich, Burns H., assignor.)
Atlantic Refining Company. (See Birkhimer, Edwin R., assignor.)
Audiffren Refrigerating Machine Company. (See Karr, A. D., and Perkins, assignors.)
Aue, Herbert D., Bloomfield, N. J. Traveler for kite strings. 1,904,938; Apr. 18.
Austin, Stanley H. (See Perks, George W., assignor.)
Auto Research Corporation. (See Kocher, Edward H., assignor.)
Automatic Burner Corporation. (See Perry, Stanley, assignor.)
Automatic Devices, Inc. (See Burkholder, John D., assignor.)
Automatic Switch Company. (See Hurlburt, Wilbur F., assignor.)
Automotive Engineering Corporation. (See Rayburn, Alden G., assignor.)
Avery, B. F., & Sons. (See Ray, Charles T., assignor.)
Avery, True M., Glens Falls, N. Y., and W. M. Seitzinger, Chicago, Ill., assignors to Union Bag and Paper Corporation, Hudson Falls, N. Y. Printing attachment for bag making machines. 1,904,709; Apr. 18.
Axe, Roy T., assignor, by mesne assignments, to The Syracuse Trust Company, Syracuse, N. Y. Window sash holder and window construction. 1,904,602; Apr. 18.
Ayers, Cecil L., et al. (See Clark, Carl W., assignor.)
B-L Electric Manufacturing Company, The. (See Hambuechen, Carl, assignor.)
Babbitt, Bethel J., Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electromagnetic device. 1,904,847; Apr. 18.
Babcock, Walter F., Detroit, Mich., assignor to The Foote-Burt Company, Cleveland, Ohio. Metal cutting machine and control system therefor. 1,904,975; Apr. 18.
Babcock & Wilcox Company, The. (See Jones, William A., assignor.)
Babcock & Wilcox Company, The. (See Miller, Benjamin H., assignor.)
Bacher, Rollin L., Lakewood, and P. I. Schultz, assignors to The United States Air Compressor Company, Cleveland, Ohio. Grease gun. 1,903,750; Apr. 18.
Backes, Peter. (See Hentrich, W., Hardtmann, Backes, and Stötter.)
Bacon, Charles F., Brattleboro, Vt., assignors to Millers Falls Company, Millers Falls, Mass. Hydraulic jack. 1,904,115; Apr. 18.
Bacon, Raymond F., Bronxville, and I. Bencowitz, New York, N. Y.; said Bencowitz assignor to said Bacon. Recovery of sulphur. 1,904,608; Apr. 18.
Baden, William, Stockton, Calif. Valve cooling device. 1,904,669; Apr. 18.
Bader, Kaspar, Berlin-Grunewald, Germany. Device for feeding the casting pots of linotype and similar machines working with soft metals. 1,903,751; Apr. 18.
Baehr, Hans, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing ammonium sulphate. 1,904,604; Apr. 18.
Bailey, Ervin G., Easton, and R. M. Hardgrove, Bethlehem, assignors to Fuller Lehigh Company, Fullerton, Pa. Retaining furnace wall blocks against tubes. 1,904,189; Apr. 18.
Bailey, William C., Los Angeles, Calif. Combination thermometer casing. 1,904,776; Apr. 18.
Baker, Albert E., Mount Vernon, Ohio, assignor of one-third to P. J. Scott and one-third to B. A. Hileman, Richmond, Va. Floor and wall brush. 1,904,774; Apr. 18.
Baker, Thomas T., Middlesex, assignor to Spicers Limited, London, England. Color photography. 1,903,971; Apr. 18.
Baker Perkins Company Inc. (See Macfarlane, R. F., and Prescott, assignors.)
Baker-Raulang Company, The. (See Bemde, Edward H., assignor.)
Bally, Oscar, Basel, assignor to Society Chemical Industry in Basle, Basel, Switzerland. Printing acetate silk or materials containing an organic cellulose ether or ester. 1,904,815; Apr. 18.
Balthaser, Harry B., Philadelphia, Pa. Surgical claw scissors. 1,904,399. Apr. 18.
Bangs, Ralph L., Wakefield, and W. A. Hermanson, Brighton, Mass. Box. 1,904,400; Apr. 18.
Banker, Oscar H., Philadelphia, Pa. Ink roll for printing presses. 1,904,764; Apr. 18.
Barclay, Robert E., assignor to Federal Electric Company, Chicago, Ill. Sign. 1,904,347; Apr. 18.
Barclay, Robert E., assignor to Federal Electric Company, Chicago, Ill. Making multibore tubes. 1,904,348; Apr. 18.
Barden, William S., Stapleton, N. Y., assignor to Radio Corporation of America. Crystal rejector circuit. 1,904,605; Apr. 18.
Barder, Byron R., assignor to The Biggs Boiler Works Company, Akron, Ohio. Pipe joint and making same. 1,904,967; Apr. 18.
Barkan, Irvin, Philadelphia, Pa. Nipple. 1,904,710; Apr. 18.
Barker, Maurice E., Edgewood, Md. Catalyst for oxidizing carbon monoxide in exhaust gases. 1,903,803; Apr. 18.
Barlow, Samuel, Sydney, New South Wales, Australia. Visible record card holder. 1,904,349; Apr. 18.
Barnes, John J. (See Parr, W. V., Love, and Barnes.)
Barrett, Charles E., assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y. Loom for weaving tufted fabric and weaving. 1,904,939; Apr. 18.
Barrett Company, The. (See Craver, Augustus E., assignor.)
Barrett Company, The. (See Hess, Raymond W., assignor.)
Barrett Company, The. (See Hess, R. W., and Leaper, assignors.)
Barrett Company, The. (See Miller, Stuart B., assignor.)
Barrett Company, The. (See Moses, F. G., Hess, and Perkins, assignors.)
Bartholomew, Gilbert A., Cleveland, Ohio. Engine. 1,904,775; Apr. 18.
Bartley, Charles B., Pittsburgh, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone system. 1,903,972; Apr. 18.
Bauch, William H., Shelbyville, assignor to Sono Equipment Corporation, Indianapolis, Ind. Resilient support for photo-electric cell exciter. 1,904,038; Apr. 18.
Bauch, William H., Shelbyville, assignor of one-half to O. R. Platter, North Vernon, and one-half to Sono Equipment Corporation, Indianapolis, Ind. Method and apparatus for reproducing sound. 1,904,711; Apr. 18.
Bauer, Gustav, Hamburg, and J. N. Klep, Altona-Hochkamp, Germany. Hydraulic power transmitter. 1,904,606; Apr. 18.
Baum, Reinhold, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Steel aluminium cable. 1,904,116; Apr. 18.
Baumann, Fritz. (See Bayer, O., and Baumann.)
Baumé, Edwall J., Long Beach, Calif. Lock. 1,904,763; Apr. 18.
Bausch & Lomb Optical Company. (See Kurtz, Henry F., assignor.)
Bausch & Lomb Optical Company. (See Powell, John R., assignor.)
Bayer, Otto, Frankfort-on-the-Main, and F. Baumann, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Vat dyestuffs of the anthrapyridone and the anthrapyrimidone series. 1,903,857; Apr. 18.
Beam, Lois M., Short Hills, N. J., assignor to Hendrick Manufacturing Company. Grille or the like. Des. 89,623; Apr. 18.
Beam, Lois M., Short Hills, N. J., assignor to Hendrick Manufacturing Company. Grille or the like. Des. 89,624; Apr. 18.
Beaudry, George P., Montreal, Quebec, Canada. Internal combustion engine. 1,904,816; Apr. 18.

Beavers, Roy J., Brookfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material working machine. 1,904,848; Apr. 18.
Becher, Willy, Bussum, Netherlands. Manufacturing chlorine dioxide. 1,904,190; Apr. 18.
Becker, Gabriel, Berlin-Charlottenburg, Germany. Starting device for internal combustion engines. 1,904,117; Apr. 18.
Becker, Joseph, assignor to The Koppers Company, Pittsburgh, Pa. Cooking retort oven. 1,904,191; Apr. 18.
Becket, Frederick M., New York, N. Y., assignor to Electro Metallurgical Company. Stain resisting cobalt alloy. 1,904,712; Apr. 18.
Bedford, Leslie H., London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Indirectly heated cathode. 1,904,261; Apr. 18.
Begeman, Myron L., St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y. Manufacture of wire glass. 1,904,118; Apr. 18.
Behr-Manning Corporation. (See Schacht, Elmer C., assignor.)
Beisser, Harry, assignor to Oscar Shorr, Detroit, Mich. Cleaning and washing brush. 1,904,940; Apr. 18.
Bek, Ernst Gideon. (See Brunhübner, Georg, assignor.)
Belissi, Vincent, Bronx, N. Y. Airplane. 1,903,752; Apr. 18.
Belknap, Franklin S., Kansas City, Mo. Brake tester. 1,904,713; Apr. 18.
Bell Telephone Laboratories, Incorporated. (See Anderson, Frithiof B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Buckley, Oliver E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burns, Robert M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Burton, Everett T., assignor.)
Bell Telephone Laboratories, Incorporated. (See Chase, Charles A., assignor.)
Bell Telephone Laboratories Incorporated. (See Coffman, Joe W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Cousins, Van Meter, assignor.)
Bell Telephone Laboratories, Incorporated. (See Dickinson, Allan B., assignor.)
Bell Telephone Laboratories, Incorporated. (See Flammer, Howard A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Gilbert, John J., assignor.)
Bell Telephone Laboratories, Incorporated. (See Harper, Robert W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Holden, W. H. T., and Jutson, assignors.)
Bell Telephone Laboratories, Incorporated. (See Hollingsworth, Lowell M., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hoyt, Frederick A., assignor.)
Bell Telephone Laboratories, Incorporated. (See Mallina, Rudolph F., assignor.)
Bell Telephone Laboratories, Incorporated. (See Robb, Theodore D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Tebo, Julian D., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ulrich, Horace W., assignor.)
Bellis, Arthur E., Branford, Conn. Heat treating metals. 1,904,706; Apr. 18.
Bencowitz, Isaac. (See Bacon, R. F., and Bencowitz.)
Bender, Martin. (See Pixley, J. S., and Bender.)
Bendix Aviation Corporation. (See Straussler, Nicholas, assignor.)
Bendix Brake Company. (See Apple, Vincent G., assignor.)
Bendix Brake Company. (See Apple, V. G., and Petit, assignors.)
Bendix Brake Company. (See Bendix, V., assignor, and La Brie.)
Bendix, Vincent, Chicago, Ill., and L. E. La Brie, South Bend, Ind., said Bendix assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,904,262; Apr. 18.
Benjamin, Reuben B., Chicago, Ill., assignor, by mesne assignments, to H. H. Eby, Philadelphia, Pa. Socket for vacuum tubes. 1,904,662; Apr. 18.
Bennett, Dennis H., Door, assignors of one-third to D. Halford and one-third to W. E. Ihling, Kalamazoo, Mich. Cutter mechanism for mowing machines. 1,903,753; Apr. 18.
Benson, Arthur C., assignor to J. S. Abercrombie, Houston, Tex. Clutch for hoisting drums. 1,904,350; Apr. 18.
Benson, Melvin B., Corporation. (See Benson, Melvin B.)
Benson, Melvin B., New York, N. Y., assignor, by mesne assignments, to Melvin B. Benson Corporation and M. B. Benson. Sign. 1,904,192; Apr. 18.
Bens, Johannes, Dusseldorf, Germany. Butter and like molding device. 1,904,714; Apr. 18.
Berg, Charles E., Vero Beach, Fla. Package holder. 1,904,193; Apr. 18.
Berge, Joseph, Montclair, assignor to The National Lock Washer Company, Newark, N. J. Nut and washer assembly. 1,904,263; Apr. 18.
Berger, Friedrich W. F., Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio. Cash register. 1,904,976; Apr. 18.
Berger Manufacturing Company. (See Vignos, Paul, assignor.)
Bergman, John and M., Poulsbo, Wash. Loom. 1,904,715; Apr. 18.
Bergman, Margaret. (See Bergman, John and M.)
Bernat, Henri. (See Bernat, Raoul and H.)
Bernat, Raoul and H., Bordeaux, France. Refrigerating plant. 1,904,817; Apr. 18.
Berssenbrugge, William H., Whitefish Bay, Wis. Table. 1,904,401; Apr. 18.
Berthold, Erich. (See Kuns, M. A., Koeberle, and Berthold.)
Berthold, Rudolf G., Berlin-Siemensstadt, and W. Stockmeyer, Finkenkrug, near Berlin, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Support for electrodes in vacuum vessels. 1,904,119; Apr. 18.
Berthon, Rodolphe, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Copying goffered films. 1,904,671; Apr. 18.
Berthon, Rodolphe, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Process and device for reproducing goffered films. 1,904,672; Apr. 18.
Berthon, Rodolphe, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y. Printing of films for color cinematography. 1,904,673; Apr. 18.
Bertsche, William H., et al. (See Ellington, Cornwallis D., assignor.)
Bessemer Cement Corporation, The. (See Wasson, Orie E., assignor.)
Bethenod, Joseph, Paris, France. Stray and atmospherics eliminating system. 1,904,607; Apr. 18.
Bettini, David, assignor to Locke Insulator Corporation, Baltimore, Md. Insulator finishing brushing machine. 1,904,608; Apr. 18.
Bets, William C., assignor to The Fafnir Bearing Company, New Britain, Conn. Spring shackle. 1,904,264; Apr. 18.
Bianchi, Alfred A., Worcester, Mass. Broken belt detector and safety device. 1,904,851; Apr. 18.
Biggs Boiler Works Company, The. (See Barder, Byron R., assignor.)
Biggs, William E., Knoxville, Tenn. Underfeed stoker. 1,904,716; Apr. 18.
Birkhimer, Edwin R., assignor to The Atlantic Refining Company, Philadelphia, Pa. Treatment of hydrocarbon oils. 1,904,402; Apr. 18.
Bissell, Marion H., Chicago, Ill. Cleaning apparatus. 1,904,818; Apr. 18.
Bixer, Edmond P., New York, N. Y. Curtain heading. 1,904,194; Apr. 18.
Bixer, A. Victor. (See Papadopoulos, Georgebeys P., assignor.)
Bjornsson, Carl A. (See Clark, C. P., and Bjornsson.)
Black & Decker Manufacturing Company, The. (See Schouten, Frank, assignor.)
Blanton, William B., Merrick, assignor to The Western Union Telegraph Company, New York, N. Y. Automatic operator indicator for busy lines at central offices. 1,904,265; Apr. 18.
Bleadon, Samuel B., San Francisco, Calif. Container for toothbrushes. 1,904,609; Apr. 18.
Bliss, E. W., Company. (See Strout, Robert W., assignor.)
Bloch Freres, Inc. (See Tansley, Thomas W., assignor.)
Blodgett, George R., assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio. Pressure and flow control device for combustion indicators. 1,904,819; Apr. 18.
Blum, Emil, Newark, N. J. Optical polygraph. 1,903,890; Apr. 18.
Blumenthal, Abraham S., Amityville, N. Y. Combined graphic outline and work locating template for building models. 1,904,674; Apr. 18.
Blumenthal, Louis, Brooklyn, N. Y. Folding table and chair. 1,903,954; Apr. 18.
Boabands Limited. (See Bradley, Daniel A., assignor.)
Bol, Cornelis, Eindhoven, Netherlands, assignor to Radio Corporation of America. Electric discharge tube. 1,904,195; Apr. 18.
Bolles, Seward B., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for treating hydrocarbons. 1,904,196; Apr. 18.
Bommer, Emil, Brooklyn, N. Y. Door hinge. 1,904,120; Apr. 18.
Bond Electric Corporation. (See Pratt, Goodrich B., assignor.)
Bond Electric Corporation. (See Stimson, Frank G., assignor.)
Bond, William G., Wilmington, Del. Cork manufacture. 1,904,197; Apr. 18.
Bonsieur, Le, assignor to The General Industries Company, Elyria, Ohio. Fish line reel. 1,904,849; Apr. 18.
Bosch, Robert, Aktiengesellschaft. (See Seiling, Otto, assignor.)
Boughton, Edward B., London, England. Brake for use on vehicles. 1,903,978; Apr. 18.
Boutillion, Henri, Suresnes, France. Automatic liquid measuring and delivering apparatus. 1,904,610; Apr. 18.
Bowes, Charles E. (See Bowes, Robert M. and C. E.)
Bowes, Robert M. and C. E., Indianapolis, Ind. Filling tire casing cuts. 1,904,403; Apr. 18.

Bowling, Wilbur S. (See Cope, F. T., Vaughan, and Bowling.)
Bowman, A. M. (See Hamaker, Rex G., assignor.)
Bowman, Newton K., Bowdil, Ohio. Cutter-chain block. 1,903,771; Apr. 18.
Bowman, Newton K., Bowdil, Ohio. Core-breaker. 1,903,772; Apr. 18.
Boyce, James, Laketown Township, Allegan County, Mich., and R. F. Hancock, Marion, Ind., assignors to Chicago Glass Novelty Corporation. Sign. 1,904,850; Apr. 18.
Boyer, Edwin S., Plainfield, N. J., assignor to American Hard Rubber Company, New York, N. Y. Pipe. 1,904,675; Apr. 18.
Boyette Air Electric Car, Inc. (See Boyette, William E., assignor.)
Boyette, William E., Jacksonville, Fla., assignor to Boyette Air Electric Car, Inc. Automotive vehicle. 1,904,611; Apr. 18.
Boykow, Johann. (See von Hofe, C., and Boykow.)
Bradbury, Clifford C., et al., trustee. (See Stokes, Charles L., assignor.)
Bradley, Daniel A., assignor to Boabands Limited, London, England. Tightening and sealing device. 1,904,914; Apr. 18.
Bradley, Lynde, assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis. Electrical resistor. 1,904,352; Apr. 18.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors, to Bragg-Kliesrath Corporation, Long Island City, N. Y. Brake mechanism for automotive vehicles. 1,904,266; Apr. 18.
Bragg, Caleb S., Palm Beach, Fla., and V. W. Kliesrath, Port Washington, assignors to Bragg-Kliesrath Corporation, Long Island, N. Y. Brake system for automotive vehicles. 1,904,267; Apr. 18.
Bragg-Kliesrath Corporation. (See Bragg, C. S., and Kliesrath, assignors.)
Braham, W. Walter. (See Hendrix, Joel H., assignor.)
Bramson, Morgens L., London, England. Shaving brush and like brush. 1,904,612; Apr. 18.
Brand, Harry R., New York, N. Y. Dish handling mechanism. 1,904,198; Apr. 18.
Brandau, Walter R., Los Angeles, Calif. Siphonic air-life trap. 1,903,773; Apr. 18.
Braren, Cornelius T., Jamaica, N. Y., assignor, by mesne assignments, to Standard-Knapp Corporation. Article-collecting machine. 1,904,613; Apr. 18.
Bresaden, Carroll E., assignor to Dayton Scale Company, Dayton, Ohio. Weighing scale. 1,904,614; Apr. 18.
Bredin, Lewis L., assignor to Chamberlin Metal Weather-strip Co., Detroit, Mich. Automobile window screen. 1,904,968; Apr. 18.
Bresnahan, William H., Lynn, Mass., assignor, by mesne assignments, to Compo Shoe Machinery Corporation, New York, N. Y. Making footwear. 1,904,851; Apr. 18.
Brewer, Francis T., assignor to General Motors Radio Corporation, Dayton, Ohio. Inductance. 1,904,199; Apr. 18.
Brewer, Stanley H., Dundalk, Md. Reversible window hinge. 1,904,717; Apr. 18.
Bridgeport Metal Goods Manufacturing Company, The. (See Fullmer, Giles C., assignor.)
Brightman, Rainald, Manchester, England, assignor to Imperial Chemical Industries, Limited. Azo dye. 1,904,820; Apr. 18.
Brightman, Rainald, Manchester, assignor to Imperial Chemical Industries Limited, Westminster, England. Disazo dyestuffs and preparing same. 1,904,821; Apr. 18.
Brightman, Rainald, Manchester, assignor to Imperial Chemical Industries, Limited, Westminster, England. Azo dyestuffs and preparing same. 1,904,822; Apr. 18.
Brillo Manufacturing Company. (See Field, Crosby, assignor.)
Brillo Manufacturing Company. (See Field, C., and Campbell, assignors.)
Brink, Henry A., Spring Lake, Mich. Fountain structure. 1,903,974; Apr. 18.
Bristol, Carlton W., and A. Noble, Naugatuck, assignors to The Bristol Company, Waterbury, Conn. Fitting for measuring elements. 1,904,615; Apr. 18.
Bristol Company, The. (See Bristol, C. W., and Noble, assignors.)
Brodsky, Michel, Paris, France, assignor to Cheney Brothers, New York, N. Y. Textile fabric or the like. Des. 89,672; Apr. 18.
Bronson, Fred L., New York, N. Y. Manufacture of formed articles. 1,904,268; Apr. 18.
Brooks, Benjamin T., Greenwich, Conn., assignor, by mesne assignments, to Standard Alcohol Company, Wilmington, Del. Producing and distilling aqueous sulphuric acid solutions of secondary and tertiary alcohols. 1,904,200; Apr. 18.
Brose, Walter. (See Klep, J. N., and Brose.)
Brown Bag Filling Machine Company, The. (See Chandler, Austin S., assignor.)
Brown Company. (See Richter, George A., assignor.)
Brown & Sharpe Mfg. Co. (See Rich, Charles A., assignor.)
Bruck, Walter, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Halogenated anthraquinoneacridones and making same. 1,903,891; Apr. 18.
Bruder, Emil A., Los Angeles, Calif. Body exercising apparatus. 1,904,039; Apr. 18.
Brügmann, William F., Chicago, Ill. Printer's register hook. 1,903,804; Apr. 18.
Brunhübner, Georg, assignor to E. G. Bek, Pforzheim, Germany. Soldering. 1,904,616; Apr. 18.
Brushaway Products, Incorporated. (See Evans, George V., assignor.)
Brzezicki, John K., assignor of one-half to M. Herbert, Moon Run, Pa. Combined tobacco box and cigarette paper holder. 1,904,777; Apr. 18.
Buchanan, Stephen N., Elizabeth, N. J. Cable connecter. 1,904,617; Apr. 18.
Buckeye Blower Company. (See Ewald, Warren, assignor.)
Buckley, John P., Washington, D. C. Toy. 1,903,805; Apr. 18.
Buckley, Oliver E., Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine signaling cable. 1,903,975; Apr. 18.
Budd Wheel Company. (See Rosenberg, Ralph H., assignor.)
Buffalo Electric Furnace Corporation. (See Scott, Donald M., assignor.)
Builders Iron Foundry. (See Smith, Ed S., jr., assignor.)
Burdick, Ralph V., Albany, N. Y. Making metal boxes. 1,904,778; Apr. 18.
Burk, Michael F., Swampscott, assignor to T. T. Greenwood, Boston, Mass. Building construction. 1,904,404; Apr. 18.
Burkholder, John D., assignor to Automatic Devices, Inc., Harrisonburg, Va. Automatic tire gauge. 1,904,823; Apr. 18.
Burns, Robert M., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Making concrete. 1,903,976; Apr. 18.
Burr, Augustus, Oaklynne, N. J. Pipe holder. 1,904,779; Apr. 18.
Burrell, Benjamin S., East Chicago, Ind. Screener equipped pipe line. 1,903,774; Apr. 18.
Burton, Everett T., Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telegraph system. 1,904,618; Apr. 18.
Burton, Robert N. (See Hynan, Arthur C., assignor.)
Butler, Jay H., Newark, Ohio. Delivery truck control. 1,903,977; Apr. 18.
Buxton, Incorporated. (See Buxton, Warner R., assignor.)
Buxton, Warner R., Longmeadow, Mass. Flexible pocket receptacle. 1,904,353; Apr. 18.
Buxton, Warner R., Longmeadow, assignor to Buxton, Incorporated, Springfield, Mass. Key case. 1,904,354; Apr. 18.
Byerlein, Arthur A., Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio. Power press control. 1,904,676; Apr. 18.
Byers, John, et al. (See Watson, Claude G., assignor.)
Caesar, George V., New York, N. Y., assignor to Stein, Hall & Company, Inc. Adhesive and making same. 1,904,619; Apr. 18.
Caggiano, Anthony, Springfield, Mass. Template for splitting leather soles. 1,904,405; Apr. 18.
Caillet, Robert. (See Mutrux, M., and Caillet.)
Cain, John R., Washington, D. C., and S. W. Yates, Cincinnati, assignors to The Richardson Company, Lockland, Ohio. Iron sulphide material and making the same. 1,904,915; Apr. 18.
Caisson Contracting Company. (See Powell, Charles L., assignor.)
Caisson Contracting Company. (See Powell, C. L., and Smith, assignors.)
Callahan, Michael J., Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Reducing the solution viscosity of cellulose. 1,904,406; Apr. 18.
Cameron, Hugh M., Woodhaven, assignor of one-half to Edward A. Judge, New York, N. Y., and one-half to J. E. Seederer, Bloomfield, N. J. Scale. 1,903,955; Apr. 18.
Camp, S. H., & Company. (See LeMay, Ariel M., assignor.)
Campbell, Charles A., Watertown, N. Y., assignor to The New York Air Brake Company. Automotive brake system. 1,903,978; Apr. 18.
Campbell, Clinton L. (See Field, C., and Campbell.)
Campbell, Norman R., Watford, assignor to The General Electric Company Limited, London, England. Manufacture of photo-electric cathodes. 1,904,895; Apr. 18.
Cannon, Harry B., Bradford, Pa. Signal and trouble-finder. 1,904,300; Apr. 18.
Caplan, Moses, Boston, Mass. Pocket for pot holder. Des. 89,627; Apr. 18.
Caplan, Solomon, Brooklyn, assignor to Combustion Utilities Corporation, New York, N. Y. Manufacture of low boiling tar acids. 1,904,269; Apr. 18.
Cappa, Giulio C., assignor of one-half to Società Anonima Automobili Ansaldo, Turin, Italy. Air-cooled internal combustion engine. 1,903,979; Apr. 18.
Cappa, Giulio C., assignor of one-half to Società Anonima Automobili Ansaldo, Turin, Italy. Oil cooling arrangement for air cooled internal combustion engines. 1,904,407; Apr. 18.

Carbide & Carbon Chemical Corporation. (See Reid, E. W., and Lewis, assignors.)
Carbonfix, Société à Responsabilité Limitée. (See Marek, John I., assignor.)
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carley, Leonard R., Watertown, assignor to The Patent Button Company, Waterbury, Conn. Button. Des. 89,625; Apr. 18.
Carney, Ephriam L., Murfreesboro, Tenn. Tank cap. 1,903,892; Apr. 18.
Carpenter, James W., assignor to The McKay Company, Pittsburgh, Pa. Magazine rack. Des. 89,626; Apr. 18.
Carson, Oswald B., Greenburg, N. Y. Spectacles. 1,904,852; Apr. 18.
Carter, Herbert F., Roselle Park, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Method of and apparatus for preparing and handling molten materials. 1,904,853; Apr. 18.
Carter, William T., Chicago, Ill. Automobile servicing machine. 1,903,905; Apr. 18.
Case, J. I., Company. (See Crawford, John F., assignor.)
Cavano, John P., and G. Vondicakis, Cleveland, Ohio. Serving and washing tray. 1,904,969; Apr. 18.
Cedar Rapids Engineering Company. (See Dunn, Allen I., assignor.)
Celanese Corporation of America. (See Cope, Ernest C., assignor.)
Celanese Corporation of America. (See Dreyfus, C., and Schneider, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Whitehead, assignors.)
Celanese Corporation of America. (See Ewing, H., and Roberts, assignors.)
Centrifugal Machine Company. (See Snyder, Clay M., assignor.)
Chain Belt Company. (See Longenecker, Charles I., assignor.)
Chalmers, John W. (See Molina, W. E., and Chalmers.)
Chamberlin Metal Weatherstrip Co. (See Bredin, Lewis L., assignor.)
Chandler, Austin S., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass. Capping table. 1,903,980; Apr. 18.
Chapin, Charles H., Chicago, Ill. Shock absorber. 1,904,040; Apr. 18.
Chapman, Lyman B., assignor to Scovill Manufacturing Company, Waterbury, Conn. Detachable snap fastener for articles to be laundered. 1,904,122; Apr. 18.
Chapman, William J., Virginia, Minn. Reversible and quick-changing runner and shoe. 1,904,201; Apr. 18.
Charette, Odilon, Fitchburg, Mass. Ice skate. 1,904,270; Apr. 18.
Charlin, André M. B., Paris, France. Needle securing device for talking machines. 1,904,408; Apr. 18.
Chase, Charles A., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Submarine cable anchorage. 1,904,271; Apr. 18.
Chase, Clyde H., et al. (See Nichols, Horace E., assignor.)
Chemical Treatment Company. (See Fink, Colin G., assignor.)
Chemical Works formerly Sandoz. (See Rheiner, Alfred, assignor.)
Chemical Works formerly Sandoz. (See Stoll, A., and Rothlin, assignors.)
Cheney Brothers. (See Brodsky, Michel, assignor.)
Chicago Electric Manufacturing Co. (See Gough, James J., assignor.)
Chicago Electric Manufacturing Co. (See Preston, Edward S., assignor.)
Chicago Glass Novelty Corporation. (See Boyce, J., and Hancock, assignors.)
Chicago Pneumatic Tool Company. (See Nell, Gustave M., assignor.)
Chicago Pneumatic Tool Company. (See Scott, George, assignor.)
Christian, Frank T., assignor to Eclipse Machine Company, Elmira, N. Y. Automatic starting mechanism. 1,904,202; Apr. 18.
Christie, John, Sunderland, and D. F. Amer, Jarrow, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England. High voltage electric switch gear. 1,903,956; Apr. 18.
Christopher, Frank E., Morgantown, W. Va. Air spring and cushion. 1,903,775; Apr. 18.
Church, Lewis H., Roselle, assignor to The Thomas & Betts Co., Elizabeth, N. J. Cable connector. 1,904,409; Apr. 18.
Ciccarelli, Ostilio, assignor to The E. Ingraham Company, Bristol, Conn. Radiocabinet. Des. 89,628; Apr. 18.
Cincinnati Grinders Incorporated. (See Hunt, Charles G., assignor.)
Cincinnati Milling Machine Company, The. (See Archea, Walter D., assignor.)
Cincinnati Milling Machine Company, The. (See Ernst, H., and Nenninger, assignors.)
Cincinnati Milling Machine Company, The. (See Nenninger, Lester F., assignor.)
Clancy, Leo V. (See Croce, Alphonse U., assignor.)
Clark Bros. Co. (See Clark, C. P., and Bjornsson, assignors.)
Clark, Carl W., Bethesda, assignor of one-fourth to C. L. Ayers, St. Clairsville, and one-fourth to S. T. Vaughn, Bethesda, Ohio. Piston ring. 1,904,410; Apr. 18.
Clark, Charles P., Olean, and C. A. Bjornsson, Wellsville, N. Y., assignors to Clark Bros. Co., Olean, N. Y. Double acting internal combustion engine. 1,904,854; Apr. 18.
Clark, George H., and J. I. Deters, assignors to The Formica Insulation Company, Cincinnati, Ohio. Securing a bearing within a pulley. 1,903,776; Apr. 18.
Clark, Thomas B., Rockford, Ill., assignor, by mesne assignments, to The Permutit Company, Wilmington, Del. Water softening system and means for controlling operation thereof. 1,903,957; Apr. 18.
Clark, Thomas B., Rockford, Ill., assignor, by mesne assignments, to The Permutit Company, Wilmington, Del. Water softener. 1,903,958; Apr. 18.
Clarkson, John L., Nashville, Ill. Power loader. 1,904,855; Apr. 18.
Clarkson, Russell, Deptford, London, England. Packing machinery. 1,903,959; Apr. 18.
Clay Reduction Company. (See Svendsen, Svend S., assignor.)
Clayton, Bert A., Kewanee, Ill. Oil burner. 1,903,858; Apr. 18.
Clayton, Joseph, New York, N. Y. Winding mechanism. 1,904,411; Apr. 18.
Clemencon, Claude, Clauire-on-the-Rhone, France. Manufacturing crepes with threads of cellulose acetate artificial silk. 1,904,123; Apr. 18.
Climax Engineering Company, The. (See Mallory, Edward B., assignor.)
Clouse, William L., assignor to The National Machinery Company, Tiffin, Ohio. Lubricant cooler. 1,904,412; Apr. 18.
Cluett, Peabody & Co., Inc. (See Almond, Lester L., Herrington, and Matthews, assignors.)
Cochrane, John D., jr., assignor to The Formica Insulation Company, Cincinnati, Ohio. Decorated laminated product and producing same. 1,904,718; Apr. 18.
Cockrell, William D., Schenectady, N. Y., assignor to General Electric Company. Stroboscope. 1,904,124; Apr. 18.
Coffman, Joe W., Jackson Heights, assignor to Bell Telephone Laboratories Incorporated, New York, N. Y. Motion picture film. 1,903,981; Apr. 18.
Cofrin, Austin E., Green Bay, Wis. Smoothing stock on Fourdrinier wire. 1,904,780; Apr. 18.
Coin, George W., Manhattan, Kans. Air refrigerating device. 1,903,777; Apr. 18.
Colen, Bernard D. (See Strongson, Herman L., assignor.)
Collingbourne, Albert B., Elgin, Ill. String holder. Des. 89,629; Apr. 18.
Collins, John E., Alton, Ill., assignor to Owens-Illinois Glass Company. Machine for making glass stoppers and the like. 1,904,977; Apr. 18.
Collyer, Julius P., Old Greenwich, Conn. Telephone dial actuator. 1,904,413; Apr. 18.
Combustion Machinery Company. (See Cronin, Arthur D., assignor.)
Combustion Utilities Corporation. (See Caplan, Solomon, assignor.)
Compo Shoe Machinery Corporation. (See Bresnahan, William H., assignor.)
Condit Electrical Manufacturing Corporation. (See Ainsworth, Chester D., assignor.)
Cone, Carroll, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio. Apparatus for the manufacture of sheet glass. 1,904,978; Apr. 18.
Conklin, David L., Independence, assignor of one-third to F. O. True, Kansas City, Mo. Display grease chart. 1,904,356; Apr. 18.
Conner, James E. (See McLavy, R. B., and Conner.)
Conroy, Marcus F., assignor to Luserne Motor Company, Luserne, Pa. Etching process and composition for use therein. 1,903,778; Apr. 18.
Consolidated Packaging Machinery Corp. (See Cundall, Robert N., assignor.)
Contact Filtration Company. (See Fuller, Ira K., assignor.)
Continental Can Company. (See Fink, H. A., and Schmidt, assignors.)
Cook, Everett J., assignor to The Dura Company, Toledo, Ohio. Doorlatch. 1,904,970; Apr. 18.
Cook, George E., New York, N. Y. Mixing device. 1,904,758; Apr. 18.
Cook, Leon W., Roselle, N. J., assignor to The Texas Company, New York, N. Y. Preparation of chlorhydrins. 1,904,677; Apr. 18.
Coombs, James A., London, England, assignor to Activated Sludge, Inc., Chicago, Ill. Activated sludge process of sewage and other impure liquid purification. 1,904,916; Apr. 18.
Cope, Ernest C., Spondon, near Derby, England, assignor to Celanese Corporation of America. Bearing and application thereof. 1,904,203; Apr. 18.
Cope, Frank T., A. H. Vaughan, and W. S. Bowling, assignors to The Electric Furnace Company, Salem, Ohio. Rotary heat treating furnace. 1,903,909; Apr. 18.
Coppus, Frans H. C., assignor to A. M. C. Wechsberg, V. L. Wood, and F. H. C. Coppus, as trustees, Worcester, Mass. Smoke disposal and draft inducing apparatus. 1,904,357; Apr. 18.

Cordy, Ivor, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Jar. Des. 89,630; Apr. 18.
Corhart Refractories Company. (See Schroeder, Frederic W., assignor.)
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Bed and cylinder printing press. 1,904,855; Apr. 18.
Cottrell, Calvert B., 3d, assignor to C. B. Cottrell & Sons Company, Westerly, R. I. Bed and cylinder printing press. 1,904,856; Apr. 18.
Cottrell, C. B., & Sons Company. (See Cottrell, Calvert B., 3d., assignor.)
Cour d'Alene Hardware & Foundry Company. (See Haugen, Edward, assignor.)
Cousins, Van Meter, Lyndhurst, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vacuum tube amplifier circuit. 1,904,272; Apr. 18.
Cozzens, Charles O., assignor to American Optical Company, Southbridge, Mass. Bridge for an opthalmic mounting. Des. 89,610; Apr. 18.
Craik, William, Paauilo, Hawaii. Shaft coupling. 1,903,982; Apr. 18.
Craver, Augustus E., Brooklyn, assignor to The Barrett Company, New York, N. Y. Production of aromatic aldehydes. 1,904,414; Apr. 18.
Crawford, Gertrude H., Milliken, Colo. Pastry confection. Des. 89,611; Apr. 18.
Crawford, John F., assignor to J. I. Case Company, Racine, Wis. Furnace. 1,904,781; Apr. 18.
Crighton, Peter F. (See Fraser, H. A., and Crighton.)
Croce, Alphonse U., assignor to Leo V. Clancy, Brockton, Mass. Channeling machine. 1,904,415; Apr. 18.
Crompton & Knowles Loom Works. (See Holmes, E. B., and Payne, assignors.)
Crompton & Knowles Loom Works. (See Wattle, W. M., and Whitten, assignors.)
Cronin, Arthur D., Detroit, Mich., assignor to Combustion Machinery Company, Wilmington, Del. Grate. 1,903,779; Apr. 18.
Cross, Frank L., Port Washington, N. Y., assignor to Cross Paper Feeder Company, Boston, Mass. Sheet separator for paper feeding machines. 1,904,416; Apr. 18.
Cross Paper Feeder Company. (See Cross, Frank L., assignor.)
Crouset, Nicolas, Buenos Aires, Argentina. Cabinet for keeping sound records. 1,904,824; Apr. 18.
Crowl, Charles A., assignor, by mesne assignments, to S. P. Foltz, New Castle, Pa. Heat exchanger. 1,904,857; Apr. 18.
Crowley, Charley A., Nashville, Tenn. Holder for reknitting fabrics. 1,903,893; Apr. 18.
Crowley, Henry L., & Company, Inc. (See Crowley, Henry L., assignor.)
Crowley, Henry L., assignor to Henry L. Crowley & Co., Inc., East Orange, N. J. Producing an article of manufacture. 1,904,273; Apr. 18.
Crowley, Henry L., East Orange, assignor to Henry L. Crowley & Company, Inc., West Orange, N. J. Grinding apparatus. 1,904,274; Apr. 18.
Crystler, Frank M., Lansing, Mich., assignor to Jones-Dabney Co. Finishing process. 1,904,417; Apr. 18.
Cundall, Robert N., East Hamburg, assignor to Consolidated Packaging Machinery Corp., Buffalo, N. Y. Weighing and filling machine. 1,904,652; Apr. 18.
Cureton, James G. (See Griffin, J. T., Deane, and Cureton.)
Currie, Eugene, Minneapolis, Minn. Sanitary brush. 1,904,917; Apr. 18.
Czechoslovak Company: Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav. (See von Hofe, C., and Boykow, assignors.)
Daggett, John D., Shafer, Minn. Bird's house. Des. 89,631; Apr. 18.
Dahlberg, Arthur O., Lake Worth, Fla., assignor to The Parker Pen Company, Janesville, Wis. Fountain pen. 1,904,358; Apr. 18.
D'Annunzio, George, Jersey City, assignor to Shoup-Owens, Inc., Hoboken, N. J. Pasteboard box. 1,904,125; Apr. 18.
Dantzsen, Christian, Schenectady, N. Y., assignor to General Electric Company. Insulation. 1,904,418; Apr. 18.
Davis, Augustine, jr. (See Haupt, Walter H., assignor.)
Davis, Augustine, jr. (See Shield, P. S., and Haupt, assignors.)
Davis, Bernard H., Fullerton, Calif. Bridging block for wells. 1,904,275; Apr. 18.
Davis, Ernest, assignor to The Prosperity Company Inc., Syracuse, N. Y. Shirt pressing machine with laterally movable head. 1,904,858; Apr. 18.
Davis, Eugene H., and W. F. Johnston, Philadelphia, assignors of one-fourth to N. Walker, Somerton, Pa., and one-fourth to J. H. Thompson, Trenton, N. J. Oil pump. 1,904,653; Apr. 18.
Davis, Frank L., jr., Kenilworth, assignor to The Watson-Stillman Co., Roselle, N. J. Lead extrusion apparatus. 1,904,419; Apr. 18.
Dawson, Oliver H. (See Edmonds, W. J., and Dawson.)
Dayton Scale Company. (See Breaden, Carroll E., assignor.)
Dayton Scale Company. (See Gumprich, William, assignor.)
Dayton Scale Company. (See Haskins, Clifford B., assignor.)
Dean, Reginald S., Washington, D. C., assignor to Western Electric Company, Incorporated, New York, N. Y. Ferrous alloy. 1,904,859; Apr. 18.
Deane, John P. (See Griffin, J. T., Deane, and Cureton.)
De Asis, Paul, Burbank, Calif. Dishwashing machine. 1,903,780; Apr. 18.
De Beaumarchais, Charles, assignor to Le Materiél Electrique S. W., Paris, France. Recording apparatus. 1,904,719; Apr. 18.
De Boer, Jan H., W. C. Van Geel, and H. Emmens, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Dry rectifier. 1,904,276; Apr. 18.
De Bothezat, George, New York, N. Y. Ventilating system. 1,903,988; Apr. 18.
De Bucci, Romeo A., Providence, R. I. Coat and trouser hanger. 1,903,277; Apr. 18.
Decker, James W., New York, N. Y. Stock quotation projecting machine. 1,903,806; Apr. 18.
Delafon, Jean M. J., Samoreau-sur-Seine, France. Machine for perforating slow emulsion films while they are being shown on the screen. 1,904,801; Apr. 18.
De Lancey, Warren H., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Liquid dispensing system. 1,904,302; Apr. 18.
De Laney, Wallace W., assignor to The Seamless Rubber Company, Inc., New Haven, Conn. Heating pad or similar article. Des. 89,612; Apr. 18.
Delco Products Corporation. (See Teeter, Wilford H., assignor.)
Delery, Edna F. (See Delery, Eugene F., assignor.)
Delery, Eugene F., deceased, New Orleans, La.; assigned by Decree of Distribution to Mrs. E. F. Delery. Fluid control valve. 1,904,204; Apr. 18.
Demers, Octave F., Bristol, Conn. Can opener. 1,903,984; Apr. 18.
Dennis, Charles H., Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio. Rake. 1,904,860; Apr. 18.
De Riccio, Eduardo R., Berlin, Germany. Electric heating and cooking appliance. 1,904,205; Apr. 18.
De Sherbinin, William N., Hastings-upon-Hudson, N. Y. Lamp shade supporting device. 1,903,985; Apr. 18.
Des Rosiers, John B., Providence, R. I. Controlling means for vehicle wheel brakes. 1,904,359; Apr. 18.
Deters, John L. (See Clark, G. H., and Deters.)
Dickhaut, Charles A., New York, N. Y., assignor to John Waldron Corporation, New Brunswick, N. J. Web tensioning mesns. 1,904,420; Apr. 18.
Dickinson, Allan B., Brooklyn, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Message register circuit for telegraph exchanges. 1,903,278; Apr. 18.
Diebenkorn, Richard C., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif. Sherbet glass or similar article. Des. 89,613; Apr. 18.
Diebenkorn, Richard C., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif. Tumbler or similar article. Des. 89,614; Apr. 18.
Diggles, George L. (See Garms, P., and Diggles.)
Dijksterhuis, Popko R. (See Strutt, M. J. O., and Dijksterhuis.)
Dinkler, August M., Waterbury, and C. S. Smith, Cheshire, Conn., assignors to The American Brass Company, Waterbury, Conn. Brazing solder. 1,904,360; Apr. 18.
Dixon, Israel K., Johnstown, Pa. Tongue switch. 1,904,206; Apr. 18.
Doble Steam Motors Corporation. (See Doble, Warren, assignor.)
Doble, Warren, Emeryville, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del. Boiler. 1,903,807; Apr. 18.
Dobos, Ladislaus, Binghamton, N. Y. Headlight for automobiles. 1,904,896; Apr. 18.
Doherty Research Company. (See Lindberg, Lawrence W., assignor.)
Doherty Research Company. (See Merley, S. R., and Spring, assignors.)
Doherty Research Company. (See Morgan, John D., assignor.)
Dohrmann Hotel Supply Co. (See Diebenkorn, Richard C., assignor.)
Donadeu, Ramon, Buenos Aires, Argentina. Hinge. 1,904,207; Apr. 18.
Donaldson, John S., St. Albans, N. Y. Piston. 1,904,126; Apr. 18.
Donle, Harold P., Meriden, Conn., assignor to Radio Inventions, Inc. Television reception. 1,903,986; Apr. 18.
Donnelly, Joseph F., South Bellingham, Wash. Lifting jack. 1,904,279; Apr. 18.
Doohan, William P. (See Stratford, R. K., and Doohan.)
Dooley Bros. (See Fellay, Louis J., assignor.)
Doran, John H., Scotia, N. Y., assignor to General Electric Company. Bucket wheel. 1,904,421; Apr. 18.
Doremus, Cornelius W., Washington, D. C. Electrical terminal. 1,903,808; Apr. 18.
Doughnut Machine Corporation. (See Hunter, Herbert T., assignor.)
Douglass, Royal, South Bellingham, Wash. Can unloader. 1,904,720; Apr. 18.
Dow, Jennings B., Alexandria, Va. Variable inductance system. 1,904,208; Apr. 18.
Doyle, John P., Lolo, Mont. Self-cleaning fish gate. 1,903,754; Apr. 18.

Dreyfus, Camille, New York, N. Y. Fabric and sheet material and the manufacture thereof. 1,903,960; Apr. 18.
Dreyfus, Camille, New York, N. Y., and George Schneider, Montclair, N. J., assignors to Celanese Corporation of America. Removing combined sulphur from cellulose acetate. 1,903,961; Apr. 18.
Dreyfus, Camille, New York, N. Y., and W. Whitehead, Cumberland, Md., assignors to Celanese Corporation of America. Making artificial filaments and product thereof. 1,904,209; Apr. 18.
Dreyfus, Henry, London, England. Manufacture of cellulose or cellulosic products. 1,903,962; Apr. 18.
Duff-Norton Manufacturing Company, The. (See Schwerin, Frank H., assignor.)
Duncan, Lee N., Oklahoma City, Okla. Sprinkling device. 1,904,292; Apr. 18.
Dunlop Rubber Company, Limited. (See Twiss, D. F., and Gorham, assignors.)
Dunn, Allen I., assignor to Cedar Rapids Engineering Company, Cedar Rapids, Mich. Valve reseating tool driver. 1,904,941; Apr. 18.
Dunn, Edward L. (See Lindquist, D. L., Dunn, and Larson.)
Du Pont, E. I. de Nemours & Company. (See Callahan, Michael J., assignor.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, Ivan, assignor.)
Du Pont, E. I., de Nemours & Company. (See Gubelmann, I., Welland, and Stallmann, assignors.)
Du Pont, E. I., de Nemours & Company. (See Handforth, Stanley L., assignor.)
Du Pont, E. I., de Nemours and Co. (See Jones, D. T., and Moore, assignors.)
Dura Company, The. (See Cook, Everett J., assignor.)
Duryea, O. C., Corporation. (See Duryea, Otho C., assignor.)
Duryea, Otho C., Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del. Car construction. 1,904,293; Apr. 18.
Duryea, Otho C., Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del. Car construction. 1,904,294; Apr. 18.
Dybvig, Henry G., assignor to General Motors Radio Corporation, Dayton, Ohio. Electrical apparatus. 1,904,422; Apr. 18.
Dysart, William L., Louisville, Ky. Antiglare device. 1,903,917; Apr. 18.
Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Indicator for reservoirs for liquid filled cables. 1,904,423; Apr. 18.
Eby, Hugh H. (See Benjamin, Reuben B., assignor.)
Eby, Hugh H. (See MacFadden, Wilford C., assignor.)
Eclipse Aviation Corporation. (See Nowodielski, Edward B., assignor.)
Eclipse Textile Devices, Inc. (See Hasbrouck, Louis B., assignor.)
Eclipse Machine Company. (See Christian, Frank T., assignor.)
Eclipse Machine Company. (See Wertz, Daniel L., assignor.)
Eclipse Machine Company. (See Whiteny, Maurice P., assignor.)
Eddy, E. B., Company. (See Saunders, Alec L., assignor.)
Edison, Thomas A., Incorporated. (See Matsner, Hyman, assignor.)
Edmonds, William J., and O. H. Dawson, Baytown, Tex., assignor to Standard Oil Development Company. Removal of hydrogen sulphide from gas mixtures and for the recovery of elemental sulphur. 1,904,424; Apr. 18.
Edwards, Frank W., assignor to The Ohio Injector Company of Illinois, Chicago, Ill. Lubrication assembly. 1,904,295; Apr. 18.
Edwards, Thomas J., Hawthorn, Victoria, Australia. Lawn mower. 1,904,280; Apr. 18.
Efcolite Corporation. (See von Nessen, Walter, assignor.)
Egan, John J., Brooklyn, N. Y., assignor to Electro Metallurgical Company. Nitriding ferrous alloys. 1,904,425; Apr. 18.
Egloff, Gustav, assignor to Universal Oil Products Company, Chicago, Ill. Conversion of hydrocarbon gases. 1,904,362; Apr. 18.
Egloff, Gustav, and L. A. Mekler, assignors to Universal Oil Products Company, Chicago, Ill. Method and apparatus for utilising radiant heat energy. 1,904,361; Apr. 18.
Ehemann, Joseph J. (See Singer, B. F., and Ehemann.)
Eichel, John V., jr., assignor to H. S. Getty and Company, Incorporated, Philadelphia, Pa. Lock. 1,904,210; Apr. 18.
Eisele, Harry T., West Dover, Ohio. Ratchet guide and support. 1,903,781; Apr. 18.
Eisenhut, Otto, Heidelberg, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of acetylene and hydrogen. 1,904,426; Apr. 18.
Eisenmann, Karl. (See Punga, W., and Eisenmann.)
Eisner, Hans, Berlin-Tempelhof, and H. Vollmer, Berlin-Halensee, Germany. Procedure in the production of a perfume or cosmetic. 1,904,211; Apr. 18.
Electric Furnace Company, The. (See Cope, F. T., Vaughan, and Bowling, assignors.)
Electrical Research Products Inc. (See Reynolds, John L., assignor.)
Electrical Testing Laboratories. (See Garms, P., and Diggles, assignors.)
Electro Metallurgical Company. (See Becket, Frederick M., assignor.)
Electro Metallurgical Company. (See Egan, John J., assignor.)
Electrolux Servel Corporation. (See Munters, Carl G., assignor.)
Electrons, Inc. (See von Wedel, Carl J. R. H., assignor.)
Ellington, Cornwallis D., assignor of one-half to A. E. Schwingel and W. H. Bertsche, Great Falls, Mont. Aircraft. 1,904,281; Apr. 18.
Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Making phenol-formaldehyde resins containing an alkaline earth metal base. 1,903,809; Apr. 18.
Ellis, Edward D. (See Hasson, P. R., and Ellis.)
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellison Bronze Company, Inc. (See Ellison, Edward H., assignor.)
Ellison, Edward H., Jamestown, assignor to Ellison Bronze Company, Inc., Falconer, N. Y. Ventilator. 1,904,654; Apr. 18.
Else, Walter C., Forest Hills, assignor to Hauck Manufacturing Company, Brooklyn, N. Y. Forge. 1,904,427; Apr. 18.
Emeth Financial Corporation. (See Goodman, Abraham, assignor.)
Emmens, Hendrik. (See De Boer, J. H., Van Geel, and Emmens.)
Emrick, George W., assignor to Etteo Tool Co., Inc., Brooklyn, N. Y. Multiple disk clutch. 1,903,963; Apr. 18.
Enemark, Hans J. P., Stapleton, N. Y. Spraying device. 1,904,428; Apr. 18.
Engberg, Axel O., and E. Ahnström, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland. Washing machine. 1,903,987; Apr. 18.
Engelhardt, Rudolf. (See Lommel, W., and Engelhardt.)
Engineering Development Company, The. (See Maxon, G., jr., and Ord, assignors.)
Ern, Robert, Solingen, Germany. Polishing apparatus, specially for knives, forks, and spoons. 1,904,282; Apr. 18.
Ernst, Hans, and L. F. Nenninger, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,904,971; Apr. 18.
Esterow, Harry, New York, N. Y. Fountain pen clip. 1,904,212; Apr. 18.
Etteo Tool Co., Inc. (See Emrick, George W., assignor.)
Ettinger, Joe J., assignor to Zimmer Manufacturing Company, Warsaw, Ind. Surgical splint. 1,904,863; Apr. 18.
Ettl, Joseph, Plainfield, N. J., assignor to Potdevin Machine Company, Brooklyn, N. Y. Tape handling apparatus. 1,904,861; Apr. 18.
Evans, Earle W., Linden, N. J., assignor to Standard Oil Development Company. Temperature control in lubricating oil systems. 1,904,429; Apr. 18.
Evans, George V., assignor to Brushaway Products, Incorporated, Cleveland, Ohio. Cleaning brush. 1,904,041; Apr. 18.
Everedy Company, The. (See Lebbers, Harry J., assignor.)
Everts, Floyd A., Detroit, Mich. Tool holder. 1,904,042; Apr. 18.
Ewald, Warren, assignor, by mesne assignments, to Buckeye Blower Company, Columbus, Ohio. Heating and ventilating apparatus. 1,904,918; Apr. 18.
Ewing, Charles R., Toronto, Ontario, and T. Montgomery, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company. Method and apparatus for distilling oil. 1,904,218; Apr. 18.
Ewing, Henry, and R. P. Roberts, Spondon, near Derby, England, assignors to Celanese Corporation of America. Dynamometer. 1,904,678; Apr. 18.
Ewing, James L., and R. R. Tobias, New Orleans, La. Feeding device for type casting machines. 1,903,904; Apr. 18.
Eyring, Adolf G., Pittsburgh, Pa. Combined window ventilator and sash fastener. 1,903,782; Apr. 18.
Fabrice, Edward H., Chicago, Ill. Bottle. Des. 89,632; Apr. 18.
Fabrik Elektrothermischer Apparate A. G. Lusern. (See Schwander, Max, assignor.)
Fabrik Explosionssicherer Gefässe Salzkotten G. m. b. H. (See Huribrink, Ernst, assignor.)
Fafnir Bearing Company, The. (See Betz, William C., assignor.)
Fagan, Charles D., Sharon, and R. W. Swank, assignors to Sharpsville Boiler Works Co., Sharpsville, Pa. Flow indicator. 1,904,283; Apr. 18.
Fagan, Charles D., Sharon, and R. W. Swank, assignors to Sharpsville Boiler Works Co., Sharpsville, Pa. Pump. 1,904,284; Apr. 18.
Fagan, George F., Pueblo, Colo. Automotive tool. 1,903,755; Apr. 18.
Fagan, James M., Maplewood, N. J., assignor to Westinghouse Lamp Company. Device for high frequency induction heating. 1,904,214; Apr. 18.
Fairbanks, Morse & Co. (See Hobart, Franklin G., assignor.)

Fairweather, David A. W., Falkirk, and J. Thomas, Polmont, Scotland, assignors to Imperial Chemical Industries Limited. Manufacture of sulphuric esters of anthra-hydroquinones. 1,904,721; Apr. 18.

Falcone, Peter, and R. E. Winton, San Jose, Calif. Hair waving clamp. 1,904,979; Apr. 18.

Farley, Francis S., Trenton, N. J., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y. Method and machinery for the manufacture of acoustical board and the like. 1,904,285; Apr. 18.

Farmers Manufacturing Company. (See Steel, John B., assignor.)

Fausse. Joseph, Melrose, assignor to The Littleway Process Company, Lynn, Mass. Holding shoe uppers in lasted position. 1,904,303; Apr. 18.

Faust, Claus W., Elmwood, Conn., assignor, by mesne assignments, to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Spring chuck. 1,903,964; Apr. 18.

Faust, Otto. (See Hottenroth, V., and Faust.)

Federal Electric Company. (See Barclay, Robert E., assignor.)

Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's M'f'g. Co., Philadelphia, Pa. Push drill. 1,904,679; Apr. 18.

Fellay, Louis J., assignor to Dooley Bros., Peoria, Ill. Mining drill mounting. 1,904,655; Apr. 18.

Fellay, Louis J., assignor to Dooley Bros., Peoria, Ill. Mining drill post. 1,904,656; Apr. 18.

Fellay, Louis J., assignor to Dooley Brothers, Peoria, Ill. Mining drill. 1,904,657; Apr. 18.

Felten & Guilleaume Carlswerk Actiengesellschaft. (See Baum, Reinhold, assignor.)

Fenton, Paul E., Thomaston, assignor to Scovill Manufacturing Company, Waterbury, Conn. Separable fastener. 1,904,722; Apr. 18.

Ferguson Brothers Manufacturing Company. (See Tinsley, Milton L., assignor.)

Ferrando, Amedeo, and A. Zanzi, assignors to Ditta Giovanni Zanzi, Ivrea, Italy. Making valves for explosion engines. 1,904,430; Apr. 18.

Ferry, William J., assignor, by mesne assignments, to Ferry's Incorporated, Oakland, Calif. Radial cam type internal combustion engine. 1,904,680; Apr. 18.

Ferry's Incorporated. (See Ferry, William J., assignor.)

Fertsch, Friedrich K., assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Producing vinyl chloride. 1,903,894; Apr. 18.

Fettsaure- und Glycerin-Fabrik G. m. b. H. (See Kantorowicz, H., and Köhler, assignors.)

Fickett, Ernest L., Fitchburg, Mass., assignor to Manning, Maxwell & Moore, Inc., New York, N. Y. Cutter for cutting spiral bevel gears. 1,903,988; Apr. 18.

Fiedler, Sébastien, O. A., assignor to l'Auxiliaire des Chemins de Fer et de l'Industrie, Paris, France. Feed water heating plant. 1,904,431; Apr. 18.

Field, Crosby, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc. Reel. 1,904,027; Apr. 18.

Field, Crosby, Brooklyn, and C. L. Campbell, Scarsdale, N. Y., assignors to Brillo Manufacturing Company, Inc. Manufacture of resilient pads. 1,904,026; Apr. 18.

Fink, Colin G., New York, N. Y., assignor to Chemical Treatment Company, Inc. Electrodepositing chromium. 1,904,432; Apr. 18.

Fink, Henry A., New York, N. Y., and J. E. Schmidt, Chicago, Ill., assignors to Continental Can Company, Inc., New York, N. Y. Control mechanism for clinching machine. 1,903,989; Apr. 18.

Firestone Tire & Rubber Company, The. (See Karl, William A., assignor.)

Fischer, Albert C., Chicago, Ill., assignor, by mesne assignments, to The Philip Carey Manufacturing Company. Expansion joint for concrete roads. 1,903,756; Apr. 18.

Fischer, Herbert G. M., Westfield, and C. E. Gustafson, Elizabeth, N. J., assignors to Standard Oil Development Company. Hydrocarbon oils and making the same. 1,904,433; Apr. 18.

Fisher, Frances E., Twin Falls, Idaho. Educational device. 1,904,723; Apr. 18.

Fisk, Gustav Leonard, assignor to Mesta Machine Company, Pittsburgh, Pa. Cooling bed. 1,904,434; Apr. 18.

Fitzgerald Manufacturing Company, The. (See Fitzgerald, Martin D., assignor.)

Fitzgerald, Martin D., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn. Gasket. 1,903,990; Apr. 18.

Flammer, Howard A., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Indicator device. 1,904,435; Apr. 18.

Flanders, Ralph E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Method and machine for grinding chasers. 1,904,304; Apr. 18.

Flannagan, Samuel H., Richmond, Va. Refrigerator water cooler. 1,904,782; Apr. 18.

Flexlume Corporation. (See Madine, John J., assignor.)

Florido, Pablo V., Annapolis, Md. Faucet structure. 1,903,757; Apr. 18.

Florman, Irving, New York, N. Y. Ash tray or the like. Des. 89,633; Apr. 18.

Foltz, Stewart P. (See Crowl, Charles A., assignor.)

Foote-Burt Company, The. (See Babcock, Walter F., assignor.)

Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. Automatic electric writing-computing machine. 1,904,127; Apr. 18.

Foothorap, Harry A., Harrisburg, Pa., assignor to Elliott-Fisher Company. New York, N. Y. Toll posting machine. 1,904,862; Apr. 18.

Ford, Hannibal C., Jamaica, assignor to Ford Instrument Company, Inc., Long Island City, N. Y. Artillery computing system. 1,904,215; Apr. 18.

Ford Instrument Company. (See Ford, Hannibal C., assignor.)

Formica Insulation Company, The. (See Clark, G. H., and Deters, assignors.)

Formica Insulation Company, The. (See Cochrane, John D., jr., assignor.)

Forward, Chauncey B., Urbana, Ohio, assignor to Forward Process Company, Dover, Del. Apparatus for refining oil. 1,903,810; Apr. 18.

Forward, Chauncey B., Urbana, Ohio, assignor, by mesne assignments, to Forward Process Company, Dover, Del. Steam generator and superheater and operation thereof. 1,904,216; Apr. 18.

Forward Process Company. (See Forward, Chauncey B., assignor.)

Foster Wheeler Corporation. (See Wexler, Meyer, assignor.)

Fowler, Charles H., Leeds, England. Ridging implement on tilling machines. 1,903,991; Apr. 18.

Fowler, John, & Co., (Leeds) Ltd. (See Hasson, P. R., and Ellis, assignors.)

Fox, Martin, assignor to The Seng Company, Chicago, Ill. Metal fixture for typewriter desks. 1,904,217; Apr. 18.

Franceway, James A., Baton Rouge, La., assignor to Standard Oil Development Company. Restoring the activity of hydrogenation catalysts. 1,904,218; Apr. 18.

Frank, Henry, Brooklyn, N. Y. Drafting pen. 1,903,965; Apr. 18.

Frank, John. (See Frank, Mary and J.)

Frank, Mary and J., New York, N. Y. Marcelling device. 1,904,043; Apr. 18.

Frankenburger, Walter, and G. Roessler, Ludwigshafen-on-the-Rhine, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y. Production and application of layers sensitive to light. 1,903,783; Apr. 18.

Franklin, Charles Samuel, London, England, assignor to Radio Corporation of America. Thermionic tube. 1,904,436; Apr. 18.

Franklin Simon & Company, Inc. (See Hennessy, Mary C., assignor.)

Frants, Grover C., Harrisburg, Pa., assignor, by mesne assignments, to J. A. Sexauer Mfg. Co., Inc., New York, N. Y. Spring connection. 1,904,681; Apr. 18.

Fraser, Henry A., and P. F. Crighton, London, England. Chair or settee bedstead. 1,903,918; Apr. 18.

Frederics, E., Inc. (See Frederics, Ernest O., assignor.)

Frederics, Ernest O., assignor to E. Frederics, Inc., New-York, N. Y. Electrical treating apparatus. 1,904,437; Apr. 18.

Freeman, Ernest H., Wilmette, Ill., assignor to Republic Flow Meters Co., Chicago, Ill. Integrating meter. 1,904,438; Apr. 18.

Freer, Phelps M., Detroit, Mich. Piston. 1,904,305; Apr. 18.

Freezidor Syndicate. (See Wright, Leonard K., assignor.)

French & Hecht, Incorporated. (See Hecht, Joseph L., assignor.)

Freund, Hugo A., et al. (See Nichols, Horace E., assignor.)

Freyermuth, George H. (See Young, P. L., Hanks, and Freyermuth.)

Freyermuth, George H., Elizabeth, N. J., assignor to Standard Oil Development Company. Production of hydrogen from hydrocarbon gases. 1,904,439; Apr. 18.

Freyermuth, George H., Elizabeth, N. J., and W. V. Hanks, Baton Rouge, La., assignors to Standard Oil Development Company. Reactivation of catalyst used in the preparation of hydrogen. 1,904,440; Apr. 18.

Freyermuth, George H., Elizabeth, N. J., and J. K. Small and W. V. Hanks, Baton Rouge, La., assignor to Standard Oil Development Company. Production of hydrogen from refinery and other hydrocarbon gases. 1,904,441; Apr. 18.

Fr. Hesser, Maschinenfabrik-Aktiengesellschaft. (See Gangler, Paul, assignor.)

Friberg, Carl A., Malmo, Sweden. Method and apparatus for edge rolling of crepe paper. 1,904,825; Apr. 18.

Fried Krupp Aktiengesellschaft. (See Wolf, Peter, assignor.)

Friedman Manufacturing Company, The. (See Keating, Clarence S., assignor.)

Frigidaire Corporation. (See Hull, Harry B., assignor.)

Fromm, George J., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 89,634; Apr. 18.

Fromm, George J., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 89,635; Apr. 18.

Fromm, George J., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y. Belt buckle. Des. 89,636; Apr. 18.

Fuller, Charles E.. (See Shoop, Fred M., assignor.)

Fuller, Ira K., Olean, N. Y., assignor, by mesne assignments, to Contact Filtration Company. Decolorizing oils. 1,904,682; Apr. 18.

Fuller, James W., Catasauqua, Pa., assignor, by mesne assignments, to Fuller Lehigh Company. Burning fuel. 1,904,128; Apr. 18.

Fuller Lehigh Company. (See Bailey, E. G., and Hardgrove, assignors.)

Fuller Lehigh Company. (See Fuller, James W., assignor.)

Fuller Lehigh Company. (See Kerr, Howard J., assignor.)

Fuller Lehigh Company. (See Lucke, Charles E., assignor.)

Fullmer, Giles C., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn. Holder for cosmetics and the like. 1,904,364; Apr. 18.

Fulton Bag & Cotton Mills, et al. (See Hancock, R. J., and Garrison, assignors.)

G & G Atlas Systems, Inc. (See Stoetzel, Joseph J., assignor.)

Gagnier, George E. (See Place, Bion C., assignor.)

Gangler, Paul, Esslingen, assignor to Firm Fr. Hesser, Maschinenfabrik-Aktiengesellschaft, Stuttgart-Cannstadt, Germany. Combined machine for making, filling, and closing bags. 1,904,131; Apr. 18.

Garms, Peter, New York, and G. L. Diggles, Flushing, assignors to Electrical Testing Laboratories, New York, N. Y. Thermostatic radiation indicator. 1,904,129; Apr. 18.

Garms, Peter, New York, and G. L. Diggles, Flushing, assignors to Electrical Testing Laboratories, New York, N. Y. Thread testing and recording device. 1,904,130; Apr. 18.

Garrison, John L. L. (See Hancock, R. J., and Garrison.)

Garrity, John G., and E. L. McCarthy, Pittsburgh, Pa. Electric automatic recording apparatus. 1,904,783; Apr. 18.

Garrity, John G., and E. L. McCarthy, Pittsburgh, Pa. Electric automatic recording scale. 1,904,784; Apr. 18.

Gartland, Michael J., Washington, D. C. Jig-saw puzzle holder. 1,904,724; Apr. 18.

Gas Fuel Corporation. (See Russell, Robert H., assignor.)

Gasiorowski, Ernst, Berlin-Hermsdorf, Germany, assignor to General Electric Company. High tension switch plant. 1,904,442; Apr. 18.

Gaskill, Kenneth W., Cleveland, Ohio. Gear-shifting mechanism. 1,903,758; Apr. 18.

Gaterman, W., Mfg. Co. (See Kind, Frederick H., assignor.)

Gay, Norman H., Los Angeles, Calif. Liquid level gauge for volatile liquids. 1,904,785; Apr. 18.

Gebhard, Louis A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Control apparatus. 1,903,759; Apr. 18.

Gebhard, Louis A., and R. R. Meyer, Washington, D. C. Antenna system. 1,903,811; Apr. 18.

Gebhard, Louis A., and C. F. Rudolph, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y. Shock-proof mounting for a high power frequency amplifier system. 1,903,812; Apr. 18.

Geiss, Willy. (See Van Liempt, J. A. M., and Geiss.)

Geist, William J., Lockport, Ill. Collapsible receptacle. 1,904,365; Apr. 18.

General Aniline Works, Inc. (See Bayer, O., and Baumann, assignors.)

General Aniline Works, Inc. (See Bruck, Walter, assignor.)

General Aniline Works, Inc. (See Kuns, M. A., Koeberle, and Berthold, assignors.)

General Aniline Works, Inc. (See Laska, L., and Haller, assignors.)

General Aniline Works, Inc. (See Mieg, W., and Heidenreich, assignors.)

General Aniline Works, Inc. (See Sander, Ludwig, assignor.)

General Atlas Carbon Company. (See Keller, Theodore P., assignor.)

General Cable Corporation. (See Kent, Moss A., assignor.)

General Cable Corporation. (See Potter, Frank M., assignor.)

General Carbonalpha Company, The. (See Willekens, Jacobus J. C., assignor.)

General Electric Company. (See Abbott, Charles C., assignor.)

General Electric Company. (See Adams, Lester V., assignor.)

General Electric Company. (See Aoki, Koichi, assignor.)

General Electric Company Limited, The. (See Campbell, Norman R., assignor.)

General Electric Company. (See Cockrell, William D., assignor.)

General Electric Company. (See Dantzisen, Christian, assignor.)

General Electric Company. (See Doran, John H., assignor.)

General Electric Company. (See Eby, Eugene D., assignor.)

General Electric Company. (See Gasiorowski, Ernst, assignor.)

General Electric Company. (See Hardy, Arthur C., assignor.)

General Electric Company. (See Haseltine, Louis A., assignor.)

General Electric Company. (See Hilliard, John D., assignor.)

General Electric Company. (See Horowitz, Eugen, assignor.)

General Electric Company. (See Hoyt, Samuel L., assignor.)

General Electric Company. (See Kissing, Friedrich, assignor.)

General Electric Company. (See Kobayashi, K., assignor.)

General Electric Company. (See Kubach, William L., assignor.)

General Electric Company. (See Livingston, Orrin W., assignor.)

General Electric Company. (See Lyon, C. L., and Jagger, assignors.)

General Electric Company. (See McDavitt, Carlisle N., assignor.)

General Electric Company. (See McLenegan, David W., assignor.)

General Electric Company. (See Nordlander, Birger W., assignor.)

General Electric Company. (See Paul, William E., assignor.)

General Electric Company. (See Rice, Chester W., assignor.)

General Electric Company. (See St. Clair, Byron W., assignor.)

General Electric Company. (See Sandelowsky, Sally, assignor.)

General Electric Company. (See Standerwick, Reginald G., assignor.)

General Electric Company. (See Steenstrup, Christian, assignor.)

General Electric Company. (See Swanson, Ernest G., assignor.)

General Electric Company. (See Taylor, George F., assignor.)

General Electric Company. (See Tobey, H. W., and May, assignors.)

General Electric Company. (See Uebermuth, Werner, assignor.)

General Electric Company. (See Van Liempt, J. A. M., and Geiss, assignors.)

General Electric Company. (See Van Nordstrand, Robert D., assignor.)

General Industries Company, The. (See Bonsieur, Le., assignor.)

General Machinery Corporation. (See Byerlein, Arthur A., assignor.)

General Motors Radio Corporation. (See Brewer, Francis T., assignor.)

General Motors Radio Corporation. (See Dybvig, Henry G., assignor.)

Gerhold, Alfred, London, England. Stand for plates and the like. 1,904,725; Apr. 18.

Gerrard Company, The. (See Spoor, Ivan H., assignor.)

Getty, H. S., and Company. (See Eichel, John V., jr., assignor.)

Gibson Art Company, The. (See Wells, M. R., and Hillix, assignors.)

Gilbert & Barker Manufacturing Company. (See De Lancey, Warren H., assignor.)

Gilbert, John J., Douglaston, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Submarine cable loading coil. 1,903,992; Apr. 18.

Gillican-Chipley Company. (See Hitch, Arthur R., assignor.)

Girard, James B., Phoenix, Ariz. Dam and making same. 1,903,760; Apr. 18.

Giuliano, Anthony P., Newark, N. J. Detecting metallic objects in hides and skins. 1,904,826; Apr. 18.

Glascodine, Richard T., London, England. Rolling stock. 1,903,859; Apr. 18.

Glatzner, Louis O., Bristol, Pa. Changeable illuminated display. 1,904,132; Apr. 18.

Gleason Works. (See Head, Ernest C., assignor.)

Gleason Works. (See Wildhaber, Ernest, assignor.)

Gleichmann, Hans, Falkenhain near Spandau, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Steam plants. 1,904,443; Apr. 18.

Glenn, Arthur B., Los Angeles, Calif. Engraver's mat. 1,903,813; Apr. 18.

Gockel, Heinrich, Leverkusen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparation of metallic coatings. 1,903,860; Apr. 18.

Goehring, William F., Baltimore, Md. Clutch. 1,903,993; Apr. 18.

Gohr, Edwin J., Elizabeth, N. J., assignor to Standard-I. G. Company. Treating hydrocarbons. 1,904,133; Apr. 18.

Goldman, Jacob S., Port Huron, Mich. Ash trays for card tables. 1,903,994; Apr. 18.

Good, Harper A., assignor to Landis Tool Company, Waynesboro, Pa. Mechanism for producing curved axial surface on rolls. 1,904,827; Apr. 18.

Goodman, Abraham, Brooklyn, N. Y., assignor to Emeth Financial Corporation. Hair waver. 1,904,444; Apr. 18.

Gookin, Sylvester L., Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastener inserting machine. 1,904,306; Apr. 18.

Gorham, Walter G. (See Twiss, D. F., and Gorham.)

Goss Printing Press Company. (See Laycock, Kenneth G., assignor.)

Goss Printing Press Company. (See Richter, Charles J., assignor.)
Gossner, Joseph, et al. (See Parrett, Dent, assignor.)
Gottschick, George D., et al. (See Watson, Claude G., assignor.)
Gough, James J., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Electric toaster. Des. 89,637; Apr. 18.
Gough, James J., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Electric toaster. Des. 89,638; Apr. 18.
Graff, George U., Washington, D. C. Pyrotechnic starter composition. 1,903,814; Apr. 18.
Graham, Clarence R., North Tonawanda, N. Y. Amusement device. 1,903,995; Apr. 18.
Granges, Louis, Paris, France. Vehicle suspension device. 1,903,966; Apr. 18.
Graton & Knight Company. (See Kullman, Alfred, assignor.)
Graver Corporation. (See Adams, James L., jr., assignor.)
Gray, Daniel M., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Plastic composition. 1,904,445; Apr. 18.
Gray, Frank, assignor to Western Electric Company, Incorporated, New York, N. Y. Protective device. 1,903,996; Apr. 18.
Gray, William H. and W. J., Rochester, N. Y. Eavestrough hanger. 1,903,861; Apr. 18.
Gray, William J. (See Gray, William H. and W. J.)
Green, Charles E., assignor to Pawtucket Screw Company, Pawtucket, R. I. Thermoelectric sprinkler head. 1,904,828; Apr. 18.
Greenberg, Mandel, Brooklyn, N. Y. Combination sprayer and sweeper. 1,903,896; Apr. 18.
Greene, Albert E., Medina, Wash. Combustion-arc process and apparatus. 1,904,683; Apr. 18.
Greene, Albert E., Medina, Wash. Melting. 1,904,684; Apr. 18.
Greenwood, T. T. (See Burk, Michael F., assignor.)
Gribojedoff, Nicolai, Putney, London, England. Winding machine. 1,904,726; Apr. 18.
Griffin, James T., Oak Park, J. P. Deane, Berwyn, and J. G. Cureton, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y. Device for fastening the end of a coiled member to a supporting structure. 1,904,863; Apr. 18.
Grimes, Herbert V., assignor to W. Taylor, Elizabeth, N. J. Radio station selector. 1,904,219; Apr. 18.
Griswold, Walter R., assignor to Packard Motor Car Company, Detroit, Mich. Internal combustion engine. 1,903,919; Apr. 18.
Grossmann, Paul, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Eliminating sulphonic acid groups from dihydroxydiaminoanthraquinonedisulfonic acid. 1,903,862; Apr. 18.
Grubs, Frank, Larchmont, N. Y., assignor to La Valle, Inc., New York, N. Y. Shoe. Des. 89,615; Apr. 18.
Gruetter, John R., Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill. Bottle rinsing mechanism. 1,904,685; Apr. 18.
Gubelmann, Ivan, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company. 7.7'-dichloro flavanthrone and making same. 1,904,367; Apr. 18.
Gubelmann, Ivan, H. J. Weiland, and O. Stallmann, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Organic acid of the diphenyl-methane series and preparing the same. 1,904,366; Apr. 18.
Guettner, Frank, jr., Shiner, Tex. Automatic electric starter for internal combustion engines. 1,903,761; Apr. 18.
Guild, Waldo J., assignor to The Heald Machine Company, Worcester, Mass. Mechanism for reciprocating grinding wheel spindles. 1,904,044; Apr. 18.
Gullett Gin Company. (See Wallace, Jeffrey J., assignor.)
Gumprich, William, Brooklyn, N. Y., assignor to Dayton Scale Company, Dayton, Ohio. Positioning means for poise weights. 1,904,446; Apr. 18.
Günzler, Heinrich, and O. Neubert, Elberfeld, near Cologne, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. New colloidal mercurized aromatic hydroxy compounds. 1,903,895; Apr. 18.
Gustafson, Clifford E. (See Fischer, H. G. M., and Gustafson.)
Gaupkaytie, Matt, Baltimore, Md. Vehicle spring and shock absorber. 1,904,220; Apr. 18.
H & W Kite Co. (See Hahn, John, assignor.)
Haas, Frederick S., Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass. Grinding machine. 1,904,045; Apr. 18.
Hagedorn, Max, Dessau in Anhalt, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y. Protective layer on photographic film. 1,904,221; Apr. 18.
Hagle, George W. (See Hampden, W. R., and Hagle.)
Hahn, John, assignor to H & W Kite Co., Decatur, Ill. Kite. 1,904,727; Apr. 18.
Hahn, John, assignor to H & W Kite Co., Decatur, Ill. Kite. 1,904,728; Apr. 18.
Halbach, Robert Mc., Jersey City, N. J. Culture bottle. 1,904,222; Apr. 18.
Halford, Dean, et al. (See Bennett, Dennis H., assignor.)
Hall-Brown, Archibald, London, England. Propulsion of aircraft. 1,904,134; Apr. 18.
Haller, Oskar. (See Laska, L., and Haller.)
Hamaker, Rex G., assignor of one-half to A. M. Bowman, Houston, Tex. Jack post. 1,904,807; Apr. 18.
Hambuechen, Carl, Belleville, Ill., assignor to The B-L Electric Manufacturing Company, St. Louis, Mo. Rectifier. 1,904,447; Apr. 18.
Hampden, Wellesley R., Reedville, and G. W. Hagle, Hillsboro, Oreg. Newspaper box. 1,904,448; Apr. 18.
Hancock, Ralph J., Marietta, and J. L. L. Garrison; said Garrison assignor to Fulton Bag & Cotton Mills, Atlanta, and said Hancock assignor to Southern Ice Supply Company, Marietta, Ga. Ice delivery bag. 1,904,729; Apr. 18.
Hancock, Raymond F. (See Boyce, J., and Hancock.)
Handforth, Stanley L., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Production of nitrites. 1,903,815; Apr. 18.
Hanique, Alfred, Paris, France. Machine for ascertaining the volume of loads of granular material. 1,904,223; Apr. 18.
Hankins, Cyrus, Washington, D. C. Brake rigging for railway cars. 1,903,997; Apr. 18.
Hankins, Cyrus, Washington, D. C. Brake rigging for railway cars. 1,904,135; Apr. 18.
Hanks, William V. (See Freyermuth, G. H., and Hanks.)
Hanks, William V. (See Freyermuth, G. H., Small, and Hanks.)
Hanks, William V. (See Young, P. L., and Hanks.)
Hanks, William V. (See Young, P. L., Hanks, and Freyermuth.)
Hanny, Charles E., Unionville, assignor to Trumbull Electric Manufacturing Company, Plainville, Conn. Residence panel board. 1,904,136; Apr. 18.
Hanson, Estyle D. (See Johnson, F. V., Hanson, and Waters.)
Hanson, Larry A., and C. F. Osner, Altoona, Pa. Float valve. 1,903,816; Apr. 18.
Hanson, Nathan E., assignor to Union Special Machine Company, Chicago, Ill. Feeding mechanism for sewing machines. 1,903,762; Apr. 18.
Hardgrove, Ralph M. (See Bailey, E. G., and Hardgrove.)
Hardtmann, Max. (See Hentrich, W., Hardtmann, Backes, and Stötter.)
Hardy, Arthur C., Wellesley, Mass., assignor to General Electric Company. Sound record film and film printing apparatus. 1,904,449; Apr. 18.
Hargrove, Clarence A., Acton, Ind. Electromagnetic tool. 1,904,224; Apr. 18.
Harmon, Kenneth A., Springfield, assignor to Wico Electric Company, West Springfield, Mass. Magneto. 1,904,808; Apr. 18.
Harnly, David H., Chicago, Ill. Weather-proofing structure for doors. 1,904,868; Apr. 18.
Harper, Robert W., West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone exchange system. 1,903,998; Apr. 18.
Harrington, John W., assignor to Harrington & Richardson Arms Company, Worcester, Mass. Cylinder construction for firearms. 1,904,730; Apr. 18.
Harrington & Richardson Arms Company. (See Harrington, John W.)
Harris, Charles Roberts, Niagara Falls, assignor to The Roessler & Hasslacher Chemical Company, New York, N. Y. Stabilization of halogenated hydrocarbons. 1,904,450; Apr. 18.
Harris, Edward M., San Diego, Calif. Wire reel. 1,904,286; Apr. 18.
Harris, George H., Auckland, New Zealand. Golf bag. 1,904,731; Apr. 18.
Harris, Henry, London, England. Apparatus for casting metals. 1,903,897; Apr. 18.
Hartford-Empire Company. (See Peller, Karl E., assignor.)
Hartwig, William G., assignor to Railway Utility Company, Chicago, Ill. Electric terminal connecter. 1,904,919; Apr. 18.
Hasbrouck, Louis B., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y. Dyeing apparatus. 1,904,137; Apr. 18.
Haseltine, Stacy B., assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,904,369; Apr. 18.
Haskins, Clifford B., assignor to Dayton Scale Company, Dayton, Ohio. Bearing. 1,904,451; Apr. 18.
Haslam, Robert T., Westfield, N. J., assignor to Standard Oil Development Company. Fatty acids and preparing same. 1,904,452; Apr. 18.
Hasson, Paul R., and E. D. Ellis, assignors to John Fowler & Co., (Leeds) Ltd., Leeds, England. Ridging implement on rotary tilling machines. 1,904,138; Apr. 18.
Hauck Manufacturing Company. (See Else, Walter G., assignor.)
Haueisen, Batist R., and J. C. Patten, Indianapolis, Ind.; said Haueisen assignor to said Patten; M. L. Patten, executrix of said J. C. Patten, deceased. Alloy plated iron and steel and making the same. 1,904,732; Apr. 18.
Haugen, Edward, Wallace, assignor to Coeur d'Alene Hardware & Foundry Company, Wallace, Idaho. Dump car. 1,904,453; Apr. 18.
Haupt, Walter H. (See Shield, Paul S., and Haupt.)
Haupt, Walter H., Ludlow, Ky., assignor to Augustine Davis, jr., Cincinnati, Ohio. Dispenser of the twin chamber type. 1,904,454; Apr. 18.

Hawaiian Pineapple Company. (See Tachi, Tadao, assignor.)
Hawk, Watson L., Long Beach, Calif. Torque control and automatic drill control. 1,904,765; Apr. 18.
Hawkins, Luty, Mount Vernon, Ill. Heating device. 1,904,786; Apr. 18.
Hayden, Howard A., Detroit, Mich. Connecting rod end. 1,903,863; Apr. 18.
Hayes, Frank A., Middletown, N. J. Variable speed power transmission mechanism. 1,904,046; Apr. 18.
Haynes Stellite Company. (See Wissler, William A., assignor.)
Hazel-Atlas Glass Company. (See Cordy, Ivor, assignor.)
Hazel-Atlas Glass Co. (See Gray, Daniel M., assignor.)
Hazel-Atlas Glass Co. (See Stenhouse, David, assignor.)
Hazel-Atlas Glass Co. (See Stenhouse, Thomas and D., assignors.)
Hazel-Atlas Glass Co. (See Williams, John J., assignor.)
Haseltine Corporation. (See Wheeler, Harold A., assignor.)
Hazeltine, Louis A., Hoboken, N. J., assignor to General Electric Company. Method and apparatus for converting electric power. 1,904,455; Apr. 18.
Head, Ernest C., assignor to Gleason Works, Rochester, N. Y. Grinding apparatus. 1,903,967; Apr. 18.
Heald Machine Company, The. (See Guild, Waldo J., assignor.)
Heald Machine Company, The. (See Haas, Frederick S., assignor.)
Hesly, John F., assignor to Piggly Wiggly Corporation, Cincinnati, Ohio. Price tag and holder. 1,904,456; Apr. 18.
Healy, John F., assignor to Piggly Wiggly Corporation, Cincinnati, Ohio. Price tag and holder. 1,904,457; Apr. 18.
Heath, Spencer, Elkridge, assignor to The American Propeller Company, Baltimore, Md. Propeller. 1,904,733; Apr. 18.
Hecht, Joseph L., Davenport, Iowa, assignor to French & Hecht, Incorporated. Making tension wheels. 1,904,458; Apr. 18.
Hedlund, Nels J. (See Solie, H. L., and Hedlund.)
Hefti, Wilhelm, assignor to the Firm Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Cylinder for internal combustion engines. 1,904,459; Apr. 18.
Hehr, Frederick G., Hempstead, assignor to Aerol Engine Corporation, New York, N. Y. Hydraulic pump. 1,904,707; Apr. 18.
Heidenreich, Rudolf M. (See Mieg, W., and Heidenreich.)
Heigl, Ludwig, Weiden, Germany, assignor of one-fourth to F. Zeisel and J. S. Kendall, Knox County, Tex. Surgical leg-stretching device. 1,904,942; Apr. 18.
Hendrick Manufacturing Company. (See Beam, Lois M., assignor.)
Hendrix, Joel H., assignor of one-half to W. W. Braham, New Castle, Pa. Key for locks. 1,904,225; Apr. 18.
Henkel & Cie. Gesellschaft mit beschrankter Haftung. (See Weber, H., and Pape, assignors.)
Henkel, Wilhelm, and F. Meyer, assignors to the Firm Carl Zeiss, Jena, Germany. Making selenium cells. 1,904,139; Apr. 18.
Henneberger, Thomas C., Bloomfield, N. J., assignor to American Telephone and Telegraph Company. Cable maintenance apparatus. 1,904,226; Apr. 18.
Henneberger, Thomas C., Caldwell, N. J., assignor to American Telephone and Telegraph Company. Gas pressure alarm system for cables. 1,904,227; Apr. 18.
Hennessy, Mary C., assignor to Franklin Simon & Company, Inc., New York, N. Y. Panties. 1,904,228; Apr. 18.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Control switch structure. 1,904,309; Apr. 18.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Stack temperature actuated control device. 1,904,310; Apr. 18.
Henning, Malcolm E., assignor to Penn Electric Switch Co., Des Moines, Iowa. Defroster. 1,904,658; Apr. 18.
Henschel, Charles J., Rutherford, N. J. Signaling instrument. Des. 89,616; Apr. 18.
Hentrich, Winfrid, and M. Hardtmann, Wiesdorf, P. Backes, Cologne, Deutz, and H. Stötter, Leverkusen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Textile pest proofing media. 1,903,864; Apr. 18.
Hentrich, Winfrid, Leverkusen-on-the-Rhine, and J. Hilger, Cologne-Mulheim, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. 2.4di(nitrophenyl)-6-halogen-1.3.5-triazines and making the same. 1,904,229; Apr. 18.
Hentschel, Ernest R., deceased, Washington, D. C.; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Frequency control apparatus. 1,904,140; Apr. 18.
Hentschel, Ernest R., deceased; J. Olson, administrator, assignor to Wired Radio, Inc., New York, N. Y. Constant frequency control apparatus. 1,904,771; Apr. 18.
Herbert, Martin. (See Brzezicki, John K., assignor.)
Heritage, Clark C., Buffalo, assignor to National Aniline & Chemical Co., Inc., New York, N. Y. Reducing a nitro compound by means of a metal. 1,904,047; Apr. 18.
Herklots, Johannus G. M., Koeniagan, Cheribon, Java, Dutch East Indies. Record strip for sound reproducing machines. 1,904,944; Apr. 18.
Hermanson, William A. (See Banga, R. L., and Hermanson.)
Herrington, Rolland. (See Almond, L. L., Herrington, and Matthews.)
Hess-Bright Manufacturing Company. (See Faust, Claus W., assignor.)
Hess, Raymond W. (See Moses, F. G., Hess, and Perkins.)
Hess, Raymond W., Buffalo, assignor to The Barrett Company, New York, N. Y. Concentration of minerals by flotation. 1,904,461; Apr. 18.
Hess, Raymond W., and J. M. F. Leaper, Buffalo, assignors to The Barrett Company, New York, N. Y. Flotation of minerals. 1,904,462; Apr. 18.
Hickok Manufacturing Company. (See Fromm, George J., assignor.)
Hildebrand, Emil C., Irvington, assignor to Krementz & Company, Newark, N. J. Fastener for wrist watch straps. 1,904,230; Apr. 18.
Hileman, Hittle A., et al. (See Baker, Albert B., assignor.)
Hilger, Josef. (See Hentrich, W., and Hilger.)
Hill, Matthew E., assignor to The Holfast Rubber Company, Atlanta, Ga. Belt fitter. 1,904,048; Apr. 18.
Hilliard, John D., Glens Falls, N. Y., assignor to General Electric Company. Circuit interrupting apparatus. 1,904,463; Apr. 18.
Hillix, Foster F. (See Wells, M. R., and Hillix.)
Hitch, Arthur R., Brunswick, Ga., assignor, by mesne assignments, to Gillican-Chipley Company. Producing high grade rosin. 1,904,464; Apr. 18.
Hitsler, Joseph, Frankfort-on-the-Main, and F. C. J. Merz, Frankfort-on-the-Main-Rodelheim, Germany. Device for shrinking leather. 1,904,787; Apr. 18.
Hobart, Franklin G., Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill. Fluid pressure switch. 1,904,311; Apr. 18.
Hodge, Lloyd. (See Nelson, J. F., and Hodge.)
Hodgman, Frederick A., Yonkers, N. Y. Golf club assembly. 1,904,231; Apr. 18.
Hoe, R., & Co. (See Tomlin, John R., assignor.)
Hoffman, Carl R., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Wire drawing apparatus. 1,904,232; Apr. 18.
Hoge, William L. (See Trube, Carl E., assignor.)
Hogue, James E., Hot Springs, Ark. Ice cream or confection container. 1,903,764; Apr. 18.
Holbrook, A. W., & Sons, Inc. (See Travis, Albert C., jr., assignor.)
Holden, William H. T., Brooklyn, and R. P. Jutson, Yonkers; said Holden assignor to American Telephone and Telegraph Company and said Jutson assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Regulating system. 1,903,999; Apr. 18.
Holfast Rubber Company, The. (See Hill, Matthew E., assignor.)
Hollingsworth, Lowell M., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Producing magnetic bodies. 1,904,233; Apr. 18.
Holmes, Elbridge R., and O. V. Payne, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Dobby pattern chain. 1,904,812; Apr. 18.
Holmes, Jesse H., assignor to Thomas Young Nurseries, Inc., Bound Brook, N. J. Display of cut flowers. 1,904,788; Apr. 18.
Hoover Company, The. (See Hoover, Howard E., assignor.)
Hoover Company, The. (See Smellie, Donald G., assignor.)
Hoover Company, The. (See Willis, Olo C., assignor.)
Hoover, Howard E., Glencoe, Ill., assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,904,974; Apr. 18.
Hopstock, Frants P. (See Aagaard, T. B., Samdahl, and Hopstock.)
Hopwood, John M. (See Peebles, Thomas A., assignor.)
Horowitz, Eugen, Halensee, Germany, assignor to General Electric Company. Electrical regulator. 1,904,465; Apr. 18.
Horwath, Julius, assignor to Arvey Corporation, Chicago, Ill. Display card. 1,904,659; Apr. 18.
Hoskin, George Clarence. (See Hoskin, Harriet M. and G. C.)
Hoskin, Harriet M. and G. C., Brookfield, Ill. Measuring scale. 1,904,234; Apr. 18.
Hosmer, Warren S., Bartow, Fla. Tractor. 1,903,968; Apr. 18.
Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Apparatus for forming sheet metal caps. 1,904,920; Apr. 18.
Hott, Ion V. K., assignor to The Joyce-Cridland Company, Dayton, Ohio. Hydraulic lifting mechanism. 1,903,763; Apr. 18.
Hottenroth, Valentin, Mannheim, and O. Faust, Mannheim-Neuostheim, assignors to Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Improving cellulose raw material of all kinds. 1,904,235; Apr. 18.
Howell, Joseph C., Fort Lee, N. J. Adjustable arch support. 1,904,789; Apr. 18.
Howell, Joseph C., Fort Lee, N. J. Arch support for shoes. 1,904,790; Apr. 18.

Hoyt, Frederick A., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Reeling device. 1,904,000; Apr. 18.
Hoyt, Samuel L., Schenectady, N. Y., assignor to General Electric Company. Diamond charged cutting tool bit. 1,904,049; Apr. 18.
Huber, Eugen. (See Stintzing, H., and Huber.)
Hudepohl, Fred H. (See Krueger, F. G., and Hudepohl.)
Hueber, Henry, assignor to Trico Products Corporation, Buffalo, N. Y. Fluid pressure horn. 1,904,759; Apr. 18.
Hull, Harry B., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,904,980; Apr. 18.
Humphrey, Don B., assignor to McHenry-Millhouse Manufacturing Company, South Bend, Ind. Roofing. Des. 89,639; Apr. 18.
Humphreys, Hoxie H., Phoenix, Ariz. Cooling system. 1,904,686; Apr. 18.
Hunt, Charles G., assignor to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machine. 1,904,642; Apr. 18.
Hunt, Rodney, Machine Company. (See Jefferson, Eugene D., assignor.)
Hünten, Alfred T., deceased, Koppern in the Taunus, by Gertrud Hünten, administratrix, Frankfort-on-the-Main, Germany. Automatic machine for the manufacture of soap bars. 1,903,920; Apr. 18.
Hünten, Gertrud, administratrix. (See Hünten, Alfred T.)
Hunter, Herbert T., Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y. Automatic cooking apparatus. 1,904,370; Apr. 18.
Hupp Motor Car Corporation. (See Watts, Frank E., assignor.)
Hurlbrink, Ernst, Berlin-Westend, assignor to the Firm Fabrik Explosionssicherer Gefässe Salzkotten G. m. b. H., Salzkotten I. W., Germany. Liquid delivery and measuring device. 1,904,829; Apr. 18.
Hurlburt, Wilbur F., East Orange, N. J., assignor to Automatic Switch Company, New York, N. Y. Magnetic switch. 1,904,141; Apr. 18.
Huse, Ralph L., Boston, assignor to Albert & J. M. Anderson Manufacturing Company, South Boston, Mass. Lighting unit. 1,904,643; Apr. 18.
Hyde, William James, London, England. Closure-holding and return spring. 1,903,923; Apr. 18.
Hygienic Manufactures and Supplies Company Limited, The. (See Nielsen, Heinrich V., assignor.)
Hyland, Lawrence A., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Electron discharge device circuit arrangement. 1,904,142; Apr. 18.
Hynan, Arthur C., assignor to R. N. Burton, Chicago, Ill. Demountable wheel lock. 1,904,371; Apr. 18.
I. G. Farbenindustrie Aktiengesellschaft. (See Baehr, Hans, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Eisenhut, Otto, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Fertsch, Friedrich K., assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Gockel, Heinrich, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hentrich, W., Hardtmann, Backes, and Stötter, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Hentrich, W., and Hilger, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Krauch, C., Pier, and Anthes, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lenz, W., and Jochum, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Lommel, W., and Engelhardt, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Pungs, W., and Eisenmann, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Schultze, Hermann, assignor.)
I. G. Farbenindustrie Aktiengesellschaft. (See Winkler, K., and Wissel, assignors.)
Ibling, Walter E., et al. (See Bennett, Dennis H., assignor.)
Ideal Manufacturing Company. (See Arlt, John L., assignor.)
Imperial Chemical Industries Limited. (See Brightman, Rainald, assignor.)
Imperial Chemical Industries Limited. (See Fairweather, David A. W., and Thomas, assignors.)
Imperial Typewriter Company Limited. (See Pateman, Arthur, assignor.)
Im Schlaa, Friedrich, Iserlohn, Germany. Machine for rolling rings. 1,904,734; Apr. 18.
Independent Pneumatic Tool Co. (See Norling, Reinhold A., assignor.)
Indestro Mfg. Co. (See Rice, Harold G., assignor.)
Ingersoll Milling Machine Company, The. (See Johnson, John R., assignor.)
Ingersoll-Rand Company. (See Metzgar, Chester W., assignor.)
Ingersoll-Rand Company. (See Prellwitz, William, assignor.)
Ingraham, E., Company, The. (See Ciccarelli, Ostilio, assignor.)
International Scale Company. (See Schaper, Harry C., assignor.)
Inventia Patent-Verwertungs-Gesellschaft. (See Engberg, A. O., and Ahnström, assignors.)
Irwin, Davis L. (See Plummer, H. L., and Irwin.)
Irwin, Lawrence C., assignor to Charles J. Taglialatela Mfg. Co., Brooklyn, N. Y. Automatic control switch. 1,903,924; Apr. 18.
Irwin, William J., Wilkinsburg, Pa. Heat regenerator. 1,904,236; Apr. 18.
Irwin, William J., Wilkinsburg, Pa. Regenerative chamber. 1,904,237; Apr. 18.
Isco Chemical Company. (See Ladd, Edward T., assignor.)
Isherwood, Joseph W. and W., Raggles Wood, Chislehurst, England. Hatch cover. 1,904,735; Apr. 18.
Isherwood, Joseph W. and W., Raggles Wood, Chislehurst, England. Cover for hatches. 1,904,736; Apr. 18.
Isherwood, William. (See Isherwood, Joseph W. and W.)
Jacob, Francis M., Columbus, Miss. Combined seesaw and merry-go-round. 1,904,687; Apr. 18.
Jaedike, Henry, Brooklyn, N. Y. Holding and dispensing device for collapsible tubes. 1,904,050; Apr. 18.
Jaeger, Adolph C., Port Chester, N. Y. Textile fabric or similar article. Des. 89,640; Apr. 18.
Jagger, Claude A. (See Lyon, C. L., and Jagger.)
Jahn, Albert, Berlin-Lichterfelde, Germany. Fountain pen. 1,904,660; Apr. 18.
James Manufacturing Company. (See Kreutzer, Frederic J., assignor.)
Janson, Joseph A., Providence, R. I. Waste eliminator for ice cream cabinets. 1,903,910; Apr. 18.
Javery, Frank B., Worcester, assignor to Warp Compressing Machine Company, Worcester, Mass. Holder for yarn packages. 1,904,737; Apr. 18.
Jeavons, Charles F. R., Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting machine. 1,904,313; Apr. 18.
Jefferson, Eugene D., Waban, assignor to Rodney Hunt Machine Company, Orange, Mass. Kier. 1,904,921; Apr. 18.
Jeffrey Manufacturing Company. (See Levin, Nils D., assignor.)
Jennings, Willis A., Chicago, Ill. Soap dispenser. 1,904,238; Apr. 18.
Jochum, Kurt. (See Lenz, W., and Jochum.)
Johns-Manville Corporation. (See Farley, Francis S., assignor.)
Johns, Wilbert R., Chicago, Ill. Poster support. 1,903,766; Apr. 18.
Johnson, Alfred, Uniontown, Pa. Closure and lock. 1,903,765; Apr. 18.
Johnson, Alfred H., assignor to National-Standard Company, Niles, Mich. Tire bead reenforcing element. 1,903,925; Apr. 18.
Johnson, Arthur S., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening inserting machine. 1,904,314; Apr. 18.
Johnson, Frank L., Akron, Ohio. Collapsible tire building form. 1,903,945; Apr. 18.
Johnson, Fred V., Irvington, N. J., E. D. Hanson, Westmont, and D. V. Waters, Oak Park, Ill., assignors to Western Electric Company, Incorporated. Molding machine. 1,904,239; Apr. 18.
Johnson, Henry, Beatrice, Nebr. Grave marker. 1,904,738; Apr. 18.
Johnson, John R., assignor to The Ingersoll Milling Machine Company, Rockford, Ill. Machine tool slide and lubricator therefor. 1,903,865; Apr. 18.
Johnson, Nelson V., Philadelphia, Pa. Propeller balance. 1,903,817; Apr. 18.
Johnston, William F. (See Davis, E. H., and Johnston.)
Jones-Dabney Co. (See Crystler, Frank M., assignor.)
Jones, David T., and F. J. Moore, Saltcoats, Scotland, assignors to E. I. du Pont de Nemours and Co., Wilmington, Del. Manufacture of electric detonators, percussion caps, and like articles. 1,904,240; Apr. 18.
Jones & Lamson Machine Company. (See Flanders, Ralph E., assignor.)
Jones & Lamson Machine Company. (See Lovely, John E., assignor.)
Jones, Lester L., Oradell, N. J. Soldering iron. 1,904,051; Apr. 18.
Jones, William A., Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Furnace and boiler. 1,904,466; Apr. 18.
Jongedyk, Ralph, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Material working apparatus. 1,904,864; Apr. 18.
Joyce-Cridland Company. (See Hott, Ion V. K., assignor.)
Judge, Edward A., et al. (See Cameron, Hugh M., assignor.)
Jungersen, Thoger G., Milwaukee, Wis. Dump body operating mechanism. 1,904,922; Apr. 18.
Junkune, Stephen, jr., Chicago, Ill. Burial casket. Des. 89,668; Apr. 18.
Jutson, Robert P. (See Holden, W. H. T., and Jutson.)
Jutting, Bernhard G., Jersey City, N. J. Wing lift system for aircraft. 1,903,818; Apr. 18.
Kadel, Byers W. (See Wine, W. E., and Kadel, assignors.)
Kaffer, Hans, Duisburg-Meiderich, Germany. Production of motor driving spirits. 1,904,880; Apr. 18.
Kahrs, Henry, deceased, Brooklyn, N. Y., by Mary D. Wright, executrix. Folding table top. 1,904,897; Apr. 18.
Kammerer, Erwin, Pforzheim, Germany. Compound metal stock. 1,904,241; Apr. 18.

Kane, Peter W., Buffalo, N. Y. Pneumatic shock absorber. 1,904,372; Apr. 18.
Kantorowicz, Hans, Berlin-Wilmersdorf, and A. Köhler, Spandau, near Berlin, assignors to Fettsaure-und Glycerin-Fabrik G. m. b. H., Mannheim, Germany. Making sulphonated products. 1,904,791; Apr. 18.
Karl, William A., assignor to The Firestone Tire and Rubber Company, Akron, Ohio. Tire construction. 1,904,981; Apr. 18.
Karnath, Kurt, Zweibrucken, Germany. Valve. 1,904,467; Apr. 18.
Karr, Alfred D., Newark, N. J., and K. D. Perkins, assignors to Audiffren Refrigerating Machine Company, New York, N. Y. Method and apparatus for conditioning air. 1,904,468; Apr. 18.
Karst, Henry C., Sonoma, Calif. Drinking fountain for poultry. 1,903,767; Apr. 18.
Kats, Alexander S., Brooklyn, N. Y. Shelving construction. 1,904,052; Apr. 18.
Katz, Alexander S., Brooklyn, N. Y. Lock. 1,904,053; Apr. 18.
Keating, Clarence S., assignor to The Friedman Manufacturing Company, Chicago, Ill. Compotier. Des. 89,617; Apr. 18.
Keller, Theodore P., Elizabeth, N. J., assignor to General Atlas Carbon Company, Dover, Del. Production of carbon black. 1,904,469; Apr. 18.
Kelley, Daniel J., Great Neck, N. Y. Auto-plate. Des. 89,641; Apr. 18.
Kelman, David J., Brooklyn, N. Y. Wreath and making same. 1,904,470; Apr. 18.
Kelman, David J., Brooklyn, N. Y. Decorative material. 1,904,471; Apr. 18.
Kelvinator Corporation. (See Asmussen, August J., assignor.)
Kempthorne, James L., Montclair, N. J. Engine. 1,904,373; Apr. 18.
Kempthorne, James L., Montclair, N. J. Engine. 1,904,374; Apr. 18.
Kendall, James S., et al. (See Heigi, Ludwig, assignor.)
Kennedy, Albert H., Rockport, Ind. Flush valve. 1,904,898; Apr. 18.
Kennedy, Edward, New York, N. Y. Testing device for water systems. 1,904,688; Apr. 18.
Kennedy, Edward, New York, N. Y. Testing device for water systems. 1,904,689; Apr. 18.
Kennedy, Paul S., assignor to Murphy Varnish Company, Newark, N. J. Wood filler and related materials. 1,903,768; Apr. 18.
Kent, Moss A., Rome, assignor to General Cable Corporation, New York, N. Y. Electrical cable. 1,904,472; Apr. 18.
Kenway, Percy N., Newton, Mass. Pipe hanger. 1,904,315; Apr. 18.
Kerr, Howard J., Westfield, N. J., assignor to Fuller Lehigh Company, Fullerton, Pa. Steam boiler. 1,904,473; Apr. 18.
Kersten, Jacob, Kalamazoo, Mich. Toy. 1,904,028; Apr. 18.
Kessler, Johannes, Long Island City, N. Y. Boat propelling system. 1,904,792; Apr. 18.
Ketchum, Karl E. (See Lacaprara, D., and Ketchum.)
Keuffel, Adolf W., Montclair, assignor to Keuffel & Esser Co., Hoboken, N. J. Slide rule. 1,904,474; Apr. 18.
Keuffel, Adolf W., Montclair, assignor to Keuffel & Esser Co., Hoboken, N. J. Drawing board. 1,904,899; Apr. 18.
Keuffel & Esser Co. (See Keuffel, Adolf W., assignor.)
Keup, Albert, Gelsenkirchen, Germany. Apparatus for casting hollow bodies in chill molds rotatable about vertical axes. 1,904,831; Apr. 18.
Kleckheafer, Henry F., Hammond, Ind. Center locating device. 1,904,242; Apr. 18.
Klep, Johann N. (See Bauer, G., and Klep.)
Klep, Johann N., Altona-Hochkamp, and W. Brose, Hamburg, Germany. Hydraulic coupling. 1,904,054; Apr. 18.
Kimmel, Joseph G., Sarasota, Fla. Method and apparatus for controlling the temperature of the soil. 1,904,001; Apr. 18.
Kind, Frederick H., assignor to W. Gaterman Mfg. Co., Manitowoc, Wis. Tapping and drilling machine. 1,904,375; Apr. 18.
King, Barnwell R., Kalamazoo, Mich. Shield for ignition coils. 1,903,784; Apr. 18.
King, Currie, Rutherford, Tenn. Seed gatherer for mowing machines. 1,903,769; Apr. 18.
King, George A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Detachable fastener. 1,904,055; Apr. 18.
Kippe, Otto, Osnabruck, assignor of one-half to Klockner-Werke A.-G., Castrop-Rauxel, Germany. Producing calcium nitrate from dolomite while simultaneously obtaining magnesia. 1,904,946; Apr. 18.
Kirby, Charles H., assignor to Marvel Carbureter Company, Flint, Mich. Carburetor. 1,904,002; Apr. 18.
Kislyn Corporation. (See Berthon, Rodolphe, assignor.)
Kissing, Friedrich, Berlin-Charlottenburg, Germany, assignor to General Electric Company. Valve control mechanism. 1,904,475; Apr. 18.
Kissinger, Raymond J., Fort Myers, Fla. Battery support. 1,904,620; Apr. 18.
Kizer, Howard W., South Orange, N. J., assignor to The Texas Company, New York, N. Y. Motor driven tank truck. Des. 89,642; Apr. 18.
Kjaer, Viggo A., Copenhagen, Denmark. Reversible rotary blower or pump. 1,904,056; Apr. 18.
Kleinschmidt, Edward E., et al. (See Morton, S., Krum, and Kleinschmidt.)
Kliesrath, Victor W. (See Bragg, C. S., and Kliesrath.)
Klockner-Werke A.-G. (See Kippe, Otto, assignor.)
Knapp, Edgar, deceased, and Carl G. Allgrunn, Middleport, N. Y.; George F. Thompson, executor. Tractor power coupling mechanism. 1,904,832; Apr. 18.
Knauer, Berthold. (See Ogden, J. W., and Knauer.)
Knobloch, Carl, Akron, Ohio. Speedometer for marine craft. 1,904,865; Apr. 18.
Knopp, Otto A., Oakland, Calif. Method and apparatus for recording electrical quantities. 1,904,029; Apr. 18.
Kobayashi, Keishiro, Tokyo, Japan, assignor to General Electric Company. Flash lamp. 1,904,057; Apr. 18.
Kocher, Edward H., New York, N. Y., assignor to Auto Research Corporation. Pipe fitting. 1,903,819; Apr. 18.
Koeberle, Karl. (See Kuns, M. A., Koeberle, and Berthold.)
Koehring Company. (See Yohe, Perry P., assignor.)
Kohl, Julius, Berlin, Germany. Process and plant for extracting glue from glue-containing material. 1,904,003; Apr. 18.
Köhler, Arnold. (See Kantorowicz, H., and Köhler.)
König, Kasper. (See Sander, O., and König.)
Koos, Arendt R., Elizabeth, N. J. Gauge device. 1,904,143; Apr. 18.
Koppers Company, The. (See Becker, Joseph, assignor.)
Kosken, Wilho A., Inc. (See Kosken, Wilho A., assignor.)
Kosken, Wilho A., New York, N. Y., assignor to Wilho A. Kosken, Inc. Prism carrier for projection machines. 1,903,820; Apr. 18.
Kotouc, John, Philadelphia, Pa. Grinding apparatus. 1,904,058; Apr. 18.
Kounovsky, Albert J., Stanton, Nebr. Ratchet device. 1,904,621; Apr. 18.
Krislein, Georg, Frankfort-on-the-Main-Hochst, and R. Samestreuther, Butzbach, Germany. Heat exchange device. 1,903,898; Apr. 18.
Krauch, Carl, Ludwigshafen-on-the-Rhine, and M. Pier, Heidelberg, Germany, assignors, by mesne assignments, to Standard I. G. Company, Linden, N. J. Conversion of solid fuels and products derived therefrom or other materials into valuable liquids. 1,904,476; Apr. 18.
Krauch, Carl, Ludwigshafen-on-the-Rhine, M. Pier, Heidelberg, and E. Anthes, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Production of valuable organic products. 1,904,477; Apr. 18.
Kreidel, Hans, Wiesbaden, Germany. Joint for pipes. 1,904,866; Apr. 18.
Krements & Company. (See Hilfebrand, Emil C., assignor.)
Krick, George W. (See Rodriques, Juan P., assignor.)
Kriegsheim, Heinrich, assignor to The Permutit Company, New York, N. Y. Control of the saline content of boiler waters. 1,904,900; Apr. 18.
Krueger, Fred G., Norwood, and F. H. Hudepohl, St. Bernard, Ohio. Stereopticon operating device. 1,904,622; Apr. 18.
Kruetzer, Frederic J., Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis. Farm building. Des. 89,643; Apr. 18.
Kreutzer, Frederic J., Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis. Farm building. Des. 89,644; Apr. 18.
Kreutzer, Frederic J., Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis. Farm building. Des. 89,645; Apr. 18.
Kroen, August F., Beaver Falls, Pa. Closure for containers. 1,904,739; Apr. 18.
Kruckemeyer, Charles G., Jennings, Mo. Gang-mower. 1,904,876; Apr. 18.
Krum, Howard L., et al. (See Morton, S., Krum, and Kleinschmidt.)
Kubach, William L., East Cleveland, Ohio, assignor to General Electric Company. Method and apparatus for testing incandescent lamps and similar articles. 1,904,059; Apr. 18.
Kuhl, Paul E., Elizabeth, N. J., assignor to Standard Oil Development Company. Apparatus for fractionating liquids. 1,904,144; Apr. 18.
Kuhn, Ray C., Warsaw, Ohio. Banquet table. 1,904,060; Apr. 18.
Kullman, Alfred, assignor to Graton & Knight Company, Worcester, Mass. Picker for fly shuttle looms. 1,904,316; Apr. 18.
Kuns, Max A., Mannheim, and K. Koeberle and R. Berthold, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works Inc., New York, N. Y. Halogenation of aromatic compounds. 1,904,145; Apr. 18.
Kurlash Company, Inc., The. (See Tuttle, W. E., and Stickel, assignors.)
Kurts, Henry F., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Röntgenological reproduction. 1,904,867; Apr. 18.
Kurts, Henry F., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Stereoscope. 1,904,868; Apr. 18.

L. A. B. Company, The. (See Laughlin, W. C., and Asch, assignors.)
La Brie, Ludger E. (See Bendix, V., and La Brie.)
Lacaprara, Donato, Dearborn, and K. E. Ketchum, Detroit, Mich. Tunneling equipment. 1,903,866; Apr. 18.
Ladd, Edward T., Lewiston, assignor to Isco Chemical Company, Inc., Niagara Falls, N. Y. Apparatus for making bleaching powder. 1,904,478; Apr. 18.
Lamont, Boyd Neil Robert, Feltham, England, assignor to Simplifix Patents Limited, Teddington, Middlesex, England. Coupling for joining pipes, rods, wires, and the like. 1,903,926; Apr. 18.
Landecker, Max, Barmen, Germany. Molding powder and method of molding. 1,904,243; Apr. 18.
Landecker, Max, Barmen, Germany. Plastic mass and making same. 1,904,244; Apr. 18.
Landis Machine Company. (See Mathias, Samuel W., assignor.)
Landis Tool Company. (See Good, Harper A., assignor.)
Larkin, John J., St. Louis, Mo. Well casing shoe. 1,904,317; Apr. 18.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Wire drawing apparatus. 1,904,146; Apr. 18.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Wire drawing machine. 1,904,147; Apr. 18.
Larsen, Einer W., Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Indicating and control device for material receiving apparatus. 1,904,869; Apr. 18.
Larson, David C. (See Lindquist, D. L., Dunn, and Larson.)
Larson, Louis, Katonah, N. Y. Pet's bed. Des. 89,646; Apr. 18.
Larson, Sigfrid, Portland, Oreg. Hose coupling. 1,904,061; Apr. 18.
Lashar, Walter B., Fairfield, Conn., assignor to American Chain Company. Reenforced chain and making the same. 1,904,479; Apr. 18.
Laska, Leopold, and O. Haller, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Carboxylic acid arylides of the benzene series and making same. 1,903,899; Apr. 18.
Laughlin, William C., Glendale, Calif., and A. B. Asch, assignors to The L. A. B. Company, New York, N. Y. Discharge apparatus. 1,904,062; Apr. 18.
L'Auxiliaire des Chemins de Fer et de l'Industrie. (See Fiedler, Sébastien O. A. assignor.)
La Valle, Inc. (See Grube, Frank, assignor.)
Lavoie, Louis, Quebec, Quebec, Canada. Outlet control for liquid containers. 1,904,798; Apr. 18.
Lawrence, Harry W., Denver, Colo. Electric light fixture. 1,904,901; Apr. 18.
Lawson, Robert H. (See Smith, W. L., jr., and Lawson.)
Laycock, Kenneth G., Shavertown, Pa., assignor to Goss Printing Press Company, Chicago, Ill. Web controlling mechanism. 1,904,870; Apr. 18.
Leaper, Joseph M. F. (See Hess, R. W., and Leaper.)
Leathers, Ward, Haworth, N. J., assignor to The Quadrex Corporation. Double filter for vacuum cleaners. 1,904,690; Apr. 18.
Lebbers, Harry J., assignor to The Everedy Company, Frederick, Md. Bottle capper. 1,903,822; Apr. 18.
Lee, Sherman Q., Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation. Promoting the bloating of earthy materials. 1,903,821; Apr. 18.
Leech, Jacob T., assignor to Union Drawn Steel Company, Beaver Falls, Pa. Wire drawing machine. 1,904,947; Apr. 18.
Leffert, Sol C., Brighton, N. Y. Tether for children. 1,904,480; Apr. 18.
Lefland, Paul W., Arlington, Tex. Support for parasitic growths. 1,904,287; Apr. 18.
Legerlotz, Helmut, Berlin, Germany, assignor to Frederick Stearns & Company, Detroit, Mich. Manufacture of secondary aromatic amino-alcohols. 1,903,927; Apr. 18.
Lehere, Henry H., Akron, Ohio. Frame. 1,904,318; Apr. 18.
Lehmann, Franz, Zurich, Switzerland. Vacuum cleaner. 1,903,867; Apr. 18.
Lehn, John U. (See Zahm, J. D., and Lehn.)
Leitz, Ernst, Optische Werke. (See Pliez, Heinrich, assignor.)
Le Materiel Electrique S. W. (See de Beaumarchais, Charles, assignor.)
Le May, Ariel M., Chicago, Ill., assignor, by mesne assignments, to S. H. Camp & Company, Jackson, Mich. Bust uplift. 1,904,644; Apr. 18.
Lenander, Nils E., Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex. Recovering sulphur from sulphide minerals. 1,904,481; Apr. 18.
Lenander, Nils E., Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex. Production of elemental sulphur. 1,904,482; Apr. 18.
Lenander, Nils E., Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex. Production of elemental sulphur from gaseous sulphur compounds. 1,904,483; Apr. 18.
Lenz, Wilhelm, Wiesbaden-Biebrich, and K. Jochum, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Accelerating the retting of flax. 1,904,148; Apr. 18.
Leonard, Anthon A., Forest Hills, N. Y., assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa. Eliminating the effects on radio circuits of sparking in the ignition system of an internal combustion engine. 1,904,149; Apr. 18.
Leopold, George O. (See Fegley, T. J., and Leopold.)
Leupold, Mathias, et al. (See Farrett, Dent.)
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal cutting machine. 1,904,488; Apr. 18.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Coal mining apparatus. 1,904,489; Apr. 18.
Levine, Bernhard, Bronx, N. Y. Bookmaking machine attachment. 1,904,645; Apr. 18.
Levy, Stanley I., Kingston Hill, England. Removing arsenic and chlorine from sulphur. 1,904,484; Apr. 18.
Lewis, Albert O., White Hall, Glais, Wales. Hair waver. 1,904,150; Apr. 18.
Lewis, Donald C. (See Reid, E. W., and Lewis.)
Lewis, Harold R., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Corn silker. 1,904,740; Apr. 18.
Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)
Lewis, Orval M., Shelton, Wash. Brake equaliser. 1,904,004; Apr. 18.
Leyes, Louis, City Island, N. Y. Mechanical movement. 1,904,151; Apr. 18.
Libbey Glass Manufacturing Company, The. (See Nash, Arthur D., assignor.)
Libbey-Owens-Ford Glass Company. (See Cone, Carroll, assignor.)
Lichtig, Abraham J., Oakland, Calif. Clothes bag. Re18,799; Apr. 18.
Lilleberg, Tideman M., assignor to The Nye Tool & Machine Works, Chicago, Ill. Die holding means. 1,903,786; Apr. 18.
Lillig, Nicholas R., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg. Manufacturing lock washers. 1,903,785; Apr. 18.
Lindberg, Lawrence W., Brooklyn, assignor to Doherty Research Company, New York, N. Y. Multiple expansion engine. 1,904,871; Apr. 18.
Lindquist, David L., Hartsdale, N. Y., E. L. Dunn, East Orange, N. J., and D. C. Larson, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J. Elevator system. 1,904,646; Apr. 18.
Lindquist, David L., Hartsdale, N. Y., E. L. Dunn, East Orange, N. J., and D. C. Larson, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Elevator system. 1,904,647; Apr. 18.
Liquid Carbonic Corporation, The. (See Gruetter, John R., assignor.)
Littleway Process Company, The. (See Fausse, Joseph, assignor.)
Liva, Henry, assignor of one-half to Angelo Sebastianelli, Scranton, Pa. Permanent and temporary brake lock. 1,904,794; Apr. 18.
Livingston, Orrin W., Schenectady, N. Y., assignor to General Electric Company. Control system. 1,904,485; Apr. 18.
Locke Insulator Corporation. (See Bettini, David, assignor.)
Lockhart, George R., Providence, assignor to Manville Jenckes Company, Pawtucket, R. I. Manufacture of rayon. 1,904,877; Apr. 18.
Lodge, William C., Montreal, Quebec, Canada, assignor to Manson Chemical Company. Paper product and making same. 1,903,787; Apr. 18.
Logan Co., Inc. (See Posey, Herbert D., assignor.)
Lomax, Clarence E. (See Saunders, N. H., and Lomax.)
Lomax, Clarence E. (See Tharp, V. S., and Lomax.)
Lommel, Wilhelm, Leverkusen-Wiesdorf, and R. Engelhardt, Leverkusen-I. G.-Werk, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing alkyl esters of carboxylic acids. 1,903,868; Apr. 18.
Longenecker, Charles I., Wauwatosa, assignor to Chain Belt Company, Milwaukee, Wis. Plunger pump. 1,904,486; Apr. 18.
Lorber, Charles, Louisville, Ky. Packeting dough. 1,904,741; Apr. 18.
Lorens, Fred C., Chicago, Ill. Gas water heater control. 1,903,788; Apr. 18.
Lougheed, Victor, Washington, D. C. Aerodynamic surface. 1,903,823; Apr. 18.
Love, Charles A. (See Parr, W. V., Love, and Barnes.)
Lovely, John E., assignor to Jones & Lamson Machine Company, Springfield, Vt. Work holding mechanism. 1,904,152; Apr. 18.
Löwenstein, Walter H., Cologne-Kalk, Germany. Device for drying razor blades. 1,904,661; Apr. 18.
Lucke, Charles E., New York, N. Y., assignor, by mesne assignments, to Fuller Lehigh Company. Heating combustion air for a furnace. 1,904,153; Apr. 18.
Lund, Rudolph O., New York, N. Y. Fire hose rack. 1,904,063; Apr. 18.
Luthet, Martin P., assignor to Super Safety Switch Co. Chicago, Ill. Electric switch. 1,903,824; Apr. 18.

Luserne Motor Company. (See Conroy, Marcus F., assignor.)
Lynds, Fred H., North Attleboro, Mass. Moving picture screen. 1,904,872; Apr. 18.
Lyon, Clinton L., Scotia, and C. A. Jagger, Schenectady, N. Y., assignors to General Electric Company. Resistance unit. 1,904,487; Apr. 18.
Mac Caskie, Thomas M., assignor to Hathaway Watson, Chicago, Ill. Aeroplane. 1,904,923; Apr. 18.
MacDonald, Hugh. (See MacDonald, William and H.)
MacDonald, William and H., Inverness, Scotland. Appliance for use in hair waving. 1,904,064; Apr. 18.
MacFadden, Wilford C., Fox Chase, assignor to H. H. Eby, Philadelphia, Pa. Socket for tubes. 1,904,670; Apr. 18.
MacFarlane, Robert F., Fulham, London, and W. H. Prescott, Willesden, London, England, assignors to Baker Perkins Company, Inc., Saginaw, Mich. Icing biscuits and the like. 1,904,742; Apr. 18.
Mackenzie, Kenneth G., Westport, Conn., assignor to The Texas Company, New York, N. Y. Lubricating oil. 1,904,065; Apr. 18.
Madine, John J., Cleveland, Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y. Electrode for discharge tubes. 1,904,154; Apr. 18.
Magee, James B., Nyack, N. Y. Attachment plug. 1,904,691; Apr. 18.
Malcolm, James A., Sheraden, and T. W. Wootton, Bellevue, Pa.; said Wootton assignor to said Malcolm. Apparatus for reproducing contours of surfaces. 1,904,625; Apr. 18.
Malec, Anthony, Brookfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Ejecting mechanism. 1,904,155; Apr. 18.
Mallina, Rudolph F., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Pneumatic sound reproducer. 1,904,156; Apr. 18.
Mallina, Rudolph F., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Turntable for phonographs. 1,904,490; Apr. 18.
Mallory, Edward B., Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa. Refrigerating apparatus. 1,903,825; Apr. 18.
Mallory, Edward B., Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa. Refrigerating apparatus. 1,903,826; Apr. 18.
Mallory, Edward B., Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa. Refrigerating apparatus. 1,903,827; Apr. 18.
Malsbary, Job F., Fresno, Calif. Steam deflector and guard for dairy sinks. 1,904,743; Apr. 18.
Manhan, John, assignor to A. B. C. Metal Corp., New York, N. Y. Weather strip. 1,904,491; Apr. 18.
Mann, William F. H., New York, N. Y. Alarm for typewriters. 1,904,744; Apr. 18.
Manning, Maxwell & Moore, Inc. (See Fickett, Ernest L., assignor.)
Manson Chemical Company. (See Lodge, William C., assignor.)
Mantle Lamp Company of America, The. (See Schwarz, Eugene, assignor.)
Manuel, Charles J., LaCrosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y. Bourdon lever type of pressure gauge. 1,904,492; Apr. 18.
Manville Jenckes Company. (See Lockhart, George R., assignor.)
Maranies, Rebecca S., assignor to S. Shapiro Co. Inc., New York, N. Y. Textile fabric or the like. Des. 89,669; Apr. 18.
Marek, John I., assignor to the Firm Carbonix Société, Paris, France. Manufacture of a coal substitute 1,904,883; Apr. 18.
Markuson, Oscar S., Hilton, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric cable. 1,904,873; Apr. 18.
Maroff, Albert E., Davenport, Iowa. Variable speed transmission. 1,904,319; Apr. 18.
Marples, Derek B., Bella Vista, Wettingen, Switzerland, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Pipeline booster system. 1,904,320; Apr. 18.
Marshall Furnace Company. (See Stout, Claude S., assignor.)
Martin, Charles W., Chicago, Ill. Table attachments for automobiles. 1,903,900; Apr. 18.
Martin, John F., assignor to United American Bosch Corporation, Springfield, Mass. Lighting generator. 1,904,692; Apr. 18.
Martin, Joseph E., assignor to F. E. Schwarzkopf, Baltimore, Md. Detergent dispensing device. 1,904,157; Apr. 18.
Marvel Carbureter Company. (See Kirby, Charles H., assignor.)
Mason, James, Deptford, London, England. Machine for applying bands, stamps, or the like to packets. 1,903,928; Apr. 18.
Masset, Edward, New York, N. Y. Saw guard. 1,904,005; Apr. 18.
Masslow, William C., assignor of one-half to A. E. Schultz, Forest Park, Ill. Bed. 1,903,901; Apr. 18.
Matheson, Avery A., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Merchandising and display receptacle. 1,904,760; Apr. 18.
Mathias, Samuel W., assignor to Landis Machine Company, Waynesboro, Pa. Transfer mechanism. 1,904,493; Apr. 18.
Mathiesen Alkali Works, The. (See Taylor, M. C., and Richardson, assignors.)
Matte, Andrew L., Summit, N. J., assignor to American Telephone and Telegraph Company. Tuning fork generator. 1,904,494; Apr. 18.
Matthews, Alice C. (See Matthews, Harry.)
Matthews, Francis A. (See Almond, L. L., Herrington, and Matthews.)
Matthews, Harry, deceased, Tarentum, Pa., distributed by court to Alice C. Matthews, widow. Display container. 1,904,648; Apr. 18.
Matzner, Hyman, New York, N. Y., assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Indicator for radioreceivers. Re18,796; Apr. 18.
Mauger, Jacques G., assignor to Société dite: Maison Camus-Duchermin Société Anonyme, Paris, France. Direct manufacture of ketones from impure volatile acids. 1,904,495; Apr. 18.
Maul, Johann. (See Meister, F., and Maul.)
Maw, Robert, Montreal, Quebec, Canada. Hydraulic transmission system. 1,904,496; Apr. 18.
Maxon, Gleaway, jr., and W. Ord, deceased, Chicago, Ill., by Harriet P. Ord, executrix, Hollywood, Calif., assignors to The Engineering Development Company, Cleveland, Ohio. Mechanical line grader. 1,904,948; Apr. 18.
May, Harold V. (See Tobey, H. W., and May.)
May Hosiery Mills. (See Smith, W. L., jr., assignor, and Lawson.)
Mayer, William H., jr., New York, N. Y. Textile fabric or similar article. Des. 89,647; Apr. 18.
McArthur, George G., Niagara Falls, N. Y. Book stock washer. 1,904,066; Apr. 18.
McCabe, Ira E., Chicago, Ill. Constant current ignition device. 1,904,878; Apr. 18.
McCaddam, Earl D., San Francisco, Calif. Agitating apparatus. 1,904,796; Apr. 18.
McCann, Charles J., Bay City, Mich. Dentist's mixing plate. 1,904,786; Apr. 18.
McCarthy, Edward L. (See Garrity, J. G., and McCarthy.)
McChesney, John S., Chicago, Ill. Flanged corrugated fastener. 1,904,288; Apr. 18.
McCoy, Ralph E. (See Scott, H. B., and McCoy.)
McDavitt, Carlisle N., Schenectady, N. Y., assignor to General Electric Company. Motor starter. 1,904,497; Apr. 18.
McFarland, Ernest L., Strasburg, Va. Combination table. 1,904,795; Apr. 18.
McGehee, Fred H., Okolona, Miss. Pencil display rack. 1,904,067; Apr. 18.
McGhee, Henry, Bumbcutters Bay, near Sydney, New South Wales, Australia. Roller particularly for use in textile machinery. 1,904,498; Apr. 18.
McGill Manufacturing Company. (See Popp, Rudolf, assignor.)
McGuire, Lee R., Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Reel and assembling reels. 1,904,158; Apr. 18.
McHale, Michael J., Scranton, Pa. Flier construction. 1,904,624; Apr. 18.
McHenry-Millhouse Manufacturing Company. (See Humphrey, Don B., assignor.)
McIlvried, Edwin J., Cleveland, Ohio, assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Wire drawing machine. 1,904,159; Apr. 18.
McKay Company, The. (See Carpenter, James W., assignor.)
McKee, Ralph H., Jersey City, and E. H. Morse, Nutley, N. J. Treating vegetable fibers. 1,903,828; Apr. 18.
McLaren, Chester, El Centro, Calif. Internal combustion engine. 1,904,499; Apr. 18.
McLaren, William W., Birmingham, Ala. Magnetic valve. 1,903,902; Apr. 18.
McLaughlin, John E., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glassware forming machine. 1,904,983; Apr. 18.
McLavy, Raymond B., and J. E. Conner, Columbine, Wyo. Gas burner. 1,903,903; Apr. 18.
McLenegan, David W., Schenectady, N. Y., assignor to General Electric Company. Electrical regulating system. 1,904,500; Apr. 18.
McLoughlin, Harold F., Solihull, England. Electrically welding metal tubing. 1,904,824; Apr. 18.
McManis, Charles N., Mitchell, S. Dak. Automobile differential. 1,904,797; Apr. 18.
Meacock, John Harper, Northampton, England. Conveyer, escalator, and the like. 1,904,068; Apr. 18.
Meader, Ralph L., Lynbrook, N. Y. Gumming tape on blanks. 1,904,874; Apr. 18.
Meador, Walter A., Gallatin, Tenn. Aerial navigator. 1,903,911; Apr. 18.
Means, Gardiner C., Poughkeepsie, N. Y. Pattern control mechanism. 1,904,006; Apr. 18.
Megley, Harley J., Chicago, Ill. Type bar machine. 1,903,829; Apr. 18.
Megros, Georges, Brouxville, assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 89,648; Apr. 18.
Megros, Georges, Brouxville, assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 89,649; Apr. 18.

Megros, Georges, Bronxville, assignor to The United Piece Dye Works, New York, N. Y. Textile fabric or the like. Des. 89,650; Apr. 18.

Meijer, Reinier, assignor to Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Process and apparatus for the manufacture of sweated paraffin from non-sweated paraffin and the like substances. 1,903,929; Apr. 18.

Meister, Franz, and J. Maul, Munich, Germany. Pillar or post standing in the street traffic. 1,903,869; Apr. 18.

Mekler, Lev A. (See Egloff, G., and Mekler.)

Melling, Herman W., Jackson, Mich. Lathe. 1,904,949; Apr. 18.

Mendel, William. (See Neidich, S. A., and Mendel.)

Merley, Sylvan R., Dover, N. J., and O. Spring, Okmulgee, Okla., assignors to Doherty Research Company, New York, N. Y. Manufacture of acetic acid. 1,904,160; Apr. 18.

Mers, Friedrich C. J. (See Hitzler, J., and Mers.)

Mesta Machine Company. (See Fisk, Gustav L., assignor.)

Metropolitan Engineering Company. (See Soehner, John D., assignor.)

Metzgar, Chester W., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Heat exchanger. 1,904,875; Apr. 18.

Meyer, Frans. (See Henkel, W., and Meyer.)

Meyer, Joseph F., Orange, N. J. Knitting machine. 1,904,501; Apr. 18.

Meyer, Raymond B. (See Gebhard, Louis A.)

Michaels, Frank H., Dishman, Wash. Meat cutter. 1,903,789; Apr. 18.

Michelin, André J., Paris, assignor to Michelin et Cie. Clermont-Ferrand, France. Applying rubber to metal and other hard materials. 1,904,502; Apr. 18.

Michelon et Cie. (See Michelin, André J., assignor.)

Mieg, Walter, Opladen, and R. M. Heidenreich, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing and printing textile fibers. 1,903,870; Apr. 18.

Mieg, Walter, Opladen, and R. M. Heidenreich, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Dyeing and printing textile fibers. 1,903,871; Apr. 18.

Miller, Benjamin H., Wadsworth, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Chain grate stoker. 1,904,503; Apr. 18.

Miller, Charles Z., Fort Scott, Kans. Sled. 1,903,930; Apr. 18.

Miller, Peter, Chicago, Ill. Windshield visor. 1,904,069; Apr. 18.

Miller, Stephen J., Danbury, Conn. Hat flanging apparatus. 1,903,872; Apr. 18.

Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. By-product coke oven operation. 1,904,161; Apr. 18.

Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar or pitch to coke and apparatus therefor. 1,904,504; Apr. 18.

Miller, Stuart P., Englewood, N. J., assignor to The Barrett Company, New York, N. Y. Distillation of tar or pitch. 1,904,505; Mar. 11.

Millers Falls Company. (See Bacon, Charles F., assignor.)

Milliken, Humphreys, Mount Royal, Montreal, Quebec, Canada. Electrical cable. 1,904,162; Apr. 18.

Mills, Lon A., Knoxville, and K. H. Mynatt, Fountain City, Tenn. Machine for distributing material on lawns, etc. 1,903,874; Apr. 18.

Miner, W. H., Inc. (See Haseltine, Stacy B., assignor.)

Miner, W. H., Inc. (See Miner, William H., assignor.)

Miner, William H., Chasy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill. Friction shock absorbing mechanism. 1,904,379; Apr. 18.

Mississippi Glass Company. (See Begeman, Myron L., assignor.)

Mitchell, Doren. (See Wright, S. B., and Mitchell.)

Mitchell, Doren, Martinsville, N. J., assignor to American Telephone and Telegraph Company. Transmission control. 1,903,875; Apr. 18.

Moffett, Myrtha, Fresno, Calif. Tool for tying fence wires. 1,903,830; Apr. 18.

Molins, Walter E., and J. W. Chalmers, Deptford, London, England, assignors to The American Tobacco Company, New York, N. Y. Package for cigarettes. 1,903,873; Apr. 18.

Molins, Walter E., and F. F. Ruan, Deptford, London, England. Apparatus for supplying tobacco to a cigarette making machine. 1,903,931; Apr. 18.

Monro, Randolph, Edgewood, Md. Drinking mask. 1,903,831; Apr. 18.

Montgomery, Thomas. (See Ewing, C. R., and Montgomery.)

Moore, Frederick Joseph. (See Jones, D. T., and Moore.)

Morden, Stephen R., San Francisco, Calif. Collar support. 1,904,506; Apr. 18.

Morgan, Harry B., et al. (See Prior, Walter, jr., assignor.)

Morgan, Henry W., Brighton, assignor to Morgan Machine Company, Inc., Rochester, N. Y. Nailing machine. 1,904,507; Apr. 18.

Morgan, John D., Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y. Combustion engine with preheated air. 1,904,070; Apr. 18.

Morgan, John D., South Orange, N. J., assignor to Doherty Research Company, New York, N. Y. Reduction furnace. 1,904,508; Apr. 18.

Morgan Machine Company, Inc. (See Morgan, Henry W., assignor.)

Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Refining of hydrocarbon oils. 1,904,381; Apr. 18.

Morrell, Jacque C., assignor to Universal Oil Products Company, Chicago, Ill. Sweetening hydrocarbon distillates containing mercaptans. 1,904,382; Apr. 18.

Morrell, Jacque C., and J. G. Alther, assignors to Universal Oil Products Company, Chicago, Ill. Apparatus for vapor fractionation. 1,904,380; Apr. 18.

Morris, Anderson F., Weir, Tex. Draft device. 1,904,163; Apr. 18.

Morris, Herbert N., Broxbourne, assignor to Rucel Limited, London, England. Improved abrasive coated materials. 1,904,663; Apr. 18.

Morse, Albert W., Forest Hills, N. Y. Nebulizer of liquids. 1,904,509; Apr. 18.

Morse, Earle H. (See McKee, R. H., and Morse.)

Morton, Sterling, H. L. Krum, and E. E. Kleinschmidt, assignors to Teletype Corporation, Chicago, Ill. Signaling system and apparatus therefor. 1,904,164; Apr. 18.

Moseley, Tomlinson I., San Francisco, Calif. Hair waver. 1,904,625; Apr. 18.

Mosely, William P., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Safe deposit lock. 1,904,383; Apr. 18.

Moses, Frederick G., New York, R. W. Hess, Buffalo, and R. L. Perkins, East Aurora, assignors to The Barrett Company, New York, N. Y. Concentration of ores by flotation. 1,904,460; Apr. 18.

Moto Meter Gauge & Equipment Corporation. (See Blodgett, George R., assignor.)

Moto Meter Gauge & Equipment Corporation. (See Manuel, Charles J., assignor.)

Mott, Harriet J., Hollis, N. Y. Umbrella holder. 1,904,510; Apr. 18.

Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Adjustable throw eccentric. 1,903,932; Apr. 18.

Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Seam. 1,903,933; Apr. 18.

Mullner, Edmund, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany. Variable condenser. 1,904,165; Apr. 18.

Munson, Harry, Wantagh, assignor to Van Kannel Revolving Door Company, New York, N. Y. Speed regulator for revolving doors. 1,904,885; Apr. 18.

Munters, Carl G., Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y. Refrigeration. 1,903,934; Apr. 18.

Murphy Varnish Company. (See Kennedy, Paul S., assignor.)

Mutrux, Marcel, and R. Caillet, Vevey, Switzerland. Liquid heater. 1,904,511; Apr. 18.

Myers, LaFayette, and C. S. Preston, San Diego, Calif. Vehicle lifting device. 1,904,693; Apr. 18.

Myers, Louis, Chicago, Ill. Game apparatus. 1,903,790; Apr. 18.

Myers, Louis, Chicago, Ill. Ice cream ladle. 1,903,791; Apr. 18.

Mynatt, Kyle H. (See Mills, L. A., and Mynatt.)

N. V. Philips Gloeilampenfabrieken. (See Beerink, E. H., and Van Wijk, assignors.)

Naamlooze Vennootschap de Bataafsche Petroleum Maatschappij. (See Meijer, Reinier, assignor.)

Nakamura, Toshichi, Los Angeles, Calif. Life-saving device. 1,904,767; Apr. 18.

Nash, Arthur D., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Smoker's stand. Des. 89,651; Apr. 18.

Nash Engineering Company. (See Nash, Harold L., assignor.)

Nash, Harold L., assignor to Nash Engineering Company, South Norwalk, Conn. Hydroturbine pumping apparatus. 1,904,321; Apr. 18.

National Aniline & Chemical Co. (See Heritage, Clark C., assignor.)

National Carbon Company. (See Saurwein, Albert G., assignor.)

National Cash Register Company. (See Berger, Friedrich W. F., assignor.)

National Cash Register Company. (See Scott, H. B., and McCoy, assignors.)

National Cash Register Company, The. (See Von Pein, Edward J., assignor.)

National India Rubber Company. (See Polleys, Herbert R., assignor.)

National Lock Washer Company, The. (See Berge, Joseph, assignor.)

National Machinery Company, The. (See Clouse, William L., assignor.)

National Malleable and Steel Castings Company. (See Robinson, David, assignor.)

National-Standard Company. (See Johnson, Alfred H., assignor.)

Naugatuck Chemical Company, The. (See Tuley, William F., assignor.)

Naugle, Harry M., and A. J. Townsend, Canton, Ohio, assignors to Naugle & Townsend, Inc., Wilmington, Del. Centrifugal molding apparatus. 1,903,906; Apr. 18.

Naugle & Townsend, Inc. (See Naugle, H. M., and Townsend, assignors.)

Neckerman, William, M., assignor to Republic Steel Corporation, Youngstown, Ohio. Pipe facing tool. 1,904,950; Apr. 18.

Neidich, Samuel A., Edgewater Park, N. J. Manufacture of tapered tubes of celluloid and the like. 1,904,290; Apr. 18.

Neidich, Samuel A., Edgewater Park, and W. Mendel, Beverly, N. J. Manufacturing articles from celluloid and the like. 1,904,289; Apr. 18.

Neilson, Clarence C. (See Neilson, Vivian W. and C. C.)

Neilson, Vivian W. and C. C., Trout Creek, Utah. Latch for gates and the like. 1,904,291; Apr. 18.

Nell, Gustave M., Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y. Fluid pressure tool. 1,904,694; Apr. 18.

Nelles, Lafayette H., New York, N. Y. Soap molding machine. 1,904,071; Apr. 18.

Nelson, John F., Charleroi, Pa., and L. Hodge, Kent, Ohio. Paper flower box. 1,904,072; Apr. 18.

Nenninger, Lester F. (See Ernst, H., and Nenninger.)

Nenninger, Lester F., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machinery. 1,904,649; Apr. 18.

Nesbitt, Frank T., Alton, Ill., assignor, by mesne assignments, to Owens-Illinois Glass Company, Toledo, Ohio. Leer. 1,904,983; Apr. 18.

Neubert, Oskar. (See Günsler, H., and Neubert.)

Neuhauss, Heinrich, Dusseldorf, Germany. Lining a furnace by freezing. 1,904,664; Apr. 18.

Newhouse, Walter F., Benton Harbor, Mich. Machine for making and inserting wire fasteners for basket covers. 1,904,384; Apr. 18.

New York Air Brake Company, The. (See Campbell, Charles A., assignor.)

New York Merchandise Co. Inc. (See Shaw, Milton M., assignor.)

Nicholee, B. L. & Company. (See Wilson, Louis, assignor.)

Nichols, Herbert E., Santa Ana, Calif. Brake dust guard. 1,903,935; Apr. 18.

Nichols, Horace E., Redford, assignor of one-third to C. H. Chase and one-third to H. A. Freund, Detroit, Mich. Constant speed mechanism. 1,903,882; Apr. 18.

Nielsen, Heinrich V., West Wharf, Cardiff, South Wales, assignor to The Hygienic Manufactures and Supplies Company Limited, London County, England. Machine for filling bottles and other vessels. 1,904,924; Apr. 18.

Nielsen, Joseph N., New York, N. Y. Wall outlet and fitting. 1,903,833; Apr. 18.

Noble, Alphonso. (See Bristol, C. W., and Noble.)

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Method and apparatus for preparing sulphur dioxide. 1,904,512; Apr. 18.

Nordlander, Birger W., Schenectady, N. Y., assignor to General Electric Company. Apparatus for preparing sulphur dioxide. 1,904,513; Apr. 18.

Norling, Reinhold A., Aurora, assignor to Independent Pneumatic Tool Co., Chicago, Ill. Stud setting tool. 1,904,322; Apr. 18.

North Bro's M'f'g Co. (See Fegley, T. J., and Leopold, assignors.)

Northrup, Edwin F., Princeton, assignor to Ajax Electrothermic Corporation, Ajax Park, N. J. Magnetic return circuit. 1,904,665; Apr. 18.

Nowosielski, Edward B., Bloomfield, assignor to Eclipse Aviation Corporation, East Orange, N. J. Yielding coupling. 1,904,745; Apr. 18.

Nunnery, Raymond B., Chickasha, Okla. Display rack. 1,903,936; Apr. 18.

Nurnberger, Joseph S., St. Albans, W. Va. Vise. 1,904,798; Apr. 18.

Nutt, William H., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for slotting heels. 1,904,823; Apr. 18.

Nye Tool & Machine Works, The. (See Lilleberg, Tideman M., assignor.)

O. & S. Beating Co. (See Skillman, Newton, assignor.)

Oberle, Alfred, Kansas City, Mo. Producing carbonaceous material. 1,903,834; Apr. 18.

O'Brien, Richard J., assignor to Waugh Equipment Co., Depew, N. Y. Journal cushion. 1,904,007; Apr. 18.

O'Connor, Louie E., and C. G. Starnes, Mount Vernon, Ga. Tire inflating device. 1,904,073; April 18.

Ogden, Jacob W. (See Wheeler, W. H., jr., and Ogden.)

Ogden, Jacob W., Springdale, and B. Knauer, East Norwalk, assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Setting and locking mechanism for printing devices of postage meters. 1,904,626; Apr. 18.

Ohio Brass Company, The. (See Wolf, Fred L., assignor.)

Ohio Injector Company of Illinois, The. (See Edwards, Frank W., assignor.)

Ohnsorg, Charles R., assignor of one-half to Josie Ohnsorg, New York, N. Y. Rotary wing aircraft propeller. 1,904,746; Apr. 18.

Ohnsorg, Josie. (See Ohnsorg, Charles R., assignor.)

Okill, John, Birkenhead, England. Device for measuring and indicating fluid pressures. 1,904,747; Apr. 18.

Oldenburg, Alfred, Berlin-Charlottenburg, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Protection for armature windings. 1,904,514; Apr. 18.

Olevin, Adolph, Bronx, N. Y. Threadless fitting conduit. 1,904,627; Apr. 18.

Oliver, James O., New York, N. Y. Plastering support. 1,904,245; Apr. 18.

Ollendorff, Gerhard, Wolfen, near Bitterfeld, Germany, assignor to Agfa Ansco Corporation, Binghamton, N. Y. Photographic roll film spool. 1,903,937; Apr. 18.

Olson, John, administrator. (See Hentschel, Ernest R.)

Olson, Samuel, & Company. (See Olson, Samuel, assignor.)

Olson, Samuel, assignor to Samuel Olson & Company, Inc., Chicago, Ill. Selective unloader mechanism for elevators. 1,903,835; Apr. 18.

Ord, Harriet P., executrix. (See Maxon, G., jr., and Ord.)

Ornstein, Georg, Berlin, Germany. Treating sewage. 1,904,246; Apr. 18.

Osmer, Charles F. (See Hanson, L. A., and Osmer.)

Oswald, Alfred E., Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Word counting register for typewriters. 1,904,516; Apr. 18.

Otis Elevator Company. (See Lindquist, D. L., Dunn, and Larson, assignors.)

Otto, Carl, Essen-Ruhr, Germany. Regenerative coke oven. 1,04,516; Apr. 18.

Owens-Illinois Glass Company. (See Collins, John E., assignor.)

Owens-Illinois Glass Company. (See McLaughlin, John E., assignor.)

Owens-Illinois Glass Company. (See Nesbitt, Frank T., assignor.)

Owens-Illinois Glass Company. (See Soubler, Leonard D., assignor.)

Packard Motor Car Company. (See Griswold, Walter R., assignor.)

Paesler, Hans, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany. Duplex system of telephony. 1,904,517; Apr. 18.

Palmer, Harry A., Boston, Mass., assignor to Palmer Inventions, Incorporated. Pump mechanism. 1,904,709; Apr. 18.

Palmer Inventions, Incorporated. (See Palmer, Harry A., assignor.)

Palmgren, Per G., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Bearing mounting. 1,904,247; Apr. 18.

Papadopoulos, Georgebeys P., assignor of sixty-six and two-thirds per cent to A. V. Biser, Detroit, Mich. Hat block. 1,903,912; Apr. 18.

Pape, Wilhelm. (See Weber, H., and Pape.)

Paragon Revolute Corporation. (See Sullivan, Harry H., assignor.)

Park, Robert E., jr., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Making electrical condensers. 1,904,676; Apr. 18.

Parker Pen Company, The. (See Dahlberg, Arthur O., assignor.)

Parr, William V., C. A. Love, and J. J. Barnes, Minneapolis, Minn. Doorlock. 1,904,748; Apr. 18.

Parrett, Dent, St. Joseph, Mich., assignor to Joseph Gosner and M. Leupold, New York, N. Y. Axle structure. 1,903,918; Apr. 18.

Parrett, Dent, St. Joseph, Mich., assignor to Joseph Gosner and M. Leupold, New York, N. Y. Variable speed transmission. 1,903,914; Apr. 18.

Parsons, Harry H., Missoula, Montana. Indicating device. 1,903,938; Apr. 18.

Parvin, Edward G., Roselle, N. J. Radio circuit. 1,904,877; Apr. 18.

Pateman, Arthur, Leicester, assignor to Imperial Typewriter Company Limited, London, England. Typewriter. 1,904,518; Apr. 18.

Patent Button Company, The. (See Carley, Leonard R., assignor.)

Patten, James C. (See Haueisen, B. R., and Patten.)

Patten, Margaret L., executrix. (See Haueisen, B. R., assignor, and Patten.)

Paul, William E., Schenectady, N. Y., assignor to General Electric Company. Electric circuit interrupter. 1,904,519; Apr. 18.

Pawtucket Screw Company. (See Green, Charles E., assignor.)

Payne, Matt, Surbiton, England. Heating and ventilating apparatus. 1,903,939; Apr. 18.

Payne, Oscar V. (See Holmes, E. R., and Payne.)

Pederson, Edwin, trustee. (See Adams, Royal E., assignor.)

Peebles, Thomas A., Mount Lebanon, assignor to John M. Hopwood, Dormont, Pa. Water control apparatus. 1,904,324; Apr. 18.

Peelle Company, The. (See Peelle, Robert S., assignor.)

Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Electrical interlock. 1,904,008; Apr. 18.

Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Operator for counterbalanced elevator doors. 1,904,009; Apr. 18.

Peelle, Robert S., Hollis, assignor to The Peelle Company, Brooklyn, N. Y. Pass-type elevator door. 1,904,010; Apr. 18.

Peiler, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Rotary knife for severing molten glass. 1,904,325; Apr. 18.
Pelton, George E., Los Angeles, Calif., assignor to The George E. Pelton Company. Ink transfer member and making the same. 1,904,628; Apr. 18.
Pelton, George E., Company. (See Pelton, George E., assignor.)
Penn Electric Switch Co. (See Henning, Malcolm E., assignor.)
Penn Electric Switch Co. (See Penn, Ralph, assignor.)
Penn, Ralph, assignor to Penn Electric Switch Co., Des Moines, Iowa. Automatic controlling device. 1,904,326; Apr. 18.
People of the United States of America, The. (See Schuster, Carl E., assignor.)
Peoples, Earl R., Beardstown, Ill. Goal. 1,904,836; Apr. 18.
Perkins, Karl D. (See Karr, A. D., and Perkins.)
Perkins, Richard E., Everett, Mass. Corn harvester. 1,904,749; Apr. 18.
Perkins, Robert L. (See Moses, F. G., Hess, and Perkins.)
Perks, George W., assignor of one-half to Stanley H. Austin, Akron, Ohio. Frying pan. 1,904,925; Apr. 18.
Permutit Company, The. (See Clark, Thomas B., assignor.)
Permutit Company, The. (See Kriegsheim, Heinrich, assignor.)
Permutit Company, The. (See Sweeney, Orland R., assignor.)
Perry, Stanley, assignor to Automatic Burner Corporation, Chicago, Ill. Gas ignition device. 1,903,792; Apr. 18.
Peters, Fredus N., jr., Evanston, assignor to Quaker Oats Company, Chicago, Ill. Reduction of furfural acetone and furan derivatives. 1,903,850; Apr. 18.
Peters, Henry W., Boston, Mass. Finger ring or the like. 1,904,074; Apr. 18.
Peters, William C. H., Albert City, Iowa. Sanitary well top. 1,904,926; Apr. 18.
Peterson, Peter, Detroit, Mich. Punch. 1,904,951; Apr. 18.
Petit, William H. (See Apple, V. G., and Petit.)
Petrich, Anton J., Milwaukee, Wis. Scissors sharpener. 1,904,075; Apr. 18.
Phillips, Albert J. (See Swartz, C. E., and Phillips.)
Philips', N. V., Gloeilampenfabriken. (See De Boer, Jan H., Van Geel, and Emmens, assignors.)
Pickard, Frank C., Erie, Pa., assignor to The Standard Stoker Company, Incorporated. Stoker. 1,904,520; Apr. 18.
Pier, Mathias. (See Krauch, C., and Pier.)
Pier, Mathias. (See Krauch, C. Pier, and Anthes.)
Pier, Mathias, Heidelberg, and K. Winkler, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J. Separation of oils from solid residues. 1,904,521; Apr. 18.
Piggly Wiggly Corporation. (See Healy, John F., assignor.)
Pilla, Tony, Trenton, N. J. Engine control. 1,903,876; Apr. 18.
Pippin, Haskel A., Okmulgee, Okla. Apparatus for drilling wells. 1,904,522; Apr. 18.
Pitney-Bowes Postage Meter Co. (See Ogden, J. W., and Knauer, assignors.)
Pitney-Bowes Postage Meter Co. (See Wheeler, W. H., jr., and Ogden, assignors.)
Pittman, George R., Wichita, Kans. Armrest. 1,904,800; Apr. 18.
Pixley, Judson S., New York, N. Y., and M. Bender, Glen Ridge, N. J., assignors to Armspear Manufacturing Company, New York, N. Y. Lantern. 1,904,248; Apr. 18.
Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Securing trim panels. 1,904,076; Apr. 18.
Place, Bion C., assignor of one-half to G. E. Gagnier, Detroit, Mich. Securing trim panels. 1,904,077; Apr. 18.
Platter, Orval R., et al. (See Bauch, William H., assignor.)
Plies, Heinrich, Wetzlar, assignor to Ernst Leitz, Optische Werke, Wetzlar, Thuringia, Germany. Epidiascope. 1,904,695; Apr. 18.
Plummer, Herbert L., and D. L. Irwin, High Holborn, London, England. Construction of roofing, partitions, and the like. 1,904,080; Apr. 18.
Plutino, Nicola C., Welland, Ontario, Canada. Automatic Airplane and dirigible control apparatus. 1,904,801; Apr. 18.
Poling, Harry A., assignor of one-fourth to F. E. Symmonds, Kenosha, Wis. Grinding and polishing attachment for rolling mills. 1,904,885; Apr. 18.
Polleys, Herbert R., New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I. Shoe tip and heel pressing machine. 1,904,166; Apr. 18.
Pontoppidan, Carl, Holte, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Fine grinding of cement material. 1,904,523; Apr. 18.
Popp, Rudolf, assignor to McGill Manufacturing Company, Valparaiso, Ind. Switch mechanism. 1,904,927; Apr. 18.
Poppe, George W., Brooklyn, N. Y. Striker bar for bag machines. 1,904,078; Apr. 18.
Portnoff, Leo, Brooklyn, N. Y. Apparatus for instruction for stringed musical instrument playing. 1,904,928; Apr. 18.
Posey, Herbert D., Cleveland, Ohio, assignor to Logan Co., Inc., Louisville, Ky. Switching conveyer. 1,904,837; Apr. 18.
Post, Charles B., New London, Ohio. Fluting machine. 1,904,030; Apr. 18.
Posthumus, Klaas, Eindhoven, Netherlands, assignor to Radio Corporation of America. Amplifier. 1,904,524; Apr. 18.
Potdevin, Adolph, Garden City, assignor to Potdevin Machine Company, Brooklyn, N. Y. Machine for handling strip material. 1,904,878; Apr. 18.
Potdevin Machine Company. (See Ettl, Joseph, assignor.)
Potdevin Machine Company. (See Potdevin, Adolph, assignor.)
Potter, Frank M., Rome, assignor to General Cable Corporation, New York, N. Y. Cable. 1,904,525; Apr. 18.
Potter, Frank M., Rome, assignor to General Cable Corporation, New York, N. Y. Cable. 1,904,526; Apr. 18.
Potter, Frank M., Rome, assignor to General Cable Corporation, New York, N. Y. Cable. 1,904,527; Apr. 18.
Potter, William, New York, N. Y. Scraper. 1,903,877; Apr. 18.
Powell, Charles L., assignor to Caisson Contracting Company, New York, N. Y. Method and apparatus for forming foundation columns. 1,904,079; Apr. 18.
Powell, Charles L., New York, and H. R. Smith, Douglaston, assignors to Caisson Contracting Company, New York, N. Y. Earth boring apparatus. 1,904,249; Apr. 18.
Powell, John R., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Lens cutting machine. 1,904,879; Apr. 18.
Powers, Frank T., Douglaston, N. Y. Heater. 1,903,878; Apr. 18.
Powers, James B., Syracuse, N. Y. Air cooled internal combustion engine. 1,904,880; Apr. 18.
Pratt, Goodrich B., Grantwood, assignor to Bond Electric Corporation, Jersey City, N. J. Flash light. 1,904,902; Apr. 18.
Pratt, Goodrich B., assignor to Bond Electric Corporation, Jersey City, N. J. Flash light safety switch. 1,903,940; Apr. 18.
Pratt, Howell D., Chestnut Hill, Pa. Auxiliary wheel for automobiles. 1,904,081; Apr. 18.
Pratt & Whitney Company. (See Whitehead, Alexander G., assignor.)
Preilwitz, William, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Portable compressor. 1,904,082; Apr. 18.
Prendergast, Charles S. and R. S., London, England. Variable speed gearing. 1,904,629; Apr. 18.
Prendergast, Richard S. (See Prendergast, Charles S. and R. S.)
Prenzel, Adam H., Halifax, Pa., assignor to United Shoe Machinery Corporation, Paterson, N. J. Apparatus for and method of attaching shoe linings. 1,904,327; Apr. 18.
Presbrey, Otis F., Brooklyn, N. Y. Sweeping machine. 1,904,881; Apr. 18.
Prescott, William E. (See Macfarlane, R. F., and Prescott.)
Preston, Clarence S. (See Myers, L., and Preston.)
Preston, Edward S., assignor to Chicago Electric Manufacturing Co., Chicago, Ill. Orange juice extractor. Des. 89,652; Apr. 18.
Priestson, Gustave A., Cliffside, N. J. Necktie and collar holder. 1,904,083; Apr. 18.
Prior, Walter, jr., South Orange, N. J., assignor of one-half to A. F. W. Viehweger, Poughkeepsie, and one-half to H. B. Morgan, Amenia, N. Y. Burglarproof lock. 1,904,882; Apr. 18.
Prosperity Company Inc., The. (See Davis, Ernest, assignor.)
Pulvis Aktiengesellschaft. (See Rudqvist, Carl A., assignor.)
Pungs, Wilhelm, and K. Eisenmann, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Lacquers, films, artificial masses, and the like. 1,904,528; Apr. 18.
Pungs, Wilhelm, and K. Eisenmann, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Manufacture of artificial masses. 1,904,529; Apr. 18.
Pure Carbonic Company of America. (See Purvis, Harry H., assignor.)
Purvis, Harry H., Port Jefferson, N. Y., assignor to Pure Carbonic Company of America. Automatic pressure sealing means. 1,904,250; Apr. 18.
Quadrex Corporation, The. (See Leathers, Ward, assignor.)
Quaker Oats Company. (See Peters, Fredus N., jr., assignor.)
Radio Corporation of America. (See Barden, William S., assignor.)
Radio Corporation of America. (See Bol, Cornelius, assignor.)
Radio Corporation of America. (See Franklin, Charles S., assignor.)
Radio Corporation of America. (See Posthumus, Klaas, assignor.)
Radio Corporation of America. (See Round, H. J., and Robb, assignors.)
Radio Corporation of America. (See Smith, Theodore A., assignor.)

Radio Corporation of America. (See Strutt, M. J. O., and Dijksterhuis, assignors.)
Radio Corporation of America. (See Weinberger, Julius, assignor.)
Radio Inventions, Inc. (See Doule, Harold P., assignor.)
Raffold Process Corporation. (See Rafton, Harold R., assignor.)
Rafton, Harold R., Andover, Mass., assignor to Raffold Process Corporation. Paper manufacture. 1,904,251; Apr. 18.
Railway Utility Company. (See Hartwig, William G., assignor.)
Ramsay, Wm. C. (See Schmuhl, Byron M., assignor.)
Rasbridge, Edward A., Lebanon, Pa. Card holder. 1,903,941; Apr. 18.
Ratajczak, Stephen. (See Stensy, August F. P., assignor.)
Rathbun, Sherrill S., Rockville Centre, N. Y. Power transmission. 1,904,530; Apr. 18.
Ray, Charles T., assignor to B. F. Avery & Sons, Louisville, Ky. Seed planter. 1,903,830; Apr. 18.
Rayburn, Alden G., Sausalito, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation. Power transmission. 1,904,011; Apr. 18.
Raymond, Charles E., Boston, Mass. Dispensing container for tablets and the like. 1,904,386; Apr. 18.
Raymond, Thomas E., Zanesville, Ohio, assignor to Simplex Engineering Company. Hydraulic device for opening and closing filter presses and other pressure-applying mechanisms. 1,904,531; Apr. 18.
Reach, Milton B., Springfield, Mass., assignor to A. G. Spalding & Bros., New York, N. Y. Two-piece metal shaft for golf clubs. 1,904,750; Apr. 18.
Redler, Arnold, Gloucester, England, assignor to Redler Conveyor Company, Quincy, Mass. Conveyer. 1,904,167; Apr. 18.
Redler Conveyor Company. (See Redler, Arnold, assignor.)
Reerink, Engbert H., and A. Van Wijk, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Preparing vitamin D. 1,904,751; Apr. 18.
Reeves, Elwin H., Toledo, Ohio. Vehicle body. 1,904,031; Apr. 18.
Reeves Manufacturing Company, The. (See Vogan, Frank M., assignor.)
Regina Corporation, The. (See Smith, Bernard P., assignor.)
Reichard, John F., assignor to United States Cigar Company, Inc., York, Pa. Converting tobacco stems into pulp. 1,903,942; Apr. 18.
Reichard, Willis E., assignor to The Worthington Ball Company, Elyria, Ohio. Golf ball. 1,904,012; Apr. 18.
Reichhardt, Herman C., Evanston, assignor to Star-Brite Corporation, Chicago, Ill. Glass lens for light reflector signal. Des. 89,670; Apr. 18.
Reid, Ernest W., Pittsburgh, and D. C. Lewis, Dormount, Pa., assignors to Carbide & Carbon Chemicals Corporation. Production of ethanol amines. 1,904,013; Apr. 18.
Reid, John, Oil City, Pa. Lubricating system and pump. 1,904,168; Apr. 18.
Reiss, Max, New York, N. Y. Book cover. 1,904,532; Apr. 18.
Remde, Edward H., assignor to The Baker-Raulang Company, Cleveland, Ohio. Industrial truck. 1,904,984; Apr. 18.
Remiker, George S. (See Anheuser, E. A., and Remiker.)
Remington Rand, Inc. (See Wolters, Carl F., assignor.)
Renfro, Pete D. (See Rollins, Levy J., assignor.)
Republic Flow Meters Co. (See Freeman, Ernest H., assignor.)
Republic Steel Corporation. (See Nechermann, William M., assignor.)
Reutter, Jean L., Paris, France. Torsion pendulum. 1,904,169; Apr. 18.
Reynolds, John L., Jackson Heights, assignor to Electrical Research Products Inc., New York, N. Y. Circuit for electric discharge devices. 1,904,533; Apr. 18.
Reyrolle, A., & Company Limited. (See Christie, J., and Amer, assignors.)
Rheiner, Alfred, assignor to the Firm "Chemical Works formerly Sandoz", Basel, Switzerland. Manufacture of emulsifying and wetting-out agents. 1,903,879; Apr. 18.
Rheinische Kampfer-Fabrik Gesellschaft mit beschrankter Haftung. (See Skrollkopf, K., and Serini, assignors.)
Rhodes, Leon Le Roy, Minneapolis, Minn. Coupling. 1,904,887; Apr. 18.
Rice, Chester W., Schenectady, N. Y., assignor to General Electric Company. Sound wave system. 1,904,534; Apr. 18.
Rice, Harold G., assignor to Indestro Mfg. Co., Chicago, Ill. Bottle capper. 1,904,328; Apr. 18.
Rice, Louis W., New York, N. Y., assignor to Bernard Rice's Sons Incorporated. Cocktail shaker or the like. Des. 89,653; Apr. 18.
Rice's, Bernard, Sons Incorporated. (See Rice, Louis W., assignor.)
Rich, Charles A., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Stock guide means for machine tools. 1,904,329; Apr. 18.
Richards, Willard F., Depew, N. Y. Pulley and mounting therefor. 1,904,535; Apr. 18.
Richardson, Chester N. (See Taylor, M. C., and Richardson.)
Richardson Company, The. (See Cain, J. R., and Yates.)
Richardson, Leon W., and A. D. Wassall, assignors to Sweeper-Vac Company, Worcester, Mass. Vacuum cleaner brush guard and adjusting roll assembly. 1,903,793; Apr. 18.
Richardson, Leon W., and A. D. Wassall, assignors to Sweeper-Vac Company, Worcester, Mass. Brush shaft holding and driving means for vacuum cleaners. 1,903,794; Apr. 18.
Richardson, Rodney G., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,903,837; Apr. 18.
Richardson, Rodney G., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Relay system. 1,904,929; Apr. 18.
Richter, Charles J., Berwyn, Ill., assignor to Goss Printing Press Company. Web supplying and controlling mechanism. 1,904,536; Apr. 18.
Richter, George A., assignor to Brown Company, Berlin, N. H. Cyclic process for the production of sulphite pulp. 1,904,170; Apr. 18.
Riddell, George A., Sheboygan, Wis. Collapsible terrace chair. 1,904,388; Apr. 18.
Rider, Phineas L. (See Wideman, L., Anderson, and Rider.)
Riebel, Frederick, jr., assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio. Air-porous paper and making same. Re18,797; Apr. 18.
Riemenschneider, Edmund W., assignor to The Union Metal Manufacturing Company, Canton, Ohio. Metal pole with reenforcing pipes. 1,903,907; Apr. 18.
Rieschick, Reinhold, New York, N. Y. All metal key for piano-accordions. 1,904,768; Apr. 18.
Rigler, Richard W., Philadelphia, Pa. Centrifugal drier. 1,903,795; Apr. 18.
Rigney, William D., assignor to Russell, Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y. Floating chuck for tapping machines. 1,904,883; Apr. 18.
Riley, Charles J., East Orange, N. J. Smoker's accessory. 1,904,084; Apr. 18.
Ringer, Ferdinand. Vienna, Austria. Ignitible stick. 1,903,888; Apr. 18.
Rizzo, Samuel, assignor to Artisan Shoe Company, Rochester, N. Y. Shoe and making the same. 1,904,085; Apr. 18.
Robb, John G. (See Round, H. J., and Robb.)
Robb, Theodore D., Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,904,252; Apr. 18.
Roberts, Benjamin F., Brasil, Ind. Apparatus for screening materials. 1,904,032; Apr. 18.
Roberts, Robert P. (See Ewing, H., and Roberts.)
Robertson, H. H. Company. (See Young, James H., assignor.)
Robinson, David, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio. Car coupler. 1,904,171; Apr. 18.
Robinson, F., and Company, Limited. (See Robinson, Gilbert A., assignor.)
Robinson, Gilbert A., assignor to F. Robinson and Company, Limited, Hull, England. Tins, iron kegs and like metal containers. 1,904,630; Apr. 18.
Rochefort, François, Paris, France. Fuel supply process for internal combustion engine. 1,903,851; Apr. 18.
Rodriques, Juan P., assignor of one-half to G. W. Krick, Lake Worth, Fla. Propeller. 1,904,752; Apr. 18.
Roessler, Georg. (See Frankenburger, W., and Roessler.)
Roessler & Hasslacher Chemical Company, The. (See Harris, Charles E., assignor.)
Rollins, Levy J., assignor of one-half to Pete D. Renfro, Beaumont, Texas. Pipe joint. 1,903,852; Apr. 18.
Rouk, George T., Cedar Rapids, Iowa. Self-locking boom hoist. 1,904,930; Apr. 18.
Rosenberg, Heyman, New York, N. Y. Heat treating apparatus for metal work. 1,904,838; Apr. 18.
Rosenberg, Ralph H., Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa. Assembling metal members with rubber bushings. 1,904,931; Apr. 18.
Roetin, Hellodor, Berlin, Germany. Treating low boiling hydrocarbons. 1,904,172; Apr. 18.
Rothlin, Ernst. (See Stoll, A., and Rothlin.)
Round, Henry J., Muswell Hill, London, and J. G. Robb, Hendon, London, England, assignors to Radio Corporation of America. Loud speaker. 1,904,537; Apr. 18.
Round, Henry J., Muswell Hill, London, and J. G. Robb, Hendon, London, England, assignor to Radio Corporation of America. Loud speaker. 1,904,538; Apr. 18.
Roy, Gustave. Bellevue, France. Preparation of stable solutions of halogenated acetylcholin salts. 1,904,696; Apr. 18.
Royal, Thomas M., Philadelphia, Pa. Fastening attachment for paper bags. 1,903,889; Apr. 18.
Roye, Forrest C., Burkburnett, Tex. Stuffing box. 1,904,631; Apr. 18.
Royle, Vernon, Paterson, N. J. Extruding machine. 1,904,884; Apr. 18.
Royse, Grover C., Sacramento, Calif. Adjustable washer. 1,904,296; Apr. 18.
Ruau, Felix F. (See Molins, W. E., and Ruau.)
Rubber Service Laboratories Company. (See Sibley, Robert L., assignor.)
Rucel Limited. (See Morris, Herbert N., assignor.)
Rudolph, Corrie F. (See Gebhard, L. A., and Rudolph.)

Rudqvist, Carl A., Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland. Clutching device. 1,903,943; Apr. 18.

Ruff, Alonzo W., assignor to York Ice Machinery Corporation, York, Pa. Compressor control. 1,903,853; Apr. 18.

Ruff, De Witt C., St. Paul, Minn. Template for use in installing plumbing. 1,904,330; Apr. 18.

Rule, John F., Toledo, Ohio. Machine for forming hollow glassware. 1,904,985; Apr. 18.

Rupf, Ernest L., West New Brighton, N. Y. Lock nut and manufacture. 1,903,921; Apr. 18.

Rupf, Ernest L., West New Brighton, N. Y. Lock nut and manufacture. 1,903,922; Apr. 18.

Ruppel, Sigwart, Frankfort-on-the-Main, Germany. Method of and apparatus for gas blast circuit interruption. 1,904,539; Apr. 18.

Ruppel, Sigwart, Frankfort-on-the-Main, Germany. Switch. 1,904,540; Apr. 18.

Ruppert, Edward H., Brooklyn, N. Y. Safety draw-off apparatus for hot water systems. 1,904,697; Apr. 18.

Russell, Burdsall & Ward Bolt & Nut Company. (See Rigney, William D., assignor.)

Russell, Robert H., Cleveland, Ohio, assignor to Gas Fuel Corporation, New York, N. Y. Apparatus for making emulsified compounds including hydrocarbons. 1,904,952; Apr. 18.

Rutten, Peter, Osakis, Minn. Portable silo or the like. 1,904,932; Apr. 18.

Rydbeck, Patrik S., assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden. Bearing roller. 1,904,253; Apr. 18.

Sack, Hans, Leipzig, Germany. Apparatus for laying drain pipes or cables. 1,904,666; Apr. 18.

Sager, Solomon M., Glencoe, Ill. Fountain pen cap and ink guard. 1,904,014; Apr. 18.

St. Clair, Byron W., Lynn, Mass., assignor to General Electric Company. Electrical measuring instrument. 1,904,095; Apr. 18.

St. Clair, Byron W., Lynn, Mass., assignor to General Electric Company. Electrical instrument. 1,904,096; Apr. 18.

Saks, Ira, Cleveland, Ohio. Clutch or transmission plate. 1,904,953; Apr. 18.

Samdahl, Bjarne. (See Asgaard, T. B., Samdahl, and Hopstock.)

Samesreuther, Richard. (See Kränzlein, G., and Samesreuther.)

Sandelowsky, Sally, Hennigsdorf, Germany, assignor to General Electric Company. Automatic arc welding. 1,904,086; Apr. 18.

Sander, Ludwig, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y. Esters of 2.3-amino-naphthoic acid and preparing them. 1,903,880; Apr. 18.

Sander, Otto, and K. König, assignor to Zeta-Bauweise G. m. b. H., Kassel, Germany. Wall structure and building block used therein. 1,903,881; Apr. 18.

Saunders, Alec L., Ottawa, Ontario, assignor to E. B. Eddy Company, Limited, Hull, Quebec, Canada. Paper cabinet. 1,904,297; Apr. 18.

Saunders, Norman H., Chicago, and C. E. Lomax, Oak Park, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,904,933; Apr. 18.

Saurwein, Albert G., Cleveland, Ohio, assignor to National Carbon Company, Inc. Arc lamp mechanism. 1,904,541; Apr. 18.

Sayre, Kenneth H., assignor of forty-five per cent to J. C. Thorn, New York, N. Y. Device for transmitting and recording telephone messages. 1,904,298; Apr. 18.

Schacht, Elmer C., assignor to Behr-Manning Corporation, Troy, N. Y. Paper making process. 1,904,087; Apr. 18.

Schaper, Harry C., Columbus, Ohio, assignor to International Scale Company, New York, N. Y. Automatic weight indicating scales. 1,904,542; Apr. 18.

Schemmel, Robert C., Union City, Ind. Finishing welt. 1,904,543; Apr. 18.

Schillaci, Thomas. (See Stramaglia, N., and Schillaci.)

Schimmel, Hans, Komotau, Czechoslovakia. Apparatus for machining rolls for rolling mills and the like. 1,904,802; Apr. 18.

Schmidt, John E. (See Fink, H. A., and Schmidt.)

Schmied, Frans, Teplitz-Schonau, Czechoslovakia. Automatic lubricating device. 1,904,803; Apr. 18.

Schmied, James W., West Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Carrier wave signaling system. 1,904,544; Apr. 18.

Schmuhl, Byron M., Centerline, assignor of one-third to Wm. Cadsow Ramsay, Detroit, Mich. Battery post clamp. 1,904,954; Apr. 18.

Schneider, George. (See Dreyfus, C., and Schneider.)

Schneider, Hermann. (See Straub, F., and Schneider.)

Schneiderman, Joseph, Chicago, Ill. Protector for a nursing bottle and nipple thereof. Des. 89,654; Apr. 18.

Schnyder, Hans, Biel, Switzerland. Shaving cup. 1,903,882; Apr. 18.

Schöllkopf, Karl, Dusseldorf-Oberkassel, and A. Serini, Dusseldorf-Heerdt, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschränkter Haftung-Dusseldorf-Oberkassel, Germany. Preparing pure optically inactive menthol. 1,904,545; Apr. 18.

Schouten, Frank, Glenarm, assignor to The Black & Decker Manufacturing Company, Towson, Md. Balanced spring hammer magnetic type. 1,904,965; Apr. 18.

Schrauth, Walther, Berlin-Dahlem, Germany. Producing stearine. 1,904,546; Apr. 18.

Schroeder, Frederic W., assignor to Corhart Refractories Company, Louisville, Ky. Casting of aluminum silicate refractories. 1,903,944; Apr. 18.

Schultz, August E. (See Masslow, William C., assignor.)

Schultz, Paul I. (See Bacher, R. L., and Schultz.)

Schultze, Hermann, Griesheim, Frankfort-on-the-Main, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Revolving tube furnace. 1,904,548; Apr. 18.

Schulze, Arno, Los Angeles, and W. Amann, Willowbrook, Calif. Combination billiard-table and bowling alley. 1,904,033; Apr. 18.

Schumann, Karl, Potsdam, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Cores for cables for communication circuits. 1,904,547; Apr. 18.

Schuster, Carl E., Corvallis, Oreg., assignor, by mesne assignments, to The People of the United States of America. Strawberry. Pl. Pt. 60; Apr. 18.

Schutz, Henri, Paris, France. Frame provided with cascistand. 1,904,088; Apr. 18.

Schwander, Max, assignor to Fabrik Electrothermischer Apparate A. G. Lusern, Lucerne, Switzerland. Electric cooking. 1,903,883; Apr. 18.

Schwarz, Eugene, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill. Lamp shade. Des. 89,655; Apr. 18.

Schwarzkopf, Frank E. (See Martin, Joseph R., assignor.)

Schwerin, Frank H., Bellevue, assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa. Centrifugal brake. 1,904,089; Apr. 18.

Schweyer, Daniel H., Easton, Pa. Automatic train control. 1,904,804; Apr. 18.

Schwingel, Albert E., et al. (See Ellingston, Cornwallis D., assignor.)

Scognamillo, Salvatore, and David Schlaifer, Bronx, N. Y. Oil burner. 1,904,549; Apr. 18.

Scott, Donald M., assignor to Buffalo Electric Furnace Corporation, Buffalo, N. Y. Production of alloys. 1,904,761; Apr. 18.

Scott, George, London, England, assignor to Chicago Pneumatic Tool Company, New York, N. Y. Electric switch. 1,904,935; Apr. 18.

Scott, Howard B., and R. E. McCoy, assignors to The National Cash Register Company, Dayton, Ohio. Quenching machine. 1,904,936; Apr. 18.

Scott, Paul J., et al. (See Baker, Albert E., assignor.)

Scott & Williams, Incorporated. (See Allen, John M., assignor.)

Scovill Manufacturing Company. (See Chapman, Lyman B., assignor.)

Scovill Manufacturing Company. (See Fenton, Paul E., assignor.)

Scovill Manufacturing Company. (See King, George A., assignor.)

Scranton, D. G., Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Apparatus for marking strand material. 1,904,254; Apr. 18.

Seamless Rubber Company, The. (See De Laney, Wallace W., assignor.)

Sebastianelli, Angelo. (See Liva, Henry, assignor.)

Seederer, Jacob E., et al. (See Cameron, Hugh M., assignor.)

Seeley, George A., Irvington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Device for handling reels. 1,904,255; Apr. 18.

Seeley, George A., Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y. Capstan. 1,904,885; Apr. 18.

Seitzinger, William M. (See Avery, T. M., and Seitzinger.)

Selling, Otto, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Electrical lead-in. 1,904,505; Apr. 18.

Selva, James, Laurelton, N. Y. Tap plate for dancing shoes. 1,904,886; Apr. 18.

Seng Company, The. (See Fox, Martin, assignor.)

Serini, Arthur. (See Schöllkopf, K., and Serini.)

Severance, Malvern W., assignor to Willard Storage Battery Company, Cleveland, Ohio. Battery handle. 1,904,987; Apr. 18.

Severance, Malvern W., assignor to Willard Storage Battery Company, Cleveland, Ohio. Battery handle. 1,904,988; Apr. 18.

Sexauer, J. A., Mfg. Co. (See Frantz, Grover C., assignor.)

Shapiro, S., Co. Inc. (See Maranian, Rebecca S., assignor.)

Sharpsville Boiler Works Co. (See Fagan, C. D., and Swank, assignors.)

Shaw, Milton M., assignor to New York Merchandise Co. Inc., New York, N. Y. Comb and accessories therefor. 1,904,090; Apr. 18.

Shee, Parke L., Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Electric cable. 1,904,887; Apr. 18.

Sheldon, Waldo, South Norwalk, Conn. Drilling machinery. 1,904,256; Apr. 18.

Shell Petroleum Corporation. (See Smith, Sydney S., assignor.)

Shield, Paul S., Cincinnati, Ohio, and W. H. Haupt, Ludlow, Ky., assignors to Augustine Davis, jr., Cincinnati, Ohio. Air controlled lock for dispensers. 1,904,550; Apr. 18.

Shimizu, Rinjiro, Tokyo, Japan, assignor to Western Electric Company, Incorporated, New York, N. Y. Anode for water-cooled vacuum tubes. 1,903,945; Apr. 18.

Shlaifer, David. (See Scognamillo, S., and Shlaifer.)

Shoop, Fred M., assignor of one-fourth to C. E. Fuller, Burat Cabins, Pa. Sealing device for closed containers. 1,904,091; Apr. 18.

Shorr, Oscar. (See Beisser, Harry, assignor.)

Shoup-Owens, Inc. (See D'Annunzio, George, assignor.)

Sibley, Robert L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Retarder for use in rubber vulcanization process. 1,904,934; Apr. 18.

Sidebotham, Melvin H., West Newton, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Shield for suspended wearing apparel. 1,904,092; Apr. 18.

Sidebotham, Melvin H., West Newton, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Drinking cup. 1,904,231; Apr. 18.

Sidebotham, Melvin H., West Newton, assignor to Specialty Automatic Machine Company, Chelsea, Mass. Machine for printing round cans in multiple colors. 1,904,232; Apr. 18.

Siemens & Halske, Aktiengesellschaft. (See Steiner, Otto.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Berthold, R. G., and Stockmeyer, assignors.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Gleichmann, Hans, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Oldenburg, Alfred, assignor.)

Siemens-Schuckertwerke Aktiengesellschaft. (See Schumann, Karl, assignor.)

Simcoe Manufacturing Company. (See Simons, Julius, assignor.)

Simmons, Oliver G., Lakewood, Ohio. Cutting the teeth of gears. 1,904,956; Apr. 18.

Simons, Aaron, Bronx, assignor to Morris Simons, New York, N. Y. Making drawing dies. 1,904,696; Apr. 18.

Simons, Julius, assignor to Simcoe Manufacturing Company, Philadelphia, Pa. Combined ink setter and static eliminator. 1,903,940; Apr. 18.

Simons, Morris. (See Simons, Aaron, assignor.)

Simplex Engineering Company. (See Raymond, Thomas E., assignor.)

Simplix Patents Limited. (See Lamont, Boyd N. R., assignor.)

Simpson, William R., Campbell, Calif. Spreader. 1,904,989; Apr. 18.

Singer, Benjamin F., and J. J. Eberman, Lancaster, Pa. Safety device. 1,904,015; Apr. 18.

Singmaster, James A., Bronxville, N. Y. Production of cement. 1,904,690; Apr. 18.

Skeel, Lewis, Meadville, Pa. Rotary cutter. 1,904,632; Apr. 18.

Skillman, Newton, Highland Park, assignor to O. & S. Bearing Co., Detroit, Mich. Shaft mounting. 1,904,769; Apr. 18.

Skillman, Newton, Highland Park, assignor to O. & S. Bearing Co., Detroit, Mich. Combined end thrust and self-aligning supporting bearing. 1,904,770; Apr. 18.

Small, James K. (See Freyermuth, G. H., Small, and Hanks.)

Smellie, Donald G., Canton, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,904,973; Apr. 18.

Smidth, F. L., & Co. (See Pontoppidan, Carl, assignor.)

Smith, Alexander, & Sons Carpet Company. (See Barrett, Charles E., assignor.)

Smith, Bernard P., assignor to The Regina Corporation, Rahway, N. J. Apparatus for developing sensitized paper. 1,904,551; Apr. 18.

Smith, Conway B., Portsmouth, Va. License plate for motor vehicles. 1,904,093; Apr. 18.

Smith, Cyril S. (See Dinsdale, A. M., and Smith.)

Smith, Cyril S., Cheshire, assignor to The American Brass Company, Waterbury, Conn. Brazing solder. 1,904,889; Apr. 18.

Smith, Ed S., jr., assignor to Builders Iron Foundry, Providence, R. I. Orifice meter. 1,904,333; Apr. 18.

Smith, Herman R. (See Powell, C. L., and Smith.)

Smith, Loyd A., assignor to Truline, Incorporated, La Grange, Ga. Tufting machine attachment. 1,903,946; Apr. 18.

Smith, Ramsey, Oakridge, Roatan, Honduras. Pipe cleaning device. 1,904,015; Apr. 18.

Smith, Sydney S., Tulsa, Okla., assignor to Shell Petroleum Corporation. Rectifier. 1,904,234; Apr. 18.

Smith, Theodore A., Ridgewood, N. J., assignor to Radio Corporation of America. Automatic gain control. 1,904,552; Apr. 18.

Smith, William A., London, England. Air washing and the like. 1,904,867; Apr. 18.

Smith, William J., West Palm Beach, Fla. Radiator filling and draining device. 1,904,758; Apr. 18.

Smith, William L., jr., and R. H. Lawson, Pawtucket, R. I.; said Smith assignor to May Hosiery Mills, Rockville, Tenn. Dial and cylinder connection for knitting machines. 1,904,968; Apr. 18.

Smoot, Charles H., deceased, Maplewood, N. J.; Katherine Smoot executrix of said Charles H. Smoot. Feed water regulator. 1,904,553; Apr. 18.

Smoot, Charles H., deceased, Maplewood, N. J.; Katherine Smoot executrix of said Charles H. Smoot. Feed water regulator. 1,904,554; Apr. 18.

Smoot, Katherine, executrix. (See Smoot, Charles H., assignor.)

Smygel, Joseph M., St. Joseph, Mo. Broom rack. 1,903,796; Apr. 18.

Snyder, Clay M., assignor to Centrifugal Machine Company, Atlanta, Ga. Method and apparatus for molding concrete pipe. 1,904,094; Apr. 18.

Snyder, Louis M., Brooklyn, assignor, by mesne assignments, to J. W. Anderson, New York, N. Y. Manifolding material. 1,904,650; Apr. 18.

Società Anonima Automobili Ansaldo. (See Cappa, Giulio C., assignor.)

Société Dite Maison Camus Duchermin Société Anonyme. (See Mauger, Jacques G., assignor.)

Society of Chemical Industry in Basle. (See Bally, Oscar, assignor.)

Society of Chemical Industry in Basle. (See Grossmann, Paul, assignor.)

Society of Chemical Industry in Basle. (See Straub, F., and Schneider, assignors.)

Soehner, John D., St. Albans, N. Y., assigner, by mesne assignments, to Metropolitan Engineering Company. Radiator. 1,904,555; Apr. 18.

Sohn, Carl, Stratford, Conn. Hedge trimmer. 1,904,330; Apr. 18.

Solie, Harold L., and N. J. Hedlund, Minneapolis, Minn. Can washing machine. 1,904,391; Apr. 18.

Solum, Aksel, Lancaster, N. Y. Lamp mounting for bowling alleys. 1,904,016; Apr. 18.

Sommermeyer, August, Berlin-Rudow, Germany. Decomposition and separation apparatus. 1,904,556; Apr. 18.

Sono Equipment Corporation et al. (See Bauch, William H., assignor.)

Soubier, Leonard D., assignor to Owens-Illinois Glass Company, Toledo, Ohio. Glass furnace. 1,904,947; Apr. 18.

Soubier, Leonard D., assignor to Owens-Illinois Glass Company. Glassware forming machine. 1,904,958; Apr. 18.

Soubier, Leonard D., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Glassware forming machine. 1,904,959; Apr. 18.

Soubier, Leonard D., Toledo, Ohio, assignor to Owens-Illinois Glass Company. Glass working tank. 1,904,960; Apr. 18.

Soubier, Leonard D., Alton, Ill., assignor to Owens-Illinois Glass Company. Machine for forming hollow glassware. 1,904,961; Apr. 18.

Southern Ice Supply Company, et al. (See Hancock, R. J., assignor, and Garrison.)

Spalding, A. G., & Bros. (See Reach, Milton B., assignor.)

Specialty Automatic Machine Company. (See Sidebotham, Melvin H., assignor.)

Spicers Limited. (See Baker, Thomas T., assignor.)

Spoor, Ivan H., La Grange, assignor to The Gerrard Company, Inc., Chicago, Ill. Loading of sewer pipe, building tile, etc., for railway shipment. 1,903,841; Apr. 18.

Sprague-Sells Corporation. (See Lewis, Harold E., assignor.)

Spring, Otto. (See Merley, S. R., and Spring.)

Stacey, Ernest W., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on tennis shoes. 1,903,840; Apr. 18.

Stallmann, Otto. (See Gubelmann, L., Welland, and Stallmann.)

Standard Alcohol Company. (See Brooks, Benjamin T., assignor.)

Standard-I. G. Company. (See Gehr, Edwin J., assignor.)

Standard I. G. Company. (See Krauch, C., and Pier, assignors.)

Standard-I. G. Company. (See Pier, M., and Winkler, assignors.)

Standard-I. G. Company. (See Watts, Rhea N., assignor.)

Standard Oil Company. (See Voorhees, Vanderveer, assignor.)

Standard Oil Development Company. (See Young, P. L., Hanks, and Freyermuth, assignors.)

Standard Oil Development Company. (See Bolles, Seward R., assignor.)

Standard Oil Development Company. (See Rimmer, W. J., and Dawson, assignors.)

Standard Oil Development Company. (See Evans, Earle W., assignor.)

Standard Oil Development Company. (See Ewing, C. R., and Montgomery, assignors.)

Standard Oil Development Company. (See Fischer, H. G. M., and Gustafson, assignors.)

Standard Oil Development Company. (See Franceway, James A., assignor.)

Standard Oil Development Company. (See Freyermuth, George H., assignor.)

Standard Oil Development Company. (See Freyermuth, G. H., and Hanks, assignors.)
Standard Oil Development Company. (See Freyermuth, G. H., Small, and Hanks, assignors.)
Standard Oil Development Company. (See Haslam, Robert T., assignor.)
Standard Oil Development Company. (See Kuhl, Paul E., assignor.)
Standard Oil Development Company. (See Stratford, R. K., and Doohan, assignors.)
Standard Oil Development Company. (See Wells, Alfred A., assignor.)
Standard Oil Development Company. (See Young, P. L., and Hanks, assignor.)
Standard-Knapp Corporation. (See Braren, Cornelius T., assignor.)
Standard Stations, Inc. (See Aldrich, Ralph N., assignor.)
Standard Stoker Company, The. (See Pickard, Frank C., assignor.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Elastic fluid turbine. 1,904,557; Apr. 18.
Star-Brite Corporation. (See Reichhardt, Herman C., assignor.)
Starch, Benjamin S., assignor of one-half to A. W. Zeratsky, La Crosse, Wis. Striping device. 1,904,558; Apr. 18.
Starks, Zeston, Malvern, Ohio. Protector for plants. 1,904,700; Apr. 18.
Starnes, Cullen G. (See O'Connor, L. R., and Starnes.)
Stearns, Frederick, & Company. (See Legerlotz, Helmut, assignor.)
Steel, John D., assignor to Farmers Manufacturing Company, Norfolk, Va. Shipping basket. 1,903,797; Apr. 18.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Refrigerating machine. 1,904,559; Apr. 18.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Refrigerator evaporator. 1,904,560; Apr. 18.
Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Refrigerating machine. 1,904,561; Apr. 18.
Stein, Hall & Company. (See Caesar, George V., assignor.)
Steiner, Otto, Berlin-Spandau, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Film holder for photographic cameras. 1,904,097; Apr. 18.
Steinholz, Gertrude, Brooklyn, assignor to William Wilhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,618; Apr. 18.
Stenhouse, David. (See Stenhouse, Thomas and D.)
Stenhouse, David, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Glass feeder. 1,904,754; Apr. 18.
Stenhouse, Thomas and D., Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va. Leer loader 1,903,916; Apr. 18.
Stensy, August F. P., assignor of one-half to Stephen Ratajczak, Baltimore, Md. Radio circuit. 1,904,839; Apr. 18.
Stetner, Joseph L., Brooklyn, N. Y. Bed lamp. 1,904,121; Apr. 18.
Stevens, George, Chicago, Ill. Tone bar. 1,904,335; Apr. 18.
Stickel, Charles W. (See Tuttle, W. R., and Stickel.)
Still, W. M., & Sons Limited. (See Adamson, Andrew G., assignor.)
Stimson, Frank G., Belleville, assignor to Bond Electric Corporation, Jersey City, N. J. Flash-light safety switch. 1,903,947; Apr. 18.
Stintsing, Hugo, Giessen, and E. Huber, Frankfort-on-the-Main, Germany. Joint for members provided in a wall separating spaces of different pressures. 1,904,392; Apr. 18.
Stirlen Engineering & Research Corporation, The. (See Stirlen, Eugene D., assignor.)
Stirlen, Eugene D., New Haven, Conn., assignor to The Stirlen Engineering & Research Corporation. Recorder for traffic signal systems. 1,904,562; Apr. 18.
Stockmeyer, Walter. (See Berthold, R. G., and Stockmeyer.)
Stockton, Jack P., Spring Lake, N. J. Theater. 1,903,948; Apr. 18.
Stoetzel, Joseph J., Queens Village, assignor to G & G Atlas Systems, Inc., New York, N. Y. Pneumatic dispatch system valve. 1,904,098; Apr. 18.
Stokes, Charles L., Los Angeles, Calif., assignor, by mesne assignments, to L. A. Williams, Evanston, and C. C. Bradbury, Glencoe, Ill., trustees. Combined primer and cylinder lubricator for internal combustion engines. 1,904,936; Apr. 18.
Stoll, Arthur, and E. Rothlin, assignors to the Firm of "Chemical Works formerly Sandoz", Basel, Switzerland. Supersaturated calcium gluconate solution. 1,904,257; Apr. 18.
Stork, Fred W., et al. (See Arit, John L., assignor.)
Stötter, Herman. (See Hentrich, W., Hardtmann, Backes, and Stötter.)
Stout, Claude S., assignor to Marshall Furnace Company, Marshall, Mich. Hot air heating system. 1,904,962; Apr. 18.
Stramaglia, Nicola, and T. Schiliaci, Chicago, Ill. Laundry machine. 1,904,099; Apr. 18.
Strara, Walter A., Baltimore, Md. Dress ensemble. Des. 89,656; Apr. 18.
Stratford, Reginald K., and W. P. Doohan, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company. Removing corrosive sulphur from hydrocarbon oils. 1,904,173; Apr. 18.
Straub, Fritz, Basel, and H. Schneider, Rieben near Basel, assignors to Societe of Chemical Industry in Basle, Basel, Switzerland. Dyeing animal fibers fast tints. 1,903,884; Apr. 18.
Straussler, Nicholas, London, England, assignor to Bendix Aviation Corporation, Chicago, Ill. Charge forming device. 1,904,701; Apr. 18.
Strindlund, John, Tofte I Hurum, Norway. Barking drum. 1,904,937; Apr. 18.
Strongson, Herman L., assignor to Bernard D. Colen, New York, N. Y. Quick break plug connecter. 1,904,889; Apr. 18.
Strout, Robert W., assignor to E. W. Bliss Company, Brooklyn, N. Y. Positive-action clutch. 1,904,563; Apr. 18.
Strutt, Maximiliaan J. O., and P. R. Dijksterhuis, Eindhoven, Netherlands, assignors to Radio Corporation of American. Arrangement for transmitting wireless signals. 1,904,174; Apr. 18.
Sullivan, Harry H., assignor to Paragon Revolute Corporation, Rochester, N. Y. Print drier. 1,904,564; Apr. 18.
Sulphide Corporation. (See Wescott, Ernest W., assignor.)
Sulzer Freres Societe Anonyme. (See Hefti, Wilhelm, assignor.)
Sunnen, Joseph, Kirkwood, Mo. Honing device. 1,904,836; Apr. 18.
Superheater Company, The. (See Armacost, Wilbur H., assignor.)
Super Safety Switch Company. (See Luther, Martin P., assignor.)
Svendsen, Svend S., assignor to Clay Reduction Company, Chicago, Ill. Production of aluminum chloride and alumina. 1,904,762; Apr. 18.
Swank, Behl W. (See Fagan, C. D., and Swank.)
Swanson, Ernest G., Upper Darby, Pa., assignor to General Electric Company. Electrical apparatus. 1,904,565; Apr. 18.
Swanson, Selvlyor A., Chicago, Ill. Reproducing pneumatic operator for typewriters. 1,904,683; Apr. 18.
Swartz, Carl E., Highland Park, and A. J. Phillips, Metuchen, N. J., assignors to American Smelting and Refining Company, New York, N. Y. Cadmium-nickel alloy. 1,904,175; Apr. 18.
Swartz, Carl E., Highland Park, and A. J. Phillips, Metuchen, N. J., assignor to American Smelting and Refining Company, New York, N. Y. Cadmium-nickel alloy. 1,904,176; Apr. 18.
Sweeney, Orland R., Ames, Iowa, assignor, by mesne assignments, to The Permutit Company, Wilmington, Del. Regenerating base-exchange substances. 1,903,949; Apr. 18.
Sweeper-Vac Company. (See Richardson, L. W., and Wassall, assignors.)
Sweet, Agnes G., Pawtucket, R. I. Cigarette holder. 1,904,903; Apr. 18.
Swenson, John F., Duluth, Minn. Fence post anchor. 1,904,177; Apr. 18.
Symmonds, Frank S. (See Poling, Harry A., assignor.)
Syracuse Trust Company, The. (See Axe, Roy T., assignor.)
Szeliga, Anton, assignor of one-half to F. Tichy, New York, N. Y. Safety attachment for moving picture apparatus. 1,904,807; Apr. 18.
Tachi, Tadao, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii. Fruit cutting machine. 1,903,854; Apr. 18.
Tagliabue, Charles J., Mfg. Co. (See Irwin, Lawrence C., assignor.)
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,657; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,658; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief Des. 89,659; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,660; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,661; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,662; Apr. 18.
Tansley, Thomas W., assignor to Bloch Freres, Inc., New York, N. Y. Handkerchief. Des. 89,663; Apr. 18.
Tate, Alfred Orde, Toronto, Ontario, Canada. Apparatus for treating light and similar rays. 1,904,566; Apr. 18.
Taylor, Albert H., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Radio signaling system. 1,904,772; Apr. 18.
Taylor, Edmund R., New York, N. Y., assignor to American Telephone and Telegraph Company. Two-way telephone system. 1,904,567; Apr. 18.
Taylor, George F., Schenectady, N. Y., assignor to General Electric Company. Wheel dresser. 1,904,100; Apr. 18.

Taylor, George F., Schenectady, N. Y., assignor to General Electric Company. Disk-like cutting tool. 1,904,568; Apr. 18.
Taylor Instrument Companies. (See Teague, Walter D., assignor.)
Taylor, Maurice C., and C. N. Richardson, Niagara Falls, assignors to The Mathieson Alkali Works, New York, N. Y. Method and apparatus for carrying out chemical reactions. 1,904,101; Apr. 18.
Taylor, William. (See Grimes, Herbert V., assignor.)
Teague, Walter D., Forest Hills, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. Des. 89,619; Apr. 18.
Teague, Walter D., Forest Hills, assignor to Taylor Instrument Companies, Rochester, N. Y. Instrument casing. Des. 89,620; Apr. 18.
Teague, Walter D., Forest Hills, assignor to Taylor Instrument Companies, Rochester, N. Y. Thermometer. Des. 89,621; Apr. 18.
Tebo, Julian D., East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Protective device. 1,904,569; Apr. 18.
Teeter, Willford H., assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,904,624; Apr. 18.
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Mullner, Edmund, assignor.)
Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H. (See Paessler, Hans, assignor.)
Teletype Corporation. (See Morton, S., Krum, and Kleinschmidt, assignors.)
Texas Company, The. (See Cook, Leon W., assignor.)
Texas Company, The. (See Kiser, Howard W., assignor.)
Texas Company, The. (See Mackenzie, Kenneth G., assignor.)
Texas Gulf Sulphur Company. (See Lesander, Nils E., assignor.)
Tharp, Victor S., Elmhurst, and C. E. Lomax, Oak Park, assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Automatic telephone system. 1,904,904; Apr. 18.
Thomas, Adolph A., New York, N. Y. Sound reproducing apparatus. 1,904,702; Apr. 18.
Thomas & Betts Co. (See Church, Lewis H., assignor.)
Thomas, John. (See Fairweather, David A. W., and Thomas.)
Thompson, Alva, Los Angeles, Calif. Automatic direction signal switch. 1,904,806; Apr. 18.
Thompson, Frank E., Winona, Minn. Chain fastener. 1,904,102; Apr. 18.
Thompson, George F., executor. (See Knapp, E., and Allgrunn.)
Thompson, James H., et al. (See Davis, E. H., and Johnston, assignors.)
Thomson, Arthur L., Milan, Italy, assignor to Altek Compagnie d'Etude et d'Exploitation d'Appareils Frigorifiques pour le Transport, Antwerp, Belgium. Apparatus for the ventilation of cooling plants. 1,904,570; Apr. 18.
Thordarson, Chester H., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill. Coil forming device. 1,904,890; Apr. 18.
Thordarson Electric Manufacturing Company. (See Thordarson, Chester H., assignor.)
Thorens, Hermann, S. A., Firm. (See Weissenburger, Adolf, assignor.)
Thorington, Fletcher, Birmingham, Ala. Push-pull amplifier circuit. 1,904,103; Apr. 18.
Thorn, John C. (See Sayre, Kenneth H., assignor.)
Tice Lock-Washer Manufacturing Co. (See Lillig, Nicholas R., assignor.)
Tichy, Frederick. (See Szeliga, Anton, assignor.)
Tinsley, Milton L., Grantwood, assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J. Folding chair. 1,904,891; Apr. 18.
Titcomb, James M., Washington, D. C. Batch dividing and covering means. 1,904,905; Apr. 18.
Titcomb, James M., Washington, D. C. Batch dividing and covering means. 1,904,906; Apr. 18.
Titus, Court C., New York, N. Y. Aluminum alloy. 1,903,842; Apr. 18.
Titus, Court C., New York, N. Y. Aluminum alloy. 1,903,843; Apr. 18.
Tobey, Harry W., and H. V. May, Pittsfield, Mass., assignors to General Electric Company. Welding torch. 1,904,104; Apr. 18.
Tobias, Robin R. (See Ewing, J. L., and Tobias.)
Tomlin, John R., Brooklyn, assignor to R. Hoe & Co., Inc., New York, N. Y. Web renewing mechanism for printing machines. 1,904,571; Apr. 18.
Townsend, Arthur, Coogee, Sydney, New South Wales, Australia. Electrical vacuum cleaner. 1,903,855; Apr. 18.
Townsend, Arthur J. (See Naugle, H. M., and Townsend.)
Transitone Automobile Radio Corporation. (See Leonard, Anthon A., assignor.)
Travis, Albert C., jr., Jackson Heights, N. Y., assignor to A. W. Holbrook & Sons, Inc., Palmer, Mass. Steam trap. 1,904,998; Apr. 18.
Travis, William, Blackley, Manchester, England. Method and apparatus for extrusion of metal. 1,904,907; Apr. 18.
Trewhella, William, Trentham, Victoria, Australia. Permutation padlock. 1,903,865; Apr. 18.
Trico Products Corporation. (See Hueber, Henry, assignor.)
Trowbridge, Ira A., Wallace, Idaho. Cow tail hanger. 1,904,635; Apr. 18.
Truax, William T., assignor to United States Register Co., Battle Creek, Mich. Key operated warm air register. 1,904,696; Apr. 18.
Trube, Carl E., deceased, Ossining, N. Y.; S. M. Trube, administratrix, assignor of one-half to W. L. Hoge, Louisville, Ky. Rotary engine compressor and the like. 1,904,892; Apr. 18.
Trube, Sarah M., administratrix. (See Trube, Carl E.)
True, Fred O. (See Conklin, David L., assignor.)
Truline, Incorporated. (See Smith, Lloyd A., assignor.)
Trumbull Electric Manufacturing Company. (See Haney, Charles E., assignor.)
Trussell, Clarence D., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y. Loose leaf binder and holder for writing implements. 1,904,572; Apr. 18.
Trussell Manufacturing Company. (See Trussell, Clarence D., assignor.)
Tuley, William F., Nutley, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Vulcanization of rubber. 1,904,573; Apr. 18.
Turner, Edward T., Dayton, Ohio. Flow regulator. 1,904,337; Apr. 18.
Turner, Edwin B., Wellington, Ohio. Carrier case. 1,903,798; Apr. 18.
Turner, Simon W. H., New York, N. Y. Automobile headlight. 1,904,574; Apr. 18.
Tuttle, William R., and C. W. Stickel, assignors to The Kurlash Company, Inc., Rochester, N. Y. Eyelash curler. 1,904,575; Apr. 18.
Twiss, Douglas F., Wylde Green, and W. G. Gorham, Erdington, Birmingham, England, assignors to Dunlop Rubber Company, Limited. Waterproofing compositions. 1,904,576; Apr. 18.
Uebermuth, Werner, Berlin-Oberschoneweide, Germany, assignor to General Electric Company. Gas blast circuit interrupter. 1,904,577; Apr. 18.
Uhrich, Burns H., Independence, assignor to The Atchison Revolving Door Co., Independence, Kans. Cable lock for revolving doors. 1,904,106; Apr. 18.
Ulrich, Horace W., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,904,017; Apr. 18.
Underwood Elliott Fisher Company. (See Oswald, Alfred E., assignor.)
Union Bag and Paper Corporation. (See Avery, T. M., and Seltzinger, assignors.)
Union Chimique Belge, Societe Anonyme. (See Verpeaux, Paul E., assignor.)
Union Drawn Steel Company. (See Leech, Jacob T., assignor.)
Union Metal Manufacturing Company, The. (See Riemenschneider, Edmund W., assignor.)
Union Special Machine Company. (See Hanson, Nathan E., assignor.)
United American Bosch Corporation. (See Martin, John F., assignor.)
United Piece Dye Works, The. (See Megros, Georges, assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)
United Shoe Machinery Corporation. (See Gookin, Sylvester L., assignor.)
United Shoe Machinery Corporation. (See Jeavons, Charles F. R., assignor.)
United Shoe Machinery Corporation. (See Johnson, Arthur S., assignor.)
United Shoe Machinery Corporation. (See Nutt, William H., assignor.)
United Shoe Machinery Corporation. (See Prensel, Adam H., assignor.)
United Shoe Machinery Corporation. (See Stacey, Ernest W., assignor.)
United States Air Compressor Company, The. (See Bacher, E. L., and Schultz, assignors.)
United States Cigar Company. (See Reichard, John F., assignor.)
United States Register Co. (See Truax, William T., assignor.)
Universal Oil Products Company. (See Egloff, Gustav, assignor.)
Universal Oil Products Company. (See Egloff, G., and Mekler, assignors.)
Universal Oil Products Company. (See Morrell, Jacque C., assignor.)
Universal Oil Products Company. (See Morrell, J. C., and Alther, assignors.)
Vacher, John, assignor to The American Mills Company, Waterbury, Conn. Automatic tension mechanism for strands, etc. 1,904,894; Apr. 18.
Vallen, Earl J., Akron, Ohio. Mask for moving picture screens. 1,904,963; Apr. 18.
Van Buren, John, Brooklyn, N. Y. Machine for making cartons. 1,903,844; Apr. 18.
Vanderhoof, Frank E., Greenwich, Conn. Attachment for telephones. 1,904,578; Apr. 18.
Vandevelde, Paul V., New York, N. Y. Continuous alarm clock. 1,904,579; Apr. 18.

Van Geel, William C. (See De Boer, J. H., Van Geel, and Emmens.)
Vanhorn, Constant, Sentinel Butte, N. Dak. Adjustable folding scaffold. 1,904,803; Apr. 18.
Van Kannel Revolving Door Company. (See Munson, Harry, assignor.)
Van Liempt, Johannes A. M., and W. Geins, Eindhoven, Netherlands, assignors to General Electric Company. Nonsag helical tungsten filament and making it. 1,904,105; Apr. 18.
Van Nordstrand, Robert D., Scotia, N. Y., assignor to General Electric Company. Protective circuit for enameling furnaces. 1,904,580; Apr. 18.
Van Wijk, Aart. (See Reerink, E. H., and Van Wijk.)
Vath, Vera, Minneapolis, Minn. Slicer. 1,904,840; Apr. 18.
Vaughan, Arthur H. (See Cope, F. T., Vaughan, and Bowling.)
Vaughn, Frank O., Poughkeepsie, N. Y. Brake device. 1,904,178; Apr. 18.
Vaughn Machinery Company, The. (See Yungman, Alfred T., assignor.)
Vaughn, S. T., et al. (See Clark, Carl W., assignor.)
Vawter, John T., Los Angeles, Calif. Cement gun nozzle. 1,904,990; Apr. 18.
Vereinigte Stahlwerke Aktiengesellschaft, the Firm. (See Alberts, Walter, assignor.)
Verpeaux, Paul E., assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Coke oven. 1,904,018; Apr. 18.
Victor, John H., Evanston, assignor to Victor Manufacturing & Gasket Company, Chicago, Ill. Gasket. 1,904,651; Apr. 18.
Victor Manufacturing & Gasket Company. (See Victor, John H., assignor.)
Viehweger, August F. W., et al. (See Prior, Walter, jr., assignor.)
Vignos, Paul, assignor to Berger Manufacturing Company, Canton, Ohio. Metal bottle carrier. 1,904,019; Apr. 18.
Vion, Camille J., Jersey City, N. J. Printer's quoin. 1,904,581; Apr. 18.
Virgile, Gabriel, Long Beach, assignor to William Willhelm Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,671; Apr. 18.
Vogan, Frank M., Canton, assignor to The Reeves Manufacturing Company, Dover, Ohio. Washtub. Des. 89,664; Apr. 18.
Voigt, Carl A. W., Portland, Oreg. Hot water heating furnace. 1,904,179; Apr. 18.
Vollmer, Hermann. (See Eisner, H., and Vollmer.)
Vondicakis, George. (See Cavano, J. P., and Vondicakis.)
Von Hofe, Christian, Vienna, Austria, and J. Boykow, Berlin-Lichterfelde, Germany, assignors to Czechoslovak Company: Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav, Pressburg, Czechoslovakia. Apparatus for determining the speed of flight of aircraft. 1,903,886; Apr. 18.
Von Nessen, Walter, New York, N. Y., assignor to Efcolite Corporation, Trenton, N. J. Electric lighting fixture. 1,904,703; Apr. 18.
Von Pein, Edward J., assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio. Cash register. 1,904,964; Apr. 18.
Von Wedel, Carl J. R. H., Newark, N. J., assignor, by mesne assignments, to Electrons, Inc. Discharge tube. Re18,798; Apr. 18.
Von Zeerleder, Alfred, assignor to Aluminium Industrie Aktiengesellschaft, Neuhausen, Switzerland. Electroplating with aluminum. 1,904,107; Apr. 18.
Voorhees, Vanderveer, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill. Hydrogen preparation. 1,904,908; Apr. 18.
Wachter, Lester. (See Anthony, W. C., and Wachter.)
Wagenbach, Anton, Elberfeld, Germany. Bending machine. 1,903,799; Apr. 18.
Wagner, Charles L. (See Wagner, Henry H., and C. L.)
Wagner, Henry H. and C. L., assignors of one-third to Omer Wray, Pickering, Mo. Fowl nest. 1,904,809; Apr. 18.
Wagner, Richard P., Berlin, Germany. Connecting rod connection. 1,904,180; Apr. 18.
Wagner, Richard P., Berlin-Lichterfelde, Germany. Booster. 1,904,181; Apr. 18.
Waldron, John, Corporation. (See Dickhaut, Charles A., assignor.)
Walker, Noah, et al. (See Davis, E. H., and Johnston, assignors.)
Wallace, Jeffrey J., assignor to Gullett Gin Company, Amite, La. Breast lift. 1,904,637; Apr. 18.
Walsh, Mary, New York, N. Y. Crown for ladies' hats. 1,904,108; Apr. 18.
Walstrom, Axel M., Minneapolis, Minn. Indoor golf game device. 1,904,034; Apr. 18.
Wappler, Reinhold H., Yonkers, N. Y. Temperature controlling apparatus. 1,904,020; Apr. 18.
Wappler, Reinhold H., Yonkers, N. Y. Temperature controlling apparatus. 1,904,587; Apr. 18.
Ward Compressing Machine Company. (See Javery, Frank E., assignor.)
Wassall, Allen D. (See Richardson, L. W., and Wassall.)
Wasson, Orie E., assignor to The Bessemer Cement Corporation, Youngstown, Ohio. Mortar cement. 1,904,909; Apr. 18.
Waters, Daniel V. (See Johnson, F. V., Hanson, and Waters.)
Watson, Claude G., Pasadena, assignor of one-half to J. Byers and G. D. Gottschick, Pasadena, Calif. Salt and pepper shaker. 1,904,787; Apr. 18.
Watson, Hathaway. (See MacCaskie, Thomas M., assignor.)
Watson-Stillman Co., The. (See Davis, Frank L., jr., assignor.)
Wattle, William M., Worcester, and K. S. Whitten, Auburn, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Reversing multiplier. 1,904,238; Apr. 18.
Watts, Frank E., assignor to Hupp Motor Car Corporation, Detroit, Mich. Rear end construction for vehicle bodies. 1,904,841; Apr. 18.
Watts, Rhea N., Baton Rouge, La., assignor to Standard-I. G. Company. Recovering valuable materials from spent catalysts. 1,904,582; Apr. 18.
Waugh Equipment Co. (See O'Brien, Richard J., assignor.)
Weber, Hermann, Dusseldorf, and W. Pape, Benrath-on-the-Rhine, assignors to the Firm Henkel & Cie. Gesellschaft mit beschrankter Haftung, Dusseldorf, Germany. Apparatus for producing soaps. 1,904,021; Apr. 18.
Webster, Mary E., Duncan, Okla. Fly screen. 1,904,085; Apr. 18.
Wechsberg, Anna M. C., et al, trustees. (See Coppus, Frans H. C., assignor.)
Weldrich, Orrin, Kenmore, N. Y. Surface conditioning machine. 1,904,893; Apr. 18.
Weiland, Henry J. (See Gubelmann, I., Weiland, and Stallmann.)
Weinberg, Isidor, Brooklyn, N. Y. Curtain rod. 1,904,588; Apr. 18.
Weinberger, Julius, New York, N. Y., assignor to Radio Corporation of America. Motion picture theater and apparatus. 1,903,950; Apr. 18.
Weingartner, Anthony E., Bethlehem, assignor to American Engineering Company, Philadelphia, Pa. Tubular fluid-cooled walls. 1,904,182; Apr. 18.
Weissenburger, Adolf, Evillard, assignor to the Firm, Hermann Thorens, S. A., Ste.-Croix, Switzerland. Pyrophoric lighter. 1,904,299; Apr. 18.
Wells, Alfred A., Roselle Park, N. J., assignor to Standard Oil Development Company. Treating oils. 1,904,188; Apr. 18.
Wells, Merritt R., Cleveland Heights, and F. F. Hillix, Lakewood, assignors to The Gibson Art Company, Cincinnati, Ohio. Knotting mechanism. 1,904,704; Apr. 18.
Wells, Sidney D., Port Edwards, Wis. Manufacturing distillable spirits by fermentation. 1,904,589; Apr. 18.
Wendorf, Albert E. O., Wauwatosa, Wis. Router gauge and guide. 1,904,109; Apr. 18.
Werts, Daniel L., assignor to Eclipse Machine Company, Elmira, N. Y. Automatic starting mechanisms for internal combustion engines. 1,904,184; Apr. 18.
Westad, Daniel, Bygdoy, near Oslo, Norway. Process and apparatus for the manufacture of cellulose. 1,904,894; Apr. 18.
Westcott, Ernest W., Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation. Treating iron ores. 1,904,583; Apr. 18.
Western Electric Company. (See Babbitt, Bethel J., assignor.)
Western Electric Company. (See Bartley, Charles B., assignor.)
Western Electric Company. (See Beavers, Roy J., assignor.)
Western Electric Company. (See Bedford, Leslie H., assignor.)
Western Electric Company. (See Carter, Herbert F., assignor.)
Western Electric Company. (See Dean, Reginald S., assignor.)
Western Electric Company. (See Gray, Frank, assignor.)
Western Electric Company. (See Griffin, J. T., Deane, and Cureton, assignors.)
Western Electric Company. (See Hoffman, Carl R., assignor.)
Western Electric Company. (See Johnson, F. V., Hanson, and Waters, assignors.)
Western Electric Company. (See Jongedyk, Ralph, assignor.)
Western Electric Company. (See Larsen, Elmer W., assignor.)
Western Electric Company. (See Maloc, Anthony, assignor.)
Western Electric Company. (See Markuson, Oscar S., assignor.)
Western Electric Company. (See McGuire, Lee E., assignor.)
Western Electric Company. (See McIlvried, Edwin J., assignor.)
Western Electric Company. (See Parks, Robert R., jr., assignor.)
Western Electric Company. (See Schmied, James W., assignor.)

Western Electric Company. (See Scranton, De Hart G., assignor.)
Western Electric Company. (See Seeley, George A., assignor.)
Western Electric Company. (See Shea, Parke L., assignor.)
Western Electric Company. (See Shimizu, Rinjiro, assignor.)
Western Electric Company. (See Zelenka, Joseph J., assignor.)
Western Union Telegraph Company, The. (See Blanton, William B., assignor.)
Westinghouse Lamp Company. (See Fagan, James M., assignor.)
Wexler, Meyer, Carteret, assignor to Foster Wheeler Corporation, New York, N. Y. Refrigeration. 1,904,590; Apr. 18.
Wheeler, Harold A., Great Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J. Low frequency amplifier. 1,904,185; Apr. 18.
Wheeler, Walter H., jr., and J. W. Ogden, assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn. Preventing taking of fraudulent impressions from postage meter machines. 1,904,638; Apr. 18.
Whitehead, Alexander G., Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y. Spindle bearing. 1,904,236; Apr. 18.
Whitehead, William. (See Dreyfus, C., and Whitehead.)
Whiteman, James L., Putney, London, England. Carburetor. 1,904,022; Apr. 18.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Brake mechanism. 1,904,186; Apr. 18.
Whitney, Maurice P., assignor to Eclipse Machine Company, Elmira, N. Y. Automatic starting mechanism for internal combustion engines. 1,904,187; Apr. 18.
Whitten, Karl S. (See Wattle, W. M., and Whitten.)
Wico Electric Company. (See Harmon, Kenneth A., assignor.)
Wideman, Louis, A. W. Anderson, and P. L. Rider, Worcester, Mass. Gasket. 1,904,910; Apr. 18.
Widener, Sterling J., Augusta, Ga. Hydraulic jack. 1,903,887; Apr. 18.
Widmer, Stefan, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland. Electric current rectifier. 1,904,236; Apr. 18.
Wiggins, John H., Tulsa, Okla. Floating deck for liquid storage tanks. 1,904,239; Apr. 18.
Wilcox, William D., Idaho Falls, Idaho. Converting natural gas and similar gaseous hydrocarbons into a mixture of carbon monoxide and hydrogen in controlled proportions. 1,903,945; Apr. 18.
Wildhaber, Ernest, Brooklyn, assignor to Gleason Works, Rochester, N. Y. Tool for cutting gears. 1,904,584; Apr. 18.
Willard Storage Battery Company. (See Severance, Malvern W., assignor.)
Willekens, Jacobus J. C., Brussels, Belgium, assignor to The General Carbonalpha Company, Wilmington, Del. Manufacture of carbon by dissociation of carbon monoxide starting from a combustible treated in a gas producer. 1,904,585; Apr. 18.
Willheim, William, New York, N. Y. Textile fabric or similar article. Des. 89,665; Apr. 18.
Willheim, William, Co. (See Steinhols, Gertrude, assignor.)
Willheim, William, Co. (See Virgile, Gabriel, assignor.)
Williams, Edward T., Pelham Manor, N. Y. Temperature control chamber. 1,903,951; Apr. 18.
Williams, John J., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Machine for vacuum sealing. 1,904,842; Apr. 18.
Williams, Lynn A., et al., trustee. (See Stokes, Charles L., assignor.)
Willis, Ote C., Lakewood, assignor to The Hoover Company, North Canton, Ohio. Suction cleaner. 1,904,972; Apr. 18.
Willmann, Paul, Merion, Pa. Window construction. 1,904,110; Apr. 18.
Willoughby, John A., Cambridge, Mass. Piloting system. 1,903,846; Apr. 18.
Willoughby, Robert S., Denver, Colo. Main switch and fuse cabinet. 1,904,911; Apr. 18.
Wilson, Louis, Brooklyn, assignor to B. L. Nicholes & Company, New York, N. Y. Powder distributing machine. 1,904,591; Apr. 18.
Windecker, Robert R., Painesville, Ohio. Manufacture of cement. 1,904,639; Apr. 18.
Windecker, Robert R., Painesville, Ohio. Manufacture of cement. 1,904,640; Apr. 18.
Wine, William H., Toledo, Ohio, and B. W. Kadel, Baltimore, Md. Door mechanism for railway cars. 1,904,022; Apr. 18.
Winkler, Karl. (See Pier, M., and Winkler.)
Winkler, Karl, and K. Wissel, Ludwigshafen-on-the-Rhine, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Conversion of carbonaceous solids into valuable liquid products. 1,904,536; Apr. 18.
Winthrop Chemical Company. (See Günzler, H., and Neubert, assignors.)
Winton, Ralph M. (See Falcona, P., and Winton.)
Wired Radio, Inc. (See Goddard, Louis A., assignor.)
Wired Radio, Inc. (See Gearhart, L. A., and Rudolph, assignors.)
Wired Radio, Inc. (See Hentschel, Ernest R., assignor.)
Wired Radio, Inc. (See Hyland, Lawrence A., assignor.)
Wired Radio, Inc. (See Taylor, Albert H., assignor.)
Wirén, Oscar A., Stockholm, Sweden. Arrangement in digesters adapted for manufacturing cellulose and washing with circulation effected by a centrifugal pump. 1,904,810; Apr. 18.
Wissel, Kurt. (See Winkler, K. and Wissel.)
Wissler, William A., Jackson Heights, N. Y., assignor to Haynes Stellite Company. Welding rod and making the same. 1,903,952; Apr. 18.
Wistrand, Gunnar, Berlin, Germany, assignor to Aktiebolaget Svenska Kullagerfabriken, Gothenburg, Sweden. Bearing mounting. 1,904,258; Apr. 18.
Withington, Winthrop, assignor to The American Fork & Hoe Company, Cleveland, Ohio. Rake. 1,904,843; Apr. 18.
Wolf, Fred L., assignor to The Ohio Brass Company, Mansfield, Ohio. Section insulator. 1,904,844; Apr. 18.
Wolf, Peter, Essen, assignor to Fried Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Metal drum. 1,904,755; Apr. 18.
Wolters, Carl F., Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y. Monolithic filing cabinet and attachments therefor. 1,904,912; Apr. 18.
Wood, John W., jr., New York, N. Y. Airport construction. 1,903,847; Apr. 18.
Wood, Vera L., et al., trustee. (See Coppus, Frans H. C., assignor.)
Wooster, Philip A., San Francisco, Calif. Dispensing device. 1,904,756; Apr. 18.
Wootton, Thomas W. (See Malcolm, J. A., and Wootton.)
Worth, Daniel B., Rochelle, Ill. Railway locomotive. Des. 89,666; Apr. 18.
Worthington Ball Company, The. (See Reichard, Willis E., assignor.)
Wray, Edwin P., White Salmon, Wash. Apple. Pl. Pt. 61; Apr. 18.
Wray, Omer. (See Wagner, Henry H. and C. L., assignors.)
Wright, Harry S., Reading, Mass. Pipe-trap cover. 1,904,840; Apr. 18.
Wright, Leonard K., Jackson Heights, assignor to Frecsidor Syndicate, New York, N. Y. Refrigeration apparatus. 1,904,024; Apr. 18.
Wright, Mary D., executrix. (See Kahrs, Henry, assignor.)
Wright, Sumner B., South Orange, and D. Mitchell, Martinsville, N. J., assignors to American Telephone and Telegraph Company. Two-way telephone system. 1,903,888; Apr. 18.
Wunsche, Wilhelm, Detroit, Mich. Buckle. 1,903,856; Apr. 18.
Wyant, Mott, Greenfield, Ind. Glass tank furnace. 1,904,111; Apr. 18.
Yale & Towne Manufacturing Company, The. (See Mosely, William P., assignor.)
Yamashita, Takehiro, Koishikawa-Ku, Tokyo, Japan. Double-color mechanical pencil or sharp pencil. 1,903,800; Apr. 18.
Yates, Sampson W. (See Cain, J. R., and Yates.)
Yobe, Perry P., North Hollywood, Calif., assignor to Koehring Company, Milwaukee, Wis. Consistency controlling mechanism for concrete mixers. 1,904,025; Apr. 18.
York Ice Machinery Corporation. (See Ruff, Alonzo W., assignor.)
York Water Corporation, Ltd. (See Alex, Max, assignor.)
Young, James H., assignor to H. H. Robertson Company, Pittsburgh, Pa. Antistick coating material. 1,904,841; Apr. 18.
Young, Philip L., New York, N. Y., and W. V. Hanks and G. H. Freyermuth, Baton Rouge, La., assignors to Standard Oil Development Company. Manufacture of hydrogen. 1,904,892; Apr. 18.
Young, Philip L., Elizabeth, N. J., and W. V. Hanks, Baton Rouge, La., assignors to Standard Oil Development Company. Manufacture of gas rich in free hydrogen. 1,904,893; Apr. 18.
Young, Thomas, Nurseries, Inc. (See Holmes, Jesse H., assignor.)
Yungman, Alfred T., Akron, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio. Wire drawing mechanism. 1,904,965; Apr. 18.
Zahm, Joseph D., and J. U. Lehn, Lititz, Pa. Animal trap. 1,904,188; Apr. 18.
Zahn, George H., Freedom, Pa. Hydraulic transmission mechanism. 1,904,811; Apr. 18.
Zaiger, Louis. (See Zaiger, Max and L.)
Zaiger, Max, Swampscott and L. Zaiger, Lynn, Mass. Splash flap for automobiles. 1,904,242; Apr. 18.
Zaiger, Max, Swampscott, and L. Zaiger, Lynn, Mass. Splash flap for automobiles. 1,904,243; Apr. 18.

Zanzi, Albino. (See Ferrando, A., and Zanzi.)
Zanzi, Ditta Giovanni. (See Ferrando, A., and Zanzi, assignors.)
Zeiss, Carl, the Firm. (See Henkel, W., and Meyer, assignors.)
Zeissel, Fred, et al. (See Heigl, Ludwig, assignor.)
Zelenka, Joseph J., La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y. Forming molded articles. 1,904,845; Apr. 18.
Zell, Lucian M., Essex County, N. J. Jewel and setting therefor. 1,904,259; Apr. 18.
Zellstoffabrik Waldhof. (See Hottenroth, V., and Faust, assignors.)
Zeratsky, August W. (See Starch, Benjamin S., assignor.)
Zeta-Bauweise G. m. b. H. (See Sander, O., and König, assignors.)
Zimmer Manufacturing Company. (See Ettinger, Joe J., assignor.)

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 18TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Abrasive coated material. H. N. Morris. 1,904,663; Apr. 18.
Acetylene and hydrogen, Production of. O. Eisenhut. 1,904,426; Apr. 18.
Acid aryllides of the benzene series and making same, Carboxylic. L. Laska and O. Haller. 1,903,899; Apr. 18.
Acid groups from dihydroxydiaminoanthraquinonedisulphonic acid, Eliminating sulphonic. P. Grossman. 1,903,862; Apr. 18.
Acid, Manufacture of acetic. S. R. Merley and O. Spring. 1,904,160; Apr. 18.
Acid of the diphenyl-methane series and preparing the same, Organic. I. Gubelmann, H. J. Welland, and O. Stallmann. 1,904,366; Apr. 18.
Acid solutions of secondary and tertiary alcohols, Producing and distilling aqueous sulphuric. B. T. Brooks. 1,904,200; Apr. 18.
Acids and preparing same, Fatty. R. T. Haslam. 1,904,452; Apr. 18.
Acids, Manufacture of low boiling tar. S. Caplan. 1,904,269; Apr. 18.
Acoustical board and the like, Method and machinery for the manufacture of. F. S. Farley. 1,904,285; Apr. 18.
Adhesive and making same. G. V. Caesar. 1,904,619; Apr. 18.
Adjustable washer. G. C. Royse. 1,904,296; Apr. 18.
Aerodynamic surface. V. Lougheed. 1,903,823; Apr. 18.
Aeroplane. T. M. MacCaskie. 1,904,923; Apr. 18.
Agitating apparatus. E. D. McCaddam. 1,904,796; Apr. 18.
Aircraft. C. D. Ellington. 1,904,281; Apr. 18.
Aircraft, Apparatus for determining the speed of flight of. C. von Hofe and J. Boykow. 1,903,886; Apr. 18.
Aircraft propeller, Rotary wing. C. E. Ohnsorg. 1,904,746; Apr. 18.
Aircraft propulsion. A. Hall-Brown. 1,904,134; Apr. 18.
Air for a furnace, Heating combustion. C. E. Lucke. 1,904,153; Apr. 18.
Air-lift trap, Siphonic. W. R. Brandau. 1,903,773; Apr. 18.
Air, Method and apparatus for conditioning. A. D. Karr and K. D. Perkins. 1,904,468; Apr. 18.
Airplane. V. Belimd. 1,903,752; Apr. 18.
Airplane and dirigible control apparatus, Automatic. N. C. Piutino. 1,904,801; Apr. 18.
Airport construction. J. W. Wood, jr. 1,903,847; Apr. 18.
Air refrigerating device. G. W. Cole. 1,903,777; Apr. 18.
Air register, Key operated warm. W. T. Truax. 1,904,636; Apr. 18.
Air washing and the like. W. A. Smith. 1,904,667; Apr. 18.
Alarm for typewriters. W. F. H. Mann. 1,904,744; Apr. 18.
Alarm system for cables, Gas pressure. T. C. Heaneberger. 1,904,227; Apr. 18.
Aldehydes, Production of aromatic. A. E. Craver. 1,904,414; Apr. 18.
Alloy, Ferrous. R. S. Dean. 1,904,859; Apr. 18.
Alloys, Nitriding ferrous. J. J. Egan. 1,904,425; Apr. 18.
Alloys, Production of. D. M. Scott. 1,904,761; Apr. 18.
Aluminum alloy. C. C. Titus. 1,903,842-3; Apr. 18.
Aluminum chloride and alumina, Production of. S. S. Svendsen. 1,904,762; Apr. 18.
Aluminum silicate refractories, Casting of. F. W. Schroeder. 1,903,944; Apr. 18.
Amino-alcohols, Manufacture of secondary aromatic. H. Legerlotz. 1,903,927; Apr. 18.
Ammonium sulphate, Producing. H. Baehr. 1,904,604; Apr. 18.
Amplifier. K. Posthumus. 1,904,524; Apr. 18.
Amplifier, Low frequency. H. A. Wheeler. 1,904,185; Apr. 18.
Amusement device. C. R. Graham. 1,903,995; Apr. 18.
Anchor, Fence post. J. F. Swenson. 1,904,177; Apr. 18.
Animal fibers fast tints, Dyeing. F. Straub and H. Schneider. 1,903,884; Apr. 18.
Animal trap. J. D. Zahm and J. U. Lehn. 1,904,188; Apr. 18.
Animated and changeable sign, Combined. R. M. Andersen. 1,904,908; Apr. 18.
Anode for water-cooled vacuum tubes. R. Shimizu. 1,903,945; Apr. 18.
Antenna system. L. A. Gebhard and R. B. Meyer. 1,903,811; Apr. 18.
Anthraquinoneacridones and making same, Halogenated. W. Bruck. 1,903,891; Apr. 18.
Antigiare device. W. L. Dysart. 1,903,917; Apr. 18.
Apple. E. P. Wray. Pl. Pt. 61; Apr. 18.
Appliance for use in hair waving. W. and H. MacDonald. 1,904,064; Apr. 18.
Arch particularly for use in metallurgical furnaces. W. Alberts. 1,904,596; Apr. 18.
Arch support, Adjustable. J. C. Howell. 1,904,789; Apr. 18.
Arch support for shoes. J. C. Howell. 1,904,790; Apr. 18.
Armature windings, Protection for. A. Oldenburg. 1,904,514; Apr. 18.
Armrest. C. R. Pittman. 1,904,800; Apr. 18.
Aromatic compounds, Halogenation of. M. A. Kunz, K. Koeberle, and E. Berthold. 1,904,145; Apr. 18.
Aromatic compounds, New colloidal mercurized hydroxy. H. Gänsler and O. Neubert. 1,903,895; Apr. 18.
Article-collecting machine. C. T. Brarea. 1,904,618; Apr. 18.
Article of manufacture, Producing an. H. L. Crowley. 1,904,273; Apr. 18.
Articles from celluloid and the like, Manufacturing. S. A. Neidich and W. Mendel. 1,904,289; Apr. 18.
Articles, Manufacture of formed. F. L. Brennen. 1,904,268; Apr. 18.
Artificial masses, Manufacture of. W. Pungs and K. Eisenmann. 1,904,529; Apr. 18.
Artillery computing system. H. C. Ford. 1,904,215; Apr. 18.
Attachment plug. J. B. Magee. 1,904,691; Apr. 18.
Automatic control switch. L. C. Irwin. 1,903,924; Apr. 18.
Automatic machine for the manufacture of soap bars. A. T. Hänten. 1,903,920; Apr. 18.
Automobile differential. C. N. McManis. 1,904,797; Apr. 18.
Automobile servicing machine. W. T. Carter. 1,903,905; Apr. 18.
Automotive tool. G. F. Fagan. 1,903,755; Apr. 18.
Auto-plate. D. J. Kelley. Des. 89,641; Apr. 18.
Axle structure. D. Parrett. 1,903,913; Apr. 18.
Bag: *See*—
Clothes bag. Ice delivery bag.
Golf bag.
Ball, Golf. W. E. Reichard. 1,904,012; Apr. 18.
Banquet table. R. C. Kuhn. 1,904,060; Apr. 18.
Bar: *See*—
Tone bar.
Base-exchange substances, Regenerating. O. R. Sweeney. 1,903,949; Apr. 18.
Basket, Shipping. J. B. Steel. 1,903,797; Apr. 18.
Batch dividing and covering means. J. M. Titcomb. 1,904,905-6; Apr. 18.
Battery handle. M. W. Severance. 1,904,887-8; Apr. 18.
Battery post clamp. B. M. Schmuhl. 1,904,954; Apr. 18.
Battery support. R. J. Kissinger. 1,904,620; Apr. 18.
Bearing: *See*—
Spindle bearing. Supporting bearing.
Bearing. C. B. Haskins. 1,904,451; Apr. 18.
Bearing and application thereof. E. C. Cope. 1,904,208; Apr. 18.
Bearing roller. P. S. Rydbeck. 1,904,253; Apr. 18.
Bearing within a pulley, Securing a. G. H. Clark and J. L. Deters. 1,903,776; Apr. 18.
Bed. W. C. Massiow. 1,903,901; Apr. 18.
Bed, Cooling. G. L. Fisk. 1,904,484; Apr. 18.
Bed, Pet's. L. Larson. Des. 89,646; Apr. 18.
Belt detector and safety device, Broken. A. A. Bianchi. 1,904,351; Apr. 18.
Belt fitter. M. E. Hill. 1,904,048; Apr. 18.
Bending machine. A. Wagenbach. 1,903,799; Apr. 18.
Binder and holder for writing implements, Loose leaf. C. D. Trussell. 1,904,572; Apr. 18.
Biscuits and the like, Icing. R. F. MacFarlane and W. H. Prescott. 1,904,742; Apr. 18.
Bit: *See*—
Tool bit.
Bloating of earthy materials, Promoting the. S. Q. Lee. 1,903,821; Apr. 18.
Block: *See*—
Cutter-chain block. Hat block.
Block for wells, Bridging. B. H. Davis. 1,904,275; Apr. 18.
Blower or pump, Reversible rotary. V. A. Kjaer. 1,904,056; Apr. 18.
Board: *See*—
Drawing board. Resistance panel board.
Boat propelling system. J. Kessler. 1,904,792; Apr. 18.

Body exercising apparatus. E. A. Bruder. 1,904,089; Apr. 18.
Boiler: *See*—
Steam boiler.
Boiler. W. Doble. 1,903,807; Apr. 18.
Book cover. M. Reiss. 1,904,532; Apr. 18.
Bookmaking machine attachment. B. Levine. 1,904,645; Apr. 18.
Book stock washer. G. G. McArthur. 1,904,066; Apr. 18.
Booster. R. P. Wagner. 1,904,181; Apr. 18.
Bore hole surveying apparatus. A. Anderson. 1,903,969; Apr. 18.
Bottle. E. H. Fabrice. Des. 89,632; Apr. 18.
Bottle capper. H. J. Lebbers. 1,903,822; Apr. 18.
Bottle capper. H. G. Rice. 1,904,828; Apr. 18.
Bottle carrier, Metal. P. Vignos. 1,904,019; Apr. 18.
Bottle, Culture. R. M. Halbach. 1,904,222; Apr. 18.
Bottle rinsing mechanism. J. R. Gruetter. 1,904,685; Apr. 18.
Box: *See*—
Newspaper box. Pasteboard box.
Paper flower box. Stuffing box.
Box. R. L. Bangs and W. A. Hermanson. 1,904,400; Apr. 18.
Box and cigarette paper holder, Combined tobacco. J. K. Brzezicki. 1,904,777; Apr. 18.
Boxes, Making metal. R. V. Burdick. 1,904,778; Apr. 18.
Brake: *See*—
Centrifugal brake. Hand brake.
Brake. V. Bendix and L. E. La Brie. 1,904,262; Apr. 18.
Brake device. F. O. Vaughn. 1,904,178; Apr. 18.
Brake equaliser. O. M. Lewis. 1,904,004; Apr. 18.
Brake for use on vehicles. E. B. Boughton. 1,903,973; Apr. 18.
Brake lock, Permanent and temporary. H. Liva. 1,904,794; Apr. 18.
Brake mechanism. M. P. Whitney. 1,904,186; Apr. 18.
Brake mechanism for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,904,266; Apr. 18.
Brake rigging for railway cars. C. Hankins. 1,903,997; Apr. 18.
Brake rigging for railway cars. C. Hankins. 1,904,185; Apr. 18.
Brake system, Automotive. C. A. Campbell. 1,903,978; Apr. 18.
Brake system for automotive vehicles. C. S. Bragg and V. W. Kliesrath. 1,904,267; Apr. 18.
Brake tester. F. S. Belknap. 1,904,713; Apr. 18.
Breast lift. J. J. Wallace. 1,904,637; Apr. 18.
Bridge for an ophthalmic mounting. C. O. Cozzens. Des. 89,610; Apr. 18.
Broom rack. J. M. Smygel. 1,903,796; Apr. 18.
Brush. S. Aki. 1,904,260; Apr. 18.
Brush and like brush, Shaving. M. L. Bramson. 1,904,612; Apr. 18.
Brush, Cleaning. G. V. Evans. 1,904,041; Apr. 18.
Brush, Cleaning and washing. H. Beisser. 1,904,940; Apr. 18.
Brush, Floor and wall. A. E. Baker. 1,904,774; Apr. 18.
Brush, Sanitary. E. Currie. 1,904,917; Apr. 18.
Brush shaft holding and driving means for vacuum cleaners. L. W. Richardson and A. D. Wassall. 1,903,794; Apr. 18.
Bucket wheel. J. H. Doran. 1,904,421; Apr. 18.
Buckle. W. Wunsche. 1,903,856; Apr. 18.
Buckle, Belt. G. J. Fromm. Des. 89,634–6; Apr. 18.
Building column and display case, Combined. R. N. Aldrich. Des. 89,607–9; Apr. 18.
Building construction. M. F. Burk. 1,904,404; Apr. 18.
Building, Farm. F. J. Kreutzer. Des. 89,643–5; Apr. 18.
Burglarproof lock. W. Prior, jr. 1,904,882; Apr. 18.
Burner: *See*—
Gas burner. Oil burner.
Bust uplift. A. M. Le May. 1,904,644; Apr. 18.
Butter and like molding device. J. Bens. 1,904,714; Apr. 18.
Button. L. R. Carley. Des. 89,625; Apr. 18.
Cabinet and attachments therefor, Monolithic filing. C. F. Wolters. 1,904,912; Apr. 18.
Cabinet for keeping sound records. N. Crouset. 1,904,824; Apr. 18.
Cabinet, Main switch and fuse. R. S. Willoughy. 1,904,911; Apr. 18.
Cabinet, Paper. A. L. Saunders. 1,904,297; Apr. 18.
Cable. F. M. Potter. 1,904,525–7; Apr. 18.
Cable anchorage, Submarine. C. A. Chase. 1,904,271; Apr. 18.
Cable connecter. S. N. Buchanan. 1,904,617; Apr. 18.
Cable connecter. L. H. Church. 1,904,409; Apr. 18.
Cable, Electric. O. S. Markuson. 1,904,878; Apr. 18.
Cable, Electric. P. L. Shee. 1,904,887; Apr. 18.
Cable, Electrical. M. A. Kent. 1,904,472; Apr. 18.
Cable, Electrical. H. Milliken. 1,904,162; Apr. 18.
Cable maintenance apparatus. T. C. Henneberger. 1,904,226; Apr. 18.
Cable, Steel aluminium. R. Baum. 1,904,116; Apr. 18.
Cable, Submarine signaling. O. E. Buckley. 1,903,975; Apr. 18.
Cadmium-nickel alloy. C. E. Swartz and A. J. Phillips. 1,904,175–6; Apr. 18.
Calcium gluconate solution, Supersaturated. A. Stoll and E. Rothlin. 1,904,287; Apr. 18.
Calcium nitrate from dolomite while simultaneously obtaining magnesia, Producing. O. Kippe. 1,904,946; Apr. 18.
Can unloader. R. Douglass. 1,904,720; Apr. 18.
Can washing machine. H. L. Solie and N. J. Hedlund. 1,904,391; Apr. 18.
Capping table. A. S. Chandler. 1,903,980; Apr. 18.
Caps, Apparatus for forming sheet metal. J. M. Hothersall. 1,904,920; Apr. 18.
Capstan. G. A. Seeley. 1,904,885; Apr. 18.
Car construction. O. C. Duryea. 1,904,293–4; Apr. 18.
Car coupler. D. Robinson. 1,904,171; Apr. 18.
Car, Dump. E. Haugen. 1,904,453; Apr. 18.
Carbonaceous solids into valuable liquid products, Conversion of. K. Winkler and K. Wissel. 1,904,586; Apr. 18.
Carbonaceous material, Producing. A. Oberle. 1,903,634; Apr. 18.
Carbon black, Production of. T. P. Keller. 1,904,469; Apr. 18.
Carbon by dissociation of carbon monoxide starting from a combustible treated in a gas producer, Manufacture of. J. J. C. Willekens. 1,904,585; Apr. 18.
Carburetor. C. H. Kirby. 1,904,002; Apr. 18.
Carburetor. J. L. Whiteman. 1,904,022; Apr. 18.
Card, Display. J. Horwath. 1,904,659; Apr. 18.
Card holder. E. A. Rasbridge. 1,903,941; Apr. 18.
Card holder, Visible record. S. Barlow. 1,904,249; Apr. 18.
Carrier: *See*—
Bottle carrier.
Carrier case. E. B. Turner. 1,903,798; Apr. 18.
Carrier for motor vehicles, Luggage. J. B. Ambrosius. 1,904,114; Apr. 18.
Case: *See*—
Carrier case. Key case.
Casing: *See*—
Thermometer casing.
Casing, Instrument. W. D. Teague. Des. 89,620; Apr. 18.
Casing shoe, Well. J. J. Larkin. 1,904,317; Apr. 18.
Casket, Burial. S. Junkunc, jr. Des. 89,623; Apr. 18.
Casting hollow bodies in chill molds rotatable about vertical axes, Apparatus for. A. Keup. 1,904,831; Apr. 18.
Casting pots of linotype and similar machines working with soft metals, Device for feeding the. K. Bader. 1,903,751; Apr. 18.
Catalyst for oxidizing carbon monoxide in exhaust gases. M. E. Barker. 1,903,803; Apr. 18.
Catalyst used in the preparation of hydrogen, Reactivation of. G. H. Freyermuth and W. V. Hanks. 1,904,440; Apr. 18.
Catalysts, Restoring the activity of hydrogenation. J. A. Franceway. 1,904,218; Apr. 18.
Cathode, Indirectly heated. L. H. Bedford. 1,904,261; Apr. 18.
Cathodes, Manufacture of photo-electric. N. R. Campbell. 1,904,895; Apr. 18.
Cellulose or celluiosic products, Manufacture of. H. Dreyfus. 1,903,962; Apr. 18.
Cellulose, Process and apparatus for the manufacture of. D. Westad. 1,904,894; Apr. 18.
Cellulose raw material of all kinds. V. Hottenroth and O. Faust. 1,904,235; Apr. 18.
Cement, Manufacture of. R. E. Windecker. 1,904,639–40; Apr. 18.
Cement material, Fire grinding of. C. Pontoppidan. 1,904,523; Apr. 18.
Cement, Mortar. O. E. Wasson. 1,904,909; Apr. 18.
Cement, Production of. J. A. Singmaster. 1,904,699; Apr. 18.
Cementing machine. G. G. Albert. 1,904,812; Apr. 18.
Center locating device. H. F. Kieckhefer. 1,904,242; Apr. 18.
Centrifugal brake. F. H. Schwerin. 1,904,069; Apr. 18.
Centrifugal drier. R. W. Rigler. 1,903,795; Apr. 18.
Chain: *See*—
Dobby pattern chain.
Chain and making the same, Reenforced. W. B. Lashar. 1,904,479; Apr. 18.
Chain fastener. F. E. Thompson. 1,904,102; Apr. 18.
Chair: *See*—
Folding chair. Terrace chair.
Chair or settee bedstead. H. A. Fraser and P. F. Crighton. 1,903,918; Apr. 18.
Channeling machine. A. U. Croce. 1,904,415; Apr. 18.
Charge forming device. N. Straussler. 1,904,701; Apr. 18.
Charge forming device. W. H. Teeter. 1,904,624; Apr. 18.
Chart, Display grease. D. L. Conklin. 1,904,356; Apr. 18.
Chemical reactions, Method and apparatus for carrying out. M. C. Taylor and C. N. Richardson. 1,904,101; Apr. 18.
Chlorhydrins, Preparation of. L. W. Cook. 1,904,677; Apr. 18.
Chloride, Producing vinyl. F. K. Fertsch. 1,903,894; Apr. 18.
Chlorine dioxide, Manufacturing. W. Becher. 1,904,190; Apr. 18.
Chromium, Electrodepositing. C. G. Fink. 1,904,432; Apr. 18.
Chuck for tapping machines, Floating. W. D. Rigney. 1,904,883; Apr. 18.
Cigar and cigarette holder. A. Anselewitz. 1,904,814; Apr. 18.
Cigarette holder. A. G. Sweet. 1,904,903; Apr. 18.

Circuit arrangement, Electron discharge device. L. A. Hyland. 1,904,142; Apr. 18.
Circuit, Crystal rejector. W. S. Barden. 1,904,605; Apr. 18.
Circuit for electric discharge devices. J. L. Reynolds. 1,904,533; Apr. 18.
Circuit for enameling furnaces, Protective. R. D. Van Nordstrand. 1,904,580; Apr. 18.
Circuit for telegraph exchanges, Message register. A. B. Dickinson. 1,903,278; Apr. 18.
Circuit interrupter, Electric. W. B. Paul. 1,904,519; Apr. 18.
Circuit interrupter, Gas blast. W. Uebermuth. 1,904,577; Apr. 18.
Circuit interrupting apparatus. J. D. Hilliard. 1,904,463; Apr. 18.
Circuit interruption, Method of and apparatus for gas blast. S. Ruppel. 1,904,529; Apr. 18.
Circuit, Magnetic return. E. F. Northrup. 1,904,665; Apr. 18.
Circuit, Push-pull amplifier. F. Thorington. 1,904,103; Apr. 18.
Circuit, Vacuum tube amplifier. V. Cousins. 1,904,272; Apr. 18.
Clamp: *See*—
Battery post clamp. Hair waving clamp.
Cleaner: *See*—
Suction cleaner. Vacuum cleaner.
Cleaning apparatus. M. H. Bissell. 1,904,818; Apr. 18.
Clip: *See*—
Pen clip.
Clock, Continuous alarm. P. V. Vandevelde. 1,904,579; Apr. 18.
Closure and lock. A. Johnson. 1,903,765; Apr. 18.
Closure for containers. A. F. Kroen. 1,904,739; Apr. 18.
Closure-holding and return spring. W. J. Hyde. 1,903,923; Apr. 18.
Clothes bag. A. J. Lichtig. Re18,799; Apr. 18.
Clutch: *See*—
Multiple disk clutch. Positive-action clutch.
Clutch. W. F. Goehring. 1,903,963; Apr. 18.
Clutch for hoisting drums. A. C. Benson. 1,904,350; Apr. 18.
Clutch for transmission plate. I. Saks. 1,904,953; Apr. 18.
Clutching device. C. A. Rudqvist. 1,903,943; Apr. 18.
Coal cutting machine. N. D. Levin. 1,904,488; Apr. 18.
Coal mining apparatus. N. D. Levin. 1,904,489; Apr. 18.
Coal substitute, Manufacture of a. J. L. Marek. 1,904,833; Apr. 18.
Coat and trouser hanger. E. A. De Bucci. 1,903,277; Apr. 18.
Coating material, Antistick. J. H. Young. 1,904,341; Apr. 18.
Coatings, Preparation of metallic. H. Gockel. 1,903,860; Apr. 18.
Cobalt alloy, Stain resisting. F. M. Becket. 1,904,712; Apr. 18.
Coil forming device. C. H. Thordarson. 1,904,890; Apr. 18.
Collapsible receptacle. W. J. Geist. 1,904,865; Apr. 18.
Collar support. S. R. Meaden. 1,904,566; Apr. 18.
Color photography. T. T. Baker. 1,903,971; Apr. 18.
Comb. R. F. Allin. 1,904,705; Apr. 18.
Comb and accessories therefor. M. M. Shaw. 1,904,090; Apr. 18.
Combination table. E. L. McFarland. 1,904,795; Apr. 18.
Combustion-arc process and apparatus. A. E. Greene. 1,904,688; Apr. 18.
Compotier. C. E. Keating. Des. 89,617; Apr. 18.
Compound metal stock. E. Kammerer. 1,904,241; Apr. 18.
Compounds including hydrocarbons, Apparatus for making emulsified. R. H. Russell. 1,904,952; Apr. 18.
Compressor control. A. W. Ruff. 1,903,553; Apr. 18.
Compressor, Portable. W. Prellwitz. 1,904,082; Apr. 18.
Concrete, Making. R. M. Burns. 1,903,976; Apr. 18.
Concrete mixers, Consistency controlling mechanism for. P. P. Yohe. 1,904,025; Apr. 18.
Condenser: *See*—
Variable condenser.
Condensers, Making electrical. E. E. Park, jr. 1,904,876; Apr. 18.
Conduit, Threadless fitting. A. Olevia. 1,904,627; Apr. 18.
Connecter: *See*—
Cable connecter. Terminal connecter.
Plug connecter.
Connecting rod end. H. A. Hayden. 1,903,983; Apr. 18.
Connection, Connecting rod. E. P. Wagner. 1,904,180; Apr. 18.
Container: *See*—
Display container.
Ice cream or confection container.
Container for tablets and the like, Dispensing. C. E. Raymond. 1,904,836; Apr. 18.
Container for toothbrushes. S. B. Bleaden. 1,904,609; Apr. 18.
Contours of surfaces, Apparatus for reproducing. J. A. Malcolm and T. W. Wootton. 1,904,622; Apr. 18.
Control apparatus. L. A. Gebhard. 1,903,759; Apr. 18.
Control apparatus, Constant frequency. E. R. Hentschel. 1,904,771; Apr. 18.
Control mechanism for clinching machines. H. A. Flak and J. E. Schmidt. 1,903,980; Apr. 18.
Control system. O. W. Livingston. 1,904,485; Apr. 18.
Controlling device, Automatic. R. Penn. 1,904,326; Apr. 18.
Controlling means for vehicle wheel brakes. J. B. Des Rosiers. 1,904,359; Apr. 18.
Conveyer. A. Redler. 1,904,167; Apr. 18.
Conveyer, escalator, and the like. J. H. Meacock. 1,904,068; Apr. 18.
Conveyer, Switching. H. D. Posey. 1,904,637; Apr. 18.
Cooking apparatus, Automatic. H. T. Hunter. 1,904,270; Apr. 18.
Cooler: *See*—
Lubricant cooler. Water cooler.
Cooling plants, Apparatus for the ventilation of. A. L. Thomson. 1,904,570; Apr. 18.
Cooling system. H. H. Humphreys. 1,904,686; Apr. 18.
Core-breaker. N. K. Bowman. 1,903,772; Apr. 18.
Cores for cables for communication circuits. K. Schumann. 1,904,547; Apr. 18.
Cork manufacture. W. G. Bond. 1,904,197; Apr. 18.
Corn sliker. H. R. Lewis. 1,904,740; Apr. 18.
Coupling: *See*—
Hose coupling. Shaft coupling.
Hydraulic coupling. Yielding coupling.
Coupling. Le R. Rhodes. 1,904,887; Apr. 18.
Coupling for joining pipes, rods, wires, and the like. B. N. R. Lamont. 1,903,926; Apr. 18.
Cover: *See*—
Book cover. Pipe-trap cover.
Hatch cover.
Cover for hatches. J. W. and W. Isherwood. 1,904,736; Apr. 18.
Cow tail hanger. I. A. Trowbridge. 1,904,635; Apr. 18.
Crepes with threads of cellulose acetate artificial silk, Manufacturing. C. Clemencon. 1,904,123; Apr. 18.
Crown for ladies' hats. M. Walsh. 1,904,108; Apr. 18.
Cup: *See*—
Drinking cup. Shaving cup.
Current ignition device, Constant. I. E. McCabe. 1,904,878; Apr. 18.
Current rectifier, Electric. S. Widmer. 1,904,896; Apr. 18.
Curtain beading. E. P. Bixer. 1,904,194; Apr. 18.
Curtain rod. I. Weinberg. 1,904,588; Apr. 18.
Cushion, Journal. E. J. O'Brien. 1,904,007; Apr. 18.
Cutter: *See*—
Meat cutter. Rotary cutter.
Cutter-chain block. N. K. Bowman. 1,903,771; Apr. 18.
Cutter for cutting spiral bevel gears. E. L. Pickett. 1,903,968; Apr. 18.
Cutter mechanism for mowing machines. D. H. Bennett. 1,903,753; Apr. 18.
Cyclic process for the production of sulphite pulp. G. A. Richter. 1,904,170; Apr. 18.
Cylinder construction for firearms. J. W. Harrington. 1,904,790; Apr. 18.
Cylinders for internal combustion engines. W. Hefti. 1,904,459; Apr. 18.
Dam and making same. J. B. Girard. 1,903,760; Apr. 18.
Decomposition and separation apparatus. A. Sommermeyer. 1,904,556; Apr. 18.
Decorative material. D. J. Kelman. 1,904,471; Apr. 18.
Defroster. M. E. Henning. 1,904,658; Apr. 18.
Detachable fastener. G. A. King. 1,904,055; Apr. 18.
Detergent dispensing device. J. R. Martin. 1,904,157; Apr. 18.
Detonators, percussion caps, and like articles, Manufacture of electric. D. T. Jones and F. J. Moore. 1,904,240; Apr. 18.
Dial and cylinder connection for knitting machines. W. L. Smith, jr., and R. H. Lawson. 1,904,833; Apr. 18.
Die holding means. T. M. Lilleberg. 1,903,786; Apr. 18.
Dies, Making drawing. A. Simons. 1,904,696; Apr. 18.
Digesters adapted for manufacturing cellulose and working with circulation effected by a centrifugal pump, Arrangement in. O. A. Wires. 1,904,810; Apr. 18.
Discharge apparatus. W. C. Laughlin and A. B. Asch. 1,904,062; Apr. 18.
Discharge tube. C. J. R. H. von Wedel. Re18,798; Apr. 18.
Dish handling mechanism. H. R. Brand. 1,904,198; Apr. 18.
Dishwashing machine. P. De Asis. 1,903,780; Apr. 18.
Disk-like cutting tool. G. F. Tayler. 1,904,568; Apr. 18.
Dispatch system valve, Pneumatic. J. J. Stoetzel. 1,904,006; Apr. 18.
Dispenser: *See*—
Soap dispenser.
Dispenser of the twin chamber type. W. H. Haupt. 1,904,454; Apr. 18.
Dispensing device. P. A. Wooster. 1,904,756; Apr. 18.
Display container. H. Matthews. 1,904,648; Apr. 18.
Display rack. E. B. Nunnery. 1,903,926; Apr. 18.
Dobby pattern chain. E. R. Holmes and O. V. Payne. 1,904,212; Apr. 18.
Door hinge. E. Bommer. 1,904,120; Apr. 18.
Doorlatch. E. J. Cook. 1,904,970; Apr. 18.
Doorlock. W. V. Parr, C. A. Love, and J. J. Barnes. 1,904,748; Apr. 18.
Door mechanism for railway cars. W. E. Wine and B. W. Kadel. 1,904,023; Apr. 18.

Door, Pass-type elevator. R. S. Peelle. 1,904,010; Apr. 18.
Dough, Packeting. C. Lorber. 1,904,741; Apr. 18.
Draft device. A. F. Morris. 1,904,163; Apr. 18.
Drawing board. A. W. Keuffel. 1,904,899; Apr. 18.
Dress ensemble. W. A. Strass. Des. 89,656; Apr. 18.
Drier: *See*—
Centrifugal drier. Paint drier.
Drill: *See*—
Mining drill. Push drill.
Drill mounting, Mining. L. J. Fellay. 1,904,655; Apr. 18.
Drill post, Mining. L. J. Fellay. 1,904,656; Apr. 18.
Drilling machinery. W. Sheldon. 1,904,256; Apr. 18.
Drinking cup. M. H. Sidebotham. 1,904,331; Apr. 18.
Drum, Barking. J. Strindlund. 1,904,937; Apr. 18.
Drum, Metal. P. Wolf. 1,904,755; Apr. 18.
Dump body operating mechanism. T. G. Jungersen. 1,904,922; Apr. 18.
Dye, Azo. R. Brightman. 1,904,820; Apr. 18.
Dyeing apparatus. L. B. Hasbrouck. 1,904,137; Apr. 18.
Dyestuffs and preparing same, Disazo. R. Brightman. 1,904,821; Apr. 18.
Dyestuffs and preparing the same, Azo. R. Brightman. 1,904,822; Apr. 18.
Dyestuffs of the anthrapyridone and the anthrapyrimidone series, Vat. O. Bayer and F. Baumann. 1,903,857; Apr. 18.
Dynamometer. H. Ewing and R. P. Roberts. 1,904,678; Apr. 18.
Earth boring apparatus. C. L. Powell and H. R. Smith. 1,904,249; Apr. 18.
Eaves-trough hanger. W. H. and W. J. Gray. 1,903,861; Apr. 18.
Eccentric, Adjustable throw. C. W. Mueller. 1,903,932; Apr. 18.
Educational device. F. E. Fisher. 1,904,723; Apr. 18.
Ejecting mechanism. V. A. Malec. 1,904,155; Apr. 18.
Electric controller. V. G. Apple. 1,904,818; Apr. 18.
Electric cooking. M. Schwander. 1,903,883; Apr. 18.
Electric discharge tube. C. Bol. 1,904,195; Apr. 18.
Electric heater. C. C. Abbott. 1,904,594; Apr. 18.
Electric heating and cooking appliance. E. R. del Riccio. 1,904,205; Apr. 18.
Electric lighting fixture. W. von Nessen. 1,904,703; Apr. 18.
Electric power, Method and apparatus for converting. L. A. Haseltine. 1,904,455; Apr. 18.
Electric switch. C. D. Ainsworth. 1,904,397; Apr. 18.
Electric switch. M. P. Luther. 1,903,824; Apr. 18.
Electric switch. G. Scott. 1,904,935; Apr. 18.
Electric writing-computing machine, Automatic. H. A. Footorap. 1,904,127; Apr. 18.
Electrical apparatus. H. G. Dybvig. 1,904,422; Apr. 18.
Electrical apparatus. E. G. Swanson. 1,904,565; Apr. 18.
Electrical control means for brakes. R. E. Adams. 1,903,801; Apr. 18.
Electrical instrument. B. W. St. Clair. 1,904,096; Apr. 18.
Electrical interlock. R. S. Peelle. 1,904,008; Apr. 18.
Electrical lead-in. O. Selling. 1,904,805; Apr. 18.
Electrical measuring instrument. B. W. St. Clair. 1,904,095; Apr. 18.
Electrical quantities, Method and apparatus for recording. O. A. Knopp. 1,904,029; Apr. 18.
Electrical regulating system. D. W. McLenegan. 1,904,500; Apr. 18.
Electrical regulator. E. Horowitz. 1,904,465; Apr. 18.
Electrical resistor. L. Bradley. 1,904,352; Apr. 18.
Electrical terminal. C. W. Doremus. 1,903,808; Apr. 18.
Electrical treating apparatus. E. O. Frederics. 1,904,437; Apr. 18.
Electrode for discharge tubes. J. J. Madine. 1,904,154; Apr. 18.
Electromagnetic device. B. J. Babbitt. 1,904,847; Apr. 18.
Electromagnetic tool. C. A. Hargrove. 1,904,224; Apr. 18.
Electroplating with aluminum. A. von Zeerleder. 1,904,107; Apr. 18.
Elevator system. D. L. Lindquist, E. L. Dunn, and D. C. Larson. 1,904,646–7; Apr. 18.
Eliminating system, Stray and atmospherics. J. Bethenod. 1,904,607; Apr. 18.
Emulsifying and wetting-out agents, Manufacture of. A. Rheiner. 1,903,879; Apr. 18.
Engine: *See*—
Expansion engine. Internal combustion engine.
Engine. G. A. Bartholomew. 1,904,775; Apr. 18.
Engine. J. L. Kempthorne. 1,904,873–4; Apr. 18.
Engine compressor and the like, Rotary. C. E. Trube. 1,904,892; Apr. 18.
Engine control. T. Pilla. 1,903,876; Apr. 18.
Engine with preheated air, Combustion. J. D. Morgan. 1,904,070; Apr. 18.
Epidiascope. H. Plies. 1,904,695; Apr. 18.
Esters of anthrahydroquinones, Manufacture of sulphuric. D. A. W. Fairweather and J. Thomas. 1,904,721; Apr. 18.
Esters of carboxylic acids, Preparing alkyl. W. Lommel and R. Engelhardt. 1,903,868; Apr. 18.
Esters of 2.8-amino-naphthole acid and preparing them, L. Sander. 1,903,880; Apr. 18.
Etching process and composition for use therein. M. F. Conroy. 1,903,778; Apr. 18.
Ethanol amines, Production of. E. W. Reid and D. C. Lewis. 1,904,018; Apr. 18.
Expansion engine, Multiple. L. W. Lindberg. 1,904,871; Apr. 18.
Extruding machine. V. Royle. 1,904,284; Apr. 18.
Eyelash curler. W. R. Tuttle and C. W. Stichel. 1,904,575; Apr. 18.
Fabric and sheet material and the manufacture thereof. C. Dreyfus. 1,903,960; Apr. 18.
Fastener: *See*—
Chain fastener. Separable fastener.
Detachable fastener.
Flanged corrugated fastener.
Fastener for articles to be laundered, Detachable snap. L. B. Chapman. 1,904,122; Apr. 18.
Fastener for wrist watch straps. E. C. Hildebrand. 1,904,230; Apr. 18.
Fastener inserting machine. S. L. Gookin. 1,904,306; Apr. 18.
Fastening attachment for paper bags. T. M. Royal. 1,903,839; Apr. 18.
Fastening inserting machine. C. F. R. Jeavons. 1,904,813; Apr. 18.
Fastening inserting machine. A. S. Johnson. 1,904,814; Apr. 18.
Fastening the end of a coiled member to a supporting structure, Device for. J. T. Grimm, J. P. Deane, and J. G. Cureton. 1,904,863; Apr. 18.
Faucet structure. P. V. Fiorido. 1,903,757; Apr. 18.
Feed water regulator. C. H. Smoot. 1,904,553–4; Apr. 18.
Feeder: *See*—
Glass feeder.
Fibers, Treating vegetable. R. H. McKee and E. H. Morse. 1,903,828; Apr. 18.
Filaments and product thereof, Making artificial. C. Dreyfus and W. Whitehead. 1,904,209; Apr. 18.
Film and film printing apparatus, Sound record. A. C. Hardy. 1,904,449; Apr. 18.
Film for photographic purposes. A. G. Adamson. 1,904,113; Apr. 18.
Film holder for photographic cameras. O. Steiner. 1,904,097; Apr. 18.
Film, Motion picture. J. W. Coffman. 1,903,981; Apr. 18.
Films, Copying goffered. R. Berthon. 1,904,671; Apr. 18.
Films for color cinematography, Printing of. R. Berthon. 1,904,673; Apr. 18.
Films, Process and device for reproducing goffered. R. Berthon. 1,904,672; Apr. 18.
Filter for vacuum cleaners, Double. W. Leathers. 1,904,690; Apr. 18.
Finishing process. F. M. Crystler. 1,904,417; Apr. 18.
Fire hose rack. R. O. Lund. 1,904,068; Apr. 18.
Fishline reel. L. Bonsieur. 1,904,849; Apr. 18.
Fitting for measuring elements. C. W. Bristol and A. Noble. 1,904,615; Apr. 18.
Flanged corrugated fastener. J. S. McChesney. 1,904,288; Apr. 18.
Flap for automobiles, Splash. M. and L. Zaiger. 1,904,842–3; Apr. 18.
Flash light. G. B. Pratt. 1,904,002; Apr. 18.
Flask, Molding. E. A. Anheuser and G. S. Remiker. 1,904,037; Apr. 18.
Flax, Accelerating the retting of. W. Lens and K. Jochum. 1,904,148; Apr. 18.
Flier construction. M. J. McHale. 1,904,624; Apr. 18.
Float valve. L. A. Hanson and C. F. Osner. 1,903,816; Apr. 18.
Flow indicator. C. D. Fagan and R. W. Swank. 1,904,283; Apr. 18.
Flow regulator. E. T. Turner. 1,904,837; Apr. 18.
Flowers, Display of cut. J. H. Holmes. 1,904,788; Apr. 18.
Fluid control system, Automatic. M. Alpern. 1,904,846; Apr. 18.
Fluid control valve. E. F. Delèry. 1,904,204; Apr. 18.
Fluid pressure switch. F. G. Hobart. 1,904,311; Apr. 18.
Fluid pressure tool. G. M. Nell. 1,904,694; Apr. 18.
Fluid pressures, Device for measuring and indicating. J. Okill. 1,904,747; Apr. 18.
Flush valve. A. H. Kennedy. 1,904,898; Apr. 18.
Fluting machine. C. B. Post. 1,904,080; Apr. 18.
Fly screen. M. E. Webster. 1,904,035; Apr. 18.
Folding chair. M. L. Tinsley. 1,904,891; Apr. 18.
Footwear, Making. W. H. Bresnahan. 1,904,851; Apr. 18.
Forge. W. C. Else. 1,904,427; Apr. 18.
Form, Collapsible tire building. F. L. Johnson. 1,904,945; Apr. 18.
Foundation columns, Method and apparatus for forming. C. L. Powell. 1,904,079; Apr. 18.
Fountain for poultry, Drinking. H. C. Karst. 1,903,767; Apr. 18.
Fountain structure. H. A. Brink. 1,903,974; Apr. 18.
Frame. H. H. Lehere. 1,904,818; Apr. 18.
Frame provided with easel-stand. H. Schuts. 1,904,068; Apr. 18.
Frequency control apparatus. E. R. Heutschel. 1,904,140; Apr. 18.
Fruit cutting machine. T. Tachi. 1,903,854; Apr. 18.
Fuel, Burning. J. W. Fuller. 1,904,128; Apr. 18.

Fuel supply process for internal combustion engines. F. Rochefort. 1,903,851; Apr. 18.
Fuels and products derived therefrom or other materials into valuable liquids, Conversion of solid. C. Krauch and M. Pier. 1,904,470; Apr. 18.
Furfural acetone and furan derivatives, Reduction of. F. N. Peters, jr. 1,903,850; Apr. 18.
Furnace: *See*—
Glass furnace. Hot water heating furnace.
Glass tank furnace. Reduction furnace.
Heat treating furnace.
Furnace. J. F. Crawford. 1,904,781; Apr. 18.
Furnace and boiler. W. A. Jones. 1,904,466; Apr. 18.
Furnace by freezing, Lining a. H. Neuhaus. 1,904,864; Apr. 18.
Furnace wall blocks against tubes, Retaining. E. G. Bailey and R. M. Hardgrove. 1,904,189; Apr. 18.
Gain control, Automatic. T. A. Smith. 1,904,552; Apr. 18.
Game apparatus. L. Myers. 1,903,790; Apr. 18.
Gas and similar gaseous hydrocarbons into a mixture of carbon monoxide and hydrogen in controlled proportions, Converting natural. W. D. Wilcox. 1,903,845; Apr. 18.
Gas burner. E. B. McLavy and J. E. Conner. 1,903,903; Apr. 18.
Gas ignition device. S. Perry. 1,903,792; Apr. 18.
Gas rich in free hydrogen, Manufacture of. P. L. Young and W. V. Hanks. 1,904,593; Apr. 18.
Gases, Conversion of hydrocarbon. G. Egloff. 1,904,862; Apr. 18.
Gasket. M. D. Fitzgerald. 1,903,990; Apr. 18.
Gasket. J. H. Victor. 1,904,651; Apr. 18.
Gasket. L. Wideman, A. W. Anderson, and P. L. Rider. 1,904,910; Apr. 18.
Gate: *See*—
Self-cleaning fish gate.
Gauge: *See*—
Tire gauge.
Gauge and guide, Router. A. E. O. Wendorf. 1,904,109; Apr. 18.
Gauge, Bourdon lever type of pressure. C. J. Manuel. 1,904,492; Apr. 18.
Gauge device. A. R. Koos. 1,904,143; Apr. 18.
Gauge for volatile liquids, Liquid level. N. H. Gay. 1,904,785; Apr. 18.
Gear: *See*—
Switch gear.
Gear-shifting mechanism. K. W. Gaskill. 1,903,758; Apr. 18.
Gearing, Variable speed. C. S. and R. S. Prendergast. 1,904,629; Apr. 18.
Gears, Cutting the teeth of. O. G. Simmons. 1,904,956; Apr. 18.
Generator: *See*—
Lighting generator. Tuning fork generator.
Glass, Apparatus for the manufacture of sheet. C. Cone. 1,904,978; Apr. 18.
Glass feeder. D. Stenhouse. 1,904,754; Apr. 18.
Glass furnace. L. D. Soubier. 1,904,957; Apr. 18.
Glass, Manufacture of wire. M. L. Bageman. 1,904,118; Apr. 18.
Glass or similar article, Sherbet. R. C. Diebenkorn. Des. 89,613; Apr. 18.
Glass tank furnace. M. Wyeat. 1,904,111; Apr. 18.
Glassware forming machine. J. E. McLaughlin. 1,904,962; Apr. 18.
Glassware forming machine. L. D. Soubier. 1,904,958–9; Apr. 18.
Glass working tank. L. D. Soubier. 1,904,960; Apr. 18.
Glue from glue-containing material, Process and plant for extracting. J. Kohl. 1,904,003; Apr. 18.
Goal. E. R. Peoples. 1,904,890; Apr. 18.
Golf bag. G. H. Harris. 1,904,781; Apr. 18.
Golf club assembly. F. A. Hodgman. 1,904,231; Apr. 18.
Golf game device, Indoor. A. M. Walstrom. 1,904,634; Apr. 18.
Grader, Mechanical fine. G. Maxon, jr., and W. Ord. 1,904,948; Apr. 18.
Grate. A. D. Cronin. 1,903,779; Apr. 18.
Grille or the like. L. M. Beam. Des. 89,622–4; Apr. 18.
Grinding and polishing attachment for rolling mills. H. A. Poling. 1,904,368; Apr. 18.
Grinding apparatus. H. L. Crowley. 1,904,274; Apr. 18.
Grinding apparatus. E. C. Head. 1,903,967; Apr. 18.
Grinding apparatus. J. Kotouc. 1,904,068; Apr. 18.
Grinding chasers, Method and machine for. E. E. Flanders. 1,904,304; Apr. 18.
Grinding machine. F. S. Haas. 1,904,045; Apr. 18.
Grinding machine. C. G. Hunt. 1,904,642; Apr. 18.
Guard, Brake dust. H. E. Nichols. 1,903,925; Apr. 18.
Guard, Saw. E. Mamet. 1,904,005; Apr. 18.
Gum, Grease. R. L. Bacher and P. L. Schultz. 1,903,750; Apr. 18.
Hair waver. A. Goodman. 1,904,444; Apr. 18.
Hair waver. A. O. Lewis. 1,904,150; Apr. 18.
Hair waver. T. I. Moseley. 1,904,625; Apr. 18.
Hair waving clamp. P. Falcone and E. B. Winton. 1,904,979; Apr. 18.
Hammer magnetic type, Balanced spring. F. Schouten. 1,904,905; Apr. 18.
Hand brake. H. B. Haseltine. 1,904,369; Apr. 18.
Handkerchief. T. W. Tansley. Des. 89,657–63; Apr. 18.
Handle: *See*—
Battery handle.
Hanger: *See*—
Coat and trouser hanger. Eaves-trough hanger.
Cow tail hanger. Pipe hanger.
Harvester, Corn. R. R. Perkins. 1,904,749; Apr. 18.
Hat block. G. P. Papadeposulos. 1,904,912; Apr. 18.
Hat flanging apparatus. S. J. Miller. 1,903,873; Apr. 18.
Hatch cover. J. W. and W. Isherwood. 1,904,795; Apr. 18.
Headlight, Automobile. S. W. H. Turner. 1,904,974; Apr. 18.
Headlight for automobile. L. Dobos. 1,904,896; Apr. 18.
Heat energy, Method and apparatus for utilizing radiant. G. Egloff and L. A. Mekler. 1,904,861; Apr. 18.
Heat exchange device. G. Krämsein and R. Sammeruether. 1,903,898; Apr. 18.
Heat exchanger. C. A. Crowl. 1,904,857; Apr. 18.
Heat exchanger. C. W. Metzgar. 1,904,875; Apr. 18.
Heat regenerator. W. J. Irwin. 1,904,286; Apr. 18.
Heat-treating apparatus for metal work. H. Rosenberg. 1,904,888; Apr. 18.
Heat treating furnace, Rotary. E. T. Cope, A. H. Vaughan, and W. S. Bowling. 1,903,909; Apr. 18.
Heater: *See*—
Electric heater. Liquid heater.
Heater. F. T. Powers. 1,903,878; Apr. 18.
Heater control, Gas water. F. C. Lorens. 1,903,788; Apr. 18.
Heating and ventilating apparatus. W. Ewalt. 1,904,918; Apr. 18.
Heating and ventilating apparatus. M. Payne. 1,903,889; Apr. 18.
Heating device. L. Hawkins. 1,904,786; Apr. 18.
Heating, Device for high frequency induction. J. M. Fagan. 1,904,214; Apr. 18.
Heating system, Hot air. C. S. Stout. 1,904,962; Apr. 18.
Heel breasting machine. F. Ashworth. 1,904,346; Apr. 18.
Hides and skins, Detecting metallic objects in. A. P. Giuliano. 1,904,826; Apr. 18.
Hinge: *See*—
Door hinge. Window hinge.
Hinge. R. Domadeu. 1,904,207; Apr. 18.
Hoist dumping body, Hydraulic. W. C. Anthony and L. Wachter. 1,904,345; Apr. 18.
Hoist, Self-locking boom. G. T. Roak. 1,904,930; Apr. 18.
Holder: *See*—
Card holder. Package holder.
Cigar and cigarette holder. Pipe holder.
Cigarette holder. Tool holder.
Jig-saw puzzle holder. Umbrella holder.
Necktie and collar holder.
Holder for cosmetics and the like. G. C. Fullmer. 1,904,864; Apr. 18.
Holder for reknitting fabrics. C. A. Crowley. 1,903,896; Apr. 18.
Holder for yarn packages. F. B. Javery. 1,904,787; Apr. 18.
Holding and dispensing device for collapsible tubes. H. Jaedike. 1,904,050; Apr. 18.
Honing device. J. Summen. 1,904,836; Apr. 18.
Hook: *See*—
Printer's register hook.
Horn, Fluid pressure. H. Hueber. 1,904,759; Apr. 18.
Hose coupling. S. Larson. 1,904,061; Apr. 18.
Hosiery and making same, Seamless. J. M. Allen. 1,904,036; Apr. 18.
Hot water heating furnace. C. A. W. Voight. 1,904,179; Apr. 18.
House, Bird's. J. D. Daggett. Des. 89,631; Apr. 18.
Hydraulic coupling. J. N. Klep and W. Broee. 1,904,054; Apr. 18.
Hydraulic device for opening and closing filter presses and other pressure-applying. T. E. Raymond. 1,904,531; Apr. 18.
Hydraulic jack. C. F. Bacon. 1,904,115; Apr. 18.
Hydraulic jack. S. J. Widener. 1,903,837; Apr. 18.
Hydraulic lifting mechanism. I. V. K. Hott. 1,903,763; Apr. 18.
Hydraulic pump. F. G. Hehr. 1,904,707; Apr. 18.
Hydraulic transmission system. R. Maw. 1,904,496; Apr. 18.
Hydrocarbon distillates containing mercaptans, Sweetening. J. C. Morrell. 1,904,382; Apr. 18.
Hydrocarbons, Apparatus for treating. S. E. Bolles. 1,904,196; Apr. 18.
Hydrocarbons, Stabilization of halogenated. C. R. Harris. 1,904,450; Apr. 18.
Hydrocarbons, Treating. E. J. Gohr. 1,904,133; Apr. 18.
Hydrocarbons, Treating low boiling. H. Restin. 1,904,172; Apr. 18.
Hydrogen from hydrocarbon gases, Production of. G. H. Freyermuth. 1,904,489; Apr. 18.
Hydrogen from refinery and other hydro-carbon gases, Production of. G. H. Freyermuth, J. K. Small, and W. V. Hanks. 1,904,441; Apr. 18.
Hydrogen, Manufacture of. P. L. Young, W. V. Hanks, and G. H. Freyermuth. 1,904,592; Apr. 18.
Hydrogen preparation. V. Voorhees. 1,904,908; Apr. 18.

Hydrogen sulphide from gas mixtures and for the recovery of elemental sulphur, Removal of. W. J. Edmonds and O. H. Dawson. 1,904,424; Apr. 18.
Ice cream or confection container. J. E. Hogue. 1,903,764; Apr. 18.
Ice delivery bag. R. J. Hancock and J. L. L. Garrison. 1,904,729; Apr. 18.
Illuminated display, Changeable. L. O. Glatzner. 1,904,132; Apr. 18.
Indicating and control device for material receiving apparatus. E. W. Larsen. 1,904,869; Apr. 18.
Indicating device. H. H. Parsons. 1,903,938; Apr. 18.
Indicator: *See*—
Flow indicator.
Thermostatic radiation indicator.
Indicator device. H. A. Flammer. 1,904,435; Apr. 18.
Indicator for radioreceivers. H. Matsner. Re18,796; Apr. 18.
Indicator for reservoirs for liquid filled cables. E. D. Eby. 1,904,423; Apr. 18.
Inductance. F. T. Brewer. 1,904,199; Apr. 18.
Inductance system, Variable. J. B. Dow. 1,904,208; Apr. 18.
Ink roll for printing presses. O. H. Banker. 1,904,764; Apr. 18.
Ink setter and static eliminator, Combined. J. Simons. 1,903,840; Apr. 18.
Ink transfer member and making the same. G. E. Pelton. 1,904,628; Apr. 18.
Instruction for stringed musical instrument playing, Apparatus for. L. Portnoff. 1,904,928; Apr. 18.
Insulation. C. Dantsizen. 1,904,418; Apr. 18.
Insulator finishing brushing machine. D. Bettini. 1,904,608; Apr. 18.
Insulator, Section. F. L. Wolf. 1,904,844; Apr. 18.
Integrating means. E. H. Freeman. 1,904,438; Apr. 18.
Internal combustion engine. W. C. Agereil. 1,903,802; Apr. 18.
Internal combustion engine. G. P. Beaudry. 1,904,816; Apr. 18.
Internal combustion engine. W. R. Griswold. 1,903,919; Apr. 18.
Internal combustion engine. C. McLaren. 1,904,499; Apr. 18.
Internal combustion engine, Air-cooled. G. C. Cappa. 1,903,979; Apr. 18.
Internal combustion engine, Air cooled. J. B. Powers. 1,904,880; Apr. 18.
Internal combustion engine, Double acting. C. P. Clark, and C. A. Bjornsson. 1,904,854; Apr. 18.
Internal combustion engine, Radial cam type. W. J. Ferry. 1,904,680; Apr. 18.
Iron and steel and making the same, Alloy plated. B. R. Haueisen and J. C. Patten. 1,904,732; Apr. 18.
Iron ores, Treating. E. W. Wescott. 1,904,583; Apr. 18.
Iron, Soldering. L. L. Jones. 1,904,051; Apr. 18.
Iron sulphide material and making the same. J. B. Cain and S. W. Yates. 1,904,915; Apr. 18.
Jack: *See*—
Hydraulic jack. Lifting jack.
Jack post. R. G. Hamaker. 1,904,307; Apr. 18.
Jar. I. Cordy. Des. 89,630; Apr. 18.
Jewel and setting therefor. L. M. Zell. 1,904,259; Apr. 18.
Jig-saw puzzle holder. M. J. Gartland. 1,904,724; Apr. 18.
Joint: *See*—
Pipe joint.
Joint and making same, Pipe. B. R. Barder. 1,904,967; Apr. 18.
Joint for concrete roads, Expansion. A. C. Fischer. 1,903,756; Apr. 18.
Joint for members provided in a wall separating spaces of different pressures. H. G. Stintzing and E. Huber. 1,904,392; Apr. 18.
Joint for pipes. H. Kreidel. 1,904,866; Apr. 18.
Ketones from impure volatile acids, Direct manufacture of. J. G. Mauger. 1,904,495; Apr. 18.
Key case. W. R. Buxton. 1,904,354; Apr. 18.
Key for locks. J. H. Hendrix. 1,904,225; Apr. 18.
Key for piano accordions, All metal. R. Rieschick. 1,904,768; Apr. 18.
Kier. H. D. Jefferson. 1,904,921; Apr. 18.
Kite. J. Hahn. 1,904,727–8; Apr. 18.
Knife for severing molten glass, Rotary. K. E. Peller. 1,904,325; Apr. 18.
Knitting machine. J. F. Meyer. 1,904,501; Apr. 18.
Knotting mechanism. M. R. Wells and F. F. Hillix. 1,904,704; Apr. 18.
Lacquers, films, artificial masses, and the like. W. Pungs and K. Eisenmann. 1,904,528; Apr. 18.
Ladle, Ice cream. L. Myers. 1,903,791; Apr. 18.
Laminated product and producing same, Decorated. J. D. Cochrane, jr. 1,904,718; Apr. 18.
Lamp, Bed. J. L. Stetner. 1,904,121; Apr. 18.
Lamp, Flash. K. Bobayashi. 1,904,057; Apr. 18.
Lamp mechanism, Arc. A. G. Saurwein. 1,904,541; Apr. 18.
Lamp mounting for bowling alleys. A. Solum. 1,904,016; Apr. 18.
Lamps and similar articles, Method and apparatus for testing incandescent. W. L. Kubach. 1,904,059; Apr. 18.
Lantern. J. S. Pixley and M. Bender. 1,904,248; Apr. 18.
Latch for gates and the like. V. W. and C. C. Nielson. 1,904,291; Apr. 18.
Lathe. H. W. Melling. 1,904,949; Apr. 18.
Laundry machine. N. Stramaglia and T. Schillaci. 1,904,099; Apr. 18.
Layers sensitive to light, Production and application of. W. Frankenburger and G. Roessler. 1,903,783; Apr. 18.
Lead extrusion apparatus. F. L. Davis, jr. 1,904,419; Apr. 18.
Leather, Device for shrinking. J. Hitzler and F. C. J. Merz. 1,904,787; Apr. 18.
Leer. F. T. Nesbitt. 1,904,983; Apr. 18.
Leer loader. T. and D. Stenhouse. 1,903,916; Apr. 18.
Lens cutting machine. J. R. Powell. 1,904,879; Apr. 18.
Lens for light reflector signal, Glass. H. C. Reichhardt. Des. 89,670; Apr. 18.
License plate for motor vehicles. C. B. Smith. 1,904,093; Apr. 18.
Life-saving device. T. Nakamura. 1,904,767; Apr. 18.
Lifting jack. J. F. Donnelly. 1,904,279; Apr. 18.
Light: *See*—
Flash light.
Light and similar rays, Apparatus for treating. A. O. Tate. 1,904,566; Apr. 18.
Light fixture, Electric. H. W. Lawrence. 1,904,901; Apr. 18.
Lighter, Pyrophoric. A. E. Weissenburger. 1,904,299; Apr. 18.
Lighting generator. J. F. Martin. 1,904,692; Apr. 18.
Lighting unit. R. L. Huse. 1,904,643; Apr. 18.
Linings, Apparatus for and method of attaching shoe. A. H. Prenzel. 1,904,827; Apr. 18.
Liquid delivery and measuring device. E. Hurlbrink. 1,904,829; Apr. 18.
Liquid dispensing system. W. H. De Lancey. 1,904,302; Apr. 18.
Liquid heater. M. Mutrux and R. Cailliet. 1,904,511; Apr. 18.
Liquid measuring and delivering apparatus, Automatic. H. Boutillon. 1,904,610; Apr. 18.
Liquids, Apparatus for fractionating. P. E. Kuhl. 1,904,144; Apr. 18.
Loader, Power. J. L. Clarkson. 1,904,353; Apr. 18.
Lock: *See*—
Brake lock. Safe deposit lock.
Burglarproof lock. Wheel lock.
Lock. E. J. Baumé. 1,904,763; Apr. 18.
Lock. J. V. Eichel, jr. 1,904,210; Apr. 18.
Lock. A. S. Katz. 1,904,053; Apr. 18.
Lock for dispensers, Air controlled. P. S. Shield and W. H. Haupt. 1,904,550; Apr. 18.
Lock for revolving doors, Cable. B. H. Uhrich. 1,904,106; Apr. 18.
Locomotive, Railway. D. B. Worth. Des. 89,666; Apr. 18.
Loom. J. and M. Bergman. 1,904,715; Apr. 18.
Loom for weaving tufted fabric and weaving. C. E. Barrett. 1,904,939; Apr. 18.
Loud speaker. H. J. Round and J. G. Robb. 1,904,587–8; Apr. 18.
Lubricant cooler. W. L. Clouse. 1,904,412; Apr. 18.
Lubricating device, Automatic. F. Schmied. 1,904,803; Apr. 18.
Lubricating device, Constant level. K. Aoki. 1,904,601; Apr. 18.
Lubricating system and pump. J. Reid. 1,904,168; Apr. 18.
Lubrication assembly. F. W. Edwards. 1,904,295; Apr. 18.
Lubricator for internal combustion engines, Combined primer and cylinder. C. L. Stokes. 1,904,936; Apr. 18.
Machine for applying bands, stamps or the like to packets. J. Mason. 1,903,928; Apr. 18.
Machine for ascertaining the volume of loads of granular material. A. Hanique. 1,904,228; Apr. 18.
Machine for distributing material on lawns, etc. L. A. Mills. 1,903,874; Apr. 18.
Machine for filling bottles and other vessels. H. V. Nielsen. 1,904,924; Apr. 18.
Machine for forming hollow glassware. J. F. Rule. 1,904,985; Apr. 18.
Machine for forming hollow glassware. L. D. Soubier. 1,904,961; Apr. 18.
Machine for handling strip material. A. Potdevin. 1,904,878; Apr. 18.
Machine for making and inserting wire fasteners for basket covers. W. F. Newhouse. 1,904,884; Apr. 18.
Machine for making cartons. J. Van Buren. 1,903,844; Apr. 18.
Machine for making, filling, and closing bags, Combined. P. Gangler. 1,904,181; Apr. 18.
Machine for making glass stoppers and the like. J. E. Collins. 1,904,977; Apr. 18.
Machine for operating on tennis shoes. E. W. Stacey. 1,903,849; Apr. 18.
Machine for perforating slow emulsion films while they are being shown on the screen. J. M. J. Delafon. 1,904,301; Apr. 18.
Machine for printing round cans in multiple colors. M. H. Sidebotham. 1,904,332; Apr. 18.
Machine for rolling rings. F. im Schlaa. 1,904,784; Apr. 18.

Machine for slotting hooks. W. H. Nutt. 1,904,823; Apr. 18.
Machine for vacuum sealing. J. J. Williams. 1,904,842; Apr. 18.
Machine tool slide and lubricator therefor. J. R. Johnson. 1,903,965; Apr. 18.
Magazine rack. J. W. Carpenter. Des. 89,626; Apr. 18.
Magnetic bodies, Producing. L. M. Hollingsworth. 1,904,233; Apr. 18.
Magnetic valve. W. W. McLaren. 1,903,902; Apr. 18.
Magnetic switch. W. F. Hurlburt. 1,904,141; Apr. 18.
Magneto. K. A. Harmon. 1,904,506; Apr. 18.
Manifolding material. L. M. Snyder. 1,904,650; Apr. 18.
Marcelling device. M. and J. Frank. 1,904,043; Apr. 18.
Marker, Grave. H. Johnson. 1,904,732; Apr. 18.
Mask, Drinking. R. Monro. 1,903,821; Apr. 18.
Mask for moving picture screens. H. J. Vallea. 1,904,963; Apr. 18.
Mat, Engraver's. A. B. Glean. 1,903,813; Apr. 18.
Material working apparatus. R. Jongedyk. 1,904,864; Apr. 18.
Material working machine. R. J. Beavers. 1,904,848; Apr. 18.
Materials, Apparatus for screening. B. F. Roberts. 1,904,032; Apr. 18.
Meat cutter. F. H. Michaels. 1,903,789; Apr. 18.
Mechanical movement. L. Layes. 1,904,151; Apr. 18.
Mechanism for producing curved axial surface on rolls. H. A. Good. 1,904,827; Apr. 18.
Melting. A. E. Greene. 1,904,084; Apr. 18.
Menthol, Preparing pure optically inactive. K. Schöllkopf and A. Serini. 1,904,545; Apr. 18.
Merchandising and display receptacle. A. A. Matheson. 1,904,760; Apr. 18.
Metal cutting machine and control system therefor. W. F. Babcock. 1,904,975; Apr. 18.
Metal fabricating machine. J. L. Adams, jr. 1,904,913; Apr. 18.
Metal fixture for typewriter desks. M. Fox. 1,904,217; Apr. 18.
Metal members with rubber bushings, Assembling. R. H. Rosenberg. 1,904,981; Apr. 18.
Metal, Method and apparatus for extrusion of. W. Travis. 1,904,907; Apr. 18.
Metals, Apparatus for casting. H. Harris. 1,903,897; Apr. 18.
Metals, Heat treating. A. E. Bellis. 1,904,706; Apr. 18.
Meter: *See*—
Integrating meter. Orifice meter.
Milling machine. H. Ernst and L. F. Nenninger. 1,904,971; Apr. 18.
Milling machine collet. W. D. Archea. 1,904,641; Apr. 18.
Milling machinery. L. F. Nenninger. 1,904,649; Apr. 18.
Minerals by flotation, Concentration of. R. W. Hess. 1,904,461; Apr. 18.
Minerals, Flotation of. R. W. Hess and J. M. F. Leaper. 1,904,462; Apr. 18.
Mining drill. L. J. Fellay. 1,904,657; Apr. 18.
Mixing device. G. E. Cook. 1,904,758; Apr. 18.
Molded articles, Forming. J. J. Zelenka. 1,904,845; Apr. 18.
Molding apparatus, Centrifugal. H. M. Naugle and A. J. Townsend. 1,903,906; Apr. 18.
Molding machine. F. V. Johnson, E. D. Hanson, and D. V. Waters. 1,904,220; Apr. 18.
Molding powder and method of molding. M. Landecker. 1,904,243; Apr. 18.
Molten materials, Method of and apparatus for preparing and handling. H. F. Carter. 1,904,853; Apr. 18.
Motor driving spirits, Production of. H. Kafer. 1,904,830; Apr. 18.
Mounting, Bearing. P. G. Palmgren. 1,904,247; Apr. 18.
Mounting, Bearing. G. Wistrand. 1,904,258; Apr. 18.
Mounting, Shaft. N. Skillman. 1,904,769; Apr. 18.
Mower, Gang. C. G. Kruckemeyer. 1,904,376; Apr. 18.
Mower, Lawn. T. J. Edwards. 1,904,236; Apr. 18.
Mowing machines, Seed gatherer for. C. King. 1,903,769; Apr. 18.
Multiple disk clutch. G. W. Emrick. 1,903,963; Apr. 18.
Multiplier, Reversing. W. M. Wattie and K. S. Whitten. 1,904,338; Apr. 18.
Nailing machine. H. W. Morgan. 1,904,507; Apr. 18.
Navigator, Aerial. W. A. Meador. 1,903,911; Apr. 18.
Nebuliser of liquids. A. W. Morse. 1,904,509; Apr. 18.
Necktie and collar holder. G. A. Priestnon. 1,904,063; Apr. 18.
Needle securing device for talking machines. A. M. B. Charlin. 1,904,408; Apr. 18.
Nest, Fowl. H. H. and C. L. Wagner. 1,904,809; Apr. 18.
Newspaper box. W. E. Hampden and G. W. Hagle. 1,904,448; Apr. 18.
Nipple. I. Barkan. 1,904,710; Apr. 18.
Nitrites, Production of. S. L. Handforth. 1,903,815; Apr. 18.
Nitro compound by means of a metal, Reducing a. C. C. Heritage. 1,904,047; Apr. 18.
Nomic Cement gun. J. T. Wawter. 1,904,990; Apr. 18.
Nut and manufacture, Lock. E. L. Rupf. 1,904,021–2; Apr. 18.
Nut and washer assembly. J. Berge. 1,904,263; Apr. 18.
Oil and making the same, Hydrocarbon. H. G. M. Fischer and C. B. Gustafson. 1,904,433; Apr. 18.
Oil, Apparatus for refining. C. B. Forward. 1,903,810; Apr. 18.
Oil burner. B. A. Clayton. 1,903,858; Apr. 18.
Oil burner. S. Scognamillo and D. Shlaifer. 1,904,540; Apr. 18.
Oil cooling arrangement for air-cooled internal combustion engines. G. C. Cappa. 1,904,407; Apr. 18.
Oil, Lubricating. K. G. Mackenzie. 1,904,065; Apr. 18.
Oil, Method and apparatus for distilling. C. R. Boving and T. Montgomery. 1,904,213; Apr. 18.
Oil pump. E. H. Davis and W. F. Johnston. 1,904,656; Apr. 18.
Oils, Decolorizing. I. K. Fuller. 1,904,682; Apr. 18.
Oils from solid residues, Separation of. M. Pier and K. Winkler. 1,904,521; Apr. 18.
Oils, Refining of hydrocarbon. J. C. Morrell. 1,904,381; Apr. 18.
Oils, Treating. A. A. Wells. 1,904,183; Apr. 18.
Oils, Treatment of hydrocarbon. E. R. Birkenmyr. 1,904,402; Apr. 18.
Oils shell. M. Alex. Des. 89,667; Apr. 18.
Opener, Can. O. F. Demers. 1,903,984; Apr. 18.
Operator for counterbalanced elevator doors. R. S. Poelle. 1,904,069; Apr. 18.
Operator indicator for busy lines at central offices, Automatic. W. B. Blanton. 1,904,295; Apr. 18.
Optical polygraph. E. Blum. 1,903,890; Apr. 18.
Orange juice extractor. E. S. Preston. Des. 89,652; Apr. 18.
Ores by flotation, Concentration of. F. G. Moses, R. W. Hess, and R. L. Perkins. 1,904,460; Apr. 18.
Organic products, Production of valuable. C. Krauch, M. Pier, and E. Anthes. 1,904,477; Apr. 18.
Orifice meter. E. S. Smith, jr. 1,904,333; Apr. 18.
Outlet control for liquid containers. L. Lavoie. 1,904,793; Apr. 18.
Oven, Coke. P. E. Verpeaux. 1,904,018; Apr. 18.
Oven, Cooking retort. J. Becker. 1,904,191; Apr. 18.
Oven operation, By-product coke. S. P. Miller. 1,904,161; Apr. 18.
Oven, Regenerative coke. C. Otto. 1,904,516; Apr. 18.
Package holder. C. E. Berg. 1,904,193; Apr. 18.
Packages for cigarettes. W. E. Molins and J. W. Chalmers. 1,903,873; Apr. 18.
Packing machinery. R. Clarkson. 1,903,959; Apr. 18.
Pad or similar article, Heating. W. W. De Laney. Des. 89,612; Apr. 18.
Pads, Manufacture of resilient. C. Field and C. L. Campbell. 1,904,026; Apr. 18.
Padlock, Permutation. W. Trewhella. 1,903,885; Apr. 18.
Pan, Frying. G. W. Perks. 1,904,925; Apr. 18.
Panties. M. C. Hennessy. 1,904,228; Apr. 18.
Paper and making same, Air-porous. F. Riebel, jr. Re18,797; Apr. 18.
Paper, Apparatus for developing sensitized. B. P. Smith. 1,904,551; Apr. 18.
Paper, Apparatus for edge rolling of crepe. C. A. Friberg. 1,904,825; Apr. 18.
Paper flower box. J. F. Nelson and L. Hodge. 1,904,072; Apr. 18.
Paper making process. E. C. Schacht. 1,904,087; Apr. 18.
Paper manufacture. H. E. Rafton. 1,904,251; Apr. 18.
Paper product and making same. W. C. Lodge. 1,903,767; Apr. 18.
Paraffin from nonsweated paraffin and the like substances, Process and apparatus for the manufacture of sweated. R. Meijer. 1,903,929; Apr. 18.
Pasteboard box. G. D'Annunzio. 1,904,125; Apr. 18.
Pastry confection. G. H. Crawford. Des. 89,611; Apr. 18.
Pattern control mechanism. G. C. Means. 1,904,066; Apr. 18.
Pen cap and ink guard, Fountain. S. M. Sager. 1,904,014; Apr. 18.
Pen clip, Fountain. H. Esterow. 1,904,212; Apr. 18.
Pen, Drafting. H. Frank. 1,903,965; Apr. 18.
Pen, Fountain. A. O. Dahlberg. 1,904,358; Apr. 18.
Pen, Fountain. A. Jahn. 1,904,660; Apr. 18.
Pencil display rack. F. H. McGehee. 1,904,067; Apr. 18.
Pencil or sharp pencil, Double-color mechanical. T. Yamashita. 1,903,800; Apr. 18.
Perfume or cosmetic, Procedure in the production of a. H. Eisner and H. Vollmer. 1,904,211; Apr. 18.
Photographs and cinematographic records in natural colors, Exposure and copying of. P. S. E. Anderson. 1,904,660; Apr. 18.
Picker for fly shuttle looms. A. Kullman. 1,904,816; Apr. 18.
Picture screen, Moving. F. H. Lynds. 1,904,672; Apr. 18.
Pillar or post standing in the street traffic. F. Meister and J. Maul. 1,903,869; Apr. 18.
Piloting system. J. A. Willoughby. 1,903,846; Apr. 18.
Pipe. B. S. Boyer. 1,904,675; Apr. 18.
Pipe, building tile, etc., for railway shipment, Loading of sewer. I. H. Spoor. 1,903,941; Apr. 18.
Pipe cleaning device. R. Smith. 1,903,915; Apr. 18.
Pipe facing tool. W. M. Nechermann. 1,904,050; Apr. 18.
Pipe fitting. E. H. Kocher. 1,903,819; Apr. 18.
Pipe hanger. P. N. Kenway. 1,904,315; Apr. 18.
Pipe holder. A. Burr. 1,904,779; Apr. 18.
Pipe joint. L. J. Robins. 1,903,833; Apr. 18.
Pipeline booster system. D. B. Marples. 1,904,830; Apr. 18.

Pipe line, Screener equipped. B. S. Burrell. 1,903,774; Apr. 18.
Pipe, Method and apparatus for molding concrete. C. M. Snyder. 1,904,094; Apr. 18.
Pipe-trap cover. H. S. Wright. 1,904,340; Apr. 18.
Pipes or cables, Apparatus for laying drain. H. Sack. 1,904,666; Apr. 18.
Piston. J. S. Donaldson. 1,904,126; Apr. 18.
Piston. P. M. Freer. 1,904,305; Apr. 18.
Piston ring. C. W. Clark. 1,904,410; Apr. 18.
Planter, Seed. C. T. Ray. 1,903,836; Apr. 18.
Plastering support. J. O. Oliver. 1,904,245; Apr. 18.
Plastic composition. D. M. Gray. 1,904,445; Apr. 18.
Plastic mass and making same. M. Landecker. 1,904,244; Apr. 18.
Plate, Dentist's mixing. C. J. McCann. 1,904,766; Apr. 18.
Plug: *See*—
Attachment plug.
Plug connecter, Quick break. H. L. Strongson. 1,904,889; Apr. 18.
Plunger pump. C. I. Longenecker. 1,904,486; Apr. 18.
Pocket for pot holder. M. Caplan. Des. 89,627; Apr. 18.
Pocket receptacle, Flexible. W. R. Buxton. 1,904,353; Apr. 18.
Pole with reenforcing pipes, Metal. E. W. Riemenschneider. 1,903,907; Apr. 18.
Polishing apparatus, specially for knives, forks, and spoons. Robert Ern. 1,904,282; Apr. 18.
Positive-action clutch. R. W. Strout. 1,904,563; Apr. 18.
Post: *See*—
Drill post. Jack post.
Postage meter machines, Preventing taking of fraudulent impressions from. W. H. Wheeler and J. W. Ogden. 1,904,638; Apr. 18.
Poster support. W. R. Johns. 1,903,766; Apr. 18.
Powder, Apparatus for making bleaching. E. T. Ladd. 1,904,478; Apr. 18.
Powder distributing machine. L. Wilson. 1,904,591; Apr. 18.
Power press control. A. A. Byerlein. 1,904,676; Apr. 18.
Power transmission. S. S. Rathbun. 1,904,530; Apr. 18.
Power transmission. A. G. Rayburn. 1,904,011; Apr. 18.
Power transmission mechanism, Variable speed. F. A. Hayes. 1,904,046; Apr. 18.
Power transmitter, Hydraulic. G. Bauer and J. N. Kiep. 1,904,606; Apr. 18.
Preparation of a product containing all opium alkaloids. T. B. Aagaard, B. Samdahl, and F. P. Hopstock. 1,903,770; Apr. 18.
Press: *See*—
Printing press.
Pressure and flow control device for combustion indicators. G. R. Blodgett. 1,904,819; Apr. 18.
Print drier. H. H. Sullivan. 1,904,564; Apr. 18.
Printer's quoin. C. J. Vion. 1,904,581; Apr. 18.
Printer's register hook. W. F. Brügmann. 1,903,804; Apr. 18.
Printing attachment for bag making machines. T. M. Avery and W. M. Seitzinger. 1,904,709; Apr. 18.
Printing machines, web renewing mechanism for. J. R. Tomlin. 1,904,571; Apr. 18.
Printing press, Bed and cylinder. C. B. Cottrell, 3d. 1,904,855–6; Apr. 18.
Prism carrier for projection machines. W. A. Kosken. 1,803,820; Apr. 18.
Propeller. S. Heath. 1,904,733; Apr. 18.
Propeller. J. P. Rodriques. 1,904,752; Apr. 18.
Propeller balance. N. V. Johnson. 1,903,817; Apr. 18.
Protective device. F. Gray. 1,903,996; Apr. 18.
Protective device. J. D. Tebo. 1,904,569; Apr. 18.
Protective layer on photographic films. M. Hagedorn. 1,904,221; Apr. 18.
Protector for a nursing bottle and nipple thereof. J. Schneiderman. Des. 89,654; Apr. 18.
Protector for plants. Z. Starks. 1,904,700; Apr. 18.
Pulley and mounting therefor. W. F. Richards. 1,904,535; Apr. 18.
Pump: *See*—
Hydraulic pump. Plunger pump.
Oil pump.
Pump. C. D. Fagan and R. W. Swank. 1,904,284; Apr. 18.
Pump mechanism. H. A. Palmer. 1,904,799; Apr. 18.
Pumping apparatus, Hydroturbine. H. L. Nash. 1,904,321; Apr. 18.
Punch. P. Peterson. 1,904,951; Apr. 18.
Push drill. T. J. Fegley and G. O. Leopold. 1,904,679; Apr. 18.
Quenching machine. H. B. Scott and R. E. McCoy. 1,904,986; Apr. 18.
Rack: *See*—
Broom rack. Fire hose rack.
Display rack. Pencil display rack.
Radiator. J. D. Soehner. 1,904,555; Apr. 18.
Radiator filling and draining device. W. J. Smith. 1,904,753; Apr. 18.
Radio apparatus. H. A. Anderson. 1,904,668; Apr. 18.
Radiocabinet. O. Ciccarelli. Des. 89,628; Apr. 18.
Radio circuit. E. G. Parvin. 1,904,877; Apr. 18.
Radio circuit. A. F. P. Stenzy. 1,904,839; Apr. 18.
Radio circuits of sparking in the ignition system of an internal combustion engine, Eliminating the effects on. A. A. Leonard. 1,904,149; Apr. 18.
Radio ground. C. J. Aanenson. 1,904,773; Apr. 18.
Radio signaling system. A. H. Taylor. 1,904,772; Apr. 18.
Radio station selector. H. V. Grimes. 1,904,219; Apr. 18.
Rake. C. H. Dennis. 1,904,860; Apr. 18.
Rake. W. Withington. 1,904,848; Apr. 18.
Ratchet device. A. J. Kounovsky. 1,904,621; Apr. 18.
Ratchet guide and support. H. T. Eisele. 1,903,781; Apr. 18.
Rayon, Manufacture of. G. R. Lockhart. 1,904,377; Apr. 18.
Razor blades, Device for drying. W. H. Löwenstein. 1,904,661; Apr. 18.
Receptacle: *See*—
Collapsible receptacle. Pocket receptacle.
Merchandising and display receptacle.
Record strip for sound reproducing machines. J. G. M. Herklots. 1,904,944; Apr. 18.
Recorder for traffic signal systems. E. D. Stirlen. 1,904,562; Apr. 18.
Recording apparatus. C. de Beaumarchais. 1,904,719; Apr. 18.
Recording apparatus, Electric automatic. J. G. Garrity and E. L. McCarthy. 1,904,783; Apr. 18.
Rectifier. S. S. Smith. 1,904,834; Apr. 18.
Rectifier. C. Hambuechen. 1,904,447; Apr. 18.
Rectifier, Dry. J. H. de Boer, W. C. Van Geel, and H. Emmens. 1,904,276; Apr. 18.
Reduction furnace. J. D. Morgan. 1,904,508; Apr. 18.
Reel: *See*—
Fishline reel. Wire reel.
Reel. C. Field. 1,904,027; Apr. 18.
Reel and assembling reels. L. R. McGuire. 1,904,158; Apr. 18.
Reeling device. F. A. Hoyt. 1,904,000; Apr. 18.
Reels, Device for handling. G. A. Seeley. 1,904,255; Apr. 18.
Refrigerating apparatus. E. E. Allyne. 1,904,597; Apr. 18.
Refrigerating apparatus. H. B. Hull. 1,904,960; Apr. 18.
Refrigerating apparatus. E. B. Mallory. 1,903,825–7; Apr. 18.
Refrigerating machine. C. Steenstrup. 1,904,559; Apr. 18.
Refrigerating machine. C. Steenstrup. 1,904,561; Apr. 18.
Refrigerating mechanism. A. J. Asmussen. 1,903,848; Apr. 18.
Refrigerating plant. R. and H. Bernat. 1,904,817; Apr. 18.
Refrigeration. C. G. Munters. 1,903,934; Apr. 18.
Refrigeration. M. Wexler. 1,904,590; Apr. 18.
Refrigeration apparatus. L. K. Wright. 1,904,024; Apr. 18.
Refrigerator evaporator. C. Steenstrup. 1,904,560; Apr. 18.
Regenerative chamber. W. J. Irwin. 1,904,237; Apr. 18.
Register, Cash. F. W. F. Berger. 1,904,976; Apr. 18.
Register, Cash. E. J. Von Pein. 1,904,964; Apr. 18.
Register for typewriters, Word counting. A. E. Oswald. 1,904,515; Apr. 18.
Regulating system. W. H. T. Holden and R. P. Jutson. 1,903,999; Apr. 18.
Regulator: *See*—
Electrical regulator. Flow regulator.
Feed water regulator.
Relay system. R. G. Richardson. 1,904,929; Apr. 18.
Residence panel board. C. E. Hanny. 1,904,186; Apr. 18.
Resinous composition. L. V. Adams. 1,904,595; Apr. 18.
Resins containing an earth alkaline metal base, Making phenol-formaldehyde. C. Ellis. 1,903,809; Apr. 18.
Resistance unit. C. L. Lyon and C. A. Jagger. 1,904,487; Apr. 18.
Retarder for use in rubber vulcanisation process. R. L. Sibley. 1,904,934; Apr. 18.
Ridging implement on rotary tilling machines. P. R. Hasson and E. D. Ellis. 1,904,138; Apr. 18.
Ridging implement on tilling machines. C. H. Fowler. 1,903,991; Apr. 18.
Ring: *See*—
Piston ring.
Ring or the like, Finger. H. W. Peters. 1,904,074; Apr. 18.
Rod: *See*—
Curtain rod.
Roller: *See*—
Bearing roller.
Roller, particularly for use in textile machinery. H. McGhee. 1,904,496; Apr. 18.
Rolling stock. R. T. Glascoline. 1,903,859; Apr. 18.
Rolls for rolling mills and the like, Apparatus for machining. H. Schimmel. 1,904,802; Apr. 18.
Röntgenological reproduction. H. F. Kurtz. 1,904,867; Apr. 18.
Roofing. D. B. Humphrey. Des. 89,639; Apr. 18.
Roofing, partitions, and the like, Construction of. H. L. Plummer and D. L. Irwin. 1,904,080; Apr. 18.
Rosin, Producing high grade. A. R. Hitch. 1,904,464; Apr. 18.
Rotary cutter. L. Skeel. 1,904,632; Apr. 18.

Rubber to metal and other hard materials, Applying. A. J. Michelin. 1,904,502; Apr. 18.
Rubber, Vulcanization of. W. F. Tuley. 1,904,573; Apr. 18.
Rule, Slide. A. W. Keufel. 1,904,474; Apr. 18.
Runner and shoe, Reversible and quick-changing. W. J. Chapman. 1,904,201; Apr. 18.
Safe deposit lock. W. P. Mosely. 1,904,283; Apr. 18.
Safety attachment for moving picture apparatus. A. Szeliga, Inc. 1,904,807; Apr. 18.
Safety device. B. F. Singer and J. J. Ehemann. 1,904,015; Apr. 18.
Safety drawoff apparatus for hot water systems. E. H. Ruppert. 1,904,907; Apr. 18.
Safety switch, Flash light. G. B. Pratt. 1,903,940; Apr. 18.
Safety switch, Flash-light. F. G. Stimson. 1,903,947; Apr. 18.
Saline content of boiler waters, Control of the. H. Kreigsheim. 1,904,900; Apr. 18.
Salt and pepper shaker. C. G. Watson. 1,904,757; Apr. 18.
Sanitary well top. W. C. H. Peters. 1,904,926; Apr. 18.
Sash holder and window construction, Window. R. T. Axe. 1,904,602; Apr. 18.
Scaffold, Adjustable folding. C. Vanhorn. 1,904,808; Apr. 18.
Scale. H. M. Cameron. 1,903,955; Apr. 18.
Scale, Automatic weight indicating. H. C. Schaper. 1,904,542; Apr. 18.
Scale, Electric automatic recording. J. G. Garrity and E. L. McCarthy. 1,904,784; Apr. 18.
Scale, Measuring. H. M. and G. C. Hoskin. 1,904,284; Apr. 18.
Scale, Weighing. C. E. Breaden. 1,904,614; Apr. 18.
Scissors, Surgical claw. H. B. Balthaser. 1,904,399; Apr. 18.
Scraper. W. Potter. 1,903,877; Apr. 18.
Screen: *See*—
Fly screen. Picture screen.
Sealing device for closed containers. F. M. Shoop. 1,904,091; Apr. 18.
Sealing means, Automatic pressure. H. H. Purvis. 1,904,250; Apr. 18.
Seam. C. W. Mueller. 1,903,933; Apr. 18.
Seams, Method of and apparatus for sewing. L. L. Almond, R. Herrington, and F. A. Matthews. 1,904,398; Apr. 18.
See-saw and merry-go-round, Combined. F. M. Jacob. 1,904,687; Apr. 18.
Selenium cells, Making. W. Henkel and F. Meyer. 1,904,189; Apr. 18.
Self-cleaning fish gate. J. P. Doyle. 1,903,754; Apr. 18.
Separable fastener. P. E. Fenton. 1,904,722; Apr. 18.
Setting and locking mechanism for printing devices of postage meters. J. W. Ogden and B. Knauer. 1,904,626; Apr. 18.
7.7-dichloro flavanthrone and making same. I. Gubelmann. 1,904,367; Apr. 18.
Sewage and other impure liquid purification, Activated sludge process of. J. A. Coombs. 1,904,916; Apr. 18.
Sewage, Treating. G. Ornstein. 1,904,246; Apr. 18.
Sewing machines, Feeding mechanism for. N. E. Hanson. 1,903,762; Apr. 18.
Shade, Lamp. E. Schwarz. Des. 89,655; Apr. 18.
Shade supporting device, Lamp. W. N. de Sherbinin. 1,903,965; Apr. 18.
Shaft coupling. W. Craik. 1,903,982; Apr. 18.
Shaft for golf clubs, Two-piece metal. M. B. Reach. 1,904,750; Apr. 18.
Shaker or the like, Cocktail. L. W. Rice. Des. 89,653; Apr. 18.
Sharpener, Scissors. A. J. Petrich. 1,904,075; Apr. 18.
Shaving cup. H. Schnyder. 1,903,882; Apr. 18.
Sheet separator for paper feeding machines. F. L. Cross. 1,904,416; Apr. 18.
Shelving construction. A. S. Katz. 1,904,052; Apr. 18.
Shield for ignition coils. B. R. King. 1,903,784; Apr. 18.
Shield for suspended wearing apparel. M. H. Sidebotham. 1,904,062; Apr. 18.
Shirt pressing machine with laterally movable head. E. Davis. 1,904,858; Apr. 18.
Shock absorber. C. H. Chapin. 1,904,040; Apr. 18.
Shock absorber, Pneumatic. P. W. Kane. 1,904,372; Apr. 18.
Shock absorbing mechanism, Friction. W. H. Miner. 1,904,379; Apr. 18.
Shockproof mounting for a high power frequency amplifier system. L. A. Gebhard and C. F. Rudolph. 1,903,812; Apr. 18.
Shoe. F. Grubs. Des. 89,615; Apr. 18.
Shoe and making the same. S. Rinso. 1,904,085; Apr. 18.
Shoe tip and heel pressing machine. H. R. Polleys. 1,904,166; Apr. 18.
Shoe uppers in lasted position, Holding. J. Fausse. 1,904,503; Apr. 18.
Shoes, Tap plate for dancing. J. Selva. 1,904,886; Apr. 18.
Sign: *See*—
Animated and changeable sign.
Sign. R. E. Barclay. 1,904,347; Apr. 18.
Sign. M. B. Benson. 1,904,192; Apr. 18.
Sign. J. Boyce. 1,904,860; Apr. 18.
Signal and trouble-finder. H. E. Cannon. 1,904,800; Apr. 18.
Signal switch, Automatic direction. A. Thompson. 1,904,806; Apr. 18.
Signaling instrument. C. J. Henschel. Des. 89,616; Apr. 18.
Signaling system and apparatus therefor. S. Morton, H. L. Krum, and H. B. Kleinschmidt. 1,904,104; Apr. 18.
Signaling system, Carrier wave. J. W. Schmied 1,904,544; Apr. 18.
Signals, Arrangement for transmitting wireless. M. J. O. Strutt and P. R. Dikkerbuis. 1,904,174; Apr. 18.
Silk or materials containing an organic cellulose ether or ester, Printing acetate. O. Bally. 1,904,818; Apr. 18.
Silo or the like, Portable. P. Rutten. 1,904,932; Apr. 18.
Sinks, Steam deflector and guard for dairy. J. F. Malabary. 1,904,743; Apr. 18.
Skate, Ice. O. Charette. 1,904,270; Apr. 18.
Sled. C. Z. Miller. 1,903,930; Apr. 18.
Slicer. V. Vath. 1,904,840; Apr. 18.
Smoke disposal and draft inducing apparatus. F. H. C. Coppus. 1,904,357; Apr. 18.
Smoker's accessory. C. J. Riley. 1,904,084; Apr. 18.
Smoker's stand. A. D. Nash. Des. 89,651; Apr. 18.
Soap dispenser. W. A. Jennings. 1,904,238; Apr. 18.
Soap molding machine. L. H. Nelles. 1,904,071; Apr. 18.
Soaps, Apparatus for producing. H. Weber and W. Pape. 1,904,021; Apr. 18.
Socket for tubes. W. C. MacFadden. 1,904,670; Apr. 18.
Socket for vacuum tubes. R. B. Benjamin. 1,904,662; Apr. 18.
Solder, Brazing. A. M. Dinkler and C. S. Smith. 1,904,300; Apr. 18.
Solder, Brazing. C. S. Smith. 1,904,389; Apr. 18.
Soldering. G. Brumhübner. 1,904,616; Apr. 18.
Solution viscosity of cellulose, Reducing the. M. J. Callahan. 1,904,406; Apr. 18.
Solutions of halogenated acetylcholin salts, Preparation of stable. G. Roy. 1,904,606; Apr. 18.
Sound, Method and apparatus for reproducing. W. H. Bauch. 1,904,711; Apr. 18.
Sound reproducer, Pneumatic. R. F. Mallina. 1,904,156; Apr. 18.
Sound reproducing apparatus. A. A. Thomas. 1,904,702; Apr. 18.
Sound wave system. C. W. Rice. 1,904,534; Apr. 18.
Spectacles. O. B. Carson. 1,904,852; Apr. 18.
Speed mechanism, Constant. H. E. Nichols. 1,903,832; Apr. 18.
Speed regulator for revolving doors. H. Munson. 1,904,835; Apr. 18.
Speed transmission, Variable. A. E. Marlof. 1,904,819; Apr. 18.
Speed transmission, Variable. D. Parrett. 1,903,914; Apr. 18.
Speedometer for marine craft. C. Knobloch. 1,904,865; Apr. 18.
Spindle bearing. A. G. Whitehead. 1,904,895; Apr. 18.
Spindles, Mechanism for reciprocating grinding wheel. W. J. Guild. 1,904,044; Apr. 18.
Spirits by fermentation, Manufacturing distillable. S. L. Wells. 1,904,589; Apr. 18.
Splint, Surgical. J. J. Ettinger. 1,904,363; Apr. 18.
Spool, Photographic roll film. G. Ollendorff. 1,903,987; Apr. 18.
Sprayer and sweeper, Combination. M. Greenberg. 1,903,896; Apr. 18.
Spraying device. H. J. P. Enemark. 1,904,428; Apr. 18.
Spreader. W. B. Simpson. 1,904,969; Apr. 18.
Spring: *See*—
Closure-holding and return spring.
Spring and cushion, Air. F. E. Christopher. 1,903,775; Apr. 18.
Spring and shock absorber, Vehicle. M. Gnapkaytis. 1,904,220; Apr. 18.
Spring chuck. C. W. Faust. 1,903,964; Apr. 18.
Spring connection. G. C. Frantz. 1,904,681; Apr. 18.
Spring shackle. W. C. Betz. 1,904,264; Apr. 18.
Sprinkler head, Thermo-electric. C. E. Green. 1,904,823; Apr. 18.
Sprinkling device. L. N. Duncan. 1,904,292; Apr. 18.
Stack temperature actuated control device. M. E. Henning. 1,904,310; Apr. 18.
Stand for plates and the like. A. Gerhold. 1,904,735; Apr. 18.
Starter composition, Pyrotechnic. G. U. Graff. 1,903,814; Apr. 18.
Starter for internal combustion engines, Automatic electric. F. Guettner, jr. 1,903,761; Apr. 18.
Starter, Motor. C. N. McDavitt. 1,904,497; Apr. 18.
Starting device for internal combustion engines. G. Becker. 1,904,117; Apr. 18.
Starting mechanism, Automatic. F. T. Christian. 1,904,203; Apr. 18.
Starting mechanism for internal combustion engines. M. P. Whitney. 1,904,187; Apr. 18.
Starting mechanism for internal combustion engines, Automatic. D. L. Wertz. 1,904,184; Apr. 18.
Steam boiler. H. J. Kerr. 1,904,478; Apr. 18.

Steam generator and superheater and operation thereof. C. B. Forward. 1,904,216; Apr. 18.
Steam plant. H. Gleichmann. 1,904,443; Apr. 18.
Steam trap. A. C. Travis, jr. 1,904,393; Apr. 18.
Stearine, Producing. W. Schrauth. 1,904,546; Apr. 18.
Stereopticon-operating device. F. G. Krueger and F. H. Hudepohl. 1,904,622; Apr. 18.
Stereoscope. H. F. Kurtz. 1,904,868; Apr. 18.
Stick, Ignitible. F. Ringer. 1,903,838; Apr. 18.
Stock quotation projecting machine. J. W. Decker. 1,903,806; Apr. 18.
Stoker. F. C. Pickard. 1,904,520; Apr. 18.
Stoker, Chain grate. B. H. Miller. 1,904,503; Apr. 18.
Stoker, Underfeed. W. E. Biggs. 1,904,716; Apr. 18.
Strand material, Apparatus for marking. D. G. Scrantom. 1,904,254; Apr. 18.
Strawberry. C. E. Schuster. Pl. Pt. 60; Apr. 18.
Striker bar for bag machines. G. W. Poppe. 1,904,078; Apr. 18.
String holder. A. B. Collingbourne. Des. 89,629; Apr. 18.
Striping device. B. S. Starch. 1,904,558; Apr. 18.
Stroboscope. W. D. Cockrell. 1,904,124; Apr. 18.
Stud setting tool. R. A. Norling. 1,904,822; Apr. 18.
Stuffing box. F. C. Roye. 1,904,631; Apr. 18.
Submarine cable loading coil. J. J. Gilbert. 1,903,992; Apr. 18.
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113: 1,904,286
117: 1,904,863
120: 1,904,737
151: 1,904,726
243— 12: 1,904,098
244— 2: 1,903,847
12: 1,903,752
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15: 1,904,923
18: 1,903,818
1,904,134
22: 1,904,737
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24: 1,904,988
29: 1,904,801
31: 1,903,823
245— 1.5: 1,903,926
443: 1,904,206
247— 1: 1,903,976
3: 1,903,833
10: 1,904,126
25: 1,904,409

247— 25: 1,904,617
248— 19: 1,904,052
28.5: 1,904,063
30: 1,904,088
31: 1,904,315
249— 18: 1,904,652
250— 2: 1,904,544
9: 1,904,567
11: 1,903,946
17: 1,903,812
20: 1,904,219
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27: 1,904,272
1,904,830
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27.5: 1,903,945
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1,904,436
1,904,805
33: 1,903,811
1,904,174
34: 1,904,867
36: 1,904,140
1,904,142
1,904,771
40: 1,904,165
251— 91: 1,904,467
137: 1,903,757
252— 1: 1,903,879
3: 1,903,834
253— 77: 1,904,421
254— 42: 1,904,551
88: 1,904,668
89: 1,903,905
102: 1,904,279
135: 1,904,885
187: 1,904,930
255— 4: 1,904,822
19: 1,904,765
22: 1,904,249
1,904,256
46: 1,904,657
53: 1,904,655
1,904,656
1,904,918
257— 137: 1,903,980
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149: 1,904,555
202: 1,903,777
240: 1,904,575
248: 1,904,357
260— 3: 1,904,244
8: 1,904,595
27: 1,904,220
32: 1,903,857
37: 1,903,891
42: 1,904,367
54: 1,903,850
59: 1,903,962
61: 1,904,145
64: 1,904,366
77: 1,904,220
78: 1,904,321
83: 1,904,322
98: 1,904,721
102: 1,903,961
103: 1,903,980
108: 1,903,988
116: 1,904,160
1,904,452
122: 1,904,495
124: 1,903,980
127: 1,904,018
128.5: 1,903,927
130.5: 1,904,047
136: 1,904,414
146: 1,904,408
153: 1,904,545
154: 1,904,269
166: 1,903,845
1,904,200
157: 1,904,677
166: 1,903,894
261— 35: 1,904,431
41: 1,904,002
1,904,634
50: 1,904,022
69: 1,904,701
92: 1,904,952
114: 1,904,380
123: 1,904,667
262— 28: 1,904,488
1,904,489
33: 1,903,771
1,903,772
263— 7: 1,903,909
9: 1,904,427
19: 1,904,226
1,904,287
264— 14: 1,904,435

265— 1: 1,904,713
2: 1,904,676
45: 1,904,446
59: 1,904,614
62: 1,904,542
66: 1,903,965
266— 6: 1,904,526
1,904,986
33: 1,904,781
34: 1,904,883
267— 1: 1,903,775
1,904,681
30: 1,904,220
54: 1,904,284
271— 21: 1,904,416
272— 22: 1,903,948
30: 1,904,667

272— 44: 1,903,905
58: 1,904,688
273— 1.5: 1,904,526
22: 1,904,694
41: 1,904,088
80: 1,904,720
122: 1,903,790
136: 1,904,736
274— 11: 1,904,944
37: 1,904,468
39: 1,904,490
275— 2: 1,903,874
9: 1,903,888
279— 16: 1,903,904
278: 1,904,941
280— 21: 1,903,990
33.18: 1,904,267

280—33.44: 1,904,163
124: 1,903,995
182: 1,904,343
1,904,948
280— 37: 1,903,781
38: 1,903,879
281— 34: 1,904,532
283— 12: 1,904,660
284— 19: 1,904,681
285— 78: 1,904,575
111: 1,903,882
282— 67: 1,904,291
169: 1,904,703
172: 1,904,693
173: 1,904,602
332: 1,904,970
340: 1,903,763
358: 1,904,210
286— 80: 1,904,081
68: 1,904,941

287— 88: 1,904,043
288— 1: 1,903,990
1,904,651
289— 8: 1,904,995
1,904,995
22: 1,904,245
1,904,982
290— 4: 1,903,974
1,904,488
118: 1,904,889
128: 1,904,988
291— 9: 1,904,271
38: 1,904,651
294— 7: 1,904,695
295— 2: 1,904,451
22: 1,904,247
1,904,288
26: 1,904,307

297— 64: 1,904,697
72: 1,904,749
152: 1,904,681
155: 1,904,898
168: 1,904,770
169: 1,904,649
183: 1,904,895
215: 1,904,888
309— 18: 1,904,158
312— 18: 1,904,884
28: 1,904,217
42: 1,904,709
89: 1,904,207

U. S. GOVERNMENT PRINTING OFFICE: 1933

LIST OF TRADE-MARK APPLICANTS

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Aaron Coffee Company. (See Weiser, Aaron.)
Ace Products Company, Inc., New York, N. Y. Kitchen graters. Serial No. 334,577; Apr. 25. Class 23.
Adorable Frocks, Inc., New York, N. Y. Dresses, coats, suits, etc. Serial No. 334,726; Apr. 25. Class 39.
Alexander Doll Co. (See Behrman, Bertha.)
American Anode Inc., Akron, Ohio. Surgeons' rubber gloves. Serial Nos. 335,382–4; Apr. 25. Class 44.
American Anode Inc., Akron, Ohio. Rubber toy balloons. Serial Nos. 335,387–9; Apr. 25. Class 22.
American Cone & Pretzel Company, Philadelphia, Pa. Cookies, cakes, and crackers, etc. Serial No. 278,673; Apr. 25. Class 46.
Amtorg Trading Corporation, New York, N. Y. Canned crab meat. Serial No. 308,716; Apr. 25. Class 46.
Antro Chemical Company. (See Bennett, Robert S.)
Ault & Wiborg Company, The, New York, N. Y. Carbon paper and typewriter ribbons. Serial No. 334,903; Apr. 25. Class 11.
Bachrach-Feld Company, Inc., The, doing business as Nnwort Concentrated Malt Co., Cincinnati, Ohio. Concentrated, liquid malt syrup. Serial No. 334,788; Apr. 25. Class 46.
Barst, Herman, doing business as Selsit Products Co., New York, N. Y. Preparation for indigestion. Serial No. 335,082; Apr. 25. Class 6.
Bayuk Cigars Incorporated, Philadelphia, Pa. Cigars. Serial No. 335,762; Apr. 25. Class 17.
Beech-Nut Packing Company, Canajoharie, N. Y. Coffee. Serial No. 335,559; Apr. 25. Class 46.
Beech-Nut Packing Company, Canajoharie, N. Y. Chewing gum. Serial No. 335,560; Apr. 25. Class 46.
Behrman, Bertha, doing business as Alexander Doll Co., New York, N. Y. Dolls. Serial No. 335,763; Apr. 25. Class 22.
Bennett, Robert S., doing business as Antro Chemical Company, Cleveland, Ohio. Preparation for sinus infections, catarrh, etc. Serial No. 334,344; Apr. 25. Class 6.
Berghoff Brewing Corporation, Fort Wayne, Ind. Malt beverage. Serial No. 335,546; Apr. 25. Class 48.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. Serial Nos. 334,907–8; Apr. 25. Class 42.
Bohland & Fuchs, Graslitz, Czechoslovakia. Bugles, cornets, altos, etc. Serial No. 335,412; Apr. 25. Class 86.
Bradspeed Corporation, St. Louis, Mo. Machinery and parts thereof. Serial No. 333,726; Apr. 25. Class 23.
Bralle, Georg, Hamburg and Altona, Germany. Perfumery. Serial No. 318,897; Apr. 25. Class 6.
Brauer Bros. Inc., St. Louis, Mo. Upper gauging attachment for making shoe lasts. Serial No. 330,028; Apr. 25. Class 26.
Burnett, Joseph, Co., Boston, Mass. Vanilla food flavoring extract. Serial No. 307,579; Apr. 25. Class 46.
Buxbaum Company, The, Akron, Ohio. Floor coverings and mats. Serial No. 334,064; Apr. 25. Class 50.
C & H Sales Corporation, Boston, Mass. Pumps for oil burners. Serial No. 334,035; Apr. 25. Class 23.
Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. Serial No. 333,219; Apr. 25. Class 6.
Calwhey Co., The, San Francisco, Calif. Stabilized dry whey skimmed milk product. Serial No. 335,346; Apr. 25. Class 46.
Capitol Rendering Works, Inc., Denver, Colo. Fertiliser. Serial No. 335,497; Apr. 25. Class 10.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 324,880; Apr. 25. Class 42.
Celanese Corporation of America, New York, N. Y. Fabrics of cellulose derivatives. Serial No. 335,187; Apr. 25. Class 42.
Chase Brass & Copper Co. Incorporated, Waterbury, Conn. Sheet-metal and wire. Serial No. 333,146; Apr. 25. Class 14.
Chicago Curled Hair Company, Chicago, Ill. Carpet pads and carpet lining. Serial No. 335,717; Apr. 25. Class 50.
Chicago Telephone Supply Company, Elkhart, Ind. Volume controls, tone controls, and switches. Serial No. 334,972; Apr. 25. Class 21.
Cleveland Cleaner and Paste Co., The, Cleveland, Ohio. Wall size. Serial No. 334,982; Apr. 25. Class 16.
Cleveland Cleaner and Paste Co., The, Cleveland, Ohio. Compound for cleaning wall paper, frescos, etc. Serial No. 334,983; Apr. 25. Class 4.
Cleveland Cleaner and Paste Co., The, Cleveland Ohio. Paint cleaning compound. Serial No. 334,984; Apr. 25. Class 4.
Cleveland Cleaner and Paste Co., The, Cleveland, Ohio. Brush cleaner. Serial No. 334,985; Apr. 25. Class 16.
Colgate-Palmolive-Peet Company, Chicago, Ill. Soap. Serial No. 335,768; Apr. 25. Class 4.
Comfort Manufacturing Company, Chicago, Ill. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 335,018; Apr. 25. Class 6.
Commercial Laboratories, Inc., Newark, N. Y. Plant fertiliser. Serial No. 335,665; Apr. 25. Class 10.
Conde Nast Publications, Inc., The, New York, N. Y. Paper patterns for garments. Serial No. 333,280; Apr. 25. Class 26.
Conover & Mast, New York, N. Y. Periodical publications. Serial No. 332,086; Apr. 25. Class 38.
Copper & Brass Research Association, New York, N. Y. Copper and copper alloys. Serial No. 333,506; Apr. 25. Class 14.
Crompton Company, West Warwick, R. I. Treated tarnish proof, napped, and pile fabrics for use in packing silver. Serial No. 335,273; Apr. 25. Class 50.
Crosley Radio Corporation, The, Cincinnati, Ohio. Power devices and parts therefor. Serial No. 334,868; Apr. 25. Class 21.
Crosley Radio Corporation, The, Cincinnati, Ohio. Electrical refrigerators. Serial No. 335,478; Apr. 25. Class 31.
Duo Corporation. (See Owen, Orlando K.)
Dorgan-McPhillips Packing Corporation, Mobile, Ala. Canned shrimps. Serial No. 335,484; Apr. 25. Class 46.
Dorman, Long & Co., Limited, Middlesbrough, England. Joist steel, channel steel, angle steel, etc. Serial No. 334,350; Apr. 25. Class 14.
Dort, Arthur A., Brooklyn, N. Y. Perfumes, face creams, talcum powder, etc. Serial No. 324,092; Apr. 25. Class 6.
Draper-Maynard Company, The, Plymouth, N. H. Balls, bats, rackets, etc. Serial No. 332,577; Apr. 25. Class 22.
Driver-Harris Company, Harrison, N. J. Wire. Serial No. 334,989; Apr. 25. Class 21.
Driver-Harris Company, Harrison, N. J. Wire. Serial No. 334,990; Apr. 25. Class 21.
Dugan Brothers of New Jersey, Inc., Newark, N. J. Bread, cakes, and pies. Serial No. 333,729; Apr. 25. Class 46.
Eclipse Machine Company, Elmira Heights, N. Y. Unitary electrical starting mechanisms, automatic starter controllers, and backfire circuit breakers, etc. Serial Nos. 334,672–3; Apr. 25. Class 21.
Edgeberg, Otto, doing business as Northwestern Brokerage Co., Eau Claire, Wis. Wheat flour. Serial No. 329,966; Apr. 25. Class 46.
Edison-Splitdorf Corporation, West Orange, N. J. Spark plugs. Serial No. 334,091; Apr. 25. Class 21.
Ezza Manufacturing Co. (See Smith, Ada F.)
Felton Chemical Company, Inc., Brooklyn, N. Y. Candies, ice cream, fruit syrups, etc. Serial No. 330,701; Apr. 25. Class 46.
Frink Corporation, The, Long Island City, N. Y. Electric floor and table lamps and parts thereof. Serial Nos. 328,420–1; Apr. 25. Class 21.
Frink Corporation, The, Long Island City, N. Y. Electric floor and table lamps and parts thereof. Serial No. 329,794; Apr. 25. Class 21.
Garfinkel & Ritter, doing business as Jaunty Silk Company New York, N. Y. Preparation for removing spots, stains, etc. Serial No. 334,558; Apr. 25. Class 4.
General Electric X-Ray Corporation, Chicago, Ill. Photographic developing solutions and for other chemical baths. Serial No. 333,287; Apr. 25. Class 26.
Glenn Confections, Inc., Buffalo, N. Y. Toy whistles of paraffine and sugar. Serial No. 335,357; Apr. 25. Class 46.
Globe Brewing Co. Inc., Utica, N. Y. Malt beverages. Serial No. 335,864; Apr. 25. Class 48.
Green, Andrew D., Evansville, Ind. Salve. Serial No. 334,995; Apr. 25. Class 6.
Green Foundry Company, St. Louis, Mo. Cast metal brake drums. Serial No. 335,418; Apr. 25. Class 19.
Grover, J. J., Shoe Company, Stoneham, Mass. Shoes. Serial No. 320,250; Apr. 25. Class 39.
Hamblet Studios, Inc., Akron, Ohio. Picture puzzles. Serial No. 335,505; Apr. 25. Class 22.
Hamm, Theo., Brewing Co., St. Paul, Minn. Malt beverages. Serial No. 335,778; Apr. 25. Class 48.
Harris, Esther L., Atlanta, Ga. Toy drawing books. Serial No. 335,465; Apr. 25. Class 22.
Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, and San Francisco, Calif. Canned pineapple juice. Serial No. 334,964; Apr. 25. Class 46.
Hijos de Francisco Serrano, Oviedo, Spain. Aniseed brandies and liquors. Serial No. 334,561; Apr. 25. Class 49.
Hijos de Francisco Serrano, Oviedo, Spain. Anisette. Serial No. 334,562; Apr. 25. Class 49.
Holabird Company, The, Bryan, Ohio. Puzzles. Serial No. 335,722; Apr. 25. Class 22.
Hollingshead, R. M., Co., The, Camden, N. J. Carbon decomposer, anti-freeze compound, etc. Serial No. 332,890; Apr. 25. Class 6.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Horton & Converse, doing business as La Salle Pharmacal Co., Los Angeles, Calif. Tooth powder. Serial No. 334,998; Apr. 25. Class 6.
Houbigant, Inc., New York, N. Y. Face powder. Serial No. 335,640; Apr. 25. Class 6.
Hudnut, Richard, New York, N. Y. Shaving cream. Serial No. 335,595; Apr. 25. Class 4.
Ingersoll-Rand Company, New York, N. Y. Cutting head for drill steels. Serial No. 335,093; Apr. 25. Class 23.
International Distributing Co., Janesville, Wis. Porch shades and window shades. Serial No. 335,320; Apr. 25. Class 32.
Jaunty Silk Company. (See Garfinkel & Ritter.)
Johnson, S. C., & Son, assignor to S. C. Johnson & Son, Inc., Racine, Wis. Polishing wax. Serial No. 320,592; Apr. 25. Class 16.
Johnson's Fur & Sales Co., Chippewa Falls, Wis. Fox feed. Serial No. 334,919; Apr. 25. Class 46.
Julian & Kokenge Company, The, doing business as The Lape & Adler Company, Columbus and Cincinnati, Ohio. Women's shoes. Serial No. 323,946; Apr. 25. Class 39.
Kalker Trieurfabrik und Fabrik Gelochter Bleche Mayer & Cie. Aktiengesellschaft, Cologne, Germany. Rotary grain separators. Serial No. 334,608; Apr. 25. Class 23.
Kashins, Max Co., Inc., New York, N. Y. Cotton piece goods. Serial No. 335,167; Apr. 25. Class 42.
Kitchenaid Manufacturing Company, The, Troy, Ohio. Electrically-driven beating, treating, and mixing machines and attachments therefor. Serial No. 331,259; Apr. 25. Class 21.
Kleinert, I. B., Rubber Company, New York, N. Y. Undergarments. Serial No. 335,277; Apr. 25. Class 39.
La Dento Laboratories. (See Lockwood, Lee W.)
Lake Wales Citrus Growers Association, Lake Wales, Fla. Citrus fruits. Serial No. 334,965; Apr. 25. Class 46.
Lakeshire Cheese Company, Plymouth, Wis. Cheese. Serial No. 335,360; Apr. 25. Class 46.
Lape & Adler Company, The. (See Julian & Kokenge Company, The.)
La Salle Pharmacal Co. (See Horton & Converse.)
Les Laboratoires Dausse, Societe Anonyme, Paris, France. Perfumes, toilet waters, rouges, etc. Serial No. 334,365; Apr. 25. Class 6.
Lester Piano Company, Philadelphia, Pa. Pianos and player pianos. Serial No. 328,357; Apr. 25. Class 36.
Liberty Mills, San Antonio, Tex. Wheat flour. Serial No. 331,408; Apr. 25. Class 46.
Lockwood, Lee W., doing business as La Dento Laboratories. Minneapolis, Minn. Sterilizing, cleansing powder for artificial teeth. Serial No. 335,280; Apr. 25. Class 4.
Luxite Silk Products Co., Milwaukee, Wis. Underwear and foundation garments. Serial No. 334,924; Apr. 25. Class 39.
Marchant, Charles, Glasgow, Scotland. Whiskey. Serial No. 335,551; Apr. 25. Class 49.
Marion Shoe Company, Marion, Ohio. Shoes. Serial No. 333,263; Apr. 25. Class 39.
Mayo Brothers, Fort Madison, Iowa. Salve. Serial No. 334,684; Apr. 25. Class 6.
McCoy's Laboratories, Inc., New York, N. Y. Cod liver oil and cod liver oil compound. Serial No. 335,512; Apr. 25. Class 6.
McKay, W. E., & Co., Inc., New York, N. Y. Textile fabrics. Serial No. 335,242; Apr. 25. Class 42.
Mead Johnson & Company, Evansville, Ind. Cereal, egg, and milk free diet for allergic children. Serial No. 335,328; Apr. 25. Class 46.
Michel, C. and J., Brewing Company, La Crosse, Wis. Malt beverage. Serial No. 334,110; Apr. 25. Class 48.
Moorman, Robert P., doing business as R. P. Moorman Co., Indianapolis, Ind. Processed nuts. Serial No. 335,205; Apr. 25. Class 46.
National Biscuit Company, New York, N. Y. Biscuits. Serial No. 334,154; Apr. 25. Class 46.
National Washboard Company, Chicago, Ill. Ironing tables. Serial Nos. 335,468–75; Apr. 25. Class 24.
Naumkeag Steam Cotton Company, Salem, Mass. Sheets. Serial Nos. 335,365–6; Apr. 25. Class 42.
Nolde and Horst Company, The, Reading, Pa. Hosiery. Serial No. 335,585; Apr. 25. Class 39.
Northwestern Brokerage Co. (See Edgeberg, Otto.)
Nox-Kwik Company, Baltimore, Md. Liniment. Serial No. 334,510; Apr. 25. Class 6.
Nuwort Concentrated Malt Co. (See Bachrach-Feld Company, Inc., The.)
Onondaga Silk Company, Inc., Syracuse and New York, N. Y. Silk fabrics. Serial Nos. 335,208–9; Apr. 25. Class 42.
Orange-Crush Company, Chicago, Ill. Maltless beverages and syrups, compounds and concentrates for making the same. Serial No. 335,519; Apr. 25. Class 45.
Owen, Orlando K., doing business as Dao Corporation, Terre Haute, Ind. Insecticide. Serial No. 327,600; Apr. 25. Class 6.
Palm Beach Loxahatchee Company, West Palm Beach, Fla. Fresh tomatoes and canned tomatoes. Serial No. 335,129; Apr. 25. Class 46.
Pango Milk Chocolate Co., The, Toledo, Ohio. Evaporated milk. Serial No. 284,869; Apr. 25. Class 46.
Parfumerie Rigaud, Inc., New York, N. Y. Perfumes, toilet waters, bath salts, etc. Serial No. 334,023; Apr. 25. Class 6.
Parfumerie St. Denis, New York, N. Y. Astringents, astringent cerates, bleach and beauty creams, etc. Serial No. 333,468; Apr. 25. Class 6.
Petrolagar Laboratories, Inc., Chicago, Ill. Magazine. Serial No. 335,521; Apr. 25. Class 38.
Quaker City Wholesale Grocery Company, Inc., Philadelphia, Pa. Canned fruits and vegetables. Serial No. 335,522; Apr. 25. Class 46.
Reiss, William, Inc., New York, N. Y. Jewelry. Serial No. 335,294; Apr. 25. Class 28.
Research Products Corporation, New York, N. Y. Filling material for teeth. Serial No. 335,173; Apr. 25. Class 44.
Richardson Corporation, Rochester, N. Y. Maltless beverages, and syrup used in making the same. Serial No. 335,542; Apr. 25. Class 45.
Robert Enterprises, Inc., New York, N. Y. Perfumes. Serial No. 335,022; Apr. 25. Class 6.
Rockwell-Barnes Company, Chicago, Ill. Bond paper. Serial No. 335,567; Apr. 25. Class 37.
Rowett, Legge & Co. Limited, London, England. Scotch whisky. Serial No. 335,552; Apr. 25. Class 49.
Schweiz. Serum- & Impfinstitut Bern, Bern, Switzerland. Apparatus for determining sugar in urine. Serial No. 335,299; Apr. 25. Class 44.
Sears, Roebuck and Co., Chicago, Ill. Portable electric drills and saws and motors. Serial No. 332,787; Apr. 25. Class 21.
Sears, Roebuck and Co., Chicago, Ill. Gun and revolver cartridges. Serial No. 335,300; Apr. 25. Class 9.
Sears, Roebuck and Co., Chicago, Ill. Kitchen chairs and ottomans. Serial No. 335,301; Apr. 25. Class 32.
Selsit Products Co. (See Barst, Herman.)
Shellmar Products Company, Chicago, Ill. Wrappers, bags, and cartons. Serial No. 335,074; Apr. 25. Class 2.
Sherwin-Williams Company, The, Cleveland, Ohio. Insecticides. Serial No. 335,524; Apr. 25. Class 6.
Sherwood Bros., Inc., Baltimore, Md. Oil burners. Serial No. 335,481; Apr. 25. Class 34.
Shoe-Milk Products Corporation, Orange, N. J. Shoe cleanser, polishes, and dressing. Serial No. 335,006; Apr. 25. Class 4.
Sir, Harry, & Son, Inc., New York, N. Y. Shoes. Serial No. 324,804; Apr. 25. Class 39.
Smith, Ada F., doing business as Ezza Manufacturing Co., Albany, N. Y. Ointment and toilet cream. Serial No. 333,783; Apr. 25. Class 6.
Societe a Responsabilite Limitee: Le Bakerfix, Nanterre, France. Perfumes, toilet waters, rouge, etc. Serial No. 334,076; Apr. 25. Class 6.
Société Anonyme de la Fabrique d'Horlogerie le Coultre & Cie., Le Sentier, Switzerland. Watches, watch movements, and parts thereof. Serial Nos. 331,013–14; Apr. 25. Class 27.
Standard Brands Incorporated, New York, N. Y. Tea. Serial Nos. 334,774–5; Apr. 25. Class 46.
Standard Brands Incorporated, New York, N. Y. Tea. Serial Nos. 334,811–12; Apr. 25. Class 46.
Standard Fuel Engineering Company, Detroit, Mich. Refractory material in plastic form. Serial No. 335,077; Apr. 25. Class 12.
Stant Manufacturing Company, Connorsville, Ind. Vehicle radiator and gasoline filler caps. Serial No. 326,960; Apr. 25. Class 19.
Stant Manufacturing Company, Connorsville, Ind. Vehicle radiator and gasoline filler caps. Serial No. 326,965; Apr. 25. Class 19.
Stearns & Foster Co., The, Cincinnati, Ohio. Quilting frames or hoops. Serial No. 335,526; Apr. 25. Class 50.
Stendahl, Earl L., doing business as Stendahl Art Gallery, Los Angeles, Calif. Jig saw puzzles. Serial No. 335,624; Apr. 25. Class 22.
Sterling Products Company, Evansville, Ind. Malt beverage. Serial No. 335,454; Apr. 25. Class 48.
Street & Smith Publications, Inc., New York, N. Y. Periodical. Serial No. 335,099; Apr. 25. Class 38.
Sullivan, Mark J., doing business as Tyoga Products Company, Wellsboro, Pa. Lubricating oil, hair tonic, liniment, etc. Serial No. 334,939; Apr. 25. Class 6.
Tennessee Eastman Corporation, Kingsport, Tenn. Antifreeze compound. Serial No. 335,405; Apr. 25. Class 6.
Thierry, Joseph, Denver, Colo. Cold cream, hand lotions, after shave lotion, etc. Serial No. 332,240; Apr. 25. Class 6.
Treadway, L. G., Service Corporation, New York, N. Y. Periodicals. Serial No. 335,372; Apr. 25. Class 38.
Tyoga Products Company. (See Sullivan, Mark J.)
Varilla, G. Bunau, Boulogne, France. Cleaning brushes, hair brushes, nail brushes, etc. Serial No. 335,305; Apr. 25. Class 29.

PUBLISHED FOR OPPOSITION

[Act of Feb. 20, 1905, Sec. 6, as amended Mar. 2, 1907]

Victor Flour Mills, Inc., Pittsford, N. Y. Wheat flour. Serial No. 335,529; Apr. 25. Class 46.
Victorius, A. V., & Co., Inc., New York, N. Y. Hosiery. Serial No. 334,545; Apr. 25. Class 39.
Vitelli, F., & Figlio, New York, N. Y. Canned peeled tomatoes. Serial No. 334,895; Apr. 25. Class 46.
Voneiff-Drayer Co., The, Baltimore, Md. Candy. Serial Nos. 335,101–2; Apr. 25. Class 46.
Weaver Jackson, Company, Los Angeles, Calif. Permanent-wave hair pads. Serial No. 333,645; Apr. 25. Class 44.
Weiser, Aaron, doing business as Aaron Coffee Company, Philadelphia, Pa. Coffee and tea. Serial No. 335,376; Apr. 25. Class 46.
Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa. Vacuum tube controllers. Serial No. 333,958; Apr. 25. Class 21.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Switches. Serial No. 335,223; Apr. 25. Class 21.
Wheedon, Inc., Buffalo, N. Y. Chairs. Serial No. 333,692; Apr. 25. Class 32.
Whitman, Stephen F., & Son, Inc., Philadelphia, Pa. Candy. Serial No. 335,877; Apr. 25. Class 46.
Whittemore Bros. Corp., Cambridge, Mass. Brushes and materials for cleaning, etc., leather goods. Serial No. 324,577; Apr. 25. Class 4.
Willapoint Oysters Incorporated, Seattle, Wash. Canned raw oysters and canned cooked oysters. Serial No. 334,725; Apr. 25. Class 46.
Williams, Clarence E., Chicago, Ill. Popcorn confections. Serial No. 325,928; Apr. 25. Class 46.
Williams, J. B., Company, The, Glastonbury, Conn. Preparations for the hair and beard, toilet powders, etc. Serial No. 335,045; Apr. 25. Class 6.
Woolfolk, J. W., Co., Inc., The, Fort Valley, Ga. Insecticide and fungicide composition. Serial No. 313,573; Apr. 25. Class 6.
Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Chemical pulp, sulphite and sulphate pulp and mechanical pulp. Serial No. 328,199; Apr. 25. Class 1.

LIST OF REGISTRANTS OF TRADE-MARKS

Adam Hat Stores, Inc., New York, N. Y. Men's hats. 302,578; Apr. 25; Serial No. 329,616; published Jan. 17, 1933. Class 39.
Advance Welding & Alloys, Ltd., Springfield Gardens, N. Y. Welding rods and hard faced castings. 302,609; Apr. 25; Serial No. 332,864; published Feb. 7, 1933. Class 14.
Ables, Martha W., Chicago, Ill. Hair net. 302,529; Apr. 25; Serial No. 330,987; published Jan. 17, 1933. Class 42.
Air-Way Electric Appliance Corporation, Toledo, Ohio. Liquid preparation. 302,699; Apr. 25; Serial No. 333,376; published Feb. 7, 1933. Class 5.
Alaska Distributing Co. (See O'Neill, John B.)
Alaska Sea Products, Inc. (See O'Neill, John B.)
Albers Bros. Milling Company, Portland, Oreg. Mixed calf food. 302,619; Apr. 25; Serial No. 331,846; published Feb. 7, 1933. Class 46.
Alexander Brothers Company, Savannah, Ga. Overalls. 91,748; renewed May 27, 1933.
Algeriam Date Importing Co., New York, N. Y. Fresh dates. 302,747; Apr. 25; Serial No. 332,506; published Feb. 7, 1933. Class 46.
Alpine Ice Cream Co. Inc., Corona, N. Y. Ice cream. 302,742; Apr. 25; Serial No. 329,665; published Feb. 14, 1933. Class 46.
American Hard Rubber Company, Hempstead and New York, N. Y. Hard rubber combs. 302,755; Apr. 25; Serial No. 332,214; published Jan. 17, 1933. Class 40.
American Hominy Company, Indianapolis, Ind., assignor, by mesne assignments, to Decatur Milling Company, Inc., Decatur, Ill. Corn-product adhesive paste. 90,619; renewed Mar. 11, 1933.
American Safety Razor Corporation, Brooklyn, N. Y. Razor blades. 302,812; Apr. 25. Class 23.
American Scotti Corporation, New York, N. Y. Wool felt hat bodies for women only. 302,795; Apr. 25; Serial No. 317,661; published Mar. 1, 1932. Class 39.
American Steel Foundries, Chicago, Ill. Railway equipment. 302,811; Apr. 25. Class 19.
Anita Laboratories. (See Lemen, Paul H.)
Amtorg Trading Corporation, New York, N. Y. Candy. 302,660; Apr. 25; Serial No. 288,461; published Jan. 13, 1931. Class 46.
Anheuser-Busch, Incorporated, St. Louis, Mo. Malt beverage. 302,556; Apr. 25; Serial No. 333,349; published Feb. 14, 1933. Class 48.
Applebaum-Mautner Company, Inc., The, Madison, Wis. Boots, shoes, slippers, and hosiery. 302,526; Apr. 25; Serial No. 330,194; published Jan. 3, 1933. Class 39.
Arbuckle Brothers, New York, N. Y. Coffee. 93,254; renewed Sept. 2, 1933.
Ayer Company, The, Lowell, Mass. Medicinal ointment. 302,546; Apr. 25; Serial No. 333,572; published Feb. 14, 1933. Class 6.
Ayrlawn Farms. (See Letts, John C.)
B. B. & R. Knight Corporation, Providence, R. I. Cloth. 302,642; Apr. 25; Serial No. 332,492; published Feb. 7, 1933. Class 42.
Ball Chemical Company, Pittsburgh, Pa. Preparations for removing paint and other coatings from surfaces. 91,451; renewed May 6, 1933.
Baltz & Koerper, Philadelphia, Pa. Soaps. 302,575; Apr. 25; Serial No. 329,725; published Feb. 14, 1933. Class 4.
Barber, Camillo, Vienna, Austria. Hair combs. 302,592; Apr. 25; Serial No. 325,676; published Feb. 7, 1933. Class 40.
Barili, Arthur E., Los Angeles, Calif. Pastry and ravioli. 302,785; Apr. 25; Serial No. 318,891; published Feb. 7, 1933. Class 46.
Barrett Company, The. (See Warren Chemical & Manufacturing Company.)
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Tar distillates. 91,409; renewed Apr. 29, 1933.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Naphthalene. 91,452; renewed May 6, 1933.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Tarred felt roofing. 91,547; renewed May 13, 1933.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Coal-tar oils. 91,836; renewed June 3, 1933.
Barrett Manufacturing Company, assignor to The Barrett Company, New York, N. Y. Roofings. 92,167; renewed June 24, 1933.
Barteldes Seed Company, The, Lawrence, Kans. Pop corn. 302,583; Apr. 25; Serial No. 328,845; published Feb. 7, 1933. Class 46.
Beauty Maid Products Company. (See Blanchard, Harry G.)
Behr-Manning Corporation, Troy and Watervliet, N. Y. Flexible abrasive paper and cloth. 302,591; Apr. 25; Serial No. 326,076; published Feb. 14, 1933. Class 4.
Belle Rose Chocolate Co. (See Daggett Chocolate Company.)
Bellemere, Stanley L., doing business as Layne Hosiery Company, Reading, Pa. Hosiery. 302,522; Apr. 25; Serial No. 330,443; published Jan. 31, 1933. Class 39.
Bensinwerke Rhenania Gesellschaft mit beschränkter Haftung, Dusseldorf-Reisholz, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Turpentine and turpentine compositions. 91,540; renewed May 6, 1933.
Blanchard, Harry G., doing business as Beauty Maid Products Company, Buffalo, N. Y. Cosmetics. 302,769; Apr. 25; Serial No. 333,142; published Feb. 14, 1933. Class 6.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 302,555; Apr. 25; Serial No. 333,350; published Feb. 14, 1933. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 302,637; Apr. 25; Serial No. 332,573; published Jan. 24, 1933. Class 42.
Blumenthal, Sidney, & Co. Inc., New York, N. Y. Pile fabrics. 302,692; Apr. 25; Serial No. 333,547; published Feb. 14, 1933. Class 42.
Bolloré, René, Odet, France. Cigarette papers. 302,806; Apr. 25; Serial No. 322,570; published Feb. 14, 1933. Class 8.
Bowser, S. F., & Co. Inc., Fort Wayne, Ind. Measuring oil-pumps. 93,160; renewed Aug. 26, 1933.
Brearley, Walter E., doing business as The Brearley Co., Rockford, Ill. Weighing scales. 302,780; Apr. 25; Serial No. 332,364; published Feb. 7, 1933. Class 26.
Brock, John D., doing business as Specialty Optical Co., Kansas City, Mo. Ophthalmic mountings. 302,568; Apr. 25; Serial No. 333,113; published Feb. 7, 1933. Class 26.
Brockman, Oscar, doing business as Oscar Brockman Company, Louisville, Ky. Shoe soles. 302,593; Apr. 25; Serial No. 331,540; published Jan. 17, 1933. Class 39.
Brockman, Oscar, Louisville, Ky. Composition rubber shoe soles. 302,621; Apr. 25; Serial No. 331,816; published Jan. 3, 1933. Class 39.
Bulletin Company, Philadelphia, Pa. Newspaper articles. 302,574; Apr. 25; Serial No. 329,886; published Feb. 7, 1933. Class 38.
Burlington County Shoe Company, Mount Holly, N. J. Shoes. 302,628; Apr. 25; Serial No. 331,542; published Jan. 17, 1933. Class 39.

Burnham & Morrill Company, doing business as Oxford Packing Co., Portland, Me. Canned vegetables. 302,723; Apr. 25; Serial No. 333,575; published Feb. 14, 1933. Class 46.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. 302,548; Apr. 25; Serial No. 333,501; published Feb. 14, 1933. Class 16.

Cabot, Godfrey L., Inc., Boston, Mass. Carbon black. 302,707; Apr. 25; Serial No. 333,056; published Feb. 7, 1933. Class 16.

California Art Supply Company, Palo Alto, Calif. Floor wax, polish. 302,813; Apr. 25. Class 16.

California Retail Grocers and Merchants Association, Ltd., San Francisco, Calif. Weekly publication. 302,777; Apr. 25; Serial No. 333,057; published Feb. 7, 1933. Class 38.

Campho-Sorcin Laboratory, The, Ossining, N. Y. Skin-disease remedy. 90,629; renewed Mar. 11, 1933.

Cannon Mills, Inc., New York, N. Y. Textile sheets, sheetings, and pillow cases. 302,786; Apr. 25; Serial No. 321,198; published Jan. 17, 1933. Class 42.

Capone, Arthur J., doing business as Ellos, New York, N. Y. Olive oil. 302,669; Apr. 25; Serial No. 332,911; published Feb. 7, 1933. Class 46.

Carpenter, J. M., Tap & Die Co., The, Pawtucket, R. I. Thread cutting tools. 302,725; Apr. 25; Serial No. 332,683; published Feb. 7, 1933. Class 23.

Carroll, Hugh F., Cedarhurst, N. Y. Toilet paper. 302,688; Apr. 25; Serial No. 332,668; published Feb. 14, 1933. Class 37.

Cates, Chas. F., & Sons, Inc., Faison, N. C. Sweet pickles, sour pickles, dill pickles, etc. 302,741; Apr. 25; Serial No. 329,823; published Feb. 14, 1933. Class 46.

Celanese Corporation of America, New York, N. Y. Fabrics. 302,788; Apr. 25; Serial No. 322,419; published Jan. 31, 1933. Class 42.

Celanese Corporation of America, New York, N. Y. Fabrics. 302,796; Apr. 25; Serial No. 318,096; published Jan. 31, 1933. Class 42.

Chanel, Inc., New York, N. Y. Soap. 302,690; Apr. 25; Serial No. 332,645; published Feb. 7, 1933. Class 4.

Chappel Bros., Inc., Rockford, Ill. Gravel for caged birds. 302,684; Apr. 25; Serial No. 332,992; published Feb. 14, 1933. Class 1.

Chappel Bros., Inc., Rockford, Ill. Prepared food for cage birds. 302,750; Apr. 25; Serial No. 332,685; published Feb. 14, 1933. Class 46.

Chappel Bros., Inc., Rockford, Ill. Bird food. 302,772; Apr. 25; Serial No. 333,114; published Feb. 7, 1933. Class 46.

Chemical Foundation, Incorporated, The. (See Bensinwerke Rhenania Gesellschaft mit beschränkter Haftung, assignor.)

Chemical Foundation, Incorporated, The. (See Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heilmann, assignor.)

Chemical Foundation, Incorporated, The. (See Farbwerke, vormals Meister, Lucius & Brüning, assignors.)

Chemical Foundation, Incorporated, The. (See Grimme Natalis & Co. Commanditgesellschaft auf Actien, assignor.)

Chemical Foundation, Incorporated, The. (See Kraft & Stendel Fabrik Photographischer Papiere Gesellschaft mit beschränkter Haftung, assignor.)

Chemical Foundation, Incorporated, The. (See Merck, E., assignor.)

Chemical Foundation, Incorporated, The. (See Nitritfabrik Aktiengesellschaft, assignor.)

Chemical Foundation, Incorporated, The. (See Redeker & Hennis, assignor.)

Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heilmann, Güstrow and Heidewes, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Remedy for furunculosis and acne. 91,647; renewed May 20, 1933.

Chicago, Association of Commerce, The, Chicago, Ill. Periodical magazine. 302,804; Apr. 25; Serial No. 313,282; published Feb. 7, 1933. Class 38.

Chippewa Shoe Manufacturing Company, doing business as Kushion-Aire Shoe Company, Chippewa Falls, Wis. Shoes. 302,586; Apr. 25; Serial No. 327,904; published Jan. 17, 1933. Class 39.

Chittenden, Turner & Company, Inc., Boston, Mass. Granular or powdered preparation for liquids to produce body, viscosity, etc. 302,802; Apr. 25; Serial No. 315,134; published Jan. 31, 1933. Class 46.

Citizens' Wholesale Supply Company, The, Columbus, Ohio. Bay leaves, dried beans, rolled oats, etc. 302,799–800; Apr. 25; Serial Nos. 315,715–16; published Oct. 6, 1931. Class 46.

Clausen, Mrs. G. E., doing business as C. B. Gentry Chili Powder Co., Los Angeles, Calif. Chili powder. 302,573; Apr. 25; Serial No. 329,979; published Feb. 14, 1933. Class 46.

Clicquot Club Company, Millis, Mass. Maltless beverages, syrups, extracts, etc., used in making the same. 302,711; Apr. 25; Serial No. 326,863; published Feb. 14, 1933. Class 45.

Cloverdale Spring Co., Baltimore, Md. Malt beverages. 302,564; Apr. 25; Serial No. 333,184; published Feb. 7, 1933. Class 48.

Coachella Grapefruit Orchards Inc., Los Angeles, Calif. Fresh citrus fruits. 302,572; Apr. 25; Serial No. 329,980; published Feb. 7, 1933. Class 46.

Cohen, Goldman & Co., Inc., New York, N. Y. Coats, vests, pants, etc. 302,633; Apr. 25; Serial No. 332,686; published Feb. 7, 1933. Class 39.

Columbia Drug Store. (See Greenstein, Joseph U.)

Compagnie De Béthune, Bully-les-Mines, France. Chemical products. 302,656; Apr. 25; Serial No. 311,261; published Feb. 7, 1933. Class 6.

Compagnie De Béthune, Bully-les-Mines, France. Chemical products. 302,658; Apr. 25; Serial No. 311,262; published Feb. 7, 1933. Class 6.

Cook, Newton & Smith, Incorporated, New Haven, Conn. Artificial fishing flies. 302,774; Apr. 25; Serial No. 333,098; published Feb. 7, 1933. Class 22.

Cooke, Dwight I., Washington, D. C. Phosphoric photo screens. 302,566; Apr. 25; Serial No. 333,150; published Feb. 7, 1933. Class 26.

Corsetry Incorporated, The, South Norwalk, Conn. Foundation garments, corsets, brassières, etc. 302,597; Apr. 25; Serial No. 331,493; published Jan. 17, 1933. Class 39.

Crane, Clarence A., Cleveland, Ohio, assignor to Life Savers, Inc., Port Chester. Candy. 93,080; renewed Aug. 19, 1933.

Crescent Publishing Co., Inc., New York, N. Y. Printed periodical. 302,657; Apr. 25; Serial No. 307,543; published Feb. 7, 1933. Class 38.

Crescent Publishing Co., Inc., New York, N. Y. Periodical. 302,659; Apr. 25; Serial No. 307,544; published Feb. 7, 1933. Class 38.

Cresta Blanca Company, San Francisco, Calif. Brandy. 302,553; Apr. 25; Serial No. 333,383; published Feb. 7, 1933. Class 49.

Crossett Shoe Co., Augusta, Me. Shoes and rubber heels. 302,646; Apr. 25; Serial No. 332,366; published Feb. 7, 1933. Class 39.

Crowell, J. B., & Sons, Wallkill, N. Y. Brick molds. 302,655; Apr. 25; Serial No. 314,048; published Feb. 7, 1933. Class 23.

Daggett Chocolate Company, doing business as Belle Rose Chocolate Co., Cambridge, Mass. Candy. 302,672; Apr. 25; Serial No. 332,647; published Jan. 31, 1933. Class 46.

Dalton Hat Co., Inc., Yonkers, N. Y. Hats. 302,821; Apr. 25; Class 39.

Davison-Paxon Company, Atlanta, Ga. Shoes. 302,620; Apr. 25; Serial No. 331,777; published Jan. 24, 1933. Class 39.

Decatur Milling Company, Inc. (See American Hominy Company, assignor.)

Decatur Milling Company, Inc., Decatur, Ill. Cornflour. 302,667; Apr. 25; Serial No. 332,995; published Feb. 14, 1933. Class 46.

De Mille, Julia C., Baltimore, Md. Solder or cement. 302,780; Apr. 25; Serial No. 333,028; published Feb. 7, 1933. Class 5.

Distillers Agency Limited, The, Edinburgh, Scotland. Rum, whisky, gin, and brandy. 302,727–8; Apr. 25; Serial Nos. 332,405–6; published Feb. 14, 1933. Class 49.

Dodez, Edward W., Fort Wayne, Ind. Antiseptic dental filling and remedy. 40,358; renewed May 12, 1933.

Dolph, John C., Company, Newark, N. J. Paints, varnishes and paint pigments. 302,641; Apr. 25; Serial No. 332,447; published Feb. 7, 1933. Class 16.

Donahoo, Jesse L., doing business as The Jin Twin Company, Minneapolis, Minn. Maltless beverage. 302,735; Apr. 25; Serial No. 331,620; published Feb. 7, 1933. Class 45.

Du Barry & Company. (See Marvin, S. Stephen.)

Dunbar, Jas. V., Inc., New Orleans, La. Canned shrimp. 302,600; Apr. 25; Serial No. 331,426; published Feb. 14, 1933. Class 46.

East Tennessee Packing Company, Knoxville, Tenn. Fresh and cured meats, lard, cheese, and butter. 302,784; Apr. 25; Serial No. 319,769; published Feb. 14, 1933. Class 46.

Edison, Sylvan M., doing business as Sanident Company, Chicago, Ill. Dental plate adhesive powder. 302,793; Apr. 25; Serial No. 328,436; published Feb. 14, 1933. Class 6.

Edwards, Reuben G., to Edwards' Harlene, Limited, London, England, successor. Preparation for the hair. 40,308; renewed May 12, 1933.

Edy, Joseph O., Alameda, Calif. Candies, ice-cream. 302,801; Apr. 25; Serial No. 314,490; published Feb. 7, 1933. Class 46.

Electric Launch Co., The, Bayonne, N. J. Boats. 93,085; renewed Aug. 19, 1933.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof, and refrigerating systems. 302,544–5; Apr. 25; Serial Nos. 333,581–2; published Feb. 7, 1933. Class 31.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof, and refrigerating systems. 302,547; Apr. 25; Serial No. 333,579; published Feb. 14, 1933. Class 31.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof and refrigerating systems. 302,715–18; Apr. 25; Serial Nos. 333,797–800; published Feb. 14, 1933. Class 31.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof and refrigerating systems. 302,719; Apr. 25; Serial No. 333,795; published Feb. 14, 1933. Class 31.

Electrolux Servel Corporation, New York, N. Y. Refrigerators and parts thereof and refrigerating systems. 302,720; Apr. 25; Serial No. 333,796; published Feb. 14, 1933. Class 31.

Ellos. (See Capone, Arthur J.)

Elks Toggery Shops. (See Rickles, Charles.)

Emmerich, Chas., & Co., assignor, by mesne assignments, to Emmerich Pillows, Inc., Chicago, Ill. Pillows. 91,955; renewed June 10, 1933.

Escorza, Ciro, Downey, Calif. Pickled chiles. 302,670; Apr. 25; Serial No. 332,762; published Feb. 14, 1933. Class 46.

Eskimo Pie Corporation, doing business as New York Eskimo Pie Corporation, New York and Brooklyn, N. Y. Frozen confections. 302,649; Apr. 25; Serial No. 328,664; published Feb. 7, 1933. Class 46.

Esmond Mills, The, Esmond, Smithfield, R. I. Textile blankets. 302,778; Apr. 25; Serial No. 333,061; published Feb. 14, 1933. Class 42.

Ettelbrick Shoe Manufacturing Co., Casey, Ill. Shoes. 302,581; Apr. 25; Serial No. 328,484; published Jan. 3, 1933. Class 39.

F-R Publishing Corporation, The, New York, N. Y. Nom de plume for a magazine. 302,557–8; Apr. 25; Serial Nos. 333,525–6; published Feb. 4, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. 302,559; Apr. 25; Serial No. 333,322; published Feb. 14, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. 302,701; Apr. 25; Serial No. 333,323; published Feb. 7, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Nom de plume for a magazine section. 302,702; Apr. 25; Serial No. 333,327; published Feb. 14, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. 302,703–6; Apr. 25; Serial Nos. 333,318–21; published Feb. 7, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Cartoons. 302,782; Apr. 25; Serial No. 333,317; published Feb. 14, 1933. Class 38.

F-R Publishing Corporation, The, New York, N. Y. Magazine section. 302,783; Apr. 25; Serial No. 333,316; published Feb. 7, 1933. Class 38.

Factor, Max, & Co. Inc., Los Angeles, Calif. Toupees, wigs, transformations, etc. 302,638; Apr. 25; Serial No. 332,580; published Feb. 7, 1933. Class 40.

Family Shoe Corp., New York, N. Y. Shoes. 302,537; Apr. 25; Serial No. 330,925; published Feb. 14, 1933. Class 39.

Farbenfabriken of Elberfeld Company, assignor to Winthrop Chemical Company, Inc., New York, N. Y. Purgative. 92,060; renewed June 17, 1933.

Farbwerke, vormals Meister, Lucius & Brüning, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Photographic developing preparation. 40,250; renewed May 5, 1933.

Farbwerke vorm. Meister Lucius & Brüning, Hochst-on-the-Main, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Chemical or biological reagent. 91,764; renewed May 27, 1933.

Farley & Loetscher Mfg. Co., Dubuque, Iowa. Doors, structural panels, moldings, etc. 302,732; Apr. 25; Serial No. 332,294; published Feb. 7, 1933. Class 12.

Farm Tools, Inc., Mansfield, Ohio. Plow points. 302,786; Apr. 25; Serial No. 331,673; published Feb. 7, 1933. Class 23.

Fear, Ernest D., Kansas City, Mo. Milk powder. 302,651; Apr. 25; Serial No. 327,894; published Jan. 31, 1933. Class 46.

Federal Tea Company, Inc., Baltimore, Md. Tea. 302,580; Apr. 25; Serial No. 329,143; published Sept. 20, 1932. Class 46.

Feldman, David, doing business as Feldman & Sons, Baltimore, Md. Shirts. 302,565; Apr. 25; Serial No. 333,174; published Feb. 14, 1933. Class 39.

Fermax Products Co., Irvington, N. J. Washing compounds. 302,781; Apr. 25; Serial No. 333,285; published Feb. 14, 1933. Class 4.

Fidalgo Island Packing Co., Seattle, Wash. Canned salmon. 302,622; Apr. 25; Serial No. 331,781; published Feb. 14, 1933. Class 46.

Fidalgo Island Packing Company, Seattle, Wash. Canned salmon. 302,624; Apr. 25; Serial No. 331,780; published Feb. 14, 1933. Class 46.

Finch, Jos. S., & Company, New York, N. Y. Whiskey, brandy, and other potable spirits. 302,807; Apr. 25. Class 49.

Fitzgerald Mfg. Company, The, doing business as Old Berkshire Coffee Company, Torrington, Conn. Coffee. 302,677; Apr. 25; Serial No. 332,370; published Feb. 7, 1933. Class 46.

Foremost Dairies, Inc., Jacksonville, Fla. Chocolate covered frozen confections, ice cream, sherbets, etc. 302,590; Apr. 25; Serial No. 331,399; published Feb. 7, 1933. Class 46.

Forstmann Woolen Co., Passaic, N. J. Woolen piece goods. 302,527; Apr. 25; Serial No. 330,042; published Jan. 24, 1933. Class 42.

Frankfort Distillery, Inc., The, Louisville, Ky. Whiskey. 302,542; Apr. 25; Serial No. 333,690; published Feb. 7, 1933. Class 49.

Frits-Taber Mfg. Co., The, New Bedford, Mass. Paperclips. 93,271; renewed Sept. 2, 1933.

Fusilli, Victoria, Company, Long Island City, N. Y. Spaghetti and alimentary products. 302,606; Apr. 25; Serial No. 332,950; published Feb. 7, 1933. Class 46.

Gallus, Herman G., Chicago, Ill. Awnings and awning hardware. 302,588–9; Apr. 25; Serial Nos. 326,851–2; published Feb. 14, 1933. Class 50.

Garofalo Bro's. Shoe Co, Inc., Brooklyn, N. Y. Shoes. 302,648; Apr. 25; Serial No. 332,256; published Feb. 14, 1933. Class 39.

Gebruder Junghans Aktiengesellschaft. (See Hamburg-Amerikanische Uhrenfabrik, assignor.)

General Dyestuff Corporation, New York, N. Y. Dyestuffs. 302,768; Apr. 25; Serial No. 333,185; published Feb. 7, 1933. Class 6.

General Mills, Inc., Minneapolis, Minn. Stock feed. 302,765; Apr. 25; Serial No. 333,186; published Feb. 14, 1933. Class 46.

Gentry, C. B., Chili Powder Co. (See Clausen, Mrs. G. E.)

Geuting, A. H., Company, Philadelphia, Pa. Boots and shoes. 302,759; Apr. 25; Serial No. 332,567; published Jan. 24, 1933. Class 39.

Glenfyne Distillery Company Limited, The, Ardrishaig, Scotland. Whisky. 302,733; Apr. 25; Serial No. 331,783; published Feb. 14, 1933. Class 49.

Goldberg, Reuben L., New York, N. Y. Cartoons and comic strips. 302,770; Apr. 25; Serial No. 333,152; published Feb. 7, 1933. Class 38.

Grady-Travers Company, Incorporated, The. (See Kelley, Henry C., assignor.)

Grau, Salvador A., to Hijos del Dr. Andreu, Barcelona, Spain, successor. Medicated pastils and lozenges. 89,953; renewed Jan. 21, 1933.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Coffee. 302,668; Apr. 25; Serial No. 332,828; published Feb. 7, 1933. Class 46.

Great Atlantic & Pacific Tea Company, The, New York, N. Y. Coffee. 302,671; Apr. 25; Serial No. 332,827; published Jan. 31, 1933. Class 46.

Greenstein, Joseph U., doing business as Columbia Drug Store, Washington, D. C. Cough syrup. 302,745; Apr. 25; Serial No. 331,824; published Feb. 14, 1933. Class 6.

Grimme Natalis & Co. Commanditgesellschaft auf Actien, Brunswick, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Calculating and adding machines. 91,659; renewed May 10, 1933.

Habicht, Braun & Co., New York, N. Y. Dates. 302,797; Apr. 25; Serial No. 317,277; published Feb. 14, 1933. Class 46.

Hamburg-Amerikanische Uhrenfabrik, assignor to Gebruder Junghans Aktiengesellschaft, Schramberg, Germany. Clocks and parts thereof. 92,551; renewed July 15, 1933.

Hammermill Paper Company, Erie, Pa. Safety paper. 302,636; Apr. 25; Serial No. 332,654; published Feb. 7, 1933. Class 37.

Harbauer, Company, The, Toledo, Ohio. Chili sauce, tomato catsup, tomato juice, etc. 302,524; Apr. 25; Serial No. 330,227; published Feb. 14, 1933. Class 46.

Harrison, Monroe, Chicago, Ill. Maltless orange beverages. 302,820; Apr. 25. Class 45.

Harvey-Whipple, Incorporated, Springfield, Mass. Oil burners. 302,810; Apr. 25. Class 34.

Heidsieck Charles, Reims Société à Responsabilité Limitée, Reims, France. Champagne wine. 302,737; Apr. 25; Serial No. 330,452; published Feb. 14, 1933. Class 47.

Heller, Robert, Inc., New York, N. Y. Upholstery and drapery fabrics. 302,642; Apr. 25; Serial No. 332,410; published Jan. 24, 1933. Class 42.

Heller, Robert, Inc., New York, N. Y. Upholstery and drapery fabrics. 302,644; Apr. 25; Serial No. 332,409; published Feb. 7, 1933. Class 42.

Heppenstall Company, Pittsburgh, Pa. Razor blades. 302,551; Apr. 25; Serial No. 333,491; published Feb. 14, 1933. Class 28.

Hercules Mineral Springs, Inc., Detroit, Mich. Mineral water. 302,603; Apr. 25; Serial No. 333,479; published Feb. 7, 1933. Class 46.

Hijos del Dr. Andreu. (See Grau, Salvador A.)

Hilton Clothes Corporation, New York, N. Y., and Newark, N. J. Suits and overcoats, shirts, mufflers, etc. 302,602; Apr. 25; Serial No. 331,275; published Jan. 3, 1933. Class 39.

Holton & Adams, New York, N. Y. Tooth brushes. 302,700; Apr. 25; Serial No. 333,390; published Feb. 14, 1933. Class 29.

Horne, Frederick E., Malden, Mass. Shingles, clapboards, roofing materials, and imitation masonry building units. 302,794; Apr. 25; Serial No. 295,216; published Feb. 7, 1933. Class 12.

Howlett & Hockmeyer Co. Inc., New York, N. Y. Leggings, windbreakers, blouses, etc. 302,636; Apr. 25; Serial No. 331,582; published Jan. 31, 1933. Class 39.

Howlett & Hockmeyer Co. Inc., New York, N. Y. Textiles. 302,647; Apr. 25; Serial No. 332,845; published Feb. 7, 1933. Class 42.

Hughes-Curry Packing Co., Anderson, Ind. Hams. 302,654; Apr. 25; Serial No. 326,144; published Feb. 14, 1933. Class 46.

Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. 302,775; Apr. 25; Serial No. 323,069; published Feb. 14, 1933. Class 40.

Hump Hairpin Manufacturing Company, The, Chicago, Ill. Hairpins. 302,790; Apr. 25; Serial No. 322,612; published Feb. 14, 1933. Class 40.

Hyman & Hyman, Inc., New York, N. Y. Applicator. 302,567; Apr. 25; Serial No. 333,124; published Feb. 14, 1933. Class 44.

Hynes, Sylvanus, doing business as The Hynes Ice & Cold Storage Co., Canon City, Colo. Apples. 302,791; Apr. 25; Serial No. 322,535; published Feb. 7, 1933. Class 46.

Illinois Dyestuff Corporation, Chicago, Ill. Carpet cleaning compound. 302,767; Apr. 25; Serial No. 333,178; published Feb. 14, 1933. Class 4.

Imunal Manufacturing Company. (See Lassman, George A.)

Industrial Chemical Company, by change of name, to Industrial Chemical Sales Company, Inc., New York, N. Y. Natural black or vegetable black. 92,339; renewed July 1, 1933.

International Shoe Co., St. Louis, Mo. Boots and shoes. 302,627; Apr. 25; Serial No. 331,556; published Jan. 17, 1933. Class 39.

International Shoe Co., St. Louis, Mo. Boots and shoes. 302,762; Apr. 25; Serial No. 333,259; published Feb. 14, 1933. Class 39.

Jarman Shoe Company, Nashville, Tenn. Shoes. 302,698; Apr. 25; Serial No. 333,260; published Feb. 14, 1933. Class 39.

Jefferys & Co., Ltd., Burbank, Calif. Washed motion picture film scrap. 302,752; Apr. 25; Serial No. 332,017; published Feb. 14, 1933. Class 1.

Jelenko, J. F., & Company, Inc., New York, N. Y. Dental golds. 302,696; Apr. 25; Serial No. 333,454; published Feb. 14, 1933. Class 44.

Jin Twin Company, The. (See Donahoo, Jesse L.)

Johns-Manville Corporation, New York, N. Y. Rod and piston packing. 302,739; Apr. 25; Serial No. 329,145; published Feb. 14, 1933. Class 35.

Johnston, Elgin W., doing business as E. W. Johnston Co., Toledo, Ohio. Medicine. 302,629; Apr. 25; Serial No. 332,774; published Feb. 14, 1933. Class 6.

Juvenile Shoe Corporation of America, The, Aurora and St. Louis, Mo. Shoes and slippers. 302,751; Apr. 25; Serial No. 332,066; published Jan. 17, 1933. Class 39.

Kali-Chemie Aktiengesellschaft, Berlin, Germany. Pharmaceutical preparations. 302,650; Apr. 25; Serial No. 328,791; published Feb. 14, 1933. Class 6.

Kansas City Wholesale Grocery Co., Kansas City, Mo. Coffee. 302,673; Apr. 25; Serial No. 332,649; published Feb. 7, 1933. Class 46.

Karno, L., & Co. Inc., Chicago, Ill. Composition rubber soles. 302,814; Apr. 25. Class 39.

Kasko Products Co., Inc., Philadelphia, Pa. Malt beverage. 302,731; Apr. 25; Serial No. 332,257; published Feb. 7, 1933. Class 48.

Kats, Ricardo. (See Robinson, J., & Company.)

Keller, Robert, Ink Company, The, Detroit, Mich. Writing inks. 302,634; Apr. 25; Serial No. 332,706; published Feb. 7, 1933. Class 11.

Kelley, Henry C., Company, assignor to The Grady-Travers Company, Incorporated, New York, N. Y. Cords, twines, ropes, etc. 93,184; renewed Aug. 26, 1933.

Kellom, Charles F., & Co., Inc., Holmesburg, Pa. Polish, rubbing compound, liquid wax, etc. 302,539; Apr. 25; Serial No. 330,749; published Feb. 7, 1933. Class 16.

Kennedy, A. H., Rockport, Ind. Whole wheat flour combined with flax seed meal and psyllium seed meal. 302,685; Apr. 25; Serial No. 332,721; published Feb. 7, 1933. Class 46.

Kesselman, Ada, doing business as The Play Money Candy Co., Philadelphia, Pa. Candy. 302,754; Apr. 25; Serial No. 332,153; published Feb. 14, 1933. Class 46.

Kester Solder Company, Chicago, Ill. Soldering fluxes. 302,757; Apr. 25; Serial No. 332,620; published Feb. 14, 1933. Class 6.

King Features Syndicate, Inc., New York, N. Y. Series of cartoon strips. 302,694; Apr. 25; Serial No. 333,518; published Feb. 14, 1933. Class 38.

King, Robert J., Company, Incorporated, The, Stamford, Conn. Chemical composition. 302,763; Apr. 25; Serial No. 333,191; published Feb. 14, 1933. Class 6.

King, Robert J., Company, Incorporated, The, Stamford, Conn. Chemical composition. 302,766; Apr. 25; Serial No. 333,190; published Feb. 14, 1933. Class 6.

Kirby, Block & Fischer, Inc., New York, N. Y. Clothing, furnishings, and wearing apparel. 302,617; Apr. 25; Serial No. 331,897; published Feb. 7, 1933. Class 39.

Kleen Chemical Company, Philadelphia, Pa. Drain pipe solvent. 302,743; Apr. 25; Serial No. 330,986; published Feb. 14, 1933. Class 6.

Kleen Chemical Company, Philadelphia, Pa. Floor cleaner and bleach. 302,805; Apr. 25; Serial No. 328,437; published Feb. 14, 1933. Class 4.

Kofman and Blumenau, Bay City, Mich. Malt beverages and extracts therefor. 302,740; Apr. 25; Serial No. 329,747; published Feb. 14, 1933. Class 48.

Kraft & Steudel Fabrik Photographischer Papiere Gesellschaft mit beschränkter Haftung, Dresden, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Sensitized photographic paper and cardboard. 91,584; renewed May 15, 1933.

Kresge Department Store Corp., Newark, N. J. Soap. 302,587; Apr. 25; Serial No. 327,060; published Feb. 14, 1933. Class 4.

Kresge Department Store Corporation, Newark, N. J. Coffee, tea, candy, cocoa, etc. 302,803; Apr. 25; Serial No. 328,821; published Jan. 31, 1933. Class 46.

Kuehn, Otto L., Co., Milwaukee, Wis. Herring and canned fish. 302,625; Apr. 25; Serial No. 331,644; published Jan. 31, 1933. Class 46.

Kushion-Aire Shoe Company. (See Chippewa Shoe Manufacturing Company.)

La France Baume Analgesique Company. (See Murray, Florence O.)

Lamm, Berthold, Baltimore, Md. Jackets, coats, pants, etc. 302,610; Apr. 25; Serial No. 332,865; published Feb. 7, 1933. Class 39.

Landau, Max, doing business as Max Landau & Co., New York, N. Y. Cheese. 302,756; Apr. 25; Serial No. 332,191; published Feb. 7, 1933. Class 46.

Lande & Miskend, Inc., New York, N. Y. Laces. 302,618; Apr. 25; Serial No. 331,829; published Jan. 24, 1933. Class 42.

Lanex Corporation, New York, N. Y. Furniture polishes and cleansers. 302,680; Apr. 25; Serial No. 332,928; published Feb. 7, 1933. Class 16.

Lang, Gerhard, Brewery, doing business as Gerhard Lang Bottling Works, and Buffalo Products Co., Buffalo, N. Y. Malt extract. 302,605; Apr. 25; Serial No. 331,187; published Feb. 14, 1933. Class 46.

Largman, Gray Company, Croydon, Pa., and New York, N. Y. Gloves and underwear. 302,616; Apr. 25; Serial No. 331,867; published Jan. 17, 1933. Class 39.

Lassman, George A., doing business as Imunal Manufacturing Company, Brooklyn, N. Y. Intra-vaginal phophylactic. 302,746; Apr. 25; Serial No. 331,559; published Feb. 7, 1933. Class 6.

Latimer, Edward, jr., Philadelphia, Pa. Wax paper. 302,816; Apr. 25. Class 37.

Lawrens, William F., Long Beach, Calif. Maltless beverage. 302,729; Apr. 25; Serial No. 332,826; published Feb. 14, 1933. Class 45.

Lay & Way Company, The, New York, N. Y. Corsets, girdles, corselettes, etc. 302,519; Apr. 25; Serial No. 330,631; published Jan. 24, 1933. Class 39.

Lee County Packing Co., Fort Myers, Fla. Oranges, lemons, limes, etc. 93,280; renewed Sept. 2, 1933.

Lemen, Paul H., doing business as Amita Laboratories, Philadelphia, Pa. Preparation for the relief of painful menstruation. 302,708; Apr. 25; Serial No. 333,074; published Feb. 14, 1933. Class 6.

Leschen, A., & Sons Rope Company, St. Louis, Mo. Wire rope. 302,552; Apr. 25; Serial No. 333,394; published Feb. 7, 1933. Class 7.

Letts, John C., doing business as Ayrlawn Farms, Bethesda, Md. Dairy products. 302,689; Apr. 25; Serial No. 332,621; published Feb. 7, 1933. Class 46.

Life Savers, Inc. (See Crane, Clarence A., assignor.)

Life Savers, Inc., Port Chester, N. Y. Candy. 302,676; Apr. 25; Serial No. 332,303; published Feb. 7, 1933. Class 46.

Life Savers, Inc., Port Chester, N. Y. Candy. 302,679; Apr. 25; Serial No. 332,304; published Feb. 7, 1933. Class 46.

Linen Thread Company, The, New York, N. Y. Fish nets. 302,561; Apr. 25; Serial No. 333,293; published Feb. 14, 1933. Class 22.

Lock, John E., Milwaukee, Wis. Shoes. 302,645; Apr. 25; Serial No. 332,844; published Jan. 24, 1933. Class 39.

Locke, Douglas R., Montreal, Quebec, Canada. Foot arch correctives. 302,748; Apr. 25; Serial No. 331,881; published Feb. 14, 1933. Class 44.

Loeb, Herbert A., New York, N. Y. Uniforms. 302,635; Apr. 25; Serial No. 332,588; published Feb. 7, 1933. Class 39.

Logan Laboratories, Ltd., New York, N. Y. Liquid and jelly preparations for nasal inhalation. 302,661; Apr. 25; Serial No. 332,156; published Feb. 7, 1933. Class 6.

Lombardi Knitcraft, Inc., New York, N. Y. Woolen and/or silk knitted fabrics. 302,604; Apr. 25; Serial No. 331,276; published Feb. 7, 1933. Class 42.

Love, Joseph, Inc., New York, N. Y. Children's dresses and top coats. 302,611; Apr. 25; Serial No. 332,848; published Feb. 14, 1933. Class 39.

MacDonald, R. O., doing business as Native Son Orchards Co., Lindsay, Calif. Fresh citrus fruits. 302,758; Apr. 25; Serial No. 332,536; published Feb. 7, 1933. Class 46.

Malden Form Brassiere Co., Inc., New York, N. Y. Brassières, bandeaux, corsets, etc. 302,819; Apr. 25. Class 39.

Mangelsdorf, Ed. F., & Brother, St. Louis, Mo. Seeds. 302,640; Apr. 25; Serial No. 332,537; published Feb. 7, 1933. Class 1.

Marion Shoe Company, Marion, Ind. Footwear. 302,598; Apr. 25; Serial No. 331,507; published Jan. 17, 1933. Class 39.

Marvin-Neitzel Corporation, Troy, N. Y. Aprons, bibs, caps, etc. 302,594; Apr. 25; Serial No. 331,509; published Jan. 3, 1933. Class 39.

Marvin, S. Stephen, doing business as Du Barry & Company, Burbank, Calif. Powdered food product. 302,674; Apr. 25; Serial No. 332,533; published Jan. 31, 1933. Class 46.

Massillon Rubber Company, The, Massillon, Ohio. Rubber gloves. 302,631; Apr. 25; Serial No. 332,707; published Feb. 7, 1933. Class 44.

May Department Stores Company, The, St. Louis, Mo. Blankets. 302,553; Apr. 25; Serial No. 330,793; published Feb. 7, 1933. Class 42.

Mayers, Mollie. (See Zwiebelson, Abraham.)

Merck, E., Darmstadt, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Compound of quinin and diethylbarbituric acid for pharmaceutical use. 91,499; renewed May 6, 1933.

Merck, E., Darmstadt, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. N-monoethbromopropyl-C.C-diethylbarbituric acid, prepared for pharmaceutical use. 91,498; renewed May 20, 1933.

Mergenthaler Linotype Company, New York, to Mergenthaler Linotype Company, Brooklyn, N. Y. Matrices. 92,096; renewed June 17, 1933.

Merkel Inc., New York, N. Y. Smoked butts. 302,623; Apr. 25; Serial No. 331,662; published Jan. 31, 1933. Class 46.

Metal Textile Corporation, West Orange, N. J. Metallic abrasive scouring pads. 302,521; Apr. 25; Serial No. 330,517; published Feb. 14, 1933. Class 4.

Mezzetta, Giuseppe L., San Francisco, Calif. Olive oil. 302,570; Apr. 25; Serial No. 329,280; published Feb. 7, 1933. Class 46.

Middishade Company, Inc., The, Philadelphia, Pa. Men's clothing. 302,590; Apr. 25; Serial No. 333,297; published Feb. 14, 1933. Class 39.

Minor, P. W., & Son, Inc., Batavia, N. Y. Shoes. 302,523; Apr. 25; Serial No. 330,271; published Jan. 10, 1933. Class 39.

Mishawaka Woolen Manufacturing Co., by change of name to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind. Boots and shoes. 91,563; renewed Apr. 29, 1933.

Model Brassiere Co. Inc., Brooklyn, N. Y. Brassières. 302,541; Apr. 25; Serial No. 330,633; published Jan. 17, 1933. Class 39.

Modern Merchandising Bureau, Inc., New York, N. Y. Hats and caps, scarfs, underwear, etc. 302,577; Apr. 25; Serial No. 329,685; published Jan. 17, 1933. Class 39.

Morgan Construction Company, Worcester, Mass. Cutlery, machinery, and tools. 91,288; renewed June 3, 1933.

Morgan Construction Company, Worcester, Mass. Heating, lighting, and ventilating apparatus. 92,356; renewed July 1, 1933.

Morgan Crucible Company Limited, The, London, England. Crucibles. 91,105; renewed Apr. 15, 1933.

Morgan Crucible Company Limited, The, London, England. Plumbago crucible. 91,502; renewed May 15, 1933.

Morrison Company, The, Philadelphia, Pa. Prepared food for dogs. 302,760; Apr. 25; Serial No. 332,504; published Feb. 14, 1933. Class 46.

Murray, Florence O., doing business as La France Baume Analgesique Company, Boston, Mass. Medicines. 302,809; Apr. 25. Class 6.

National Specialties Co., Inc., Fort Wayne, Ind. Miter box or device. 302,562; Apr. 25; Serial No. 333,269; published Feb. 14, 1933. Class 23.

National Tube Company, Pittsburgh, Pa. Pipes, tubes, and casings. 91,982; renewed June 5, 1933.

Native Son Orchards Co. (See MacDonald, R. O.)

Negri, Teresina M., Paris, France. Bathing suits. 302,614; Apr. 25; Serial No. 331,904; published Feb. 7, 1933. Class 39.

Nestor Johnson Manufacturing Company, Chicago, Ill. Ice skates and skate outfits. 302,580; Apr. 25; Serial No. 333,106; published Feb. 7, 1933. Class 22.

New York Consolidated Card Company, The, assignor to The United States Playing Card Company, East Norwood, Cincinnati, Ohio. Playing cards. 40,749; renewed July 14, 1933.

New York Maimo Pie Corporation. (See Maimo Pie Corporation.)

New York Evening Journal, Inc., New York, N. Y. Newspaper section. 302,697; Apr. 25; Serial No. 333,398; published Feb. 7, 1933. Class 38.

Nitritfabrik Aktiengesellschaft, Cosepenick near Berlin, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Serum preparations. 91,685; renewed May 20, 1933.

Norwich Knitting Company, Norwich, N. Y. Shirts, sweaters, and knit underwear. 302,632; Apr. 25; Serial No. 332,720; published Feb. 14, 1933. Class 39.

Noxon Broom Company, Ltd., Avoca, N. Y. Household brooms and brushes. 302,643; Apr. 25; Serial No. 332,223; published Feb. 7, 1933. Class 29.

Nu-Sno Company. (See Williams, Amy F.)

Old Berkshire Coffee Company. (See Fitzgerald Mfg. Company, The.)

O'Neill, John B., doing business as Alaska Sea Products, Inc., and Alaska Distributing Co., Seattle, Wash. Canned crab meat, crab legs, and clams. 302,793; Apr. 25; Serial No. 333,008; published Feb. 7, 1933. Class 46.

Onondaga Pottery Company, Syracuse, N. Y. China table ware. 302,606; Apr. 25; Serial No. 331,004; published Feb. 7, 1933. Class 50.

Oxford Packing Co. (See Burnham & Morrill Company.)

Panther Rubber Manufacturing Company, Stoughton, Mass. Rubber heels. 302,787; Apr. 25; Serial No. 320,692; published Jan. 3, 1933. Class 39.

Parke, Davis & Co., Detroit, Mich. Ethyl-hexyl barbituric acid hypnotic. 302,612; Apr. 25; Serial No. 331,941; published Feb. 7, 1933. Class 6.

Peck & Peck, New York, N. Y. Piece goods of cotton, silk, etc. 302,665; Apr. 25; Serial No. 332,109; published Feb. 14, 1933. Class 42.

Pelzer Manufacturing Company, Boston, Mass. Sheets, pillow cases, and cotton piece goods. 302,721; Apr. 25; Serial No. 333,236; published Feb. 14, 1933. Class 42.

Perfect Vichy Bottling Co., The, Cincinnati, Ohio. Artificial Vichy water. 302,744; Apr. 25; Serial No. 330,020; published Feb. 7, 1933. Class 6.

Perkins, Joel S., & Son, Philadelphia, Pa. Round leather belting. 302,582; Apr. 25; Serial No. 332,856; published Feb. 7, 1933. Class 35.

Pioneer Paper Company, Los Angeles, Calif. Bituminous emulsions. 302,734; Apr. 25; Serial No. 332,196; published Feb. 14, 1933. Class 12.

Play Money Candy Co., The. (See Kesselman, Ada.)

Pollak, Henry, Inc., New York, N. Y. Hats. 302,691; Apr. 25; Serial No. 331,264; published Jan. 3, 1933. Class 39.

Post Printing and Publishing Company, The, Denver, Colo. Section or column appearing in a newspaper. 302,724; Apr. 25; Serial No. 333,005; published Feb. 14, 1933. Class 38.

Priddy, Chas. W., & Company, Inc., Norfolk, Va. Fish meal. 302,687; Apr. 25; Serial No. 332,861; published Feb. 7, 1933. Class 46.

Priess, Wilhelm, & Company, G. m. b. H., Magdeburg, Germany. Fuller's earth, bleaching earth, and activated clays. 302,681; Apr. 25; Serial No. 332,961; published Feb. 7, 1933. Class 1.

Pro-Ker Laboratories, Inc., New York, N. Y. Apparatus for measuring and recording the growth or production of human hair. 302,543; Apr. 25; Serial No. 333,077; published Feb. 14, 1933. Class 26.

Pro-Phy-Lac-Tic Brush Company, Northampton, Mass. Tooth brushes. 302,771; Apr. 25; Serial No. 333,257; published Feb. 14, 1933. Class 39.

Quaker Oats Company, The, Chicago, Ill. Wheat flour. 302,779; Apr. 25; Serial No. 333,010; published Feb. 7, 1933. Class 46.

Quality Soap Manufacturing Company, Milwaukee, Wis. Hand soaps. 302,570; Apr. 25; Serial No. 329,719; published Feb. 7, 1933. Class 4.

RCA Victor Company, Inc., Camden, N. J. Photographic and electro-physical sound recording apparatus and equipment, etc. 302,712; Apr. 25; Serial No. 333,074; published Feb. 7, 1933. Class 26.

Rainey, Clara H., Malone, N. Y. Kimonos and baby garments. 302,580; Apr. 25; Serial No. 330,209; published Jan. 31, 1933. Class 39.

Redeker & Hennis, Nuremberg, Germany, assignor, by mesne assignments, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y. Water and oil colors. 40,305; renewed May 12, 1933.

Redlands Foothill Groves, Redlands, Calif. Fresh citrus fruits. 302,675; Apr. 25; Serial No. 332,535; published Feb. 7, 1933. Class 46.

Regal Shoe Company, as assignee of Regal Shoe Co., Inc., Boston, Mass., assignor, by mesne assignments, to Regal Shoe Company, Whitman, Mass. Shoes and boot and shoe trees. 90,577; renewed [illegible], 1933.

Reid, Murdoch & Co., Chicago, Ill. Coffee. 302,682; Apr. 25; Serial No. 332,017; published Feb. 14, 1933. Class 46.

Reynolds Metals Company, New York, N. Y. [illegible] for wrapping paper. 302,695; Apr. 25; Serial No. 333,106; published Feb. 7, 1933. Class [illegible].

Rich, H. S., & Co., Chicago, Ill. Publication. 302,776; Apr. 25; Serial No. 333,060; published Feb. 7, 1933. Class 38.

Rickies, Charles, doing business as Rikes Tegnery Shops, Philadelphia, Pa. Neckties. 302,618; Apr. 25. Class 39.

Riggs, F. M., Maywood, Ill. Cleansing compound. 302,540; Apr. 25; Serial No. 330,646; published Feb. 14, 1933. Class 4.

Riker Company, The, Newark, N. J. Buckles. 302,644; Apr. 25; Serial No. 332,[illegible]; published Feb. 7, 1933. Class 40.

Riverside Products Company, Cincinnati, Ohio. Malt syrup. 302,691; Apr. 25; Serial No. 333,532; published Feb. 7, 1933. Class 46.

Robbins-Schulman Stationery Co., Inc., New York, N. Y. Bond paper. 302,[illegible]; Apr. 25; Serial No. 333,[illegible]; published Feb. 7 1933. Class 37.

Robinson, J., & Company, assignor to Ricardo Katz, New York, N. Y. Kerchiefs and handkerchiefs. 92,264; renewed June 24, 1933.

Roy Press, New York, N. Y. Periodical. 302,721; Apr. 25; Serial No. 333,688; published Feb. 14, 1933. Class 38.

Rubel Baking Company, The, Cincinnati, Ohio. Rye bread. 302,520; Apr. 25; Serial No. 330,521; published Feb. 7, 1933. Class 46.

Sandeman Hermanos y Compania, Jerez de la Frontera, Cadiz, Spain. Wines. 302,726; Apr. 25; Serial No. 332,633; published Feb. 14, 1933. Class 47.

San Fernando Heights Lemon Co., San Fernando, Calif. Fresh lemons. 302,759; Apr. 25; Serial No. 322,069; published Feb. 7, 1933. Class 46.

Sanident Company. (See Edison, Sylvan M.)

Schoble, Frank, and Company, Philadelphia, Pa. Hats. 302,753; Apr. 25; Serial No. 332,162; published Feb. 7, 1933. Class 39.

Schoeneman, J., Incorporated, Baltimore, Md. Coats, vests, trousers, etc. 302,607; Apr. 25; Serial No. 332,900; published Jan. 31, 1933. Class 39.

Sears, Roebuck and Co., Chicago, Ill. Root beer extract. 302,549; Apr. 25; Serial No. 333,452; published Feb. 7, 1933. Class 45.

Sears, Roebuck and Co., Chicago, Ill. Manila rope. 302,571; Apr. 25; Serial No. 333,086; published Feb. 14, 1933. Class 7.

Sears, Roebuck and Co., Chicago, Ill. Root beer steins of glass. 302,683; Apr. 25; Serial No. 332,965; published Feb. 14, 1933. Class 33.

Sears, Roebuck and Co., Chicago, Ill. Overnight bags, harness, brief cases, and pocketbooks. 302,773; Apr. 25; Serial No. 333,085; published Feb. 7, 1933. Class 3.

Singer, Emelia E., Los Angeles, Calif. Prepared pie-crust mixture. 302,749; Apr. 25; Serial No. 332,000; published Feb. 7, 1933. Class 46.

Singer Manufacturing Company, The, Elizabeth, N. J. Sewing machines and parts thereof and attachments therefor. 93,126–7; renewed Aug. 19, 1933.

Singer Manufacturing Company, The, Elizabeth, N. J. Sewing-machine needles. 93,128; renewed Aug. 19, 1933.

Sivade, Elie F. A., doing business as Sivade Good Foods Company, Atlantic City, N. J. Hollandaise sauce and au gratin cheese sauce. 302,764; Apr. 25; Serial No. 333,206; published Feb. 14, 1933. Class 46.

Slamey, Joseph S., Boston, Mass. Cigarettes. 302,618; Apr. 25; Serial No. 331,906; published Feb. 7, 1933. Class 17.

Società Regie Terme di Montecatini, Rome, Italy. Mineral waters and salts made therefrom. 302,714; Apr. 25; Serial No. 325,924; published Feb. 7, 1933. Class 45.

Specialty Optical Co. (See Brock, John D.)

Star-Chronicle Publishing Company, St. Louis, Mo. Newspaper. 302,722; Apr. 25; Serial No. 333,745; published Feb. 14, 1933. Class 38.

Strathmore Paper Company, Mittineague, Mass. Writing and printing paper. 302,550; Apr. 25; Serial No. 333,442; published Feb. 7, 1933. Class 37.

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Bread (rye bread and pumpernickel). 302,530–4; Apr. 25; Serial Nos. 330,974–8; published Feb. 14, 1933. Class 46.

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Bread (rye bread and pumpernickel). 302 535–6; Apr. 25; Serial Nos. 330,971–2; published Feb. 14, 1933. Class 46.

Sun Glow Industries, Inc., Mansfield, Ohio. Smoking stands and cabinets, telephone sets, book cases, etc. 302,554; Apr. 25; Serial No. 333,364; published Feb. 14, 1933. Class 32.

Sussberg & Feinberg, Inc., New York, N. Y. Underwear. 302,570; Apr. 25; Serial No. 333,088; published Feb. 14, 1933. Class 39.

Sweet-Orr & Co., Inc., Wappingers Falls, and New York, N. Y. Negligee shirts and breeches, pants, etc. 302,584; Apr. 25; Serial No. 328,283; published Jan. 31, 1933. Class 39.

Taylor, E. E., Corporation, Boston, Mass. Boots and shoes. 302,798; Apr. 25; Serial No. 317,860; published Mar. 22, 1933. Class 39.

Trippe, Barker & Co., New York, N. Y. Cotton piece goods. 302,682; Apr. 25; Serial No. 332,969; published Feb. 14, 1933. Class 42.

Troy, Seymour, & Co., Inc., New York, N. Y. Shoes. 302,639; Apr. 25; Serial No. 332,497; published Jan. 17, 1933. Class 39.

Tupacau Mills, Tupacau, S. C. Towels. 302,563; Apr. 25; Serial No. 333,243; published Feb. 14, 1933. Class 42.

Turney, J. G., & Son, Limited, London, England. Whiskey, rum, gin, and brandy. 302,739; Apr. 25; Serial No. 330,718; published Feb. 14, 1933. Class 49.

United States Playing Card Company, The. (See New York Consolidated Card Company, The, assignor.)

United States Rubber Company, New York, N. Y. Canvas and rubber shoes. 302,815; Apr. 25. Class 39.

Universal Button Fastening & Button Company, Detroit, Mich. Buttons. 302,585; Apr. 25; Serial No. 327,951; published Jan. 17, 1933. Class 40.

Universal Button Fastening & Button Company, Detroit, Mich. Buttons. 302,713; Apr. 25; Serial No. 332,429; published Feb. 7, 1933. Class 40.

Valier & Spies Milling Co., St. Louis, assignor, by mesne assignments, to Valier & Spies Milling Corporation, Kansas City, Mo. Wheat-flour. 90,665; renewed Mar. 11, 1933.

Vegetable Products Corporation, doing business as Vegetised Foods, Inc., Burbank, Calif. Vegetable tablets, vegetable mineral broth, vegetable soup, etc. 302,808; Apr. 25. Class 6.

Vegetised Foods, Inc. (See Vegetable Products Corporation.)

Wagner's, W. T., Sons, to The W. T. Wagner's Sons Company, Cincinnati, Ohio, successor. Artificial table-waters. 40,742; renewed July 7, 1933.

Waid, C. F., Dallas, Tex. Maltless orange drink. 302,792; Apr. 25; Serial No. 328,425; published Feb. 7, 1933. Class 45.

Wamsutta Mills, New Bedford, Mass. Cotton piece goods, pillow cases, and sheets. 302,595; Apr. 25; Serial No. 331,420; published Feb. 7, 1933. Class 42.

Wanamaker, John, Philadelphia, Philadelphia, Pa. Smoking pipes, cigarette cases, tobacco pouches, etc. 302,606; Apr. 25; Serial No. 331,206; published Feb. 14, 1933. Class 8.

Warren Chemical & Manufacturing Company, to The Barrett Company, New York, N. Y., successor. Asphalt. 91,401; renewed Apr. 29, 1933.

Warren Woolen Company, The, Stafford Springs, Conn. Rugs. 302,662; Apr. 25; Serial No. 332,205; published Feb. 14, 1933. Class 42.

Washington Maid, Incorporated, Washington, D. C. Ice creams and ices. 302,528; Apr. 25; Serial No. 330,026; published Nov. 1, 1932. Class 46.

Weber Coffee Company, The, Philadelphia, Pa. Canned and packaged coffee and tea. 302,658; Apr. 25; Serial No. 325,277; published Jan. 31, 1933. Class 46.

Weiner, Simon, New York, N. Y. Shoes, slippers, and sandals, etc. 302,603; Apr. 25; Serial No. 331,231; published Jan. 17, 1933. Class 39.

Western Clock Co., assignor to Western Clock Company, Peru, Ill. Clocks and watches. 91,054; renewed Apr. 8, 1933.

Western Clock Co., assignor to Western Clock Company, Peru, Ill. Clocks and watches. 91,282; renewed Apr. 22, 1933.

Wilhoyte Decorative Plaster Co., Gary, Ind. Colors for tinting plaster. 302,617; Apr. 25. Class 12.

Williams, Amy F., doing business as Nu-Sno Company, Greeley, Colo. Frozen confections. 302,678; Apr. 25; Serial No. 332,242; published Feb. 14, 1933. Class 46.

Winterfresh Foods, Inc., Chicago, Ill. Preserved fruits and vegetables. 302,615; Apr. 25; Serial No. 331,940; published Jan. 31, 1933. Class 46.

Winthrop Chemical Company, Inc. (See Farbenfabriken of Eberfeld Company, assignor.)

Wohl Shoe Company, St. Louis, Mo. Shoes, boots, overshoes, and house slippers. 302,525; Apr. 25; Serial No. 330,219; published Feb. 7, 1933. Class 39.

Wohl Shoe Company, St. Louis, Mo. Arch support shoes. 302,630; Apr. 25; Serial No. 332,799; published Jan. 24, 1933. Class 39.

Wolf, Benjamin, Co. Inc., New York, N. Y. Handkerchiefs. 302,822; Apr. 25. Class 39.

Wright, John, (London) Limited, London, England. Dog biscuits. 302,710; Apr. 25; Serial No. 333,022; published Feb. 7, 1933. Class 46.

Zwiebelson, Abraham, doing business as Mollie Mayers, New York, N. Y. Brassières. 302,596; Apr. 25; Serial No. 331,526; published Feb. 14, 1933. Class 39.

LIST OF REGISTRANTS OF LABELS

Austin Canning Co. (See Walker's Austex Chile Company.)

Ayrand & Hallam, San Antonio, Tex. The Cross Puzzle. For Puzzles. 41,958; Apr. 25.

B/G Sandwich Shops, Inc., Chicago, Ill. B/G Lunches—Prepared To Your Order—Ready to Go In a Jiffy. For Sandwiches, Salads, Pies, Cakes, Fruits, Coffee, Tea, and Milk. 41,959; Apr. 25.

B. & S. Cigar Company. (See Baylin, Richard.)

Baylin, Richard, doing business as B. & S. Cigar Company, Chester, Pa. Status. For Cigars. 41,960; Apr. 25.

Beich, Paul F., Company, Bloomington, Ill. Sky Ride. For Candy. 41,961; Apr. 25.

Biloxi Canning & Packing Co., Inc., Biloxi, Miss. Biloxi Miss. For Canned Shrimp. 41,962; Apr. 25.

Blechman, S., Sons Inc., New York, N. Y. Nite-N-Paris Pajamas. For Pajamas. 41,963; Apr. 25.

Chilcote Company, The, Cleveland, Ohio. Jig Time. For Puzzles. 41,964; Apr. 25.

Chilcote Company, The, Cleveland, Ohio. Jigger Jig. For Puzzles. 41,965; Apr. 25.

Clorox Chemical Co., Oakland, Calif. Concentrated Clorox Disinfectant, Cleanser, Germicide, Deodorant, Prepared Especially for Agricultural and Industrial Use. For Disinfecting, Cleansing, Germicidal, and Deodorizing Compounds. 41,966; Apr. 25.

Cook-Rite Food Products Company, New York, N. Y. Cook-Rite. For Gravy Powder. 41,967; Apr. 25.

Davidson Biscuit Company, Mount Vernon, Ill. Tasty Graham Wafers. For Graham Wafers. 41,968; Apr. 25.

Escorza, Ciro, Downey, Calif. El Ranchero. For Pickled Chiles. 41,969; Apr. 25.

Foreign Chemical Co. (See Scherer, Isidor.)

General Health Corporation, Philadelphia, Pa. General Health Nipples. For Nursing Bottle Nipples. 41,970; Apr. 25.

Gibson, Thos. H., Newark, N. J. Emmet. For Varnishes. 41,971; Apr. 25.

Grist Mill, The, Los Angeles, Calif. Six-N-One. For Breakfast Cereal. 41,972; Apr. 25.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Jiffy. For Jar Rubbers. 41,973; Apr. 25.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Jiffy Jar Rubbers. For Jar Rubbers. 41,974; Apr. 25.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Opens The Jar In A Jiffy. For Jar Rubbers. 41,975; Apr. 25.

Hamilton Rubber Manufacturing Company, Trenton, N. J. Good Housekeeping. For Jar Rings. 41,976; Apr. 25.

Haskins Brothers & Company, Sioux City, Iowa. Rose Queen. For Soap. 41,977; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. National Bellas Hess Shoes. For Boxes. 41,978; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. The Pedipoise Shoe. For Boxes. 41,979; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. Circle of Fashion. For Boxes. 41,980; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. De Luxe Compo. For Boxes. 41,981; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. Vim-Ode. For Boxes. 41,982; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. Footrelax. For Boxes. 41,983; Apr. 25.

Hoague-Sprague Corporation, Lynn, Mass. Tri-Plex. For Boxes. 41,984; Apr. 25.

Iannotti, Oswald, New York, N. Y. —Dear PP—Appian Lab. N. Y. For Perfume. 41,985; Apr. 25.

Jill. Frank, Inc., New York, N. Y., and Fort Lauderdale, Fla. Aircraft Florida Peppers. For Peppers. 41,986; Apr. 25.

Kent Company, Inc., The, Kansas City, Mo. My Kel Tooth Powder. For Tooth Powder. 41,987; Apr. 25.

Kilgore Manufacturing Company, The, Westerville, Ohio. Kilgore Oh Boy. For Cap Pistols. 41,988; Apr. 25.

Kleenex Company, Chicago, Ill. Free Sample Pocket Packet of Full Size Sheets Kleenex. For Pocket Size Packets of Disposable Tissues. 41,989; Apr. 25.

Koffee Klear Company, Chicago, Ill. Koffee-Klear. For a Substance for Clearing Coffee. 41,990; Apr. 25.

Kohler, G. A., & Co., Yoe, Pa. Kohler's American Made. For Cigars. 41,991; Apr. 25.

Kotex Company, Chicago, Ill. Kotex with Patented Equalizer. For Sanitary Pad. 41,992; Apr. 25.

Kroeck, Karl S., doing business as Ponder Puzzles Company, Inc., Hubbard, Ohio. Ponder Puzzles. For Puzzles. 41,993; Apr. 25.

Laplace, O., doing business as Rex Chemical Company, New York, N. Y. Double Quick Paint & Varnish Remover. For Paint and Varnish Remover. 41,994; Apr. 25.

Manischewitz, B., Company, The, Cincinnati, Ohio, and Jersey City, N. J. Egg Matzos. For Egg Matzos. 41,995; Apr. 25.

Manischewitz, B., Company, The, Cincinnati, Ohio, and Jersey City, N. J. Round Tea Matzos. For Round Tea Matzos. 41,996; Apr. 25.

Manischewitz, B., Company, The, Cincinnati, Ohio, and Jersey City, N. J. Hygienic Matzos. For Matzos. 41,997; Apr. 25.

Manischewitz, B., Company, The, Cincinnati, Ohio, and Jersey City, N. J. Thin Tea Matzos. For Thin Tea Matzos. 41,998; Apr. 25.

Midwest Hardware Company, Chicago, Ill. Naphtha Creme. For Household Cleaner. 41,999; Apr. 25.

Monad Paint & Varnish Company, Philadelphia, Pa. Col-O-Jar. For Colors in Oil. 42,000; Apr. 25.

Monad Paint & Varnish Company, Philadelphia, Pa. Fresh Colors. For Paints. 42,001; Apr. 25.

Monad Paint and Varnish Company, Philadelphia, Pa. Monad Long Life. For White Lead. 42,002; Apr. 25.

Monad Paint & Varnish Company, Philadelphia, Pa. Monad-Col-O-Jar. For Colors in Oil. 42,003; Apr. 25.

New Jersey Paint Works, Harry Lauderbough, Inc., Jersey City, N. J. New Jersey Copper Bronze Composition. For Paint. 42,004; Apr. 25.

Northam Trading Corporation, New York, N. Y. Picadilly. For Safety Matches. 42,005; Apr. 25.

Oak Hill Citrus Growers Association, Oak Hill, Fla. Turabull. For Oranges and Grapefruit. 42,006; Apr. 25.

Peerless Novelty Company, Grand Haven, Mich. Peerless Visor-Ette. For Attachment for Automobile Visor. 42,007; Apr. 25.

Ponder Puzzles Company, Inc. (See Kroeck, Karl S.)

Raasch & Grimm Baking Corporation, Long Island City, N. Y. Queen's Taste. For Bread. 42,008; Apr. 25.

Regan, R. W., Co., Chicago, Ill. Regan's Wonder Cup Coffee. For Coffee. 42,009; Apr. 25.

Rex Chemical Company. (See Laplace, O.)

Ritter, Emily, Philadelphia, Pa. Herva Mate. For Brasilian Tea. 42,010; Apr. 25.

Royal Estates Tea Co., Hoboken, N. J. Royco Tea. (Green Label.) For Tea. 42,011; Apr. 25.

Scherer, Isidor, doing business as Foreign Chemical Co., Baltimore, Md. Vienna Beauty Healing Skin Cream Greaseless. For Greaseless Healing Skin Cream. 42,012; Apr. 25.

Schmidt, Henry, & Bros. Inc., Philadelphia, Pa. Jiggered Letter. For Puzzle Consisting of Pieces to be Associated Together. 42,013; Apr. 25.

Schwartz, Joseph, Cleveland, Ohio. New Deal. For Cigars. 42,014; Apr. 25.

Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. The Onotuft Patented Box Spring. For Box Springs. 42,015; Apr. 25.

Sleeper Products, Inc., Wilmington, Del., and Philadelphia, Pa. The Wonder Mat Inner-Spring Mattress. For Inner-Spring Mattresses. 42,016; Apr. 25.

Sparkletts Bottled Water Corporation, Los Angeles, Calif. Certified Distilled Water. For Certified Distilled Water. 42,017; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Fleischmann's Cream. For Phosphate and Lactate Mixture Suitable for Use With Sodium Bicarbonate for the Same Purpose as Baking Powder. 42,018; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Chase and Sanborn's Seal Brand Tender Leaf Orange Pekoe and Pekoe. For Tea Balls. 42,019; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Cherry Flavor Gelatin Dessert. For Gelatin Dessert. 42,020; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Lime Flavor Gelatin Dessert. For Gelatin Dessert. 42,021; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. 42,022; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. 42,023; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Lemon Flavor Gelatin Dessert. For Gelatin Dessert. 42,024; Apr. 25.

Standard Brands Incorporated, New York, N. Y. Royal Quick Setting Orange Flavor Gelatin Dessert. For Gelatin Dessert. 42,025; Apr. 25.

Starlight Bros. Inc., New York, N. Y. Starlight. For Cigars. 42,026; Apr. 25.

Stuhmer, Geo. F., & Company, Brooklyn, N. Y. Stuhmer's. For Rye Bread. 42,027; Apr. 25.

Tobacco By-Products & Chemical Corporation, Louisville, Ky. "Black Leaf" Worm Powder. For Worm Powder for Poultry. 42,028; Apr. 25.

Tobacco By-Products & Chemical Corporation, Louisville, Ky. "Black Leaf" Worm Pellets For Poultry. For Worm Pellets for Poultry. 42,029; Apr. 25.

United Service Advertising, Newark, N. J. Royal Stores. For General Merchandise. 42,030; Apr. 25.

Walker's Austex Chile Company, doing business as Austin Canning Co., Austin, Tex. La Fronters Mexican Style Chile Con Carne. For Canned Chile Con Carne. 42,031; Apr. 25.

LIST OF REGISTRANTS OF PRINTS

Bigelow-Sanford Carpet Co., Inc., New York, N. Y. Copyrighted December 5, 1931 For Your Sake Madam. For Rugs and Carpets. 14,142; Apr. 25.

Chicago Roller Skate Company, Chicago, Ill. Come On Let's Go Roller Skating. For Roller Skates. 14,143; Apr. 25.

Chilton Pen Company, Inc., The, New York, N. Y. Chilton Pen. For Fountain Pens. 14,144; Apr. 25.

Dixon-Prosser Inc., Seattle, Wash. Saves Time Builds Appetite Wonder Shredder. For Foods Shredders. 14,145; Apr. 25.

General Mills, Inc., Minneapolis, Minn. Free! Accept, Please, Betty Crocker's New B-Z Serve Cake Plate. For Cake Flour. 14,146; Apr. 25.

General Mills, Inc., Minneapolis, Minn. Apricot Topsy Turvy. For Flour. 14,147; Apr. 25.

Hamblet Studios, Inc., Akron, Ohio. Jigette Picture Puzzle. For Picture Puzzles. 14,148; Apr. 25.

Hills Bros., San Francisco, Calif. Where's The Vine? For Coffee. 14,149; Apr. 25.

Mathews Company, The, Detroit, Mich. Four Point Service Display. For Ice Cream. 14,150; Apr. 25.

Minneapolis Shoe Co., Minneapolis, Minn. An Extra Pair $1. For Shoes. 14,151; Apr. 25.
Minneapolis Shoe Co., Minneapolis, Minn. Minneapolis Shoe Co. For Shoes. 14,152; Apr. 25.
Minor, P. W., & Son, Inc., Batavia, N. Y. Minor's Feminized Munson The Human Foot In Leather. For Footwear. 14,153; Apr. 25.
Minor, P. W., & Son, Inc., Batavia, N. Y. Related Lasts. For Footwear. 14,154; Apr. 25.
Minor, P. W., & Son, Inc., Batavia, N. Y. Unified Measurements. For Footwear. 14,155; Apr. 25.
Municipal Shoe Co. Inc., Brooklyn, N. Y. Detailed Construction. For Shoes. 14,156; Apr. 25.
Premier Malt Products Co., Peoria Heights, Ill. Made From Nature's Choicest Barley—Good Old Blue Ribbon Malt. For Malt Extract. 14,157; Apr. 25.

CLASSIFIED LIST OF TRADE-MARKS REGISTERED

CLASS 1

Film scrap, Washed motion picture. Jefferys & Co. 302,752; Apr. 25; Serial No. 332,017; published Feb. 14, 1933.
Fuller's earth, bleaching earth, and activated clays. Wilhelm Priem & Company, G. m. b. H. 302,681; Apr. 25; Serial No. 332,961; published Feb. 7, 1933.
Gravel for caged birds. Chappel Bros., Inc. 302,684; Apr. 25; Serial No. 332,992; published Feb. 14, 1933.
Seeds. Ed. F. Mangelsdorf & Brother. 302,640; Apr. 25; Serial No. 332,587; published Feb. 7, 1933.

CLASS 3

Bags, harness, brief cases, and pocketbooks, Overnight. Sears, Roebuck and Co. 302,773; Apr. 25; Serial No. 333,085; published Feb. 7, 1933.

CLASS 4

Abrasive paper and cloth, Flexible. Behr-Manning Corporation. 302,591; Apr. 25; Serial No. 326,076; published Feb. 14, 1933.
Cleaner and bleach, Floor. Kleen Chemical Company. 302,805; Apr. 25; Serial No. 323,437; published Feb. 14, 1933.
Cleaning compound, Carpet. Illinois Dyestuff Corporation. 302,767; Apr. 25; Serial No. 333,173; published Feb. 14, 1933.
Cleansing compound. F. M. Riggs. 302,540; Apr. 25; Serial No. 330,646; published Feb. 14, 1933.
Pads, Metallic abrasive scouring. Metal Textile Corporation. 302,521; Apr. 25; Serial No. 330,517; published Feb. 14, 1933.
Soap. Chanel, Inc. 302,690; Apr. 25; Serial No. 332,645; published Feb. 7, 1933.
Soap. Kresge Department Store Corp. 302,587; Apr. 25; Serial No. 327,060; published Feb. 14, 1933.
Soaps. Baltz & Koerper. 302,575; Apr. 25; Serial No. 329,725; published Feb. 14, 1933.
Soaps, Hand. Quality Soap Manufacturing Company. 302,576; Apr. 25; Serial No. 329,719; published Feb. 7, 1933.
Washing compounds. Fermax Products Co. 302,781; Apr. 25; Serial No. 333,285; published Feb. 14, 1933.

CLASS 5

Liquid preparation. Air-Way Electric Appliance Corporation. 302,699; Apr. 25; Serial No. 333,376; published Feb. 7, 1933.
Paste, Corn-product adhesive. American Hominy Company. 90,619; renewed Mar. 11, 1933.
Solder or cement. J. C. De Mille. 302,780; Apr. 25; Serial No. 333,028; published Feb. 7, 1933.

CLASS 6

Chemical composition. Robert J. King Company. 302,768; Apr. 25; Serial No. 333,191; published Feb. 14, 1933.
Chemical composition. Robert J. King Company. 302,766; Apr. 25; Serial No. 333,190; published Feb. 14, 1933.
Chemical or biological reagent. Farbwerke vorm. Meister Lucius & Brüning. 91,764; renewed May 27, 1933.
Chemical products. Compagnie De Béthune. 302,656; Apr. 25; Serial No. 311,261; published Feb. 7, 1933.
Chemical products. Compagnie De Béthune. 302,658; Apr. 25; Serial No. 311,262; published Feb. 7, 1933.
Compound of quinin and diethylbarbituric acid for pharmaceutical use. E. Merck. 91,490; renewed May 6, 1933.
Cosmetics. H. G. Blanchard. 302,769; Apr. 25; Serial No. 333,142; published Feb. 14, 1933.
Cough syrup. J. D. Greenstein. 302,745; Apr. 25; Serial No. 331,824; published Feb. 14, 1933.
Dyestuffs. General Dyestuff Corporation. 302,768; Apr. 25; Serial No. 333,185; published Feb. 7, 1933.
Ethyl-hexyl barbituric acid hypnotic. Parke, Davis & Co. 302,612; Apr. 25; Serial No. 331,961; published Feb. 7, 1933.
Fluxes, Soldering. Kester Solder Company. 302,757; Apr. 25; Serial No. 332,620; published Feb. 14, 1933.
Liquid and jelly preparations for nasal inhalation. Logan Laboratories, Ltd. 302,661; Apr. 25; Serial No. 332,156; published Feb. 7, 1933.
Medicated pastils and lozenges. S. A. Grau. 89,953; renewed Jan. 21, 1933.
Medicine. E. W. Johnston. 302,629; Apr. 25; Serial No. 332,774; published Feb. 14, 1933.
Medicines. F. O. Murray. 302,809; Apr. 25.
Naphthalene. Barrett Manufacturing Company. 91,452; renewed May 6, 1933.
N-monodibromopropyl-C.C-diethyl-barbituric acid. E. Merck. 91,680; renewed May 20, 1933.
Ointment, Medicinal. Ayer Company. 302,546; Apr. 25; Serial No. 333,572; published Feb. 14, 1933.
Pharmaceutical preparations. Kali-Chemie Aktiengesellschaft. 302,650; Apr. 25; Serial No. 328,791; published Feb. 14, 1933.
Photographic developing preparation. Farbwerke, vormals Meister, Lucius & Brüning. 40,259; renewed May 5, 1933.
Powder, Dental plate adhesive. S. M. Edison. 302,793; Apr. 25; Serial No. 323,436; published Feb. 14, 1933.
Preparation for the hair. R. G. Edwards. 40,808; renewed May 12, 1933.
Preparation for the relief of painful menstruation. P. H. Lemen. 302,708; Apr. 25; Serial No. 333,074; published Feb. 14, 1933.
Prophylactic, Intra-vaginal. G. A. Lasuman. 302,746; Apr. 25; Serial No. 331,559; published Feb. 7, 1933.
Purgative. Farbenfabriken of Elberfeld Company. 92,060; renewed June 17, 1933.
Remedy for furunculosis and acne. Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heilmann. 91,647; renewed May 20, 1933.
Serum preparations. Nitritfabrik Aktiengesellschaft. 91,685; renewed May 20, 1933.
Skin-disease remedy. Campho-Sorcin Laboratory. 90,629; renewed Mar. 11, 1933.
Solvent, Drain pipe. Kleen Chemical Company. 302,743; Apr. 25; Serial No. 330,986; published Feb. 14, 1933.
Tar distillates. Barrett Manufacturing Company. 91,409; renewed Apr. 29, 1933.
Vegetable tablets, mineral broth, soup, etc. Vegetable Products Corporation. 302,806; Apr. 25.
Vichy water, Artificial. Perfect Vichy Bottling Co. 302,744; Apr. 25; Serial No. 330,520; published Feb. 7, 1933.

CLASS 7

Cords, twines, ropes, etc. Henry C. Kelley Company. 93,184; renewed Aug. 26, 1933.
Rope, Manila. Sears, Roebuck and Co. 302,571; Apr. 25; Serial No. 333,086; published Feb. 14, 1933.
Rope, Wire. A. Leschen & Sons Rope Company. 302,552; Apr. 25; Serial No. 333,894; published Feb. 7, 1933.

CLASS 8

Cigarette papers. R. Bollord. 302,806; Apr. 25; Serial No. 322,570; published Feb. 14, 1933.
Pipes, cigarette cases, tobacco pouches, etc. John Wanamaker Philadelphia. 302,606; Apr. 25; Serial No. 331,206; published Feb. 14, 1933.

CLASS 11

Inks, Writing. Robert Keller Ink Company. 302,634; Apr. 25; Serial No. 332,706; published Feb. 7, 1933.

CLASS 12

Asphalt. Warren Chemical & Manufacturing Company. 91,401; renewed Apr. 29, 1933.
Bituminous emulsions. Pioneer Paper Company. 302,734; Apr. 25; Serial No. 332,198; published Feb. 14, 1933.
Colors for tinting plaster. Wilhoyte Decorative Plaster Co. 302,817; Apr. 25.
Doors, structural panels, moldings, etc. Farley & Loetscher Mfg. Co. 302,752; Apr. 25; Serial No. 332,294; published Feb. 7, 1933.
Roofing, Tarred felt. Barrett Manufacturing Company. 91,547; renewed May 13, 1933.
Roofings. Barrett Manufacturing Company. 93,167; renewed June 24, 1933.
Shingles, clapboards, roofing materials, and imitation masonry building units. F. E. Horne. 302,794; Apr. 25; Serial No. 295,216; published Feb. 7, 1933.

CLASS 13

Pipes, tubes and casings. National Tube Company. 91,892; renewed June 3, 1933.

CLASS 14

Welding rods and hard faced castings. Advance Welding and Alloys, Ltd. 302,609; Apr. 25; Serial No. 332,864; published Feb. 7, 1933.

CLASS 15

Oils, Coal-tar. Barrett Manufacturing Company. 91,836; renewed June 3, 1933.

CLASS 16

Black or vegetable black, Natural. Industrial Chemical Company. 92,339; renewed July 1, 1933.
Carbon black. Godfrey L. Cabot, Inc. 302,548; Apr. 25; Serial No. 333,501; published Feb. 14, 1933.
Carbon black. Godfrey L. Cabot, Inc. 302,707; Apr. 25; Serial No. 333,056; published Feb. 7, 1933.
Colors, Water and oil. Redsker & Hannis. 40,295; renewed May 12, 1933.
Paint, varnishes and paint pigments. John C. Dolph Company. 302,641; Apr. 25; Serial No. 332,447; published Feb. 7, 1933.
Polish, rubbing compound, liquid wax, etc. Charles F. Kellom Co. 302,539; Apr. 25; Serial No. 330,749; published Feb. 7, 1933.
Polishes and cleaners, Furniture. Lasex Corporation. 302,680; Apr. 25; Serial No. 332,928; published Feb. 7, 1933.
Preparations for removing paint and other coatings from surfaces. Ball Chemical Company. 91,451; renewed May 6, 1933.
Turpentine and turpentine compositions. Benzinwerke Rhenania Gesellschaft mit beschränkter Haftung. 91,540; renewed May 6, 1933.
Wax, polish, Floor. California Art Supply Company. 302,813; Apr. 25.

CLASS 17

Cigarettes. J. S. Slamey. 302,613; Apr. 25; Serial No. 331,996; published Feb. 7, 1933.

CLASS 19

Boats. Electric Launch Co. 93,085; renewed Aug. 19, 1933.
Railway equipment. American Steel Foundries. 302,811; Apr. 25.

CLASS 22

Cards, Playing. New York Consolidated Card Company. 40,749; renewed July 14, 1933.
Fish nets. Linen Thread Company. 302,561; Apr. 25; Serial No. 333,293; published Feb. 14, 1933.
Fishing Flies, Artificial. Cook, Newton & Smith, Incorporated. 302,774; Apr. 25; Serial No. 333,098; published Feb. 7, 1933.
Skates and skate outfits, Ice. Nestor Johnson Manufacturing Company. 302,569; Apr. 25; Serial No. 333,103; published Feb. 7, 1933.

CLASS 23

Cutlery, machinery, and tools. Morgan Construction Company. 91,888; renewed June 3, 1933.
Matrices. Mergenthaler Linotype Company. 92,096; renewed June 17, 1933.
Miter box or device. National Specialties Co. 302,562; Apr. 25; Serial No. 333,269; published Feb. 14, 1933.
Molds, Brick. J. B. Crowell & Sons. 302,655; Apr. 25; Serial No. 314,043; published Feb. 7, 1933.
Needles, Sewing-machine. Singer Manufacturing Company. 93,128; renewed Aug. 19, 1933.
Plow points. Farm Tools, Inc. 302,736; Apr. 25; Serial No. 331,673; published Feb. 7, 1933.
Razor blades. American Safety Razor Corporation. 302,812; Apr. 25.
Razor blades. Heppenstall Company. 302,551; Apr. 25; Serial No. 333,431; published Feb. 14, 1933.
Sewing machines and parts thereof and attachments therefor. Singer Manufacturing Company. 93,126-7; renewed Aug. 19, 1933.
Thread cutting tools. J. M. Carpenter Tap & Die Co. 302,725; Apr. 25; Serial No. 332,683; published Feb. 7, 1933.

CLASS 26

Appliances for measuring and recording the growth or production of growing human hair. Pro-Ker Laboratories, Inc. 302,543; Apr. 25; Serial No. 333,607; published Feb. 14, 1933.
Calculating and adding machines. Grimme Natalis & Co. Commanditgesellschaft auf Actien. 91,689; renewed May 20, 1933.
Crucible, Plumbago. Morgan Crucible Company Limited. 91,503; renewed May 13, 1933.
Crucibles. Morgan Crucible Company Limited. 91,105; renewed Apr. 15, 1933.
Mountings, Ophthalmic. J. D. Brock. 302,568; Apr. 25; Serial No. 333,113; published Feb. 7, 1933.
Pumps, Measuring oil. S. F. Bowser & Co. Inc. 93,160; renewed Aug. 26, 1933.
Scales, Weighing. W. R. Brearley. 302,730; Apr. 25; Serial No. 332,304; published Feb. 7, 1933.
Screens, Phosphoric photo. D. I. Cooke. 302,566; Apr. 25; Serial No. 333,150; published Feb. 7, 1933.
Sensitized photographic paper and cardboard. Kraft & Steudel Fabrik Photographischer Papiere Gesellschaft mit beschränkter Haftung. 91,584; renewed May 13, 1933.
Sound recording apparatus and equipment, etc., Photographic and electro-physical. RCA Victor Company. 302,712; Apr. 25; Serial No. 328,074; published Feb. 7, 1933.

CLASS 27

Clocks and parts thereof. Hamburg-Amerikanische Uhrenfabrik. 92,551; renewed July 15, 1933.
Clocks and watches. Western Clock Co. 91,054; renewed Apr. 8, 1933.
Clocks and watches. Western Clock Co. 91,282; renewed Apr. 22, 1933.

CLASS 29

Brooms and brushes, Household. Norea Broom Company. 302,668; Apr. 25; Serial No. 332,238; published Feb. 7, 1933.
Tooth brushes. Holton & Adams. 302,700; Apr. 25; Serial No. 333,390; published Feb. 14, 1933.
Tooth brushes. Pro-Phy-Lac-Tic Brush Company. 302,771; Apr. 25; Serial No. 333,107; published Feb. 14, 1933.

CLASS 30

China table ware. Onondaga Pottery Company. 302,666; Apr. 25; Serial No. 331,004; published Feb. 7, 1933.

CLASS 31

Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 302,544-5; Apr. 25; Serial No. 333,581-2; published Feb. 7, 1933.
Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 302,547; Apr. 25; Serial No. 333,579; published Feb. 14, 1933.
Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 302,715-18; Apr. 25; Serial Nos. 333,797-800; published Feb. 14, 1933.
Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 302,719; Apr. 25; Serial No. 333,793; published Feb. 14, 1933.
Refrigerators and parts thereof, and refrigerating systems. Electrolux Servel Corporation. 302,720; Apr. 25; Serial No. 333,796; published Feb. 14, 1933.

CLASS 32

Pillows. Chas. Emmerich & Co. 91,955; renewed June 10, 1933.
Stands and cabinets, telephone sets, book cases, etc., Smoking. Sun Glow Industries, Inc. 302,554; Apr. 25; Serial No. 333,264; published Feb. 14, 1933.

CLASS 33

Steins of glass. Sears, Roebuck and Co. 302,632; Apr. 25; Serial No. 332,965; published Feb. 14, 1933.

CLASS 34

Burners, Oil. Harvey-Whipple, Incorporated. 302,810; Apr. 25.
Heating, lighting, and ventilating apparatus. Morgan Construction Company. 92,356; renewed July 1, 1933.

CLASS 35

Belting, Round leather. Joel S. Perkins & Son. 302,582; Apr. 25; Serial No. 332,598; published Feb. 7, 1933.
Packing, Rod and piston. Johns-Manville Corporation. 302,739; Apr. 25; Serial No. 329,145; published Feb. 14, 1933.

CLASS 37

Clips, Paper. Fritz-Taber Mfg. Co. 93,271; renewed Sept. 2, 1933.
Foil, Metallic. Reynolds Metals Company. 302,695; Apr. 25; Serial No. 333,106; published Feb. 7, 1933.
Paper, Bond. Robbins-Schulman Stationery Co. Inc. 302,686; Apr. 25; Serial No. 332,962; published Feb. 7, 1933.
Paper, Safety. Hammermill Paper Company. 302,696; Apr. 25; Serial No. 332,654; published Feb. 7, 1933.
Paper, Toilet. H. F. Carroll. 302,668; Apr. 25; Serial No. 332,668; published Feb. 14, 1933.
Paper, Wax. E. Latimer, jr. 302,810; Apr. 25.
Paper, Writing and paper. Strathmore Paper Company. 302,550; Apr. 25; Serial No. 333,442; published Feb. 7, 1933.

CLASS 38

Cartoon strips, Series of. King Features Syndicate, Inc. 302,694; Apr. 25; Serial No. 333,518; published Feb. 14, 1933.
Cartoons. F-R Publishing Corporation. 302,762; Apr. 25; Serial No. 333,317; published Feb. 14, 1933.
Cartoons or comic strips. R. L. Goldberg. 302,770; Apr. 25; Serial No. 333,152; published Feb. 7, 1933.
Magazine, Periodical. Chicago Association of Commerce. 302,804; Apr. 25; Serial No. 313,282; published Feb. 7, 1933.
Magazine section. F-R Publishing Corporation. 302,580; Apr. 25; Serial No. 333,322; published Feb. 14, 1933.
Magazine section. F-R Publishing Corporation. 302,701; Apr. 25; Serial No. 333,323; published Feb. 7, 1933.
Magazine section. F-R Publishing Corporation. 302,703-6; Apr. 25; Serial Nos. 333,318-21; published Feb. 7, 1933.
Magazine section. F-R Publishing Corporation. 302,783; Apr. 25; Serial No. 333,316; published Feb. 7, 1933.
Newspaper. Star-Chronicle Publishing Company. 302,722; Apr. 25; Serial No. 333,745; published Feb. 14, 1933.
Newspaper articles. Balletin Company. 302,574; Apr. 25; Serial No. 329,865; published Feb. 7, 1933.

Newspaper section. New York Evening Journal, Inc. 302,697; Apr. 25; Serial No. 333,398; published Feb. 7, 1933.
Nom de plume for a magazine section. F-R Publishing Corporation. 302,557–8; Apr. 25; Serial Nos. 333,325–6; published Feb. 14, 1933.
Nom de plume for a magazine section. F-R Publishing Corporation. 302,702; Apr. 25; Serial No. 333,327; published Feb. 14, 1933.
Periodical. Crescent Publishing Co. 302,657; Apr. 25; Serial No. 307,548; published Feb. 7, 1933.
Periodical. Crescent Publishing Co. 302 659; Apr. 25; Serial No. 307,544; published Feb. 7, 1933.
Periodical. Roy Press. 302,721; Apr. 25; Serial No. 333,688; published Feb. 14, 1933.
Publication. California Retail Grocers and Merchants Association, Ltd. 302,777; Apr. 25; Serial No. 333,057; published Feb. 7, 1933.
Publication. H. S. Rich & Co. 302,776; Apr. 25; Serial No. 333,080; published Feb. 7, 1933.
Section or column appearing in a newspaper. Post Printing and Publishing Company. 302,724; Apr. 25; Serial No. 333,605; published Feb. 14, 1933.

CLASS 39

Aprons, bibs, caps, etc. Marvin-Neitzel Corporation. 302,594; Apr. 25; Serial No. 331,509; published Jan. 3, 1933.
Boots and shoes. A. H. Geuting Company. 302,759; Apr. 25; Serial No. 332,567; published Jan. 24, 1933.
Boots and shoes. International Shoe Co. 302,627; Apr. 25; Serial No. 331,556; published Jan. 17, 1933.
Boots and shoes. International Shoe Co. 302,762; Apr. 25; Serial No. 333,259; published Feb. 14, 1933.
Boots and shoes. Misbawaka Woolen Manufacturing Co. 91,362; renewed Apr. 29, 1933.
Booth and shoes. E. E. Taylor Corporation. 302,798; Apr. 25; Serial No. 317,860; published Mar. 22, 1932.
Boots, shoes, slippers, and hosiery. Applebaum-Mautner Company. 302,526; Apr. 25; Serial No. 330,194; published Jan. 3, 1933.
Brassières. Model Brassiere Co. Inc. 302,541; Apr. 25; Serial No. 330,632; published Jan. 17, 1933.
Brassières. A. Zwiebelson. 302,596; Apr. 25; Serial No. 331,526; published Feb. 14, 1933.
Brassières, bandeaux, corsets, etc. Maiden Form Brassiere Co. 302,819; Apr. 25.
Clothing, furnishings, and wearing apparel. Kirby, Block & Fischer, Inc. 302,617; Apr. 25; Serial No. 331,897; published Feb. 7, 1933.
Clothing, Men's. Middishade Company. 302,560; Apr. 25; Serial No. 333,297; published Feb. 14, 1933.
Coats, vests, pants, etc. Cohen, Goldman & Co. 302,633; Apr. 25; Serial No. 332,686; published Feb. 7, 1933.
Coats, vests, trousers, etc. J. Schoeneman, Incorporated. 302,607; Apr. 25; Serial No. 332,900; published Jan. 31, 1933.
Corsets, girdles, corselettes, etc. Lay & Way Company. 302,519; Apr. 25; Serial No. 330,631; published Jan. 24, 1933.
Dresses and top coats, Children's. Joseph Love, Inc. 302,611; Apr. 25; Serial No. 332,848; published Feb. 14, 1933.
Footwear. Marion Shoe Company. 302,598; Apr. 25; Serial No. 331,507; published Jan. 17, 1933.
Garments, corsets, brassières, etc., Foundation. Corsetry, Incorporated. 302,597; Apr. 25; Serial No. 331,493; published Jan. 17, 1933.
Gloves and underwear. Largman, Gray Company. 302,616; Apr. 25; Serial No. 331,867; published Jan. 17, 1933.
Handkerchiefs. Benjamin Wolf Co. Inc. 302,822; Apr. 25.
Hat bodies for women only, Wool felt. American Scotti Corporation. 302,795; Apr. 25; Serial No. 317,661; published Mar. 1, 1932.
Hats. Dalton Hat Co. 302,821; Apr. 25.
Hats. Henry Pollak, Inc. 302,801; Apr. 25; Serial No. 331,264; published Jan. 3, 1933.
Hats. Frank Schoble and Company. 302,753; Apr. 25; Serial No. 332,162; published Feb. 7, 1933.
Hats and caps, scarfs, underwear, etc. Modern Merchandising Bureau, Inc. 302,577; Apr. 25; Serial No. 329,685; published Jan. 17, 1933.
Hats, Men's. Adam Hat Stores, Inc. 302,578; Apr. 25; Serial No. 329,616; published Jan. 17, 1933.
Heels, Rubber. Panther Rubber Manufacturing Company. 302,787; Apr. 25; Serial No. 320,692; published Jan. 3, 1933.
Hosiery. S. L. Bellemere. 302,522; Apr. 25; Serial No. 330,443; published Jan. 31, 1933.
Jackets, coats, pants, etc. B. Lamm. 302,610; Apr. 25; Serial No. 332,865; published Feb. 7, 1933.
Kimonos and baby garments. C. H. Rainey. 302 590; Apr. 25; Serial No. 326,269; published Jan. 31, 1933.
Leggings, windbreakers, blouses, etc. Howlett & Hockmeyer Co. Inc. 302,626; Apr. 25; Serial No. 331,582; published Jan. 31, 1933.
Neckties. C. Rickles. 302,818; Apr. 25.
Overalls. Alexander Brothers Company. 91,748; renewed May 27, 1933.
Shirts. D. Feldman. 302,565; Apr. 25; Serial No. 333,174; published Feb. 14, 1933.
Shirts, and breeches, pants, etc., Negligee. Sweet-Orr & Co. 302,584; Apr. 25; Serial No. 328,283; published Jan. 31, 1933.
Shirts, sweaters, and knit underwear. Norwich Knitting Company. 302,632; Apr. 25; Serial No. 332,729; published Feb. 14, 1933.
Shoes. Burlington County Shoe Company. 302,628; Apr. 25; Serial No. 331,542; published Jan. 17, 1933.
Shoes. Chippewa Shoe Manufacturing Company. 302,586; Apr. 25; Serial No. 327,904; published Jan. 17, 1933.
Shoes. Davison-Paxon Company. 302,620; Apr. 25; Serial No. 331,777; published Jan. 24, 1933.
Shoes. Ettelbrick Shoe Manufacturing Co. 302,581; Apr. 25; Serial No. 328,484; published Jan. 3, 1933.
Shoes. Family Shoe Corp. 302,537; Apr. 25; Serial No. 330,925; published Feb. 14, 1933.
Shoes. Garofalo Bro's. Shoe Co. Inc. 302,643; Apr. 25; Serial No. 332,296; published Feb. 14, 1933.
Shoes. Jarman Shoe Company. 302,693; Apr. 25; Serial No. 333,260; published Feb. 14, 1933.
Shoes. J. E. Lock. 302,645; Apr. 25; Serial No. 332,344; published Jan. 24, 1933.
Shoes. P. W. Minor & Son, Inc. 302,523; Apr. 25; Serial No. 330,271; published Jan. 10, 1933.
Shoes. Seymour Troy & Co. 302,639; Apr. 25; Serial No. 332,497; published Jan. 17, 1933.
Shoes. United States Rubber Company. 302,815; Apr. 25.
Shoes and rubber heels. Crossett Shoe Co. 302,646; Apr. 25; Serial No. 332,366; published Feb. 7, 1933.
Shoes and slippers. Juvenile Shoe Corporation of America. 302,751; Apr. 25; Serial No. 332,066; published Jan. 17, 1933.
Shoes, Arch support. Wohl Shoe Company. 302,630; Apr. 25; Serial No. 332,799; published Jan. 24, 1933.
Shoes, boots, overshoes, and house slippers. Wohl Shoe Company. 302,525; Apr. 25; Serial No. 330,219; published Feb. 7, 1933.
Shoes, slippers, and sandals, etc. S. Weiner. 302,603; Apr. 25; Serial No. 331,231; published Jan. 17, 1933.
Soles, Composition rubber. O. Brockman. 302,621; Apr. 25; Serial No. 331,816; published Jan. 3, 1933.
Soles, Composition rubber. L. Karno & Co. Inc. 302,814; Apr. 25.
Soles, Shoe. O. Brockman. 302,593; Apr. 25; Serial No. 331,540; published Jan. 17, 1933.
Suits and overcoats, shirts, mufflers, etc. Hilton Clothes Corporation. 302,602; Apr. 25; Serial No. 331,275; published Jan. 3, 1933.
Suits, Bathing. T. M. Negri. 302,614; Apr. 25; Serial No. 331,904; published Feb. 7, 1933.
Underwear, Ladies' silk. Susseberg & Feinberg, Inc. 302,570; Apr. 25; Serial No. 333,088; published Feb. 14, 1933.
Uniforms. H. A. Loeb. 302,635; Apr. 25; Serial No. 332,588; published Feb. 7, 1933.

CLASS 40

Buckles. Riker Company. 302,664; Apr. 25; Serial No. 332,074; published Feb. 7, 1933.
Buttons. Universal Button Fastening & Button Company. 302,585; Apr. 25; Serial No. 327,951; published Jan. 17, 1933.
Buttons. Universal Button Fastening & Button Company. 302,713; Apr. 25; Serial No. 332,429; published Feb. 7, 1933.
Combs, Hair. C. Barber. 302,592; Apr. 25; Serial No. 325,676; published Feb. 7, 1933.
Combs, Hard Rubber. American Hard Rubber Company. 302,755; Apr. 25; Serial No. 332,214; published Jan. 17, 1933.
Hairpins. Hump Hairpin Manufacturing Company 302,775; Apr. 25; Serial No. 333,069; published Feb 14, 1933.
Hairpins. Hump Hairpin Manufacturing Company. 302,790; Apr. 25; Serial No. 322,612; published Feb. 14, 1933.
Toupees, wigs, transformations, etc. Max Factor & Co. Inc. 302,638; Apr. 25; Serial No. 332,580; published Feb. 7, 1933.

CLASS 42

Blankets. May Department Stores Company. 302,538; Apr. 25; Serial No. 330,792; published Feb. 7, 1933.
Blankets, Textile. Esmond Mills. 302,778; Apr. 25; Serial No. 333,061; published Feb. 14, 1933.
Cloth. B. B. & R. Knight Corporation. 302,642; Apr. 25; Serial No. 332,492; published Feb. 7, 1933.
Cotton piece goods. Trippe, Barker & Co. 302,682; Apr. 25; Serial No. 332,669; published Feb. 14, 1933.
Cotton piece goods, pillow cases and sheets. Wamsutta Mills. 302,595; Apr. 25; Serial No. 331,520; published Feb. 7, 1933.
Fabrics made of cellulose derivatives. Celanese Corporation of America. 302,788; Apr. 25; Serial No. 322,419; published Jan. 31, 1933.
Fabrics of cellulose derivatives. Celanese Corporation of America. 302,796; Apr. 25; Serial No. 318,096; published Jan. 31, 1933.
Hair net. M. W. Ables. 302,529; Apr. 25; Serial No. 330,987; published Jan. 17, 1933.
Kerchiefs and handkerchiefs. J. Robinson & Company. 92,264; renewed June 24, 1933.
Laces. Lande & Miskend, Inc. 302,618; Apr. 25; Serial No. 331,829; published Jan. 24, 1933.

Piece goods. Peck & Peck. 302,665; Apr. 25; Serial No. 332,100; published Feb. 14, 1933.
Pile fabrics. Sidney Blumenthal & Co. Inc. 302,555; Apr. 25; Serial No. 332,350; published Feb. 14, 1933.
Pile fabrics. Sidney Blumenthal & Co. Inc. 302,637; Apr. 25; Serial No. 332,573; published Jan. 24, 1933.
Pile fabrics. Sidney Blumenthal & Co. Inc. 302,692; Apr. 25; Serial No. 333,547; published Feb. 14, 1933.
Rugs. Warren Woolen Company. 302,662; Apr. 25; Serial No. 332,205; published Feb. 14, 1933.
Sheets, pillow cases, and cotton piece goods. Pelzer Manufacturing Company. 302,761; Apr. 25; Serial No. 333,236; published Feb. 14, 1933.
Textile sheets, sheetings, and pillow cases. Cannon Mills, Inc. 302,786; Apr. 25; Serial No. 321,198; published Jan. 17, 1933.
Textiles. Howlett & Hockmeyer Co. Inc. 302,647; Apr. 25; Serial No. 332,845; published Feb. 7, 1933.
Towels. Tupacan Mills. 302,563; Apr. 25; Serial No. 333,243; published Feb. 14, 1933.
Upholstery and drapery fabrics. Robert Heller, Inc. 302,643; Apr. 25; Serial No. 332,410; published Jan. 24, 1933.
Upholstery and drapery fabrics. Robert Heller, Inc. 302,644; Apr. 25; Serial No. 332,409; published Feb. 7, 1933.
Woolen and/or silk knitted fabrics. Lombardi Knitcraft, Inc. 302,604; Apr. 25; Serial No. 331,276; published Feb. 7, 1933.
Woolen piece goods. Forstmann Woolen Co. 302,527; Apr. 25; Serial No. 330,042; published Jan. 24, 1933.

CLASS 44

Applicator. Hyman & Hyman, Inc. 302,567; Apr. 25; Serial No. 333,124; published Feb. 14, 1933.
Arch correctives, Foot. D. R. Locke. 302,748; Apr. 25; Serial No. 331,881; published Feb. 14, 1933.
Dental filling and remedy, Antiseptic. E. W. Dodes. 40,553; renewed May 12, 1933.
Dental golds. J. F. Jelenko & Company. 302,606; Apr. 25; Serial No. 333,454; published Feb. 14, 1933.
Rubber gloves. Massillon Rubber Company. 302,631; Apr. 25; Serial No. 332,707; published Feb. 7, 1933.

CLASS 45

Beer extract, Root. Sears, Roebuck and Co. 302,549; Apr. 25; Serial No. 333,452; published Feb. 7, 1933.
Beverage, Maltless. J. L. Donahoo. 302,735; Apr. 25; Serial No. 331,620; published Feb. 7, 1933.
Beverage, Maltless. W. F. Lawrens. 302,729; Apr. 25; Serial No. 332,326; published Feb. 14, 1933.
Beverages, Orange. M. Harrison. 302,620; Apr. 25.
Beverages, syrups, extracts, etc., used in making the same, Maltless. Cliequot Club Company. 302,711; Apr. 25; Serial No. 326,363; published Feb. 14, 1933.
Orange drink, Maltless. C. F. Waid. 302,792; Apr. 25; Serial No. 323,425; published Feb. 7, 1933.
Water, Mineral. Hercules Mineral Springs, Inc. 302,693; Apr. 25; Serial No. 333,479; published Feb. 7, 1933.
Waters and salts made therefrom, Mineral. Societa Regie Terme di Montecatini. 302,714; Apr. 25; Serial No. 325,924; published Feb. 7, 1933.
Waters, Artificial table. W. T. Wagner's Sons. 40,742; renewed July 7, 1933.

CLASS 46

Apples. S. Hynes. 302,791; Apr. 25; Serial No. 322,535; published Feb. 7, 1933.
Bay leaves, dried beans, rolled oats, etc. Citizens' Wholesale Supply Company. 302,790–800; Apr. 25; Serial Nos. 315,715–16; published Oct. 6, 1931.
Biscuits, Dog. John Wright (London) Limited. 302,710; Apr. 25; Serial No. 333,023; published Feb. 7, 1933.
Bread, Rye. Rubel Baking Company. 302,520; Apr. 25; Serial No. 330,521; published Feb. 7, 1933.
Bread (rye bread and pumpernickel). Geo. F. Stuhmer & Company. 302,530–4; Apr. 25; Serial Nos. 330,974–8; published Feb. 14, 1933.
Bread (rye bread and pumpernickel). Geo. F. Stuhmer & Company. 302,535–9; Apr. 25; Serial Nos. 330,971–2; published Feb. 14, 1933.
Butts, Smoked. Merkel Inc. 302,622; Apr. 25; Serial No. 331,662; published Jan. 31, 1933.
Candies, Ice-cream. J. O. Edy. 302,601; Apr. 25; Serial No. 314,490; published Feb. 7, 1933.
Candy. Amtorg Trading Corporation. 302,660; Apr. 25; Serial No. 288,461; published Jan. 13, 1931.
Candy. C. A. Crane. 92,060; renewed Aug. 19, 1933.
Candy. Daggett Chocolate Company. 302,672; Apr. 25; Serial No. 332,647; published Jan. 31, 1933.
Candy. A. Kesselman. 302,754; Apr. 25; Serial No. 332,153; published Feb. 14, 1933.
Candy. Life Savers, Inc. 302,676; Apr. 25; Serial No. 332,303; published Feb. 7, 1933.
Candy. Life Savers, Inc. 302,679; Apr. 25; Serial No. 332,304; published Feb. 7, 1933.
Canned and packaged coffee and tea. Weber Coffee Company. 302,653; Apr. 25; Serial No. 325,277; published Jan. 31, 1933.
Canned crab meat, crab legs, and clams. J. B. O'Neill. 302,709; Apr. 25; Serial No. 333,008; published Feb. 7, 1933.
Canned salmon. Fidalgo Island Packing Co. 302,622; Apr. 25; Serial No. 331,781; published Feb. 14, 1933.
Canned salmon. Fidalgo Island Packing Company. 302,624; Apr. 25; Serial No. 331,790; published Feb. 14, 1933.
Canned shrimp. Jas. V. Dunbar, Inc. 302,600; Apr. 25; Serial No. 331,426; published Feb. 14, 1933.
Canned vegetables. Burnham & Morrill Company. 302,723; Apr. 25; Serial No. 333,575; published Feb. 14, 1933.
Cheese. M. Landau. 302,756; Apr. 25; Serial No. 332,191; published Feb. 7, 1933.
Chiles, Pickled. C. Escorsa. 302,670; Apr. 25; Serial No. 332,763; published Feb. 14, 1933.
Chili powder. Mrs. G. E. Clausen. 302,573; Apr. 25; Serial No. 329,979; published Feb. 14, 1933.
Chili sauce, tomato catsup, tomato juice, etc. Herbauer Company. 302,524; Apr. 25; Serial No. 330,227; published Feb. 14, 1933.
Coffee. Arbuckle Brothers. 98,254; renewed Sept. 2, 1933.
Coffee, Fitzgerald Mfg. Company. 302,677; Apr. 25; Serial No. 332,270; published Feb. 7, 1933.
Coffee, Great Atlantic & Pacific Tea Company. 302,668; Apr. 25; Serial No. 332,823; published Feb. 7, 1933.
Coffee, Great Atlantic & Pacific Tea Company. 302,671; Apr. 25; Serial No. 332,827; published Jan. 31, 1933.
Coffee, Kansas City Wholesale Grocery Co. 302,678; Apr. 25; Serial No. 333,649; published Feb. 7, 1933.
Coffee, tea, candy, cocoa, etc. Kresge Department Store Corporation. 302,803; Apr. 25; Serial No. 332,231; published Jan. 31, 1933.
Confectionery. Reid, Murdoch & Co. 302,652; Apr. 25; Serial No. 328,017; published Feb. 14, 1933.
Confections, Frozen. Eskimo Pie Corporation. 302,649; Apr. 25; Serial No. 328,664; published Feb. 7, 1933.
Confections, Frozen. A. F. Williams. 302,675; Apr. 25; Serial No. 332,242; published Feb. 14, 1933.
Confections, ice cream, sherbets, etc., Chocolate covered frozen. Foremost Dairies, Inc. 302,599; Apr. 25; Serial No. 331,899; published Feb. 7, 1933.
Cornflour. Decatur Milling Company. 302,667; Apr. 25; Serial No. 332,995; published Feb. 14, 1933.
Dairy products. J. C. Letts. 302,689; Apr. 25; Serial No. 332,621; published Feb. 7, 1933.
Dates. Habicht, Braun & Co. 302,797; Apr. 25; Serial No. 317,277; published Feb. 14, 1933.
Dates, Fresh. Algerian Date Importing Co. 302,747; Apr. 25; Serial No. 332,506; published Feb. 7, 1933.
Extract, Malt. Gerhard Lang Brewery. 302,605; Apr. 25; Serial No. 331,187; published Feb. 14, 1933.
Fish meal. Chas. W. Priddy & Company. 302,667; Apr. 25; Serial No. 332,661; published Feb. 7, 1933.
Flour combined with flax seed meal and psyllium seed meal, Whole wheat. A. H. Kennedy. 302,635; Apr. 25; Serial No. 332,721; published Feb. 7, 1933.
Flour, Wheat. Quaker Oats Company. 302,779; Apr. 25; Serial No. 333,010; published Feb. 7, 1933.
Flour, Wheat. Valier & Spies Milling Co. 90,665; renewed Mar. 11, 1933.
Food, Bird. Chappel Bros., Inc. 302,772; Apr. 25; Serial No. 333,114; published Feb. 7, 1933.
Food for cage birds, Prepared. Chappel Bros., Inc. 302,750; Apr. 25; Serial No. 332,685; published Feb. 14, 1933.
Food for dogs, Prepared. Morrison Company. 302,760; Apr. 25; Serial No. 332,594; published Feb. 14, 1933.
Food, Mixed calf. Albers Bros. Milling Company. 302,619; Apr. 25; Serial No. 331,846; published Feb. 7, 1933.
Food products, Powdered. S. S. Marvin. 302,674; Apr. 25; Serial No. 332,538; published Jan. 31, 1933.
Food, Stock. General Mills, Inc. 302,765; Apr. 25; Serial No. 333,186; published Feb. 14, 1933.
Fruits and vegetables, Preserved. Winterfresh Foods, Inc. 302,615; Apr. 25; Serial No. 331,940; published Jan. 31, 1933.
Fruits, Fresh citrus. Coachella Grapefruit Orchards Inc. 302,572; Apr. 25; Serial No. 329,980; published Feb. 7, 1933.
Fruits, Fresh citrus. R. O. MacDonald. 302,758; Apr. 25; Serial No. 332,536; published Feb. 7, 1933.
Fruits, Fresh citrus. Redlands Foothill Groves. 302,675; Apr. 25; Serial No. 332,560; published Feb. 7, 1933.
Hams. Hughes-Curry Packing Co. 302,654; Apr. 25; Serial No. 326,144; published Feb. 14, 1933.
Herring and canned fish. Otto L. Kuehn Co. 302,625; Apr. 25; Serial No. 331,644; published Jan. 31, 1933.
Hollandaise sauce and au gratin cheese sauce. H. F. A. Sivade. 302,764; Apr. 25; Serial No. 333,206; published Feb. 14, 1933.
Ice cream. Alpine Ice Cream Co. Inc. 302,742; Apr. 25; Serial No. 329,665; published Feb. 14, 1933.
Ice creams and ices. Washington Maid, Incorporated. 302,528; Apr. 25; Serial No. 330,026; published Nov. 1, 1932.
Lemons. San Fernando Heights Lemon Co. 302,789; Apr. 25; Serial No. 322,069; published Feb. 7, 1933.
Meats, lard, cheese and butter, Fresh and cured. East Tennessee Packing Company. 302,784; Apr. 25; Serial No. 319,769; published Feb. 14, 1933.
Milk powder. E. D. Fear. 302,651; Apr. 25; Serial No. 327,684; published Jan. 31, 1933.
Olive oil. A. J. Capone. 302,669; Apr. 25; Serial No. 332,911; published Feb. 7, 1933.
Olive oil. G. L. Mezzetta. 302,579; Apr. 25; Serial No. 329,290; published Feb. 7, 1933.

Oranges, lemons, limes, etc. Lee County Packing Co. 93,280; renewed Sept. 2, 1933.
Pastry and ravioli. A. E. Barili. 302,785; Apr. 25; Serial No. 318,891; published Feb. 7, 1933.
Pickles, Sweet, sour, dill, etc. Chas. F. Cates & Sons, Inc. 302,741; Apr. 25; Serial No. 329,823; published Feb. 14, 1933.
Pie-crust mixture, Prepared. E. E. Singer. 302,749; Apr. 25; Serial No. 332,000; published Feb. 7, 1933.
Pop corn. Barteldes Seed Company. 302,588; Apr. 25; Serial No. 328,345; published Feb. 7, 1933.
Preparation for liquids to produce body, viscosity, etc., of ingredients in mixtures, Granular or powdered. Chittenden, Turner & Company. 302,802; Apr. 25; Serial No. 315,134; published Jan. 31, 1933.
Spaghetti and alimentary paste products. Victoria Fusilli Company. 302,666; Apr. 25; Serial No. 332,950; published Feb. 7, 1933.
Syrup, Malt. Riverside Products Company. 302,691; Apr. 25; Serial No. 323,532; published Feb. 7, 1933.
Tea. Federal Tea Company. 302,580; Apr. 25; Serial No. 329,142; published Sept. 20, 1932.

CLASS 47

Champagne wine. Charles Heidsieck Reims Société à Responsabilité Limitée. 302,737; Apr. 25; Serial No. 330,452; published Feb. 14, 1933.
Wines. Sandeman Hermanos y Compania. 302,726; Apr. 25; Serial No. 332,633; published Feb. 14, 1933.

CLASS 48

Malt beverage. Anheuser-Busch, Incorporated. 302,556; Apr. 25; Serial No. 333,349; published Feb. 14, 1933.
Malt beverage. Kasko Products Co. 302,731; Apr. 25; Serial No. 332,257; published Feb. 7, 1933.
Malt beverages. Cloverdale Spring Co. 302,564; Apr. 25; Serial No. 333,194; published Feb. 7, 1933.
Malt beverages and extracts therefor. Koffman and Blumenau. 302,740; Apr. 25; Serial No. 329,747; published Feb. 14 1933.

CLASS 49

Brandy. Cresta Blanca Company. 302,553; Apr. 25; Serial No. 333,333; published Feb. 7, 1933.
Rum, whisky, gin, and brandy. Distillers Agency Limited. 302,727–8; Apr. 25; Serial Nos. 332,405–6; published Feb. 14, 1933.
Whiskey. Frankfort Distillery, Inc. 302,542; Apr. 25; Serial No. 333,630; published Feb. 7, 1933.
Whiskey, brandy, and other potable spirits. Jos. S. Finch & Company. 320,807; Apr. 25.
Whiskey, rum, gin, and brandy. J. G. Turney & Son, Limited. 302,738; Apr. 25; Serial No. 330,716; published Feb. 14, 1933.
Whisky. Glenfyne Distillery Company Limited. 302,733; Apr. 25; Serial No. 331,783; published Feb. 14, 1933.

CLASS 50

Awnings and awning hardware. H. G. Gallas. 302,588–9; Apr. 25; Serial Nos. 326,351–2; published Feb. 14, 1933.
Shoe-holders and boot and shoe trees. Regal Shoe Company. 90,577; renewed Mar. 4, 1933.

LIST OF LABELS

Aircraft Florida Peppers. For Peppers. Frank Jill, Inc. 41,986; Apr. 25.
B/G Lunches—Prepared To Your Order—Ready To Go In a Jiffy. For Sandwiches, Salads, Pies, Cakes, Fruits, Coffee, Tea, and Milk. B/G Sandwich Shops, Inc. 41,959; Apr. 25.
Biloxi Miss. For Canned Shrimp. Biloxi Canning & Packing Co. 41,962; Apr. 25.
'Black Leaf' Worm Pellets For Poultry. For Worm Pellets for Poultry. Tobacco By-Products & Chemical Corporation. 42,029; Apr. 25.
'Black Leaf' Worm Powder. For Worm Powder for Poultry. Tobacco By-Products & Chemical Corporation. 42,028; Apr. 25.
Certified Distilled Water. For Certified Distilled Water. Sparkletts Bottled Water Corporation. 42,017; Apr. 25.
Chase and Sanborn's Seal Brand Tender Leaf Orange Pekoe and Pekoe. For Tea Balls. Standard Brands Incorporated. 42,019; Apr. 25.
Circle of Fashion. For Boxes. Hoague-Sprague Corporation. 41,980; Apr. 25.
Col-O-Jar. For Colors in Oil. Monad Paint & Varnish Company. 42,000; Apr. 25.
Concentrated Clorox Disinfectant, Cleanser, Germicide, Deodorant Prepared Especially For Agricultural And Industrial Use. For Disinfecting, Cleansing, Germicidal, and Deodorising Compounds. Clorox Chemical Co. 41,966; Apr. 25.
Cook-Rite. For Gravy Powder. Cook-Rite Food Products Company. 41,967; Apr. 25.
—Dear PP—Applan Lab. N. Y. For Perfume. O. Iannotti. 41,985; Apr. 25.
De Luxe Compo. For Boxes. Hoague-Sprague Corporation. 41,981; Apr. 25.
Double Quick Paint & Varnish Remover. For Paint and Varnish Remover. O. Laplace. 41,994; Apr. 25.
Egg Matzos. For Egg Matzos. B. Manischewitz Company. 41,995; Apr. 25.
El Ranchero. For Pickled Chiles. C. Escorsa. 41,969; Apr. 25.
Emmet. For Varnishes. T. H. Gibson. 41,971; Apr. 25.
Fleischmann's Cream. For Phosphate and Lactate Mixture Suitable for Use With Sodium Bicarbonate for the Same Purpose as Baking Powder. Standard Brands Incorporated. 42,018; Apr. 25.
Footrelax. For Boxes. Hoague-Sprague Corporation. 41,983; Apr. 25.
Free Sample Pocket Packet of Full Size Sheets Kleenex. For Pocket Size Packets of Disposable Tissues. Kleenex Company. 41,989; Apr. 25.
Fresh Colors. For Paints. Monad Paint & Varnish Company. 42,001; Apr. 25.
General Health Nipples. For Nursing Bottle Nipples. General Health Corporation. 41,970; Apr. 25.
Good Housekeeping. For Jar Rings. Hamilton Rubber Manufacturing Company. 41,976; Apr. 25.
Herva Mate. For Brazilian Tea. R. Ritter. 42,010; Apr. 25.
Hygienic Matzos. For Matzos. B. Manischewitz Company. 41,997; Apr. 25.
Jiffy. For Jar Rubbers. Hamilton Rubber Manufacturing Company. 41,973; Apr. 25.
Jiffy Jar Rubbers. For Jar Rubbers. Hamilton Rubber Manufacturing Company. 41,974; Apr. 25.
Jig Time. For Puzzles. Chilcote Company. 41,964; Apr. 25.
Jigger Jig. For Puzzles. Chilcote Company. 41,965; Apr. 25.
Jiggered Letter. For Puzzle Consisting of Pieces to be Associated Together. Henry Schmidt & Bros. Inc. 42,013; Apr. 25.
Kilgore Oh Boy. For Cap Pistols. Kilgore Manufacturing Company. 41,988; Apr. 25.
Koffee-Klear. For a Substance for Clearing Coffee. Koffee Klear Company. 41,990; Apr. 25.
Kohler's American Made. For Cigars. G. A. Kohler & Co. 41,991; Apr. 25.
Kotex With Patented Equalizer. For Sanitary Pad. Kotex Company. 41,922; Apr. 25.
La Frontera Mexican Style Chile Con Carne. For Canned Chile Con Carne. Walker's Austex Chile Company. 42,031; Apr. 25.
Monad Col-O-Jar. For Colors in Oil. Monad Paint & Varnish Company. 42,008; Apr. 25.
Monad Long Life. For White Lead. Monad Paint and Varnish Company. 42,002; Apr. 25.
My Kel Tooth Powder. For Tooth Powder. Kent Company. 41,987; Apr. 25.
Naphtha Creme. For Household Cleaner. Midwest Hardware Company. 41,999; Apr. 25.
National Bellas Hess Shoes. For Boxes. Hoague-Sprague Corporation. 41,978; Apr. 25.
New Deal. For Cigars. J. Schwarts. 42,014; Apr. 25.
New Jersey Copper Bronze Composition. For Paint. New Jersey Paint Works. Harry Louderbough, Inc. 42,004; Apr. 25.
Nite-N-Paris Pajamas. For Pajamas. S. Blechman Sons, Inc. 41,963; Apr. 25.
Opens the Jar in a Jiffy. For Jar Rubbers. Hamilton Rubber Manufacturing Company. 41,975; Apr. 25.
Peerless Visor-Ette. For Attachment for Automobile Visor. Peerless Novelty Company. 42,007; Apr. 25.
Picadilly. For Safety Matches. Northam Trading Corporation. 42,005; Apr. 25.
Ponder Puzzles. For Puzzles. K. S. Kroeck. 41,993; Apr. 25.
Queen's Taste. For Bread. Rausch & Grimm Baking Corporation. 42,003; Apr. 25.
Regan's Wonder Cup Coffee. For Coffee. R. W. Regan Co. 42,009; Apr. 25.
Rose Queen. For Soap. Haskins Brothers & Company. 41,977; Apr. 25.
Round Tea Matzos. For Round Tea Matzos. B. Manischewitz Company. 41,996; Apr. 25.
Royal Quick Setting Cherry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,020; Apr. 25.
Royal Quick Setting Lemon Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,024; Apr. 25.
Royal Quick Setting Lime Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,021; Apr. 25.
Royal Quick Setting Orange Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,025; Apr. 25.

Royal Quick Setting Raspberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,023; Apr. 25.
Royal Quick Setting Strawberry Flavor Gelatin Dessert. For Gelatin Dessert. Standard Brands Incorporated. 42,022; Apr. 25.
Royal Stores. For General Merchandise. United Service Advertising. 42,030; Apr. 25.
Royco Tea (Green Label). For Tea. Royal Estates Tea Co. 42,011; Apr. 25.
Six-N-One. For Breakfast Cereal. Grist Mill. 41,972; Apr. 25.
Sky Ride. For Candy. Paul F. Beich Company. 41,961; Apr. 25.
Starlight. For Cigars. Starlight Bros. Inc. 42,026; Apr. 25.
Status. For Cigars. R. Baylin. 41,960; Apr. 25.
Stuhmer's. For Rye Bread. Geo. F. Stuhmer & Company. 42,027; Apr. 25.
Tasty Graham Wafers. For Graham Wafers. Davidson Biscuit Company. 41,968; Apr. 25.
The Cross Puzzle. For Puzzles. Ayraud & Hallam. 41,968; Apr. 25.
The Onetuft Patented Box Spring. For Box Springs. Sleeper Products, Inc. 42,015; Apr. 25.
The Pedipoise Shoe. For Boxes. Hoague-Sprague Corporation. 41,979; Apr. 25.
The Wonder Mat Inner-Spring Mattress. For Inner-Spring Mattresses. Sleeper Products, Inc. 42,016; Apr. 25.
Thin Tea Matzos. For Thin Tea Matzos. B. Manischewitz Company. 41,998; Apr. 25.
Tri-Flex. For Boxes. Hoague-Sprague Corporation. 41,984; Apr. 25.
Turnbull. For Oranges and Grapefruit. Oak Hill Citrus Growers Association. 42,006; Apr. 25.
Vienna Beauty Healing Skin Cream, Greaseless. For Greaseless Healing Skin Cream. I. Seberer. 42,012; Apr. 25.
Vim-Ode. For Boxes. Hoague-Sprague Corporation. 41,982; Apr. 25.

LIST OF PRINTS

An Extra Pair $1. For Shoes. Minneapolis Shoe Co. 14,151; Apr. 25.
Apricot Topsy Turvy. For Flour. General Mills, Inc. 14,147; Apr. 25.
Chilton Pen. For Fountain Pens. Chilton Pen Company. 14,144; Apr. 25.
Come On Let's Go Roller Skating. For Roller Skates. Chicago Roller Skate Company. 14,143; Apr. 25.
Copyrighted December 5, 1931 For Your Sake Madam. For Rugs and Carpets. Bigelow-Sanford Carpet Co. 14,142; Apr. 25.
Detailed Construction. For Shoes. Municipal Shoe Co. Inc. 14,156; Apr. 25.
Four Point Service Display. For Ice Cream. Mathews Company. 14,150; Apr. 25.
Free! Accept, Please, Betty Crocker's New B-Z Serve Cake Plate. For Cake Flour. General Mills, Inc. 14,146; Apr. 25.
Jigette Picture Puzzle. For Picture Puzzles. Hamblet Studios, Inc. 14,148; Apr. 25.
Made From Nature's Choicest Barley—Good Old Blue Ribbon Malt. For Malt Extract. Premier Malt Products Co. 14,157; Apr. 25.
Minneapolis Shoe Co. For Shoes. Minneapolis Shoe Co. 14,152; Apr. 25.
Minor's Feminized Munson The Human Foot In Leather. For Footwear. P. W. Minor & Son, Inc. 14,153; Apr. 25.
Related Lasts. For Footwear. P. W. Minor & Son, Inc. 14,154; Apr. 25.
Saves Time Builds Appetite Wonder Shredder. For Food Shredders. Dixon-Prosser Inc. 14,145; Apr. 25.
Unified Measurements. For Footwear. P. W. Minor & Son, Inc. 14,155; Apr. 25.
Where's The Fire? For Coffee. Hills Bros. 14,149; Apr. 25.

LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED ON THE 25TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

A. B. See Elevator Company. (See Olofson, C. F. E., and Lindstrom, assignors.)
A C Spark Plug Company. (See Howse, Curtis L., assignor.)
A C Spark Plug Company. (See Webb, Hartwell W., assignor.)
Abbott, Edward J., assignor to Abbott Machine Company, Wilton, N. H. Slab detector, catcher, or breaker. 1,905,259; Apr. 25.
Abbott Machine Company. (See Abbott, Edward J., assignor.)
Abington Textile Machinery Works. (See Clark, Ernest, assignor.)
Ackerman, Adolph J., Mankato, Minn. Lifting device. 1,905,427; Apr. 25.
Ackerman-Blaesser-Fenney, Incorporated. (See Ackerman, Edward L., assignor.)
Ackerman, Edward L., assignor to Ackerman-Blaesser-Fenney, Incorporated, Detroit, Mich. Automatic window regulator. 1,905,876; Apr. 25.
Acme Steel Company. (See Wilson, Allen B., assignor.)
Adam, Frederick B., St. Louis, Mo. Panel-board section. 1,905,121; Apr. 25.
Adams, J. D., Manufacturing Company. (See Notvest, Robert, assignor.)
Adams, Oscar C., Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe and the manufacture thereof. 1,905,205; Apr. 25.
Adams, Roy S., assignor of one-half to J. Pinto, Saginaw, Mich. Automatic furnace regulator. 1,905,977; Apr. 25.
Ad-Bag Sales Corporation, The. (See Christianson, David A., assignor.)
Addressograph Company. (See Duncan, Joseph S., assignor.)
Addressograph Company. (See Ziege, Karl, assignor.)
Aderer, Julius, New York, N. Y. Orthodontic appliance. 1,906,877; Apr. 25.
Adlake Company, The. (See Forbregd, G. T., and Cornish, assignors.)
Adlake Company. (See Sevison, Harry D., assignor.)
Aeschlimann, John A., Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J. Disubstituted carbamic acid esters of phenols containing a basic constituent. 1,906,960; Apr. 25.
Affel, Herman A., Ridgewood, N. J., assignor to American Telephone and Telegraph Company. Channel selection. 1,906,859; Apr. 25.
Ahlmann, Nikolai, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y. Apparatus for grinding materials which contain particles of iron. 1,906,780; Apr. 25.
Air Systems Incorporated. (See Burner, James A., assignor.)
Air Way Electric Appliance Corporation. (See Riebel, F., jr., and Dow, assignors.)
Aitkenhead, William, Failsworth, England. Flexible harrow or cultivator. 1,906,671; Apr. 25.
Aktiebolaget Formator. (See Granstedt, Erik, assignor.)
Aktiebolaget Formator. (See Granstedt, Karl E., assignor.)
Aktiengesellschaft Brown, Boveri & Cie. (See Couwenhoven, Abraham, assignor.)
Aktiengesellschaft Brown, Boveri and Cie. (See Stoecklin, Josef, assignor.)
Albertine, Herman, East Rutherford, N. J., assignor to Rogers Products Company, Inc. Lubricating apparatus. 1,905,878; Apr. 25.
Albertson & Company. (See Albertson, Frans O., assignor.)
Albertson, Frans O., assignor to Albertson & Company, Inc., Sioux City, Iowa. Valve seat ring driver. 1,905,879; Apr. 25.
Alden, John L., Wyncote, Pa., and C. J. McCarthy, East Orange, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y. Comparing time mechanisms. 1,906,778; Apr. 25
Alemite Corporation. (See Fesler, Douglas F., assignor.)
Alemite Corporation. (See Locke, S. D., Doech, and Stegeman, assignors.)
Alemite Corporation. (See Thomas, G. F., and Herb, assignors.)
Alexander, Clinton B., Washington, D. C. Connecter for repairing metallic measuring tapes. 1,906,128; Apr. 25.
Alexander, Gustaf, Chicago, Ill. Building structure. 1,906,040; Apr. 25.
Alexander, William, Glasgow, Scotland. Centrifugal separator. 1,905,779; Apr. 25.
Allegheny Steel Company. (See Ponce, Lucien G., assignor.)
Allen, Alexander, Providence, R. I. Towel cabinet and towel pack therefor. 1,905,206; Apr. 25.
Allen, Lavont C., assignor to The Lamson Company, Syracuse, N. Y. Conveyer system. 1,905,025; Apr. 25.
Allen-Sherman-Hoff Company, The. (See Rome, Jacob, assignor.)
Allendorf, Fritz, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Dynamo-electric ignition apparatus. 1,905,580; Apr. 25.
Allington, William E., Saginaw, Mich. Wood-waste feeding system. 1,906,781; Apr. 25.
Allis-Chalmers Manufacturing Company. (See Fiucior, Alfred K., assignor.)
Almy, Richard, Little Compton, R. I., assignor to Dewey and Almy Chemical Company, North Cambridge, Mass. Dispersion of rubber in nonaqueous liquids. 1,905,026; Apr. 25.
Aloserij, Nicolaas J. G. (See Carswell, T. S., Stehlby, and Aloserij.)
Alsaker, Alfred, and E. S. Cornelissen, assignor to The Delta Star Electric Company, Chicago, Ill. Adjustable lever. 1,905,784; Apr. 25.
Altwicker, Hubert. (See de Ridder, E., and Altwicker.)
Aluminum Screw Machine Products Company. (See Chestnut, Robert, assignor.)
Amann, Rudolf. (See Hissnay, L., and Amann.)
Amatel, Harold, East Orange, N. J., assignor to Westinghouse Lamp Company. Six-lamp wrapper. 1,905,027; Apr. 25.
Amdursky, Samuel S., assignor to Taylor Instrument Companies, Rochester, N. Y. Manometer. 1,905,782; Apr. 25.
American Ball Mill Company. (See Jugel, Rudolf P., assignor.)
American Brake Shoe and Foundry Company, The. (See Sutherland, Wallace B., assignor.)
American Circular Loom Company. (See Lutz, George A., assignor.)
American Circular Loom Company. (See Lutz, G. A., and Kramer, assignors.)
American Dyewood Company. (See Cole, Robert M., assignor.)
American Fabrics Company, The. (See Juestrich, Max U., assignor.)
American Glanzstoff Corporation. (See Stoeckly, J. J., and Bartunek, assignors.)
American Liquid Meter Company. (See Bassler, Carlos J., assignor.)
American Metal Company, The. (See Weinig, A. J., and Cuthbertson, assignors.)
American Optical Company. (See Baker, Nelson M., assignor.)
American Optical Company. (See Laabs, Max A., assignor.)
American Sales Book Company, Limited. (See Bottle, Edward K., assignor.)
American Seating Company. (See Hamilton, George H., assignor.)
American Seating Company. (See Hanson, Walter M., assignor.)
American Steel Foundries. (See Kayler, Frank H., assignor.)
American Tar Products Company. (See Rhodes, R. O., and Hager, assignors.)
American Telephone and Telegraph Company. (See Affel, Herman A., assignor.)
American Telephone and Telegraph Company. (See Potter, Ralph K., assignor.)
American Tobacco Company, The. (See Mallgraf, Ferdinand, assignor.)
American Zeolite Corporation. (See Riley, Ray, assignor.)
Anchor Packing Company, The. (See Walton, Julian N., assignor.)
Andersen, Johan M., Brookline, assignor to Albert & J. M. Anderson Manufacturing Company, Boston, Mass. Rewinding mechanism for clock springs. 1,905,783; Apr. 25.
Anderson, Albert & J. M., Manufacturing Company. (See Andersen, Johan M., assignor.)
Anderson, August E., Montclair, N. J. Spark plug. 1,905,957; Apr. 25.
Anderson Banking Company, executor. (See Norviel, Harry E.)
Anderson, Norman T. (See Sweeley, E. A., and Anderson.)
Andres, William J., assignor to Bendix Brake Company, South Bend, Ind. Controlling means. 1,906,826; Apr. 25.

Andrews, Charles W., and A. J. Boynton, assignors to H. A. Brassert & Company, Chicago, Ill. Treatment of oil gas. 1,905,028; Apr. 25.
Andrews, Isaac, Spartanburg, S. C. Antirattle device. Re18,800; Apr. 25.
Anselmo, Peter J. (See Leschke, H. M., and Anselmo.)
Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Gas range grid. Des. 89,673; Apr. 25.
Antrim, William D., Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa. Gas range. 1,905,672; Apr. 25.
Apco Mossberg Corporation. (See Jackson, Alfred F., assignor.)
Archea, Walter D., assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling machine. 1,905,678; Apr. 25.
Arco Vacuum Corporation. (See Carter, A. P., Hynes, and Cronin, assignors.)
Arford, Merton K. (See Dickinson, Lloyd W., assignor.)
Armitage, Ned. (See Kellett, I., Armitage, and Wood.)
Arnold, Clarence F., Drexel Hill, Pa. Tasseling machine. 1,905,978; Apr. 25.
Aro Equipment Corporation, The. (See Carter, John F., assignor.)
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Combined safety razor and sharpening device. 1,905,329; Apr. 25.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Combined safety razor and sharpening device. 1,905,330; Apr. 25.
Aronson, Louis V., Newark, N. J., assignor to Art Metal Works, Inc. Combined safety razor and sharpening device. 1,905,331; Apr. 25.
Arpin, Louis J., New York, N. Y. Method and means of identification. 1,906,129; Apr. 25.
Art Concrete Works, Inc. (See Haase, L. G., and Brooks, assignors.)
Art Metal Works, Inc. (See Aronson, Louis V., assignor.)
Arthur, James L. (See Prescott, F. H., and Arthur.)
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Duplex charge forming device. 1,905,029; Apr. 25.
Aseltine, Fred E., assignor to Delco Products Corporation, Dayton, Ohio. Charge forming device. 1,905,030; Apr. 25.
Ashworth, Fred, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe sewing machine. 1,905,031; Apr. 25.
Ashworth, Fred, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sewing machine shuttle. 1,905,032; Apr. 25.
Askania-Werke Aktiengesellschaft. (See Möller, Waldemar, assignor.)
Associated Electric Laboratories, Inc. (See Doyle, Frederick W., assignor.)
Associated Electric Laboratories, Inc. (See Tharp, Victor S., assignor.)
Associated Electric Laboratories, Inc. (See Weinreich, George F., assignor.)
Austin, John T., assignor to The Austin Organ Company, Hartford, Conn. Combination organ stop action. 1,905,880; Apr. 25.
Austin Manufacturing Co. (See Morse, W. G., Wilson, and Wuestenberg, assignors.)
Austin Organ Company, The. (See Austin, John T., assignor.)
Auto Research Corporation. (See Bijur, Joseph, assignor.)
Avey Drilling Machine Company, The. (See Friedl, Joseph, assignor.)
Avila, Joseph T., Providence, R. I. Automobile commode. 1,905,881; Apr. 25.
Baash, Lawrence F., and E. Burns, Los Angeles, and G. B. Garrard, Long Beach, Calif. Packing assembly. 1,905,122; Apr. 25.
Babbs, Alfred J., Longsight, Manchester, England. Splash guard for motor vehicles. 1,905,674; Apr. 25.
Babcock & Wilcox Company, The. (See Harter, Isaac, assignor.)
Babcock & Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Jacobus, D. S., and Black, assignors.)
Babcock & Wilcox Company, The. (See Kerr, H. J., and Jones, assignors.)
Babitch, Abraham M., and M. G. Hanson, Flint, Mich. Fuel pump operating means. 1,905,207; Apr. 25.
Bacon, Robert H., Oakland, Calif. Check valve for rubber Balls. 1,905,361; Apr. 25.
Bacqueyrisse, Louis, Paris, France. Electric traction system employing compound motors. 1,905,428; Apr. 25.
Badgett, James L., Boling, assignor of one-fourth to W. C. McMasters and one-fourth to J. E. Pomeroy, Pasadena, Tex. Sand tester. 1,905,208; Apr. 25.
Baetz, Walter, New York, N. Y., assignor to Man-O-Lamp Corporation. Picture frame. Des. 89,674; Apr. 25.
Baetz, Walter, New York, N. Y., assignor to Man-O-Lamp Corporation. Picture frame. Des. 89,675; Apr. 25.
Baetz, Walter, New York, N. Y., assignor to Man-O-Lamp Corporation. Picture frame. Des. 89,676; Apr. 25.
Bailey, R. W., et al. (See Schurts, Ralph E., assignor.)
Bailey, Sidney, jr., Ablington, Pa. Drum for dyeing, etc. 1,906,180; Apr. 25.
Bailey, Walter T. (See Federwitz, T. A., and Bailey.)
Baker, John C. (See Dunbar, H. W., and Baker.)
Baker, John H. B., Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Automatic telephone system using single motion switch by-path circuits. 1,905,785; Apr. 25.
Baker, Nelson M., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mountings. 1,905,675; Apr. 25.
Baldwin, John W., jr. (See Weatherhead, A. J., jr., and Baldwin, jr.)
Balke, Clarence W., Highland Park, assignor to Fansteel Products Company, Inc., North Chicago, Ill. Metallic columbium and making the same. 1,905,882; Apr. 25.
Ball, Albert P., assignor to Briggs Manufacturing Company, Detroit, Mich. Door and window construction. 1,905,429; Apr. 25.
Ball, Edward M., Bloomingdale, N. J., assignor, by mesne assignments, to Libbey-Owens-Ford Glass Company. Manufacture of laminated glass. 1,905,430; Apr. 25.
Banbury, Fernley H. (See Schnuck, C. F., and Banbury.)
Bancroft, Albert F., West Newton, assignor to Bancroft-Walker Company, Boston, Mass. Making footwear. 1,905,786; Apr. 25.
Bancroft-Walker Company. (See Bancroft, Albert F., assignor.)
Banner, Otto A., Highland Park, assignor to John Waldron Corporation, New Brunswick, N. J. Shaft coupling. 1,905,431; Apr. 25.
Barbé, Edgar H., assignor to Rollodor Manufacturing Company, Los Angeles, Calif. Mobile ash tray. 1,905,123; Apr. 25.
Barber Asphalt Company, The. (See Douthett, Orin R., assignor.)
Barber-Colman Company. (See Edgar, John, assignor.)
Barber-Colman Company. (See Sinderson, John B., assignor.)
Barber, George H., New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J. Flash light bottom cap with spare bulb carrier. 1,905,787; Apr. 25.
Barbulesco, Constantin D. (See Edwards, P. S., and Barbulesco.)
Barbulesco, Constantin D., assignor to P. S. Edwards, Dayton, Ohio. Capacity controlled relay. 1,905,332; Apr. 25.
Barclay, Sidney F., Manchester, England, assignor to General Fire Extinguisher Company, Providence, R. I. Automatic sprinkler or fire extinguisher and other fire device. 1,905,676; Apr. 25.
Baron, Charles S., Tiffin, Ohio. Container and in sealing closure therefor. 1,905,628; Apr. 25.
Barrett, Harold G., Wilmette, assignor to Pyratone Products Corporation, Chicago, Ill. Golf club. 1,905,406; Apr. 25.
Barrett, Ray W., Torrance, Calif. Antifriction equalising bearing. 1,905,333; Apr. 25.
Barstow, Edwin O., and S. B. Heath, Midland, assignors to The Dow Chemical Company, Midland, Mich. Apparatus for contacting solid and gaseous materials. 1,905,883; Apr. 25.
Barthelemy, Henri L., Milan, Italy, assignor to Ruthaldo Company Inc., New York, N. Y. Formation of filaments and the like of a cellulose ester. 1,906,041; Apr. 25.
Barthelemy, Henri L., Rome, Ga. Spinning cell for the manufacture of artificial filaments with auto-recovery of the volatile solvents. 1,906,042; Apr. 25.
Barton, James P., Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company. Radio receiving system. 1,905,260; Apr. 25.
Bartunek, Richard. (See Stoeckly, J. J., and Bartunek.)
Bassler, Carlos J., assignor to American Liquid Meter Company, Alhambra, Calif. Meter. 1,905,549; Apr. 25.
Bast, Frank J., Queens Village, assignor to Charles J. Tagliabue Mfg. Co., Brooklyn, N. Y. Temperature and pressure controller. 1,905,788; Apr. 25.
Bates Manufacturing Company, The. (See Svensson, Victor A., assignor.)
Bauer, Walter, assignor to Roh. & Haas Aktiengesellschaft. Darmstadt, Germany. Manufacture of hydrogen chloride or hydrogen bromide or their corresponding acid solutions. 1,905,432; Apr. 25.
Baum, Isaac A., Chicago, Ill. Footplate for door frames. 1,905,124; Apr. 25.
Baum, Isaac A., Chicago, Ill. Metal jamb construction. 1,905,125; Apr. 25.
Baylis, George A., Huntington, N. Y. Battery light for refrigerators, ice boxes, closets, and the like. 1,906,131; Apr. 25.
Beam, Vilynn O., assignor to Surface Combustion Corporation, Toledo, Ohio. Motor operated valve. 1,905,884; Apr. 25.
Becker, Logan A. (See Egger, W. F., and Becker.)
Beckley, Will. (See Gross, William M., assignor.)
Beddoe, Ira H., Venice, Calif. Expansion compensator. 1,905,991; Apr. 25.
Beeman, Edwin R., Minneapolis, Minn. Electrical door operating device. 1,905,126; Apr. 25.
Behrsing, David. (See Godshalk, C. A., Henke, and Behrsing.)
Belden, Albert G., and H. A. Silven, assignors to Norton Company, Worcester, Mass. Hydraulically operated grinding machine. 1,905,127; Apr. 25.
Belgard, Austin B., Chicago, Ill., assignor to Belgard-Spero, Inc. Temple for spectacles. Des. 89,677; Apr. 25.
Belgard-Spero, Inc. (See Belgard, Austin B., assignor.)

Bell Telephone Laboratories, Incorporated. (See Bruce, Edmond, assignor.)
Bell Telephone Laboratories, Incorporated. (See Harrison, Henry C., assignor.)
Bell Telephone Laboratories, Incorporated. (See Hinrichsen, Edward E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Horton, Joseph W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Ives, Herbert E., assignor.)
Bell Telephone Laboratories, Incorporated. (See Landsman, Wesley E., assignor.)
Bell Telephone Laboratories, Incorporated. (See St. John, E., and Miller, assignors.)
Bell Telephone Laboratories, Incorporated. (See Ulrich, Horace W., assignor.)
Bell Telephone Laboratories, Incorporated. (See Yenser, George R., assignor.)
Bemis Industries, Incorporated. (See Brown, Horatio W., assignor.)
Bemis Industries, Incorporated. (See Litchfield, Isaac W., assignor.)
Bendix Aviation Corporation. (See Lansing, Raymond P., assignor.)
Bendix Aviation Corporation. (See Lorensen, Christian, assignor.)
Bendix Brake Company. (See Andres, William J., assignor.)
Bendix Brake Company. (See Parker, Humphrey F., assignor.)
Benner, Anthony A., and R. A. Schatzel, Rome, assignors to General Cable Corporation, New York, N. Y. Insulated electrical conductor. 1,905,789; Apr. 25.
Bennett, Edwin O., assignor to Continental Oil Company, Ponca City, Okla. Dry ice conversion unit. 1,905,885; Apr. 25.
Bennett, Owen G., Baltimore, Md., and C. B. Jackson, Meridian, Miss., assignors to Catalyst Research Corporation, Baltimore, Md. Hydrogenation catalyst. 1,905,433; Apr. 25.
Benson, Pamella F., Long Beach, Calif. Baby's folding crib. 1,905,128; Apr. 25.
Bergen, George M., et al. (See Hatfield, Floyd H., assignor.)
Bergen, Gustav, F. Engelhardt, and R. Steckhan, assignors to "Miag" Muhlenbau und Industrie Aktiengesellschaft, Brunswick, Germany. Manufacturing white Portland cement, etc. Re18,805; Apr. 25.
Berkowitz, Michael, New York, assignor to United Research Corporation, Long Island City, N. Y. Motion picture projecting machine. 1,905,886; Apr. 25.
Berns, John V., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Orthopedic bed. 1,905,887; Apr. 25.
Bernstein, Max, Cincinnati, Ohio. Dog harness. 1,906,043; Apr. 25.
Bernström, Seth F., Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Speed indicator. 1,905,261; Apr. 25.
Berns, Otto, Co. Inc. (See Berns, W., Flitcroft, and Imfeld, assignors.)
Berns, William, J. B. Flitcroft, and J. M. Imfeld, assignors to Otto Berns Co. Inc., Newark, N. J. Plumber's furnace. 1,905,617; Apr. 25.
Berry, George P., assignor to General Motors Research Corporation, Detroit, Mich. Screw type mechanical lash adjuster for valves. 1,905,888; Apr. 25.
Berry, Thomas D., Markdale, Ontario, Canada. Lightning arrester. 1,905,970; Apr. 25.
Bertran, Benjamin E., Los Angeles, Calif., assignor of one-half to Josie A. Bertran. Underreamer. 1,905,905; Apr. 25.
Bertran, Josie A. (See Bertran, Benjamin E., assignor.)
Beryllium Development Corporation. (See Smith, Joseph K., assignor.)
Best, Virgil H., Pasadena, Calif. Fish lure. 1,905,407; Apr. 25.
Bethlehem Steel Company. (See Stevens, Richard H., assignor.)
Bicker, Edgar B., St. Louis, Mo. Paper receptacle and making the same. 1,905,284; Apr. 25.
Biel, Fa. Richard. (See von Fischer, Waldemar, assignee.)
Biggert, Florence C., jr., Crafton, and L. Johnson, Ingram, assignors to United Engineering & Foundry Company, Pittsburgh, Pa. Rolling mill. 1,905,129; Apr. 25.
Bijur, Joseph, New York, N. Y., assignor to Auto Research Corporation. Chassis lubricating installation and the flow control elements thereof. 1,905,335; Apr. 25.
Billiter, Irvin A., Burnham, Pa. Open hearth furnace. 1,905,677; Apr. 25.
Binder, George A., assignor to R. Malcom, Chicago, Ill. Goggles. 1,905,130; Apr. 25.
Birdseye, Clarence, and B. Hall, Gloucester, Mass., assignors to Frosted Foods Company, Inc., Dover, Del. Refrigerating apparatus. 1,905,131; Apr. 25.
Bishop, Benjamin S. T., Shrewsbury, and R. J. Hirvonen, Worcester, Mass., assignors to Leland-Gifford Company. Control for hydraulic feeding mechanism. 1,905,132; Apr. 25.
Bishop, Benjamin S. T., Shrewsbury, and R. J. Hirvonen, Worcester, Mass., assignors to Leland-Gifford Company. Hydraulic feed for machinery. 1,905,133; Apr. 25.
Bixby, John L., Arlington, assignor to Ke-Bond Company, Incorporated, Boston, Mass. Mold and bonding means. 1,905,134; Apr. 25.
Black, Herman, W. Holmes, and M. A. Hesse, assignors to Evening American Publishing Company, Chicago, Ill. Apparatus for coloring paper. 1,905,889; Apr. 25.
Black, John E. (See Jacobus, D. S., and Black.)
Blackwood, Oswald H., Pittsburgh, Pa., and L. P. Bass, Woods Hole, Mass., assignors to The Koppers Company of Delaware. Humidifying apparatus. 1,905,135; Apr. 25.
Bladin, Walter C. (See Wardwell, H. F., and Bladin.)
Blaikie, Kenneth G., and G. O. Morrison, Shawinigan Falls, assignors to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Ester-aldehyde gum emulsion and making same. 1,906,207; Apr. 25.
Blaivas, Abraham J., Brooklyn, N. Y. Ampoule. 1,905,362; Apr. 25.
Blakely, Sidney B., Minneapolis, Minn., assignor to Mitchell Battery Company. Collapsible luggage carrier. 1,905,890; Apr. 25.
Blanchard, Frederick C., Boston, Mass. Machine for combing textile fibers. 1,905,336; Apr. 25.
Blanchard, Werner J., Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc. Aeronautical propeller. 1,905,891; Apr. 25.
Blaw-Knox Company. (See Voelker, Fred, jr., assignor.)
Bliss, John, assignor to C. C. Wakefield & Company, Limited, London, England. Lubricating device. 1,905,136; Apr. 25.
Block, Samuel R. (See Duraney, Stephen J., assignor.)
Blomberg, Per H., Chicago, Ill. Collapsible shipping crate. 1,905,137; Apr. 25.
Blume, George F., Philadelphia, Pa. Bearing structure. 1,906,122; Apr. 25.
Bodard, Fernand. (See Bodart, Jules, assignor.)
Bodart, Jules, Brussels, assignor to F. Bodart, Marchienne au Pont, Belgium. Metallic packing means for the shafts of centrifugal pumps and other rotary machines. 1,905,618; Apr. 25.
Boecking, Ewald. (See Frappier, L. S., and Boecking.)
Bogley, Preston P., Chicago, Ill. Rubber clothespin. 1,905,958; Apr. 25.
Bogren, Edward C., Portland, Oreg. Convertible paper box. 1,905,992; Apr. 25.
Bohlin, Olof G., assignor to Helsingborgs Gummifabriks Aktiebolag, Helsingborg, Sweden. Rubber articles of every kind. 1,905,338; Apr. 25.
Bolcom, Clarence A., Ionia, Mich. Safety attachment for aeroplanes. 1,905,337; Apr. 25.
Bollinger, William A., Pittsburgh, Pa. Heating apparatus. 1,905,550; Apr. 25.
Bond Electric Corporation. (See Barber, George H., assignor.)
Bond, Harlan A., Metuchen, N. J., assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y. Concentration of formaldehyde solutions. 1,905,023; Apr. 25.
Bonner, Daniel B., Philadelphia, Pa. Thread printing apparatus. 1,905,138; Apr. 25.
Bonsall, Charles D., assignor to P. H. Murphy Company, New Kensington, Pa. Load lifting arrangement. 1,905,678; Apr. 25.
Booth, Clement. (See Haas, F. S., and Booth.)
Borland, Bruce, Chicago, Ill. Seal. 1,905,139; Apr. 25.
Borsig, A., G. m. b. H. (See Oechel, Wilhelm, assignor.)
Bosch, Robert, Aktiengesellschaft. (See Allendorff, Fritz, assignor.)
Bosch, Robert, Aktiengesellschaft. (See Lorenze, Max, assignor.)
Boss, Lester F. (See Blackwood, O. H., and Boss.)
Bossart, Paul N., assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical amplifier. 1,905,209; Apr. 25.
Bossini, Raoul F. (See Maiuri, G., and Bossini.)
Botsford, Albert E., Walla Walla, Wash. Seeding implement. 1,905,892; Apr. 25.
Bottle, Edward K., Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada. Manifolding book. 1,905,893; Apr. 25.
Bowers, Frederick M., Chester, Pa. Welder's mask. 1,905,210; Apr. 25.
Bowser, S. F., & Company. (See Griffith, Clement P., assignor.)
Boyce, William F., Toronto, Ontario, Canada. Valve for internal combustion engines. 1,905,140; Apr. 25.
Boyens, Paul J., et al. (See Ryan, Thomas H., assignor.)
Boyer, Fernand, St. Quentin, France. Hopper crane of the movable and traveling type. 1,905,434; Apr. 25.
Boynton, Arthur J. (See Andrews, C. W., and Boynton.)
Boynton, Arthur J., and P. Zimmerman, assignors to H. A. Brassert & Company, Chicago, Ill. Apparatus for charging furnaces. 1,905,679; Apr. 25.
Boynton, Vera K., Milwaukee, Wis., assignor to Duplate Corporation. Process and apparatus for making composite glass or other composite articles. 1,905,211; Apr. 25.
Bracke, Robert F., Chicago, assignor, by mesne assignments, to L. A. Williams, Evanston, and C. C. Bradbury, Glencoe, Ill., trustees. Carburetor. 1,905,435; Apr. 25.
Bradbury, Clifford C., et al., trustees. (See Bracke, Robert F., assignor.)

Bradshaw, William M., Summit, N. J., assignor to Westinghouse Electric & Manufacturing Company. Auxiliary meter attachment for wattbour meters. 1,905,262; Apr. 25.
Brand, Frederick F., Pittsfield, Mass., assignor to General Electric Company. Magnetic core with supporting and clamping structure. 1,905,790; Apr. 25.
Brandt, Francis L., Wakefield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Locating shank pieces. 1,905,894; Apr. 25.
Brassert, H. A., & Company. (See Andrews, C. W., and Boynton, assignors.)
Brassert, H. A., & Company. (See Boynton, A. J., and Zimmermann, assignors.)
Braun, Carl A., Munich, Germany, assignor to International Bitumen Emulsions Corporation, San Francisco, Calif. Water-proofing materials with aqueous emulsions. 1,905,212; Apr. 25.
Brierly, Benjamin R., Seattle, Wash. Canned fish package and preparing the same. 1,905,338; Apr. 25.
Briggs Manufacturing Company. (See Ball, Albert P., assignor.)
Briggs, Norman R. (See Halsted, H. J., and Briggs.)
Briggs & Stratton Corporation. (See Fitz Gerald, John W., assignor.)
Briggs & Stratton Corporation. (See Jacobi, Edward N., assignor.)
Brindley, Ralph, Tacoma, Wash. Electric branding iron. 1,905,864; Apr. 25.
British Coal Distillation Limited. (See Machen, Clifford, assignor.)
Bronson, Budd, assignor to The Ohio Rubber Company, Cleveland, Ohio. Running board. 1,905,895; Apr. 25.
Brooks, Frank M. (See Haase, L. G., and Brooks.)
Brown, Carl A., East Cleveland, and F. B. Van Sickle, Wickliffe, Ohio, assignors to General Electric Company. Apparatus for sorting rods and tubes. 1,905,791; Apr. 25.
Brown Company. (See Burke, Edmund, assignor.)
Brown Company. (See Richter, G. A., Van Arsdel, and Hill, assignors.)
Brown Company. (See Schur, Milton O., assignor.)
Brown Company. (See Vannah, Harold P., assignor.)
Brown, Frank, New York, N. Y. Skylight awning. 1,905,339; Apr. 25.
Brown, Horatio W., Concord, assignor to Bemis Industries, Incorporated, Boston, Mass. Strand treating apparatus and method. 1,905,896; Apr. 25.
Brown & Sharpe Mfg. Co. (See Harley, John, assignor.)
Brown & Sharpe Mfg. Co. (See Rich, Charles A., assignor.)
Browne, Vere B., Brackenridge, Pa. Alloy for use in the cracking of petroleum. 1,905,436; Apr. 25.
Bruce, Edmond, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Transmission system. 1,905,792; Apr. 25.
Bruce, William McA., assignor to The Permutit Company, New York, N. Y. Making zeolites. 1,906,202; Apr. 25.
Bruce, William McA., assignor to The Permutit Company, New York, N. Y. Manufacture of water-softening zeolites. 1,906,203; Apr. 25.
Bruijnes, Johannes. (See Zecher, Gustav, and Bruijnes.)
Brundage, James W., assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio. Vulcanizer. Re18,808; Apr. 25.
Bryant Electric Company. (See Webster, Benjamin C., assignor.)
Buchan, Hugh G., Philadelphia, Pa. Mechanism for shifting sheets. 1,905,437; Apr. 25.
Buchi, Alfred, Winterthur, Switzerland. Turbo blower aggregate for internal combustion engines. 1,906,132; Apr. 25.
Buckingham, Alfred O., New Rochelle, assignor to Cluett, Peabody & Co., Troy, N. Y. Garment board. 1,905,793; Apr. 25.
Budd Wheel Company. (See Tarbox, John P., assignor.)
Buff, Carl T., Berlin-Spandau, Germany, assignor, by mesne assignments, to International Precipitation Company, Los Angeles, Calif. Treatment of gases. 1,905,993; Apr. 25.
Bunting Brass & Bronze Company, The. (See Yager, George F., assignor.)
Burda, John L. (See Palmer, R. C., Burda, and Oliver.)
Burgess, Louis, New York, N. Y. Concentrating beryllium oxide occurring in materials containing beryllium silicate or silicates. 1,905,340; Apr. 25.
Burk, Robert E., assignor to The Standard Oil Company, Cleveland, Ohio. Improving cracked petroleum distillates. 1,906,044; Apr. 25.
Burke, Edmund, Portland, Me., assignor to Brown Company, Berlin, N. H. Conduit for subway cables. 1,905,794; Apr. 25.
Burke, James P., Wayne, N. J., assignor to Kept-Kant, Inc., Knoxville, Tenn. Collapsible dispenser. 1,905,994; Apr. 25.
Burkle, Philip J., assignor to C. G. Conn, Ltd., Elkhart, Ind. Wind musical instrument. 1,905,141; Apr. 25.
Burlet, Berthe. (See Malleval, F., Veuve.)
Burner, James A., assignor to Air Systems Incorporated, Minneapolis, Minn. Process and apparatus for producing dehydrated products. 1,905,263; Apr. 25.
Burnett, Richard W., Chicago, Ill. Side hand brake for railway cars. 1,905,213; Apr. 25.
Burns, Bruce, and H. B. Lewis, Los Angeles, Calif., assignors to Hughes Tool Company, Houston, Tex. Boiler water control. 1,905,142; Apr. 25.
Burns, Erwin. (See Baash, L. F., Burns, and Garrard.)
Burns, Fred J., assignor to Columbia Mills, Incorporated, Saginaw, Mich. Venetian blind. 1,905,979; Apr. 25.
Burns, Fred J., assignor to The Columbia Mills, Saginaw, Mich. Shade roller. 1,905,980; Apr. 25.
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,905,795; Apr. 25.
Burns, James E., Bridgeport, Conn., assignor to Remington Arms Company, Inc. Ammunition. 1,905,796; Apr. 25.
Burns, Peter E., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Convenience outlet for canopies. 1,905,341; Apr. 25.
Burton, Warren D., Oak Park, assignor to Combustioneer, Inc., Cicero, Ill. Mechanical stoker. 1,905,342; Apr. 25.
Bush, Leroy F., Edwardsville, Kans. Radio clock. 1,905,214; Apr. 25.
Busse, Edwin G., assignor to Chicago Railway Equipment Company, Chicago, Ill. Railway truck construction. 1,905,680; Apr. 25.
Butler Manufacturing Company. (See Norquist, V. C., and Treanor, assignors.)
C-S Engineering Company. (See Schellens, Eugene L. and C. A., assignors.)
Cadieux, Joseph O., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn. Telephone system and apparatus. 1,905,215; Apr. 25.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Treating rubber and product obtained thereby. 1,905,797; Apr. 25.
Cadwell, Sidney M., Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn. Mercapto aryl thiazoles and making them. 1,905,798; Apr. 25.
Cahill, Charles T., Boston, Mass. Mold. 1,905,897; Apr. 25.
Cain, William E. (See Gotthardt, H. B., and Cain.)
Camel Company. (See Tobin, Kenneth J., assignor.)
Cameron, Hugh M., Woodhaven, N. Y., assignor, by mesne assignments, to Seederer-Kohlbusch, Inc., Jersey City, N. J. Low type even balance counter scale. 1,905,898; Apr. 25.
Camille, Dreyfus, New York, N. Y., and G. Schneider, Montclair, N. J., assignors to Celanese Corporation of America. Discharge printing and fabric produced thereby. 1,905,347; Apr. 25.
Campbell, Samuel J., assignor of one-half to Hudson-Sharp Machine Company, Green Bay, Wis. Paper folding, winding, and cutting, and mechanism therefor. 1,905,899; Apr. 25.
Campbell, Walter H., Springfield, and W. C. Ellsworth and C. J. Madsen, Chicopee Falls, Mass., assignors to Westinghouse Electric and Manufacturing Company. Built-up condenser plate. 1,905,264; Apr. 25.
Canadian Electro Products Company, Limited. (See Blaikie, K. G., and Morrison, assignors.)
Candor, Robert R., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,904,991; Apr. 25.
Cappa, Frank L., Milford, Conn. Radio receiving apparatus. 1,905,216; Apr. 25.
Caprio, Amerigo F. (See Walsh, J. F., and Caprio.)
Capstaff, John G., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic color process. 1,905,438; Apr. 25.
Carey, Philip, Manufacturing Company, The. (See Fischer, Albert C., assignor.)
Carleton, Robert A., Brooklyn, assignor to National Electric Heating Co., Inc., New York, N. Y. Electric fluid heating apparatus. 1,905,439; Apr. 25.
Carlin, James C., Norristown, assignor to Lee Rubber and Tire Corporation, Conshohocken, Pa. Making inner tubes. 1,905,365; Apr. 25.
Carlin, James C., Norristown, assignor to Lee Rubber and Tire Corporation, Conshohocken, Pa. Machine for cutting rubber stock. 1,905,366; Apr. 25.
Carlisle, Paul J., and R. P. Ward, Niagara Falls, assignors to The Roessler & Hasslacher Chemical Company, New York, N. Y. Vapor recovery. 1,905,900; Apr. 25.
Carlson, Edwin G., Riverside, assignor to Speidel Chain Co., Providence, R. I. Extension device. 1,905,681; Apr. 25.
Carlson, Elof L., assignor to The E. Ingraham Company, Bristol, Conn. Wrist watch and the like. 1,905,682; Apr. 25.
Carpenter, Webster I., Norfolk, Va. Fluid temperature maintainer. 1,905,343; Apr. 25.
Carr, James D., Detroit, Mich., assignor to Pittsburgh Reflector Company, Pittsburgh, Pa. Electric light strip. 1,905,143; Apr. 25.
Carraway, Thomas W., Chicago, Ill., assignor to General Fire Extinguisher Company, Providence, R. I. Thermostatically controlled valve. 1,905,683; Apr. 25.
Carrier Engineering Company Limited. (See Robertson, Kenneth J. R., assignor.)
Carse, Orlando M., Maple Heights, Ohio. Apron for car dumpers. 1,905,867; Apr. 25.

Carswell, Thomas S., E. T. Stebby, and N. J. G. Alosert, assignors to Monsanto Chemical Works, St. Louis, Mo. Producing esters. 1,905,144; Apr. 25.
Carter, Arthur P., and M. J. Hynes, Chicago, and J. C. Cronin, Oak Park, Ill., assignors to Arco Vacuum Corporation, New York, N. Y. Squeegee machine. 1,905,440; Apr. 25.
Carter, John F., assignor to The Arc Equipment Corporation, Bryan, Ohio. Grease gun. Des. 89,678; Apr. 25.
Carter, Samuel C., Los Angeles, Calif. Transmission. 1,905,145; Apr. 25.
Carton, Arthur, et al. (See Carton, Lee C., assignor.)
Carton, Lee C., Detroit, assignor to A. Carton, J. H. Henderson, J. H. Montgomery, and H. Trimble, Toronto, and T. Watson, Woodstock, Ontario, Canada. Cement block molding machine. 1,905,619; Apr. 25.
Case, Frank E., Erie, Pa., assignor to General Electric Company. Constant level lubricating device for bearings. 1,905,799; Apr. 25.
Case, J. I., Company. (See Traphagen, Harry R., assignor.)
Casey, William F. (See Pullen, R. S., Casey, and Thomas.)
Cash, A. W., Company. (See Terry, Charles M., assignor.)
Catalyst Research Corporation. (See Bennett, O. G., and Jackson, assignors.)
Cavanagh, Gerald F. (See Marbach, E. R., and Cavanagh.)
Cegler, Carl. (See Schorno, Albert, assignor.)
Celanese Corporation of America. (See Cope, E. C., and Kinsella, assignors.)
Celanese Corporation of America. (See Dreyfus, C., and Schneider, assignors.)
Celanese Corporation of America. (See Ellis, G. H., and Olpin, assignors.)
Celluloid Corporation. (See Walsh, J. F., and Caprio, assignors.)
Champion Corporation. (See Farquhar, John B., assignor.)
Chandler, Robert W., assignor to Graton & Knight Company, Worcester, Mass. Oil seal. 1,905,800; Apr. 25.
Chapin, Fenton G., East St. Louis, Ill., assignor of one-tenth to W. A. Thum, St. Louis, Mo. Flow controlled switch. 1,905,146; Apr. 25.
Chapman, Charles H., Scotia, N. Y., assignor to General Electric Company. Electrical heater. 1,905,801; Apr. 25.
Chapman, Everett, Cleveland Heights, Ohio. Homopolar electric generator, distributor, and method of application. 1,905,147; Apr. 25.
Charman, Walter M. (See Hushour, Perry D., assignor.)
Chase Companies, The. (See Zinno, Frank D., assignor.)
Chemnitzer Strickmaschinen-Fabrik. (See Stenglein, Oswald, assignor.)
Chestnut, Robert, Grantwood, assignor to Aluminum Screw Machine Products Company, Edgewater, N. J. Haircurling device. 1,905,148; Apr. 25.
Chevrolet, Louis, Baltimore, Md., and R. J. Parrish, Indianapolis, Ind., assignors, by mesne assignments, to The Glenn L. Martin Co., Baltimore, Md. Aviation engine. 1,906,045; Apr. 25.
Chicago Forging & Manufacturing Company. (See Falk, Frank A., assignor.)
Chicago Railway Equipment Company. (See Busse, Edwin G., assignor.)
Chicago Railway Equipment Company. (See Garrard, James G., assignor.)
Chisholm, Clifton, Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del. Printing apparatus. 1,905,344; Apr. 25.
Chrisman, Horace, and H. G. Weymouth, assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa. Meter by-pass controlling means. 1,906,133; Apr. 25.
Christenson, Albert J. (See Sundling, Fritz E., assignor.)
Christianson, David A., Atlanta, Ga., assignor, by mesne assignments, to The Ad-Bag Sales Corporation. Bag. Des. 89,679; Apr. 25.
Chromy, Ben J., Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y. Electrical control system. 1,906,046; Apr. 25.
Chrysler Corporation. (See Kent, P. J., and McKechnie, assignor.)
Chrysler Corporation. (See Lee, Roger K., assignor.)
Chrysler Corporation. (See McCall, Charles D., assignor.)
Chrysler Corporation. (See Pfeiffer, Karl, assignor.)
Chrysler Corporation. (See Shay, Edgar, assignor.)
Chrysler Corporation. (See Smith, Adelbert R., assignor.)
Chrysler Corporation. (See White, Jay B., assignor.)
Chryst, William A., assignor to Delco Products Corporation, Dayton, Ohio. Shock absorber valve. 1,905,149; Apr. 25.
Cibulas, Stephen R., Bridgeport, Conn. Turret or window construction. 1,905,902; Apr. 25.
Cincinnati Grinders Incorporated. (See Haas, F. S., and Booth, assignors.)
Cincinnati Milling Machine Company, The. (See Archea, Walter D., assignor.)
Clark, Arthur M., Norton-on-Tees, assignor to Imperial Chemical Industries, Limited, London, England. Collection of sulphur from gases or vapors. 1,905,901; Apr. 25.
Clark Equipment Company. (See Clark, Eugene B., assignor.)
Clark, Ernest, Abington, assignor to Abington Textile Machinery Works, Boston, Mass. Pneumatic stripper for carding engines. 1,905,265; Apr. 25.
Clark, Ernest W., Schenectady, N. Y., assignor to General Electric Company. Wire drawing machine. 1,905,803; Apr. 25.
Clark, Eugene B., assignor to Clark Equipment Company, Buchanan, Mich. Making axle housings. 1,905,150; Apr. 25.
Clark, Frederick J., Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill. Pressing iron. 1,905,804; Apr. 25.
Clark, George F., West Drayton, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Automatic stopping device for talking machines. 1,905,151; Apr. 25.
Clark, Lee H., Haverford, assignor to The Sharples Specialty Company, Philadelphia, Pa. Filter. 1,905,806; Apr. 25.
Cleveland Rock Drill Company, The. (See Curtis, John C., assignor.)
Clinton, Charles H., Hinsdale, and P. F. Theobald and E. H. Stitt, assignors to United States Gypsum Company, Chicago, Ill. Mineral wool and method of and apparatus for granulating same. 1,905,152; Apr. 25.
Cloud, Raymond T., Chicago, Ill., assignor, by mesne assignments, to General Theatres Equipment, Inc., New York, N. Y. Producing high frequency light variations. 1,905,153; Apr. 25.
Clouse, William L., assignor to The National Machinery Co., Tiffin, Ohio. Forging machine. 1,905,620; Apr. 25.
Cluett, Peabody & Co. (See Buckingham, Alfred O., assignor.)
Coated Paper Products Company, The. (See Gluck, Alva F., assignor.)
Coated Paper Products Company, The. (See Gluck, Fred C., assignor.)
Coats, George S., Visalia, Calif. Packless turbine pump shaft. 1,905,368; Apr. 25.
Cochrane Corporation. (See Rohlin, Victor A., assignor.)
Coffman, John E., assignor to The Columbus Valve Manufacturing Corporation, Columbus, Ohio. Valve structure. 1,905,684; Apr. 25.
Cohen, Joseph H., Bridgeport, Conn. Fender apron. Des. 89,680; Apr. 25.
Coil, Grover C., assignor to Ohmer Fare Register Company, Dayton, Ohio. Interlocking mechanism. 1,905,807; Apr. 25.
Coldwell, Joseph, Fall River, Mass. Loom shuttle. 1,905,266; Apr. 25.
Cole, Edward J., assignor, by mesne assignments, to Helen M. Cole, Peekskill, N. Y. Producing self-locking nuts. 1,905,621; Apr. 25.
Cole, Helen M. (See Cole, Edward J., assignor.)
Cole, Robert M., Bryn Athyn, Pa., assignor to American Dyewood Company, New York, N. Y. Preparing carbon and product thereof. 1,905,688; Apr. 25.
Collins, Edward W., Detroit, Mich., assignor, by mesne assignments, to Delco-Remy Corporation, Anderson, Ind. Coil positioning machine. 1,905,154; Apr. 25.
Colman, Howard D. (See Colman, Duncan J., assignor.)
Colorado Fuel and Iron Company, The. (See Stuart, Kenneth B., assignor.)
Columbia Mills, The. (See Burns, Fred J., assignor.)
Columbia Valve Manufacturing Corporation. (See Coffman, John E., assignor.)
Combustioneer, Inc. (See Burton, Warren D., assignor.)
Commercial Investment Trust Incorporated. (See Malocsay, Francis X., assignor.)
Commercial Solvents Corporation. (See Goebel, Max, assignor.)
Communication Patents, Inc. (See Nicolson, Alexander M., assignor.)
Compagnie Nationale de Matieres Colorantes et Manufactures de Produits Chimiques du Nord reunies Etablissements Kuhlmann. (See Sack, Ernest, assignor.)
Conforti, Matthew, New York, and R. Malerba, Brooklyn, N. Y. Cigarette ejector and lighter. 1,906,154; Apr. 25.
Conn, C. G., Ltd. (See Burkle, Philip J., assignor.)
Conn, C. G., Ltd. (See Neptune, Frederick W., assignor.)
Connecticut Telephone & Electric Corporation. (See Cadieux, Joseph O., assignor.)
Conover Company, The. (See Stoddard, Edgar S., assignor.)
Consolidated Mining and Smelting Company of Canada, Limited. (See McCallum, A. L., Sutherland, and Thompson, assignors.)
Constable, Charles E., and H. F. Kuncid, Cincinnati, Ohio. Mechanical assorting device. 1,905,217; Apr. 25.
Continental Can Company. (See Kronquest, Alfred L., assignor.)
Continental Gin Company. (See Elliott, Thomas, assignor.)
Continental Oil Company. (See Bennett, Edwin O., assignor.)
Cook, John E., Estate, Incorporated, The. (See Dante, Joseph J., assignor.)
Cooke, Troughton & Simms Limited. (See Linn, John D., assignor.)
Cooper, William, and W. F. Knapp, Apalachin, N. Y. Nonskid device. 1,905,441; Apr. 25.
Cooper, William O. (See Craig, E., and Cooper.)
Coors, Fritz, jr., Berlin, Germany, assignor to Eastman Kodak Company, Rochester, N. Y. Producing motion picture film. 1,905,442; Apr. 25.

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Coors, William F., Tacoma, Wash. Track oiler. 1,905,155; Apr. 25.
Cope, Ernest C., and E. Kinsella, Spondon, near Derby, England, assignors to Celanese Corporation of America. Bearing and application thereof. 1,905,442; Apr. 25.
Corbitt, Howard E., assignor to International Precipitation Company, Los Angeles, Calif. Apparatus for producing rectified high voltage electric current. 1,905,629; Apr. 25.
Corey, Flournoy, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Direction-indicating beacon. 1,905,267; Apr. 25.
Corneliussen, Elias S. (See Alsaker, A., and Corneliussen.)
Cornish, Vernon R. (See Forbregd, G. T., and Cornish.)
Cotchett, Louis M., Brookline, assignor to Textile Patent & Process Co. Incorporated, Boston, Mass. Drafting textile fibers. 1,905,268; Apr. 25.
Conbrough, George B., Long Beach, Calif., assignor to The Lummus Company, New York, N. Y. Dividing petroleum bottoms. 1,905,156; Apr. 25.
Coupleux, Edouard E., Tourcoing, and J. A. M. V. de P. Givelet, Paris, France. Electric organ. 1,905,996; Apr. 25.
Couwenhoven, Abraham, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Motor control system. 1,905,808; Apr. 25.
Cowan, Roysel J., assignor to Surface Combustion Corporation, Toledo, Ohio. Preventing oxidation of metals during heat treatment. 1,905,809; Apr. 25.
Cowan, Roysel J., and O. E. Cullen, assignors to Surface Combustion Corporation, Toledo, Ohio. Low-temperature bright-annealing. 1,905,810; Apr. 25.
Cox, John R., assignor to Thompson Products, Incorporated, Cleveland, Ohio. Composite piston. 1,905,157; Apr. 25.
Crafts, Curtis S., Oak Park, assignor to The Goss Printing Press Company, Chicago, Ill. Folding mechanism. 1,905,687; Apr. 25.
Craftsman Radiator Enclosure Company. (See Greenberg, Meyer, assignor.)
Crago, Paul H., Wilkinsburg, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway car retarder. 1,905,218; Apr. 25.
Craig, Edward, and W. O. Cooper, Brea, Calif. Drill pipe protector. 1,905,158; Apr. 25.
Craig, Thomas W., et al. (See Hatfield, Floyd H., assignor.)
Cramer, Albert M., assignor to Horn and Hardart Baking Company, Philadelphia, Pa. Vending drum for coin controlled vending machines. 1,905,083; Apr. 25.
Craven, Thomas C., Dumont, N. J. Closure for locomotive cab windows. 1,905,389; Apr. 25.
Creed and Company, Limited. (See Griffith, Ronald G., assignor.)
Crespinel, William T., and C. W. Prynne, Los Angeles, Calif. Auto light checking means. 1,905,406; Apr. 25.
Crichton, James V., Philadelphia, Pa. Folding table. 1,905,219; Apr. 25.
Crimmel, Alvie C. and H. H., Hartford City, Ind. Combined glass container and cover. Des. 89,681; Apr. 25.
Crimmel, Henry H. (See Crimmel, Alvie C. and H. H.)
Critchfield, Robert M., and J. W. Lawson, assignors to Delco-Remy Corporation, Anderson, Ind. Windshield cleaner. 1,906,047; Apr. 25.
Crites, Wilbur J. (See Knowlton, D. E., and Crites.)
Croasdale, John P., jr., Berwyn, and J. A. Roberts, Philadelphia, Pa. Planting tool. Des. 89,682; Apr. 25.
Cronin, James C. (See Carter, A. P., Hynes, and Cronin.)
Cullen-Friestedt Company. (See Schmidt, Albert G. A., assignor.)
Cullen, Orville E. (See Cowan, R. J., and Cullen.)
Culver, Charles A., Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Cooling system for vacuum tubes. 1,905,811; Apr. 25.
Cummins Perforator Company. (See Swanson, Hjalmar A., assignor.)
Cunningham, Melville B., Fort Worth, Tex. Condiment shaker. 1,906,135; Apr. 25.
Curran, Frank M. (See Norris, C. B., Curran, and Van Steenwyk.)
Currie, Gilbert. (See James, H. D., and Currie.)
Curtis, John C., assignor to The Cleveland Rock Drill Company, Cleveland, Ohio. Steel retainer attachment for rock drills. 1,905,981; Apr. 25.
Curtiss Aeroplane & Motor Company. (See Blanchard, Werner J., assignor.)
Cuthbertson, Robert E. (See Weinig, A. J., and Cuthbertson.)
Cutler-Hammer, Inc. (See Krieger, Alvin W., assignor.)
Cutler, Leonard W., and C. A. Klein, Enfield, assignors, by mesne assignments, to Goodlass Wall and Lead Industries Limited, London, England. Metal coated material. 1,905,959; Apr. 25.
Dahrén, Johan A., Gottenborg, Sweden. Driving pile shells. 1,906,136; Apr. 25.
Dandini, Alessandro O., San Francisco, Calif. Marine vessel. 1,905,345; Apr. 25.
D'Angelo, Philip, Algonac, Mich. Ash can. 1,905,622; Apr. 25.
Daniels, Lloyd C. (See Jaeger, A. O., and Daniels.)
Dante, Joseph J., Bantam, assignor to The John E. Cook Estate, Incorporated, Torrington, Conn. Electric switch. 1,905,812; Apr. 25.
Deprato Statuary Company. (See Riccini, Bruno, assignor.)
Dardelet Threadlock Corporation. (See Heke, William E., assignor.)
Davenport, Talmon A. (See Eksergian, C. L., and Davenport.)
Davidson, Clinton, San Francisco, Calif. Carbureting device. 1,905,159; Apr. 25.
Davies, Emyr Conwy. (See Powell, A. R., Davies, and Scott.)
Davis, Alfred U., Baltimore, Md., assignor to Davis Instrument Manufacturing Company, Incorporated. Anemometer. 1,905,444; Apr. 25.
Davis, Chester L., Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Thermionic tube. 1,906,048; Apr. 25.
Davis, Dean W., Pendleton, assignor to Joseph H. Staley, Columbus, Ind. Mercury tube switch. 1,905,813; Apr. 25.
Davis Instrument Manufacturing Company, Incorporated. (See Davis, Alfred U., assignor.)
Davis, Robert E., Fort Payne, Ala. Combination sock and anklet. 1,906,137; Apr. 25.
Davisson, Delos W., and F. G. Welke, assignors to Shell Development Company, San Francisco, Calif. Process and apparatus for refrigeration with liquefied fuel gas. 1,905,971; Apr. 25.
Dawson, Elma N. (See Dawson, James C., assignor.)
Dawson, James C., assignor to E. N. Dawson, Webster Groves, Mo. Loose leaf binder. Re18,806; Apr. 25.
De Angelis, Frederick, West Orange, N. J., assignor to Metal Textile Corporation. Knitted metallic fabric. 1,905,160; Apr. 25.
De Back, William, assignor to Food Machinery Corporation, San Jose, Calif. Clean-out mechanism. 1,906,049; Apr. 25.
Decarie Incinerator Corporation. (See Woodman, Joseph C., assignor.)
Deere & Company. (See Johnson, Ellsworth T., assignor.)
Deere & Company. (See Silver, Walter H., assignor.)
Deere & Company. (See Strandlund, Carl G., assignor.)
Deere & Company. (See White, Charles H., assignor.)
De Groot, Willem, and E. H. Reerink, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company. Electric discharge tube. 1,905,688; Apr. 25.
Deitz, John G., Tulsa, Okla. Door mount for accessory equipment of motor vehicles. 1,905,623; Apr. 25.
Delaney, Ada W., Estate of (See Delaney, John H., assignor.)
Delaney, John H., deceased, Los Angeles, Calif., Union Bank & Trust Co. of Los Angeles, administrator, assignor to estate of Ada W. Delaney, deceased. Acoustic material. 1,906,138; Apr. 25.
De Laval Separator Company, The. (See Bernström, Seth F., assignor.)
Delco Products Corporation. (See Aseltine, Fred E., assignor.)
Delco Products Corporation. (See Chryst, William A., assignor.)
Delco Products Corporation. (See Dybvig, Henry G., assignor.)
Delco-Remy Corporation. (See Collins, Edward W., assignor.)
Delco-Remy Corporation. (See Critchfield, R. M., and Lawson, assignors.)
Delco-Remy Corporation. (See Norviel, Harry E., assignor.)
Delco-Remy Corporation. (See Norviel, H. E., and Ecoff, assignors.)
Delco-Remy Corporation. (See Prescott, F. H., and Arthur, assignors.)
Delco-Remy Corporation. (See Swayze, Clare S., assignor.)
Delco-Remy Corporation. (See Whelchel, Rupert C., assignor.)
Delta Manufacturing Company. (See Tauts, Herbert E., assignor.)
Delta Star Electric Company, The. (See Alsaker, A., and Corneliussen, assignors.)
Demstädt, Friedrich. (See Demstädt, Hermann and F., and Weichert.)
Demstädt, Hermann and F., and M. Weichert, Neubrandenburg, Germany. Machine for setting rows of plants deeper. 1,906,139; Apr. 25.
Denton, Geoffrey P., Rickmansworth, England. Producing Expanded rubber material. 1,905,269; Apr. 25.
De Orlow, Stephen, East Lansing, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Hood fastener. 1,905,220; Apr. 25.
De Orlow, Stephen, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Hood latch. 1,905,814; Apr. 25.
De Orlow, Stephen, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Hood latch. 1,905,815; Apr. 25.
Depasse, Henri, Neuilly-sur-Seine, France. Shaving brush having a reservoir for the soap. 1,906,140; Apr. 25.
De Phillips, Joseph, New York, N. Y. Fountain brush. 1,905,960; Apr. 25.
De Reamer, Frank C., Bridgeport, Conn., assignor to General Electric Company. Switch for radio phonograph sets. 1,905,689; Apr. 25.

De Ridder, Ernst, and H. Altwicker, Bitterfeld, Germany, assignors, by mesne assignments, to Magnesium Development Corporation. Alloy. 1,905,445; Apr. 25.
Dessenberg, Josef, Cologne, Germany. Machine for grinding and polishing optical lenses, spectacle glasses, and the like. 1,906,050; Apr. 25.
De Sherbinin, Helen K. (See Ingram, E. H., and Pearson, assignors.)
Despard, Victor R., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Electric snap switch. Des. 89,683; Apr. 25.
Despard, Victor R., assignor to Pass & Seymour, Inc., Syracuse, N. Y. Electric convenience outlet. Des. 89,684; Apr. 25.
Dewey and Almy Chemical Company. (See Almy, Richard, assignor.)
Dewey and Almy Chemical Company. (See Slagle, Willard J., assignor.)
Dewey, Haywood G., and J. G. Jones, assignors to Eastman Kodak Company, Rochester, N. Y. Film backing paper making machine. 1,906,446; Apr. 25.
Diamant, Nicholas S., Detroit, Mich. Radiator. 1,905,447; Apr. 25.
Dickinson, Lloyd W., assignor of one-half to M. K. Arford, Stone Lake, Wis. Combined cigarette extinguisher and ash receptacle. 1,905,271; Apr. 25.
Diehl Manufacturing Company. (See Peets, Wilbur J., assignor.)
Dillingham, Charles L., Indianapolis, Ind. Vehicle signal lamp. Des. 89,685; Apr. 25.
Dillingham, Charles L., Indianapolis, Ind. Vehicle signal lamp. Des. 89,686; Apr. 25.
Dina, Augusto, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y. Motion picture projection machine structure. 1,905,816; Apr. 25.
Dixie Dental Manufacturing Co. (See Levy, Arthur S., assignor.)
Dixon, John W., Indianapolis, Ind. Routing machine. 1,905,448; Apr. 25.
Dobrovolny, Frank J., Niagara Falls, assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y. Odorant for refrigeration. 1,905,817; Apr. 25.
Dodge, Ira J. (See Freese, Paul S., assignor.)
Doran, John F., Portage, Wis. Folding ironing table. 1,905,551; Apr. 25.
Dorsey, Dorothy. (See Dorsey, John J. and D.)
Dorsey, John J. and D., New York, N. Y. Hair protecting headband. 1,906,370; Apr. 25.
Dosch, Charles R. (See Locke, S. D., Dosch, and Stegeman.)
Douglass, Harry A., Bronson, Mich. Electric lamp. 1,905,818; Apr. 25.
Douthett, Orin R., Perth Amboy, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa. Bituminous emulsion. 1,905,680; Apr. 25.
Dow Chemical Company, The. (See Barstow, E. O., and Heath, assignors.)
Dow Chemical Company, The. (See Grebe, J. J., and Stoesser, assignors.)
Dow, Dewey M. (See Riebel, F., jr., and Dow.)
Doyle, Frederick W., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Assembling machine and jig. 1,906,690; Apr. 25.
Doyle, Michael P., Brooklyn, N. Y. Boring and facing tool with feed attachment. 1,905,819; Apr. 25.
Doyle, William T., Dorchester, assignor to Sturtevant Mill Company, Boston, Mass. Method of and apparatus for hydrating cellulose pulp. 1,905,161; Apr. 25.
Draper Corporation. (See Ross, Edward, assignor.)
Dreffein, Henry A., Chicago, Ill. Heat treating process. 1,905,272; Apr. 25.
Dreffein, Henry A., Chicago, Ill. Kiln and burner apparatus. 1,905,820; Apr. 25.
Dreyfus, Camille, New York, N. Y., and G. Schneider, East Orange, N. J., assignors to Celanese Corporation of America. Discharge printing and fabric produced thereby. 1,905,846; Apr. 25.
Drury, Horace B., Washington, D. C. Antiskid chain. 1,905,998; Apr. 25.
Drury, Horace F., Washington, D. C. Antiskid device. 1,905,997; Apr. 25.
Dubilier Condenser Corporation. (See Houck, Harry W., assignor.)
Duffy, James F., assignor to Duffy Manufacturing Company, Holland, Mich. Mat. 1,905,371; Apr. 25.
Duffy, James F., assignor to Duffy Manufacturing Co., Holland, Mich. Plate covering and attachment. 1,905,372; Apr. 25.
Duffy, John M., Ventnor, N. J. Furnace appliance. Re18,803; Apr. 25.
Duffy Manufacturing Company. (See Duffy, James F., assignor.)
Dunbar, Howard W., and J. C. Baker, assignors to Norton Company, Worcester, Mass. Lapping device for cylindrical objects. 1,905,821; Apr. 25.
Duncan, Joseph S., Chicago, Ill., assignor to Addressograph Company, Wilmington, Del. Printing machine. 1,905,982; Apr. 25.
Dunkelberg, Ralph C., Fort Wayne, Ind. Water softening apparatus. 1,905,221; Apr. 25.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company. Buffer safety shop. 1,905,273; Apr. 25.
Dunlop, James, Park Ridge, Ill., assignor to Westinghouse Electric & Manufacturing Company. Elevator governor. 1,905,274; Apr. 25.
Dunn, Irwin L., Tulsa, Okla. Packing. 1,905,822; Apr. 25.
Dunn, William Earl, Kansas City, Mo. Fishhook fastening means. 1,905,449; Apr. 25.
Duplate Corporation. (See Boynton, Vern K., assignor.)
Duplate Corporation. (See Sherts, James H., assignor.)
Du Pont, E. I., de Nemours & Company. (See Goodrich, E. J., and Howell, assignors.)
Du Pont, E. I., de Nemours & Company. (See Holmes, Walter C., assignor.)
Du Pont, E. I., de Nemours & Company. (See Howell, E. T., and Goodrich, assignors.)
Du Pont Film Manufacturing Corporation. (See Seane, Virgil B., assignor.)
Durasey, Stephen J., assignor of one-half to S. R. Block, Johnstown, Pa. Permanent wave winder. 1,905,378; Apr. 25.
Duvall, James, Camas, Wash. Bag and closure means therefor. 1,905,982; Apr. 25.
Dwork, Max, Brooklyn, N. Y. Jack. 1,905,634; Apr. 25.
Dybvig, Henry G., assignor to Delco Products Corporation, Dayton, Ohio. Thermostatic switch. 1,905,823; Apr. 25.
Dyggve, Eigil V. P., assignor to Koefoed, Hauberg, Marstrand & Helweg, Aktieselskabet Titan, Copenhagen, Denmark. Grab. 1,905,450; Apr. 25.
Dysthe, Martinius, Minneapolis, Minn. Jointed metallic hose casing. 1,905,824; Apr. 25.
Eames, William F., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Motor control system. 1,905,275; Apr. 25.
Earnshaw, George F., assignor to Earnshaw Knitting Company, Newton, Mass. Sun suit. 1,905,451; Apr. 25.
Earnshaw Knitting Company. (See Earnshaw, George F., assignor.)
Eastman Kodak Company. (See Capstaff, John G., assignor.)
Eastman Kodak Company. (See Coors, Fritz, jr., assignor.)
Eastman Kodak Company. (See Dewey, H. G., and Jones, assignors.)
Eastman Kodak Company. (See Hickman, Kenneth C. D., assignor.)
Eastman Kodak Company. (See Mihalyi, Joseph, assignor.)
Eastman Kodak Company. (See Smith, Henry B., assignor.)
Eastman Kodak Company. (See Stephenson, Paul A., assignor.)
Eastman Kodak Company. (See Webber, C. S., and Stand, assignors.)
Eastman Kodak Company. (See Wittel, Otto, assignor.)
Eaton, George, Cleveland, Ohio, assignor to May C. Eaton. Electric plug. 1,905,452; Apr. 25.
Eaton, Leslie B., Los Angeles, assignor, by mesne assignments, to Kalite Company, Limited, Pasadena, Calif. Acoustic plaster. 1,906,128; Apr. 25.
Eaton, May C. (See Eaton, George, assignor.)
Ebbw Vale Steel Iron & Coal Company Limited. (See Harvey, Arthur H., assignor.)
Eby, Eugene D., Pittsfield, Mass., assignor to General Electric Company. Joint for high tension underground cables. 1,905,691; Apr. 25.
Eclipse Aviation Corporation. (See Nowosielski, Edward B., assignor.)
Ecoff, Vance. (See Norviel, H. E., and Ecoff.)
Edgar, John, assignor to Barber-Colman Company, Rockford, Ill. Making spline couplings. 1,906,276; Apr. 25.
Edwards, Donald V., New York, N. Y., and E. K. Smith, East Orange, N. J., assignors to Electrons, Inc., of Delaware. Rectifier. 1,905,692; Apr. 25.
Edwards, Herbert E., Brookline, Mass. Shoe bottom ornamenting machine. 1,905,961; Apr. 25.
Edwards, Herbert E., Brookline, Mass. Embroiderer. 1,905,962; Apr. 25.
Edwards, Paul S. (See Barbulesco, Constantin D., assignor.)
Edwards, Paul S., and C. D. Barbulesco, Dayton, Ohio. Direct reading ohmmeter. 1,905,948; Apr. 25.
Edwards, Paul S., and C. D. Barbulesco, Dayton, Ohio. Direct reading capacimeter. 1,905,949; Apr. 25.
Egger, Walter F., Cleveland, and L. A. Becker, Lakewood, Ohio, assignors, by mesne assignments, to Norton Company, Worcester, Mass. Machine for honing and polishing crank shafts. 1,905,825; Apr. 25.
Egy, Willard L., assignor to W. & L. E. Gurley, Troy, N. Y. Testing machine. 1,905,276; Apr. 25.
Ehrhardt, Earl, Chicago, Ill. Composition for acoustical devices. 1,905,631; Apr. 25.
Ekelöf, John, Lidingo, Sweden. Rotary pump, compressor, and the like. 1,906,141; Apr. 25.
Ekelöf, John, Lidingo, Sweden. Rotary pump or compressor. 1,906,142; Apr. 25.
Eksergian, Carolus L., and T. A. Davenport, Detroit, Mich. Disk wheel. Des. 89,687; Apr. 25.
Electric Railway Improvement Company, The. (See Smith, Benjamin A., assignor.)
Electrified Sugar Company. (See Lima, Alfred, jr., assignor.)
Electrolock Manufacturing Company, The. (See Kulicke, Frederick W., assignor.)

Electrolux Servel Corporation. (See Lennmor, Gosta G., assignor.)
Electrolux Servel Corporation. (See Maiuri, G., and Bossini, assignors.)
Electrons, Inc. (See Edwards, D. V., and Smith, assignors.)
Elevator Supplies Company. (See Orr, Carroll R., assignor.)
Elion, Henry. (See Vangrevenynge, C., and Elion.)
Elliott, Harold F., Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. High frequency amplifier. 1,905,826; Apr. 25.
Elliott, Thomas, Birmingham, Ala., assignor to Continental Gin Company. Hull extractor. 1,905,632; Apr. 25.
Elliott, Wilbert N. (See Milne, W. G., and Elliott.)
Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to Resyl Corporation, New York, N. Y. Floor covering. 1,905,827; Apr. 25.
Ellis, Carleton, Montclair, N. J., assignor to Ellis-Foster Company. Catalysed urea resin. 1,905,999; Apr. 25.
Ellis-Foster Company. (See Ellis, Carleton, assignor.)
Ellis, George H., St. Paul, assignor to The Insulite Company, Minneapolis, Minn. Fireproof bodies and making the same. 1,905,222; Apr. 25.
Ellis, George H., and H. C. Olpin, Spondon, near Derby, England, assignors to Celanese Corporation of America. Treatment of cellulose derivatives. 1,905,453; Apr. 25.
Ellsworth, Carl F., Collingswood, assignor to The R. M. Hollingshead Co., Camden, N. J. Liquid sprayer and making the same. 1,905,828; Apr. 25.
Ellsworth, William C. (See Campbell, W. H., Ellsworth, and Madsen.)
Endres, Walter, and H. Hootz, Berlin, Germany, assignors to General Electric Company. Motor control system. 1,905,693; Apr. 25.
Engelhardt, Felix. (See Bergen, G., Engelhardt, and Steckhan.)
Engelmann, Max, Lausa, Germany. Cinematographic apparatus. 1,905,454; Apr. 25.
English, Solomon, London, England, assignor to Holophane Company, Inc., New York, N. Y. Luminair employing prismatic reflectors. 1,905,829; Apr. 25.
Ensenat, Ramon, deceased, Newark, N. J. E. J. C. Joerg, executor. Stern paddle-wheel propulsion mechanism for boats. 1,905,162; Apr. 25.
Enterprise Manufacturing Company, The. (See Pflueger, Charles T., assignor.)
Erickson, Ellis O., Pasadena, Calif., assignor to Westinghouse Electric & Manufacturing Company. Photocell amplifier unit. 1,905,276; Apr. 25.
Ericson, George R., assignor to Metalcraft Corporation, St. Louis, Mo. Headlight for toy vehicles. 1,905,931; Apr. 25.
Ericson, Philip E. G., St. Charles, assignor to The W. H. Howell Company, Geneva, Ill. Folding chair. 1,905,830; Apr. 25.
Evans, Allen S. (See Horne, Harry F., assignor.)
Evans, James, jr., administrator. (See Horne, Harry F.)
Evans, Merwin W., Holland Patent, N. Y. Helicopter. 1,906,143; Apr. 25.
Evans, William L., Washington, Ind. Electric fluid heater. 1,906,144; Apr. 25.
Evans, William L., Washington, Ind. Electric fluid heater. 1,906,145; Apr. 25.
Evening American Publishing Company. (See Black, H., Holmes, and Hesse, assignors.)
Ewert, Otto F., Genoa City, Wis. Making spline couplings. 1,905,277; Apr. 25.
Ewest, Hans. (See Skaupy, F., Ewest, and Pulfrich.)
Ewest, Hans, Berlin, and M. Pirani, Berlin-Wilmersdorf, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,905,831; Apr. 25.
Excell, Stuart W., assignor to Standard Oil Company, Chicago, Ill. Insulating wall. 1,905,832; Apr. 25.
Fagan, Thomas A., Denver, Colo. Conservation valve. 1,906,625; Apr. 25.
Falk, Frank A., Stacyville, Iowa, assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,905,554; Apr. 25.
Falk, Frank A., Stacyville, Iowa, assignor to Chicago Forging & Manufacturing Co., Chicago, Ill. Hood latch. 1,905,555; Apr. 25.
Falk, Rudolph D., Peoria, Ill. Building material. 1,905,553; Apr. 25.
Fansteel Products Company. (See Balke, Clarence W., assignor.)
Farquhar, John B., assignor to Champion Corporation, Chicago, Ill. Cleaning device. 1,905,163; Apr. 25.
Farrel-Birmingham Company. (See Schnuck, C. F., and Banbury, assignors.)
Fathauer, Alvin J., Cleveland, Ohio. Wringer. 1,905,556; Apr. 25.
Feagley, Chester C., Philadelphia, Pa., assignor, by mesne assignments, to The Grasselli Chemical Company. Non-hygroscopic composition comprising aluminum sulphate and an acid salt. 1,905,833; Apr. 25.
Federwitz, Theodore A., and W. T. Bailey, assignors to Stokes and Smith Company, Philadelphia, Pa. Conveying system. 1,906,051; Apr. 25.
Fehrle, Alfred. (See Streitwolf, Fehrle, Hilmer, and Schmidt.)
Felix, Friedrich, and W. Huber, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Azodyestuffs and making same. 1,905,374; Apr. 25.
Felt & Tarrant Manufacturing Company. (See Turck, Joseph A. V., assignor.)
Feltham, Douglas L., Toledo, Ohio. Dental mirror. 1,905,633; Apr. 25.
Fensky, Charles, assignor of one-half to V. F. Flader, St. Louis, Mo. Copy holder. 1,905,834; Apr. 25.
Fentress, George E. (See Golish, Frank A., assignor.)
Ferris, John P., Whitefish Bay, and W. Ferris, assignors to The Oilgear Company, Milwaukee, Wis. Broaching machine. 1,905,164; Apr. 25.
Ferris, Walter. (See Ferris, John P. and W.)
Fesler, Douglas F., Evanston, assignor to Alemite Corporation, Chicago, Ill. Compressor. 1,905,455; Apr. 25.
Fibreboard Products Inc. (See Ford, G. F., and Pittman, assignors.)
Fieg, Joseph F., La Grange, assignor to United Screw and Bolt Corporation, Chicago, Ill. Manufacture of bolts. 1,905,084; Apr. 25.
Field, Ethel A., New York, N. Y. Flower holder. Des. 89,688; Apr. 25.
Field, Ethel A., New York, N. Y. Flower holder. Des. 89,689; Apr. 25.
Field, Ethel A., New York, N. Y. Flower holder. Des. 89,690; Apr. 25.
Field, Ethel A., New York, N. Y. Flower holder. Des. 89,691; Apr. 25.
Fifth Avenue Coach Company. (See Forrester, Michael J., assignor.)
Fina, Valentine, assignor to Milwaukee Valve Company, Milwaukee, Wis. Boiler return trap. 1,906,062; Apr. 25.
Finlay, John S., and E. B. Royle, Eureka, Utah. Mucker. 1,906,000; Apr. 25.
Finlay, John S., and E. B. Royle, Eureka, Utah. Shoveling machine. 1,906,001; Apr. 25.
Finn, Sidney J., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Sheet-separating apparatus. 1,905,835; Apr. 25.
Finsen, Eyvind, assignor to Gleason Works, Rochester, N. Y. Automatic throw-out mechanism for gear cutting machines. 1,905,456; Apr. 25.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Constructional unit. 1,905,875; Apr. 25.
Fischer, Albert C., Chicago, Ill., assignor to The Philip Carey Manufacturing Company. Roofing mastic. 1,905,876; Apr. 25.
Fischer, Samuel M., Pittsburgh, Pa. Supporting stand for porch gliders. 1,905,557; Apr. 25.
Fischmann, Nettie, St. Louis, Mo. Dress. Des. 89,692; Apr. 25.
Fischmann, Nettie, St. Louis, Mo. Lady's suit. Des. 89,693; Apr. 25.
Fish, Gilbert D. (See James, H. D., and Fish.)
Fisher, Roy S., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa. Electrodynamic reproducer. 1,906,196; Apr. 25.
Fitch, Elbert L., Newburgh, N. Y. Capsule filling machine. 1,905,279; Apr. 25.
Fitz Gerald, John W., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Engine starter. 1,905,836; Apr. 25.
Flader, Vera F. (See Fensky, Charles, assignor.)
Fleischhauer, Richard. (See Kalischer, G., and Fleischhauer.)
Fletcher, Harold W., assignor to Hughes Tool Company, Houston, Tex. Disk bit. 1,905,165; Apr. 25.
Fletcher Works. (See Schaum, Fletcher, assignor.)
Fliether, Walter, Velbert, Germany. Leaf turner. 1,905,963; Apr. 25.
Flink, John H., Watertown, Mass., assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for producing cut articles or blanks from plastic strip material. 1,905,837; Apr. 25.
Flitcroft, James E. (See Berns, W., Flitcroft, and Imfeld.)
Florang, Emil A., Burlington, Iowa. Basket. 1,906,146; Apr. 25.
Flueler, Alfred K., Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis. Control system for electric motors. 1,905,838; Apr. 25.
Foley, Ernest L., Newton, assignor to Underwood Machinery Company, South Boston, Mass. Article treating apparatus. 1,905,694; Apr. 25.
Folk, Joseph, assignor to U. S. Slicing Machine Company, La Porte, Ind. Combined top clamp and end grip for slicing machines. 1,905,457; Apr. 25.
Food Machinery Corporation. (See de Back, William, assignor.)
Foote, Leonard, Pedro Miguel, Canal Zone. Measuring device. 1,905,558; Apr. 25.
Forbregd, Gustav T., and V. R. Cornish, Elkhart, Ind., assignors to The Adlake Company, Chicago, Ill. Sash forming machine. 1,905,839; Apr. 25.
Ford, George F., Hollywood, and W. Pittman, Huntington Park, assignors to Fibreboard Products Inc., San Francisco, Calif. Printing, cutting, and scoring press. 1,905,559; Apr. 25.

Foreseman, Robert A., Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company. Ash disposal apparatus. 1,906,223; Apr. 25.
Forges & Ateliers de Constructions Electriques de Jeumont. (See Letrilliart, Pierre, assignor.)
Formed Steel Products Company, The. (See Priddy, Thomas D., assignor.)
Forney, John D., Chatham, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. System for starting and operating gaseous electric discharge devices. 1,906,840; Apr. 25.
Forney, John D., Chatham, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Electric discharge device and operating circuits therefor. 1,905,841; Apr. 25.
Forrester, Michael J., Astoria, N. Y., assignor to Fifth Avenue Coach Company. Double deck passenger vehicle. 1,905,842; Apr. 25.
Foster, John E., San Bernardino, Calif. Projector. 1,906,923; Apr. 25.
Foster, Walter F., San Francisco, Calif. Door closer. 1,905,972; Apr. 25.
Foulke, Ted E., Nutley, assignor to General Electric Vapor Lamp Company, Hoboken, N. J. Base and socket for electric lamps. 1,905,843; Apr. 25.
Fourness Development Corporation Ltd. (See Fourness, Wilfred, assignor.)
Fourness, Wilfred, Oakland, Calif., assignor to Fourness Development Corporation Ltd., New York, N. Y. High speed compressor. 1,905,933; Apr. 25.
Fox Edge Co. Inc., The. (See Fox, Harry, assignor.)
Fox, Harry, assignor to The Fox Edge Co. Inc., Lowell, Mass. Upholstery edge. 1,905,166; Apr. 25.
Franklin Railway Supply Company. (See Martin, Frederick W., assignor.)
Franklin Simon & Company. (See Long, Dorothy, assignor.)
Frappier, Louis S., and E. Boecking, Brooklyn, assignors to International Projector Corporation, New York, N. Y. Film gate support for motion picture projection machines. 1,906,063; Apr. 25.
Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Match package. 1,905,695; Apr. 25.
Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Match package. 1,905,696; Apr. 25.
Freedman, Benjamin H., assignor to Hudson Holding Corporation, New York, N. Y. Match package. 1,905,844; Apr. 25.
Freese, Paul S., assignor of one-fourth to I. J. Dodge, Marietta, Ohio. Fruit juice extractor. 1,906,064; Apr. 25.
Frey, Frederick E. (See Huppke, W. F., and Frey.)
Freydberg, Aaron, assignor to Freydberg Brothers, Inc., New York, N. Y. Tying strand or strip. 1,905,392; Apr. 25.
Freydberg Brothers, Inc. (See Freydberg, Aaron, assignor.)
Friedl, Joseph, Covington, Ky., assignor to The Avey Drilling Machine Company, Cincinnati, Ohio. Drilling machine. 1,906,560; Apr. 25.
Friedrichsen, Heinrich, Berlin-Treptow, Germany, assignor to General Electric Company. Polarity indicator. 1,905,697; Apr. 25.
Frigidaire Corporation. (See Candor, Robert R., assignor.)
Frigidaire Corporation. (See Matthews, William H., assignor.)
Frigidaire Corporation. (See Reeves, Donald H., assignor.)
Fritch, Elue O., assignor to The Kelly-Springfield Tire Company, Cumberland, Md. Vehicle tire. Des. 89,694; Apr. 25.
Fronek, Anthony. (See Kaltenbach, R. W., and Fronek, assignor.)
Frosted Foods Company. (See Birdseye, C., and Hall, assignors.)
Fuchs, Henry, assignor to W. H. Miner, Inc., Chicago, Ill. Hand brake. 1,906,845; Apr. 25.
Fuller Lehigh Company. (See Gaffney, Joseph B., assignor.)
Fulton, James S., Shields, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Sand blast nozzle. 1,905,696; Apr. 25.
Fulton Sylphon Company, The. (See Giesler, Jean V., assignor.)
Furedi, Stephen, New York, N. Y. Perpetual calendar. 1,905,846; Apr. 25.
Gaffney, Joseph B., Bethlehem, assignor to Fuller Lehigh Company, Fullerton, Pa. Separator. 1,906,458; Apr. 25.
Garnier, George E. (See Place, Bion C., assignor.)
Gail, John F., Evanston, Ill., assignor to Simmons Company, New York, N. Y. Spring assembling machine. 1,905,459; Apr. 25.
Gaisman, Henry J., New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,906,680; Apr. 25.
Galyean, Elmer E., Topeka, Kans. Rotary engine. 1,905,847; Apr. 25.
Gamichon, Paul, Paris, France. Converting into soluble salts lead and other metals contained in lead bearing ores. 1,905,460; Apr. 25.
Gardiner, Charles W., High Barnet, assignor to Gardiner's Conveyors Limited, London, England. Band conveyor. 1,906,147; Apr. 25.
Gardiner's Conveyors Limited. (See Gardiner, Charles W., assignor.)
Gardner, Henry A., Washington, D. C. Dehumidifying. 1,906,148; Apr. 25.
Gardner, Henry A., Washington, D. C. Dehumidifying. 1,906,149; Apr. 25.
Garner, Samuel R., Mercer, Pa. Highway guardrail. 1,905,377; Apr. 25.
Garrard, George B. (See Baash, L. F., Burns, and Garrard.)
Garrard, James G., Grand Rapids, Mich., assignor to Chicago Railway Equipment Company, Chicago, Ill. Foundry ladle. 1,906,634; Apr. 25.
Gassen, Josef, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany. Cooling means for rolled bars. 1,905,461; Apr. 25.
Gast, Paul H., Buffalo, N. Y. Process and apparatus for straightening rails. 1,906,062; Apr. 25.
Gaus, George E., Washington, D. C., dedicated to the free use of the Government and the people. Wire bale-tie. 1,905,581; Apr. 25.
Gay, Fraser W., Newark, N. J. Hot water storage for power generation. 1,905,085; Apr. 25.
Ganda, Anton, Vienna, Austria. Piston with cooling effect. 1,905,582; Apr. 25.
Gebruder, Hardy, Maschinenfabrik us Giesserei A. G. (See Leuchter, Richard L., assignor.)
Gechter, Herman J., Cleveland, Ohio. Traffic regulating device. 1,905,378; Apr. 25.
Gelaris, Arnold J., New York, N. Y. Zirconium citrate hexamethylenetetramine. 1,906,848; Apr. 25.
Gellman, Israel C., Rock Island, assignor to Northwestern Barb Wire Company, Sterling, Ill. Wire fabric making machine. 1,905,086; Apr. 25.
Gelsthorp, Frederick, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company. Making sheet glass. 1,906,849; Apr. 25.
General Aniline Works, Inc. (See Hern, R., and Schubert, assignors.)
General Aniline Works, Inc. (See Hern, R., and Zerweck, assignors.)
General Aniline Works, Inc. (See Kalischer, G., and Fleischhauer, assignors.)
General Cable Corporation. (See Bonner, A. A., and Schatzel, assignors.)
General Cable Corporation. (See Roux, Adrian F., assignor.)
General Electric Company. (See Brand, Frederick F., assignor.)
General Electric Company. (See Brown, C. A., and Van Sickle, assignors.)
General Electric Company. (See Case, Frank R., assignor.)
General Electric Company. (See Chapman, Charles H., assignor.)
General Electric Company. (See Clark, Ernest W., assignor.)
General Electric Company. (See De Groot, W., and Burink, assignors.)
General Electric Company. (See De Remer, Frank C., assignor.)
General Electric Company. (See Eby, Eugene D., assignor.)
General Electric Company. (See Endres, W., and Hootz, assignors.)
General Electric Company. (See Ewest, H., and Pirani, assignors.)
General Electric Company. (See Friedrichsen, H., assignor).
General Electric Company. (See Harries, Wolfgang, assignor.)
General Electric Company. (See Hasenpatt, Wolfgang, assignor.)
General Electric Company. (See Hendry, Johannes F., assignor.)
General Electric Company. (See Hill, Charles H., assignor.)
General Electric Company. (See Holst, Gilles, assignor.)
General Electric Company. (See Jones, Benjamin W., assignor.)
General Electric Company. (See Oliver, James H., assignor.)
General Electric Company. (See Rankin, William K., assignor.)
General Electric Company. (See Rupp, Emil, assignor.)
General Electric Company. (See Schwartz, Emil W., assignor.)
General Electric Company. (See Skaupy, F., Ewest, and Pulfrich, assignors.)
General Electric Company. (See Standerwick, Reginald G., assignor.)
General Electric Company. (See Thompson, L. W., and Zucker, assignors.)
General Electric Company. (See Zocher, Gustav, assignor.)
General Electric Company. (See Zocher, G., and Brudnoe, assignors.)
General Electric Vapor Lamp Company. (See Forney, John D., assignor.)
General Electric Vapor Lamp Company. (See Foulke, Ted E., assignor.)

General Electric Vapor Lamp Company. (See Walker, Warren R., assignor.)
General Fire Extinguisher Company. (See Barclay, Sidney F., assignor.)
General Fire Extinguisher Company. (See Carraway, Thomas W., assignor.)
General Motors Corporation. (See Manning, William H., assignor.)
General Motors Corporation. (See Williams, Charles E., assignor.)
General Motors Research Corporation. (See Berry, George P., assignor.)
General Spring Bumper Company. (See Jandus, Herbert S., assignor.)
General Theatres Equipment, Inc. (See Cloud, Raymond T., assignor.)
Getz Exterminators, Inc. (See Raley, Thomas C., assignor.)
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Flexible corrugated tubular wall. 1,905,583; Apr. 25.
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Making thin walled tubes. 1,905,584; Apr. 25.
Giesler, Jean V., assignor to The Fulton Sylphon Company, Knoxville, Tenn. Steam engine. 1,905,585; Apr. 25.
Gilbert, A. C., Company, The. (See Gilbert, Alfred C., assignor.)
Gilbert, Alfred C., North Haven, assignor to The A. C. Gilbert Company, New Haven, Conn. Electric drill or similar tool. 1,905,462; Apr. 25.
Gilbertson, Harry A. (See Reishus, Sondre S., assignor.)
Gillette Safety Razor Company. (See Gaisman, Henry J., assignor.)
Gillette Safety Razor Company. (See Testi, Nicholas, assignor.)
Ginsburg, Fred, Chicago, Ill. Gear shifting mechanism. 1,905,635; Apr. 25.
Ginsburg, Joseph. (See Hamilton, Warren G., assignor.)
Givelet, Joseph A. M. V. de P. (See Coupleux, E. E., and Givelet.)
Glaesner, Harry, Philadelphia, Pa. Four-wheel trailer truck and ash hopper. 1,905,636; Apr. 25.
Gleaner Harvester Corporation. (See Hanson, Perren J., assignor.)
Gleason Works. (See Finsen, Eyvind, assignor.)
Globe Ticket Company. (See Thomson, Henry A., assignor.)
Gluck, Alva F., assignor to The Coated Paper Products Company, Minerva, Ohio. Dispensing carton. 1,905,561; Apr. 25.
Gluck, Fred C., assignor to The Coated Paper Products Company, Minerva, Ohio. Paper dispensing device. 1,905,562; Apr. 25.
Goddard, George N., Newton, Mass. Device for spinning and twisting textile fibers. 1,905,280; Apr. 25.
Godshalk, Clarence A., Ardmore, and F. Henke and D. Behrsing, Philadelphia, assignors, by mesne assignments, to Ocean City Manufacturing Co., Philadelphia, Pa. Fishing reel. 1,904,992; Apr. 25.
Goebel, Max, assignor to Commercial Solvents Corporation, Terre Haute, Ind. Reactivation of spent filter materials. 1,905,067; Apr. 25.
Golden, Thomas H., Pottsville, Pa., assignor to Phillips-Jones Corporation, New York, N. Y. Shirt package. 1,906,150; Apr. 25.
Goldsholl, Morton, Chicago, Ill. Pocket keyholder. Des. 89,695; Apr. 25.
Goldsmith, Bertram J., Allentown, Pa., and J. W. Stark, New York, N. Y. Ribbon reel. 1,906,055; Apr. 25.
Golish, Frank A., South Gate, assignor of one-half to G. E. Fentress, Los Angeles, Calif. Underreamer. 1,906,056; Apr. 25.
Goodlass Wall and Lead Industries Limited. (See Cutler, L. W., and Klein, assignors.)
Goodman, Elisabeth A. (See Goodman, Patrick, assignor.)
Goodman, Elisabeth A., et al., administratrices. (See Goodman, Patrick.)
Goodman, Francis G. (See Goodman, Patrick, assignor.)
Goodman Manufacturing Company. (See Kraft, Robert H., assignor.)
Goodman, Mary, et al., administratrices. (See Goodman, Patrick.)
Goodman, Patrick, Brooklyn, N. Y.; M. Goodman and E. A. Goodman, administratrices of said Patrick Goodman, deceased, assignors to F. G. Goodman and E. A. Goodman, Brooklyn, N. Y. Inflatable conduit stopper. 1,906,151; Apr. 25.
Goodrich, B. F., Company, The. (See Flink, John H., assignor.)
Goodrich, B. F., Company, The. (See Leguillon, Charles W., assignor.)
Goodrich, B. F., Company, The. (See Matthias, Gilbert L., assignor.)
Goodrich, Robert J. (See Howell, E. T., and Goodrich.)
Goodrich, Robert J., and E. T. Howell, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Anthraquinone vat dyes and making the same. 1,905,088; Apr. 25.
Goss Printing Press Company, The. (See Crafts, Curtis S., assignor.)
Gotthardt, Henry R., Louisville, Ky., and W. E. Cain, Jeffersonville, Ind., assignors to Logan Co. Inc., Louisville, Ky. Conveying system. 1,905,579; Apr. 25.
Gough, Fred J., Fort Dodge, assignor to United States Gypsum Company, Chicago, Ill. Apparatus for the continuous calcination of gypsum. 1,905,089; Apr. 25.
Government and the people, Dedicated to the free use of. (See Gaus, George E., assignor.)
Graef, Russell C., Westfield, N. J. Building wall structure. 1,905,167; Apr. 25.
Grandjean, Georges, assignor to Isothermos Corporation, New York, N. Y. Collecting and feeding oil to journal bearings. 1,905,281; Apr. 25.
Grange, Leo O., assignor to Walter J. Jarratt, Chicago, Ill. Vulcaniser. 1,905,463; Apr. 25.
Granstedt, Erik, assignor to Aktiebolaget Formator, Stockholm, Sweden. Machine for the separation and formation of the filler of cigar bunches. 1,905,586; Apr. 25.
Granstedt, Karl E., assignor to Aktiebolaget Formator, Stockholm, Sweden. Cigar bunching machine. 1,906,152; Apr. 25.
Grasselli Chemical Company. (See Feagley, Chester C., assignor.)
Grasselli Chemical Company, The. (See Jenemann, Joseph A., assignor.)
Grasselli Chemical Company, The. (See Lawrence, Ralph E., assignor.)
Graton & Knight Company. (See Chandler, Robert W., assignor.)
Gray, Ffolliott. (See Hodgson, J. L., and Gray.)
Gray, Martin V., Stockton, Calif. Garment hanger. 1,906,058; Apr. 25.
Grebe, John J., and S. M. Stoesser, assignors to The Dow Chemical Company, Midland, Mich. Synthetic lubricant and making same. 1,905,850; Apr. 25.
Green, Burnett E., assignor to Huron Industries, Inc., Alpena, Mich. Vibrating screen. 1,905,398; Apr. 25.
Green, Frank R., assignor to Joseph Peter, Chicago, Ill. Cigarette ring. 1,906,003; Apr. 25.
Green, Louis D., San Francisco, Calif. Surgical instrument. 1,905,851; Apr. 25.
Greenberg, Meyer, Lynbrook, assignor to Craftsman Radiator Enclosure Company, Inc., Oceanside, N. Y. Cabinet construction. 1,906,208; Apr. 25.
Greenfield, Nathan R., et al. (See Hatfield, Floyd H., assignor.)
Greenholt, Harry A., Chicago, Ill., assignor to National Biscuit Company, New York, N. Y. Facing machine. 1,905,700; Apr. 25.
Greenholt, Harry A., Chicago, Ill., assignor to National Biscuit Company, New York, N. Y. Conveying mechanism. 1,905,701; Apr. 25.
Greenstreet, Oliver P., Owensville, Mo. Antifreeze compound for radiators. 1,905,880; Apr. 25.
Greer, Palmore, Higginsville, Mo. Garage. 1,905,852; Apr. 25.
Greve, Edgar E., Bellevue, assignor to Oil Well Supply Company, Oil City, Pa. Lubricating system for pumping power. 1,906,004; Apr. 25.
Griffin, Adella V., San Diego, Calif. Educational device. 1,905,881; Apr. 25.
Griffith, Clement P., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Dome for a liquid dispensing apparatus. Des. 89,696; Apr. 25.
Griffith, Ronald G., assignor to Creed and Company, Limited, Croydon, England. Clutch mechanism. 1,905,090; Apr. 25.
Griffiths, Richard T., Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del. Heat insulating panel member. 1,905,853; Apr. 25.
Grip, Carl A. O., Newtonville, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole sewing machine. 1,905,854; Apr. 25.
Gritt, Frank A., assignor to Gritt Incorporated, Indianapolis, Ind. Simulation of fast-moving objects. 1,905,168; Apr. 25.
Gritt Incorporated. (See Gritt, Frank A., assignor.)
Gross, William M., assignor of one-half to Will Beckley, Las Vegas, Nev. Loading and dumping truck. 1,905,855; Apr. 25.
Guhl, Maclyn, Forest Hills, assignor to William Willheim Co., Inc., New York, N. Y. Textile fabric or similar article. Des. 89,697; Apr. 25.
Guide Lamp Corporation. (See Mead, Howard C., assignor.)
Gurley, W. & L. E. (See Egy, Willard L., assignor.)
Guttzeit, Chas. W. (See Kenn, William H., assignor.)
Guy, Frederick M., assignor to Guy-Murton Incorporated, Detroit, Mich. Universal joint. 1,906,057; Apr. 25.
Guy-Murton Incorporated. (See Guy, Frederick M., assignor.)
Haas, Fred S., and C. Booth, assignors to Cincinnati Grinders Incorporated, Cincinnati, Ohio. Grinding machinery. 1,905,224; Apr. 25.
Haase, Leo G., Long Beach, and F. M. Brooks, assignors to Art Concrete Works, Inc., Pasadena, Calif. Curb valve box. 1,905,856; Apr. 25.
Hadaway, John B., Swampscott, Mass. Focusing device for cameras. 1,906,059; Apr. 25.
Haeussler, Alfred F. W., San Juan, Puerto Rico. Apparatus for signaling. 1,905,924; Apr. 25.
Hafer, John J., sr., Stratford, Conn., and M. Hafer, sr., College Point, N. Y. Fastening device. 1,905,567; Apr. 25.

Hafer, Mathias, sr. (See Hafer, John J. and M.)
Hager, Floyd D. (See Rhodes, R. O., and Hager.)
Hairlock Company Inc., The. (See Weber, A. E., and Howard, assignors.)
Haley, Kenneth W. (See Smith, W. M., and Haley.)
Halsite Corporation. (See Hawerlander, Adolf, assignor.)
Hall, Bicknell. (See Birdseye, C., and Hall.)
Hall, Theodore P., Rochester, N. Y. Airplane. 1,906,005; Apr. 25.
Hall, William T., assignor of one-third to H. McCullough, San Diego, Calif. Window lock. 1,906,153; Apr. 25.
Halsted, Hobart J., and N. R. Briggs, Buffalo, N. Y. Fraud preventive device. 1,905,935; Apr. 25.
Hamilton, Edward P., assignor to Hamilton Manufacturing Company, Two Rivers, Wis. Drawer structure. 1,905,857; Apr. 25.
Hamilton, George H., East Grand Rapids, assignor to American Seating Company, Grand Rapids, Mich. Hinge having friction bearings. 1,905,858; Apr. 25.
Hamilton, George H., East Grand Rapids, assignor to American Seating Company, Grand Rapids, Mich. Chair with swingable table leaves. 1,905,859; Apr. 25.
Hamilton, Gertrude, administratrix. (See Hamilton, Warren G., assignor.)
Hamilton Manufacturing Company. (See Hamilton, Edward P., assignor.)
Hamilton, Warren G., deceased, Atlantic City, N. J.; G. Hamilton, administratrix, assignor of one-half to J. Ginsburg, Philadelphia, Pa. Safety attachment for typographical composing and casting machines. 1,906,060; Apr. 25.
Hammer, Otto, Whittier, Calif., assignor to Security Engineering Company, Reno, Nev. Well reamer. 1,905,860; Apr. 25.
Hammes, Michael A., Racine, Wis. Washing device. 1,905,861; Apr. 25.
Hammond, Myron B., assignor to The Thos. P. Taylor Company, Bridgeport, Conn. Sanitary pad supporter belt. 1,905,964; Apr. 25.
Hanlon-Waters, Inc. (See Waters, Millard F., assignor.)
Hanna Engineering Works. (See Norris, Allan A., assignor.)
Hanson, Miles G. (See Babitch, A. M., and Hanson.)
Hanson, Perren J., assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo. Combined harvester, thresher, and separator. 1,905,091; Apr. 25.
Hanson, Walter M., assignor to American Seating Company, Grand Rapids, Mich. Seat. 1,906,061; Apr. 25.
Harden, Stephen W. (See Morgan, R. M., and Harden.)
Harder, John F., Omaha, Nebr. Detent for window sashes. 1,905,963; Apr. 25.
Harding, Charles P., Montreal, Quebec, and J. A. Shaw, Westmount, Quebec, Canada. Pipe support. 1,906,209; Apr. 25.
Hardisty, Rupert W., Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y. Loudspeaker. 1,905,702; Apr. 25.
Hardoll (Etablissements Hariveau & Dolimier, et René Porte & Cie reunis). (See Porte, René, assignor.)
Hardy, Peter S., Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y. Exercise machine. 1,905,092; Apr. 25.
Harley, John, Glasgow, Scotland, assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Index center. 1,906,062; Apr. 25.
Harman, Frank B., Kenosha, Wis., assignor to Simmons Company, New York, N. Y. Folding card or like tables. 1,905,862; Apr. 25.
Harmon, John B. (See Wiener, J. A., and Harmon.)
Harnischfeger Corporation. (See Wadd, Roy J., assignor.)
Harper, James G. (See Newman, S. F., and Harper.)
Harries, Wolfgang, Jena, Germany, assignor to General Electric Company. Contact rectifier. 1,905,703; Apr. 25.
Harris, Allyn, Wheaton, Ill., assignor to Safety Mining Company. Blasting cartridge. 1,905,863; Apr. 25.
Harris, Charles W., Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation. Journal box waste roll winding machine. 1,905,464; Apr. 25.
Harris, Leonard B., New York, N. Y. Vehicle seat. 1,905,563; Apr. 25.
Harrison, Henry C., Port Washington, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Acoustic device. 1,905,704; Apr. 25.
Harter, Isaac, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam boiler. 1,905,465; Apr. 25.
Hartford-Empire Company. (See Howard, George E., assignor.)
Hartford-Empire Company. (See Lorenz, Edward H., assignor.)
Hartford-Empire Company. (See Peiler, Karl E., assignor.)
Hartford-Empire Company. (See Wadman, Harold A., assignor.)
Hartle, Jacob E., jr., Madison, N. J. Vending machine attachment. 1,906,160; Apr. 25.
Hartness, James, Springfield, Vt. Screw thread gauge. 1,905,705; Apr. 25.
Harvey, Arthur H., assignor of one half to The Ebbw Vale Steel, Iron & Coal Company Limited, Ebbw Vale, England. Railway and like sleeper. 1,906,006; Apr. 25.
Hars, Hermann, Berlin-Siemensstadt, Germany, assignor to Radio Patents Corporation, New York, N. Y. Electric voltage regulation. 1,906,210; Apr. 25.
Haseltine, Stacy E., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,905,864; Apr. 25.
Hasenpatt, Wolfgang, Berlin-Friedenau, Germany, assignor to General Electric Company. Advertising device. 1,906,706; Apr. 25.
Haskelite Manufacturing Corporation. (See Norris, C. B., Curran, and Van Steenwyk, assignors.)
Hatfield, Floyd H., assignor of one-tenth to N. R. Greenfield, one-tenth to T. W. Craig, and one one-hundredth to G. M. Bergen, Rawlins, Wyo. Folding table. 1,905,282; Apr. 25.
Hatke, Charles W., Denver, Colo. Reversible attraction sign. 1,905,563; Apr. 25.
Havemeyer, Henry O., jr., Mahwah, N. J. Indicating means for turntables and the like. 1,905,707; Apr. 25.
Hawerlander, Adolf, assignor to Halsite Corporation, New York, N. Y. Compressed laminated products. 1,905,225; Apr. 25.
Hawkins, Charles A., and H. L. Hirschler, San Francisco, and M. Lothrop, Berkeley, Calif., assignors to Hawkins Patents, Ltd., Reno, Nev. Vehicle. 1,905,865; Apr. 25.
Hawkins Patents, Ltd. (See Hawkins, C. A., Hirschler, and Lothrop, assignors.)
Hasel, Ernest C., jr. (See Hasel, Ernest C. and E. C., jr.)
Hasel, Ernest C. and E. C., jr., Atchison, Kans. Cover for permanently bound books. 1,905,093; Apr. 25.
Health Developing Apparatus Company. (See Hardy, Peter S., assignor.)
Heany, John A., New Haven, Conn., assignor to Sirian Lamp Company, Newark, N. J. Producing yttrium and metals of the yttrium group. 1,905,866; Apr. 25.
Heard, James J., Phoenix, Ariz. Automatic pressure valve seal cap for collapsible tubes. 1,905,936; Apr. 25.
Heath, Sheldon B. (See Barstow, E. O., and Heath.)
Heaton, Herman C., Chicago, Ill. Process and apparatus for generating vapors. 1,905,283; Apr. 25.
Hefty, Henry, St. Louis, Mo. Ventilated cabinet. 1,905,867; Apr. 25.
Hein, George N., San Francisco, Calif. Driving mirror. 1,905,868; Apr. 25.
Heitger, Frank H., deceased, by Mattie G. Heitger, Flint, Mich., administratrix. Pump. 1,905,284; Apr. 25.
Heitger, Mattie G., administratrix. (See Heitger, Frank H., assignor.)
Helsingborgs Gummifabriks Aktiebolag. (See Bohlin, Olof G., assignor.)
Hemann, Bernard, Ashland, Ky. Coating metal objects. 1,906,154; Apr. 25.
Henderson, J. H., et al. (See Carton, Lee C., assignor.)
Hendry, Johnson F., Schenectady, N. Y., assignor to General Electric Company. Packing case for fragile articles. 1,905,708; Apr. 25.
Henke, Frederick. (See Godshalk, C. A., Henke, and Behrsing.)
Henle, Franz, Frankfort-on-the-Main-Hochst, G. Meder, Munster in Taunus, V. Lanz, Frankfort-on-the-Main-Hochst, F. Privinsky, Hofheim in Taunus, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Preparing acetic anhydride. 1,905,466; Apr. 25.
Heraeus-Vacuumschmelze A-G. (See Rohn, Wilhelm, assignor.)
Herb, Otto J. (See Thomas, G. F., and Herb.)
Hercules Powder Company. (See Humphrey, Irvin W., assignor.)
Herman, Raymond L., New York, assignor to Benjamin May and Louis Schulman, Brooklyn, N. Y. Collapsible tap. 1,905,709; Apr. 25.
Hershey, John A., Cherryville, Pa. Scaffolding. 1,905,026; Apr. 25.
Hervey, Earl C., assignor to Hydraulic-Press Brick Company, Indianapolis, Ind. Ornamental brick and producing same. 1,905,170; Apr. 25.
Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Bromінating anthanthrone. 1,905,285; Apr. 25.
Herz, Richard, Frankfort-on-the-Main, and W. Zerweck, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Chlorinating anthanthrone. 1,905,286; Apr. 25.
Herz, Richard, Frankfort-on-the-Main, and M. Schubert, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Manufacturing nuclear halogenated derivatives of arylaminothiasole compounds. 1,905,287; Apr. 25.
Hesse, Maurice A. (See Black, H., Holmes, and Hesse.)
Heuser, Herman, and R. S. Heuser, Evanston, assignors to United States Process Corporation, Chicago, Ill. Removal of volatile constituents from fermented liquids. 1,906,007; Apr. 25.
Heuser, Raymond S. (See Heuser, Herman, and R. S.)
Hickman, Kenneth C. D., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic processing. 1,905,467; Apr. 25.
Hicks, William W. (See Kercher, A. J., and Hicks.)

Hilder, Stuart, Glenearlyn, Va., assignor to Monroe Calculating Machine Company, Orange, N. J. Keyboard for registers. 1,906,068; Apr. 25.
Hill, Charles H., Drexel Hill, Pa., assignor to General Electric Company. Interlocking system. 1,906,710; Apr. 25.
Hill, Edward G., assignor to Hill Engineering Corporation, Richmond, Va. Clutch operating device for motor vehicles. 1,905,964; Apr. 25.
Hill Engineering Corporation. (See Hill, Edward G., assignor.)
Hill, Roger B., et al. (See Richter, G. A., Van Arsdel, and Hill.)
Hill, William H. (See Rose, H. J., and Hill.)
Hilmer, Hans. (See Streitwolf, K., Fehrle, Hilmer, and Schmidt.)
Hinrichsen, Edward R., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,905,711; Apr. 25.
Hirschler, Horace L. (See Hawkins, C. A., Hirschler, and Lothrop.)
Hirvonen, Eric J. (See Bishop, B. S. T., and Hirvonen.)
Hirvonen, Eric J., Worcester, Mass., assignor to Leland-Gifford Company. Hydraulic feed system for machine tools. 1,905,094; Apr. 25.
Himmay, Leopoldine, Ithaca, N. Y., and R. Amann, Brookline, Mass. Cooking utensil. 1,905,227; Apr. 25.
Heag, Eugene A., Pacific Grove, Calif. Door call. 1,905,937; Apr. 25.
Hoard, Bert V., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Series capacitor with combination protective equipment. 1,905,226; Apr. 25.
Hodgson, Edward S., East St. Louis, Ill. Folding desk. 1,906,064; Apr. 25.
Hodgson, John L., and F. Gray, Luton, assignors to George Kent Limited, London, England. Indicating or recording mechanism. 1,906,155; Apr. 25.
Hofbauer, Caspar E., assignor to Paramount Carburetor Corporation, New York, N. Y. Carbureting system. 1,905,712; Apr. 25.
Hoffman, Earl E., Springfield, Mass. Magneto electric machine. 1,906,065; Apr. 25.
Hoffman, Hugo. (See Hoffman, Joe and H.)
Hoffman, Joe and H., Two Rivers, Wis. Motor barrow. 1,905,589; Apr. 25.
Hoffman-La Roche Inc. (See Aeschlimann, John A., assignor.)
Hoffman, Morris J., Chicago, Ill., assignor to The Tabulating Machine Company, New York, N. Y. Key controlled printing machine. 1,905,268; Apr. 25.
Hoke, William E., Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y. Self-locking coupled screw element. 1,905,869; Apr. 25.
Holland, Sidney S., assignor of one-half to Oscar Reiger, Kansas City, Mo. Ironer attachment for washers. 1,905,870; Apr. 25.
Holland, Sidney S., assignor of one-half to Oscar Rieger, Kansas City, Mo. Wringer roll. 1,905,871; Apr. 25.
Holland, Walter, Washington, D. C. Apparatus for electrolysis. 1,905,627; Apr. 25.
Hollerith, Herman, jr., Riverton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Amplifier. 1,905,985; Apr. 25.
Hollingshead, R. M. Co., The. (See Ellsworth, Carl F., assignor.)
Holmes, Walter C., Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del. Explosive. 1,905,290; Apr. 25.
Holmes, William. (See Black, H., Holmes, and Hesse.)
Holophane Company. (See English, Solomon, assignor.)
Holst, Gilles, Eindhoven, Netherlands, assignor, by mesne assignments, to General Electric Company. Gas filled discharge tube. 1,905,713; Apr. 25.
Holst, Gilles, R. Shepherd, and P. H. A. van Lis, Eindhoven, Netherlands, assignors to Radio Corporation of America. Diaphragm and coil support. 1,906,066; Apr. 25.
Hoots, Herbert. (See Endres, W., and Hoots.)
Hopkins, Edwin, New York, N. Y. Re-vocalised phonograph record. 1,906,124; Apr. 25.
Hoppe, Arthur, River Edge, N. J., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y. Finger ring. Des. 89,698; Apr. 25.
Hoppe, Oscar, Rorschach, Switzerland. Milling or cutting machine. 1,905,552; Apr. 25.
Hopwood, John M. (See Peebles, Thomas A., assignor.)
Horn and Hardart Baking Company. (See Cramer, Albert M., assignor.)
Horn & Hardart Baking Co. (See Lowther, Leonard W., assignor.)
Horne, Harry F., deceased, Los Angeles, Calif.; J. Evans, jr., administrator, assignor to A. S. Evans. Shaving brush. 1,905,171; Apr. 25.
Herzung, Ernest W., Cleveland, Ohio. Ventilator. 1,906,004; Apr. 25.
Hornley, George F., Norton-on-Tees, assignor to Imperial Chemical Industries Limited, London, England. Production of aldol. 1,905,290; Apr. 25.
Horton, Joseph W., Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Signaling system. 1,905,714; Apr. 25.
Hotchkiss, B. H., Company, The. (See Polser, Fridolin, assignor.)
Hotchkiss, B. H., Company, The. (See Vogel, Max, assignor.)
Hotstream Heater Company, The. (See Macrow, Clarence H., assignor.)
Hotz, Wilhelm, Basel, Switzerland. Compressed air brake with stage braking. 1,906,166; Apr. 25.
Houck, Harry W., East Orange, N. J., assignor to Dubilier Condenser Corporation, New York, N. Y. Thermionic valve. 1,905,572; Apr. 25.
Houde Engineering Corporation. (See Peo, Ralph F., assignor.)
Howard, George E., Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn. Process and apparatus for forming shaped mold charges of molten glass. 1,905,463; Apr. 25.
Howard, George H., Alhambra, Calif. Starter drive. 1,906,067; Apr. 25.
Howard, Joseph A. (See Weber, A. E., and Howard.)
Howe, John H., South Orange, N. J. Loop forming and cutting device. 1,905,687; Apr. 25.
Howell, Edward T. (See Goodrich, E. J., and Howell.)
Howell, Edward T., Milwaukee, and E. J. Goodrich, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company. Black vat dyestuff preparation. 1,905,095; Apr. 25.
Howell, W. H., Company, The. (See Ericson, Philip E. G., assignor.)
Howse, Curtis L., Detroit, assignor, by mesne assignments, to A C Spark Plug Company, Flint, Mich. Liquid gauge. 1,905,172; Apr. 25.
Huber, Wilhelm. (See Felix, F., and Huber.)
Hudson Holding Corporation. (See Freedman, Benjamin H., assignor.)
Hudson, Patrick, New York, N. Y. Self-holding auto license frame. 1,905,874; Apr. 25.
Hudson-Sharp Machine Company. (See Campbell, Samuel J., assignor.)
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp, parking lamp, and horn casing. Des. 89,699; Apr. 25.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp, parking lamp, and horn casing. Des. 89,700; Apr. 25.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp, parking lamp, and horn casing. Des. 89,701; Apr. 25.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender and head lamp casing. Des. 89,702; Apr. 25.
Hughes, James R., South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y. Combined fender, head lamp casing, parking lamp casing, and horn casing. Des. 89,703; Apr. 25.
Hughes Tool Company. (See Burns, E., and Lewis, assignors.)
Hughes Tool Company. (See Fletcher, Harold W., assignor.)
Hughes Tool Company. (See Lansford, Robert C., jr., assignor.)
Hughes Tool Company. (See McKellar, Marion S., assignor.)
Hughes Tool Company. (See Ricker, Norman H., assignor.)
Hughes Tool Company. (See Scott, Floyd L., assignor.)
Hughes Tool Company. (See Wellenstein, Louis H., assignor.)
Hughes Tool Company. (See Wellenstein, L. H., and Smith, assignors.)
Hughes Tool Company. (See Woods, Henry B., assignor.)
Humphrey, Irwin W., Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del. Refining resin. 1,905,178; Apr. 25.
Hund, August, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y. Detector circuit for three-element gaseous discharge tubes. 1,905,873; Apr. 25.
Hupptz, Walter F., and F. R. Frey, assignors to Phillips Petroleum Company, Bartlesville, Okla. Hydrogenating or dehydrogenating hydrocarbons. 1,905,323; Apr. 25.
Huron Industries, Inc. (See Green, Burnett R., assignor.)
Hushour, Perry D., assignor to Walter M. Chapman, Youngstown, Ohio. Valve seat. 1,905,628; Apr. 25.
Hutches, Benjamin F., jr., Allendale, N. J. Parking clock. 1,905,875; Apr. 25.
Hydraulic-Press Brick Company. (See Harvey, Earl C., assignor.)
Hyland, Lawrence A., Washington, D. C. Direct current generator voltage regulator. 1,905,291; Apr. 25.
Hynes, Michael J. (See Carter, A. F., Hynes, and Cronin.)
I. G. Farbenindustrie Aktiengesellschaft. (See Henle, F., Meder, Lanz, and Privinsky, assignors.)
I. G. Farbenindustrie Aktiengesellschaft. (See Steigerwald, Christian, assignor.)
Imfeld, Joseph M. (See Beran, W., Fliteroft, and Imfeld.)
Imperial Chemical Industries, Limited. (See Clark, Arthur M., assignor.)
Imperial Chemical Industries Limited. (See Hornley, George F., assignor.)
Indiana Condensed Milk Company. (See Mott, Samuel B., assignor.)

Individual Drinking Cup Company. (See Wenzman, Edwin G., assignor.)
Ingersoll-Rand Company. (See Fulton, J. S., assignee.)
Ingersoll-Rand Company. (See Lear, Earl E., assignor.)
Ingersoll-Rand Company. (See Peters, Arthur E., assignor.)
Ingraham, E., Company, The. (See Carlson, Olof L., assignor.)
Ingraham, E., Company, The. (See Simpson, John O., assignor.)
Ingram, Edward H., Philadelphia, Pa., and V. B. Pearson, Buffalo, N. Y., assignors, by mesne assignments, to H. K. de Sherbinin. Nut blank feeding mechanism. 1,906,718; Apr. 25.
Innes, George, Davenport, assignor to Innes Manufacturing Company, Bettendorf, Iowa. Harvesting grain. 1,905,409; Apr. 25.
Innes, George, assignor to Innes Manufacturing Company, Bettendorf, Iowa. Harvesting machine. 1,905,410; Apr. 25.
Innes Manufacturing Company. (See Innes, George, assignor.)
Insulite Company, The. (See Ellis, George H., assignor.)
International Bitumen Emulsion Corporation. (See Braun, Carl A., assignor.)
International Precipitation Company. (See Buff, Carl T., assignor.)
International Precipitation Company. (See Corbitt, Howard E., assignor.)
International Projector Corporation. (See Dina, Augusto, assignor.)
International Projector Corporation. (See Frappier, L. S., and Boecking.)
International Standard Electric Corporation. (See Baker, John H. R., assignor.)
Irgens, Finn T., Wauwatosa, assignor to Outboard Motors Corporation, Milwaukee, Wis. Breaker mechanism. 1,905,094; Apr. 25.
Irving, Clarence B., Kansas City, Mo., assignor to Wilson-Jones Company, Chicago, Ill. Loose leaf memorandum book. 1,905,007; Apr. 25.
Isaacson, Fred A., Chicago, Ill. Car gaming device. 1,905,098; Apr. 25.
Ingrig, Walter V., Milwaukee, Wis. Automobile bumper. 1,905,599; Apr. 28.
Isothermos Corporation. (See Grandjean, Georges, assignee).
Isted, Gerald A. (See Mathieu, G. A., and Isted.)
Ives, Herbert E., Montclair, N. J. Printing stereoscopic positives from inverted relief negatives. 1,905,469; Apr. 25.
Ives, Herbert E., Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Making stereoscopic parallax panoramagrams from pseudoscopic parallax panoramagrams. 1,905,716; Apr. 25.
Jackson, Alfred F., Providence, R. I., assignor to L. B. Smith, receiver of Apsco Mossberg Corporation. Automobile indicating device. 1,905,717; Apr. 25.
Jackson, Carey B. (See Bennett, O. G., and Jackson.)
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,906,620; Apr. 25.
Jacobi, Edward N., assignor to Briggs & Stratton Corporation, Milwaukee, Wis. Lock. 1,906,902; Apr. 25.
Jacobs, Charles H., and E. E. Nash, San Francisco, Calif., assignors to Syphonator Company, Ltd. Beverage carbonating and dispensing apparatus. 1,905,966; Apr. 25.
Jacobs, Isidor, Union City, N. J., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn. Fastener. 1,905,718; Apr. 25.
Jacobus, David S., Montclair, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Economizer. 1,905,470; Apr. 25.
Jacobus, David S., Montclair, and J. E. Black, Rumson, assignors to The Babcock & Wilcox Company, Bayonne, N. J. Interdeck superheater for water tube boilers. 1,905,322; Apr. 25.
Jacquelet, Robert C. (See Liebel, J. G. H., and Jacquelet.)
Jaeger, Alphons O., Mount Lebanon, assignor, by mesne assignments, to Selden Research & Engineering Corporation, Pittsburgh, Pa. Catalytic apparatus. 1,905,719; Apr. 25.
Jaeger, Alphons O., Mount Lebanon, and L. C. Daniels, Crafton, assignors to The Selden Company, Pittsburgh, Pa. Purification of crude aromatic compounds. 1,905,905; Apr. 25.
James, Henry D., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Signaling system for elevators. 1,905,225; Apr. 25.
James, Henry D., Edgewood, Pa., and G. D. Fish, Pelham, N. Y., assignors to Westinghouse Electric and Manufacturing Company. Circuitous elevator. 1,905,220; Apr. 25.
James, Henry D., Edgewood, and G. Currie, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company. Circuitous elevator. 1,905,220; Apr. 25.
Jandus, Herbert S., assignor to General Spring Bumper Company, Detroit, Mich. Impact bar for automobile bumpers. Des. 89,704; Apr. 25.
Jaquiery, William, Waterbury, Conn., assignee, by mesne assignments, to Johns-Manville Corporation, New York, N. Y. Machine for producing strip moldings. 1,906,849; Apr. 25.
Jarratt, Walter J. (See Grange, Leo O., assignor.)
Jam, Carl, Horicon, Wis. Pulverizing roller. 1,905,884; Apr. 25.
Jam, Carl, Horicon, Wis. Control means for earth pulverizing machine. 1,905,885; Apr. 25.
Jam, Carl, Horicon, Wis. Earth pulverizing machine. 1,905,886; Apr. 25.
Jay, William C., assignor to Sanitary Products Corporation of America, Philadelphia, Pa. Safety device for die presses. 1,905,089; Apr. 25.
Jenemann, Joseph A., Philadelphia, Pa., assignor to The Grasselli Chemical Company, Cleveland, Ohio. Lactic acid. 1,906,088; Apr. 25.
Jenkins, Jesse M., Summit, N. J. Tobacco pipe. 1,905,298; Apr. 25.
Jenkinson, Louis, Auckland, New Zealand. Towel rail. 1,905,088; Apr. 25.
Jerowsek, Frank, Baltimore, Md. Drip catcher for paint brushes and the like. 1,906,157; Apr. 25.
Jett, George C., assignee of two-fifths to W. H. Stiemke, Milwaukee, Wis. Brake mechanism. 1,906,321; Apr. 25.
Johns, C. T., et al. (See Schurts, Ralph E., assignor.)
Joerg, Edwin J. C., executor. (See Emanuel, Ramon.)
John, Elmer N., Wauwatosa, assignor to Reliable Knitting Works, Milwaukee, Wis. Knitted footwear and making the same. Re18,864; Apr. 25.
John, Alex, Port Huron, Mich. Ventilator. 1,906,158; Apr. 25.
Johns Manville Corporation. (See Jaquiery, William, assignor.)
Johnson, Al. Construction Co. (See Johnson, Algot F., assignor.)
Johnson, Algot F., assignor to Al. Johnson Construction Co., Minneapolis, Minn. Apparatus for sinking bodies such as caissons and piles. 1,905,642; Apr. 25.
Johnson, Carl O., Lincoln, Nebr. Truck mainteiner. 1,905,904; Apr. 25.
Johnson, Ellsworth T., assignor to Deere & Company, Moline, Ill. Bundle carrier. 1,905,100; Apr. 25.
Johnson, Erland. (See Pendergast, J. F., and Johnson.)
Johnson, Halbert T., Paso Robles, Calif. Air conditioner. 1,905,101; Apr. 25.
Johnson, John F., Bellevue, Pa., assignor to Pittsburgh Plate Glass Company. Clamp for plate glass racks. 1,905,905; Apr. 25.
Johnson, Joseph, Milwaukee, Wis. Spinning top. Des. 89,705; Apr. 25.
Johnson, Lane. (See Biggert, F. C., jr., and Johnson.)
Johnson, Leonard W., Batavia, Ill. Aligning fixture. 1,905,102; Apr. 25.
Johnson, Leonard W., Batavia, Ill. Valve guide cleaner. 1,905,103; Apr. 25.
Johnson Matthey & Company Limited. (See Powell, A. R., Davies, and Scott, assignors.)
Johnston, James W., assignor to Lacene Manufacturing Company, Manchester, N. H. Grading machine. 1,905,174; Apr. 25.
Jones, Benjamin W., Schenectady, N. Y., assignor to General Electric Company. Motor starter. 1,906,720; Apr. 25.
Jones, John G. (See Dewey, H. G., and Jones.)
Jones, Oliver A., and J. A. Struthers, Bacchus, Utah. Synchroniser. 1,905,591; Apr. 25.
Jones, William A. (See Kerr, H. J., and Jones.)
Joyce, Lyndon W., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C. Suspender slide with bars flattened and embossed across weld. 1,906,020; Apr. 25.
Joyce-Venning Manufacturing Co., Inc. (See Joyce, Lyndon W., assignor.)
Juestrich, Max U., Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn. Textile fabric. Des. 89,706; Apr. 25.
Jugel, Rudolf P., Denver, Colo., assignor to American Ball Mill Company. Grinding mill. 1,906,411; Apr. 25.
Junker, Otto, Lammersdorf, Germany. Tensioning device for maintaining a given catenary curve in metal strips continuously pulled through an annealing furnace. 1,906,211; Apr. 25.
Kalamazoo Stied Company. (See Kidder, William R., assignor.)
Kallscher, Georg, Frankfort-on-the-Main, and R. Steinhauer, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y. Azo dyestuffs and making same. 1,905,204; Apr. 25.
Kaltite Company. (See Eaton, Leslie R., assignor.)
Kalunn Steel Company. (See White, William R., assignor.)
Kaltenbach, Robert W., Cleveland Heights, and A. Franek, Cleveland, Ohio; said Franek assignor to said Kaltenbach. Pile driver. 1,905,906; Apr. 25.
Kanter, Alfred, University City, Mo. Display sign or similar article. Des. 89,707; Apr. 25.
Kant-Glare Manufacturing Company. (See Walker, John S., assignor.)
Karle, John D., Roselle Park, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Workholder for sewing machine durating operations. 1,905,907; Apr. 25.
Karnes, Orla B., Caldwell, Tex. Display stand. 1,905,909; Apr. 25.

Kanson, Charles L., Mattapan, Mass. Testing. 1,905,412; Apr. 25.

Kayler, Frank H., Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill. Coupler. 1,905,641; Apr. 25.

Ke-Bond Company. (See Bixby, John L., assignor.)

Keen, William H., Albany, assignor to Chas. W. Guttseit, New York, N. Y. Stainless iron and producing the same. 1,905,721; Apr. 25.

Keiser, Charles R., assignor to The Serton Rubber Company, Dayton, Ohio. Manufacturing rubber soles. 1,905,909; Apr. 25.

Kellett, Irvine, and N. Armitage, Lawrence, and W. J. Wood, Methuen, Mass. Bobbin winding and bunch forming mechanism and method. 1,905,910; Apr. 25.

Kellett, William R., Menasha, assignor to Paper Patents Company, Neenah, Wis. Paper making apparatus. 1,905,911; Apr. 25.

Kelly-Springfield Tire Company, The. (See Fritch, Elue O., assignor.)

Kelsey-Hayes Wheel Corporation. (See White, John W., assignor.)

Kendall, James M., Woodbury Heights, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y. Sound recording and reproducing unit. 1,905,175; Apr. 25.

Kennedy, Edward C. (See Lacks, F. A., and Kennedy.)

Kent, George, Limited. (See Hodgson, J. L., and Gray, assignors.)

Kent, Philip J., Birmingham, and I. C. McKechnie, assignors to Chrysler Corporation, Detroit, Mich. Lamp and lamp mounting. 1,905,471; Apr. 25.

Kept-Kapt, Inc. (See Burke, James P., assignor.)

Kercher, Arthur J., Berkeley, Calif. Thermostat. 1,905,283; Apr. 25.

Kercher, Arthur J., Berkeley, and W. W. Hicks, assignors to Wesix National Company, San Francisco, Calif. Electrical heating element and manufacture. 1,905,282; Apr. 25.

Kerr, Arthur D., Holden, assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass. Bearing for ink roll doctors. 1,905,104; Apr. 25.

Kerr, Howard J., Westfield, N. J., and W. A. Jones, Westerleigh, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J. Boiler with interdeck superheater. 1,906,125; Apr. 25.

Kersten, Harold J., assignor to Board of Directors of the University of Cincinnati, Cincinnati, Ohio. Electrodeposition of tin-gold alloys. 1,905,105; Apr. 25.

Kersten, Harold J., assignor to Board of Directors of the University of Cincinnati, Cincinnati, Ohio. Electrodeposition of zinc-gold alloys. 1,905,106; Apr. 25.

Kersting, Albert H., Los Angeles, Calif. Sash balance. 1,905,107; Apr. 25.

Kidder, William E., assignor to Kalamazoo Sled Company, Kalamazoo, Mich. Sled. 1,905,642; Apr. 25.

Kieckhefer, Edwin F., Wauwatosa, Wis. Preparing lawns. 1,905,176; Apr. 25.

Kilgore Mfg. Company, The. (See Peake, Edward S., assignor.)

Kinsella, Edward. (See Cope, E. C., and Kinsella.)

Kinsman, Russell C., assignor to Taylor Instrument Companies, Rochester, N. Y. Milk heater control. 1,905,722; Apr. 25.

Kirby, James B., West Richfield, Ohio. Washing machine. 1,905,912; Apr. 25.

Kirk, William C., Indianapolis, Ind. Knockdown convertible stand. Re18,807; Apr. 25.

Kirkwood, Arthur M., Portland, Oreg. Debarking machine. 1,905,887; Apr. 25.

Kirkwood, Harry R., assignor of one-fourth to R. C. Speer, Pittsburgh, Pa. Lock. 1,905,177; Apr. 25.

Klasing, Augustus F., Chicago, Ill. Brake mechanism. 1,905,400; Apr. 25.

Klein, Carl A. (See Cutler, L. W., and Klein.)

Kliem, Max, Leipsig, Germany. Newspaper stand. 1,905,564; Apr. 25.

Knapp, William F. (See Cooper, W., and Knapp.)

Knowlton, Donald R., and W. J. Crites, assignors to Phillips Petroleum Company, Bartlesville, Okla. Control device for wells. 1,905,592; Apr. 25.

Koefoed, Hauberg, Marstrand & Helweg, Aktieselskabet Titan. (See Dyggve, Rigil V. P., assignor.)

Koehler Manufacturing Company. (See Wheat, Grant, assignor.)

Kohler, Kurt P., Salem, Ohio, assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Collapsible reel. 1,905,178; Apr. 25.

Konstantinoff, Jean, Meudon, France. Apparatus for the distribution and injection of compressed air for internal combustion engines. 1,906,008; Apr. 25.

Kopp, Philip E., Kansas City, Mo. Grease gun. 1,905,913; Apr. 25.

Koppers Company of Delaware, The. (See Blackwood, O. H., and Boss, assignors.)

Koppers Company of Delaware, The. (See Koppers, Heinrich, assignor.)

Koppers Company of Delaware, The. (See Powell, Alfred R., assignor.)

Koppers Company of Delaware, The. (See Rose, H. J., and Hill, assignors.)

Koppers Company of Delaware, The. (See Sperr, Frederick W., jr., assignor.)

Koppers Company of Delaware, The. (See Totzek, Friedrich, assignor.)

Koppers, Heinrich, Essen, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Distillation of gas liquor. 1,905,106; Apr. 25.

Kurz, Willi, Berlin-Friedenau, Germany. Coding machine. 1,905,593; Apr. 25.

Kraft, Robert H., assignor to Goodman Manufacturing Company, Chicago, Ill. Loading machine. 1,905,472; Apr. 25.

Krakauer, Samuel, and S. S. Marcus, New York, N. Y. Spring cushion construction. 1,906,159; Apr. 25.

Kramer, Andrew A., Kansas City, Mo. Reenforced metallic structural sheet and making the same. 1,905,413; Apr. 25.

Kramer, Louis E. (See Lutz, G. A., and Kramer.)

Krauth & Benninghofen. (See Krauth, Marie W., assignor.)

Krauth, Marie W., assignor to Krauth & Benninghofen, Hamilton, Ohio. Sheet holding rack. 1,906,109; Apr. 25.

Krebs Pigment & Color Corporation. (See Mertes, Albert T., assignor.)

Kreidler, Urban A., East Orange, N. J., assignor to National Biscuit Company, New York, N. Y. Pastry cup. Des. 89,708; Apr. 25.

Kremmling, Aribert, Hammersleben, Germany. Apparatus for forming molded or embossed articles of plastic material. 1,906,160; Apr. 25.

Krieger, Alvin W., assignor to Cutler-Hammer, Inc., Milwaukee, Wis. Electric snap switch. 1,905,914; Apr. 25.

Kris, Joseph, Chicago, Ill. Power operated talking machine. 1,906,161; Apr. 25.

Krocks, John S. (See Nosik, William A. and R. J., Krocks, and Moncher.)

Kronquest, Alfred L., Syracuse, assignor to Continental Can Company, Inc., New York, N. Y. Seaming head for closing machines. 1,906,162; Apr. 25.

Kulicke, Frederick W., Philadelphia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss. Electric switch lock. 1,906,110; Apr. 25.

Kunold, Henry F. (See Constable, C. H., and Kunold.)

Kurowski, Alfred G. F., Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y. Braille-writing machine. Des. 89,700; Apr. 25.

Laaba, Max A., assignor to American Optical Company, Southbridge, Mass. Ophthalmic lens. 1,906,644; Apr. 25.

Labberton, John M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Preventing oil leakage from bearings. 1,905,234; Apr. 25.

Lacene Manufacturing Company. (See Johnston, James W., assignor.)

Lachowitz, Samuel, Brooklyn, and I. Shiffman, New York, N. Y. Wrist watch or similar article. Des. 89,719; Apr. 25.

Lacks, Felix A., Pelham Manor, and E. C. Kennedy, New Haven, Conn.; said Kennedy assignor to said Lacks. Making hats. 1,906,212; Apr. 25.

Lamb, Joseph F., assignor to Landers, Frary, & Clark, New Britain, Conn. Percolator. 1,905,111; Apr. 25.

Lamb, Judson D., Reno, Nev. Universal ratchet wrench. 1,905,888; Apr. 25.

Lambert, Alvan R., Hollywood, Calif., assignor, by mesne assignments, to Burnett Walker, New York, N. Y. Wheel. 1,905,473; Apr. 25.

Lambert, Henry C., Anthon, Iowa. Hack saw. 1,905,940; Apr. 25.

Lamson Company, The. (See Allen, Lavont C., assignor.)

Lancaster Iron Works, Inc. (See Luce, Grafton H., assignor.)

Landers, Frary & Clark. (See Lamb, Joseph F., assignor.)

Landis Machine Company. (See Newman, S. F., and Harper, assignors.)

Landsman, Wesley E., Cedar Grove, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vibration damping device. 1,905,722; Apr. 25.

Lane, Wilton V., Guthrie, assignor of one-half to Zella M. Lane, Oklahoma City, Okla. Electrically heated wax spatula. 1,905,987; Apr. 25.

Lane, Zella M. (See Lane, Wilton V., assignor.)

Lanz, Gregory, Yuba City, Calif. Fruit picker's stilt. 1,905,112; Apr. 25.

Lanning, Samuel W., New Lexington, Ohio. Aeroplane. 1,905,389; Apr. 25.

Lansing, Raymond P., Montclair, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind. Fluid pump. 1,905,941; Apr. 25.

Lansing, Raymond P., Montclair, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind. Engine starting apparatus. 1,905,943; Apr. 25.

Lanz, Valentin. (See Henle, F., Meder, Lanz, and Privinsky.)

Lasker, Charles H., Joliet, Ill. Operating means for a crank press. 1,905,113; Apr. 25.

Laskey, Rose D. (See Laskey, William B.)

Laskey, William B., deceased, by R. D. Laskey, executrix, assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y. Method of and machine for producing candy units. 1,906,069; Apr. 25.

Lasselle, Percy, Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y. Making base exchange materials for water softening. 1,906,162; Apr. 25.

Latham Machinery Company. (See Metcalf, Irving E., assignor.)

Lattig, Melvin T., Hillsboro, N. C. Tread block. 1,906,009; Apr. 25.

Lauterbur, Edward J. (See Lauterbur, Frank X. and E. J.)

Lauterbur, Frank X. and E. J., Sidney, Ohio. Variable-mostatic radiator valve. 1,905,642; Apr. 25.

Laver, Anna, Philadelphia, Pa. Undergarment. 1,905,645; Apr. 25.

Lawler, James J., Mount Vernon, N. Y. Automatic thermostatic radiator valve. 1,906,942; Apr. 25.

Lawrence, Ralph E., Wichita, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Condensation product of cinchona bark alkaloids with thiuram sulphides as inhibitors. 1,905,915; Apr. 25.

Lawson, John W. (See Critchfield, E. M., and Lawson.)

Leach, Edgar J., Janesville, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. Pilot light controlled safety valve. 1,905,414; Apr. 25.

Lear, Earl B., Philipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Safety device for rock drills. 1,906,474; Apr. 25.

Lederer, Ernest A. (See Mardon, J. W., and Lederer.)

Ledwinka, Hans, Koprivnica, Czechoslovakia. Power-driven vehicle. 1,905,994; Apr. 25.

Lee, Roger K., Highland Park, assignor to Chrysler Corporation, Detroit, Mich. Vibration damper. 1,905,475; Apr. 25.

Lee Rubber and Tire Corporation. (See Carlin, James C., assignor.)

Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Method and apparatus for treating textile material. 1,905,916; Apr. 25.

Leguillon, Charles W., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Separable fastener. 1,905,917; Apr. 25.

Leland-Gifford Company. (See Bishop, B. S. J., and Hirvonen, assignors.)

Leland-Gifford Company. (See Hirvonen, Eric J., assignor.)

Lemel, Samuel L., Shaker Heights, Ohio. Device for the protection of the eyes. 1,905,415; Apr. 25.

Lennmor, Gösta G., Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y. Control for wick type liquid fuel burner. 1,905,918; Apr. 25.

Leschke, Hans M., and P. J. Anselmo, San Francisco, Calif. Electric safe lock. 1,905,965; Apr. 25.

Leslie Company. (See Soderberg, Sten M. B., assignor.)

Letrilliart, Pierre, assignor to Forges & Ateliers de Constructions Electriques de Jeumont, Paris, France. Asynchronous electrical machine. 1,906,164; Apr. 25.

Leuchter, Richard L., Weidlingau-Hadersdorf, assignor to Gebruder Hardy, Maschinenfabrik und Giesserei A. G., Vienna, Austria. Pressure release valve. 1,906,165; Apr. 25.

Levine, Louis, Cincinnati, Ohio. Automobile cover. 1,905,972; Apr. 25.

Levis, W. Kent, Selma, Calif. Irrigation pipe screen. 1,905,919; Apr. 25.

Levy, Arthur B., Birmingham, Ala., assignor, by mesne assignments, to Dixie Dental Manufacturing Co., Philadelphia, Pa. Interchangeable porcelain root facing. 1,905,595; Apr. 25.

Lewis, Howard B. (See Burns, B., and Lewis.)

Lewis Invisible Stitch Machine Company. (See Mueller, Charles W., assignor.)

Lewis, Lloyd L., Wellaston, Mass. Stanchion. 1,905,596; Apr. 25.

Libbey Glass Manufacturing Company, The. (See Nash, Arthur D., assignor.)

Libbey-Owens-Ford Glass Company. (See Ball, Edward M., assignor.)

Liegel, John G. H., Cincinnati, and E. C. Jacquelot, Norwood, Ohio, assignors, by mesne assignments, to The Union Switch & Signal Company. Electric current valve. 1,905,724; Apr. 25.

Liebknecht, Otto, Neubabelsberg, Germany, assignor to Permutit Company, New York, N. Y. Recovering base exchange material. 1,906,166; Apr. 25.

Lima, Alfred, jr., assignor to Electrified Sugar Company, Los Angeles, Calif. Apparatus for treating sugar containing liquid. 1,906,305; Apr. 25.

Liming, John, jr., Philadelphia, Pa. Fluid pump. 1,906,966; Apr. 25.

Lind, Howard E., assignor to The Toledo Porcelain Enamel Products Company, Toledo, Ohio. Production of signs, decorations, and the like. 1,906,965; Apr. 25.

Lindegaard, Emil. (See Nicolai, C. A., and Lindegaard.)

Lindemann, Frederick W., St. Paul, assignor to The Unipress Company, Incorporated, Minneapolis, Minn. Garment press. 1,906,071; Apr. 25.

Lindemon, William H., assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa. Mechanical pencil. 1,905,920; Apr. 25.

Lindner, Herbert, Berlin, Germany. Device for shaping and truing grinding rolls. 1,905,860; Apr. 25.

Lindsay, Lyan G., near Dayton, assignor to Trupar Manufacturing Company, Dayton, Ohio. Softening water. 1,905,725; Apr. 25.

Lindstrom, Nils O. (See Olofson, C. F. E., and Lindstrom.)

Linhares, Aurelio, Rio de Janeiro, Brazil. Electrically operated typewriter. 1,906,167; Apr. 25.

Linn, John D., assignee of one-half to Cooke, Troughton & Simms, Limited, York, England. Engraving machine. 1,906,735; Apr. 25.

Lisenby Manufacturing Company. (See Low, Charles L., assignor.)

Litchfield, Isaac W., assignor to Bemis Industries, Incorporated, Boston, Mass. Casement locking mechanism. 1,905,921; Apr. 25.

Livingston, John W., Kirkwood, assignor to Monsanto Chemical Works, St. Louis, Mo. Manufacture of liquid dialkyl phthalate esters. 1,906,974; Apr. 25.

Locke, Sylvanus D., Bridgeport, and C. E. Beach, Stratford, and H. J. Stegeman, Fairfield, Conn., assignors, by mesne assignments, to Alemite Corporation, Chicago, Ill. Lubricating apparatus. 1,905,179; Apr. 25.

Locomotive Finished Material Company, The. (See Muchnic, Henry E., assignor.)

Lofgren, Peter, assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass. Seating ring for pipe couplings. 1,905,115; Apr. 25.

Logan Co. Inc. (See Gotthardt, H. E., and Cain, assignors.)

Long, Dorothy, assignor to Franklin Simon & Company, Inc., New York, N. Y. Ensemble dress. Des. 89,711; Apr. 25.

Long, Joseph H., Cleveland, Ohio. Refrigerator. 1,905,597; Apr. 25.

Loomis, Chauncey C., Lenox, Mass., and A. D. Macdonald, New York, N. Y., assignors, by mesne assignments, to New England Lime Company, Pittsfield, Mass. Simultaneous production of condensed carbon dioxide and slow setting cement. 1,905,598; Apr. 25.

Loomis, Crawford C., Ilion, N. Y., assignor to Remington Arms Company, Inc. Firearm. 1,905,922; Apr. 25.

Lord, Hugh C. (See Whitehouse, Irving P., assignor.)

Lorenz, Edward H., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for handling glassware. 1,906,476; Apr. 25.

Lorenz, Max, Stuttgart, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Carburetor. 1,905,938; Apr. 25.

Lorensen, Christian, Berlin-Treptow, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill. Making tubular turbine blades. 1,905,944; Apr. 25.

Lothrop, Marcus. (See Hawkins, C. A., Hirschler, and Lothrop.)

Low, Albert H., Denver, Colo. Cigarette. 1,905,410; Apr. 25.

Low, Charles L., Benton Harbor, Mich., assignor to Lisenby Manufacturing Company, Fresno, Calif. Elevator structure and control for printing presses. 1,906,070; Apr. 25.

Lowther, Leonard W., Audubon, N. J., assignor to Horn and Hardart Baking Co., Philadelphia, Pa. Dispensing machine. 1,905,180; Apr. 25.

Luce, Grafton H., Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa. Brick edging machine. 1,906,477; Apr. 25.

Lummus Company, The. (See Coubrough, George R., assignor.)

Lumsden, David, Sikeston, Mo. Overflow trap for automobile radiators. 1,906,072; Apr. 25.

Lundquist, Hendrick W., Los Angeles, Calif. Floor sander. 1,905,296; Apr. 25.

Lunsford, Robert C., jr., assignor to Hughes Tool Company, Houston, Tex. Mounting for acid bottles. 1,905,116; Apr. 25.

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Electric welding. 1,905,478; Apr. 25.

Lutz, George A., Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del. Electric welding. 1,905,479; Apr. 25.

Lutz, George A., and L. E. Kramer, Cranford, N. J., assignors to American Circular Loom Company, Inc., Dover, Del. Electric welding. 1,905,480; Apr. 25.

Lux Clock Manufacturing Company. (See Lux, Paul, assignor.)

Lux, Paul, assignor to Lux Clock Manufacturing Company, Waterbury, Conn. Combined alarm clock case and dial. Des. 89,712; Apr. 25.

Lyon, Harry H., New Rochelle, assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y. Tape feeding device. 1,905,481; Apr. 25.

Macdonald, Alexander D. (See Loomis, C. C., and Macdonald.)

MacDonald, Charles H., San Francisco, Calif. Rod mill. 1,905,417; Apr. 25.

Macbeth, Clifford, Westminster, assignor to British Coal Distillation Limited, London, England. Method of and apparatus for separating solid carbonaceous material from foreign impurities. 1,905,965; Apr. 25.

Mackenzie, Fred L., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Fastening-pulling machine. 1,905,297; Apr. 25.

MacLaren, Frederick H., Hammond, assignor to Standard Oil Company, Whiting, Ind. Wax composition. 1,905,923; Apr. 25.
MacLanchlan, James H., New York, N. Y. Conveyer. 1,905,924; Apr. 25.
Madsen, Carl J. (See Campbell, W. H., Ellsworth, and Madsen.)
Magnesium Development Corporation. (See de Ridder, E., and Altwicker, assignors.)
Magri, Abel A., Rochester, N. Y. Saw adapter. 1,905,482; Apr. 25.
Maluri, Guido, and R. F. Bossini, London, England, assignors, by mesne assignments, to Electrolux Servel Corporation. Absorption refrigerating system. 1,905,727; Apr. 25.
Malcom, Robert. (See Binder, George A., assignor.)
Malcom, Robert, Chicago, Ill. Face protector. 1,904,993; Apr. 25.
Malerba, Robert. (See Conforti, M., and Malerba.)
Malleval, Veuve F., neé Berthe Burlet, Paris, France. Decorating metals. 1,906,168; Apr. 25.
Mallgraf, Ferdinand, Little Neck, assignor to The American Tobacco Company, New York, N. Y. Display device. 1,905,395; Apr. 25.
Malocsay, Francis X., Upper Saddle River, N. J., assignor, by mesne assignments, to Commercial Investment Trust Incorporated. Cigar handling machine. 1,905,728; Apr. 25.
Malone, John M., Pittsburgh, Pa. Steam trap. 1,904,994; Apr. 25.
Mandelert, Charles L., Chippewa Falls, Wis. Hunting coat with detachable pocket. 1,905,235; Apr. 25.
Mangan, George B., Washington, D. C., assignor to Westinghouse Electric & Manufacturing Company. Expulsion fuse. 1,905,236; Apr. 25.
Mangin, James, assignor to New Brunswick Electric Supply Company, New Brunswick, N. J. Adjustable crossbar or strap for electric fixtures. 1,906,197; Apr. 25.
Manning, William H., Pontiac, assignor to General Motors Corporation, Detroit, Mich. Making connecting rods. 1,905,925; Apr. 25.
Man-O-Lamp Corporation. (See Baetz, Walter, assignor.)
Mansitto, Joe, Omaha, Nebr. Electric heater. 1,906,169; Apr. 25.
Marbach, Edward R., and G. F. Cavanagh, assignors to The Ohio Rubber Company, Cleveland, Ohio. Making steering wheels. 1,905,926; Apr. 25.
Marcus, Samuel S. (See Krakauer, S., and Marcus.)
Marden, John W., East Orange, N. J., assignor to Westinghouse Lamp Company. Electron discharge device. 1,905,035; Apr. 25.
Marden, John W., and E. A. Lederer, East Orange, N. J., assignors to Westinghouse Lamp Company. Electron emission device. 1,905,034; Apr. 25.
Marsh, Harry V., Chicago, Ill. Placard. 1,905,927; Apr. 25.
Martel, Edgar J., Laconia, N. H. Chain for automobile tires. 1,905,237; Apr. 25.
Matthens, Arthur S., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Control system. 1,905,238; Apr. 25.
Martin, Dennis E., Glassport, assignor to United States Glass Company, Pittsburgh, Pa. Goblet or similar article. Des. 89,713; Apr. 25.
Martin, Dennis E., Glassport, assignor to United States Glass Company, Pittsburgh, Pa. Goblet or similar article. Des. 89,714; Apr. 25.
Martin, Frederick W., Bronxville, assignor to Franklin Railway Supply Company, New York, N. Y. Flexible pipe coupling for railway vehicles. 1,905,647; Apr. 25.
Martin, Glenn L., Co., The. (See Chevrolet, L., and Parrish, assignors.)
Martin, Joseph, New York, assignor to United States Cabinet Bed Co., Brooklyn, N. Y. Day-bed. 1,905,928; Apr. 25.
Martin, William A., Trenton, Mo. Mausoleum. 1,905,036; Apr. 25.
Mason, Au & Magenheimer Confectionery Manufacturing Company. (See Laskey, William B.)
Mathieu, Gaston A., London, and G. A. Isted, Essex, England, assignors to Radio Corporation of America. Automatic gain control. 1,905,946; Apr. 25.
Matthews, William H., assignor to Frigidaire Corporation, Dayton, Ohio. Refrigerating apparatus. 1,905,037; Apr. 25.
Matthias, Gilbert L., Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Vulcanizing apparatus. 1,905,929; Apr. 25.
Mausin, André E., Paris, France. Device for recording the warp of railway tracks. 1,906,170; Apr. 25.
Maxmoor Corporation. (See Moore, Arlington, assignor.)
May, Benjamin, et al. (See Herman, Raymond L., assignor.)
Maynes, Emma C. (See Maynes, Hyla F., assignor.)
Maynes, Hyla F., assignor of one half to Emma C. Maynes, North Tonawanda, N. Y. Fishing reel. 1,905,483; Apr. 25.
Maywood Chemical Works. (See Weber, F. W., and Schaefer, assignors.)
McCall, Charles D., assignor to Chrysler Corporation, Detroit, Mich. Steering gear mechanism. 1,905,484; Apr. 25.
McCallum, Arthur L., B. P. Sutherland, and J. B. Thompson, Trail, British Columbia, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Canada. Preparing calcium nitrate from phosphate rock. 1,905,930; Apr. 25.
McCarthy, Charles J. (See Alden, J. L., and McCarthy.)
McCarthy, Charles J., et al. (See Ryan, Thomas H., assignor.)
McCarty, Grace V. F., Park Ridge, Ill. Dog collar. 1,906,073; Apr. 25.
McClure, Robert R., Warren, Ohio. Game board. Des. 89,715; Apr. 25.
McCullough, Herbert. (See Hall, William T., assignor.)
McDaniel Glider Incorporated. (See McDaniel, Taylor, assignor.)
McDaniel, Taylor, assignor to McDaniel Glider Incorporated, Washington, D. C. Flying machine. 1,905,288; Apr. 25.
McDonald, William H., Overton, Nev. Advertising device. 1,905,239; Apr. 25.
McDowell, Thomas R., assignor to The Pyle-National Company, Chicago, Ill. Arc reducing electric switch. 1,905,085; Apr. 25.
McFeely, William R., Ponca City, Okla. Removable valve mechanism for underground liquid tanks. 1,905,729; Apr. 25.
McIntosh, Roy E., New York, N. Y., and T. J. Noonan, Jersey City, assignors to J. Edward Ogden Company, Inc., East Orange, N. J. Bolt anchor. 1,905,730; Apr. 25.
McKechnie, Ian C. (See Kent, P. J., and McKechnie.)
McKee, Ralph H., Jersey City, N. J. Digesting pulp and apparatus therefor. 1,905,731; Apr. 25.
McKellar, Marion S., assignor to Hughes Tool Company, Houston, Tex. Antifriction thread for shafts. 1,905,089; Apr. 25.
McLaughlin, William I., Piedmont, and R. G. Wedemeyer, Palo Alto; said Wedemeyer assignor to Standard Oil Company of California, San Francisco, Calif. Instrument for recording inclination. 1,905,290; Apr. 25.
McMahon, William F., Riverside, Calif. Pump piston. 1,905,181; Apr. 25.
McMasters, W. C., et al. (See Badgett, James L., assignor.)
McNeal, Eli H., assignor of one-half to M. Newald, Muskegon, Mich. Garden and flower hoe. 1,906,171; Apr. 25.
McPherson, Clyde G. (See Monroe, Edward B., assignor.)
Mead, Howard C., assignor to Guide Lamp Corporation, Anderson, Ind. Tail lamp. 1,905,182; Apr. 25.
Mead-Morrison Manufacturing Company. (See Snow, Frederick O., jr., assignor.)
Meder, Georg. (See Henle, F., Meder, Lans, and Privinsky.)
Melcher, Lee W., Winnetka, Ill. Air conditioning system for railway cars. 1,905,040; Apr. 25.
Mello, Manuel P., Fall River, Mass. Machine for combing textile fibers. 1,905,300; Apr. 25.
Merchant, Berenice W., Kensington, Md. Cigarette package. 1,906,172; Apr. 25.
Merkt, Gustav A., assignor to Morgan Construction Company, Worcester, Mass. Recirculating system and apparatus for waste furnace gases. Re18,801; Apr. 25.
Mertes, Albert T., Newport, assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del. Production of zinc salt solutions. 1,906,074; Apr. 25.
Metalcraft Corporation. (See Ericson, George E., assignor.)
Metal Textile Corporation. (See De Angelis, Frederick, assignor.)
Metcalf, Irving R., St. Charles, Ill., assignor to Latham Machinery Company. Stitching machine. 1,906,075; Apr. 25.
Metropolitan Device Corporation. (See Murray, Thomas E., jr., assignor.)
Meyes, Robert H., Berlin-Fridenau, Germany. Letter file. 1,905,418; Apr. 25.
"Miag" Mühlenbau und Industrie Aktiengesellschaft. (See Bergen, G., Engelhardt and Steckhan, assignors.)
Michelet, Wilhelm J., Waukegan, Ill. Cabinet desk. 1,905,396; Apr. 25.
Mihalyi, Joseph, assignor to Eastman Kodak Company, Rochester, N. Y. Base type range finder. 1,905,466; Apr. 25.
Miller, Charles, Long Island City, N. Y. Fastener for hand-bags. 1,905,117; Apr. 25.
Miller, David, Brooklyn, N. Y. Collapsible basket. 1,906,173; Apr. 25.
Miller, David, Brooklyn, N. Y. Collapsible basket. 1,906,174; Apr. 25.
Miller, James A., Forest Hills, N. Y. Sound record blank. 1,905,732; Apr. 25.
Miller, Max C., Cumberland, R. I. Knitting machine. 1,905,419; Apr. 25.
Miller Rubber Company Inc. (See Griffiths, Richard T., assignor.)
Miller, Stanley C. (See St. John, E., and Miller.)
Millet, Paul, assignor of one-half to Societe en Nom Collectif dite: Veuve Paul Luc & Cie, Nancy, France. Machine for determining the resisting qualities in wear of leather for soles. 1,906,175; Apr. 25.

Milne, Winford G., assignor to N. Slater Company, Limited, Hamilton, Ontario, Canada. Cable clamp. 1,906,267; Apr. 25.
Milne, Winford G., and W. M. Elliott, assignors to N. Slater Company, Hamilton, Ontario. Eye and loop for anchor rods. 1,905,906; Apr. 25.
Milprint Products Corporation. (See Nelson, John V., assignor.)
Milwaukee Valve Company. (See Fina, Valentine, assignor.)
Miner, Alice T., executrix. (See Miner, W. H., and Sidley.)
Miner, W. H., Inc. (See Fuchs, Henry, assignor.)
Miner, W. H., Inc. (See Hazeltine, Stacy B., assignor.)
Miner, W. H., Inc. (See Miner, W. H., and Sidley, assignors.)
Miner, W. H., Inc. (See O'Connor, John F., assignor.)
Miner, William H., deceased, by A. T. Miner, executrix, Chazy, and W. P. Sidley, executor, Wilmettka, N. Y., assignors to W. H. Miner, Inc., Chicago, Ill. Buffer. 1,905,496; Apr. 25.
Minerals Beneficiation Incorporated. (See Wuensch, Charles R., assignor.)
Minneapolis-Honeywell Regulator Company. (See Leach, Edgar J., assignor.)
Mitchell Battery Company. (See Blakely, Sidney B., assignor.)
Mitchell, John E., Dallas, Tex. Cotton cleaning equipment. 1,906,076; Apr. 25.
Modine, Arthur R., assignor to Modine Manufacturing Company, Racine, Wis. Automobile heater. 1,905,487; Apr. 25.
Modine, Arthur R., assignor to Modine Manufacturing Company, Racine, Wis. Radiator. 1,906,077; Apr. 25.
Modine Manufacturing Company. (See Modine, Arthur R., assignor.)
Mohr, Georg. (See Paschen, P., and Mohr.)
Möller, Waldemar, Berlin-Charlottenburg, assignor to Askania-Werke Aktiengesellschaft, Berlin-Friedenau, Germany. Measuring apparatus. 1,905,491; Apr. 25.
Moncher, Walter. (See Nosik, William A. and R. J., Krocka, and Moncher.)
Monroe Calculating Machine Company. (See Hilder, Stuart, assignor.)
Monroe, Edward B., Bay City, assignor of one-fourth to C. G. McPherson, Black River, Mich. Hydraulic clutch. 1,905,041; Apr. 25.
Monsanto Chemical Works. (See Carswell, T. S., Stehlby, and Alonerij, assignors.)
Monsanto Chemical Works. (See Livingston, John W., assignor.)
Montgomery, James R., et al. (See Carton, Lee C., assignor.)
Moore, Arlington, assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y. Combustion chamber construction. 1,905,905; Apr. 25.
Moore Company, The. (See Wunderlich, William E., assignor.)
Moore, Emmett B., Evanston, Ill. Pressure controlled valve. 1,905,042; Apr. 25.
Moore, Jess G., Los Angeles, Calif. Sterilizer. 1,905,506; Apr. 25.
Moore, Morris C. (See Nicols, A. C., and Moore.)
Moore, William F., Flushing, assignor to The Texas Company, New York, N. Y. Flow divider. 1,905,733; Apr. 25.
Morgan Construction Company. (See Merkt, Gustav A., assignor.)
Morgan, David H., assignor to Truscon Steel Company, Youngstown, Ohio. Gangway. 1,905,947; Apr. 25.
Morgan, Robert M., Alhambra, and S. W. Hardan, Maywood, assignors, by mesne assignments, to Pacific Coast Steel Corporation, San Francisco, Calif. Nutting machine. 1,906,078; Apr. 25.
Morin, George G., Holyoke, Mass. Fluid operated dipper trip. 1,905,188; Apr. 25.
Moritz, Charles V. Effingham, Ill. Road grader. 1,905,420; Apr. 25.
Morrill, Alfred R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe supporting jack. 1,905,184; Apr. 25.
Morrill, Alfred R., Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Driving and stopping mechanism. 1,905,735; Apr. 25.
Morrin, Fearing H., assignor to Standard Oil Company, Whiting, Ind. Heat transfer. 1,905,185; Apr. 25.
Morrison, George O. (See Blaikie, K. G., and Morrison.)
Morrison, Montford, Montclair, N. J., assignor, by mesne assignments, to Westinghouse Lamp Company. Luminous discharge device. 1,905,043; Apr. 25.
Morrison, Montford, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc. Constant potential device. 1,905,044; Apr. 25.
Morrow, Clarence H., assignor to The Hotstream Heater Company, Cleveland, Ohio. Draft regulator. 1,905,734; Apr. 25.
Morse, William G., Fleetwood, F. D. Wilson and H. C. Wagenhorst, Harvey, assignors to Austin Manufacturing Co., Chicago, Ill. Blade adjusting mechanism for road machines. 1,906,079; Apr. 25.
Mott, Samuel R., Noblesville, assignor to Indiana Condensed Milk Company, Indianapolis, Ind. Conveying and unpacking cans and the like. 1,906,126; Apr. 25.
Mushak, Henry R., assignor to The Locomotive Finished Material Company, Atchison, Kans. Spring hoop. 1,906,724; Apr. 25.
Mueller, Charles W., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo. Sewing machine. 1,905,891; Apr. 25.
Multigraph Company. (See Chisholm, Clifton, assignor.)
Mundie Manufacturing Co., The. (See Nolan, Egbert E., assignor.)
Murphy, P. H., Company. (See Bonsall, Charles D., assignor.)
Murray, Thomas E., jr., Brooklyn, N. Y., assignor to Metropolitan Device Corporation. Switch and fuse mounting. 1,906,080; Apr. 25.
Nack, Leo W., Chicago, Ill. Collapsible steel cable reel. 1,906,486; Apr. 25.
Nadell, Aaron, Brooklyn, N. Y. Eradicating typewritten matter. 1,905,118; Apr. 25.
Nash, Arthur D., assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio. Glass container. Des. 89,716; Apr. 25.
Nash, Edgar R. (See Jacobs, C. H., and Nash.)
Nash, Walter H., Arlington, Calif. Bottle stopper and the like. 1,905,201; Apr. 25.
Nathan Manufacturing Company. (See Sharp, John C., assignor.)
Nathanson, Isidore. (See Rodstein, H., and Nathanson.)
National Biscuit Company. (See Greenbelt, Harry A., assignor.)
National Biscuit Company. (See Kreidler, Urban A., assignor.)
National Electric Heating Co. (See Carleton, Robert A., assignor.)
National Machinery Co. (See Clouse, William L., assignor.)
National Paper Box Co. (See Newton, Edwin H., assignor.)
National Rubber Machinery Company. (See Brundage, James W., assignor.)
Naugatuck Chemical Company. (See Cadwell, S. M., assignor.)
Naylor, Carl G., assignor to Naylor Pipe Company, Chicago, Ill. Pipe and making the same. 1,906,010; Apr. 25.
Naylor, Carl G., assignor to Naylor Pipe Company, Chicago, Ill. Tubing or pipe. 1,906,011; Apr. 25.
Naylor Pipe Company. (See Naylor, Carl G., assignor.)
Nekoosa-Edwards Paper Company. (See Pelot, Leon V. and F.)
Nelson, Henry F., La Fayette, Ind. Toy gun. 1,905,737; Apr. 25.
Nelson, John V., Chicago, Ill., assignor, by mesne assignments, to Milprint Products Corporation, Milwaukee, Wis. Machine for wrapping packages. 1,905,432; Apr. 25.
Neptune, Frederick W., assignor to C. G. Conn, Ltd., Elkhart, Ind. Trombone. 1,905,045; Apr. 25.
Neuschotz, Robert, and N. C. Ratner, New York, N. Y. Card table. 1,906,913; Apr. 25.
Newald, Martin. (See McNeal, Eli H., assignor.)
New Brunswick Electric Supply Company. (See Mangin, James, assignor.)
New England Line Company. (See Loomis, C. C., and MacDonald, assignors.)
Newman, Samuel F., and J. G. Harper, assignors to Landis Machine Company, Waynesboro, Pa. Chaser. 1,906,176; Apr. 25.
Newport Industries, Inc. (See Palmer, R. C., Burda, and Oliver, assignors.)
Newton, Edwin H., assignor to National Paper Box Co., Kansas City, Mo. Berry or fruit basket or box. 1,905,119; Apr. 25.
Nicolai, Charles A., and E. Lindegaard, Bloomfield, N. J., assignor to Westinghouse Lamp Company. Machine for feeding coiled sections. 1,905,046; Apr. 25.
Nicols, Andrew C., and M. C. Moore, Girard, Ohio. Safety device. 1,906,081; Apr. 25.
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. High frequency phonograph apparatus. 1,906,214; Apr. 25.
Nicolson, Alexander M., assignor to Communication Patents, Inc., New York, N. Y. Projection system. 1,906,215; Apr. 25.
Nielsen, Peter C., Pocatello, Idaho. Garbage can and holder therefor. 1,906,082; Apr. 25.
Noble, F. H., & Co. (See Shields, John M., assignor.)
Nolan, Squire E., Spring Valley, assignor to The Mundie Manufacturing Co., Peru, Ill. Oil burner. 1,905,930; Apr. 25.
Nonn Electric Corporation. (See Propp, Louis, assignor.)
Noonan, Thomas J. (See McIntosh, R. E., and Noonan.)
Norin, Allan A., assignor to Hanna Engineering Works, Chicago, Ill. Roller wedge riveter. 1,906,047; Apr. 25.
Norquist, Victor C., and N. E. Treanor, assignors to Butler Manufacturing Company, Kansas City, Mo. Filter. 1,905,738; Apr. 25.
Norrick, Stanley A., Newcastle, assignor to The Perfect Circle Company, Hagerstown, Ind. Molding machine. 1,905,490; Apr. 25.
Norris, Charles R., F. M. Curran, and H. W. Van Stonwyk, Grand Rapids, Mich., assignors to Hasbelite Manufacturing Corporation. Making wood mold disc. 1,905,048; Apr. 25.

Northrup, Edwin F., Princeton, N. J. Method and apparatus for producing light. 1,904,995; Apr. 25.
Northwestern Barb Wire Company. (See Gellman, Israel C., assignor.)
Norton Company. (See Belden, A. G., and Silven, assignors.)
Norton Company. (See Dunbar, H. W., and Baker, assignors.)
Norton Company. (See Egger, W. F., and Becker, assignors.)
Norton Company. (See Whittles, Joseph R., assignor.)
Norviel, Harry E., Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio. Lock switch. 1,905,049; Apr. 25.
Norviel, Harry E., deceased, by Anderson Baking Company, executor, assignor to Delco-Remy Corporation, Anderson, Ind. Switch. 1,906,084; Apr. 25.
Norviel, Harry E., deceased, by Anderson Baking Company, executor, assignor to Delco-Remy Corporation, Anderson, Ind. Electric switch. 1,906,085; Apr. 25.
Norviel, Harry E., and V. Ecoff, assignors to Delco-Remy Corporation, Anderson, Ind. Switch. 1,906,083; Apr. 25.
Nosik, Rudolph J. (See Nosik, William A. and R. J., Krocka, and Moncher.)
Nosik, William A. and R. J., J. S. Krocka, and W. Moncher, Milwaukee, Wis. Pajamas. 1,905,948; Apr. 25.
Notvest, Robert, assignor to J. D. Adams Manufacturing Company, Indianapolis, Ind. Coated welding wire. 1,905,848; Apr. 25.
Nowitsky, Herman S., Norfolk, Va. Ventilator. 1,905,599; Apr. 25.
Nowosielski, Edward B., Bloomfield, assignor to Eclipse Aviation Corporation, East Orange, N. J. Making spark plugs. 1,905,600; Apr. 25.
Noyes, Gertrude E. (See Noyes, Hazlehurst R., assignor.)
Noyes, Hazlehurst R., assignor to G. E. Noyes, Los Angeles, Calif. Windowscreen and structure. 1,905,421; Apr. 25.
Null, Abraham E., Memphis, Tenn. Folding table. 1,905,491; Apr. 25.
Oatley, Henry B., Great Neck, assignor to The Superheater Company, New York, N. Y. Superheater. 1,905,789; Apr. 25.
Ocean City Manufacturing Co. (See Godhalk, C. A., Henke, and Behrsing, assignors.)
Ochel, Wilhelm, assignor to A. Borsig, G. m. b. H., Berlin-Tegel, Germany. Regulator for multistage compressor systems. 1,906,012; Apr. 25.
O'Connor, John F., assignor to W. H. Miner, Inc., Chicago, Ill. Shock absorbing mechanism. 1,905,492; Apr. 25.
Oehler Machine Company. (See Schneider, Kurt, assignor.)
Ogden, Clarence E., Cincinnati, Ohio, assignor, by mesne assignments, to The Union Switch & Signal Company. Operating dry disk rectifiers at capacities greater than normal. 1,905,740; Apr. 25.
Ogden, J. Edward, Company. (See McIntosh, R. E., and Noonan, assignors.)
O'Hagan, Bernard E., assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,905,186; Apr. 25.
Ohio Rubber Company, The. (See Bronson, Budd, assignor.)
Ohio Rubber Company, The. (See Marbach, E. R., and Cavanagh, assignors.)
Ohmer Fare Register Company. (See Coil, Grover C., assignor.)
Oilgear Company, The. (See Ferris, John P. and W., assignors.)
Oil Well Supply Company. (See Greve, Edgar E., assignor.)
Old Colony Trust Company, trustee. (See Spencer, Percy L., assignor.)
Oliver, Anthony F. (See Palmer, E. C., Burda, and Oliver.)
Oliver, James H., Aldan, Pa., assignor to General Electric Company. Storage battery voltage regulator. 1,905,741; Apr. 25.
Olofson, Carl F. E., West Orange, and N. O. Lindstrom, Nutley, N. J., assignors to A. B. See Elevator Company, Inc. Electric elevator system. 1,905,742; Apr. 25.
Olpin, Henry C. (See Ellis, G. H., and Olpin.)
O'Neill, Frank, Toledo, Ohio. Glass blank transfer. 1,906,086; Apr. 25.
Orr, Carroll E., Orange, assignor to Elevator Supplies Company, Hoboken, N. J. Circuit controlling mechanism. 1,906,198; Apr. 25.
Osgood, Charles F., Claremont, N. H., assignor to Sullivan Machinery Company. Hoisting mechanism. 1,906,219; Apr. 25.
Oswego Falls Corporation. (See Wright, W. L., and Pierce, assignors.)
Outboard Motors Corporation. (See Irgens, Finn T., assignor.)
Owen, William, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Apparatus for making plate glass. 1,905,743; Apr. 25.
Pacific Coast Steel Corporation. (See Morgan, R. M., and Harder, assignors.)
Pacific Egg Producers Cooperative, Inc. (See Powell, Charles K., assignor.)
Page, Albert E., Brooklyn, and H. Swinglehurst, jr., Floral Park, assignors to Scott & Williams, Incorporated, New York, N. Y. Machine for making knitted fabric. 1,906,204; Apr. 25.
Page, Charles H., Los Angeles, Calif. Drip coffee maker. 1,906,350; Apr. 25.
Paige and Williams Company, The. (See Vrooman, William S., assignor.)
Palmer, Robert C., J. L. Burda, and A. F. Oliver, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc. Purifying rosin. 1,905,493; Apr. 25.
Paper Patents Company. (See Kellett, William E., assignor.)
Paramount Carburetor Corporation. (See Hofbauer, Casper H., assignor.)
Parnell, Charles E., Vinton, Iowa. Variable condenser. 1,906,901; Apr. 25.
Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,904,996; Apr. 25.
Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,904,997; Apr. 25.
Parker, Humphrey F., assignor to Bendix Brake Company, South Bend, Ind. Brake. 1,904,998; Apr. 25.
Parker, Lionel D., Barrow-in-Furness, assignor to Vickers-Armstrongs Limited, Westminster, England. Rotary kiln for burning cement, ore, and similar materials. 1,905,744; Apr. 25.
Parkes, Jeremiah V. B., administrator. (See Parkes, William N.)
Parkes, William N., deceased, Brooklyn, N. Y., by J. V. B. Parkes, administrator, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Needle-thread take-up mechanism for sewing machines. 1,906,087; Apr. 25.
Parkin, Ernest V., Tacoma, Wash. Amalgam mixing device. 1,905,802; Apr. 25.
Patrish, Russell J. (See Chevrolet, L., and Parrish.)
Parsons, Mauran F., Millinocket, Me. Pulp treating process and the product. 1,906,088; Apr. 25.
Paschen, Paul, and G. Mohr, Nuremberg, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Measuring instrument. 1,906,089; Apr. 25.
Pass & Seymour, Inc. (See Burns, Peter E., assignor.)
Pass & Seymour, Inc. (See Despard, Victor R., assignor.)
Patchell, Charles E., Portland, Me. Joint construction for shovel handles and the like. 1,906,218; Apr. 25.
Patent Button Company, The. (See Purinton, Forrest G., assignor.)
Patterson, Frank H., Fredonia, Kans. Quick freezing. 1,905,602; Apr. 25.
Peake, Edward S., assignor to The Kilgore Mfg. Company, Westerville, Ohio. Wheeled toy. 1,905,649; Apr. 25.
Pearson, Victor E. (See Ingram, E. H., and Pearson.)
Peebles, Thomas A., Mount Lebanon, assignor to J. M. Hopwood, Dormont, Pa. Automatic combustion safety control system. 1,905,745; Apr. 25.
Pelts, Wilbur J., assignor to Diehl Manufacturing Company, Elizabeth, N. J. Phonograph driving mechanism. 1,905,746; Apr. 25.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for supplying molten glass. 1,906,494; Apr. 25.
Peller, Karl E., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for supplying molten glass. 1,905,495; Apr. 25.
Pekar, Joseph, Bridgeport, Conn. Antiglare device. 1,906,090; Apr. 25.
Pelot, Frank. (See Pelot, Leon V. and F.)
Pelot, Leon V., Wisconsin Rapids, and F. Pelot, assignors to Nekoosa-Edwards Paper Company, Port Edwards, Wis. Apparatus for and method of cooking wood pulp. 1,905,050; Apr. 25.
Pendergast, James F., Leicester, and E. Johnson, Genesee, N. Y. Parachute. 1,906,091; Apr. 25.
Pennsylvania Wire Glass Company. (See Shuman, Arno, assignor.)
Peo, Ralph F., assignor to Houde Engineering Corporation, Buffalo, N. Y. Shifting device. 1,906,496; Apr. 25.
Perfect Circle Company, The. (See Norrick, Stanley A., assignor.)
Perling, Albert, Paris, Ky. Automatic merchandise displaying device. 1,905,851; Apr. 25.
Permutit Company, The. (See Bruce, William M., assignor.)
Permutit Company, The. (See Lasselle, Percy, assignor.)
Permutit Company, The. (See Liebknecht, Otto, assignor.)
Peter, Joseph. (See Green, Frank E., assignor.)
Peters, Arthur E., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Working implement for percussive tools. 1,905,497; Apr. 25.
Peters, Arthur E., Phillipsburg, assignor to Ingersoll-Rand Company, Jersey City, N. J. Compressor. 1,905,747; Apr. 25.
Peterson, Alfred J. A., Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Protective system for generator field circuits. 1,906,240; Apr. 25.
Peterson, Guy S., East Cleveland, assignor to The Streng-Carlisle & Hammond Company, Cleveland, Ohio. Conveyer furnace. 1,906,092; Apr. 25.

Petroleum Iron Works Co. of Ohio, The. (See Shaner, Edgar E., assignor.)
Pfeifer, Karl, assignor to Chrysler Corporation, Detroit, Mich. Valve spring. 1,905,166; Apr. 25.
Pflueger, Charles T., assignor to The Enterprise Manufacturing Company, Akron, Ohio. Floating bug or lure. 1,905,567; Apr. 25.
Phalen, Maurice J., Marathon, N. Y. Plant spraying machine. 1,906,013; Apr. 25.
Philadelphia Storage Battery Company. (See Fisher, Roy S., assignor.)
Phillips-Jones Corporation. (See Golden, Thomas H., assignor.)
Phillips Petroleum Company. (See Huppke, W. F., and Frey, assignors.)
Phillips Petroleum Company. (See Knowlton, D. E., and Crites, assignors.)
Phillips Petroleum Company. (See Riney, Arthur H., assignor.)
Pierce-Arrow Motor Car Company, The. (See Hughes James E., assignor.)
Pierce, Lee D. (See Wright, W. L., and Pierce.)
Pinto, Joseph. (See Adams, Roy S., assignor.)
Pioneer Instrument Company, Incorporated. (See Simmons, John W., assignor.)
Pirani, Marcello. (See Ewest, H., and Pirani.)
Pittman, Walter P. (See Ford, G. F., and Pittman.)
Pittsburgh Equitable Meter Company. (See Chrisman, H., and Weymouth, assignors.)
Pittsburgh Plate Glass Company. (See Golstharp, Frederick, assignor.)
Pittsburgh Plate Glass Company. (See Johnson, John F., assignor.)
Pittsburgh Plate Glass Company. (See Owen, William, assignor.)
Pittsburgh Plate Glass Company. (See Redshaw, Joseph H., assignor.)
Pittsburgh Reflector Company. (See Carr, James D., assignor.)
Place, Bion C., assignor of one-half to G. H. Gagnier, Detroit, Mich. Wall insert. 1,905,603; Apr. 25.
Podd, Ernest A., Houston, Tex. Spreader clamp. 1,905,051; Apr. 25.
Podolsky, Jacob, Dorchester, Mass. Valve. 1,905,490; Apr. 25.
Polser, Fridolin, South Norwalk, assignor to The H. H. Hotchkiss Company, Norwalk, Conn. Tacking machine. 1,905,241; Apr. 25.
Pomeroy, J. E., et al. (See Badgett, James L., assignor.)
Ponce, Lucien G., Parnassus, assignor to Allegheny Steel Company, Brackenridge, Pa. Pipe thread protector. 1,906,093; Apr. 25.
Porte, René, assignor to Societe Hardoll (Etablissements Harivean & Dollmier et René Porte & Cie reunis) Levallois-Perret, France. Automatic device for measuring and delivering liquids. 1,906,177; Apr. 25.
Porter, David M., Hopkinsville, Ky. Punting machine. 1,905,852; Apr. 25.
Porter, Howard C., La Grange Park, assignor to Signode Steel Strapping Company, Chicago, Ill. Stretching tool. 1,905,052; Apr. 25.
Potter, Ralph K., Landing, N. J., assignor to American Telephone and Telegraph Company. Attenuation units. 1,905,858; Apr. 25.
Potter, Thomas E., Los Angeles, Calif. Table football game. 1,905,908; Apr. 25.
Powell, Alan E., H. C. Davies, and A. W. Scott, assignors to Johnson Matthey & Company Limited, London, England. Preparation and operation of platinum plating baths. 1,906,178; Apr. 25.
Powell, Alan E., H. C. Davies, and A. W. Scott, assignors to Johnson Matthey & Company Limited, London, England. Alkali metal platinates and their manufacture. 1,906,179; Apr. 25.
Powell, Alfred E., Elizabeth, N. J., assignor to The Koppers Company of Delaware. Treatment of gas. 1,905,053; Apr. 25.
Powell, Charles K., Dobbs Ferry, assignor to Pacific Egg Producers Cooperative, Inc., New York, N. Y. Egg marking apparatus. 1,906,094; Apr. 25.
Pranke, Edward J., Bayside, N. Y. Cyanide process. 1,906,804; Apr. 25.
Prentice, Alfred T., Valparaiso, Ind. Internal combustion engine. 1,906,095; Apr. 25.
Prentice, G. E., Manufacturing Company. (See Jacobs, Isidor, assignor.)
Prescott, Frank H., and J. L. Arthur, assignors to Delco-Remy Corporation, Anderson, Ind. Ignition apparatus. 1,906,054; Apr. 25.
Pribil, Alexis E., Saginaw, Mich. Trolley construction. 1,906,097; Apr. 25.
Priddy, Thomas D., Cleveland, assignor to The Formed Steel Products Company, Cleveland, Ohio. Metal studding. 1,906,098; Apr. 25.
Privitsky, Franz. (See Henle, F., Meder, Lanz, and Privitsky.)
Propp, Louis, assignor to Noma Electric Corporation, New York, N. Y. Decorative device. 1,906,500; Apr. 25.
Prynne, Charles W. (See Crespinel, W. T., and Prynne.)
Pwenig, Pfann, O'Hara Township, Allegheny County, Pa. Method of and apparatus for producing coke. 1,906,863; Apr. 25.
Pulfrich, Hans. (See Skaupy, F., West, and Pulfrich.)
Pullen, Rodney S., Akron, Ohio, and W. F. Casey and G. M. Thomas, Philadelphia, Pa., assignors to Pullenite Company. Match packaging machine. 1,906,096; Apr. 25.
Pullenite Company. (See Pullen, R. S., Casey, and Thomas, assignors.)
Pullman Car & Manufacturing Corporation. (See Harris, Charles W., assignor.)
Purinton, Forrest G., assignor to The Patent Button Company, Waterbury, Conn. Mechanism for distributing articles upon a travelling assembling carrier. 1,905,048; Apr. 25.
Pyle-National Company, The. (See McDowell, Thomas R., assignor.)
Pyratone Products Corporation. (See Barrett, Harold G., assignor.)
Queneau, Augustin L. J., New York, N. Y. Roasting oven. 1,906,604; Apr. 25.
Radio Corporation of America. (See Clark, George F., assignor.)
Radio Corporation of America. (See Elliott, Harold F., assignor.)
Radio Patents Corporation. (See Harz, Hermann, assignor.)
Radio Corporation of America. (See Hollerith, Herman, jr.)
Radio Corporation of America. (See Holst, G., Shepherd, and van Lis, assignors.)
Radio Corporation of America. (See Kendall, James M., assignor.)
Radio Corporation of America. (See Mathies, G. A. and Isted, assignors.)
Radke, William A., assignor to The Studebaker Corporation, South Bend, Ind. Tail lamp fixture. 1,906,366; Apr. 25.
Radio, Leopold, Berlin-Halensee, Germany. Metal film. 1,906,199; Apr. 25.
Raley, Thomas C., assignor to Getz Exterminators, Inc., St. Louis, Mo. Distributor for insecticides and the like. 1,905,650; Apr. 25.
Ramsden, John T. (See Wallace, F. R., and Ramsden.)
Randall, Karl C., Edgewood, Pa., assignors to Westinghouse Electric & Manufacturing Company. Circuit breaker. 1,905,501; Apr. 25.
Rankin, Knott C., assignor to Rockland & Rockport Lime Corporation, Rockland, Me. Material for making waterproof mortar and producing the same. 1,905,187; Apr. 25.
Rankin, William K., Lansdowne, Pa., assignor to General Electric Company. Vacuum sealing structure. 1,905,751; Apr. 25.
Rapellin, René, San Gabriel, Calif. Grease gun. 1,906,569; Apr. 25.
Rasmussen, Aksel F., et al. (See Rasmussen, Robert P., assignor.)
Rasmussen, Edvald L., et al. (See Rasmussen, Robert P., assignor.)
Rasmussen, Robert P., assignor of one-fourth to E. L. Rasmussen and one-fourth to A. F. Rasmussen, Chicago, Ill. Air conditioning apparatus. 1,905,422; Apr. 25.
Ratner, Nathaniel C. (See Nemschotz, E., and Ratner.)
Raule, Clifford T., Brooklime, Pa. Safety device for grinders. 1,906,651; Apr. 25.
Redshaw, Joseph H., Homestead Park, Pa., assignor to Pittsburgh Plate Glass Company. Glass drawing apparatus. 1,905,748; Apr. 25.
Reece Button Hole Machine Company, The. (See Gris, Carl A. O., assignor.)
Reed, Harry M., Chattanooga, Tenn., assignor of one-half to H. L. Reis, Birmingham, Ala. Garment hanger cover. 1,904,909; Apr. 25.
Meerink, Engbert H. (See De Groot, W., and Reerink.)
Reed, Byron, Salt Lake City, Utah. Cartridge for medicinal applications. 1,905,752; Apr. 25.
Rees, Edmund S. G., Oxton, England. Propeller, pump, or fan. 1,906,180; Apr. 25.
Reeves, Donald H., assignor to Frigidaire Corporation, Dayton, Ohio. Drinking water cooler fountain. Des. 89,717; Apr. 25.
Reeves, Donald H., assignor to Frigidaire Corporation, Dayton, Ohio. Drinking water cooler fountain. Des. 89,718; Apr. 25.
Reid, Chauncey E., Brownsville, Tex. Frost control machine. 1,905,502; Apr. 25.
Reis, H. L. (See Reed, Harry M., assignor.)
Reisbaw, Rondre E., assignor of one-half to H. A. Gilbertson, Valley City, N. Dak. Weed and foul seed destroying machine. 1,906,137; Apr. 25.
Reliable Knitting Works. (See John, Elmer N., assignor.)
Remington Arms Company, Inc. (See Burns, James E., assignor.)
Remington Arms Company, Inc. (See Loomis, Crawford C., assignor.)
Republic Flow Meters Company. (See Sandison, Alexander G. S., assignor.)
Resch, Henry, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y. Combined typewriting and computing machine. 1,905,905; Apr. 25.
Reuter, Baptist, Kraiking-Planegg, Germany. 4-brom-diethylacetylaminoal-phenyl-2, 3-dimethyl-5-pyrazoline and preparing the same. 1,906,200; Apr. 25.
Reynolds, Clifton G., San Francisco, Calif. Wall board construction. 1,905,897; Apr. 25.

Rayl Corporation. (See Ellis, Carleton, assignor.)
Rhodes, Edmund O., and F. D. Hager, Pittsburgh, Pa., assignors to The American Tar Products Company. Treatment of tar. 1,905,423; Apr. 25.
Ribe, Léon, St. Etienne, France. Superposed barrel. breech-loading firearm. 1,906,216; Apr. 25.
Riccini, Bruno, assignor to Daprato Statuary Company, Chicago, Ill. Lock. 1,905,057; Apr. 25.
Rice, Barton & Fales, Incorporated. (See Kerr, Arthur D., assignor.)
Rich, Charles A., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Nut making machine. 1,906,099; Apr. 25.
Richardson, James H., Indianapolis, Ind. Rolling turner. 1,906,100; Apr. 25.
Richardson, Joseph L., Nashville, Ark. Automobile bed. 1,905,605; Apr. 25.
Richter, George A., W. B. Van Arsdel, and R. B. Hill, assignors to Brown Company, Berlin, N. H. Manufacture of artificial leather. 1,905,749; Apr. 25.
Ricker, Norman H., assignor to Hughes Tool Company, Houston, Tex. Swab plunger. 1,905,058; Apr. 25.
Rickey, Walter J., Helensburgh, and W. Tivendale, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J. Needle straightening machine and method. 1,906,101; Apr. 25.
Riebel, Frederick, jr., and D. M. Dow, assignors to Air Way Electric Appliance Corporation, Toledo, Ohio. Vacuum cleaner. 1,905,059; Apr. 25.
Rieger, Oscar. (See Holland, Sidney S., assignor.)
Riley, Ray, Paterson, N. J., assignor to American Zeolite Corporation, New York, N. Y. Compound silicate gels and making the same. 1,906,181; Apr. 25.
Riney, Arthur H., assignor to Phillips Petroleum Company, Bartlesville, Okla. Protector for threaded pipe ends. 1,906,182; Apr. 25.
Rinman, Erik L., Djursholm, Sweden. Alkalising the waste liquors from the soda or sulphate pulp manufacture for the purpose of making them suitable for dry distillation. 1,906,102; Apr. 25.
Roberts, Eugene, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah. Centrifugal apparatus. 1,906,806; Apr. 25.
Roberts, John A. (See Croasdale, J. P., jr., and Roberts.)
Roberts & Mander Stove Company. (See Antrim, William D., assignor.)
Robertson, Kenneth J. R., assignor to Carrier Engineering Company Limited, London, England. Method and apparatus for cleaning articles, particularly metallic goods. 1,905,968; Apr. 25.
Robertson, Lloyd T., Milwaukee, Wis. System of remote radiocontrol. 1,905,503; Apr. 25.
Robinson, Emmet M., Minneapolis, Minn. Applicator and massage instrument. 1,905,750; Apr. 25.
Rockland & Rockport Lime Corporation. (See Rahkin, Knott C., assignor.)
Rockwood Sprinkler Company of Massachusetts. (See Lofgren, Peter, assignor.)
Rodstein, Harry, and I. Nathanson, New York, N. Y. Footboard for a bedstead or similar article. Des. 89,719; Apr. 25.
Roessler and Hasslacher Chemical Company, The. (See Bond, Harlan A., assignor.)
Roessler & Hasslacher Chemical Company, The. (See Carlisle, P. J., and Ward, assignors.)
Roessler and Hasslacher Chemical Company, The. (See Dobrovolny, Frank J., assignor.)
Rogers, Charles A., L. J., and H. L., Albion, Pa. Heavy duty vehicle. 1,905,242; Apr. 25.
Rogers, Henry C. (See Rogers, Robert, assignor.)
Rogers, Hugh L. (See Rogers, Charles A., L. J., and H. L.)
Rogers, Louis J. (See Rogers, Charles A., L. J., and H. L.)
Rogers, Louis J., Albion, Pa. Method of and apparatus for removing fumes from buildings. 1,905,243; Apr. 25.
Rogers Products Company. (See Albertine, Herman, assignor.)
Rogers, Robert, assignor to H. C. Rogers, Dallas, Tex. Automatic water heater control valve. 1,905,949; Apr. 25.
Rohlin, Victor A., assignor to Cochrane Corporation, Philadelphia, Pa. Apparatus for controlling rate of flow of a liquid. 1,905,244; Apr. 25.
Rohm & Haas Aktiengesellschaft. (See Bauer, Walter, assignor.)
Rohn, Wilhelm, Hanau, assignor to Heraeus-Vacuumschmelze A-G., Hanau-on-the-Main, Germany. Reducing metal oxides. 1,906,184; Apr. 25.
Rollodor Manufacturing Company. (See Barbé, Edgar H., assignor.)
Rome, Jacob, Philadelphia, Pa., assignor to The Allen-Sherman-Hoff Company. Nozzle oscillating means. 1,905,570; Apr. 25.
Ross, Harold J., Penn Township, Allegheny County, Pa., and W. H. Hill, New York, N. Y., assignors to The Koppers Company of Delaware. Treating coal with oil. 1,905,060; Apr. 25.
Rossman, Leo, Newark, N. J. Machine for sewing fastener tape and the like. 1,905,504; Apr. 25.
Ross, Edward, Lawrence, assignor to Draper Corporation, Hopedale, Mass. Loom shuttle. 1,905,000; Apr. 25.
Rossmann, Rudolf, Munich, Germany, assignor to Tefag Textil Finanz A. G. Zurich, Zurich, Switzerland. Loom. 1,906,185; Apr. 25.
Roth, Sol, Columbus, Ohio. Chip container. Des. 89,720; Apr. 25.
Rouse, Adrian P., Oriskany, assignor to General Cable Corporation, New York, N. Y. Metallic composition and making the same. 1,906,505; Apr. 25.
Rowley, Charles A., East Orange, N. J. Cable terminal. 1,906,245; Apr. 25.
Royle, Edwin B. (See Finlay, J. S., and Royle.)
Russe, Félix P., Deptford, London, England. Cigarette making machine. 1,906,014; Apr. 25.
Rubber Service Laboratories Company, The. (See Sibley, Robert L., assignor.)
Rupp, Emil, Berlin-Frohnau, assignor to General Electric Company. Inorganic metal insulation. 1,905,753; Apr. 25.
Russell, George J., Waltham, Mass. Broaching machine. 1,905,506; Apr. 25.
Russell, George J., Waltham, Mass. External broaching machine. 1,905,507; Apr. 25.
Russell, George J., Waltham, Mass. Broach centering apparatus. 1,905,508; Apr. 25.
Russell, George J., Waltham, Mass. Broaching guide. 1,905,509; Apr. 25.
Russell, George J., Waltham, Mass. Cylinder construction. 1,905,510; Apr. 25.
Ruthaldo Company Inc. (See Barthelemy, Henri L., assignor.)
Ryan, Thomas H., assignor of one-sixth to P. J. Boyens and one-sixth to C. J. McCarthy, San Francisco, Calif. Mechanical power transmission. 1,906,103; Apr. 25.
Ryder, Henry K., Laurel, Mont. Gas saver. 1,905,906; Apr. 25.
S. & C. Holding Corporation. (See Sherrick, Samuel T., assignor.)
Saad, John. (See Thomas, Joseph L., assignor.)
Sabourin, Jean B., Norton, Mass. Cigarette making device. 1,905,652; Apr. 25.
Sachs, Joseph, West Hartford, Conn. Electric circuit controlling appliance. 1,905,001; Apr. 25.
Sachs, Joseph, West Hartford, Conn. Electric appliance inclosing cabinet. 1,905,002; Apr. 25.
Sachs, Joseph, West Hartford, Conn. Electric meter service appliance. 1,905,003; Apr. 25.
Sachs, Joseph, West Hartford, Conn. Fuse device. 1,905,004; Apr. 25.
Sack, Ernest, Neuilly, assignor to Compagnie Nationale de Matieres Colorantes et Manufactures de Produits Chimiques du Nord reunis, Etablissements Kuhlmann, Paris, France. Diazo-compound of 2-amino-chloro-1-oxy-3-sulphobensene and its production. 1,906,354; Apr. 25.
Sack, Rud. (See Schirmer, Werner, assignor.)
Safety Mining Company. (See Harris, Allyn, assignor.)
Safir, Charles. (See Safir, Leo C. and C.)
Safir, George and L. C., South Norwalk, Conn. Robe construction. 1,905,685; Apr. 25.
Safir, Leo C. (See Safir, George and L. C.)
Safir, Leo C., South Norwalk, Conn., and C. Safir, New York, N. Y. Garment monogram. 1,905,909; Apr. 25.
Salter, Rudolph J., Townley, assignor to The Singer Manufacturing Company, Elizabeth, N. J. Strip-guiding means for sewing machines. 1,906,104; Apr. 25.
Salute Claire Deville, Etienne, assignor to Societe des Etablissements Gaumont, Paris, France. Film-drawing device for cinematographic apparatus. 1,906,186; Apr. 25.
St. John, Everett, Westport, Conn., and S. C. Miller, Mountain Lakes, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y. Cable suspension. 1,905,761; Apr. 25.
Sandison, Alexander G. S., Kelda, Balta Sound, Shetland Islands, assignor to Republic Flow Meters Company, Chicago, Ill. Electrical recording instrument of the relay type. 1,906,105; Apr. 25.
Sanitary Products Corporation of America. (See Jay, William C., assignor.)
Sato, Seikichi, Sendai, Japan. Self recording dilatometer. 1,905,607; Apr. 25.
Sax, Harry, Chicago, Ill. Shading drawings. 1,905,061; Apr. 25.
Schaefer, Eugene. (See Weber, F. W., and Schaefer.)
Schaefer, Joseph M., assignor to Zenith Radio Corporation, Chicago, Ill. Key-operated device for radio systems. 1,906,106; Apr. 25.
Schaeffers, Joseph, Camden, N. J. Internal combustion engine. 1,905,062; Apr. 25.
Schatzel, Rudolph A. (See Benner, A. A., and Schatzel.)
Schaum, Fletcher, assignor to Fletcher Works, Philadelphia, Pa. Drive release and brake for extractors. 1,905,950; Apr. 25.
Schellens, Christopher A. (See Schellens, Eugene L. and C. A.)
Schellens, Eugene L., Millburn, N. J., and C. A. Schellens, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J. Locomotive. 1,906,063; Apr. 25.
Schick, Jacob, Sound Beach, Conn., assignor to Schick Dry Shaver, Inc. Internal combustion engine. 1,905,754; Apr. 25.
Schicker, Oscar F., Teaneck, N. J. Lace or the like. Des. 89,721; Apr. 25.
Schicker, Oscar F., Teaneck, N. J. Lace or the like. Des. 89,722; Apr. 25.

Schicker, Oscar F., Teaneck, N. J. Lace or the like. Des. 89,723; Apr. 25.
Schierich, Henry, Kansas City, Mo. Control mechanism for steam heating systems. 1,905,005; Apr. 25.
Schirmer, Werner, assignor to Rud Sack, Leipzig, Germany. Agricultural implement. 1,906,107; Apr. 25.
Schlieper, Rudolf, Remscheid-Hasten, Germany. Hydraulic driven washing apparatus. 1,906,424; Apr. 25.
Schloemann Aktiengesellschaft. (See Gussen, Josef, assignor.)
Schlott, Sarah R., St. Paul, Minn. Preserving jar handling means. 1,905,904; Apr. 25.
Schlueter, Henry W., Beverly Hills, Calif. Concrete structural member. 1,906,108; Apr. 25.
Schmidt, Albert G. A., assignor to Cullen-Friestedt Company, Chicago, Ill. Crane. 1,906,109; Apr. 25.
Schmidt, Hans. (See Stretiwolf, K., Fuhrle, Hilmer, and Schmidt.)
Schnakenberg, Henry, Honesdale, Pa. Brake. 1,905,951; Apr. 25.
Schneider, George. (See Dreyfus, C., and Schneider.)
Schneider, Kurt, Brooklyn, N. Y., assignor to Oehler Machine Company, Inc. Automatic light control. 1,905,511; Apr. 25.
Schnell, William, assignor to Ternstedt Manufacturing Company, Detroit, Mich. Method and apparatus for making a sill plate. 1,905,398; Apr. 25.
Schnuck, Carl F., New Haven, and F. H. Bantury, assignors to Farrel-Birmingham Company, Incorporated, Ansonia, Conn. Mixing machine. 1,906,755; Apr. 25.
Schoenfeldt, Henry W., Youngstown, Ohio. Pencil sharpener. 1,905,909; Apr. 25.
Scholes, Howard S. (See Wilmarth, Louis R., assignor.)
Scholl, Bernhard, Rolsdorf, near Duren, assignor to Zimmermann & Jansen, G. m. b. H., Duren-Rhld., Germany. Valve actuating means for air heaters. 1,905,065; Apr. 25.
Schorno, Albert, assignor of one-half to C. Cegler, Grand Rapids, Mich. Ice cream roll cake. 1,905,755; Apr. 25.
Schrader's, A., Son, Incorporated. (See Williams, Belden T., assignor.)
Schram, Charles A., assignor to W. Wood, trading as R. D. Wood & Company, Philadelphia, Pa. Plug for steam plateau and other metallic articles. 1,905,683; Apr. 25.
Schubert, Max. (See Herz, R., and Schubert.)
Schulhof, Baltimore, Md. Steel wool holder. 1,905,907; Apr. 25.
Schulman, Louis, et al. (See Herman, Raymond L., assignor.)
Schur, Milton O., assignor to Brown Company, Berlin, N. H. Deodorization of paper. 1,906,757; Apr. 25.
Schurtz, Ralph R., assignor, by mesne assignments, of one-half to R. W. Bailey and C. F. Jobes, Kansas City, Mo. Refrigerating system. 1,906,906; Apr. 25.
Schutte & Koerting Company. (See Teller, Martin F., assignor.)
Schwartz, Emil W., Bridgeport, Conn., assignor to General Electric Company. Manufacture of electrical insulation. 1,905,760; Apr. 25.
Schwarzkopf, Otto, Linz, Austria. After treatment of artificial silk. 1,906,015; Apr. 25.
Schweisthal, Fred G., assignor to Stewart-Warner Corporation, Chicago, Ill. Mechanical fuel pump. 1,906,246; Apr. 25.
Scott, Arthur W. (See Powell, A. R., Davies, and Scott.)
Scott, Floyd L., assignor to Hughes Tool Company, Houston, Tex. Rolling drill cutter. 1,905,066; Apr. 25.
Scott, Howard, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company. Welding electrode. 1,905,947; Apr. 25.
Scott, Robert F., Charleston, W. Va. Steering mechanism for tractors having endless tread members. 1,905,962; Apr. 25.
Scott & Williams, Incorporated. (See Page, A. R., and Swinglehurst, jr., assignors.)
Scully, John T., New York, N. Y. Friction lighting device. 1,906,217; Apr. 25.
Sease, Virgil B., Perth, N. J., assignor to Du Pont Film Manufacturing Corporation, New York, N. Y. Positive photographic film. 1,906,188; Apr. 25.
Security Engineering Company. (See Hammer, Otto, assignor.)
Seederer-Kohlbusch, Inc. (See Cameron, Hugh M., assignor.)
Selden Company, The. (See Jaeger, A. O., and Daniels, assignors.)
Selden Research & Engineering Corporation. (See Jaeger, Alphons O., assignor.)
Serton Rubber Company, The. (See Keiser, Charles R., assignor.)
Sevison, Harry D., Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill. Weather strip. 1,906,110; Apr. 25.
Shafer, Alvin O., Kalamazoo, Mich. Clamp for saws and the like. 1,905,512; Apr. 25.
Shaner, Edgar E., assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa. Shipping drum. 1,906,905; Apr. 25.
Sharp, John C., Chattanooga, Tenn., assignor to Nathan Manufacturing Company, New York, N. Y. Trunnion for locomotive valve motions. 1,906,800; Apr. 25.
Sharples Specialty Company, The. (See Clark, Lee H., assignor.)
Shaw, Harold F., assignor to F. A. Whitney Carriage Company, Leominster, Mass. Article with associated plunger rod. 1,905,425; Apr. 25.
Shaw, John A. (See Harding, C. P., and Shaw.)
Shay, Edgar, Pleasant Ridge, assignor to Chrysler Corporation, Detroit, Mich. Antiskimming structure for vehicles. 1,905,518; Apr. 25.
Sheaffer, W. A., Pen Company. (See Lindeman, William H., assignor.)
Shell Development Company. (See Davieson, D. W., and Wolke, assignors.)
Shell Development Company. (See van Heuru, Franz C., assignor.)
Shepard, George F., Bethel, Conn. Adjustable combination awning and shutter. 1,905,514; Apr. 25.
Shepherd, Richard. (See Holst, G., Shepherd, and van Lis.)
Sherrick, Samuel T., assignor to S. & C. Holding Corporation, Denver, Colo. Liquid fuel burner. 1,905,907; Apr. 25.
Sherts, James H., Brackenridge, Pa., assignor to Duplate Corporation. Process and apparatus for making composite glass. 1,905,189; Apr. 25.
Shick Dry Shaver, Inc. (See Schick, Jacob, assignor.)
Shields, John M., assignor to F. H. Noble & Co., Chicago, Ill. Box for displaying jewelry and the like. 1,906,111; Apr. 25.
Shields, Thomas T., Los Angeles, Calif. Power unit for slicing machines. 1,905,654; Apr. 25.
Shiffman, Irving. (See Lechowitz, S., and Shiffman.)
Shultz, Charles L., Brookline, Pa. Hospital bed. 1,905,355; Apr. 25.
Shuman, Arno, assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa. Making corrugated wire glass. 1,905,006; Apr. 25.
Sibley, Robert L., Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio. Manufacture of mercaptoarylthiazoles. 1,906,112; Apr. 25.
Sidley, William P., executor. (See Miner, W. H., and Sidley.)
Siemens-Schuckertwerke Aktiengesellschaft. (See Pamhen, P., and Mohr, assignors.)
Signode Steel Strapping Company. (See Porter, Howard C., assignor.)
Silven, Herbert A. (See Belden, A. G., and Silven.)
Silver, Walter H., assignor to Deere & Company, Moline, Ill. Ridge burster. 1,906,113; Apr. 25.
Silverman, Joseph, Chicago, Ill. Aerial craft construction. 1,906,114; Apr. 25.
Silvester, Lisa, et al. (See Silvester, Thomas P., assignor.)
Silvester, Thomas P., assignor of one third to L. Silvester and one third to V. J. Silvester, New York, N. Y. Marble working machine. 1,906,190; Apr. 25.
Silvester, Vincent J., et al. (See Silvester, Thomas P., assignor.)
Simmons Company. (See Berns, John V., assignor.)
Simmons Company. (See Gail, John F., assignor.)
Simmons Company. (See Harman, Frank B., assignor.)
Simmons, John W., Cleveland, Ohio, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y. Speed indicating device. 1,906,187; Apr. 25.
Simpson, John O., assignor to The B. Ingraham Company, Bristol, Conn. Clock. 1,905,955; Apr. 25.
Simpson, William R., Creston, assignor to Thermoid Rubber Company, Trenton, N. J. Burnishing machine. 1,906,201; Apr. 25.
Sinderson, John B., assignor to Barber-Colman Company, Rockford, Ill. Method of and machine for hobbing gears and the like. 1,905,510; Apr. 25.
Sinderson, John B., assignor to Barber-Colman Company, Rockford, Ill. Method of and machine for hobbing gear teeth. 1,905,511; Apr. 25.
Singer, Hayward, et al. (See Tavis, John, assignor.)
Singer, M., & Sons. (See Tavis, John, assignor.)
Singer Manufacturing Company, The. (See Earle, John D., assignor.)
Singer Manufacturing Company, The. (See Pushee, William N., assignor.)
Singer Manufacturing Company, The. (See Risley, W. J., and Tivendale, assignors.)
Singer Manufacturing Company, The. (See Sailer, Rudolph J., assignor.)
Singer, Mendel, et al. (See Tavis, John, assignor.)
Singer, Nathaniel, et al. (See Tavis, John, assignor.)
Singer, Samuel, et al. (See Tavis, John, assignor.)
Sink, James F., Winston-Salem, N. C. Telephone installation apparatus. 1,905,662; Apr. 25.
Sioberg, Charles F., assignor to York Safe & Lock Company, York, Pa. Chest depository. 1,905,873; Apr. 25.
Sirian Lamp Company. (See Henny, John A., assignor.)
Sisseler, Sidney, New Orleans, La. Finger ring. Des. 89,724; Apr. 25.
Sisseler, Sidney, New Orleans, La. Finger ring. Des. 89,725; Apr. 25.
Sisseler, Sidney, New Orleans, La. Finger ring. Des. 89,726; Apr. 25.
Skaife, Arthur F., Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company. Elevator guide system. 1,905,248; Apr. 25.
Skaupy, Franz, Berlin-Lichterfelde, H. Sweet, Berlin, and H. Pulfrich, Berlin-Baumschulenweg, Germany, assignors to General Electric Company. Gaseous electric discharge device. 1,905,750; Apr. 25.

Skoko, Stephen, Portland, Oreg. Combination automobile license carrier, bumper, and release. 1,905,007; Apr. 25.
Slagle, Willard J., assignor to Dewey and Almy Chemical Company, Cambridge, Mass. Rug underlay. 1,905,008; Apr. 25.
Slater, N., Company. (See Milne, Winford G., assignor.)
Slater, N., Company. (See Milne, W. G., and Elliott, assignors.)
Smally, Emanuel C., Canton, Ohio. Incandescent lamp. 1,906,188; Apr. 25.
Smidth, F. L., & Co. (See Ahlmann, Nikolai, assignor.)
Smith, Adelbert B., Newcastle, Ind., assignor to Chrysler Corporation, Detroit, Mich. Bending machine. 1,905,515; Apr. 25.
Smith, Albert L. (See Walker, A. W., and Smith.)
Smith, Alfa K. (See Smith, Carl C. V., assignor.)
Smith, Benjamin A., Lakewood, assignor to The Electric Railway Improvement Company, Cleveland, Ohio. Combined rail bond and clamp. 1,906,115; Apr. 25.
Smith, Carl C. V., assignor to Alfa Klara Smith, Copenhagen, Denmark. Rotary toothbrush. 1,905,656; Apr. 25.
Smith, Earl K. (See Edwards, D. V., and Smith.)
Smith, Fred C., jr. (See Wellensiek, L. H., and Smith.)
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulosic composition of matter containing a dialkyl hydrophthalate. 1,905,516; Apr. 25.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose ester composition of matter containing the tetraethyl ester of a tetracarboxyl derivative of a saturated aliphatic hydrocarbon. 1,905,517; Apr. 25.
Smith, Henry B., assignor to Eastman Kodak Company, Rochester, N. Y. Cellulose organic derivative composition of matter containing a BB'-dialkoxy ethyl carbonate. 1,905,518; Apr. 25.
Smith, Joseph K., Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y. Beryllium aluminum alloy. 1,905,312; Apr. 25.
Smith, Joseph K., Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y. Beryllium aluminum alloy. 1,905,313; Apr. 25.
Smith, Joseph K., Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y. Copper alloy. 1,905,314; Apr. 25.
Smith, Lewis R. (See Jackson, Alfred F., assignor.)
Smith, Lowell J., assignor to Stant Manufacturing Co., Connersville, Ind. Combined paper weight and pen holder. Des. 89,727; Apr. 25.
Smith, Ronald G., Fairfield, Conn. Toy railway system. 1,905,571; Apr. 25.
Smith, Wayne M., and K. W. Haley, Fellows, Calif. Oil well surveying instrument. 1,905,573; Apr. 25.
Smooth Saw Equipment Company. (See Taylor, Samuel M., assignor.)
Smythe, Frank A., assignor to The Thew-Shovel Company, Lorain, Ohio. Tractor. 1,906,116; Apr. 25.
Snow, Frederick O., jr., Winchester, assignor to Mead-Morrison Manufacturing Company, East Boston, Mass. Excavator. 1,905,191; Apr. 25.
Snyder, Christopher H., Berkeley, Calif. Building and constructing the same. 1,906,117; Apr. 25.
Snyder, Franklin L., Sharon,, Pa., assignor to Westinghouse Electric & Manufacturing Company. Tap-changing-underload equipment. 1,905,249; Apr. 25.
Societe des Etablissements Gaumont. (See S. Deville, Etienne, assignor.)
Societe en Nom Collectif dite: Veuve Paul Luc & Cie. (See Millet, Paul, assignor.)
Society of Chemical Industry in Basle. (See Felix, F., and Huber, assignors.)
Soderberg, Sten E. B., Passaic, assignor to Leslie Company, Lyndhurst, N. J. Regulator. 1,905,519; Apr. 25.
Southwark Foundry & Machine Company. (See Stringfellow, Henry A., assignor.)
Speer, Reid C. (See Kirkwood, Harry R., assignor.)
Speidel Chain Co. (See Carlson, Edwin G., assignor.)
Spencer, Percy L., Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company, trustee. Gaseous discharge device. 1,906,110; Apr. 25.
Sperr, Frederick W., jr., Pittsburgh, Pa., assignor to The Koppers Company of Delaware. Apparatus for dehydrating gas. 1,905,068; Apr. 25.
Staege, Stephen A., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Taking up slack. 1,905,250; Apr. 25.
Stair, Ray L., Los Angeles, Calif. Soap dish. 1,905,069; Apr. 25.
Staley, Joseph H. (See Davis, Dean W., assignor.)
Staley, Joseph H., Columbus, Ind. Mercury switch. 1,906,118; Apr. 25.
Standard Conveyor Company. (See Wego, Peter C., assignor.)
Standard Oil Company, The. (See Bruk, Robert E., assignor.)
Standard Oil Company. (See Excell, Stuart W., assignor.)
Standard Oil Company. (See MacLaren, Frederick H., assignor.)
Standard Oil Company. (See Morris, Fearing H., assignor.)
Standard Oil Company. (See Wilson, Robert E., assignor.)
Standard Oil Company (Indiana). (See Wilson, Robert E., assignor.)
Standard Oil Company of California. (See McLaughlin, W. L., and Wedemeyer, assignors.)
Standard Oil Company of California. (See Webster, Hugh B., assignor.)
Standerwick, Reginald G., Marblehead, Mass., assignor to General Electric Company. Elastic fluid turbine. 1,905,760; Apr. 25.
Standish, Myles, Omaha, Nebr. Truck body. 1,905,009; Apr. 25.
Stant Manufacturing Co. (See Smith, Lowell J., assignor.)
Stark, Joseph W. (See Goldsmith, B. J., and Stark.)
Staud, Cyril J. (See Webber, C. S., and Staud.)
Steam Pressing Iron Company. (See Clark, Frederick J., assignor.)
Stecher, Karl. (See Stecher, Leopold, assignor.)
Stecher, Leopold, assignor of one-third to K. Stecher, Wichita, Kans. Poultry water and feed protector. 1,906,016; Apr. 25.
Steckhan, Richard. (See Bergen, G., Engelhardt, and Steckhan.)
Stegeman, Henry J. (See Locke, S. D., Dosch, and Stegeman.)
Stehlby, Ernest T. (See Carswell, T. S., Stehlby, and Aloserij.)
Steigerwald, Christian, Ludwigshafen-on-the-Rhine, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Conversion of methane into liquid hydrocarbons. 1,905,520; Apr. 25.
Steiner, Hans, Winterthur, Switzerland. Cooling facilities for rotary compressors. 1,905,521; Apr. 25.
Steinle, Adolf, assignor to the Firm of Carl Zeiss, Jena, Germany. Telescope sight. 1,905,070; Apr. 25.
Stenglein, Oswald, Markersdorf-Chemnitztal, assignor to Chemnitzer Strickmaschinen-Fabrik, Chemnitz, Germany. Winding frame. 1,905,426; Apr. 25.
Stephenson, Edward B., Washington, D. C. Subaqueous system of artillery fire adjustment. 1,905,315; Apr. 25.
Stephenson, Paul A., Newton, Mass., assignor to Eastman Kodak Company, Rochester, N. Y. Motion picture camera control. 1,905,522; Apr. 25.
Sternberg, Carrie, Philadelphia, Pa. Window clothes rack. 1,905,574; Apr. 25.
Stevens, Richard H., Baltimore, Md., assignor to Bethlehem Steel Company. Ventilator. 1,905,010; Apr. 25.
Stewart, Duncan J., assignor to H. D. Colman, Rockford, Ill. Temperature regulating system. 1,905,011; Apr. 25.
Stewart, Edward E., Wichita Falls, Tex. Treating hydrocarbons. 1,905,671; Apr. 25.
Stewart-Warner Corporation. (See Schweisthal, Fred G., assignor.)
Stewart-Warner Corporation. (See Whitted, John B., assignor.)
Stiemke, Walter H. (See Jett, George C., assignor.)
Stitt, Roger H. (See Clinton, C. H., Theobald, and Stitt.)
Stoddard, Edgar S., Berwyn, assignor to The Conover Company, Chicago, Ill. Dishwashing machine. 1,905,523; Apr. 25.
Stoecklin, Josef, Zurich, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Distance relay for electric lines. 1,905,609; Apr. 25.
Stoeckly, Johann J., and R. Bartunek, Teltow Seehof near Berlin, Germany, assignors to American Glanzstoff Corporation, New York, N. Y. Maintaining the composition of viscose precipitating baths containing magnesium sulphate. Re18,802; Apr. 25.
Stoesser, Sylvia M. (See Grebe, J. J., and Stoesser.)
Stokes and Smith Company. (See Federwitz, T. A., and Bailey, assignors.)
Stoll, Edgar A., South Bend, Ind. Method and apparatus for reducing fuel oil or the like to a comminuted condition. 1,905,610; Apr. 25.
Stone, R. Harry, Irvington, N. J., assignor to Titeflex Metal Hose Co. Die. 1,905,762; Apr. 25.
Strandlund, Carl G., assignor to Deere & Company, Moline, Ill. Cultivator. 1,905,524; Apr. 25.
Strasburger, Lee L., Atlanta, Ga. Apparatus for producing suds. 1,906,953; Apr. 25.
Streitwolf, Karl, Frankfort-on-the-Main, A. Fehrle, Bad Soden-on-the-Taunus, H. Hillmer, Frankfort-on-the-Main, and H. Schmidt, Wuppertal-Vohwinkel, Germany, assignors to Winthrop Chemical Company Inc., New York, N. Y. Water-soluble complex compounds of heavy metals with 3.4-dihydroxybenzene arsonic acid. 1,905,316; Apr. 25.
Stringfellow, Henry A., Philadelphia, assignor to Southwark Foundry & Machine Company, Eddystone, Pa. Cable shearing mechanism. 1,905,317; Apr. 25.
Strobel, Charles K., Pittsburgh, assignor to The Union Switch & Signal Company, Swissvale, Pa. Electrical rectifier. 1,905,525; Apr. 25.
Strong, Carlisle & Hammond Company, The. (See Peterson, Guy S., assignor.)
Struthers, James A. (See Jones, O. A., and Struthers.)
Stuart, Harold V., Milwaukee, Wis. Shoulder strap maintenance device. 1,905,318; Apr. 25.
Stuart, Kenneth B., Pueblo, assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filmed coal and composition of matter for producing same. 1,905,072; Apr. 25.

Stuart, Kenneth B., Pueblo, assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filming coal. 1,905,073; Apr. 25.
Studebaker Corporation, The. (See Radke, William A., assignor.)
Stuebing Automatic Machine Co., The. (See Todd, Frederick C., assignor.)
Sturges, Norman D., New York, N. Y. Storage battery. 1,905,319; Apr. 25.
Sturtevant Mill Company. (See Doyle, William T., assignor.)
Styer, Charles A., Forest Hills, Pa., assignor to Westinghouse Electric Manufacturing Company. Self compensating light control. 1,905,251; Apr. 25.
Sullivan Machinery Company. (See Osgood, Charles F., assignor.)
Sundling, Frits R., assignor of one-fourth to A. J. Christenson, Chicago, Ill. Airplane. 1,906,017; Apr. 25.
Sundling, Frits R., assignor of one-fourth to A. J. Christenson, Chicago, Ill. Airplane. 1,906,018; Apr. 25.
Sunnen, Joseph, Kirkwood, Mo. Combined valve lifter, spring compressor, and replacer. 1,905,012; Apr. 25.
Superheater Company, The. (See Oatley, Henry B., assignor.)
Surface Combustion Corporation. (See Beam, Vilynn O., assignor.)
Surface Combustion Corporation. (See Cowan, Roysel J., assignor.)
Surface Combustion Corporation. (See Cowan, R. J., and Cullen, assignors.)
Sutherland, Brian P. (See McCallum, A. L., Sutherland, and Thompson.)
Sutherland, Wallace B., Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,905,575; Apr. 25.
Sutherland, Wallace B., Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del. Brake shoe. 1,905,576; Apr. 25.
Sutton, William S., Rockford, Ill. Radio apparatus. 1,906,189; Apr. 25.
Svensson, Victor A., Montclair, assignor to The Bates Manufacturing Company, West Orange, N. J. Numbering machine. 1,906,019; Apr. 25.
Swanson, Hjalmar A., Chicago, Ill., assignor to Cummins Perforator Company. Type carrying cylinder. 1,905,526; Apr. 25.
Swayze, Clare S., assignor to Delco-Remy Corporation, Anderson, Ind. Coil test apparatus. 1,906,020; Apr. 25.
Sweeley, Edward A., Alexandria, Va., and N. T. Anderson, Washington, D. C. Heater for refrigerator cars and other structures. 1,905,954; Apr. 25.
Swinglehurst, Harry, jr. (See Page, A. E., and Swinglehurst.)
Symington, T. H., & Son, Inc. (See Symington, Thomas H., assignor.)
Symington, Thomas H., assignor to T. H. Symington & Son, Inc., Baltimore, Md. Railway car truck springs. 1,905,252; Apr. 25.
Syphonator Company. (See Jacobs, C. H., and Nash, assignors.)
Tabor Manufacturing Company, The. (See Wallace, F. E., and Ramsden, assignors.)
Tabulating Machine Company, The. (See Hoffman, Morris J., assignor.)
Tagliabue, Charles J., Mfg. Co. (See Bast, Frank J., assignor.)
Talbot, Howard H., assignor to United Engineering & Foundry Company, Pittsburgh, Pa. Reel. 1,905,192; Apr. 25.
Tarbox, John P., assignor to Budd Wheel Company, Philadelphia, Pa. Brake cooling system. 1,906,657; Apr. 25.
Tauts, Herbert E., assignor to Delta Manufacturing Company, Milwaukee, Wis. Surfacing tool. 1,906,190; Apr. 25.
Tavis, John, Bayside, assignor to M., S., N., and H. Singer, copartners trading as M. Singer & Sons, New York, N. Y. Upholstered sofa or similar article. Des. 89,728; Apr. 25.
Taylor, Frederick A., Tadworth, England. Windscreen. 1,905,763; Apr. 25.
Taylor Instrument Companies. (See Amdursky, Samuel S., assignor.)
Taylor Instrument Companies. (See Kinsman, Russell C., assignor.)
Taylor, Samuel M., assignor to Smooth Saw Equipment Company, Loyalton, Calif. Tooth swage. 1,905,013; Apr. 25.
Taylor, Thos. P., Company, The. (See Hammond, Myron B., assignor.)
Tefag Textil Finanz A. G. Zurich. (See Roesmann, Rudolf, assignor.)
Teller, Martin P., assignor to Schutte & Koerting Company, Philadelphia, Pa. Combined shut off and trip valve. 1,905,014; Apr. 25.
Ternstedt Manufacturing Company. (See DeOrlow, Stephen, assignor.)
Ternstedt Manufacturing Company. (See Schnell, William, assignor.)
Terry, Charles M., assignor to A. W. Cash Company, Decatur, Ill. Method and apparatus for controlling combustion. 1,905,606; Apr. 25.
Testi, Nicholas, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass. Safety razor. 1,905,764; Apr. 25.
Texas Company, The. (See Moore, William F., assignor.)
Textile Patent & Process Co., Incorporated. (See Cotchett, Louis M., assignor.)
Tharp, Bessie M., administratrix. (See Tharp, Victor S.)
Tharp, Victor S., deceased, Hinsburst, by Bessie M. Tharp, administratrix, assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Telephone system. 1,905,765; Apr. 25.
Theobald, Paul F., et al. (See Clinton, C. H., Theobald, and Stitt.)
Thermoid Rubber Company. (See Simpson, William R., assignor.)
Thew-Shovel Company, The. (See Smythe, Frank A., assignor.)
Thomann, Albert H. (See Thomann, Alois and A.)
Thomann, Alois A., Brookline, and A. H. Thomann, Medford, Mass. Motor vehicle speedometer. 1,905,015; Apr. 25.
Thomas, Bertram and R., Hulme, Manchester, England. Box and shelves and partitions therefor. 1,906,191; Apr. 25.
Thomas, Charles C. H., Mill Valley, Calif. Concrete block molding machine. 1,906,975; Apr. 25.
Thomas, Eustace. (See Thomas, Bertram and R.)
Thomas, George F., Berwyn, and O. J. Herb, assignors to Alemite Corporation, Chicago, Ill. Gravity lubricating system. 1,905,527; Apr. 25.
Thomas, George M. (See Pullen, R. S., Casey, and Thomas.)
Thomas, Joseph L., Milan, assignor of one-half to J. Saad, Spokane, Wash. Ash receiver. 1,906,403; Apr. 25.
Thomas, Mable M., executrix. (See Thomas, Thomas H.)
Thomas, Thomas H., deceased, Edgewood, by M. M. Thomas, executrix, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car equipment. 1,905,258; Apr. 25.
Thompson, Howard A., Edgewood, assignor to The Union Switch & Signal Company, Swissvale, Pa. Railway traffic controlling apparatus. 1,906,021; Apr. 25.
Thompson, Joshua B. (See McCallum, A. L., Sutherland, and Thompson.)
Thompson, Louis W., Schenectady, N. Y., and M. Zucker, Royal Oak, Mich., assignors to General Electric Company. Power responsive means. 1,905,766; Apr. 25.
Thompson Products, Incorporated. (See Cox, John R., assignor.)
Thomson, Henry A., Lansdowne, assignor to Globe Ticket Company, Philadelphia, Pa. Ticket printing and issuing machine. 1,905,659; Apr. 25.
Thornley, Joseph H., Evanston, Ill. Pile driver. 1,905,528; Apr. 25.
Thum, Walter A. (See Chapin, Fenton G., assignor.)
Titeflex Metal Hose Co. (See Stone, R. Harry, assignor.)
Tivendale, William. (See Rickey, W. J., and Tivendale.)
Tobin, Kenneth J., assignor to Camel Company, Chicago, Ill. Pliable clock block. 1,906,022; Apr. 25.
Tobin, Kenneth J., Chicago, Ill. Incinerator appliance for heating units. 1,906,023; Apr. 25.
Todd, Frederick C., assignor to The Stuebing Automatic Machine Co., Cincinnati, Ohio. Metal binding for calendars. 1,906,024; Apr. 25.
Toledo Porcelain Enamel Products Company, The. (See Lind, Howard B., assignor.)
Topham, Laurence E., Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J. Shoe sewing machine. 1,905,074; Apr. 25.
Torio, Thomas, Corona, N. Y. Shoe. 1,905,529; Apr. 25.
Totzek, Friedrich, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa. Retort oven for producing gas and coke. 1,905,075; Apr. 25.
Trans-Lux Daylight Picture Screen Corporation. (See Lynn, Harry H., assignor.)
Traphagen, Harry R., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Universal footpiece for cultivator shovels and the like. 1,905,016; Apr. 25.
Traphagen, Harry R., Rockford, Ill., assignor to J. I. Case Company, Racine, Wis. Fertiliser boot. 1,905,767; Apr. 25.
Travis, Bert, Santa Fe Springs, Calif. Cat line spool. 1,905,577; Apr. 25.
Treanor, Earl E. (See Norquist, V. C., and Treanor.)
Trimble, E., et al. (See Carton, Lee C., assignor.)
Trogner, Arthur M., Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y. Combined clock and radio system. 1,905,193; Apr. 25.
Trueman, Walter B., Mattoon, Ill. Closure fastener. 1,905,320; Apr. 25.
Trupar Manufacturing Company. (See Lindsay, Lynn G., assignor.)
Truscon Steel Company. (See Morgan, David H., assignor.)
Tucker, John T., Berkeley, Calif. Fruit peeler. 1,905,578; Apr. 25.
Tucker, Louis, Chicago, Ill. Combined lamp and fan. Des. 89,729; Apr. 25.
Tuck-Tite Lock and Fastener Company Limited. (See Widmer, Harry A., assignor.)
Tufts, Edward P., Bow, N. H. Sawmill dog. 1,905,768; Apr. 25.
Tuvek, Joseph A. V., Wilmette, assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill. Calculating machine. 1,905,579; Apr. 25.

Turner, Dee, Hollywood, Calif. Exercising apparatus. 1,905,019; Apr. 25.
Tyler, De Witt C., Chicago, Ill. Soap dispensing apparatus. 1,905,611; Apr. 25.
Ulrich, Horace W., Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Telephone system. 1,905,662; Apr. 25.
Underwood Elliott Fisher Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Elliott Fisher Company. (See Resch, Henry, assignor.)
Underwood Machinery Company. (See Foley, Ernest L., assignor.)
Ungerer, Fritz, Pforzheim, Germany. Adjusting device for plate straightening machines. 1,905,530; Apr. 25.
Union Bank & Trust Co. of Los Angeles, administrator. (See Delaney, John H.)
Union Switch & Signal Company, The. (See Bossart, Paul N., assignor.)
Union Switch & Signal Company, The. (See Crago, Paul H., assignor.)
Union Switch & Signal Company. (See Liebel, J. G. H., and Jacquelet, assignors.)
Union Switch & Signal Company, The. (See Ogden, Clarence E., assignor.)
Union Switch & Signal Company. (See O'Hagan, Bernard E., assignor.)
Union Switch & Signal Company, The. (See Strobel, Charles K., assignor.)
Union Switch & Signal Company, The. (See Thompson, Howard A., assignor.)
Unipress Company, The. (See Lindemann, Frederick W., assignor.)
United Engineering & Foundry Company. (See Biggert, F. C., jr., and Johnson, assignors.)
United Engineering & Foundry Company. (See Kohler, Kurt P., assignor.)
United Engineering & Foundry Company. (See Talbot, Howard H., assignor.)
United Research Corporation. (See Berkowitz, Michael, assignor.)
United Screw and Bolt Corporation. (See Fieg, Joseph F., assignor.)
United Shoe Machinery Corporation. (See Adams, Oscar C., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred assignor.)
United Shoe Machinery Corporation. (See Brandt, Francis L., assignor.)
United Shoe Machinery Corporation. (See Finn, Sidney J., assignor.)
United Shoe Machinery Corporation. (See Mackenzie, Fred L., assignor.)
United Shoe Machinery Corporation. (See Morrill, Alfred R., assignor.)
United Shoe Machinery Corporation. (See Topham, Laurence E., assignor.)
United States Cabinet Bed Co. (See Martin, Joseph, assignor.)
United States Glass Company. (See Martin, Dennis E., assignor.)
United States Gypsum Company. (See Clinton, C. H., Theobald, and Stitt, assignors.)
United States Gypsum Company. (See Gough, Fred J., assignor.)
United States Process Corporation. (See Heuser, Herman and R. S., assignors.)
U. S. Slicing Machine Company. (See Folk, Joseph, assignor.)
U. S. Slicing Machine Company. (See van Berkel, Cornelis F. M., assignor.)
University of Cincinnati, Board of Directors of the. (See Kersten, Harold J., assignor.)
Urschel, William E., Valparaiso, Ind. Harvesting machine. 1,905,194; Apr. 25.
Vallas, Lionel, Chicago, Ill. Roof flashing. 1,905,017; Apr. 25.
Van Arsdel, Wallace B., et al. (See Richter, G. A., Van Arsdel, and Hill.)
Van Berkel, Cornelis F. M., Wassenaar, Holland, assignor to U. S. Slicing Machine Company, La Porte, Ind. Slicing machine. 1,905,531; Apr. 25.
Vangrevenynge, Charles, La Celle-St. Cloud, and H. Ellon, Paris, France. Metal alloy. 1,906,192; Apr. 25.
Van Heurn, Frans C., Amsterdam, Netherlands, assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif. Manufacturing ebonite in which stone chippings or the like are incorporated. 1,905,404; Apr. 25.
Van Hise, Amos S., Brooklyn, N. Y. Combined fountain pen and desk stand holder therefor. Des. 89,730; Apr. 25.
Van Hise, Amos S., Brooklyn, N. Y. Combined fountain pen and desk stand holder therefor. Des. 89,731; Apr. 25.
Van Lis, Pieter H. A. (See Holst, G., Shepherd, and van Lis.)
Vannah, Harold P., West Palm Beach, Fla., assignor to Brown Company, Berlin, N. H. Fungicide. 1,905,532; Apr. 25.
Van Sciver, Lloyd, Chestnut Hill, Pa. Walking stick. 1,905,076; Apr. 25.
Van Sickle, Frank B. (See Brown, C. A., and Van Sickle.)
Van Steenkiste, Theodore, Chicago, Ill. Game apparatus. 1,906,025; Apr. 25.
Van Steenwyk, Hendrik W. (See Norris, C. B., Curran, and Van Steenwyk.)
Velen, Luther T., Cheswold, Del. Shock handling machine. 1,905,321; Apr. 25.
Vickers-Armstrongs Limited. (See Parker, Lionel D., assignor.)
Vitale, Vincent V., Brooklyn, N. Y. Signal device. 1,906,193; Apr. 25.
Voelker, Fred, jr., assignor to Blaw-Knox Company, Pittsburgh, Pa. Material measuring and handling apparatus. 1,905,018; Apr. 25.
Vogel, Max, Frankfort-on-the-Main, Germany, assignor to The E. H. Hotchkiss Company, Norwalk, Conn. Stapling machine. 1,905,254; Apr. 25.
Vogt, Clarence W., assignor to Vogt Instant Freezers, Incorporated, Louisville, Ky. Frozen comestible package. 1,906,183; Apr. 25.
Vogt Instant Freezers, Incorporated. (See Vogt, Clarence W., assignor.)
Von Fischer, Waldemar, assignor to Fa. Richard Biel, Hamburg, Germany. Tilting device for sliding windows. 1,906,026; Apr. 25.
Von Platen, Baltzar C., Stockholm, Sweden. Electric machine. 1,905,660; Apr. 25.
Voorhees, Daniel W., jr., Peru, Ill. Steel wheel. 1,905,661; Apr. 25.
Vroman, William S., assignor to The Paine and Williams Company, Cleveland, Ohio. Automobile running board and the like. 1,905,769; Apr. 25.
Wackman, Louis B., St. Louis, Mo. Bushing and solder sealed cap therefor for metallic containers. 1,905,969; Apr. 25.
Wadd, Roy J., assignor to Harnischfeger Corporation, Milwaukee, Wis. Crane type charger. 1,905,195; Apr. 25.
Wadman, Harold A., assignor to Hartford-Empire Company, Hartford, Conn. Forehearth of glass melting furnaces. 1,905,533; Apr. 25.
Wadman, Harold A., West Hartford, assignor to Hartford-Empire Company, Hartford, Conn. Apparatus for and method of making glass. 1,905,534; Apr. 25.
Wachner, Paul E., Brooklyn, N. Y. Receptacle. 1,905,955; Apr. 25.
Wagner Electric Corporation. (See Weichsel, Hans, assignor.)
Wagner, John A., Decatur, Ill. Marker unit. 1,905,612; Apr. 25.
Wagner, L. A. (See Williams, William J., assignor.)
Wagner, Richard E., Rockaway Park, N. Y. Water softening apparatus. 1,905,021; Apr. 25.
Wagner, Tosca, Seattle, Wash. Brush for eyelashes and eyebrows. 1,905,899; Apr. 25.
Wahl Clipper Corporation. (See Wahl, Leo J., assignor.)
Wahl, Leo J., assignor to Wahl Clipper Corporation, Sterling, Ill. Vibrator control device. 1,906,027; Apr. 25.
Wakefield, C. C. & Company. (See Bliss, John, assignor.)
Waldron, John, Corporation. (See Banner, Otto A., assignor.)
Walker, Arthur W., Malden, and A. L. Smith, West Medway, assignors to Walker & Pratt Mfg. Co., Boston, Mass. Electric heating unit and manufacturing same. 1,905,770; Apr. 25.
Walker, Burnett. (See Lambert, Alvan R., assignor.)
Walker, Henry A., Rockport, Wash. Safety means for hydraulic brakes. 1,905,077; Apr. 25.
Walker, John S., assignor to Kant-Glare Manufacturing Company, Incorporated, Pittsburgh, Pa. Antiglare device. 1,905,822; Apr. 25.
Walker & Pratt Mfg. Co. (See Walker, A. W., and Smith, assignors.)
Walker, Warren R., Bloomfield, N. J., assignors to General Electric Vapor Lamp Company. Switch mounting. 1,905,771; Apr. 25.
Wallace, Archibald L., Brooklyn, N. Y. Continuous vulcanizing apparatus. 1,905,663; Apr. 25.
Wallace, Edward, Cleveland Heights, Ohio. Attachment for vehicles. 1,905,823; Apr. 25.
Wallace, Frank R., and J. T. Ramsden, assignors to The Tabor Manufacturing Company, Philadelphia, Pa. Automatic equalizing support. 1,905,020; Apr. 25.
Walsh, James F., South Orange, and A. F. Caprio, Newark, N. J., assignors to Celluloid Corporation. Modifier for cellulose acetate plastics. 1,905,535; Apr. 25.
Walton, Julian N., Brooklyn, N. Y., assignor to The Anchor Packing Company, Philadelphia, Pa. Packing means for shafts. 1,905,772; Apr. 25.
Waltz, Susie R., Ross, Calif. Necktie. 1,906,120; Apr. 25.
Ward, Raleigh P. (See Carlisle, P. J., and Ward.)
Wardwell, Henry F., and W. C. Bladin, Chicago, Ill. Side bearing for railway cars. 1,905,196; Apr. 25.
Waters, Millard F., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Pipe coupling. 1,905,524; Apr. 25.
Watson, Cecil A. B., Auckland, New Zealand. Exposure indicator attachment to photographic cameras. 1,905,956; Apr. 25.
Watson, Thomas, et al. (See Carton, Leo C., assignor.)
Weatherhead, Albert J., jr., Cleveland, Ohio. Producing a controlling device. 1,905,664; Apr. 25.
Weatherhead, Albert J., jr., and J. D. Baldwin, jr., Cleveland, Ohio; said Baldwin assignor to said Weatherhead. Producing couplings. 1,905,665; Apr. 25.

Webb, Hartwell W., assignor to A C Spark Plug Company, Flint, Mich. Flexible cable. 1,905,197; Apr. 25.
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Hydrolysis of cellulose acetate. 1,905,536; Apr. 25.
Webber, Charles S., Springfield, Mass., and C. J. Staud, assignors to Eastman Kodak Company, Rochester, N. Y. Hydrolysis of cellulose acetate. 1,905,537; Apr. 25.
Weber, Arthur E., Forest Hill, and J. A. Howard, Streatham Hill, London, England, assignors to The Hairlock Company, Inc., New York, N. Y. Upholstery pad and making the same. 1,906,028; Apr. 25.
Weber, Friedrich W., Hackensack, and E. Schaefer, Englewood, assignors to Maywood Chemical Corks, Maywood, N. J. Method for weighting artificial silk consisting of cellulose esters. 1,906,306; Apr. 25.
Webster, Benjamin C., Southport, assignor to The Bryant Electric Company, Bridgeport, Conn. Attachment plug with pilot light. 1,906,104; Apr. 25.
Webster, Hugh B., Oakland, assignor to Standard Oil Company of California, San Francisco, Calif. Instrument for recording inclination. 1,905,546; Apr. 25.
Wedemeyer, Rupert G. (See McLaughlin, W. I., and Wedemeyer.)
Wege, Peter C., St. Paul, assignor to Standard Conveyor Company, North St. Paul, Minn. Sealed bearing. 1,906,066; Apr. 25.
Weichert, Max. (See Denstädt, Hermann and F., and Weichert.)
Weichsel, Hans, assignor to Wagner Electric Corporation, St. Louis, Mo. Single phase motor. 1,905,773; Apr. 25.
Weinig, Arthur J., and R. H. Cuthbertson, Golden, Colo., assignors to The American Metal Company, Limited, New York, N. Y. Ore separation. 1,906,029; Apr. 25.
Weinreich, George F., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill. Train-control trackway equipment. 1,905,667; Apr. 25.
Weisker, Ellis, Bronx, N. Y. Apparatus for illuminating objects to be reproduced. 1,906,588; Apr. 25.
Welke, Ferdinand G. (See Davisson, D. W., and Welke.)
Wellensiek, Louis H., assignor to Hughes Tool Company, Houston, Tex. Core drill reamer. 1,905,078; Apr. 25.
Wellensiek, Louis H., and F. C. Smith, jr., assignors to Hughes Tool Company, Houston, Tex. Roller cutter retaining device. 1,905,079; Apr. 25.
Wendtland, Heinz, Altona-on-the-Elbe, Germany. Water lock for acetylene generators. 1,905,198; Apr. 25.
Wensley, Roy J., Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company. Remote control system. 1,905,255; Apr. 25.
Wesix National Company. (See Kercher, A. J., and Hicks, assignors.)
Wessman, Edwin G., assignor to Individual Drinking Cup Company, Inc., Easton, Pa. Dispenser. 1,905,613; Apr. 25.
West, George E., Washington, D. C. Cap for containers. 1,905,356; Apr. 25.
Western Electric Company. (See Alden, J. L., and McCarthy, assignors.)
Western Electric Company. (See Hardisty, Rupert W., assignor.)
Western States Machine Company, The. (See Roberts, Eugene, assignor.)
Westinghouse Air Brake Company, The. (See Thomas, Thomas H., assignor.)
Westinghouse Electric Elevator Company. (See Dunlop, James, assignor.)
Westinghouse Electric & Manufacturing Company. (See Barton, James P., assignor.)
Westinghouse Electric & Manufacturing Company. (See Bradshaw, William M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Campbell, W. H., Ellsworth, and Madsen, assignors.)
Westinghouse Electric & Manufacturing Company. (See Corey, Flournoy, assignor.)
Westinghouse Electric & Manufacturing Company. (See Eames, William F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Erickson, Ellis O., assignor.)
Westinghouse Electric & Manufacturing Company. (See Foresman, Robert A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Hoard, Bert V., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, Henry D., assignor.)
Westinghouse Electric & Manufacturing Company. (See James, H. D., and Currie, assignors.)
Westinghouse Electric & Manufacturing Company. (See James, H. D., and Fish, assignors.)
Westinghouse Electric & Manufacturing Company. (See Labberton, John M., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mangan, George B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Marthens, Arthur S., assignor.)
Westinghouse Electric & Manufacturing Company. (See Peterson, Alfred J. A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Randall, Karl C., assignor.)
Westinghouse Electric & Manufacturing Company. (See Scott, Howard, assignor.)
Westinghouse Electric & Manufacturing Company. (See Skaife, Arthur F., assignor.)
Westinghouse Electric & Manufacturing Company. (See Snyder, Franklin L., assignor.)
Westinghouse Electric & Manufacturing Company. (See Steere, Stephen A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Styer, Charles A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Wensley, Roy J., assignor.)
Westinghouse Electric & Manufacturing Company. (See White, Thomas U., assignor.)
Westinghouse Lamp Company. (See Amatel, Harold, assignor.)
Westinghouse Lamp Company. (See Marden, John W., assignor.)
Westinghouse Lamp Company. (See Marden, J. W., and Lederer, assignors.)
Westinghouse Lamp Company. (See Morrison, Montford, assignor.)
Westinghouse Lamp Company. (See Nicolai, C. A., and Lindegaard, assignors.)
Westinghouse X-Ray Company. (See Morrison, Montford, assignor.)
Weymouth, Harry G. (See Chrisman, H., and Weymouth.)
Wheat, Grant, assignor to Koehler Manufacturing Company, Marlboro, Mass. Portable electric lamp. 1,905,774; Apr. 25.
Whelchel, Rupert C., assignor to Delco-Remy Corporation, Anderson, Ind. Armature test machine. 1,906,000; Apr. 25.
White, Charles H., assignor to Deere & Company, Moline, Ill. Middle burster. 1,905,022; Apr. 25.
White, Everett H., St. Paul, Minn. Remote control regulator motor. 1,905,325; Apr. 25.
White, Jay E., assignor to Chrysler Corporation, Detroit, Mich. Control apparatus for radio receiving instruments. 1,905,539; Apr. 25.
White, John W., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich. Method of and apparatus for forming and testing switches. 1,905,668; Apr. 25.
White, Thomas U., Pittsburgh, Pa., assignor to Westinghouse Electric Manufacturing Company. Control system. 1,905,256; Apr. 25.
White, William E., assignor to Kalman Steel Company, Chicago, Ill. Bead strip and support. 1,905,923; Apr. 25.
Whitehouse, Irving P., assignor to H. C. Lord, Erie, Pa. Mounting. 1,905,540; Apr. 25.
Whitney, F. A., Carriage Company. (See Shaw, Harold F., assignor.)
Whitted, John B., assignor to Stewart-Warner Corporation, Chicago, Ill. Thermostat radiator shutter control. 1,905,257; Apr. 25.
Whittles, Joseph R., Rockford, Ill., assignor to Norton Company, Worcester, Mass. Hydraulically actuated table reciprocating mechanism. 1,905,080; Apr. 25.
Wicke, A. C., Manufacturing Company. (See Wicke, Charles E., assignor.)
Wicke, Charles E., Mount Vernon, assignor to A. C. Wicke Manufacturing Company, New York, N. Y. Illuminated refrigerator display case. 1,905,775; Apr. 25.
Widmer, Harry Alphonse, assignor to Tuck-Tite Lock and Fastener Company Limited, London, England. Fastening. 1,905,199; Apr. 25.
Wiener, John A., and J. B. Harmon, Oswego, N. Y. Fireproof wall board. 1,905,541; Apr. 25.
Wikstrand, Andres, Mora, Sweden. Cable tightening and holding device for load pulling apparatus. 1,905,542; Apr. 25.
Wilcox, William D., Lawrence, Kans. Producing mixtures of carbon monoxide and hydrogen. 1,905,326; Apr. 25.
Wilford, Edward Burke, Merion, Pa. Aircraft. 1,905,776; Apr. 25.
Willheim, William, Co. (See Guhl, Maclyn, assignor.)
Williams, Charles E., assignor to General Motors Corporation, Detroit, Mich. Carburetor. 1,905,258; Apr. 25.
Williams, Lynn A., et al., trustee. (See Bracke, Robert F., assignor.)
Williams, Selden T., Bellerose, assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y. Air chuck. 1,905,777; Apr. 25.
Williams, William J., South Gate, assignor of one-half to L. A. Wagner, Los Angeles, Calif. Mechanism for recording rotation of a well-surveying instrument. 1,905,200; Apr. 25.
Wilmarth, Louis R., Attleboro, Mass., assignor to Howard S. Scholes, Edgewood, R. I. Article holder. 1,906,031; Apr. 25.
Wilson, Allen B., assignor to Acme Steel Company, Chicago, Ill. Container and forming same. 1,906,032; Apr. 25.
Wilson, Fred D. (See Morse, W. G., Wilson, and Wuestenberg, A.)
Wilson-Jones Company. (See Irving, Clarence B., assignor.)
Wilson, Robert E., assignor to Standard Oil Company, Chicago, Ill. Vacuum distillation. 1,905,201; Apr. 25.
Wilson, Robert E., assignor to Standard Oil Company (Indiana), Chicago, Ill. Vacuum surface distillation. 1,906,033; Apr. 25.
Wine, William E., Toledo, Ohio. Railway car. 1,906,195; Apr. 25.

Winslow, Edward J., Chicago, Ill. Repair device for closing ruptures in concrete structures. 1,905,405; Apr. 25.
Winthrop Chemical Company. (See Streitwolf, K., Fehrle, Hilmer, and Schmidt, assignors.)
Winzenburg, Wilhelm, Dresden, Germany. Combined cinematographic apparatus. 1,905,614; Apr. 25.
Wired Radio, Inc. (See Chromy, Ben J., assignor.)
Wired Radio, Inc. (See Culver, Charles A., assignor.)
Wired Radio, Inc. (See Davis, Chester L., assignor.)
Wired Radio, Inc. (See Hund, August, assignor.)
Wired Radio, Inc. (See Trogner, Arthur M., assignor.)
Wittel, Otto, assignor to Eastman Kodak Company, Rochester, N. Y. Supporting structure for the casing of a motion picture projection screen. 1,905,543; Apr. 25.
Wittstein, Charles T., Newark, N. J. Ornamental display device. 1,905,544; Apr. 25.
Wolf, Marie C., Cleveland Heights, Ohio. Manicuring device. 1,905,976; Apr. 25.
Wolf, Simon, Bronx, N. Y. Collapsible dress form. 1,905,202; Apr. 25.
Wood, J. R., & Sons, Inc. (See Hoppe, Arthur, assignor.)
Wood, James, Noblesville, Ind. Protective entrance to a burglar-proof safe. 1,905,547; Apr. 25.
Wood, R. D., & Company. (See Schrans, Charles A., assignor.)
Wood, Walter. (See Schrans, Charles A., assignor.)
Wood, Walter J. (See Kellett, I., Armitage, and Wood.)
Woodman, Joseph C., Flushing, N. Y., assignor to Decarie Incinerator Corporation. Incinerator. 1,905,120; Apr. 25.
Woods, Henry B., assignor to Hughes Tool Company, Houston, Tex. Covered welding rod. 1,905,081; Apr. 25.
Woolley, Bruce D., Johnstown, Ohio. Tire chain. 1,906,034; Apr. 25.
Wright, Wilbur L., and L. D. Pierce, assignors to Oswego Falls Corporation, Fulton, N. Y. Hood capping container. 1,905,615; Apr. 25.
Wuebling, Harry B., Cincinnati, Ohio. Flush panel construction. 1,905,082; Apr. 25.
Wuensch, Charles E., Joplin, Mo., assignor to Minerals Beneficiation Incorporated. Grinding mill. 1,905,545; Apr. 25.
Wuestenberg, Herbert C. (See Morse, W. G., Wilson, and Wuestenberg.)
Wulff, Robert G., Los Angeles, Calif. Charging compressed gas cylinders. 1,906,035; Apr. 25.
Wunderlich, William E., assignor to The Moore Company, Muncie, Ind. Conveying mechanism. 1,906,036; Apr. 25.
Yager, George F., assignor to The Bunting Brass & Bronze Company, Toledo, Ohio. Metal working machine. 1,905,203; Apr. 25.
Yenser, George R., Woodhaven, assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y. Vibration translating device. 1,905,669; Apr. 25.
York Safe & Lock Company. (See Sloberg, Charles F., assignor.)
Young, Elijah A., Johannesburg, Union of South Africa. Device for securing broom heads to their sticks. 1,905,670; Apr. 25.
Zanella, Apollony, Spadra, Calif. Concrete form board traing bolder. 1,905,616; Apr. 25.
Zecher, Gustav, Eindhoven, Netherlands, assignor, by mesne assignments, to General Electric Company. Installation suitable for the irradiation of substances with ultra-violet light. 1,906,038; Apr. 25.
Zecher, Gustav, Eindhoven, Netherlands, assignor to General Electric Company. Gaseous electric discharge device. 1,906,039; Apr. 25.
Zecher, Gustav, and J. Bruijnes, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company. Electrode in discharge tubes. 1,906,037; Apr. 25.
Zeiss, Carl, Firm of. (See Steinle, Adolf, assignor.)
Zenith Radio Corporation. (See Schaefer, Joseph M., assignor.)
Zerweck, Werner. (See Herz, R., and Zerweck.)
Zetmeir, Emil A., Topeka, Kans. Window construction. 1,905,024; Apr. 25.
Ziegs, Karl, Berlin, Germany, assignor to Addressograph Company, Wilmington, Del. Sheet feeding mechanism for printing machines. 1,905,548; Apr. 25.
Zimmerman, Paul. (See Boynton, A. J., and Zimmerman.)
Zimmermann, Gustav, Dusseldorf, Germany. Molding apparatus. 1,905,357; Apr. 25.
Zimmermann, Gustav, Dusseldorf, Germany. Lowering device in molding machines. 1,905,358; Apr. 25.
Zimmermann & Jansen, G. m. b. H. (See Scholl, Bernhard, assignor.)
Zinno, Frank D., assignor to The Chase Companies, Incorporated, Waterbury, Conn. Apparatus for pouring molten metal. 1,905,204; Apr. 25.
Zucker, Myron. (See Thompson, L. W., and Zucker.)
Zugermayer, Melmore, Southampton, Pa. Safety magneto switch. 1,906,121; Apr. 25.
Zumwalt, John H., Tacoma, Wash. Method and composition for preserving wood. 1,905,327; Apr. 25.

LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED ON THE 25TH DAY OF APRIL, 1933

NOTE.—Arranged in accordance with the first significant character or word of the name (in accordance with city and telephone directory practice). Includes patents, reissues, and designs.

Acetic anhydride, Preparing. F. Henle, G. Meder, V. Lans, and F. Privinsky. 1,905,466; Apr. 25.
Acid: *See*—
Lactic acid.
Acid esters of phenols containing a basic constituent, Disubstituted carbamic. J. A. Aeschlimann. 1,905,990; Apr. 25.
Acoustic device. H. C. Harrison. 1,905,704; Apr. 25.
Acoustic material. J. H. Delaney. 1,906,138; Apr. 25.
Adjusting device for plate straightening machines. F. Ungerer. 1,905,530; Apr. 25.
Advertising device. W. Hasenpatt. 1,905,706; Apr. 25.
Advertising device. W. H. McDonald. 1,905,239; Apr. 25.
Aerial craft construction. J. Silverman. 1,906,114; Apr. 25.
Aeroplane. S. W. Lanning. 1,905,889; Apr. 25.
Agricultural implement. W. Schirmer. 1,906,107; Apr. 25.
Air conditioner. H. T. Johnson. 1,905,101; Apr. 25.
Air conditioning apparatus. E. P. Rasmussen. 1,905,422; Apr. 25.
Air conditioning system for railway cars. L. W. Melcher. 1,905,040; Apr. 25.
Aircraft. E. B. Wilford. 1,905,776; Apr. 25.
Air for internal combustion engines, Apparatus for the distribution and injection. J. Konstantinoff. 1,906,008; Apr. 25.
Airplane. T. P. Hall. 1,906,005; Apr. 25.
Airplane. F. R. Sundling. 1,906,017–18; Apr. 25.
Aldol, Production of. G. F. Horsley. 1,905,290; Apr. 25.
Aligning fixture. L. W. Johnson. 1,905,102; Apr. 25.
Alloy. E. de Ridder and H. Altwicker. 1,905,445; Apr. 25.
Alloy, Copper. J. K. Smith. 1,905,314; Apr. 25.
Alloy for use in the cracking of petroleum. V. B. Browne. 1,905,436; Apr. 25.
Alloy, Metal. C. Vangrevenynge and H. Elion. 1,906,192; Apr. 25.
Alloys, Electrodisposition of tin-gold. H. J. Kersten. 1,905,105; Apr. 25.
Alloys, Electrodisposition of zinc-gold. H. J. Kersten. 1,905,106; Apr. 25.
Amalgam mixing device. E. V. Parkin. 1,905,802; Apr. 25.
Ammunition. J. E. Burns. 1,905,795–6; Apr. 25.
Amplifier. H. Hollerith, jr. 1,905,985; Apr. 25.
Amplifier, High frequency. H. F. Elliott. 1,905,826; Apr. 25.
Amplifier unit, Photocell. E. O. Erickson. 1,905,276; Apr. 25.
Ampoule. A. J. Blaivas. 1,905,362; Apr. 25.
Anchor, Bolt. R. E. McIntosh and T. J. Noonan. 1,905,730; Apr. 25.
Anemometer. A. U. Davis. 1,905,444; Apr. 25.
Annealing, Low-temperature bright. R. J. Cowan and O. E. Cullen. 1,905,810; Apr. 25.
Anthanthrone, Brominating. R. Herz and W. Zerweck. 1,905,285; Apr. 25.
Anthanthrone, Chlorinating. R. Herz and W. Zerweck. 1,905,286; Apr. 25.
Antifreeze compound for radiators. O. P. Greenstreet. 1,905,880; Apr. 25.
Antifriction equalising bearing. R. W. Barrett. 1,905,333; Apr. 25.
Antiglare device. J. Pekar. 1,906,090; Apr. 25.
Antiglare device. J. S. Walker. 1,905,822; Apr. 25.
Antirattle device. I. Andrews. Re18,800; Apr. 25.
Antiskid chain. H. B. Drury. 1,905,993; Apr. 25.
Antiskid device. H. F. Drury. 1,905,997; Apr. 25.
Apparatus for sinking bodies such as caissons and piles. A. F. Johnson. 1,905,643; Apr. 25.
Applicator and massage instrument. E. M. Robinson. 1,905,750; Apr. 25.
Apron for car dumpers. O. M. Carse. 1,905,867; Apr. 25.
Armature test machine. R. C. Whelchel. 1,906,050; Apr. 25.
Aromatic compounds, Purification of crude. A. O. Jaeger and L. C. Daniels. 1,905,903; Apr. 25.
Article holder. L. R. Wilmarth. 1,906,031; Apr. 25.
Article treating apparatus. E. L. Foley. 1,905,694; Apr. 25.
Article with associated plunger rod. H. F. Shaw. 1,905,425; Apr. 25.
Articles of plastic material, Apparatus for forming molded or embossed. A. Kremmling. 1,906,160; Apr. 25.
Articles upon a traveling assembling carrier, Mechanism for distributing. F. G. Purinton. 1,905,056; Apr. 25.
Arylaminothiazole compounds, Manufacture of nuclear halogenated derivatives of. R. Herz and M. Schubert. 1,905,287; Apr. 25.
Ash can. P. D'Angelo. 1,905,622; Apr. 25.
Ash disposal apparatus. R. A. Foresman. 1,905,228; Apr. 25.
Ash receiver. J. L. Thomas. 1,905,403; Apr. 25.
Assembling machine and jig. F. W. Doyle. 1,905,690; Apr. 25.
Attenuation unit. R. K. Potter. 1,905,353; Apr. 25.
Automatic equalising support. F. R. Wallace and J. T. Ramsden. 1,905,020; Apr. 25.
Automatic gain control. G. A. Mathieu and G. A. Isted. 1,905,946; Apr. 25.
Automatic window regulator. E. L. Ackerman. 1,905,876; Apr. 25.
Automobile cover. L. Levine. 1,905,973; Apr. 25.
Automobile heater. A. B. Modine. 1,905,487; Apr. 25.
Automobile indicating device. A. F. Jackson. 1,905,717; Apr. 25.
Aviation engine. L. Chevrolet and R. J. Parrish. 1,906,045; Apr. 25.
Awning and shutter, Adjustable combination. G. F. Shepard. 1,905,514; Apr. 25.
Awning, Skylight. F. Brown. 1,905,839; Apr. 25.
Axle housings, Making. E. B. Clark. 1,905,150; Apr. 25.
Bag. D. A. Christianson. Des. 89,679; Apr. 25.
Bag and closure means therefor. J. Duvall. 1,905,982; Apr. 25.
Bar for automobile bumpers, Impact. H. S. Jandus. Des. 89,704; Apr. 25.
Barrow, Motor. J. and H. Hoffman. 1,905,589; Apr. 25.
Base and socket for electric lamps. T. E. Foulke. 1,905,843; Apr. 25.
Base exchange material, Recovering. O. Liebknecht. 1,906,166; Apr. 25.
Basket. E. A. Florang. 1,906,146; Apr. 25.
Basket, Collapsible. D. Miller. 1,906,173–4; Apr. 25.
Basket or box, Berry or fruit. E. H. Newton. 1,905,119; Apr. 25.
Baths containing magnesium sulphate, Maintaining the composition of viscose precipitating. J. J. Stoeckly and R. Bartunek. Re18,802; Apr. 25.
Battery: *See*—
Storage battery.
Beacon, Direction-indicating. F. Corey. 1,905,267; Apr. 25.
Bearing: *See*—
Sealed bearing.
Bearing, and application thereof. E. C. Cope and E. Kinsella. 1,905,443; Apr. 25.
Bearing for ink roll doctors. A. D. Kerr. 1,905,104; Apr. 25.
Bearing for railway cars, Side. H. F. Wardwell and W. C. Bladin. 1,905,196; Apr. 25.
Bearing structure. G. F. Blume. 1,906,122; Apr. 25.
Bed, Automobile. J. L. Richardson. 1,905,605; Apr. 25.
Bed, Day. J. Martin. 1,905,928; Apr. 25.
Bed, Hospital. C. L. Shults. 1,905,855; Apr. 25.
Bed, Orthopedic. J. V. Berne. 1,906,887; Apr. 25.
Bending machine. A. R. Smith. 1,905,515; Apr. 25.
Beryllium aluminum alloy. J. K. Smith. 1,905,312–13; Apr. 25.
Beryllium oxide occurring in materials containing beryllium silicate or silicates, Concentrating. L. Burgess. 1,905,340; Apr. 25.
Beverage carbonating and dispensing apparatus. C. H. Jacobs and E. R. Nash. 1,905,986; Apr. 25.
Binder, Loose leaf. J. C. Dawson. Re18,806; Apr. 25.
Binding for calendars, Metal. F. C. Todd. 1,906,024; Apr. 25.
Bit: *See*—
Disk bit.
Blade adjusting mechanism for road machines. W. G. Morse, F. D. Wilson, and H. C. Wuestenberg. 1,906,079; Apr. 25.
Blades, Making tubular turbine. C. Lorensen. 1,905,944; Apr. 25.
Blind, Venetian. F. J. Burns. 1,905,979; Apr. 25.
Block: *See*—
Clock block. Tread block.
Board: *See*—
Fireproof wall board. Running board.
Garment board.
Bobbin winding and bunch forming mechanism and method. I. Kellett, N. Armitage, and W. J. Wood. 1,905,910; Apr. 25.
Boiler: *See*—
Steam boiler.
Boiler return trap. V. Fina. 1,906,052; Apr. 25.
Boiler water control. B. Burns and H. B. Lewis. 1,905,142; Apr. 25.

Boiler with interdeck superheater. H. J. Kerr and W. A. Jones. 1,906,125; Apr. 25.
Bolts, Manufacture of. J. F. Fleg. 1,905,084; Apr. 25.
Book, Loose leaf memorandum. C. B. Irving. 1,905,097; Apr. 25.
Book, Manifolding. E. K. Bottle. 1,905,893; Apr. 25.
Boot, Fertilizer. H. R. Traphagen. 1,905,767; Apr. 25.
Box: *See*—
Paper box. Valve box.
Box and shelves and partitions therefor. B. and E. Thomas. 1,906,191; Apr. 25.
Box for displaying jewelry and the like. J. M. Shields. 1,906,111; Apr. 25.
Braille writing machine. A. G. F. Kurowski. Des. 89,709; Apr. 25.
Brake: *See*—
Hand brake.
Brake. H. F. Parker. 1,904,996–8; Apr. 25.
Brake. H. Schnakenberg. 1,905,951; Apr. 25.
Brake cooling system. J. P. Tarbox. 1,905,657; Apr. 25.
Brake for railway cars, Side hand. R. W. Burnett. 1,905,213; Apr. 25.
Brake mechanism. G. C. Jett. 1,905,231; Apr. 25.
Brake mechanism. A. F. Klaning. 1,905,400; Apr. 25.
Brake shoe. W. B. Sutherland. 1,905,575–6; Apr. 25.
Brake with stage braking, Compressed air. W. Hotz. 1,906,156; Apr. 25.
Breaker mechanism. F. T. Irgens. 1,905,096; Apr. 25.
Brick and producing same, Ornamental. E. C. Hervey. 1,905,170; Apr. 25.
Brick edging machine. G. E. Luce. 1,905,477; Apr. 25.
Broach centering apparatus. G. J. Russell. 1,905,508; Apr. 25.
Broaching guide. G. J. Russell. 1,905,509; Apr. 25.
Broaching machine. J. P. and W. Ferris. 1,905,164; Apr. 25.
Broaching machine. G. J. Russell. 1,905,506; Apr. 25.
Broaching machine, External. G. J. Russell. 1,905,507; Apr. 25.
Broom heads to their sticks, Device for securing. E. A. Young. 1,905,670; Apr. 25.
Brush for eyelashes and eyebrows. T. Wagner. 1,905,399; Apr. 25.
Brush, Fountain. J. De Phillips. 1,905,960; Apr. 25.
Brush having a reservoir for the soap, Shaving. H. Depasse. 1,906,140; Apr. 25.
Brush, Shaving. H. F. Horne. 1,905,171; Apr. 25.
Buffer. W. H. Miner. 1,905,486; Apr. 25.
Buffer safety shop. J. Dunlop. 1,905,273; Apr. 25.
Bug or lure, Floating. C. T. Pflueger. 1,905,567; Apr. 25.
Building and constructing the same. C. H. Snyder. 1,906,117; Apr. 25.
Building material. R. D. Falk. 1,905,553; Apr. 25.
Building structure. G. Alexander. 1,906,040; Apr. 25.
Bumper, Automobile. W. V. Isgrig. 1,905,590; Apr. 25.
Bundle carrier. E. T. Johnson. 1,905,100; Apr. 25.
Burner: *See*—
Liquid fuel burner. Oil burner.
Burnishing machine. W. R. Simpson. 1,906,201; Apr. 25.
Bushing and solder sealed cap therefor for metallic containers. L. B. Wackman. 1,905,969; Apr. 25.
Cabinet and towel pack therefor, Towel. A. Allen. 1,905,206; Apr. 25.
Cabinet construction. M. Greenberg. 1,906,208; Apr. 25.
Cabinet, Electric appliance inclosing. J. Sachs. 1,905,002; Apr. 25.
Cabinet, Ventilated. H. Hefty. 1,905,867; Apr. 25.
Cable clamp. W. G. Milne. 1,905,967; Apr. 25.
Cable, Flexible. H. W. Webb. 1,905,197; Apr. 25.
Cable shearing mechanism. H. A. Stringfellow. 1,905,317; Apr. 25.
Cable suspension. E. St. John and S. C. Miller. 1,905,761; Apr. 25.
Cable terminal. C. A. Rowley. 1,905,245; Apr. 25.
Cable tightening and holding device for load pulling apparatus. A. Wikstrand. 1,905,542; Apr. 25.
Cake, Ice cream roll. A. Schorno. 1,905,756; Apr. 25.
Calcium nitrate from phosphate rock, Preparing. A. L. McCallum, B. P. Sutherland, and J. B. Thompson. 1,905,930; Apr. 25.
Calculating machine. J. A. V. Turck. 1,905,579; Apr. 25.
Calendar, Perpetual. S. Furedi. 1,905,846; Apr. 25.
Camera control, Motion picture. P. A. Stephenson. 1,905,522; Apr. 25.
Cameras, Exposure indicator attachment to photographic. C. A. B. Watson. 1,905,956; Apr. 25.
Cameras, Focusing device for. J. B. Hadaway. 1,906,059; Apr. 25.
Can: *See*—
Ash can.
Can and holder therefor, Garbage. P. C. Nielsen. 1,906,082; Apr. 25.
Cans and the like, Conveying and unpacking. S. B. Mott. 1,906,126; Apr. 25.
Candy units, Method of and machine for producing. W. B. Laskey. 1,906,069; Apr. 25.
Canned fish package and preparing the same. B. R. Brierly. 1,905,338; Apr. 25.
Canopies, Convenience outlet for. P. E. Burns. 1,905,841; Apr. 25.
Cap for collapsible tubes, Automatic pressure valve seal. J. J. Heard. 1,905,936; Apr. 25.
Cap for containers. G. E. West. 1,905,856; Apr. 25.
Cap with spare bulb carrier, Flashlight bottom. G. H. Barber. 1,905,787; Apr. 25.
Capacitometer, Direct reading. P. S. Edwards and C. D. Barbulesco. 1,905,849; Apr. 25.
Capsule filling machine. E. L. Fitch. 1,905,279; Apr. 25.
Car equipment, Safety. T. H. Thomas. 1,905,253; Apr. 25.
Car gassing device. F. A. Isaacson. 1,905,098; Apr. 25.
Car, Railway. W. E. Wine. 1,906,195; Apr. 25.
Car retarder, Railway. P. H. Crago. 1,905,218; Apr. 25.
Carbon and product thereof, Preparing. R. M. Cole. 1,905,686; Apr. 25.
Carbon dioxide and slow setting cement, Simultaneous production of condensed. C. C. Loomis and A. D. MacDonald. 1,905,598; Apr. 25.
Carbon monoxide and hydrogen, Producing mixtures of. W. D. Wilcox. 1,905,826; Apr. 25.
Carbonaceous material from foreign impurities, Method of and apparatus for separating solid. C. Machen. 1,905,945; Apr. 25.
Carbureting device. C. Davidson. 1,905,159; Apr. 25.
Carbureting system. C. E. Hofbauer. 1,905,712; Apr. 25.
Carburetor. R. F. Bracke. 1,905,485; Apr. 25.
Carburetor. M. Lorens. 1,905,968; Apr. 25.
Carburetor. C. E. Williams. 1,905,258; Apr. 25.
Card table. R. Neuschotz and N. C. Batner. 1,906,218; Apr. 25.
Carrier: *See*—
Bundle carrier. Luggage carrier.
Carton, Dispensing. A. F. Gluck. 1,905,561; Apr. 25.
Cartridge, Blasting. A. Harris. 1,905,863; Apr. 25.
Cartridge for medicinal applications. B. Rees. 1,905,752; Apr. 25.
Case: *See*—
Display case.
Case and dial, Combined alarm clock. P. Lux. Des. 89,712; Apr. 25.
Case for fragile articles, Packing. J. F. Hendry. 1,905,708; Apr. 25.
Casing: *See*—
Hose casing.
Catalyst, Hydrogenation. O. G. Bennett and C. B. Jackson. 1,905,433; Apr. 25.
Catalytic apparatus. A. O. Jaeger. 1,905,719; Apr. 25.
Cellulose acetate, Hydrolysis of. C. S. Webber and C. J. Staud. 1,905,536–7; Apr. 25.
Cellulose derivatives, Treatment of. G. H. Ellis and H. C. Olpin. 1,905,453; Apr. 25.
Cellulose ester composition of matter containing the tetraethyl ester of a tetracarboxyl derivative of a saturated aliphatic hydrocarbon. H. B. Smith. 1,905,517; Apr. 25.
Cellulose organic derivative composition of matter containing a BB'-dialkoxy ethyl carbonate. H. B. Smith. 1,905,518; Apr. 25.
Cellulose pulp, Method of and apparatus for hydrating. W. T. Doyle. 1,905,161; Apr. 25.
Cellulosic composition of matter containing a dialkyl hydrophthalate. H. B. Smith. 1,905,516; Apr. 25.
Cement block molding machine. L. C. Carton. 1,905,619; Apr. 25.
Cement, etc., Manufacturing white Portland. G. Bergen, F. Engelhardt, and R. Steckhan. Re18,805; Apr. 25.
Centrifugal apparatus. E. Roberts. 1,905,306; Apr. 25.
Centrifugal separator. W. Alexander. 1,905,779; Apr. 25.
Chain: *See*—
Antiskid chain. Tire chain.
Chain for automobile tires. E. J. Martel. 1,905,237; Apr. 25.
Chair: *See*—
Folding chair.
Chair with swingable table leaves. G. H. Hamilton. 1,905,859; Apr. 25.
Channel selection. H. A. Affel. 1,905,359; Apr. 25.
Charge forming device. F. E. Aseltine. 1,905,030; Apr. 25.
Charge forming device, Duplex. F. E. Aseltine. 1,905,029; Apr. 25.
Charger, Crane type. R. J. Wadd. 1,905,195; Apr. 25.
Chaser. S. F. Newman and J. G. Harper. 1,906,176; Apr. 25.
Chassis lubricating installation and the flow control elements thereof. J. Bijur. 1,905,335; Apr. 25.
Chest depository. C. F. Sioberg. 1,905,572; Apr. 25.
Chip container. S. Roth. Des. 89,720; Apr. 25.
Chuck, Air. S. T. Williams. 1,905,777; Apr. 25.
Cigar bunching machine. K. E. Granstedt. 1,906,152; Apr. 25.
Cigar handling machine. F. X. Malocsay. 1,905,728; Apr. 25.
Cigarette. A. H. Low. 1,905,416; Apr. 25.
Cigarette ejector and lighter. M. Comforti and R. Malerba. 1,906,134; Apr. 25.
Cigarette extinguisher and ash receptacle, Combined. L. W. Dickinson. 1,905,271; Apr. 25.
Cigarette making device. J. B. Sabourin. 1,905,652; Apr. 25.
Cigarette making machine. F. F. Ruau. 1,906,014; Apr. 25.
Cigarette ring. F. R. Green. 1,906,003; Apr. 25.
Cinematographic apparatus. M. Engelmann. 1,905,454; Apr. 25.

Cinematographic apparatus and box, Combined. W. Winzenburg. 1,905,614; Apr. 25.
Circuit breaker. K. C. Randall. 1,905,501; Apr. 25.
Circuit controlling appliance, Electric. J. Sachs. 1,905,001; Apr. 25.
Circuit controlling mechanism. C. E. Orr. 1,906,198; Apr. 25.
Circuit for three-element gaseous discharge tubes, Detector. A. Hund. 1,905,873; Apr. 25.
Circuitous elevator. H. D. James and G. Currie. 1,905,230; Apr. 25.
Circuitous Elevator. H. D. James and G. D. Fish. 1,905,229; Apr. 25.
Circuits, Protective system for generator field. A. J. A. Peterson. 1,905,240; Apr. 25.
Clamp: *See*—
Cable clamp.. Spreader clamp.
Clamp for plate glass racks. J. F. Johnson. 1,905,905; Apr. 25.
Clamp for saws and the like. A. O. Shafer. 1,905,512; Apr. 25.
Clean-out mechanism. W. de Back. 1,906,049; Apr. 25.
Cleaner: *See*—
Vacuum cleaner. Windshield cleaner.
Valve guide cleaner.
Cleaning articles, particularly metallic goods, Method and apparatus for. K. J. R. Robertson. 1,905,968; Apr. 25.
Cleaning device. J. B. Farquhar. 1,906,164; Apr. 25.
Clock. J. O. Simpson. 1,905,655; Apr. 25.
Clock and radio system, Combined. A. M. Trogner. 1,905,193; Apr. 25.
Clock block, Pliable. K. J. Tobin. 1,906,022; Apr. 25.
Clock, Parking. B. F. Hutches, jr. 1,905,875; Apr. 25.
Clock, Radio. L. F. Bush. 1,905,214; Apr. 25.
Closure fastener. W. B. Trueman. 1,905,320; Apr. 25.
Closure for locomotive cab windows. T. C. Craven. 1,905,369; Apr. 25.
Clothespin, Rubber. P. P. Bogley. 1,905,958; Apr. 25.
Clothes rack, Window. C. Sternberg. 1,905,574; Apr. 25.
Clutch: *See*—
Hydraulic clutch.
Clutch mechanism. R. G. Griffith. 1,905,090; Apr. 25.
Clutch operating device for motor vehicles. E. G. Hill. 1,905,984; Apr. 25.
Coal and composition of matter for producing same, Filmed. K. B. Stuart. 1,905,072; Apr. 25.
Coal, Filming. K. B. Stuart. 1,905,073; Apr. 25.
Coal with oil, Treating. H. J. Rose and W. H. Hill. 1,905,060; Apr. 25.
Coat with detachable pocket, Hunting. C. L. Mandelert. 1,905,235; Apr. 25.
Coding machine. W. Korn. 1,905,593; Apr. 25.
Coffee maker, Drip. C. E. Page. 1,905,250; Apr. 25.
Coil positioning machine. E. W. Collins. 1,905,154; Apr. 25.
Coil test apparatus C. S. Swayne. 1,906,020; Apr. 25.
Coke, Method of and apparatus for producing. F. Puening. 1,905,055; Apr. 25.
Collapsible dispenser. J. P. Burke. 1,905,904; Apr. 25.
Collapsible reel. K. P. Kohler. 1,905,178; Apr. 25.
Collar, Dog. G. V. F. McCarty. 1,906,078; Apr. 25.
Columbium and making the same, Metallic. C. W. Balke. 1,905,882; Apr. 25.
Combustion chamber construction. A. Moore. 1,905,805; Apr. 25.
Combustion, Method and apparatus for controlling. C. M. Terry. 1,905,658; Apr. 25.
Comestible package, Frozen. C. W. Vogt. 1,906,183; Apr. 25.
Commode, Automobile. J. T. Avila. 1,905,881; Apr. 25.
Complex compounds of heavy metals with 3.4-di-hydroxybenzene arsonic acid, Water-soluble. K. Strettwolf, A. Febrle, H. Hilmer, and H. Schmidt. 1,905,816; Apr. 25.
Composition for acoustical devices. E. Ehrhardt. 1,905,631; Apr. 25.
Compressor. D. F. Fesler. 1,905,455; Apr. 25.
Compressor. A. E. Peters. 1,905,747; Apr. 25.
Concrete block molding machine. C. C. H. Thomas. 1,905,975; Apr. 25.
Concrete form board truing holder. A. Zanella. 1,905,616; Apr. 25.
Concrete structural member. H. W. Schlueter. 1,906,108; Apr. 25.
Condensation product of cinchona bark alkaloids with thiuram sulphides as inhibitors. R. E. Lawrence. 1,905,915; Apr. 25.
Condenser: *See*—
Variable condenser.
Condenser plate, Built-up. W. H. Campbell, W. C. Ellsworth, and C. J. Madsen. 1,905,264; Apr. 25.
Conductor, Insulated electrical. A. A. Benner and R. A. Schatzel. 1,905,789; Apr. 25.
Conduit for subway cables. E. Burke. 1,905,794; Apr. 25.
Connecter for repairing metallic measuring tapes. C. B. Alexander. 1,906,128; Apr. 25.
Conservation valve. T. A. Fagan. 1,905,625; Apr. 25.
Constructional unit. A. C. Fischer. 1,905,875; Apr. 25.
Contact rectifier. W. Harries. 1,905,708; Apr. 25.
Container: *See*—
Hood capping container.
Container and cover, Combined glass. A. C. and H. H. Crimmel. Des. 89,681; Apr. 25.
Container and forming same. A. B. Wilson. 1,906,032; Apr. 25.
Container and in sealing closure therefor. C. S. Baron. 1,905,628; Apr. 25.
Control apparatus for radio receiving instruments. J. E. White. 1,905,539; Apr. 25.
Control device for wells. D. R. Knowlton and W. J. Crites. 1,905,592; Apr. 25.
Control for hydraulic feeding mechanism. B. S. T. Bishop and E. J. Hirvonen. 1,906,132; Apr. 25.
Control for wick type liquid fuel burners. G. C. Leanmer. 1,905,918; Apr. 25.
Control means for earth pulverizing machines. C. Jass. 1,905,385; Apr. 25.
Control mechanism for steam heating systems. H. Schierloh. 1,905,005; Apr. 25.
Control system. A. S. Marthens. 1,905,238; Apr. 25.
Control system. T. U. White. 1,905,256; Apr. 25.
Control system for electric motors. A. K. Flueler. 1,905,838; Apr. 25.
Control valve, Automatic water heater. R. Rogers. 1,905,949; Apr. 25.
Controlling device, Producing a. A. J. Weatherhead, jr. 1,905,664; Apr. 25.
Controlling means. W. J. Andres. 1,905,328; Apr. 25.
Conveyer. J. H. MacLauchlan. 1,905,924; Apr. 25.
Conveyer, Band. C. W. Gardiner. 1,906,147; Apr. 25.
Conveyer furnace. G. S. Peterson. 1,906,092; Apr. 25.
Conveyer system. L. C. Allen. 1,905,025; Apr. 25.
Conveying mechanism. H. A. Greenholt. 1,905,701; Apr. 25.
Conveying mechanism. W. E. Wunderlich. 1,906,036; Apr. 25.
Conveying system. T. A. Federwitz and W. T. Bailey. 1,906,051; Apr. 25.
Conveying system. H. R. Gotthardt and W. E. Cain. 1,905,379; Apr. 25.
Cooling facilities for rotary compressors. H. Steiner. 1,905,521; Apr. 25.
Cooling means for rolled bars. J. Gassen. 1,905,461; Apr. 25.
Cooling system for vacuum tubes. C. A. Culver. 1,905,811; Apr. 25.
Copy holder. C. Fensky. 1,905,834; Apr. 25.
Core drill reamer. L. H. Wellensiek. 1,905,078; Apr. 25.
Core with supporting and clamping structure, Magnetic. F. F. Brand. 1,905,790; Apr. 25.
Cotton cleaning equipment. J. E. Mitchell. 1,906,076; Apr. 25.
Coupler. F. H. Kayler. 1,905,641; Apr. 25.
Coupling: *See*—
Pipe coupling. Shaft coupling.
Coupling for railway vehicles, Flexible pipe. F. W. Martin. 1,905,647; Apr. 25.
Couplings, Making spline. J. Edgar. 1,905,278; Apr. 25.
Couplings, Making spline. O. F. Ewert. 1,905,277; Apr. 25.
Couplings, Producing. A. J. Weatherhead, jr., and J. D. Baldwin, jr. 1,905,665; Apr. 25.
Cover: *See*—
Automobile cover. Garment hanger cover.
Cover for permanently bound books. E. C. and E. C. Hazel, jr. 1,905,093; Apr. 25.
Crane. A. G. A. Schmidt. 1,906,109; Apr. 25.
Crane of the movable and traveling type, Hopper. F. Boyer. 1,905,434; Apr. 25.
Crate, Collapsible shipping. P. H. Blomberg. 1,905,137; Apr. 25.
Crib, Baby's folding. P. F. Benson. 1,905,128; Apr. 25.
Crossbar or strap for electric fixtures, Adjustable. J. Mangin. 1,906,197; Apr. 25.
Cultivator. C. G. Strandlund. 1,905,524; Apr. 25.
Cultivator shovels and the like, Universal footpiece for. H. R. Traphagen. 1,905,016; Apr. 25.
Current, Apparatus for producing rectified high voltage electric. H. E. Corbitt. 1,905,629; Apr. 25.
Cut articles or blanks from plastic strip material, Method and apparatus for producing. J. H. Flink. 1,905,837; Apr. 25.
Cutter: *See*—
Rolling drill cutter.
Cyanide process. E. J. Pranke. 1,905,804; Apr. 25.
Cylinder construction. G. J. Russell. 1,905,510; Apr. 25.
Cylinder, Type carrying. H. A. Swanson. 1,905,526; Apr. 25.
Cylinders, Charging compressed gas. R. G. Wulff. 1,906,035; Apr. 25.
Damper, Vibration. R. K. Lee. 1,905,475; Apr. 25.
Debarking machine. A. M. Kirkwood. 1,905,887; Apr. 25.
Decorative device. L. Propp. 1,905,500; Apr. 25.
Dehydrated products, Process and apparatus for producing. J. A. Burner. 1,905,263; Apr. 25.
Delustering. H. A. Gardner. 1,906,148–9; Apr. 25.
Desk, Cabinet. W. J. Michelet. 1,905,396; Apr. 25.
Desk, Folding. E. S. Hodgson. 1,906,064; Apr. 25.
Detent for window sashes. J. F. Harder. 1,905,983; Apr. 25.
Diaphragm and coil support. G. Holst, R. Shepherd, and P. H. A. van Lis. 1,906,066; Apr. 25.
Diazo-compound of 2-amino-chloro-1-oxy-3-sulphobenzene and its production. E. Sack. 1,905,354; Apr. 25.
Die. R. H. Stone. 1,905,763; Apr. 25.
Dies, Making wood mold. C. B. Norris, F. M. Curran, and H. W. Van Steenwyk. 1,905,048; Apr. 25.

Dilatometer, Self recording. S. Sato. 1,905,607; Apr. 25.
Dipper trip, Fluid operated. G. G. Morin. 1,905,183; Apr. 25.
Discharge printing and fabrics produced thereby. C. Dreyfus and G. Schneider. 1,905,346–7; Apr. 25.
Discharge tube, Gas filled. G. Holst. 1,905,713; Apr. 25.
Dish, Soap. R. L. Stair. 1,905,069; Apr. 25.
Dish washing machine. E. S. Stoddard. 1,905,523; Apr. 25.
Disk bit. H. W. Fletcher. 1,905,165; Apr. 25.
Disk wheel. C. L. Eksergian and T. A. Davenport. Des. 89,687; Apr. 25.
Dispenser: *See*—
Collapsible dispenser.
Dispenser. E. G. Wessman. 1,905,613; Apr. 25.
Dispensing machine. L. W. Lowther. 1,905,180; Apr. 25.
Display case, Illuminated refrigerator. C. E. Wicke. 1,905,775; Apr. 25.
Display device. F. Mallgraf. 1,905,395; Apr. 25.
Display device, Ornamental. C. T. Wittstein. 1,905,544; Apr. 25.
Display stand. O. E. Karnes. 1,905,908; Apr. 25.
Distance relay for electric lines. J. Stoecklin. 1,905,609; Apr. 25.
Distributor for insecticides and the like. T. C. Raley. 1,905,650; Apr. 25.
Dome for a liquid dispensing apparatus. C. P. Griffith. Des. 89,696; Apr. 25.
Door and window construction. A. P. Ball. 1,905,429; Apr. 25.
Door call. E. A. Hoag. 1,905,937; Apr. 25.
Door closer. W. F. Foster. 1,905,972; Apr. 25.
Door mount for accessory equipment of motor vehicles. J. G. Deits. 1,905,623; Apr. 25.
Draft regulator. C. H. Morrow. 1,905,734; Apr. 25.
Drawer structure. E. P. Hamilton. 1,905,857; Apr. 25.
Drawings, Shading. H. Sax. 1,905,061; Apr. 25.
Dress. N. Fischmann. Des. 89,692; Apr. 25.
Dress, Ensemble. D. Long. Des. 89,711; Apr. 25.
Drill or similar tool, Electric. A. C. Gilbert. 1,905,462; Apr. 25.
Drilling machine. J. Friedl. 1,905,560; Apr. 25.
Drip catcher for paint brushes and the like. F. Jerousek. 1,906,157; Apr. 25.
Drive release and brake for extractors. F. Schaum. 1,905,950; Apr. 25.
Drive, Starter. G. H. Howard. 1,906,067; Apr. 25.
Driving and stopping mechanism. A. R. Morrill. 1,905,735; Apr. 25.
Drum for dyeing, etc. S. Bailey, jr. 1,906,130; Apr. 25.
Drum, Shipping. E. E. Shanor. 1,906,205; Apr. 25.
Dry ice conversion unit. E. O. Bennett. 1,905,885; Apr. 25.
Dyes and making the same, Anthraquinone vat. R. J. Goodrich and E. T. Howell. 1,905,088; Apr. 25.
Dyestuff preparation, Black vat. E. T. Howell and R. J. Goodrich. 1,905,095; Apr. 25.
Dyestuffs and making same, Azo. F. Felix and W. Huber. 1,905,374; Apr. 25.
Dyestuffs and making same, Azo. G. Kalischer and R. Fleischhauer. 1,905,294; Apr. 25.
Earth pulverizing machine. C. Jass. 1,905,386; Apr. 25.
Ebonite in which stone chippings or the like are incorporated, Manufacturing. F. C. van Heurn. 1,905,404; Apr. 25.
Economizer. D. S. Jacobus. 1,905,470; Apr. 25.
Educational device. A. V. Griffin. 1,905,381; Apr. 25.
Egg marking apparatus. C. K. Powell. 1,906,094; Apr. 25.
Electric branding iron. R. Brindley. 1,905,364; Apr. 25.
Electric convenience outlet. V. R. Despard. Des. 89,684; Apr. 25.
Electric current valve. J. G. H. Liebel and R. C. Jacquelet. 1,905,724; Apr. 25.
Electric discharge device and operating circuits therefor. J. D. Forney. 1,905,841; Apr. 25.
Electric discharge device, Gaseous. H. Ewest and M. Pirani. 1,905,831; Apr. 25.
Electric discharge device, Gaseous. G. Zecher. 1,906,039; Apr. 25.
Electric discharge devices, system for starting and operating gaseous. J. D. Forney. 1,905,840; Apr. 25.
Electric discharge tube. W. de Groot and E. H. Reerink. 1,905,688; Apr. 25.
Electric fluid heater. W. L. Evans. 1,906,144–5; Apr. 25.
Electric generator, distributor, and method of application, Homopolar. E. Chapman. 1,905,147; Apr. 25.
Electric heater. J. Mansitto. 1,906,169; Apr. 25.
Electric heating unit and manufacturing the same. A. W. Walker and A. L. Smith. 1,905,770; Apr. 25.
Electric lamp. H. A. Douglas. 1,905,818; Apr. 25.
Electric lamp, Portable. G. Wheat. 1,905,774; Apr. 25.
Electric machine. B. C. von Platen. 1,905,660; Apr. 25.
Electric plug. G. Eaton. 1,905,452; Apr. 25.
Electric snap switch. A. W. Krieger. 1,905,914; Apr. 25.
Electric switch. J. J. Dante. 1,905,812; Apr. 25.
Electric switch. H. E. Norviel. 1,906,085; Apr. 25.
Electric switch, Arc reducing. T. E. McDowell. 1,905,088; Apr. 25.
Electric switch lock. F. W. Kulicke. 1,905,110; Apr. 25.
Electric traction system employing compound motors. L. Bacqueyrisse. 1,905,428; Apr. 25.
Electrical amplifier. P. N. Bossart. 1,905,209; Apr. 25.
Electrical control system. B. J. Chromy. 1,906,046; Apr. 25
Electrical door operating device. E. R. Beeman. 1,905,126; Apr. 25.
Electrical heater. C. H. Chapman. 1,905,801; Apr. 25.
Electrical heating element and manufacture. A. J. Kercher and W. W. Hicks. 1,905,232; Apr. 25.
Electrical insulation, Manufacture of. E. W. Schwartz. 1,905,758; Apr. 25.
Electrical machine, Synchronous. P. Letrilliart. 1,906,164; Apr. 25.
Electrical recording instrument of the relay type. A. G. S. Sandison. 1,906,105; Apr. 25.
Electrical rectifier. C. K. Strobel. 1,905,525; Apr. 25.
Electrode in discharge tubes. G. Zecher and J. Bruijnes. 1,906,037; Apr. 25.
Electrode, Welding. H. Scott. 1,905,247; Apr. 25.
Electrodynamic reproducer. R. S. Fisher. 1,906,196; Apr. 25.
Electrolysis, Apparatus for. W. Holland. 1,905,627; Apr. 25.
Electron discharge device. J. W. Marden. 1,905,035; Apr. 25.
Electron emission device. J. W. Marden and E. A. Lederer. 1,905,034; Apr. 25.
Elevator: *See*—
Circuitous elevator.
Elevator guide system. A. F. Skaife. 1,905,248; Apr. 25.
Elevator structure and control for printing presses. C. L. Low. 1,906,070; Apr. 25.
Elevator system, Electric. C. F. E. Olofson and N. O. Lindstrom. 1,905,742; Apr. 25.
Emulsion, Bituminous. O. R. Douthett. 1,905,630; Apr. 25.
Engine: *See*—
Aviation engine. Rotary engine.
Internal combustion engine. Steam engine.
Engine starting apparatus. R. P. Lansing. 1,905,943; Apr. 25.
Engraving machine. J. D. Linn. 1,905,725; Apr. 25.
Ester-aldehyde gum emulsion and making same. K. G. Blaikie and G. O. Morrison. 1,906,207; Apr. 25.
Esters, Manufacture of liquid dialkyl phthalate. J. W. Livingston. 1,905,974; Apr. 25.
Esters, Producing. T. S. Carswell, E. T. Stehlby, and N. J. G. Alogerij. 1,905,144; Apr. 25.
Excavator. F. O. Snow, jr. 1,905,191; Apr. 25.
Exercise machine. P. S. Hardy. 1,905,092; Apr. 25.
Exercising apparatus. D. Turner. 1,905,019; Apr. 25.
Exhibitor. H. E. Edwards. 1,905,962; Apr. 25.
Expansion compensator. I. H. Beddoe. 1,905,991; Apr. 25.
Explosive. W. C. Holmes. 1,905,289; Apr. 25.
Extension device. E. G. Carlson. 1,905,681; Apr. 25.
Extractor: *See*—
Fruit juice extractor. Hull extractor.
Eye and loop for anchor rods. W. G. Milne and W. N. Elliott. 1,905,966; Apr. 25.
Eyes, Device for the protection of the. S. L. Lemel. 1,905,415; Apr. 25.
Fabric: *See*—
Knitted metallic fabric.
Fabric making machine, Wire. I. C. Gellman. 1,905,086; Apr. 25.
Face protector. R. Malcom. 1,904,998; Apr. 25.
Facing machine. H. A. Greenholt. 1,905,700; Apr. 25.
Fast-moving objects, Simulation of. F. A. Gritt. 1,905,168; Apr. 25.
Fastener: *See*—
Closure fastener. Separable fastener.
Hood fastener.
Fastener. I. Jacobs. 1,905,718; Apr. 25.
Fastener for hand-bags. C. Filler. 1,905,117; Apr. 25.
Fastening. H. A. Widmer. 1,905,199; Apr. 25.
Fastening device. J. J. Hafer, sr. 1,905,587; Apr. 25.
Fastening-pulling machine. F. L. Mackensie. 1,905,297; Apr. 25.
Feed system for machine tools, Hydraulic. E. J. Hirvonen. 1,905,094; Apr. 25.
Fender and head lamp casing, Combined. J. R. Hughes. Des. 89,702; Apr. 25.
Fender apron. J. H. Cohen. Des. 89,680; Apr. 25.
Fender, head lamp casing, parking lamp casing, and horn casing, Combined. J. R. Hughes. Des. 89,703; Apr. 25.
Fender, head lamp, parking lamp, and horn casing, Combined. J. R. Hughes. Des. 89,699–701; Apr. 25.
Filaments and the like of a cellulose ester, Formation of. H. L. Barthelemy. 1,906,041; Apr. 25.
Film backing paper making machine. H. G. Dewey and J. G. Jones. 1,905,446; Apr. 25.
Film-drawing device for cinematographic apparatus. E. S. Deville. 1,906,186; Apr. 25.
Film, Metal. L. Rado. 1,906,199; Apr. 25.
Film, Positive photographic. V. H. Sease. 1,905,188; Apr. 25.
Film, Producing motion picture. F. Coors, jr. 1,905,442; Apr. 25.
Filter. L. H. Clark. 1,905,806; Apr. 25.
Filter. V. C. Norquist and R. R. Treanor. 1,905,738; Apr. 25.
Filter materials, Reactivation of spent. M. Goebel. 1,905,067; Apr. 25.
Finger ring. A. Hoppe. Des. 89,698; Apr. 25.
Finger ring. S. Siseler. Des. 89,724–6; Apr. 25.
Firearm. C. C. Loomis. 1,905,922; Apr. 25.

Firearm, Superposed barrel, breech-loading. L. Ribe. 1,906,216; Apr. 25.
Fireproof bodies and making the same. G. H. Ellis. 1,905,222; Apr. 25.
Fireproof wall board. J. A. Wiener and J. B. Harmon. 1,905,541; Apr. 25.
Fishhook fastening means. W. E. Dunn. 1,905,449; Apr. 25.
Fish lure. V. H. Best. 1,905,407; Apr. 25.
Fishing reel. C. A. Godshalk, F. Henke, and D. Behrsing. 1,904,992; Apr. 25.
Fishing reel. H. F. Maynes. 1,905,483; Apr. 25.
Floor controlled switch. F. G. Chapin. 1,905,146; Apr. 25.
Floor covering. C. Ellis. 1,905,827; Apr. 25.
Floor sander. H. W. Lundquist. 1,905,296; Apr. 25.
Flow divider. W. F. Moore. 1,905,733; Apr. 25.
Flower holder. E. A. Field. Des. 89,688–91; Apr. 25.
Fluid pump. R. P. Lansing. 1,905,941; Apr. 25.
Fluid pump. J. Liming, jr. 1,905,646; Apr. 25.
Fluid temperature maintainer. W. I. Carpenter. 1,905,343; Apr. 25.
Flush panel construction. H. B. Wuebling. 1,905,082; Apr. 25.
Flying machine. T. McDaniel. 1,905,298; Apr. 25.
Folding chair. P. E. G. Ericson. 1,905,830; Apr. 25.
Folding mechanism. C. S. Crafts. 1,905,687; Apr. 25.
Folding table. J. V. Crichton. 1,905,219; Apr. 25.
Folding table. F. H. Hatfield. 1,905,282; Apr. 25.
Folding table. A. E. Null. 1,905,491; Apr. 25.
Footboard for a bedstead or similar article. H. Rodstein and I. Nathanson. Des. 89,719; Apr. 25.
Footplate for door frames. I. A. Baum. 1,905,124; Apr. 25.
Footwear and making the same, Knitted. E. N. Joha. Re18,804; Apr. 25.
Footwear, Making. A. F. Bancroft. 1,905,786; Apr. 25.
Forehearth of glass melting furnaces. H. A. Wadman. 1,905,533; Apr. 25.
Forging machine. W. L. Clouse. 1,905,620; Apr. 25.
Form, Collapsible dress. S. Wolf. 1,905,202; Apr. 25.
Formaldehyde solutions, Concentration of. H. A. Bond. 1,905,033; Apr. 25.
4-brom-diethylacetylamino-1-phenyl-2, 3-dimethyl-5-pyrasolone and preparing the same. B. Reuter. 1,906,200; Apr. 25.
Frame: *See*—
License frame. Winding frame.
Fraud preventive device. H. J. Halsted and N. R. Briggs. 1,906,935; Apr. 25.
Freezing, Quick. F. H. Patterson. 1,905,602; Apr. 25.
Frost control machine. Chauncey S. Reid. 1,905,502; Apr. 25.
Fruit juice extractor. P. S. Freese. 1,906,054; Apr. 25.
Fuel pump, Mechanical. F. G. Schweistall. 1,905,246; Apr. 25.
Fumes from buildings, Methods of and apparatus for removing. L. J. Rogers. 1,905,243; Apr. 25.
Fungicide. H. P. Vannah. 1,905,532; Apr. 25.
Furnace: *See*—
Conveyer furnace. Plumber's furnace.
Open hearth furnace.
Furnace appliance. J. M. Duffy. Re18,803; Apr. 25.
Furnace regulator, Automatic. R. S. Adams. 1,905,977; Apr. 25.
Furnaces, Apparatus for charging. A. J. Boynton and P. Zimmerman. 1,905,679; Apr. 25.
Fuse device. J. Sachs. 1,905,004; Apr. 25.
Fuse, Expulsion. G. B. Mangan. 1,905,286; Apr. 25.
Game apparatus. T. Van Steenkiste. 1,906,025; Apr. 25.
Game board. R. E. McClure. Des. 89,715; Apr. 25.
Game, Table football. T. R. Potter. 1,905,503; Apr. 25.
Gangway. D. H. Morgan. 1,905,947; Apr. 25.
Garage. P. Greer. 1,905,852; Apr. 25.
Garment board. A. O. Buckingham. 1,905,793; Apr. 25.
Garment hanger. M. V. Gray. 1,906,058; Apr. 25.
Garment hanger cover. H. M. Reed. 1,904,999; Apr. 25.
Garment press. F. W. Lindemann. 1,906,071; Apr. 25.
Garment, Under. A. Laver. 1,905,645; Apr. 25.
Gas, Apparatus for dehydrating. F. W. Sperr, jr. 1,905,068; Apr. 25.
Gas saver. H. K. Ryder. 1,905,606; Apr. 25.
Gas treatment. A. R. Powell. 1,905,053; Apr. 25.
Gaseous discharge device. P. L. Spencer. 1,906,119; Apr. 25.
Gaseous electric discharge device. F. Skaupy, H. Ewest, and H. Pulfrich. 1,905,759; Apr. 25.
Gases, Treatment of. C. T. Buff. 1,905,993; Apr. 25.
Gauge: *See*—
Liquid gauge. Screw thread gauge.
Gear cutting machines, Automatic throw-out mechanism for. E. Finsen. 1,905,456; Apr. 25.
Gear mechanism, Steering. C. D. McCall. 1,905,484; Apr. 25.
Gear shifting mechanism. F. Ginsburg. 1,905,635; Apr. 25.
Gear teeth, Method of and machine for hobbing. J. B. Sinderson. 1,905,311; Apr. 25.
Gears and the like, Method of and machine for hobbing. J. B. Sinderson. 1,905,310; Apr. 25.
Generator: *See*—
Electric generator.
Generator voltage regulator, Direct current. L. A. Hyland. 1,905,291; Apr. 25.
Glass, Apparatus for and method of making. H. A. Wadman. 1,905,534; Apr. 25.
Glass, Apparatus for making plate. W. Owen. 1,905,743; Apr. 25.
Glass, Apparatus for supplying molten. K. E. Peiler. 1,905,494–5; Apr. 25.
Glass blank transfer. F. O'Neill. 1,906,066; Apr. 25.
Glass container. A. D. Nash. Des. 89,716; Apr. 25.
Glass drawing apparatus. J. H. Redshaw. 1,905,748; Apr. 25.
Glass, Making corrugated wire. A. Shuman. 1,905,006; Apr. 25.
Glass, Making sheet. F. Gelstharp. 1,905,849; Apr. 25.
Glass, Manufacture of laminated. E. M. Ball. 1,905,430; Apr. 25.
Glass or other composite articles, Process and apparatus for making composite. V. K. Boynton. 1,905,211; Apr. 25.
Glass, Process and apparatus for making composite. J. H. Sherts. 1,905,189; Apr. 25.
Glassware, Apparatus for handling. E. H. Lorens. 1,905,476; Apr. 25.
Goblet or similar article. D. E. Martin. Des. 89,713–14; Apr. 25.
Goggles. G. A. Binder. 1,905,130; Apr. 25.
Golf club. H. G. Barrett. 1,905,406; Apr. 25.
Governor, Elevator. J. Dunlop. 1,905,274; Apr. 25.
Grab. E. V. P. Dyserve. 1,905,450; Apr. 25.
Grading machine. J. W. Johnston. 1,905,174; Apr. 25.
Grain, Harvesting. G. Innes. 1,905,409; Apr. 25.
Gravity lubricating system. G. F. Thomas and O. J. Herb. 1,905,527; Apr. 25.
Grinding machine, Hydraulically operated. A. G. Belden and H. A. Silven. 1,905,127; Apr. 25.
Grinding machinery. F. S. Haas and C. Booth. 1,905,224; Apr. 25.
Grinding materials which contain particles of iron, Apparatus for. N. Ahlmann. 1,905,780; Apr. 25.
Grinding mill. R. P. Jugel. 1,905,411; Apr. 25.
Grinding mill. C. E. Wuensch. 1,905,545; Apr. 25.
Guard for motor vehicles, Splash. A. J. Babbs. 1,905,674; Apr. 25.
Guard rail, Highway. S. R. Garner. 1,905,377; Apr. 25.
Gun, Grease. J. F. Carter. Des. 89,678; Apr. 25.
Gun, Grease. P. E. Kopp. 1,905,913; Apr. 25.
Gun, Grease. R. Rapellin. 1,905,569; Apr. 25.
Gypsum, Apparatus for the continuous calcination of. F. J. Gough. 1,905,089; Apr. 25.
Hack saw. H. C. Lambert. 1,905,940; Apr. 25.
Hair-curling device. R. Chestnut. 1,905,145; Apr. 25.
Hand brake. H. Fuchs. 1,905,845; Apr. 25.
Hanger: *See*—
Garment hanger.
Harness, Dog. M. Bernstein. 1,906,043; Apr. 25.
Harrow or cultivator, Flexible. W. Aitkenhead. 1,905,671; Apr. 25.
Harvester, thresher, and separator, Combined. P. J. Hanson. 1,905,091; Apr. 25.
Harvesting machine. G. Innes. 1,905,410; Apr. 25.
Harvesting machine. W. E. Urschel. 1,905,194; Apr. 25.
Hats, Making. F. A. Lacks and E. C. Kennedy. 1,906,212; Apr. 25.
Headband. Hair protecting. J. J. and D. Dorsey. 1,905,370; Apr. 25.
Headlight for toy vehicles. G. P. Ericson. 1,905,931; Apr. 25.
Heat transfer. F. H. Morris. 1,905,185; Apr. 25.
Heat treating process. H. A. Dreffein. 1,905,272; Apr. 25.
Heater: *See*—
Automobile heater. Electric heater.
Electric fluid heater. Electrical heater.
Heater control, Milk. R. C. Kinsman. 1,905,722; Apr. 25.
Heater for refrigerator cars and other structures. E. A. Sweeley. 1,905,954; Apr. 25.
Heating apparatus. W. A. Bollinger. 1,905,550; Apr. 25.
Heating apparatus, Electric fluid. R. A. Carleton. 1,905,439; Apr. 25.
Helicopter. M. W. Evans. 1,906,143; Apr. 25.
Hinge having friction bearings. G. H. Hamilton. 1,905,858; Apr. 25.
Hoe, Garden and flower. E. H. McNeal. 1,906,171; Apr. 25.
Hoisting mechanism. C. F. Osgood. 1,906,219; Apr. 25.
Holder: *See*—
Article holder. Copy holder.
Concrete form board tru- Steel wool holder.
ing holder.
Hood capping container. W. L. Wright and L. D. Pierce. 1,905,615; Apr. 25.
Hood fastener. S. De Orlow. 1,905,220; Apr. 25.
Hood latch. S. De Orlow. 1,905,314–15; Apr. 25.
Hood latch. F. A. Falk. 1,905,554–5; Apr. 25.
Hose casing, Jointed metallic. M. Dysthe. 1,905,824; Apr. 25.
Hull extractor. T. Elliott. 1,905,632; Apr. 25.
Humidifying apparatus. O. H. Blackwood and L. F. Bess. 1,905,135; Apr. 25.
Hydraulic clutch. E. R. Monroe. 1,905,041; Apr. 25.

Hydraulic feed for machinery. B. S. T. Bishop and E. J. Hirvonen. 1,905,133; Apr. 25.
Hydrocarbons, Hydrogenating or dehydrogenating. W. F. Huppke and F. E. Frey. 1,905,383; Apr. 25.
Hydrocarbons, Treating. E. E. Stewart. 1,905,071; Apr. 25.
Hydrogen chloride or hydrogen bromide or their corresponding acid solutions, Manufacture of. W. Bauer. 1,905,432; Apr. 25.
Identification, Method and means for. L. J. Arpin. 1,906,129; Apr. 25.
Ignition apparatus. F. H. Prescott and J. L. Arthur. 1,905,054; Apr. 25.
Ignition apparatus, Dynamo-electric. F. Allendorf. 1,905,580; Apr. 25.
Illuminating objects to be reproduced, Apparatus for. E. Weisker. 1,905,538; Apr. 25.
Incandescent lamp. E. C. Smally. 1,906,188; Apr. 25.
Incinerator. J. C. Woodman. 1,905,120; Apr. 25.
Incinerator appliance for heating units. K. J. Tobin. 1,906,023; Apr. 25.
Index center. J. Harley. 1,906,062; Apr. 25.
Indicating means for turntables and the like. H. O. Havemeyer, jr. 1,905,707; Apr. 25.
Indicating or recording mechanism. J. L. Hodgson and F. Gray. 1,906,155; Apr. 25.
Indicator: *See*—
Polarity indicator. Speed indicator.
Installation suitable for the irradiation of substances with ultra-violet light. G. Zecher. 1,906,038; Apr. 25.
Instrument for recording inclination. W. I. McLaughlin and R. G. Wedemeyer. 1,905,299; Apr. 25.
Instrument for recording inclination. H. B. Webster. 1,905,546; Apr. 25.
Insulation, Inorganic metal. E. Rupp. 1,905,753; Apr. 25.
Interlocking mechanism. G. C. Coll. 1,905,807; Apr. 25.
Interlocking system. C. H. Hill. 1,905,710; Apr. 25.
Internal combustion engine. A. T. Prentice. 1,906,095; Apr. 25.
Internal combustion engine. J. Schaeffers. 1,905,062; Apr. 25.
Internal combustion engine. J. Schick. 1,905,754; Apr. 25.
Iron and producing the same, Stainless. W. H. Keen. 1,905,721; Apr. 25.
Iron, Pressing. F. J. Clark. 1,905,804; Apr. 25.
Ironer attachment for washers. S. S. Holland. 1,905,870; Apr. 25.
Ironing table, Folding. J. P. Dorau. 1,905,551; Apr. 25.
Jack: *See*—
Shoe supporting jack.
Jack. M. Dwork. 1,905,624; Apr. 25.
Jamb construction, Metal. I. A. Baum. 1,905,125; Apr. 25.
Jar handling means, Preserving. S. E. Schlott. 1,905,064; Apr. 25.
Joint: *See*—
Universal joint.
Joint construction for shovel handles and the like. C. E. Patchell. 1,906,218; Apr. 25.
Joint for high tension underground cables. E. D. Eby. 1,905,691; Apr. 25.
Journal box waste roll winding machine. C. W. Harris. 1,905,464; Apr. 25.
Keyboard for registers. S. Hilder. 1,906,063; Apr. 25.
Keyholder, Pocket. M. Goldsholl. Des. 89,695; Apr. 25.
Key-operated device for radio systems. J. M. Schaefer. 1,906,106; Apr. 25.
Kiln and burner apparatus. H. A. Dreffein. 1,905,820; Apr. 25.
Kiln for burning cement, ore and similar materials, Rotary. L. D. Parker. 1,905,744; Apr. 25.
Knitted metallic fabric. F. De Angelis. 1,905,160; Apr. 25.
Knitting machine. M. C. Miller. 1,905,419; Apr. 25.
Knockdown convertible stand. W. C. Kirk. Re18,807; Apr. 25.
Lace or the like. O. F. Schicker. Des. 89,721–3; Apr. 25.
Lactic acid. J. A. Jenemann. 1,906,068; Apr. 25.
Ladle, Foundry. J. G. Garrard. 1,905,634; Apr. 25.
Laminated products, Compressed. A. Hawerlander. 1,905,225; Apr. 25.
Lamp: *See*—
Electric lamp. Tail lamp.
Incandescent lamp.
Lamp and fan, Combined. L. Tucker. Des. 89,729; Apr. 25.
Lamp and lamp mounting. P. J. Kent and I. C. McKechnie. 1,905,471; Apr. 25.
Lamp fixture, Tail. W. A. Radke. 1,905,568; Apr. 25.
Lamp, Vehicle signal. C. L. Dillingham. Des. 89,685–6; Apr. 25.
Lapping device for cylindrical objects. H. W. Dunbar and J. C. Baker. 1,905,821; Apr. 25.
Latch: *See*—
Hood latch.
Lawns, Preparing. E. F. Kleckhefer. 1,905,176; Apr. 25.
Lead and other metals contained in lead bearing ores, Converting into soluble salts. P. Gamichon. 1,905,460; Apr. 25.
Leaf turner. W. Fliether. 1,905,963; Apr. 25.
Leather, Manufacture of artificial. G. A. Richter, W. B. Van Arsdel, and R. B. Hill. 1,905,749; Apr. 25.
Lens, Ophthalmic. M. A. Laabs. 1,905,644; Apr. 25.
Letter file. R. H. Meyer. 1,905,418; Apr. 25.
Lever, Adjustable. A. Alsaker and E. S. Cornelissen. 1,905,784; Apr. 25.
License carrier, bumper, and release, Combination automobile. S. Skoko. 1,905,007; Apr. 25.
License frame, Self-holding auto. P. Hudson. 1,905,874; Apr. 25.
Lifting device. A. J. Ackerman. 1,905,427; Apr. 25.
Light checking means, Auto. W. T. Crespinel and C. W. Prynne. 1,905,408; Apr. 25.
Light control, Automatic. K. Schneider. 1,905,511; Apr. 25.
Light control, Self compensating. C. A. Styer. 1,905,251; Apr. 25.
Light for refrigerators, ice boxes, closets, and the like, Battery. G. A. Baylis. 1,906,131; Apr. 25.
Light, Method and apparatus for producing. M. F. Northrup. 1,904,995; Apr. 25.
Light strip, Electric. J. D. Carr. 1,905,143; Apr. 25.
Light variations, Producing high frequency. R. T. Cloud. 1,905,153; Apr. 25.
Lighting device, Friction. J. T. Scully. 1,906,217; Apr. 25.
Lightning arrester. T. D. Berry. 1,905,970; Apr. 25.
Liquid, Apparatus for controlling rate of flow of a. V. A. Roblin. 1,905,244; Apr. 25.
Liquid fuel burner. S. T. Sherrick. 1,905,067; Apr. 25.
Liquid gauge. C. L. Howse. 1,905,172; Apr. 25.
Liquids, Automatic device for measuring and delivering. R. Porte. 1,906,177; Apr. 25.
Liquor, Distillation of gas. H. Koppers. 1,905,106; Apr. 25.
Liquors from the soda or sulphate pulp manufacture for the purpose of making them suitable for dry distillation, Alkalyzing the waste. E. L. Einman. 1,906,102; Apr. 25.
Load lifting arrangement. C. D. Bonsall. 1,905,678; Apr. 25.
Loading machine. R. H. Kraft. 1,905,472; Apr. 25.
Lock: *See*—
Electric switch lock. Window lock.
Safe lock.
Lock. E. N. Jacobi. 1,905,639; Apr. 25.
Lock. E. N. Jacobi. 1,905,902; Apr. 25.
Lock. H. R. Kirkwood. 1,905,177; Apr. 25.
Lock. B. Riccini. 1,905,057; Apr. 25.
Lock switch. H. E. Norviel. 1,905,049; Apr. 25.
Locking mechanism, Casement. I. W. Litchfield. 1,905,921; Apr. 25.
Locomotive. E. L. and C. A. Schellens. 1,905,063; Apr. 25.
Loom. R. Rossmann. 1,906,185; Apr. 25.
Loom shuttle. J. Coldwell. 1,905,266; Apr. 25.
Loom shuttle. E. Ross. 1,905,000; Apr. 25.
Loop forming and cutting device. J. H. Howe. 1,905,637; Apr. 25.
Loudspeaker. R. W. Hardisty. 1,905,702; Apr. 25.
Lowering device in molding machines. G. Zimmermann. 1,905,358; Apr. 25.
Lubricant and making same, Synthetic. J. J. Grebe and S. M. Stoesser. 1,905,850; Apr. 25.
Lubricating apparatus. H. Albertine. 1,905,878; Apr. 25.
Lubricating apparatus. S. D. Locke, C. R. Dosch, and H. J. Stegeman. 1,905,179; Apr. 25.
Lubricating device. J. Bliss. 1,905,136; Apr. 25.
Lubricating device for bearings, Constant level. F. E. Case. 1,905,799; Apr. 25.
Lubricating system for pumping power. E. B. Greve. 1,906,004; Apr. 25.
Luggage carrier, Collapsible. S. B. Blakely. 1,905,890; Apr. 25.
Luminair employing prismatic reflectors. S. English. 1,905,829; Apr. 25.
Luminous discharge device. M. Morrison. 1,905,043; Apr. 25.
Machine for combing textile fibers. F. C. Blanchard. 1,905,336; Apr. 25.
Machine for combing textile fibers. M. P. Mello. 1,905,300; Apr. 25.
Machine for cutting rubber stock. J. C. Carlin. 1,905,366; Apr. 25.
Machine for determining the resisting qualities in wear of leather for soles. P. Milliet. 1,906,175; Apr. 25.
Machine for feeding coiled sections. C. A. Nicolai and E. Lindegaard. 1,905,046; Apr. 25.
Machine for grinding and polishing optical lenses, spectacle glasses, and the like. J. Desenberg. 1,906,050; Apr. 25.
Machine for honing and polishing crank shafts. W. F. Egger and L. A. Becker. 1,905,825; Apr. 25.
Machine for making knitted fabric. A. E. Page and H. Swinglewurst. 1,906,204; Apr. 25.
Machine for producing strip moldings. W. Jaquiery. 1,905,640; Apr. 25.
Machine for setting rows of plants deeper. H. and F. Denstädt and M. Weichert. 1,906,139; Apr. 25.
Machine for sewing fastener tape and the like. L. Roseman. 1,905,504; Apr. 25.
Machine for the separation and formation of the filler or cigar bunches. F. Granstedt. 1,905,586; Apr. 25.

Machine for wrapping packages. J. V. Nelson. 1,905,489; Apr. 25.
Magnets, Electric machine. E. R. Hoffman. 1,906,065; Apr. 25.
Manicuring device. M. C. Wolf. 1,905,976; Apr. 25.
Manometers. S. S. Amdursky. 1,905,782; Apr. 25.
Marble working machine. T. P. Silvester. 1,905,190; Apr. 25.
Marker unit. J. A. Wagner. 1,905,612; Apr. 25.
Mask, Welder's. F. M. Bowers. 1,905,210; Apr. 25.
Mat. J. F. Duffy. 1,905,871; Apr. 25.
Match package. B. H. Freedman. 1,905,695–6; Apr. 25.
Match package. B. H. Freedman. 1,905,844; Apr. 25.
Match packaging machine. R. S. Pullen, W. F. Casey, and G. M. Thomas. 1,905,098; Apr. 25.
Material for making waterproof mortar and producing the same. K. C. Rankin. 1,905,187; Apr. 25.
Material measuring and handling apparatus. F. Voelker, jr. 1,905,018; Apr. 25.
Materials, Apparatus for contacting solid and gaseous. E. O. Barstow and S. B. Heath. 1,905,683; Apr. 25.
Materials for water softening, Making base exchange. P. Lasselle. 1,906,163; Apr. 25.
Materials with aqueous emulsions, Waterproofing. C. A. Braun. 1,905,212; Apr. 25.
Mausoleum. W. A. Martin. 1,905,036; Apr. 25.
Measuring apparatus. W. Möller. 1,905,401; Apr. 25.
Measuring device. L. Foote. 1,905,558; Apr. 25.
Measuring instrument. P. Paschen and G. Mohr. 1,906,089; Apr. 25.
Mechanical assorting device. C. E. Constable and H. F. Kynold. 1,905,217; Apr. 25.
Mechanism for shifting sheets. H. G. Buchan. 1,905,437; Apr. 25.
Mercaptoarylthiazoles, Manufacture of. R. L. Sibley. 1,906,112; Apr. 25.
Merchandise displaying device, Automatic. A. Perling. 1,905,351; Apr. 25.
Mercury switch. J. H. Staley. 1,906,118; Apr. 25.
Mercury tube switch. D. W. Davis. 1,905,813; Apr. 25.
Metal, Apparatus for pouring molten. F. D. Zinno. 1,905,204; Apr. 25.
Metal coated material. L. W. Cutler and C. A. Klein. 1,905,959; Apr. 25.
Metal objects, Coating. B. Hemana. 1,906,154; Apr. 25.
Metal oxides, Reducing. W. Rohn. 1,906,184; Apr. 25.
Metal working machine. G. F. Yager. 1,905,203; Apr. 25.
Metallic composition and making the same. A. P. Roux. 1,905,505; Apr. 25.
Metals, Decorating. V. F. Malleval. 1,906,168; Apr. 25.
Metals during heat treatment, Preventing oxidation of. R. J. Cowan. 1,905,809; Apr. 25.
Meter. C. J. Bassler. 1,905,549; Apr. 25.
Meter attachment for watthour meters, Auxiliary. W. M. Bradshaw. 1,905,262; Apr. 25.
Meter by-pass controlling means. H. Chrisman and H. G. Weymouth. 1,906,133; Apr. 25.
Meter service appliance, Electric. J. Sachs. 1,905,003; Apr. 25.
Methane into liquid hydrocarbons, Conversion of. C. Steigerwald. 1,905,520; Apr. 25.
Middle burster. C. H. White. 1,905,022; Apr. 25.
Mill: *See*—
Grinding mill. Rolling mill.
Rod mill.
Milling machine. W. D. Archea. 1,905,673; Apr. 25.
Milling or cutting machine. O. Hoppe. 1,905,382; Apr. 25.
Mirror, Dental. D. L. Feltham. 1,905,628; Apr. 25.
Mirror, Driving. G. N. Hein. 1,905,906; Apr. 25.
Mixing machine. C. F. Schnuck and F. H. Banbury. 1,905,755; Apr. 25.
Modifier for cellulose acetate plastics. J. F. Walsh and A. F. Caprio. 1,905,535; Apr. 25.
Mold. C. T. Cahill. 1,905,897; Apr. 25.
Mold and bonding means. J. L. Bixby. 1,905,134; Apr. 25.
Mold charges of molten glass, Process and apparatus for forming shaped. G. E. Howard. 1,905,468; Apr. 25.
Molding apparatus. G. Zimmermann. 1,905,357; Apr. 25.
Molding machine. S. A. Norrick. 1,905,490; Apr. 25.
Monogram, Garment. L. C. and C. Sadr. 1,905,980; Apr. 25.
Motor: *See*—
Regulator motor. Single phase motor.
Motor control system. A. Couwenhoven. 1,905,808; Apr. 25.
Motor control system. W. F. Eames. 1,905,275; Apr. 25.
Motor control system. W. Endres and H. Hoetz. 1,905,693; Apr. 25.
Motor operated valve. V. O. Beam. 1,905,834; Apr. 25.
Mounting. I. P. Whitehouse. 1,905,540; Apr. 25.
Mounting for acid bottles. R. C. Lunsford, jr. 1,905,116; Apr. 25.
Mounting, Ophthalmic. N. M. Baker. 1,905,675; Apr. 25.
Mounting, Switch and fuse. T. R. Murray, jr. 1,905,660; Apr. 25.
Mucker. J. S. Finlay and H. B. Royle. 1,906,609; Apr. 25.
Musical instrument, Wind. P. J. Barkle. 1,905,161; Apr. 25.
Necktie. S. R. Waltz. 1,906,120; Apr. 25.
Needle straightening machine and method. W. J. Richey and W. Tivendale. 1,906,101; Apr. 25.
Newspaper stand. M. Klhem. 1,905,564; Apr. 25.
Nonhygroscopic composition comprising aluminum sulphate and an acid salt. C. C. Feagley. 1,905,838; Apr. 25.
Nonskid device. W. Cooper and W. F. Knapp. 1,906,441; Apr. 25.
Nozzle oscillating means. J. Rome. 1,905,570; Apr. 25.
Nozzle, Sand blast. J. S. Fulton. 1,905,693; Apr. 25.
Numbering machine. V. A. Svenson. 1,906,019; Apr. 25.
Nut blank feeding mechanism. E. H. Ingram and V. E. Pearson. 1,905,715; Apr. 25.
Nut making machine. C. A. Rich. 1,906,099; Apr. 25.
Nutting machine. R. M. Morgan and S. W. Harden. 1,906,078; Apr. 25.
Nuts, Producing self-locking. E. J. Cole. 1,905,221; Apr. 25.
Odorant for refrigeration. F. J. Dobrovolny. 1,905,817; Apr. 25.
Ohmmeter, Direct reading. P. S. Edwards and C. D. Barbulesco. 1,905,848; Apr. 25.
Oil burner. S. E. Noles. 1,905,860; Apr. 25.
Oil gas, Treatment of. C. W. Andrews and A. J. Boynton. 1,905,023; Apr. 25.
Oil leakage from bearings, Preventing. J. M. Labberton. 1,905,284; Apr. 25.
Oil or the like to a comminuted condition, Method and apparatus for reducing fuel. E. A. Stoll. 1,905,610; Apr. 25.
Oil to journal bearings, Collecting and feeding. G. Grandjean. 1,905,281; Apr. 25.
Oiler, Track. W. F. Coors. 1,905,155; Apr. 25.
Open hearth furnace. L. A. Billiar. 1,905,677; Apr. 25.
Operating means for a crank press. C. H. Lasker. 1,905,113; Apr. 25.
Ore separation. A. J. Weinig and R. E. Cuthbertson. 1,906,029; Apr. 25.
Ores, Roasting. A. L. J. Queneau. 1,905,604; Apr. 25.
Organ, Electric. E. E. Coupleux and J. A. M. V. de P. Givelet. 1,905,906; Apr. 25.
Organ stop action, Combination. J. T. Austin. 1,905,880; Apr. 25.
Orthodontic appliance. J. Aderer. 1,905,877; Apr. 25.
Oven for producing gas and coke, Retort. F. Totsek. 1,905,075; Apr. 25.
Package, Cigarette. B. W. Merchant. 1,906,172; Apr. 25.
Packing. I. L. Dunn. 1,905,822; Apr. 25.
Packing assembly. L. F. Baash, E. Burns, and G. B. Garrard. 1,905,122; Apr. 25.
Packing means for shafts. J. N. Walton. 1,905,772; Apr. 25.
Packing means for the shafts of centrifugal pumps and other rotary machines, Metallic. J. Bodart. 1,905,618; Apr. 25.
Pajamas. W. A. and R. J. Nosik, J. S. Krocka, and W. Moncher. 1,905,948; Apr. 25.
Panel-board section. F. B. Adam. 1,905,121; Apr. 25.
Panel member, Heat insulating. R. T. Griffiths. 1,905,853; Apr. 25.
Panoramagrams from pseudoscopic parallax panoramagrams, Making stereoscopic parrallax. H. E. Ives. 1,905,716; Apr. 25.
Paper, Apparatus for coloring. H. Black, W. Holmes, and M. A. Hesse. 1,905,885; Apr. 25.
Paper box, Convertible. E. C. Bogren. 1,905,992; Apr. 25.
Paper, Deodorization of. M. O. Schur. 1,905,757; Apr. 25.
Paper dispensing device. F. C. Gluck. 1,905,562; Apr. 25.
Paper folding, winding and cutting, and mechanism therefor. S. J. Campbell. 1,905,899; Apr. 25.
Paper making apparatus. W. R. Kellett. 1,905,911; Apr. 25.
Parachute. J. F. Pendergast and E. Johnson. 1,906,091; Apr. 25.
Pastry cup. U. A. Kreidler. Des. 89,708; Apr. 25.
Peeler, Fruit. J. T. Tucker. 1,905,678; Apr. 25.
Pen and desk stand holder therefor, Combined fountain. A. S. Van Hise. Des. 89,730–1; Apr. 25.
Pencil, Mechanical. W. J. Lindemon. 1,905,920; Apr. 25.
Percolator. J. F. Lamb. 1,905,111; Apr. 25.
Petroleum bottoms, Dividing. G. B. Coubrough. 1,905,156; Apr. 25.
Petroleum distillates, Cracked. R. E. Burk. 1,906,044; Apr. 25.
Phonograph apparatus, High frequency. A. McL. Nicolson. 1,906,214; Apr. 25.
Phonograph driving mechanism. W. J. Peets. 1,905,746; Apr. 25.
Phonograph record, Revocalised. H. Hopkins. 1,906,124; Apr. 25.
Photographic color process. J. G. Capstaff. 1,905,436; Apr. 25.
Photographic processing. K. C. D. Hickman. 1,905,467; Apr. 25.
Picture frame. W. Beetz. Des. 89,674–6; Apr. 25.
Picture projecting machine, Motion. M. Berkowitz. 1,905,886; Apr. 25.
Picture projection machine structure, Motion. A. Dina. 1,905,816; Apr. 25.

Pile driver. R. W. Kaltenbach and A. Fronek. 1,905,906; Apr. 25.
Pile driver. J. H. Thornley. 1,905,528; Apr. 25.
Pile shells, Driving. J. A. Dahren. 1,906,136; Apr. 25.
Pipe: *See*—
Tobacco pipe.
Pipe and making the same. C. G. Naylor. 1,906,010; Apr. 25.
Pipe coupling. M. F. Waters. 1,905,324; Apr. 25.
Pipe protector, Drill. E. Craig and W. O. Cooper. 1,905,158; Apr. 25.
Pipe screen, Irrigation. W. K. Levis. 1,905,919; Apr. 25.
Pipe support. C. P. Harding and J. A. Shaw. 1,906,209; Apr. 25.
Pipe thread protector. L. G. Ponce. 1,906,093; Apr. 25.
Piston, Composite. J. R. Cox. 1,905,157; Apr. 25.
Piston, Pump. W. F. McMahon. 1,905,181; Apr. 25.
Piston with cooling effect. A. Gasda. 1,905,582; Apr. 25.
Placard. H. V. Marsh. 1,905,927; Apr. 25.
Plant spraying machine. M. J. Phalen. 1,906,013; Apr. 25.
Planting tool. J. P. Croasdale and J. A. Roberts. Des. 89,682; Apr. 25.
Plaster, Acoustic. L. B. Eaton. 1,906,123; Apr. 25.
Plate covering and attachment. J. F. Duffy. 1,905,372; Apr. 25.
Platinates and their manufacture, Alkali metal. A. R. Powell, E. C. Davies, and A. W. Scott. 1,906,179; Apr. 25.
Platinum plating baths, Preparation and operation of. A. R. Powell, E. C. Davies, and A. W. Scott. 1,906,178; Apr. 25.
Plug: *See*—
Electric plug. Spark plug.
Plug for steam platens and other metallic articles. C. A. Schranz. 1,905,653; Apr. 25.
Plug with pilot light, Attachment. B. C. Webster. 1,906,194; Apr. 25.
Plugs, Making spark. E. B. Nowosielski. 1,905,600; Apr. 25.
Plumber's furnace. W. Berns, J. E. Flitcroft, and J. M. Imfeld. 1,905,617; Apr. 25.
Polarity indicator. H. Friedrichsen. 1,905,697; Apr. 25.
Porcelain root facing, Interchangeable. A. S. Levy. 1,905,595; Apr. 25.
Potential device, Constant. M. Morrison. 1,905,044; Apr. 25.
Power responsive means. L. W. Thompson and M. Zucker. 1,905,766; Apr. 25.
Power transmission, Mechanical. T. H. Ryan. 1,906,103; Apr. 25.
Press: *See*—
Garment press.
Pressure controlled valve. E. B. Moore. 1,905,042; Apr. 25.
Pressure release valve. R. L. Leuchter. 1,906,165; Apr. 25.
Printing apparatus. C. Chisholm. 1,905,344; Apr. 25.
Printing, cutting, and scoring press. G. F. Ford and W. Pittman. 1,905,559; Apr. 25.
Printing machine. J. S. Duncan. 1,905,552; Apr. 25.
Printing machine, Key controlled. M. J. Hoffman. 1,905,288; Apr. 25.
Printing machines, Sheet feeding mechanism for. K. Ziege. 1,905,548; Apr. 25.
Projection system. A. McL. Nicolson. 1,906,215; Apr. 25.
Projector. J. E. Foster. 1,905,982; Apr. 25.
Propeller, Aeronautical. W. J. Blanchard. 1,905,891; Apr. 25.
Propeller, pump, or fan. E. S. G. Rees. 1,906,180; Apr. 25.
Protective entrance to a burglar-proof safe. J. Wood. 1,905,547; Apr. 25.
Protector: *See*—
Face protector. Pipe thread protector.
Pipe protector. Water and feed protector.
Protector for threaded pipe ends. A. H. Riney. 1,906,182; Apr. 25.
Pulp and apparatus therefor, Digesting. R. H. McKee. 1,905,731; Apr. 25.
Pulp treating process and the product. M. F. Parsons. 1,906,088; Apr. 25.
Pulverizing roller. C. Jass. 1,905,384; Apr. 25.
Pump: *See*—
Fluid pump. Fuel pump.
Pump. F. H. Heitger. 1,905,284; Apr. 25.
Pump, compressor and the like, Rotary. J. Ekelöf. 1,906,141; Apr. 25.
Pump operating means, Fuel. A. M. Babitch and M. G. Hanson. 1,905,207; Apr. 25.
Pump or compressor, Rotary. J. Ekelöf. 1,906,142; Apr. 25.
Pump shaft, Packless turbine. G. S. Coats. 1,905,368; Apr. 25.
Punting machine. D. M. Porter. 1,905,352; Apr. 25.
Rack: *See*—
Clothes rack. Sheet holding rack.
Radiator. N. S. Diamant. 1,905,447; Apr. 25.
Radiator. A. B. Modine. 1,906,077; Apr. 25.
Radiator valve, Automatic thermostatic. J. J. Lawler. 1,905,942; Apr. 25.
Radio apparatus. W. S. Sutton. 1,906,189; Apr. 25.
Radiocontrol, System of remote. L. T. Roberton. 1,905,503; Apr. 25.
Radio receiving apparatus. F. L. Capps. 1,905,216; Apr. 25.
Radio receiving system. J. P. Barton. 1,905,260; Apr. 25.
Rail bond and clamp, Combined. B. A. Smith. 1,906,115; Apr. 25.
Rail, Towel. L. Jenkinson. 1,905,938; Apr. 25.
Rails, Process and apparatus for straightening. P. H. Gast. 1,906,002; Apr. 25.
Railway and like sleeper. A. H. Harvey. 1,906,006; Apr. 25.
Railway tracks, Device for recording the warp of. A. E. Mauzin. 1,906,170; Apr. 25.
Range finder, Base type. J. Mihalyi. 1,905,485; Apr. 25.
Range, Gas. W. D. Antrim. 1,905,672; Apr. 25.
Range grid, Gas. W. D. Antrim. Des. 89,675; Apr. 25.
Ratchet wrench, Universal. J. D. Lamb. 1,905,388; Apr. 25.
Razor and sharpening device, Combined safety. L. V. Aronson. 1,905,329–31; Apr. 25.
Razor, Safety. H. J. Galaman. 1,905,699; Apr. 25.
Razor, Safety. N. Testi. 1,905,764; Apr. 25.
Receptacle. P. E. Waehner. 1,905,955; Apr. 25.
Receptacle and making the same, Paper. E. B. Bicker. 1,905,334; Apr. 25.
Recirculating system and apparatus for waste furnace gases. G. A. Merkt. Re18,801; Apr. 25.
Rectifier. D. V. Edwards and E. K. Smith. 1,905,692; Apr. 25.
Rectifiers at capacities greater than normal, Operating dry disk. C. E. Ogden. 1,905,740; Apr. 25.
Reel: *See*—
Collapsible reel. Ribbon reel.
Fishing reel. Steel cable reel.
Reel. H. H. Talbot. 1,905,192; Apr. 25.
Refrigerating apparatus. C. Birdseye and B. Hall. 1,905,131; Apr. 25.
Refrigerating apparatus. R. R. Candor. 1,904,991; Apr. 25.
Refrigerating apparatus. W. H. Matthews. 1,905,037; Apr. 25.
Refrigerating system. R. E. Schurts. 1,905,308; Apr. 25.
Refrigerating system, Absorption. G. Maiuri and R. F. Rossini. 1,905,727; Apr. 25.
Refrigeration with liquefied fuel gas, Process and apparatus for. D. W. Davisson and F. G. Welke. 1,905,971; Apr. 25.
Refrigerator. J. H. Long. 1,905,597; Apr. 25.
Regulator: *See*—
Automatic window regulator. Generator voltage regulator.
Draft regulator. Voltage regulator.
Furnace regulator.
Regulator. S. E. B. Soderberg. 1,905,519; Apr. 25.
Regulator for multistage compressor systems. W. Ochel. 1,906,012; Apr. 25.
Regulator motor, Remote control. E. H. White. 1,905,325; Apr. 25.
Relay, Capacity controlled. C. D. Barbulesco. 1,905,332; Apr. 25.
Remote control system. R. J. Wensley. 1,905,255; Apr. 25.
Repair device for closing ruptures in concrete structures. E. J. Winslow. 1,905,405; Apr. 25.
Reversible attraction sign. C. W. Hatke. 1,905,563; Apr. 25.
Rewinding mechanism for clock springs. J. M. Andersen. 1,905,783; Apr. 25.
Ribbon reel. B. J. Goldsmith. 1,906,055; Apr. 25.
Ridge burster. W. H. Silver. 1,906,113; Apr. 25.
Ring: *See*—
Cigarette ring.
Ring for pipe couplings, Seating. P. Lofgren. 1,905,115; Apr. 25.
Riveter, Roller wedge. A. A. Norin. 1,905,047; Apr. 25.
Road grader. C. J. Morits. 1,905,420; Apr. 25.
Road strip and support. W. E. White. 1,905,028; Apr. 25.
Robe construction. G. and L. C. Safir. 1,905,685; Apr. 25.
Rod: *See*—
Welding rod.
Rod mill. C. H. MacDonald. 1,905,417; Apr. 25.
Rods and tubes, Apparatus for sorting. C. A. Brown and F. B. Van Sickle. 1,905,791; Apr. 25.
Rods, Making connecting. W. H. Manning. 1,905,925; Apr. 25.
Roller: *See*—
Pulverizing roller. Shade roller.
Roller cutter retaining device. L. H. Wellensiek and F. C. Smith, jr. 1,905,079; Apr. 25.
Rolling drill cutter. F. L. Scott. 1,905,066; Apr. 25.
Rolling mill. F. C. Biggert, jr., and L. Johnson. 1,905,129; Apr. 25.
Rolling turner. J. H. Richardson. 1,906,100; Apr. 25.
Rolls, Device for shaping and truing grinding. H. Lindner. 1,905,390; Apr. 25.
Roof flashing. L. Vallas. 1,905,017; Apr. 25.
Roofing mastic. A. C. Fischer. 1,905,376; Apr. 25.
Rosin, Purifying. E. C. Palmer, J. L. Burda, and A. F. Oliver. 1,905,493; Apr. 25.
Rosin, Refining. I. W. Humphrey. 1,905,173; Apr. 25.
Rotary engine. E. E. Galyean. 1,905,847; Apr. 25.

Routing machine. J. W. Dixon. 1,905,448; Apr. 25.
Rubber and product obtained thereby, Treating. S. M. Cadwell. 1,905,797; Apr. 25.
Rubber articles of every kind. O. G. Bohlin. 1,905,363; Apr. 25.
Rubber in nonaqueous liquids, Dispersion of. R. Almy. 1,905,026; Apr. 25.
Rubber material, Producing expanded. G. P. Denton. 1,905,269; Apr. 25.
Rug underlay. W. J. Slagle. 1,905,008; Apr. 25.
Running board. B. Bronson. 1,905,895; Apr. 25.
Running board and the like, Automobile. W. S. Vrooman. 1,905,769; Apr. 25.
Safe lock, Electric. H. M. Leschke and P. J. Anselmo. 1,905,965; Apr. 25.
Safety attachment for aeroplanes. C. A. Bolcom. 1,905,237; Apr. 25.
Safety attachment for typographical composing and casting machines. W. G. Hamilton. 1,906,060; Apr. 25.
Safety control system, Automatic combustion. T. A. Peebles. 1,905,745; Apr. 25.
Safety device. A. C. Nicols and M. C. Moore. 1,906,081; Apr. 25.
Safety device for die presses. W. C. Jay. 1,905,099; Apr. 25.
Safety device for grinders. C. T. Raule. 1,905,651; Apr. 25.
Safety device for rock drills. E. B. Lear. 1,905,474; Apr. 25.
Safety magneto switch. M. Zugermayer. 1,906,121; Apr. 25.
Safety means for hydraulic brakes. H. A. Walker. 1,905,077; Apr. 25.
Safety valve, Pilot light controlled. E. J. Leach. 1,905,414; Apr. 25.
Sand tester. J. L. Badgett. 1,905,208; Apr. 25.
Sanitary pad supporter belt. M. B. Hammond. 1,905,964; Apr. 25.
Sash balance. A. H. Kersting. 1,905,107; Apr. 25.
Sash forming machine. G. T. Forbregd and V. R. Cornish. 1,905,839; Apr. 25.
Saw adapter. A. A. Magri. 1,905,482; Apr. 25.
Sawmill dog. E. P. Tufts. 1,905,766; Apr. 25.
Scaffolding. J. A. Hershey. 1,906,626; Apr. 25.
Scale, Low type even balance counter. H. M. Cameron. 1,905,898; Apr. 25.
Screen: *See*—
Pipe screen. Window screen.
Vibrating screen.
Screen and structure, Window. H. R. Noyes. 1,905,421; Apr. 25.
Screw element, Self-locking coupled. W. E. Hoke. 1,905,869; Apr. 25.
Screw thread gauge. J. Hartness. 1,905,705; Apr. 25.
Seal. B. Borland. 1,905,139; Apr. 25.
Seal, Oil. R. W. Chandler. 1,905,800; Apr. 25.
Sealed bearing. P. C. Wego. 1,905,666; Apr. 25.
Seaming head for closing machines. A. L. Kronquest. 1,906,162; Apr. 25.
Seat: *See*—
Valve seat. Vehicle seat.
Seat. W. M. Hanson. 1,906,061; Apr. 25.
Seeding implement. A. E. Botsford. 1,905,892; Apr. 25.
Separable fastener. C. W. Leguillon. 1,905,917; Apr. 25.
Separator: *See*—
Centrifugal separator.
Separator. J. B. Gaffney. 1,905,458; Apr. 25.
Series compacitator with combination protective equipment. B. V. Hoard. 1,905,226; Apr. 25.
Sewing machine. C. W. Mueller. 1,905,891; Apr. 25.
Sewing machine, Buttonhole. C. A. O. Grip. 1,905,854; Apr. 25.
Sewing machine darning operations, Workholder for. J. D. Karle. 1,905,907; Apr. 25.
Sewing machine, Shoe. F. Ashworth. 1,905,031; Apr. 25.
Sewing machine, Shoe. L. E. Topham. 1,905,074; Apr. 25.
Sewing machine shuttle. F. Ashworth. 1,905,032; Apr. 25.
Sewing machines, Needle-thread take-up mechanism for. W. N. Parkes. 1,906,067; Apr. 25.
Sewing machines, Strip-guiding means for. R. J. Sailer. 1,906,104; Apr. 25.
Shade roller. F. J. Burns. 1,905,980; Apr. 25.
Shaft coupling. O. A. Banner. 1,905,431; Apr. 25.
Shaker, Condiment. M. B. Cunningham. 1,906,185; Apr. 25.
Shank pieces, Locating. F. L. Brandt. 1,905,894; Apr. 25.
Sharpener, Pencil. H. W. Schoenfeldt. 1,905,608; Apr. 25.
Sheet and making the same, Reenforced metallic structural. A. A. Kramer. 1,905,418; Apr. 25.
Sheet holding rack. M. W. Krauth. 1,905,109; Apr. 25.
Sheet-separating apparatus. S. J. Finn. 1,905,835; Apr. 25.
Shifting device. R. F. Peo. 1,905,496; Apr. 25.
Shirt package. T. H. Golden. 1,906,150; Apr. 25.
Shock absorber valve. W. A. Chryst. 1,905,149; Apr. 25.
Shock absorbing mechanism. S. B. Haseltine. 1,905,864; Apr. 25.
Shock absorbing mechanism. J. F. O'Connor. 1,905,492; Apr. 25.
Shock handling machine. L. T. Velen. 1,905,321; Apr. 25.
Shoe. T. Torio. 1,905,529; Apr. 25.
Shoe and the manufacture thereof. O. C. Adams. 1,906,205; Apr. 25.
Shoe bottom ornamenting machine. H. B. Edwards. 1,905,961; Apr. 25.
Shoe supporting jack. A. R. Morrill. 1,905,184; Apr. 25.
Shoveling machine. J. S. Finlay and E. B. Reyle. 1,906,001; Apr. 25.
Shut-off and trip valve, Combined. M. P. Teller. 1,905,014; Apr. 25.
Shutter control, Thermostat radiator. J. B. Whitted. 1,905,257; Apr. 25.
Sign or similar article, Display. A. Kanter. Des. 89,707; Apr. 25.
Signs, decorations, and the like, Production of. H. B. Lind. 1,905,565; Apr. 25.
Signal device. V. V. Vitale. 1,906,193; Apr. 25.
Signaling apparatus. A. F. W. Haeussler. 1,905,934; Apr. 25.
Signaling system. J. W. Horton. 1,905,714; Apr. 25.
Signaling system for elevators. H. D. James. 1,905,236; Apr. 25.
Silicate gels and making the same, Compound. R. Riley. 1,906,181; Apr. 25.
Silk, After treatment of artificial. O. Schwarzkopf. 1,906,015; Apr. 25.
Silk consisting of cellulose esters, Weighting artificial. F. W. Weber and H. Schaefer. 1,906,206; Apr. 25.
Sill plate, Method and apparatus for making a. W. Schnell. 1,905,398; Apr. 25.
Single phase motor. H. Weichsel. 1,905,773; Apr. 25.
Slack, Taking up. S. A. Staege. 1,905,250; Apr. 25.
Sled. W. E. Kidder. 1,905,642; Apr. 25.
Slicing machine. C. F. M. van Berkel. 1,905,531; Apr. 25.
Slicing machines, Combined top clamp and end grip for. J. Folk. 1,905,457; Apr. 25.
Slicing machines, Power unit for. T. T. Shields. 1,905,654; Apr. 25.
Slub detector, catcher or breaker. E. J. Abbott. 1,905,259; Apr. 25.
Snap switch, Electric. V. R. Despard. Des. 89,683; Apr. 25.
Soap dispensing apparatus. De W. C. Tyler. 1,905,611; Apr. 25.
Sock and anklet, Combination. R. E. Davis. 1,906,137; Apr. 25.
Sofa or similar article, Upholstered. J. Tavis. Des. 89,728; Apr. 25.
Soles, Manufacturing rubber. C. R. Keiser. 1,905,909; Apr. 25.
Sound record blank. J. A. Miller. 1,905,732; Apr. 25.
Sound recording and reproducing unit. J. M. Kendall. 1,905,175; Apr. 25.
Spark plug. A. E. Anderson. 1,905,957; Apr. 25.
Spatula, Electrically heated wax. W. V. Lane. 1,905,987; Apr. 25.
Speed compressor, High. W. Fourness. 1,905,923; Apr. 25.
Speed indicating device. J. W. Simmons. 1,906,187; Apr. 25.
Speed indicator. S. F. Bernström. 1,905,261; Apr. 25.
Speedometer, Motor vehicle. A. A. and A. H. Thomann. 1,905,015; Apr. 25.
Spinning cell for the manufacture of artificial filaments with auto-recovery of the volatile solvents. H. L. Barthelemy. 1,906,042; Apr. 25.
Spool, Cat line. B. Travis. 1,905,577; Apr. 25.
Sprayer and making the same, Liquid. C. F. Ellsworth. 1,905,828; Apr. 25.
Spreader clamp. E. A. Podd. 1,905,051; Apr. 25.
Spring: *See*—
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Spring assembling machine. J. F. Gail. 1,905,489; Apr. 25.
Spring cushion construction. S. Krakauer and S. S. Marcus. 1,906,159; Apr. 25.
Spring frog. H. E. Muchnic. 1,905,736; Apr. 25.
Sprinkler or fire extinguisher and other fire device, Automatic. S. F. Barclay. 1,905,676; Apr. 25.
Squeegee machine. A. P. Carter, M. J. Hynes, and J. C. Cronin. 1,905,440; Apr. 25.
Stanchion. L. L. Lewis. 1,905,596; Apr. 25.
Stand: *See*—
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Stand for porch gliders, Supporting. S. M. Fischer. 1,905,557; Apr. 25.
Stapling machine. M. Vozel. 1,905,254; Apr. 25.
Starter, Engine. J. W. Fits Gerald. 1,905,836; Apr. 25.
Starter, Motor. B. W. Jones. 1,905,720; Apr. 25.
Steam boiler. I. Harter. 1,905,465; Apr. 25.
Steam engine. J. V. Giesler. 1,905,586; Apr. 25.
Steam trap. J. M. Malone. 1,904,994; Apr. 25.
Steel cable reel, Collapsible. L. W. Nack. 1,905,483; Apr. 25.
Steel retainer attachment for rock drills. J. C. Curtis. 1,905,981; Apr. 25.
Steel wheel. D. W. Voorhees, jr. 1,905,661; Apr. 25.
Steel wool holder. S. Schulhof. 1,905,307; Apr. 25.
Steering mechanism for tractors having endless tread members. R. F. Scott. 1,905,952; Apr. 25.
Stereoscopic positives from inverted relief negatives, Printing. H. E. Ives. 1,905,469; Apr. 25.

Steriliser. J. G. Moore. 1,905,586; Apr. 25.
Stick, Walking. L. Van Selver. 1,905,076; Apr. 25.
Stilt, Fruit picker's. G. Lang. 1,905,112; Apr. 25.
Stitching machine. I. R. Metcalf. 1,906,675; Apr. 25.
Stoker, Mechanical. W. D. Burton. 1,905,542; Apr. 25.
Stopper and the like, Bottle. W. H. Nash. 1,905,801; Apr. 25.
Stopper, Inflatable conduit. P. Goodman. 1,906,151; Apr. 25.
Stopping device for talking machines, Automatic. G. F. Clark. 1,905,151; Apr. 25.
Storage battery. N. D. Starges. 1,905,819; Apr. 25.
Strand or strip, Tying. A. Freydberg. 1,905,392; Apr. 25.
Strand treating apparatus and method. H. W. Brown. 1,905,896; Apr. 25.
Strap maintenance device, Shoulder. H. V. Stuart. 1,905,318; Apr. 25.
Stretching tool. H. C. Porter. 1,905,052; Apr. 25.
Stripper for carding engines, Pneumatic. E. Clark. 1,905,265; Apr. 25.
Studding, Metal. T. D. Priddy. 1,906,096; Apr. 25.
Subaqueous system of artillery fire adjustment. E. B. Stephenson. 1,905,815; Apr. 25.
Suds, Apparatus for producing. L. L. Strasburger. 1,905,958; Apr. 25.
Sugar containing liquid, Apparatus for treating. A. Lima, jr. 1,905,295; Apr. 25.
Suit, Lady's. N. Fischmann. Des. 89,693; Apr. 25.
Suit, Sun. G. F. Earnshaw. 1,905,451; Apr. 25.
Sulphur from gases or vapors, Collection of. A. M. Clark. 1,905,901; Apr. 25.
Superheater. H. B. Oatley. 1,905,739; Apr. 25.
Superheater for water tube boilers, Interdeck. D. S. Jacobus and J. E. Black. 1,905,292; Apr. 25.
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Diaphragm and coil support.
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Support for motion picture projection machines, Film gate. L. S. Frappier and E. Boecking. 1,906,053; Apr. 25.
Supporting structure for the casing of a motion picture projection screen. O. Wittel. 1,905,543; Apr. 25.
Surfacing tool. H. E. Tautz. 1,906,190; Apr. 25.
Surgical instrument. L. D. Green. 1,905,851; Apr. 25.
Surveying instrument, Oil well. W. M. Smith and K. W. Haley. 1,905,573; Apr. 25.
Suspender slide with bars flattened and embossed across weld. L. W. Joyce. 1,905,939; Apr. 25.
Swab plunger. N. H. Ricker. 1,905,058; Apr. 25.
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Switch. H. E. Norviel. 1,906,084; Apr. 25.
Switch. H. E. Norviel and V. Ecoff. 1,906,083; Apr. 25.
Switch for radio phonograph sets. F. C. De Reamer. 1,905,689; Apr. 25.
Switch mounting. W. R. Walker. 1,905,771; Apr. 25.
Switches, Method and apparatus for forming and testing. J. W. White. 1,905,668; Apr. 25.
Synchronizer. O. A. Jones and J. A. Struthers. 1,905,591; Apr. 25.
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Table reciprocating mechanism, Hydraulically actuated. J. R. Whittles. 1,905,080; Apr. 25.
Tables, Folding card or like. F. B. Harman. 1,905,862; Apr. 25.
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Talking machine, Power operated. J. Kriz. 1,906,161; Apr. 25.
Tap-changing-underload equipment. F. L. Snyder. 1,905,249; Apr. 25.
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Tape feeding device. H. H. Lynn. 1,905,481; Apr. 25.
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Tasseling machine. C. F. Arnold. 1,905,978; Apr. 25.
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Telephone system. V. S. Tharp. 1,905,765; Apr. 25.
Telephone system. H. W. Ulrich. 1,905,662; Apr. 25.
Telephone system and apparatus. J. O. Cadieux. 1,905,215; Apr. 25.
Telephone system using single motion switch by-pass circuits, Automatic. J. H. E. Baker. 1,905,785; Apr. 25.
Telescope sight. A. Steinle. 1,905,070; Apr. 25.
Temperature and pressure controller. F. J. Bast. 1,905,788; Apr. 25.
Temperature regulating system. D. J. Stewart. 1,905,011; Apr. 25.
Temple for spectacles. A. B. Belgard. Des. 89,677; Apr. 25.
Tensioning device for maintaining a given catenary curve in metal strips continuously pulled through an annealing furnace. O. Junker. 1,906,211; Apr. 25.
Testing. C. L. Kasson. 1,905,412; Apr. 25.
Testing machine. W. L. Egy. 1,905,270; Apr. 25.
Textile fabric. M. U. Juestrich. Des. 89,706; Apr. 25.
Textile fabric or similar article. M. Guhl. Des. 89,697; Apr. 25.
Textile fibers, Device for spinning and twisting. G. N. Goddard. 1,905,280; Apr. 25.
Textile fibers, Drafting. L. M. Cotchett. 1,905,268; Apr. 25.
Textile material, Method and apparatus for treating. C. W. Leguillon. 1,905,916; Apr. 25.
Thermionic tube. C. L. Davis. 1,906,048; Apr. 25.
Thermionic valve. H. W. Houck. 1,905,672; Apr. 25.
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Thermostatic switch. H. G. Dybvig. 1,905,823; Apr. 25.
Thermostatically controlled valve. T. W. Carraway. 1,905,683; Apr. 25.
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Thread for shafts, Antifriction. M. S. McKellar. 1,905,939; Apr. 25.
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Ticket printing and issuing machine. H. A. Thomson. 1,905,559; Apr. 25.
Tilting device for sliding windows. W. von Fischer. 1,906,026; Apr. 25.
Time mechanisms, Comparing. J. L. Alden and C. J. McCarthy. 1,905,778; Apr. 25.
Tire chain. B. D. Woolley. 1,906,034; Apr. 25.
Tire, Vehicle. E. O. Fritch. Des. 89,694; Apr. 25.
Tobacco pipe. J. M. Jenkins. 1,905,293; Apr. 25.
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Toothbrush, Rotary. C. C. V. Smith. 1,905,656; Apr. 25.
Tooth swage. S. M. Taylor. 1,905,013; Apr. 25.
Top, Spinning. J. Johnson. Des. 89,705; Apr. 25.
Toy gun. H. F. Nelson. 1,905,787; Apr. 25.
Toy railway system. R. G. Smith. 1,905,571; Apr. 25.
Toy, Wheeled. E. S. Peake. 1,905,649; Apr. 25.
Trackway equipment, Train-control. G. F. Weinreich. 1,905,667; Apr. 25.
Tractor. F. A. Smythe. 1,906,116; Apr. 25.
Traffic controlling apparatus, Railway. B. E. O'Hagan. 1,905,186; Apr. 25.
Traffic controlling apparatus, Railway. H. A. Thompson. 1,906,021; Apr. 25.
Traffic regulating device. H. J. Gechter. 1,905,878; Apr. 25.
Transmission. S. C. Carter. 1,905,145; Apr. 25.
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Trap for automobile radiators, Overflow. D. Lumsden. 1,906,072; Apr. 25.
Tray, Mobile ash. E. H. Barbé. 1,905,123; Apr. 25.
Tread block. M. T. Lattia. 1,906,009; Apr. 25.
Trolley construction. A. E. Pribil. 1,906,097; Apr. 25.
Trombone. F. W. Neptune. 1,905,045; Apr. 25.
Truck and ash hopper, Four-wheel trailer. H. Glaesner. 1,905,636; Apr. 25.
Truck body. M. Standish. 1,905,009; Apr. 25.
Truck construction, Railway. E. G. Busse. 1,905,680; Apr. 25.
Truck, Loading and dumping. W. M. Gross. 1,905,855; Apr. 25.
Truck maintainer. C. O. Johnson. 1,905,904; Apr. 25.
Truck springs, Railway car. T. H. Symington. 1,905,252; Apr. 25.
Trunnions for locomotive valve motions. J. C. Sharp. 1,905,809; Apr. 25.
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Tubes, Making inner. J. C. Carlin. 1,905,865; Apr. 25.
Tubes, Making thin walled. J. V. Geisler. 1,905,584; Apr. 25.
Tubing or pipe. C. G. Naylor. 1,906,011; Apr. 25.
Turbine, Elastic fluid. E. G. Standerwick. 1,905,760; Apr. 25.
Turbo blower aggregate for internal combustion engines. A. Buchi. 1,906,132; Apr. 25.
Turret or window construction. S. E. Cibulas. 1,905,802; Apr. 25.
Typewriter, Electrically operated. A. Linhares. 1,906,167; Apr. 25.
Typewriting and computing machine, Combined. H. Resch. 1,905,305; Apr. 25.
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Universal joint. F. M. Guy. 1,906,057; Apr. 25.
Upholstery edge. H. Fox. 1,905,168; Apr. 25.
Upholstery pad and making the same. A. E. Weber and J. A. Howard. 1,906,028; Apr. 25.
Urea resin, Catalyzed. C. Hills. 1,906,999; Apr. 25.
Utensil, Cooking. L. Hissmay and R. Amann. 1,906,227; Apr. 25.
Vacuum cleaner. F. Riebel, jr., and D. M. Dow. 1,905,059; Apr. 25.
Vacuum distillation. R. E. Wilson. 1,905,201; Apr. 25.
Vacuum sealing structure. W. K. Rankin. 1,905,751; Apr. 25.

Vacuum surface distillation. R. E. Wilson. 1,906,033; Apr. 25.
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Valve. J. Podolsky. 1,905,499; Apr. 25.
Valve actuating means for air heaters. B. Scholl. 1,905,065; Apr. 25.
Valve box, Curb. L. G. Haase and F. M. Brooks. 1,905,856; Apr. 25.
Valve for internal combustion engines. W. F. Boyce. 1,905,140; Apr. 25.
Valve for rubber balls, Check. R. H. Bacon. 1,905,861; Apr. 25.
Valve guide cleaner. L. W. Johnson. 1,905,103; Apr. 25.
Valve lifter, spring compressor and replacer, Combined. J. Sunnen. 1,905,012; Apr. 25.
Valve mechanism for underground liquid tanks, Removable. W. R. McFeely. 1,905,729; Apr. 25.
Valve seat. P. D. Husbour. 1,905,688; Apr. 25.
Valve seat ring driver. F. O. Albertson. 1,905,879; Apr. 25.
Valve spring. K. Pfeiffer. 1,905,496; Apr. 25.
Valve structure. J. R. Coffman. 1,905,684; Apr. 25.
Valves, Screw type mechanical lash adjuster for. G. P. Berry. 1,905,883; Apr. 25.
Vapor recovery. P. J. Carlisle and R. P. Ward. 1,905,900; Apr. 25.
Vapors, Process and apparatus for generating. H. C. Heaton. 1,905,283; Apr. 25.
Variable condenser. C. E. Parcell. 1,905,601; Apr. 25.
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Vehicle. C. A. Hawkins, H. L. Hirschler, and M. Lothrop. 1,905,865; Apr. 25.
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Vehicle, Power-driven. H. Ledwinka. 1,905,594; Apr. 25.
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Vehicles, Antishimmying structure for. E. Shay. 1,905,513; Apr. 25.
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Vessel, Marine. A. O. Dandini. 1,905,845; Apr. 25.
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Vibration damping device. W. E. Landsman. 1,905,723; Apr. 25.
Vibration translating device. G. R. Yenser. 1,905,669; Apr. 25.
Vibrator control device. L. J. Wahl. 1,906,027; Apr. 25.
Volatile constituents from fermented liquids, Removal of. H. and R. S. Heuser. 1,906,007; Apr. 25.
Voltage regulation, Electric. H. Hars. 1,906,210; Apr. 25.
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Washing machine. J. B. Kirby. 1,905,912; Apr. 25.
Watch and the like, Wrist. E. L. Carlson. 1,905,683; Apr. 25.
Watch or similar article, Wrist. S. Lachowits and I. Shiffman. Des. 89,710; Apr. 25.
Water and feed protector, Poultry. L. Stecher. 1,906,016; Apr. 25.
Water cooler fountain, Drinking. D. H. Reeves. Des. 89,717–18; Apr. 25.
Water lock for acetylene generators. H. Wendtland. 1,905,198; Apr. 25.
Water, Softening. L. G. Lindsay. 1,905,726; Apr. 25.
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Weather-strip. H. D. Sevison. 1,906,110; Apr. 25.
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Weight and pen holder, Combined paper. L. J. Smith. Des. 89,727; Apr. 25.
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Wire bale-tie. G. E. Gaus. 1,905,581; Apr. 25.
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CLASSIFICATION OF PATENTS

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NOTE.—First number—class, second number—subclass, third number—patent number

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Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,728,425, G. F. Jaubert, Process of separating hydrogen from gaseous mixtures, decided January 16, 1933, claim 1.

Pat. 1,783,295, O. C. Levy, Party line telephone system, decided Mar. 9, 1933, claims 1, 2, 3, 4, 5, 6, 7, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26.

Pat. 1,790,899, S. E. Agnew, Kitchen implement, decided March 3, 1933, claim 1.

Pat. 1,794,453, G. D. Graves, Reduction of furfural to tetrahydrofurfuryl alcohol, decided March 9, 1933, claims 1, 2, 3, 4, and 9.

Adjudicated Patents

(C. C. A. Mass.) Gullborg patent, No. 1,807,734, for lubricating means, claims 14 and 15 *Held* not infringed. *Alemite Corporation* v. *Lubrair Corporation*, 62 F.(2d) 899.

(C. C. A. Ill.) Hartman and Hartman patent, No. 1,594,947, for field diffusing device, claims 1, 2, and 7 *Held* valid but not infringed, claims 4 and 9 *Held* valid and infringed. *U. S. Ozone Co.* v. *U. S. Ozone Co. of America*, 62 F.(2d) 881.

(C. C. A. Ill.) Hartman and Hartman patent, No. 1,667,316, for dehydrator, claims 1, 2, and 8 *Held* invalid, claims 3, 4, and 7 *Held* valid and infringed. *Id.*

Drawings

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorization from the applicant is filed in connection with the application. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

Applicant's Address

The requirement of Rule 33, that the post-office address of the applicant must be stated in the petition, means that the applicant must give the post-office address at which he customarily receives his mail.

The rule was made in order that the Office in necessary cases might correspond directly with the applicant and not through his attorney. The address of the attorney with instructions to send communications to the applicant in his care will not be accepted as a compliance with this rule.

Condition of Applications Under Examination at Close of Business March 18, 1933

Room No.	(Total number of applications awaiting action, excluding Trade-Mark Division, 52,929; Trade-Mark Division, 986. Oldest new case, Oct. 20, 1932; oldest amended, Oct. 18, 1932. The dates given are 1932 except where † indicates 1933.) DIVISIONS, EXAMINERS, AND SUBJECTS OF INVENTIONS	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6634	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Nov. 10	Nov. 10	684
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 19	Nov. 19	924
4003	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	Dec. 27	Dec. 29	603
7063	4. MERRITT, A. D., Conveyors; Hoists; Handling Apparatus; Excavating	Dec. 9	Dec. 19	516
3626	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	Dec. 19	†Jan. 3	497
4006C	6. LEWERS, A. M., Carbon Chemistry	Nov. 10	Nov. 11	1,043
5726	7. JARBOE, C. G., Optics; Photography	Nov. 26	Nov. 23	1,046
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Jan. 6	†Jan. 6	556
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	Dec. 23	Dec. 24	615
9612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 9	Dec. 14	498
3067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Oct. 26	Oct. 31	660
7701	12. HENRY, C. C., Machine Elements	Dec. 3	Dec. 12	563
8006	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 3	Dec. 3	806
8007	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	Dec. 27	Dec. 27	584
4007	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 18	Nov. 18	1,282
3612	16. SPENCER, O. J., Telegraphy; Telephony	Dec. 22	Dec. 26	501
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 3	Nov. 3	1,146
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 19	†Jan. 19	323
4006	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 1	Nov. 2	1,191
6618	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 18	†Jan. 18	336
7728	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 18	Nov. 18	904
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Nov. 19	Nov. 21	640
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 7	Oct. 26	596
8063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 18	†Jan. 18	449
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 14	Nov. 16	1,146
8008	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Dec. 6	Dec. 6	516
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 19	Dec. 19	622
4628	28. BENSON, A. R., Internal-Combustion Engines	Oct. 21	Oct. 27	975
8062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Nov. 8	Nov. 14	437
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Nov. 23	Dec. 21	610
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 14	Nov. 10	1,220
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 22	Dec. 23	685
6006	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Rock; Wooden Buildings.	Nov. 11	Nov. 9	1,282
6626	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Nov. 1	Nov. 1	926
3609	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 2	Nov. 4	852
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 20	Oct. 20	1,361
3609	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 6	Dec. 6	626
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Walls.	Nov. 21	Nov. 21	695
4674	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 9	Nov. 11	967
7609	40. OBERLIN, J. J., Receptacles	Nov. 22	Nov. 23	1,505
6003	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Nov. 16	Nov. 10	663
8003	42. CUTTING, H. O., Electric Signaling	Oct. 26	Oct. 26	1,088
4004B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Oct. 22	Oct. 27	1,005
4007B	44. SHAFFER, O. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 11	Nov. 7	768
7607	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 12	†Jan. 13	505
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Nov. 22	Nov. 22	624
7609	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Nov. 7	Nov. 8	1,330
5721	48. ROEPKE, O. B., Electricity, General Applications	Nov. 23	Nov. 22	693
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Oct. 20	Oct. 18	900
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 4	Nov. 4	1,003
5628	51. BACKUS, C. D., Radiant Energy	Dec. 12	Dec. 12	806
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	Dec. 19	Dec. 22	577
6607	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 20	†Jan. 21	435
6674	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 10	Nov. 10	911
6607	55. BOWEN, S. T.. {Bread, Pastry, and Confection Making; Cutlery	Dec. 26	Dec. 26	314
	{Designs	†Feb. 20	†Mar. 6	220
4726	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Nov. 25	Nov. 18	962
3626	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Nov. 23	Nov. 23	803
8008	58. DOWELL, E. F., Abrading; Typewriting	Nov. 21	Nov. 21	554
4709	59. RICHARD, V. L., Chemistry; Alcohol; Fertilisers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 11	Nov. 14	673
5806	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 4	Nov. 4	1,067
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 7	Nov. 10	819
7825	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 25	Nov. 25	1,189
4008	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 1	Nov. 1	1,172
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 23	Nov. 25	1,004
8624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Nov. 1	Nov. 1	1,217
3009B	TRADE-MARKS, LABELS, AND PRINTS: F. A. RICHMOND.. {Trade-Marks	†Feb. 17	†Mar. 6	832
	{Labels and Prints	†Feb. 18	†Mar. 6	184

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

IN RE RECKFORD

No. 3,128. Decided January 23, 1933

PATENTABILITY—RUBBER ERASER ATTACHMENT FOR LEAD PENCILS.

A claim for a rubber eraser attachment for lead pencils *Held* patentable over the prior art.

APPEAL from the Patent Office. Reversed.

Mr. Philip Mauro and *Mr. Reeve Lewis* for Reckford.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

HATFIELD, *J.*:

This is an appeal from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Primary Examiner rejecting claim 14, the only one in appellant's application for a patent for an alleged invention relating to improvements in rubber eraser attachments for lead pencils.

The appealed claim reads as follows:

An article of manufacture consisting of an integrally formed ferrule whose wall is approximately concentric throughout to a common axis and which comprises an annular shoulder at the middle portion thereof, a pencil receiving portion of relatively small diameter extending from said shoulder in one direction and an eraser receiving portion of substantially larger diameter extending from said shoulder in the opposite direction; a pencil one extremity of which fits within said pencil receiving portion of said ferrule, being closely embraced by the wall thereof and permanently and immovably secured therein; and an eraser of substantially larger diameter than said pencil secured within and closely embraced by the wall of said eraser receiving portion of said ferrule and extending substantially beyond the outer extremity thereof.

The references are: Brauns, 814,890, March 13, 1906; Handly, 897,580, September 1, 1908; Tregoning, 977,762, December 6, 1910; Antler, 1,248,988, December 4, 1917.

The appealed claim defines appellant's ferrule as being integrally formed, with walls approximately concentric throughout to a common axis, and comprising—

an annular shoulder at the middle portion thereof, a pencil receiving portion of relatively small diameter extending from said shoulder in one direction and an eraser receiving portion of substantially larger diameter extending from said shoulder in the opposite direction.

One end of the pencil fits into the receiving portion of the ferrule, where it is permanently and immovably secured. The eraser, secured in the eraser receiving portion of the ferrule and extending substantially beyond its outer end, is substantially larger in diameter than the pencil.

The patent to Brauns discloses a lead pencil having a ferrule, which consists, generally, of a non-rotatable cap securely and permanently attached to the pencil. The outer end of the cap is closed and enlarged to form an annular head or shoulder. Mounted upon the non-rotatable cap is a rotatable sleeve, provided with an annular shoulder at approximately its middle portion which abuts against the shoulder formed by the head of the non-rotatable cap. A rubber eraser, which, from the drawings, appears to be of slightly greater diameter than the pencil, is screwed into the outer end of the rotatable sleeve.

The patent to Handly discloses a pencil of the ordinary type, having a ferrule permanently and immovably secured to the pencil, and an eraser of the same diameter as that of the pencil.

The patents to Tregoning and Antler were cited in the decision of the Primary Examiner, because, he said, they disclosed erasers substantially larger than the pencils to which they were attached. They were not referred to by the Board of Appeals.

The patent to Tregoning relates to eraser tips for pencils and means for securing them in position. It appears from his specification that the purpose of the patentee was to so construct the eraser, and the device by which it was secured to the pencil, that when the eraser became worn, it might be removed,

reversed to present another portion (for use) and again secured in place.

In order to carry out the object of the invention, the patentee provided an eraser—

having a lateral collar or projection intermediate its ends, confined within and upon the upper end of a resilient socket adapted to be secured in place upon the end of a pencil, and a hollow flanged ring or ferrule secured removably upon the upper end of the socket and adapted to confine the collar or lateral projection on the rubber body between it and the upper extremity of the socket.

It is evident from the patentee's specification that his purpose was to provide an eraser that would last approximately as long as the pencil to which it was attached, and, in order to accomplish this purpose, he provided a rather complicated structure.

The patent to Antler discloses an adjustable eraser holder for pencils, so constructed that, as the eraser becomes worn, it may be adjusted, and, when necessary, replaced. It was designed to be detachably connected to a pencil so that when desired, a new pencil could be substituted. The patent discloses the end of the eraser inserted in the holder to be rectangular in shape, the outer or erasing end being beveled or wedge shaped, and of larger diameter than the pencil. The purpose of the patentee was to provide an eraser holder of longer life than either an eraser or a pencil.

The Primary Examiner stated that, in view of the references, the enlargement of the eraser receiving end of the ferrule, in order to permit the attachment of an eraser of substantially larger diameter than the pencil, was only a change in proportion or degree "not productive of a different result," and not involving invention. He further stated that the annular shoulder of the ferrule, between the portions of large and small diameters, was nothing more than an ordinary "reducing coupling, well known in pipes and tubing."

The Board of Appeals, Pierce, Examiner-in-Chief, dissenting, affirmed the decision of the Primary Examiner holding, first, that all applicant had done was to "mount the sleeve * * * of Brauns' device

upon the pencil in the manner suggested by Handly," and, second, that the enlargement of the eraser receiving end of the ferrule disclosed in the patent to Handly, in order that a larger eraser might be used, was devoid of invention.

It appears from the evidence of record that the problem confronting those engaged in the business of manufacturing and selling pencils, and it appears from appellant's specification that the problem confronting him, was to provide an eraser "adapted to furnish a maximum surface for erasing written or other matter with a minimum effort," and of such form and proportions that its maximum wear would approximate that of the pencil, and, for the accommodation of such eraser, a non-adjustable ferrule, simple in construction, producible at low cost, and in such form that it would not interfere with the proper use of the pencil to which it was permanently attached.

The trade had beeen offered complicated structures. It demanded a simple one. Appellant met that demand with a device—non-adjustable, integrally formed, simple in construction, producible at low cost, commercially practicable, and adapted to accommodate an eraser of such form and size that its wear will approximate the maximum wear of the pencil to which it is attached—which, by virtue of its own merits, has become so popular that many of the largest producers of lead pencils in the United States have adopted it. It appears, therefore, that appellant's device is not only novel, useful, and commercially successful, but is of such character as to command the respect of the purchasing public and of appellant's competitors as well.

We are unable to agree that the solution of the problem confronting appellant was as simple as stated by the tribunals of the Patent Office. Neither of the references referred to by the Board of Appeals—Brauns and Handly—anticipates the invention defined by the appealed claim. Furthermore, those references do not suggest, either separately or in combination, appellant's novel structure, nor the useful results obtained therefrom. It is true, as stated by the Board of Appeals, that appellant's device is a simple one. However, when considered in the light of its accomplishment and the state of the prior art, its simplicity is the determining factor that brings us to the conclusion that the exercise of the inventive faculties was required to produce it, and that it was not obvious to one of ordinary mechanical skill. In the case of *Potts* v. *Creager*, 155 U. S. 597, 70 O. G. 494, the Supreme Court, among other things, said:

> * * * The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to any one familiar with the subject; but the decisive answer is that with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to any one before. The practised eye of an ordinary mechanic may be safely trusted to see what ought to be apparent to every one. As was said by Mr. Justice Bradley, in *Loom Company* v. *Higgins*, 105 U. S. 580, 591: "Now that it has succeeded, it may seem very plain to any one that he could have done it as well. This is often the case with inventions of the greatest merit. * * *"

The quoted language of the Supreme Court has particular application to the issues in the case at bar.

For the reasons stated, the decision is reversed.

Reversed.

U. S. Court of Customs and Patent Appeals

IN RE DUBILIER

No. 3,063. Decided January 3, 1933

PATENTABILITY—SYSTEMS OF BROADCASTING OVER WIRES OF A POWER SYSTEM.

Claims for a system of broadcasting over the wires of a power system *Held* unpatentable in view of the prior art.

APPEAL from the Patent Office. Affirmed.

Mr. Samuel Ostrolenk for Dubilier.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

LENROOT, *J.*:

This is an appeal from a decision of the Board of Appeals of the United States Patent Office, affirming a decision of the Examiner, rejecting, for want of patentability over the prior art, claims 23 and 24 of appellant's application, filed May 11, 1923.

The appealed claims read as follows:

> 23. In a composite system, a conductor carrying a power supply and high frequency currents superimposed thereon, impedance offering a negligible impedance to said power currents and a high impedance to the high frequency currents and comprising inductance and capacity connected in series with said conductor, one end of said impedance being connected to said conductor, a load connected to the other end of said impedance operated by the power supply, a receiver for the reception of the high frequency signals also connected to the other end of said impedance and means for shunting said first impedance to permit said signalling currents to operate said receiver.
>
> 24. In a composite system, a conductor carrying a power supply and high frequency currents superimposed thereon, means offering a negligible impedance to said power currents and a high impedance to said signalling currrents, one end of said means being connected to said conductor, a load connected to the other end of said means operated by the power supply, a receiver for the reception of the high frequency signals also connected to the other end of said means and means for disabling said first means to permit said signalling currents to operate said receiver.

The references relied upon are: French patent to Drahtlose Tel., 520,285, pub. June 23, 1921; Libby, 1,365,926, January 18, 1921; and Frankis, 1,354,290, September 28, 1920.

The subject matter of appellant's application relates to a system of broadcasting high frequency signals over the wires of a power system, said wires at the same time being in use for the transmission of low frequency commercial electrical current. It is not contended that the simultaneous transmission over one circuit of two currents of different frequencies is new. The object of the alleged invention is an arrangement whereby a subscriber for electric current may enjoy uninterrupted commercial service, and may also be enabled by means of a receiver to hear the broadcast signals upon complying with some requirement to entitle him to this privilege, such as the placing of a coin in a control device; if such requirement is not complied with, the broadcast signals are not available, but in either case the ordinary power current is not affected. In the accomplishment of this, appellant shows the ordinary power line carrying service to various branches. In each branch there is interposed in series with each of the feed wires an impedance, the design of which is such that it offers little or no opposition to the flow of the low frequency power supply, but constitutes a prohibitive impedance to the passage of the signaling currents, which are transmitted at a relatively high frequency. Accordingly, when said impedance is inserted in the line, the result is that, while the power currrent passes on to the subscriber without hindrance, he is unable to receive the broadcast signals because the impedance, while in circuit, chokes such signaling current out of the branch line. In order to permit the clearing of the branch line to permit the reception of the broadcast signals, appellant shows a switch designed to be closed across the terminals of the impedance means, thereby short-circuiting or shunting the same; thereupon both the power current and broadcast signaling current will pass along the switch, since this constitutes a path of less resistance to both, and the subscriber, when this switch is closed, will be able to receive the broadcast programs. While the claims on appeal do not include any such device specifically, the application contemplates a means of permitting the subscriber at his election to bring about the short-circuiting of the impedance, such as by a coin device, and thereby be enabled to receive the programs.

With respect to the design of the impedance to be interposed in the line, appellant has the following to say in his specification:

> In connecting an inductance or impedance in series with the lines, it may be found in certain circumstances that the said inductances or impedance introduces into circuit a resistance sufficiently great to cause considerable losses to occur in respect of the commercial current and to produce a heating up of the coils resulting in further serious objections. In order to reduce these losses and the heating up of the coils to a minimum the inductances or impedance is made up of a few turns only and is magnetically coupled to another inductance, which may be termed a secondary inductance, of many turns, and a condenser is connected across the ends of the said secondary inductance. * * *

The drawings of appellant's application show such an arrangement, having inductances in the lines of the branches, and magnetically coupled with each of them is a secondary inductance, across which latter there is connected a condenser.

The French reference relates to high frequency telegraphy or telephony conducted over wires already in use for the transmissison of high intensity, relatively low frequency, power current. The patentee shows a stretch of transmission line, at each end of which is located high voltage, low frequency, power transformers. At one end of the transmission line there is magnetically coupled to the line a transmitting station for the transmission of the signaling currents, and at the other end of said transmission line there is magnetically coupled a receiving apparatus. According to the patentee, the success of such a system was seriously menaced by the fact that the highly inductive power transformers at each end of the line resulted in a reflection back to the line of the high frequency signaling impulses, resulting in an unsatisfactory transmission of the signaling currents on the one hand and a consequently unsatisfactory reception of them on the other. This trouble was taken care of by the insertion in each of the lines, between the transmitting station and the power apparatus at one end of the line, and between the receiving station and the power apparatus at the other end of the line, of an ohmic resistance, across which was also connected an impedance. The operation of this device, as gathered from the patent, was as follows. The impedance in each line was of such a design that the signaling currrents, being of high frequency, would be unable to pass through said impedances, said signaling currents thereupon being forced to take the path through the ohmic resistance, which was of such a value that the signaling currents would be absorbed, in the form of heat, by their passage through said resistances. The result of this was that the signaling currents would be either totally excluded from the power transformers or other power apparatus, or so nearly so as to obviate the possibility of any serious reflection of the signaling impulses back upon the line. At the same time, the inductance was of such a design as to offer no appreciable impedance to the ordinary power currrent, which is of a relatively low frequency, and accordingly the power current would pass through the said impedances rather than through the relatively high resistance of the resistors.

Figure 4 of the French patent shows a main line 17 and a branch line 22, in the wires of which branch line are connnected the inductances and resistances above described. At the end of this branch line, however, there is not shown any low frequency apparatus, such as transformers, as are shown in Figure 3, upon which our previous description of the French patent is based. The Board of Appeals held that this showed the application of the impedances to a branch line, just as did Dubilier; appellant argues that, while no power apparatus is shown in such branch line, it is impliedly there, and that such condition differentiates this drawing from the situation treated by him, where, as in the ordinary house, no such apparatus is present. We do not regard this question as of great importance to this case, but we may say that we are disposed to accept appellant's view of it. The French patent shows in the conductors of the branch line in Fig. 4 precisely the same impedance means as is shown in Fig. 3. Accordingly, it would seem that the same conditions which necessitated the arrangement in Fig. 3 are impliedly present in the branch line in Fig. 4.

Both the Examiner and the Board of Appeals held that the French patent showed the use of an impedance for the purpose of excluding currrents of high frequency, which at the same time offered no serious opposition to the passage of low frequency commercial currents.

While it is true that the French patentee ultimately treats the high frequency currents differently than does Dubilier, inasmuch as the former dissipates them in the form of heat in the resistances, it is nevertheless true that the effect of the impedances of the French structure is to exclude high

frequency currents *from passing through said impedances while at the same time permitting power current to flow unimpeded through them.* Accordingly the French patent shows a means whereby the high frequency currents are excluded from passage therethrough without interfering with the passage of power currents.

The Board of Appeals in its decision said:

> * * * The Examiner takes the position that there would be no invention in placing a radio receiving set in this branch line [the branch line of the French patent already discussed] beyond the impedance means and in rendering the radio frequency current available by the use of a low impedance shunt in view of the suggestions of the Libby patent.

The low impedance shunt referred to in this quotation is merely a switch shown in Libby for the short-circuiting of certain apparatus in order to eliminate its effect in a circuit. Appellant contends that to place a radio receiver in the French circuit, as suggested by the Board of Appeals in the above quoted language, would be inoperative because, when the reactances and resistances were short-circuited by the "low impedance shunt", the same difficulty would be met in the French circuit that the reactance coils and resistances were designed to prevent. While this is true, we do not think it concludes the matter. We believe that the French patent does show the use of an impedance in a circuit, the function of which is to exclude passage therethrough of the high frequency signaling currents, while permitting unimpeded flow of power current. The question remains whether, in view of such disclosure and the other references, it required more than ordinary skill to bring about the arrangement shown by Dubilier.

With respect to claim 23 above quoted, the Examiner stated in his decision as follows:

> In claim 23 it is stated that the inductance and capacity are connected in parallel [series]. This is effectively true, since the co-operation of E and F with the coil D gives an action similar to that which would be obtained by connecting a condenser across D, so that both the condenser and the inductance D would be in series with the line.
>
> The French patent shows, in Fig. 3, a line 17 for the transmission of power currents between transformers 15 and 16, and shows high frequency signaling apparatus, including a transmitter 18 and receiver 19. To prevent passage of high frequency signaling currents to undesired points, inductances 21 shunted by resistances 20 are inserted in the lines, the combination offering a negligible interference to the passage of power currents, but substantially preventing the passage of high frequency currents. Fig. 4 shows a modification wherein a branch 22 is connected across the conductors 17, with means similar to that of Fig. 3 for permitting the passage of power currents, but excluding the high frequency currents.
>
> * * * This reference does not, however, disclose the form of impedance claimed nor the means for shunting it. However, there would be no invention in replacing this impedance with an arrangement as shown in Fig. 2 of Libby, wherein an impedance including an inductance and condenser is connected in series with a conductor and provided with a switch for short-circuiting it. With the impedances in each of the branch wires 22 replaced by one of these arrangements, high frequency currents could be admitted to or excluded from 22 at will, whereby a receiver connected to 22 would or would not be capable of receiving signals from 18. As an optional arrangement, the elements E, G and H of Frankis, corresponding to applicant's elements D, E, F, might be used in conductors 22 of the French patent and short-circuiting switches provided as suggested by Libby.

An examination of claim 23 shows that the impendance means claimed is described therein as—

> comprising inductance and capacity connected in series with said conductor.

The Solicitor for the Patent Office in his brief urges that this language is met by the ordinary inductance coil alone, since the word "impedance" includes capacity as well as inductance, and since such a coil would have an inherent distributed capacity. While it is true that the word "impedance" includes capacity, and also that a coil has a certain amount of distributed capacity, it is to be observed that the Examiner has otherwise construed this element of the claim; he found that the description of the impedance stated in said claim 23 as—

> comprising inductance and capacity

was

> effectively true, since the co-operation of E and F with the coil D [references are to the Dubilier drawings] gives an action similar to that which would be obtained by connecting a condenser across D, so that both the condenser and the inductance D would be in series with the line.

We think that the language quoted from the claim, respecting the character of the impedance, contemplates a separate capacity to be associated with the inductance.

The Examiner further found that—

> This reference [the French patent] *does not, however, disclose the form of impedance claimed nor the means for shunting it.* Italics ours.)

He thereupon passed on to a consideration of Libby and Frankis with respect to the form of impedance claimed and the means of shunting it.

Frankis shows, in a radio tuning circuit, an inductance coil, coupled to which is a secondary coil, across which latter coil there is connected a condenser. The object of Frankis was to utilize said coupled circuit for the purpose of tuning the whole circuit with a view to permitting the maximum flow of one signal currrent while avoiding the flow of another having a frequency close to the one desired. The coupled structure of Frankis appears to be very much the same, diagrammatically, as the coupled arrrangement of Dubilier; the principal differences are that in the secondary circuit of Frankis the condenser is a variable one, and it also appears that the primary of his impedance means is tapped to permit of the connection of different turns of wire in the main circuit. These differences do not appear to us to be of importance for the purpose of the present discussison. We have already adverted to the language of the Examiner relating to the theory upon which the structure of Dubilier met the impedance means claimed in claim 23; it is our opinion that the same reasoning is applicable to make this showing of Frankis likewise read upon claim 23 in this respect. It is, of course, true that Frankis was dealinng with high frequency currents alone, and had a different problem before him; that these currents were of comparatively small volume, and consequently the wires used in his coils would be correspondingly small. It follows, of course, that the exact structure of Frankis would be inoperative in the Dubilier or the French circuits because the high resistance of the coil would be such as to preclude a circuit offering "negligible impedance to said power currents." The question therefore is whether or not it required the exercise of the inventive faculty so to modify the construction shown by Frankis to adapt it to the conditions faced by Dubilier.

With regard to Libby, we hold that this reference clearly shows it to be old in the art to utilize a short-circuiting switch to nullify the effect of apparatus in a circuit, said apparatus being ineffective when said switch is closed.

It thus appears that all of the elements of claim 23 are old in the electrical art, and the question remains whether to combine these elements as done by Dubilier required the exercise of the inventive faculty. Inasmuch as this is a highly technical matter and the tribunals of the Patent Office have agreed that the arrangement claimed in 23 did not involve the exercise of the inventive faculty, we believe that the rule applies that concurring decisions of the Patent Office will not be disturbed unless manifest error is shown. We are not convinced that such error has been shown, and we believe that the rejection of said claim 23 should be affirmed.

With respect to claim 24, the Examiner found that it was met by merely providing the impedances of the French patent with short-circuiting switches, as shown by Libby. This claim does not require that the impedance consist of a separate inductance and capacity, as the Examiner construed claim 23 to call for, and we are in agreement with the tribunals of the Patent Office that said claim 24 is not patentable in view of the disclosures of the French patent and Libby.

While the decision of the Board of Appeals follows closely that of the Examiner, the latter was more detailed in its discussion of the issues and the references, and for that reason we have deemed it a better basis for our discussion.

For the reasons stated, the decision of the Board of Appeals is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922.]

1,173,079, E. F. Alexanderson, Selective tuning system; 1,195,632, W. C. White, Circuit connections of electron discharge apparatus; 1,251,377, A. W. Hull, Method of and means for obtaining constant direct current potentials; 1,573,374, P. A. Chamberlain, Radio condenser; 1,728,879, C. W. Rice, Amplifying system, D. C., S. D. Calif. (Los Angeles), Doc. E Y-27-M, *Radio Corp. of America et al.* v. *M. Sexton et al.* (*Radio Dock*). Consent decree holding patents infringed Feb. 2, 1933. Doc. E Y-29-C, *Radio Corp. of America et al.* v. *H. Burns* (*Melrose Distributing Co.*). Decree as above.

1,177,697, L. Gaumont, Developing, fixing, toning and otherwise treating photographic films and prints; 1,209,696, same, Apparatus for drying photographic films, appeal filed Feb. 2, 1933, C. C. A., 2d Cir., Doc. 12561, *Cinema Patents Co., Inc.*, v. *Warner Bros. Pictures, Inc.* Doc. 12562, *Cinema Patents Co., Inc.*, v. *Duplex Motion Picture Industries, Inc.*

1,180,159, I. Langmuir, Incandescent electric lamp, D. C., C. D. Calif. (Los Angeles), Doc. E Y-105-C, *General Electric Co.* v. *Young's Market Co., Inc.* Consent decree Jan. 2, 1933.

1,185,313, E. C. Haviland, Collapsible cable lock, D. C., S. D. N. Y., Doc. E 65/314, *Van Kannel Revolving Door Co.* v. *American Revolving Door Corp.* Consent decree for plaintiff (notice Feb. 3, 1933). Doc. E 65/331, *Van Kannel Revolving Door Co.* v. *Cordette Realty Co., Inc., et al.* Consent decree as to Webster Cafeteria, Inc. and S. Kramer, discontinued as to Cordette Co. (notice Feb. 3, 1933).

1,195,632. (See 1,173,079.) 1,209,696. (See 1,177,697.)

1,224,263, R. P. Wiley et al., Illuminated sign, D. C., W. D. Mich. (Grand Rapids), Doc. E 2453, *Flexlume Corp.* v. *American Signs Corp.* Consent decree Feb. 3, 1933.

1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit, D. C., S. D. Calif. (Los Angeles), Doc. E Y-28-H, *Radio Corp. of America, et al.* v. *M. Sexton et al* (*Radio Dock*). Consent decree holding patents infringed Feb. 2, 1933. Doc. E Y-29-M, *Radio Corp. of America et al.* v. *H. Burns* (*Melrose Distributing Co.*). Decree as above.

1,251,377. (See 1,173,079.)

1,277,750, J. A. Pearce, Flotation process and apparatus, C. C. A. 10th Cir., Doc. 647, *The Stearns-Roger Mfg. Co.* v. *J. P. Ruth, Jr.* Decree affirmed Dec. 19, 1932. (To correct error in 427 O. G., p. 783, originally published as 1,277,431.)

1,291,167, M. J. Rueb, Storage battery electrode and process of making same, D. C., W. D. Okla. (Oklahoma City), Doc. E 1227, *A. F. Rueb et al.* v. *Harrison Smith Co. et al.* Claims 1 to 7 held not infringed, bill dismissed Feb. 1, 1933.

1,306,128, R. A. Simpson, Dumping butter mold, D. C., E. D. Wash. (Yakima), Doc. E 1639, *R. A. Simpson Mfg. Co., Inc.*, v. *G. R. Harvill et al* (*Woodcrafters*). Dismissed with prejudice Oct. 11, 1932.

1,307,734. (See 1,459,662.) 1,403,475. (See 1,231,764.)

1,405,523, M. C. Latour, Audion or lamp relay or amplifying apparatus D. C., S. D. N. Y., Doc. E 72/384, *Latour Corp.* v. *Nelson Radio Mfg. Corp.* Consent order of discontinuance (notice Jan. 27, 1933).

1,459,662, C. W. Mansel, Lubricating system; 1,475,980, O. Zerk, Lubricating apparatus; 1,676,636, same, Lubricating dispensing apparatus; Re. 16,787 (of 1,494,652), O. F. Wallace, Grease container; 1,619,126, W. F. Hundemer, Lubricating device; 1,816,022, Re. 18,123 (of 1,749,830), Re. 18,278, W. L. Morris, Grease feeder; 1,807,784, A. V. Gulliborg, Lubricating means, D. C., S. D. Calif. (Los Angeles), Doc. E Y-21-J, *Alemite Corp. et al.* v. *D. L. Yeat et al.* Decree pro confesso, patents held valid, "infringed as to certain thereof" Jan. 30, 1933.

1,467,614, C. W. Bada, Finger nail cleaning compound; 1,819,004, W. C. Roessinger, Toilet article, D. C., E. D. N. Y., Doc. E 6580, *Northam Warren Corp.* v. *Allied Shops, Inc., et al.* Consent decree for plaintiff Jan. 9, 1933.

1,467,930, J. W. Fretwell, Locked razor, filed Dec. 22, 1932, D. C. Del., Doc. E 1009, *J. W. Fretwell* v. *Gillette Safety Razor Co.*

1,470,524, H. B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confectionery; 1,505,592, F. W. Epperson, same, D. C. N. Mex. (Santa Fe), Doc. E 2499, *National Popsicle Corp. et al.* v. *G. A. Ward* (*Ward Rainbow Sucker Co.*). Decree rendered Feb. 1, 1933.

1,474,152 (a), A. A. Kent, Induction coil, filed Feb. 3, 1933, D. C., E. D. N. Y., Doc. E 6842, *Delco-Remy Corp. et al.* v. *O. Borodkin et al.*

1,474,152 (b), 1,474,597, A. A. Kent, Induction coil, filed Feb. 3, 1933, D. C., S. D. N. Y., Doc. E 74/110, *Delco-Remy Corp. et al.* v. *National Ignition Sales Co., Inc.*

1,474,597. (See 1,474,152 (b).)

1,475,980. (See 1,459,662.)

1,494,652. (See 1,459,662.) 1,505,592. (See 1,470,524.)

1,520,312, Shaffer & Wirts, Paper folding machine; 1,663,391, same, Folded sheet and method of folding same, filed Jan. 31, 1933, D. C. Wis. (Milwaukee), Doc. 3939, *Fort Howard Paper Co.* v. *Paper Converting Machine Co.*

1,533,858, L. A. Haseltine, Method and means for neutralizing capacity coupling in audions, D. C., S. D. N. Y., Doc. E 50/141, *Haseltine Corp.* v. *General Electric Co. et al.* Patents sustained, injunction granted, dismissed as to Radiomarine Corp. of America (notice Feb. 1, 1933).

1,584,478, W. J. Wiswall, Manifolding book, D. C., S. D. N. Y., Doc. E 69/111, *American Sales Book Co., Ltd., v. Bonner-Vawter Fanform Co.* Consent order of discontinuance (notice Feb. 1, 1933).

1,570,297, F. L. Dyer, Art of recording and reproducing sounds; 1,628,658, same, Talking machine record; 1,726,546, same, Apparatus for making phonograph records; 1,783,498, same, Method of making phonograph records, filed Feb. 3, 1933, D. C. Del., Doc. E 1013, *F. L. Dyer v. Sound Studios of N. Y., Inc.*

1,573,374. (See 1,173,079.)

1,606,342, E. A. Bruce, Draining device, appeal filed Feb. 6, 1933, C. C. A., 8th Cir. (St. Louis), Doc. 9684, *E. A. Bruce v. S. Marino (Florence Oil Co.).*

1,610,567, Marsh & Cochran, Annealing of sheet steel, D. C., N. D. Ohio, E. Div., Doc. E 3337, *The Surface Combustion Co., Inc., v. Newton Steel Co. et al.* Claim 2 of 1,610,567 held valid, injunction to issue, bill of complaint dismissed as to defendant, The Duraloy Co.; counter-claim of The Duraloy Co. as to infringement of Re. 17,413, A. T. Kathner, Annealing and heat treating furnace, and 1,725,398, same, Metal treating furnace, dismissed Feb. 2, 1933.

1,618,909, E. B. Benjamin, Electrical connecter device, filed Feb. 3, 1933, D. C., S. D. N. Y., Doc. E 74/109, *Beaver Mfg. Co., Inc., v. Presto Electric Co., Inc., et al.*

1,619,126. (See 1,459,662.)

1,627,723, P. P. Bebry, Tufted mattress button, filed Feb. 6, 1933, D. C., E. D. N. Y., Doc. E 6846, *Mohawk Mfg. Co., Inc., et al. v. The Defiance Button Machine Co.*

1,628,658. (See 1,570,297.) 1,662,999. (See 1,791,119.)

1,663,391. (See 1,520,312.) 1,676,626. (See 1,459,662.)

1,718,997. (See 1,470,524.) 1,725,398. (See 1,610,567.)

1,726,546. (See 1,570,297.)

1,728,430, G. G. Mevi, Binder, filed Jan. 30, 1933, D. C., E. D. Mich. (Detroit), Doc. 5758, *G. G. Mevi v. The Burkhardt Co.*

1,728,879. (See 1,173,079.)

1,729,654, Watson & Culver, Method of making bifocal lenses, D. C. Mass., Doc. 3446, *United Kingdom Optical Co., Ltd., et al. v. American Optical Co. et al.* Bill dismissed, injunction on counterclaim against plaintiff, The Univis Corp., Feb. 1, 1933.

1,730,879, A. K. Epstein, Egg product and process for producing same, filed Jan. 30, 1933, D. C., N. D. Ohio, E. Div., Doc. 4587, *The Emulsol Corp. v. Standard Brands, Inc., et al.*

1,739,506, C. P. Delbel, Process and apparatus for forming connecters for dry cells, D. C., S. D. N. Y., Doc. E 70/199, *General Dry Batteries, Inc., v. U. S. Electric Mfg. Corp.* Consent decree for plaintiff (notice Feb. 2, 1933).

1,749,830. (See 1,459,662.)

1,752,917, A. R. Lukens, Dielectric substance, D. C., W. D. N. Y., Doc. 296, *The Richardson Co. v. The Arrow Battery Products Co.* Dismissed Jan. 30, 1933. Doc. E 789, *The Richardson Co. v. Klein-Kramer Co.* Dismissed without prejudice Feb. 7, 1933.

1,755,114, L. A. Hazeltine, Unicontrol signaling system; 1,755,115, same, Variable condenser, D. C., S. D. N. Y., Doc. E 72/383, *Hazeltine Corp. v. Halson Radio Mfg. Corp.* Consent order of discontinuance (notice Jan. 27, 1933).

1,755,115. (See 1,755,114.)

1,756,898, A. J. Bocs, Balancing device; 1,886,246, same, Harmonic antivibrator, filed Jan. 31, 1933, D. C., E. D. Mich. (Detroit), Doc. 5759, *A. J. Bocs v. Reo Motor Car Co.*

1,783,498. (See 1,570,297.)

1,784,619, J. W. Bishop, Toilet seat, filed Feb. 7, 1933, D. C. Mass., Doc. E 3829, *The Brunswick-Balke-Collender Co. v. C. F. Church Mfg. Co.*

1,791,119, S. Cabot, Colloidal dispersion product; 1,662,999, same, Method of colloidally dispersing solids, filed Jan. 31, 1933, D. C. Mass., Doc. E 3826, *S. Cabot, Inc., v. Pittsburgh Plate Glass Co.*

1,793,486, H. L. Budd, Picture frame, filed Feb. 1, 1933, D. C., S. D. N. Y., Doc. E 74/99, *Friedman Silver Co., Inc., v. Globe Silver Co., Inc.*

1,800,665, Des. 85,117, E. Schultz, Ash receptacle, D. C., E. D. Pa., Doc. 6751, *The Nagel Chase Mfg. Co. v. H. M. Kofsky (Champion Lighting Co.).* Dismissed Jan. 27, 1933.

1,815,745, R. E. Thompson, Safety razor; 1,858,316, Thompson & Smith, same, D. C., S. D. N. Y., Doc. E 71/287, *Gillette Safety Razor Co. v. Triangle Mechanical Laboratories Corp.* Discontinued without prejudice (notice Feb. 2, 1933). Same, filed Feb. 3, 1933, D. C., E. D. N. Y., Doc. E 6841, *Gillette Safety Razor Co. v. Triangle Mechanical Laboratories Corp.* Same, filed Feb. 4, 1933, D. C. Del., Doc. E 1014, *Gillette Safety Razor Co. v. Marathon Razor Blade Co.*

1,816,022. (See 1,459,662.) 1,819,004. (See 1,467,614.)

1,830,768, I. M. Rod, Art of making garments, D. C., E. D. Pa., Doc. 7403, *Rokap Corp. v. M. Steinberg Co., Inc., et al.* Consent decree enjoining defendants Jan. 30, 1933.

1,858,316. (See 1,815,745.)

1,860,433. (See Des. 86,274.)

1,875,894, J. A. Singmaster, Artificial silk filament and method of making same, filed Dec. 19, 1932, D. C. Del., Doc. E 1008, *Tubize Chatillon Corp. v. Industrial Rayon Corp.*

1,886,246. (See 1,756,898.)

1,887,364, A. H. Shillman, Art needle work, filed Jan. 28, 1933, D. C., S. D. N. Y., Doc. E 74/56, *A. H. Shillman v. Tobin, Sporn & Glaser, Inc.*

Re. 16,787. (See 1,459,662.)

Re. 17,413. (See 1,610,567.)

Re. 18,123. (See 1,459,662.)

Re. 18,278. (See 1,459,662.)

Des. 83,651, P. A. Stuart, Shoe, Des. 83,711, C. Wolfelt, same, D. C., S. D. N. Y., Doc. E 59/390, *Andrew Geller Shoe Mfg. Co., Inc. v. M. J. L. Shoe Shops, Inc.* Decree pro confesso (notice Jan. 31, 1933).

Des. 83,711. (See Des. 83,651.)

Des. 85,117. (See 1,800,665.)

Des. 86,274, L. F. Rosenbaum, Bifurcated outer garment; 1,860,433, same, Trousers, filed Feb. 1, 1933, D. C. Conn., Doc. E 2270, *Rosenbaum & Sons Co. (Kalamazoo Pants Co.) v. G. B. Prentice Mfg. Co.*

T. M. 147,206, F. J. Coty, Perfume, toilet water, face powder, etc., appeal filed Nov. 5, 1932, C. C. A., 3d Cir., Doc. 5029, *Weissbard Bros. v. Coty, Inc.*

TRADE-MARKS

OFFICIAL GAZETTE, APRIL 4, 1933

[VOL. 429. No. 1]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 325,994. NORTHRUP, KING & CO., Minneapolis, Minn. Filed Apr. 11, 1932.

KINGSCROST

For Field Corn Seed and Sweet Corn Seed.
Claims use since Mar. 25, 1932.

CLASS 2

Receptacles

Ser. No. 334,954. CLIMAX TUBE COMPANY, Mystic, Conn. Filed Feb. 14, 1933.

CLIMAXCORE

No claim is made to the exclusive use of the word "Core" or the representation of the goods apart from the mark as shown in the drawing.
For Paper Tubes or Cores Used for Wrapping and Shipping Purposes.
Claims use since November, 1916.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 334,109. MANHATTAN SOAP COMPANY, INC., New York, N. Y. Filed Jan. 19, 1933.



The copyright notice and the representation of the label or wrapper per se and the wording thereon being disclaimed apart from the mark as shown, excepting the words "Mickey Mouse" and the words "Smart as Its Namesake", and the corporate name of the applicant.
For Toilet Soaps.
Claims use since Dec. 8, 1932.

Ser. No. 334,533. THE LEA MANUFACTURING COMPANY, Waterbury, Conn. Filed Feb. 1, 1933.

LEAROK

For Abrasive Composition for Buffing, Coloring, Abrading, and Cutting Surfaces of Metal or Other Materials.
Claims use since Jan. 4, 1931.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 325,104. KRICH PRODUCTS CORPORATION, Vineland, N. J. Filed Mar. 14, 1932.



The descriptive notation "Sparkling Icy Cubes" is disclaimed apart from the other features of the mark shown in the drawing.
For Cubes or Tablets for Aiding the Digestion and for Correcting Tobacco Breath and Smokers' Taste.
Claims use since Jan. 11, 1932.

Ser. No. 328,660. JAMES A. CARLSON, doing business as Redicide Co., Minneapolis, Minn. Filed July 9, 1932.

RED-I-CIDE

For Insecticides.
Claims use since June 27, 1931.

Ser. No. 328,968. S. M. A. CORPORATION, Cleveland, Ohio. Filed July 21, 1932.

ALERDEX

For Protein Free Maltose and Dextrins to be Used as a Pharmaceutical Preparation Upon Prescription by Physicians.
Claims use since May 30, 1932.

Ser. No. 329,200. THE PERFECT MANUFACTURING CO., doing business as So-Lo Works, Cincinnati, Ohio. Filed July 29, 1932.



For Adhesive Preparation for Shoe Resoling and Repairing Compound.
Claims use since Jan. 10, 1931.

Ser. No. 330,298. THE HOWARD JACKLEY COMPANY, Philadelphia, Pa. Filed Sept. 13, 1932.

citrotabs

For Laxatives in the Form of Tablets for Use in Cases of Constipation, Indigestion, Sour Stomach, Headache, Biliousness and Bad Breath.
Claims use since Sept. 1, 1932.

Ser. No. 330,751. LITHOGRAPHIC TECHNICAL FOUNDATION, INC., New York, N. Y. Filed Sept. 28, 1932.

LITHOTERPS

For Material Adapted for the Treatment and Preservation of the Plates and Parts of Printing and Lithographing Presses.
Claims use since Sept. 12, 1932.

Ser. No. 331,274. THE WALLINGFORD LABORATORIES, INC., Wallingford, Conn. Filed Oct. 14, 1932.



For Astringent, Skin Tightener Preparation, Liquid Powder, Lemon Cream, Tissue Cream, Cold Cream, Almond Cream, Liquefying Cleansing Cream, Foundation Cream, Cuticle Remover Preparation, Nail Polish Preparation, Nail Polish Remover Preparation, Muscle Oil, Brilliantine, Liquid Cream.
Claims use since Mar. 1, 1932.

Ser. No. 331,862. AUGUST KARRETH, doing business as Luitpold-Werk, Chemisch-pharmaceutische Fabrik, Munich, Germany. Filed Nov. 3, 1932.

Tonaton

For Nerve Tonics.
Claims use since September, 1931.

Ser. No. 332,503. WORCESTER SALT CO., New York, N. Y. Filed Nov. 26, 1932.

WORCESTER

IODIZED

No claim is made to the word "Iodized" apart from the mark shown in the drawing.
For Tooth Paste, Tooth Powder, Mouth Wash.
Claims use since Oct. 11, 1930.

Ser. No. 333,702. ADELE DU PONT, INC., New York, N. Y. Filed Jan. 6, 1933.



The name "Adele duPont" is a fictitious name. The lining in the shield designates shading. No claim is made to the exclusive use of the words "Plastic Facial Cream" except in the combination shown.
For Face Creams.
Claims use since Oct. 24, 1932.

Ser. No. 333,785. FRANCIS ELLSWORTH DAWSON, Decatur, Ill. Filed Jan. 9, 1933.



The hand-writing appearing on the drawing is a facsimile of applicant's signature.
For Health Powder for Cattle.
Claims use since Nov. 8, 1917.

Ser. No. 333,787. B-B CHEMICAL WORKS, INC., Atlanta, Ga. Filed Jan. 10, 1933.

KWIK-SODDER

For Preparation in Powder, Paste, and Liquid Form Used in the Cleaning, Mending, and Repairing of Radiators, Water Jackets, Cylinder Heads, and Similar Objects.
Claims use since Dec. 28, 1932.

Ser. No. 333,817. BEATRICE M. BAUER, doing business as The Pinx Company, Burbank, Calif. Filed Jan. 11, 1933.

PINX

For Stomach Medicine and Breath Purifier.
Claims use since Jan. 2, 1933.

Ser. No. 333,869. ANN WATKINS, doing business as Equalizer Company, Memphis, Tenn. Filed Jan. 12, 1933.

EQUALIZERS

For Laxative Preparation for Use in the Treatment of Constipation.
Claims use since June 1, 1932.

Ser. No. 334,318. HARRY PERSONENI, doing business as Harper Company, New York, N. Y. Filed Jan. 25, 1933.

BICAS

For Preparation for Treatment of Stomach Disorders.
Claims use since Dec. 23, 1932.

Ser. No. 334,434. FILTROL COMPANY OF CALIFORNIA, Los Angeles, Calif. Filed Jan. 28, 1933.

RETROL

For Chemically Treated Colloidal Clay, Adapted for Use as a Decolorising, Bleaching, Filtering, Purifying, and Absorbing Medium.
Claims use since Jan. 10, 1933.

Ser. No. 334,485. CHEMOSAN-UNION UND FRITZ-PREOLDT A. G., Vienna, Austria. Filed Jan. 31, 1933.

METUVIT

For Ray-Active Ointment for the Treatment of Wounds.
Claims use since June 11, 1929.

Ser. No. 334,507. WARWICK CHEMICAL COMPANY, West Warwick, R. I. Filed Jan. 31, 1933.

SETOLE

For Finishing Products and Softeners for Silk, Rayon, and Cotton.
Claims use since May 15, 1931.

Ser. No. 334,556. THE DILL CO., Norristown, Pa. Filed Feb. 2, 1933.

DIL-KIL

For Insect Spray.
Claims use since June 11, 1932.

Ser. No. 334,591. THE UPJOHN COMPANY, Kalamazoo Mich. Filed Feb. 3, 1933.

Spirymol

For Medicated Troche for Use in the Treatment of the Throat.
Claims use since Dec. 15, 1932.

Ser. No. 334,611. MAISON JEURELLE, INC., Chicago, Ill. Filed Feb. 3, 1933.

Secret de Jeurelle

For Perfume.
Claims use since Jan. 20, 1933.

Ser. No. 334,618. ZOLTAN REICHMAN, doing business as New York Medical Pharmaceutical Laboratories, New York, N. Y. Filed Feb. 3, 1933.

LITHAMIN

For Compressed Tablets for Urinary and Biliary Antiseptic.
Claims use since October, 1932.

Ser. No. 334,630. ARCADY LABORATORIES, INC., Chicago, Ill. Filed Feb. 4, 1933.

ARKD ARCADY

For Medicinal Preparations for Animals and Poultry.
Claims use since Jan. 25, 1933.

Ser. No. 334,724. WERNER MFG. CO., Brooklyn, N. Y. Filed Feb. 7, 1933.

Elozone

For Sets of Perfumed Pads and Pad Holders, as Well as for the Perfumed Pads Themselves, Such Perfumed Pads Being Used to Destroy Cooking and Other Odors.
Claims use since June 1, 1932.

Ser. No. 334,750. RAY P. HELM, doing business as The Helm Company, Benton Harbor, Mich. Filed Feb. 8, 1933.

HE-SHE

For Antiseptic Vaginal Suppositories.
Claims use since Sept. 20, 1927.

CLASS 12

Construction Materials

Ser. No. 334,849. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 10, 1933.

ALLSTATE

For Asphalt Roofing, Asbestos Building Material, and Wallboard.
Claims use since Nov. 16, 1932.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 328,033. NATIONAL TUBE COMPANY, Pittsburgh, Pa. Filed June 16, 1932.

US STEEL

No claim is made herein to the registration of the word "Steel" apart from the mark shown in the drawing. The applicant, and Tennessee Coal, Iron & Railroad Company, owner of Trade-Mark registration No. 296,780, issued Aug. 23, 1932, and Universal Atlas Cement Company, owner of Trade-Mark registration No. 292,999, issued Apr. 5, 1932, are subsidiaries of the United States Steel Corporation.
For Metal Pipes, Tubes, and Casings.
Claims use since Aug. 27, 1931.

Ser. No. 330,447. THE CHAMPION HARDWARE COMPANY, Geneva, Ohio. Filed Sept. 19, 1932.

CHAMPION

For Sash Lifts, Door Stops and Pulls, Base Knobs, Push Plates, Spring Hinges, Chest Handles, Coat and Hat Hooks, Door Checks, Guards, Holders, Pulls and Stops, Drop Handles, Door Pulls, Kick Plates, Letter Box Plates, Box Corners, Screen Door Braces, Shelf Brackets, Folding Shelf Brackets, Hand Rail Brackets, Sink Brackets, Broad Butts, Half Mortise Butts, Light Narrow Butts, Loose Pin Butts, Ornamental Butts, Reversible Butts. Screen and Storm Door Butts, Half Surface Butts, Card Holders, Transom Chains, Corner Irons, Screen Corners, Cup Hooks, Gate Hooks and Eyes, Hammock Hooks, Pole Hangers, Screen Hangers, Hinge Hasps, Safety Hasps, Double Acting Floor Hinges, Ornamental Hinges, Show Case Hinges, Strap and T Hinges, Surface Door Hinges, Clothes Line Hooks, Fire Pail Hooks, Screw Hooks, Door Knockers, Mending Plates, Sash Pull Plates, T Plates, Sash Pulleys, Flush Rings, Trap Door Rings, Thresholds, Stop Bead Washers, Double Acting Screen Door Hinges, Screen Sash Adjusters, Ceiling Hooks, Screen Door Hinges, Basement Window Sets, Costumers Hooks.
Claims use since 1883.

Ser. No. 334,794. GENERAL FIRE EXTINGUISHER COMPANY, Providence, R. I. Filed Feb. 9, 1933.

SIMPLEX

For Automatic Sprinkler Systems.
Claims use since May 5, 1930.

CLASS 15

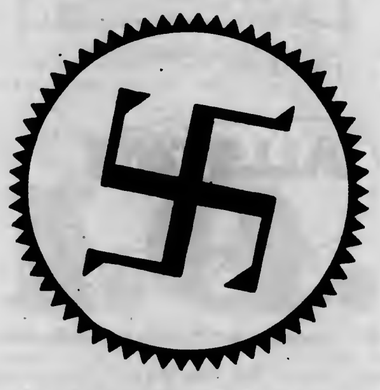
Oils and Greases

Ser. No. 325,821. EDELEANU GESELLSCHAFT M. B. H., Berlin, Germany. Filed Apr. 5, 1932.

EDELEANU

For Gasoline, Illuminating Oil, Diesel Oil, Transformer Oil, Switch Oil, Turbine Oil, and Lubricating Oil.
Claims use since July 17, 1931.

Ser. No. 327,747. SCHLIEMANN COMPANIES, INC., New York, N. Y. Filed June 4, 1932.



For Mineral Lubricating Oils, Engine Grease, Animal and Fatty Lubricating Oils, Boring Machine Oils, and Special Oils.
Claims use since June 3, 1925.

Ser. No. 334,388. WOLVERINE-EMPIRE REFINING CO., New York, N. Y. Filed Jan. 25, 1933.



In the drawing, the oblique lines denote the color green and the horizontal lines the color blue. The background and unbatched areas are a yellowish white. The words "100% Pure Pennsylvania", "Motor Oil", "For 50 Years Refiners of Pennsylvania Crude Oil Exclusively", "New York" are disclaimed apart from the mark shown in the drawing.
For Lubricating Oils and Greases.
Claims use since Jan. 9, 1933.

Ser. No. 334,480. THE WHITE & BAGLEY COMPANY, Worcester, Mass. Filed Jan. 30, 1933.

ROYAL WORCESTER

The word "Worcester" is disclaimed apart from the mark shown in the drawing.
For Lubricant Oils for Motors and Other Machinery.
Claims use since May 4, 1899.

Ser. No. 334,971. THE ZIP ABRASIVE COMPANY, Cleveland, Ohio. Filed Feb. 13, 1933.

SUPER-FILM

For Lubricating Oils and Grease.
Claims use since Oct. 15, 1932.

Ser. No. 335,041. F. P. UERLING, Hastings, Nebr. Filed Feb. 16, 1933.

XC TE

For Gasoline and Lubricating Oil.
Claims use since Feb. 8, 1933.

CLASS 16

Paints and Painters' Materials

Ser. No. 330,766. J. A. TUMBLER LABORATORIES, Baltimore, Md. Filed Sept. 28, 1932.

Sparkol

For Automobile and Furniture Polish.
Claims use since Aug. 19, 1932.

Ser. No. 333,360. PITTSBURGH PLATE GLASS COMPANY, Pittsburgh, Pa. Filed Dec. 24, 1932.



The trade-mark consisting of a representation of a sun face and rays and the words "Pittsburgh Paint Products," the words "Pittsburgh Paint Products" being dis-

claimed apart from the mark as shown. The decoration around the sun's face and the broad ray are shaded to denote orange, and the narrow rays are shaded to denote gold.

For Liquid and Paste Paints, Paint Primers, Paint Enamels, and Lacquers.

Claims use since Nov. 14, 1932.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 330,414. JOSEPH LEWIS, doing business as Auto Car-A-Van Trailer Co., Detroit, Mich. Filed Sept. 17, 1932.



All words in the accompanying drawing with the exception of the word "Car-A-Van" are hereby disclaimed.

For Automobile Camp Trailer and Coach.

Claims use since May 15, 1930.

Ser. No. 332,880. GENERAL MOTORS CORPORATION, Detroit, Mich. Filed Dec. 8, 1932.

I.C.V.

The drawing is lined to indicate the color red, although color is not an essential feature of the trade-mark.

For Ventilating Windows for Automobiles, Busses, Trucks, and Like Commercial Vehicles, Railway Cars, Aeroplanes, Boats, and Similar Vehicles Having Closed Bodies.

Claims use since Nov. 22, 1932.

Ser. No. 332,881. GENERAL MOTORS CORPORATION, Detroit, Mich. Filed Dec. 8, 1932.

FISHER
I.C.V.
NO-DRAFT VENTILATION

The drawing is lined to indicate the color red, although color is not an essential feature of the trade-mark. The words "No-Draft Ventilation" are disclaimed apart from the mark shown in the drawing.

For Ventilating Windows for Automobiles, Busses, Trucks, and Like Commercial Vehicles, Railway Cars, Aeroplanes, Boats, and Similar Vehicles Having Closed Bodies.

Claims use since Nov. 22, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 335,178. BLUMAN ENGINEERING CORP., Brooklyn, N. Y. Filed Feb. 21, 1933.

LIFEGUARD

For Electric Fuse Plugs.

Claims use since June 1, 1931.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,201. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 19, 1932.



For Toy Velocipedes and Wagons, Golf Balls, Dolls, and Croquet Sets.

Claims use since Nov. 16, 1932.

Ser. No. 333,809. ALBERT S. MOORMAN, West Englewood, N. J. Filed Jan. 10, 1933.

TAXI

For Card Game.

Claims use since August, 1931.

Ser. No. 334,375. GRAFF F. WOLFE, doing business as The Hamilton Machine Company, Minneapolis, Minn. Filed Jan. 26, 1933.

E-Z-ACES

For Coin-Controlled Amusement Device.

Claims use since Dec. 6, 1932.

Ser. No. 334,408. RICK-RACK CO., Columbus, Ga. Filed Jan. 27, 1933.

RICK-RACK

For Toy Novelty Consisting of a Wooden Paddle and Rubber Ball Attached Thereto by Means of a Rubber String.

Claims use since Aug. 29, 1932.

Ser. No. 334,560. GULBRANSEN COMPANY, Chicago, Ill. Filed Feb. 2, 1933.

TEKNOKRAZY

For Table Board Game Played with Pieces.

Claims use since Jan. 28, 1933.

Ser. No. 334,760. PROGRESSIVE GAMES COMPANY, Cincinnati, Ohio. Filed Feb. 8, 1933.

I.Q.

For Table Board Game Played with Paper and Writing Instrument.

Claims use since Dec. 30, 1932.

Ser. No. 334,819. VIRGINIA STATIONERY COMPANY, INC., Richmond, Va. Filed Feb. 9, 1933.

ZIGZAW

For Puzzles and Board Games.

Claims use since Feb. 6, 1933.

Ser. No. 334,925. MAGIC FLOTE NOVELTY CORP., Chicago, Ill. Filed Feb. 13, 1933.

THE MAGIC FLOTE

For Pneumatic Toys Comprising a Blow Tube Having a Dart Seat and a Dart on the Seat Adapted to be Elevated from the Seat by Air Pressure Through the Blow Tube.

Claims use since Oct. 14, 1932.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 328,029. CLEMSON BROS., INC., Middletown, N. Y. Filed Jan. 15, 1932.



No claim is made in this registration to trade-mark rights in the words "The Saw", "Trade-Mark", "Weatherproof", "Made in U. S. A.", "Clemson Bros., Inc.", or "Middletown, N. Y.", except as distinctively displayed in connection with other features of the mark. Applicant claims ownership of registrations #41,568 issued Dec. 1, 1908, and #47,670 issued Nov. 14, 1905.

For Saws and Saw Blades.

Claims use since Sept. 11, 1931.

Ser. No. 333,707. JOHNSON, JOHNSON & JOHNSON, Hartford, Conn. Filed Jan. 6, 1933.

CLE-TUBE

The word "Tube" is disclaimed apart from the mark shown in the drawing for purposes of registration only.

For Squeezers for Collapsible Dispensing Tubes for Semi-Liquid Substances.

Claims use since Sept. 1, 1932.

Ser. No. 334,540. STANDARD SAFETY RAZOR CORPORATION, Wilmington, Del., and East Norwalk, Conn. Filed Feb. 1, 1933.



No claim is made to the words "Norwalk Long Life Blades" apart from the mark as shown.

For Razors and Razor Blades.

Claims use since June 2, 1930.

Ser. No. 334,617. THE PARKERSBURG RIG & REEL COMPANY, Parkersburg, W. Va. Filed Feb. 3, 1933.

HYDROMATIC

For Brakes for Hoists and Well Rigs.

Claims use since May 2, 1932.

Ser. No. 334,796. ASHER GOLDEN, New York, N. Y. Filed Feb. 9, 1933.



For Ball and Roller Bearings.
Claims use since August, 1932.

CLASS 25

Locks and Safes

Ser. No. 334,631. ARGUS MANUFACTURING COMPANY, Chicago, Ill. Filed Feb. 4, 1933.

THE IRON CLAW

For Handcuffs or Manacles.
Claims use since June 8, 1931.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 319,196. AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Sept. 19, 1931.

NOMAREX

For Prescription Ophthalmic Lenses.
Claims use since Sept. 2, 1931.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 330,094. JAMES G. KINKADE, Pasadena, Calif. Filed Sept. 3, 1932.

FILLERUB

For Brushes, such as Tooth Brushes, Shaving Brushes, Blacking Brushes, and Cosmetic Cream Brushes, etc.
Claims use since July 15, 1932.

CLASS 33

Glassware

Ser. No. 332,876. CURTIS LIGHTING, INC., Chicago, Ill. Filed Dec. 8, 1932.

Golden Armor

For Glass Reflectors.
Claims use since June 15, 1931.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 331,278. BASTIAN-MORLEY CO., doing business as Gas and Electric Heater Co., La Porte, Ind. Filed Oct. 15, 1932.

the Oil Way

The lining appearing in the drawing serves to indicate shading only. For the purpose of registration the word "Oil" is disclaimed apart from the mark as shown.
For Oil Water Heaters.
Claims use since Aug. 29, 1932.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 319,250. SHOJIRO ISHIBASHI, Kurume, Japan. Filed Sept. 21, 1931.

Bridge Stone

For Rubber Tires, Rubber Tubes, Rubber Tire Flaps, and Tire Patches.
Claims use since Sept. 1, 1929.

Ser. No. 330,299. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed Sept. 13, 1932.



The mark consists of a black strand appearing on the surface of the goods at intervals as shown by the color lining in the drawing. All other lining on the drawing indicates shading. No registration rights are claimed in the representation of the packing shown in the drawing.
For Flax Packing for Glands, Stuffing Boxes, Valve Stems, Pistons, Piston Rods, and Plungers.
Claims use since Jan. 7, 1932.

Ser. No. 333,725. E. F. HOUGHTON & CO., Philadelphia, Pa. Filed Jan. 7, 1933.

VIM TRED

For Leather Belting.
Claims use since Dec. 9, 1932.

Ser. No. 334,269. SOUTHERN FRICTION FABRIC COMPANY, Charlotte, N. C. Filed Jan. 23, 1933.

HOLDBESTOS

For Brake Lining.
Claims use since Jan. 1, 1929.

Ser. No. 334,461. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Filed Jan. 30, 1933.



The trade-mark consists of a purple band coextensive with and extending full length along both lateral edges of the goods and is applied by painting it thereon. The ruling in the drawing indicates the color purple.
For Power Transmission Belts.
Claims use since September, 1931.

CLASS 36

Musical Instruments and Supplies

Ser. No. 331,810. WILLIAM VOIT COMPANY, INC., New York, N. Y. Filed Nov. 1, 1932.

LA FAVORITA

For Musical Instruments, Particularly Saxophones; Strings for Musical Instruments, Particularly Violin Strings; and Violin E-String Adjuster.
Claims use since 1897.

Ser. No. 334,588. ANSLEY RADIO CORPORATION, New York, N. Y. Filed Feb. 2, 1933.

DYNAPHONE

For Electric Phonograph With Vacuum Tube Amplifier.
Claims use since Nov. 5, 1932.

CLASS 37

Paper and Stationery

Ser. No. 321,504. RIEGEL PAPER CORPORATION, Riegelsville, N. J. Filed Nov. 25, 1931.

TRANSOLITE

For Wrapping Papers—Namely, Waxed Papers, Plain and Waxed Glassine Papers, Transparent Wrapping Paper, Wax Sulphite Paper, and Cake and Bread Wraps, Excluding Papers for Office Equipment.
Claims use since Oct. 28, 1931.

Ser. No. 328,464. PARSONS PAPER COMPANY, Holyoke, Mass. Filed Jan. 26, 1932.

LACONIA

For Bond and Ledger Papers.
Claims use since Jan. 20, 1932.

Ser. No. 329,953. FRED MAGUIRE, San Francisco, Calif. Filed Aug. 29, 1932.

Silklin

For Toilet Tissue.
Claims use since Aug. 16, 1932.

Ser. No. 329,954. FRED MAGUIRE, San Francisco, Calif. Filed Aug. 29, 1932.

ZILKLIN

For Toilet Tissue.
Claims use since Aug. 2, 1932.

Ser. No. 334,072. THE REPUBLIC PAPER BOARD COMPANY, Cincinnati, Ohio. Filed Jan. 18, 1933.

"REPACO"

For Pasted Board, Containing Indented Paper in Whole or in Part, and Indented Paper.
Claims use since Nov. 10, 1931.

Ser. No. 334,870. THE GLOBE ENVELOPE & PRINTING COMPANY, INC., Richmond, Va. Filed Feb. 11, 1933.

E-Z-OPEN

No claim is made to the word "Open" apart from the mark as shown.
For Church Collection Envelopes.
Claims use since Jan. 26, 1933.

Ser. No. 334,962. P. H. GLATFELTER COMPANY, Spring Grove, Pa. Filed Feb. 14, 1933.

MONOPLANE

For Writing and Printing Paper.
Claims use since Apr. 20, 1929.

CLASS 38

Prints and Publications

Ser. No. 331,701. POPULAR MECHANICS CO., Chicago, Ill. Filed Oct. 29, 1932.

POPULAR INVENTIONS *and* Wonders *of the* World

For Leaflet Published Periodically.
Claims use since Sept. 11, 1931.

Ser. No. 334,341. ALUMNI ASSOCIATION OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Mass. Filed Jan. 26, 1933.

THE TECHNOLOGY REVIEW

For Magazine, a Periodical Chiefly Devoted to the Publication of Articles of a General Scientific and Engineering Nature.
Claims use since Jan. 1, 1899.

Ser. No. 334,948. SHADOPLAY PUBLISHING COMPANY, Chicago, Ill. Filed Feb. 13, 1933.

SHADOPLAY

For Periodicals.
Claims use since Jan. 3, 1933.

Ser. No. 335,095. NATIONAL FUNERAL DIRECTORS' ASSOCIATION OF THE UNITED STATES, INC., Cincinnati, Ohio. Filed Feb. 18, 1933.



For Periodicals—Namely, Magazines, Booklets, and Pamphlets Published Monthly, Annually, and from Time to Time.
Claims use since 1915.

CLASS 39

Clothing

Ser. No. 330,744. GORMAN-NATHAN CO. INC., New York, N. Y. Filed Sept. 28, 1932.



Silvercrest

The representation of a man shown in the drawing is a fanciful picture, and the lining on the drawing is for shading purposes only.
For Men's Clothing—Namely, Men's Suits, Overcoats, and Topcoats.
Claims use since July, 1932.

Ser. No. 333,450. PEERLESS SPORT APPAREL CO. INC., New York, N. Y. Filed Dec. 27, 1932.

FLYING COLORS

For Sweaters for Men, Women, and Children and Dresses for Women and Children.
Claims use since Nov. 25, 1932.

Ser. No. 333,598. LOUIS MEYERS & SON, INCORPORATED, New York, N. Y. Filed Jan. 3, 1933.

PIGTWIN

Applicant disclaims any right to the exclusive use of the descriptive word "Pig".
For Leather Gloves.
Claims use since Nov. 14, 1932.

Ser. No. 333,965. CHIC MANUFACTURING COMPANY, Peoria, Ill. Filed Jan. 16, 1933.

MOVIE LAND

For Women's, Misses', and Children's Dresses, Pajamas; Uniforms for Nurses, Waitresses, Clerks, Beauty Parlor Operators, Elevator Operators; Smocks and Utility Aprons.
Claims use since Oct. 15, 1932.

Ser. No. 334,432. ESSEX RUBBER COMPANY, Trenton, N. J. Filed Jan. 28, 1933.



The drawing is lined for red.
For Rubber Heels.
Claims use since Jan. 18, 1933.

Ser. No. 334,433. ESSEX RUBBER COMPANY, Trenton, N. J. Filed Jan. 28, 1933.

CRUSADER

For Rubber Heels.
Claims use since Jan. 18, 1933.

Ser. No. 334,449. STYLE-CRAFT LINGERIE, INC., New York, N. Y. Filed Jan. 28, 1933.

MISS DEB.

For Panties, Dansettes, Chemises, Night Gowns, Pajamas, and Slips.
Claims use since Dec. 15, 1932.

Ser. No. 334,475. STEINBERGER BROS. GLOVE CORP., San Francisco, Calif., and New York, N. Y. Filed Jan. 30, 1933.

FAUVETY

For Leather and Fabric Gloves.
Claims use since Aug. 14, 1931.

Ser. No. 334,482. MORRIS B. SACHS, Chicago, Ill. Filed Jan. 30, 1933.

SACMOR

For Men's Clothing and Ladies' Ready-to-Wear Apparel—Viz., Men's Overcoats, Top Coats, and Suits, and Ladies' Coats, Suits, and Dresses.
Claims use since Nov. 1, 1932.

Ser. No. 334,559. ISIDORE GROSSMAN, doing business as Grossman Clothing Co., New York, N. Y. Filed Feb. 2, 1933.



Groshire

For Men's Suits, Overcoats, Topcoats, and Trousers.
Claims use since Jan. 29, 1929.

Ser. No. 334,567. THE JUVENILE SHOE CORPORATION OF AMERICA, Aurora, Mo. Filed Feb. 2, 1933.

NATIONAL PARK

SPORT WALKS

For Shoes and Slippers of Leather or Kid.
Claims use since September, 1931.

Ser. No. 334,602. ISAAC GLASER, doing business as H. Glaser & Son, Boston, Mass. Filed Feb. 3, 1933.

Greendale

For Men's, Women's, and Children's Hosiery; Underwear Made of Knitted, Netted, and Textile Fabrics; Sweaters; and Men's Dress, Negligee, and Work Shirts.
Claims use since Mar. 1, 1932.

Ser. No. 334,779. U-NO-JAUNTY DRESS, INC., New York, N. Y. Filed Feb. 8, 1933.

AJUSTAN

For Women's, Misses', and Children's Dresses, Pajamas, Blouses, Vests, Underwear, and Bathing Suits.
Claims use since Jan. 11, 1933.

Ser. No. 334,832. GARFINKEL & RITTER, New York, N. Y. Filed Feb. 10, 1933.

THE RESORTER

For Ladies' Undergarments—Namely, Slips.
Claims use since Feb. 6, 1933.

Ser. No. 334,833. GARFINKEL & RITTER, New York, N. Y. Filed Feb. 10, 1933.

THE STREAMLINE

For Ladies' Undergarments—Namely, Slips.
Claims use since Feb. 8, 1933.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 330,385. SOCIÉTÉ A. RESPONSABILITÉ LIMITÉE RODIER, Paris, France. Filed Sept. 15, 1932.

DJALAP

For Goods in the Piece—Namely, Velvets, Cretonnes, Silks, Tulles, and Nets, Laces, and Veils.
Claims use since Mar. 7, 1932.

Ser. No. 334,362. KLEIN BROTHERS, New York, N. Y. Filed Jan. 26, 1933.

MARILLYN

For Silk, Satin, Linen, Cotton, Rayon, Wool, Crepes, and/or Combinations Thereof, Whether Knitted, Netted, Woven, or Textile in the Piece and Ribbons.
Claims use since May 1, 1924, on Silks, Satins, and Crepes; and Sept. 28, 1928, on remaining goods.

Ser. No. 334,444. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass. Filed Jan. 28, 1933.

KIDDYWINK

For Sheets and Pillow Cases.
Claims use since Jan. 19, 1933.

CLASS 43

Thread and Yarn

Ser. No. 330,340. EMPIRE TWINE & YARN CO., INC., New York, N. Y. Filed Sept. 14, 1932.

EMPIRE
BRAND

No claim is made to the word "Brand" apart from the mark shown on the drawing.
For Thread and Yarn Made of Cotton, Silk, Rayon, Wool, and Combinations Thereof.
Claims use since 1929.

Ser. No. 334,813. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Feb. 9, 1933.

"ADMIRAL"

For Cotton Thread.
Claims use since Jan. 9, 1933.

Ser. No. 334,814. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Feb. 9, 1933.

"EMBLEM"

For Cotton Thread.
Claims use since Jan. 9, 1933.

Ser. No. 334,815. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Feb. 9, 1933.

"MOCCASIN"

For Cotton Thread.
Claims use since Jan. 9, 1933.

Ser. No. 334,816. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Feb. 9, 1933.

"MAJOR"

For Cotton Thread.
Claims use since Jan. 9, 1933.

Ser. No. 334,817. STANDARD-COOSA-THATCHER COMPANY, Chattanooga, Tenn. Filed Feb. 9, 1933.

"NO TRUMP"

For Cotton Thread.
Claims use since Jan. 9, 1933.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 332,581. HOUSEHOLD PAPER PRODUCTS, Detroit, Mich. Filed Nov. 28, 1932.

Servelle

For Sanitary Napkins.
Claims use since July 1, 1931.

Ser. No. 333,620. WABASH APPLIANCE CORP., Brooklyn, N. Y. Filed Jan. 3, 1933.

GLO-O-SUN
ULTRA VIOLET RAY
HEALTH LAMP

Applicant disclaims the exclusive right to the use of the words "Ultra Violet Ray Health Lamp" separate and apart from the mark shown on the drawing.
For Ultra Violet Ray Health Lamps.
Claims use since June 1, 1932.

Ser. No. 333,978. MARCUS & WIRSEN, INC., New York, N. Y. Filed Jan. 16, 1933.

LADY
BETTY

Applicant is the owner of registered Trade-Mark No. 297,203.
For Sanitary Aprons, Sanitary Pads, Sanitary Napkins, Sanitary Panties, and Sanitary Step-Ins.
Claims use since May 4, 1932.

Ser. No. 334,654. ALBERT STUZIN, Brooklyn, N. Y. Filed Feb. 4, 1933.



For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Sept. 15, 1922.

CLASS 46

Foods and Ingredients of Foods

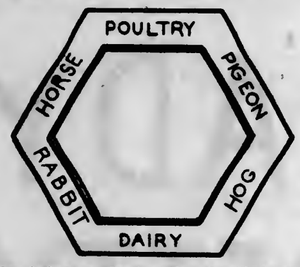
Ser. No. 277,992. BLUE BIRD MALT COMPANY, Brooklyn, N. Y. Filed Jan. 15, 1929.

SELECT BRAND



No claim is made to the words "Select Brand" apart from the mark as shown in the drawing.
For Malt Syrup.
Claims use since May 1, 1927.

Ser. No. 315,364. NATIONAL GRANGE FEEDS, INC., Buffalo, N. Y. Filed June 3, 1931.



No claim being made for the wording associated with this mark apart from the mark as shown.

For Animal Feeds—Namely, Horse, Poultry, Pigeon, Rabbit, Dairy, and Hog Feeds.

Claims use since Jan. 13, 1931.

Ser. No. 316,762. W. BURTON & CO., INC., Brooklyn, N. Y. Filed July 9, 1931. Under 10-year proviso.



For Flavoring Extracts and Imitations Thereof for Food Purposes and Food Flavoring Syrups for Table and Other Uses.

Claims use since 1882.

Ser. No. 326,469. GENERAL MILLS, INC., Minneapolis, Minn. Filed Apr. 25, 1932.

Martha Meade



The portrait shown in the mark is that of a living individual known to applicant's trade as Martha Meade.

For Wheat Flour and Cereal Breakfast Foods.

Claims use since Mar. 1, 1932.

Ser. No. 331,758. SUN-A-SURED, INC., Minneapolis, Minn. Filed Oct. 31, 1932.

SUN-A-SURED

For Milled Grain Products and Preparations Thereof, Particularly Wheat Flour, Wheat Germ Embryo, Breakfast Cereals, and Prepared Flours—viz, Cake and Biscuit Flour.

Claims use since Sept. 7, 1932.

Ser. No. 332,073. PISMO BEACH CREAMERY, Pismo Beach, Calif. Filed Nov. 11, 1932.



The word "Milkone" and the representation of a cone are disclaimed, apart from the mark as shown in the drawing.

For Frozen Milk Confections.

Claims use since Sept. 20, 1932.

Ser. No. 332,136. MARS, INCORPORATED, Chicago, Ill. Filed Nov. 12, 1932.

MARS

For Candy.

Claims use since May 1, 1932.

Ser. No. 332,989. CANDY PRODUCTS CORPORATION, Owosso, Mich. Filed Dec. 12, 1932.



The representation of the label per se is disclaimed except in combination with the features displayed in applicant's drawing and the specimens of its mark filed in the case.

For Candies.

Claims use since Nov. 18, 1911.

Ser. No. 333,162. JAMES MARSHALL (GLASGOW) LIMITED, Glasgow, Scotland. Filed Dec. 17, 1932.



The exclusive use of all of the wording is disclaimed apart from the mark shown in the drawing.

For Oat Flour, Semolina, Rice Flour, Pea Flour, Corn Starch, Ground Rice, and a Preparation of Wheat for Infant Feeding, Puddings, Blanc-Manges, Cakes, Pastries, Biscuits, and Thickening Soups, Gravies, and Sauces.

Claims use since 1885.

Ser. No. 333,358. MACDOWELL BROTHERS, Ogdensburg, N. Y. Filed Dec. 24, 1932.

MACDOWELL'S
Merrillized
YEAST

Applicant disclaims the word "Yeast" apart from the mark as shown in the drawing.

For Vitamin B Food—Namely, Yeast.

Claims use since Apr. 21, 1932.

Ser. No. 333,419. M. L. GRAHAM, Salt Lake City, Utah, Seattle, Wash., and Portland, Oreg. Filed Dec. 23, 1932.



No claim being made to the word "Chicken" apart from the mark as shown.

For Special Kind of a Fried Chicken Sandwich, Chicken Pie, Fried Chicken Sandwich Dinner, Consisting Generally of Pieces of Fried Chicken on a Special Sandwich Roll, French Fried or Potato Chips, Olive, and Pickle; and Special Fried Quarter, Half, and Whole Chickens.

Claims use since August, 1927.

Ser. No. 333,420. M. L. GRAHAM, Salt Lake City, Utah, Seattle, Wash., and Portland, Oreg. Filed Dec. 23, 1932.



No claim being made to the word "Chicken" apart from the mark as shown.

For Special Kind of Fried Chicken Sandwich, Chicken Pie, Fried Chicken Sandwich Dinner, Consisting Generally of Pieces of Fried Chicken on a Special Sandwich Roll, French Fried or Potato Chips, Olive, and Pickle, and Special Fried Quarter, Half, and Whole Chickens.

Claims use since August, 1927.

Ser. No. 333,870. BABY BEAR PRODUCTS CORPORATION, Buffalo, N. Y. Filed Jan. 11, 1933.



The descriptive term "Bread" is disclaimed apart from the mark as shown in the drawing.

For Bread.

Claims use since Nov. 11, 1932.

Ser. No. 333,921. CROWN PRODUCTS CORPORATION, San Francisco, Calif. Filed Jan. 14, 1933.

Gold Stream

For Salad Oil, Vinegar, Table Syrup, Mustard, Bottled and/or Canned Chili Peppers.

Claims use since Oct. 25, 1932.

Ser. No. 333,922. CROWN PRODUCTS CORPORATION, San Francisco, Calif. Filed Jan. 14, 1933.

Lady's Choice

For Salad Oil, Vinegar, Table Syrup, Mustard, Bottled and/or Canned Chili Peppers.

Claims use since Oct. 25, 1932.

Ser No. 334,326. THE RUBEL BAKING COMPANY, Cincinnati, Ohio. Filed Jan. 25, 1933.



No claim is made to the words "Daily Double" apart from the mark as shown in the drawing.
For Bread.
Claims use since Sept. 1, 1932.

Ser. No. 334,346. VINCENT J. BONTA, Brooklyn, N. Y. Filed Jan. 26, 1933.

SUN PURE

No claim is made to the exclusive use of the word "Pure" except in connection with the mark as shown in the drawing.
For Oranges, Grapefruit, and Lemons.
Claims use since Nov. 15, 1932.

Ser. No. 334,594. C. W. BAKER & SONS, Aberdeen, Md. Filed Feb. 3, 1933.

BAKER'S BRAND



No claim is made to the word "Brand" apart from the mark as shown. The picture is of C. W. Baker, deceased.
For Canned Vegetables.
Claims use since 1867.

Ser. No. 334,625. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Feb. 3, 1933.



The drawing is lined for red.
For Chewing Gum.
Claims use since Jan. 26, 1933.

Ser. No. 334,626. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Filed Feb. 3, 1933.



The drawing is lined for red.
For Chewing Gum.
Claims use since Jan. 26, 1933.

Ser. No. 334,751. M. J. HOLLOWAY & COMPANY, Chicago, Ill. Filed Feb. 8, 1933.

WINK-BLINK-NOD

For Candy.
Claims use since July 1, 1932.

Ser. No. 334,776. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Filed Feb. 8, 1933.

"Ideal with every meal"

No claim being made to the words "With Every Meal" apart from the mark as shown.
For Rye Bread and Pumpernickel.
Claims use since Dec. 5, 1932.

Ser. No. 334,823. CLIFFORD L. IORNS, doing business as ViPro Corporation, St. Louis, Mo. Filed Feb. 9, 1933.

ViPRO

For Soy Oleum or Soy Bean Oil Used as a Food and an Ingredient of Foods.
Claims use since Sept. 30, 1932.

Ser. No. 334,837. GUM, INC., Philadelphia, Pa. Filed Feb. 10, 1933.

WILD WEST

For Chewing Gum.
Claims use since Jan. 17, 1933.

Ser. No. 334,851. SHENANDOAH MILLING COMPANY, INC., Shenandoah, Va. Filed Feb. 10, 1933.



For Self Rising Flour and Wheat Flour.
Claims use since Jan. 1, 1933.

CLASS 48

Malt Beverages and Liquors

Ser. No. 334,709. INDIANA BREWERIES, INC., Indianapolis, Ind. Filed Feb. 7, 1933.



No claim is made to the words "Brew" and "Indianapolis" apart from the mark as shown.
For Malt Beverage With Not More Than the Legal Alcoholic Content.
Claims use since January, 1933.

Ser. No. 334,809. RED TOP MALT COMPANY, Cincinnati, Ohio. Filed Feb. 9, 1933.

RED TOP



For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since Dec. 14, 1932.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 333,087. ADET SEWARD (STE ANONYME), Bordeaux, France. Filed Dec. 14, 1932.



The signature appearing on the drawing is in the handwriting of Harry Seward, the senior partner of Adet Seward & Co., predecessors of the applicant company.
For Brandy.
Claims use since 1925.

Ser. No. 333,177. JOSÉ ARECHABALA S. A., Cardenas, Cuba. Filed Dec. 19, 1932.



For Rum, Brandy, Cognac, and Other Potable Spirits.
Claims use since May 6, 1932.

Ser. No. 333,178. JOSÉ ARECHABALA S. A., Cardenas, Cuba. Filed Dec. 19, 1932.

MOFUCO

For Rum, Brandy, Cognac, and Other Potable Spirits.
Claims use since May 6, 1932.

Ser. No. 333,951. WILLIAM SANDERSON & SON, LIMITED, Leith, Scotland. Filed Jan. 14, 1933.



No claim is made to the words "Liqueur Scotch Whisky" and "Leith." Claims ownership of Reg. No. 66,087.
For Scotch Whisky.
Claims use since Dec. 21, 1912.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 323,809. THE BUTTONLESS TIRE COVER COMPANY, Canton, Ohio. Filed Feb. 4, 1932.

BURBEX

For Embossed Textile Fabrics Which May be Used for Automobile Tire Covers.
Claims use since Jan. 11, 1932.

Ser. No. 328,577. ENDURETTE CORPORATION OF AMERICA, New York, N. Y. Filed July 6, 1932.

ENDURETTE

For Chemically Treated Translucent Silk and Sateen Piece Goods Sold by the Yard.
Claims use since July, 1931.

Ser. No. 334,342. ANCHOR CAP & CLOSURE CORPORATION, Long Island City, N. Y. Filed Jan. 26, 1933.

PARAGON

For Closure Caps.
Claims use since 1912.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

APRIL 4, 1933

302,172. RADIO RECEIVING SETS, RADIO TELEVISION SETS, AND PARTS THEREFOR—NAMELY, RECTIFYING, RECEIVING, AMPLIFYING, AND TRANSMITTING RADIO TUBES. M. MITCHELL GRUHN, New York, N. Y.
Filed May 23, 1931. Serial No. 314,955. PUBLISHED FEBRUARY 2, 1932. Class 21.

302,173. COFFEE. SHOREHAM COFFEE COMPANY, Washington, D. C.
Filed June 24, 1931. Serial No. 316,224. PUBLISHED JANUARY 17, 1933. Class 46.

302,174. HOSIERY, LINGERIE—NAMELY, STEP-INS AND CHEMISES, SILK NIGHT GOWNS, AND PAJAMAS. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed November 2, 1931. Serial No. 320,730. PUBLISHED JANUARY 3, 1933. Class 39.

302,175. FOUR-IN-HAND NECKTIES FOR MEN. BROWN & WELLS, INC., Boston, Mass.
Filed December 10, 1931. Serial No. 321,983. PUBLISHED JANUARY 3, 1933. Class 39.

302,176. MEN'S, WOMEN'S, AND CHILDREN'S UNDERWEAR MADE OF KNITTED, NETTED, AND/OR TEXTILE FABRICS; BATHING SUITS, SPORT COATS, SWEATER SUITS AND COATS; VESTS FOR UNDER AND OUTER WEAR, JACKETS, PETTICOATS, NIGHTSHIRTS, NIGHTGOWNS, AND PYJAMAS. H. LOMB & CO. INC., New York, N. Y.
Filed March 2, 1932. Serial No. 324,716. PUBLISHED DECEMBER 13, 1932. Class 39.

302,177. PEAS, GREEN LIMA BEANS, SUGAR CORN, SAUERKRAUT, SAUERKRAUT JUICE, PUMPKIN, CHERRIES, HOMINY, TOMATOES, BEET SALAD, WHOLE BEETS, SLICED BEETS, GREEN STRINGLESS BEANS, WAX BEANS, SWEET RELISH, SLICED SWEET PICKLES, SOUR PICKLES, DILL PICKLES, TOMATO JUICE, TOMATO KETCHUP, CARROTS, CARROTS AND PEAS, AND GOLDEN BANTAM CORN, ALL PACKED IN CANS. THE KUNER PICKLE COMPANY, Brighton, Colo.
Filed August 19, 1931. Serial No. 318,152. PUBLISHED JANUARY 17, 1933. Class 46.

302,178. FRESH CITRUS FRUITS. C. A. MARSH, INC., Orlando, Fla.
Filed October 7, 1931. Serial No. 319,824. PUBLISHED JANUARY 17, 1933. Class 46.

302,179. CHOCOLATE COVERED CONE FILLED WITH ICE CREAM AND TOPPED WITH NUTS. EDWIN E. KOONTZ, Kansas City, Mo.
Filed October 12, 1931. Serial No. 319,998. PUBLISHED JANUARY 17, 1933. Class 46.

302,180. FRESH VEGETABLES. L. M. MCLAREN, Yuma, Ariz.
Filed December 1, 1931. Serial No. 321,651. PUBLISHED JANUARY 17, 1933. Class 46.

302,181. CHEWING GUM.. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y.
Filed March 2, 1932. Serial No. 324,694. PUBLISHED JANUARY 17, 1933. Class 46.

302,182. POTABLE SPIRITS, WHISKY, AND LIQUORS. JOSEPH E. SEAGRAM & SONS LIMITED, Waterloo, Ontario, Canada.
Filed December 14, 1932. Serial No. 333,084. PUBLISHED JANUARY 24, 1933. Class 49.

302,183. LINOLEUM AND OIL CLOTH. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 19, 1932. Serial No. 333,202. PUBLISHED JANUARY 24, 1933. Class 20.

302,184. MEN'S AND YOUNG MEN'S OVERCOATS. WALDFOGEL-ADRAMS COMPANY, Boston, Mass.
Filed June 17, 1932. Serial No. 328,080. PUBLISHED JANUARY 17, 1933. Class 39.

302,185. HOSIERY. HARRINGTON & WARING, New York, N. Y.
Filed August 11, 1932. Serial No. 329,466. PUBLISHED JANUARY 3, 1933. Class 39.

302,186. KNITTED, NETTED, AND TEXTILE MATERIALS IN THE PIECE, COMPOSED WHOLLY OR IN PART OF FILAMENTS OF ARTIFICIAL ORIGIN—NAMELY, FILAMENTS OF ARTIFICIAL SILK. I. P. BEMBERG AKTIENGESELLSCHAFT, Wuppertal Oberbarmen, Germany, assignor to American Bemberg Corporation, New York, N. Y.
Filed August 18, 1932. Serial No. 329,618. PUBLISHED JANUARY 10, 1933. Class 42.

302,187. HOSIERY. NELSON KNITTING COMPANY, Rockford, Ill.
Filed September 21, 1932. Serial No. 330,549. PUBLISHED JANUARY 17, 1933. Class 39.

302,188. BLOOMERS, COMBINATION GARMENTS, ETC. WINGET KICKERNICK COMPANY, Minneapolis, Minn.
Filed September 22, 1932. Serial No. 330,589. PUBLISHED JANUARY 10, 1933. Class 39.

302,189. HOSIERY. DOVEDOWN HOSIERY MILLS, Griffin, Ga.
Filed November 3, 1932. Serial No. 331,854. PUBLISHED JANUARY 3, 1933. Class 39.

302,190. COLLARS, NEGLIGEE AND DRESS SHIRTS; UNDERSHIRTS, UNDERDRAWERS, UNION SUITS OF KNITTED AND WOVEN FABRICS, FOR MEN, WOMEN, AND CHILDREN. CLUETT, PEABODY & CO., INC., Troy, N. Y.
Filed November 14, 1932. Serial No. 332,113. PUBLISHED JANUARY 10, 1933. Class 39.

302,191. HOSIERY AND LINGERIE. BELCRAFT SALES CORPORATION, New York, N. Y.
Filed October 22, 1932. Serial No. 331,482. PUBLISHED JANUARY 3, 1933. Class 39.

302,192. HOSIERY. GOLD MAID HOSIERY MILLS, INC., Chicago, Ill.
Filed October 25, 1932. Serial No. 331,550. PUBLISHED JANUARY 3, 1933. Class 39.

302,193. MISSES' DRESSES. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed November 1, 1932. Serial No. 331,811. PUBLISHED JANUARY 3, 1933. Class 39.

302,194. MEN'S WORK AND FLANNEL SHIRTS. GORDON-EAST COAST COMPANY, Moundsville, W. Va.
Filed November 2, 1932. Serial No. 331,823. PUBLISHED JANUARY 3, 1933. Class 39.

302,195. MEN'S AND BOYS' SHIRTS—NAMELY, DRESS, NEGLIGEE, AND WORK, AND COLLARS. HEATH-SWEETSER, INC., New York, N. Y.
Filed November 10, 1932. Serial No. 332,040. PUBLISHED JANUARY 3, 1933. Class 39.

302,196. MOLDING COMPOSITION USED PRIMARILY FOR DENTAL PURPOSES BUT WHICH IN ADDITION HAS OTHER USES. DENTAL LABORATORY SUPPLY COMPANY, INC., New York, N. Y.
Filed May 5, 1931. Serial No. 314,196. PUBLISHED JANUARY 24, 1933. Class 44.

302,197. VEHICLE TIRES AND INNER TURES MADE WHOLLY OR PARTLY OF RUBBER. (CHARLES A. DANA and JOHN B. PIERCE, receivers of The Fisk Rubber Company, Chicopee Falls, Mass., and Cudahy, Wis.
Filed April 25, 1932. Serial No. 326,461. PUBLISHED JANUARY 10, 1933. Class 35.

302,198. TIME INDICATING AND REGISTERING APPARATUS AND PARTS THEREOF. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 28, 1932. Serial No. 326,581. PUBLISHED JANUARY 17, 1933. Class 27.

302,199. BRAKE LININGS. THE SIMPLEX PISTON RING COMPANY OF AMERICA, INC., Cleveland, Ohio.
Filed July 30, 1932. Serial No. 329,243. PUBLISHED JANUARY 17, 1933. Class 35.

302,200. TIME INDICATING AND REGISTERING MECHANISMS AND PARTS THEREOF. THE ELECTRIC AUTO-LITE COMPANY, Toledo, Ohio.
Filed April 28, 1932. Serial No. 326,583. PUBLISHED JANUARY 17, 1933. Class 27.

302,201. MEN'S, BOYS', AND CHILDREN'S BROADCLOTH AND FLANNEL PAJAMAS AND MEN'S FLANNEL NIGHT SHIRTS. THE STAR UNION OVERALL CO., INC., South Norwalk, Conn.
Filed November 19, 1932. Serial No. 332,315. PUBLISHED JANUARY 10, 1933. Class 39.

302,202. LUBRICATING OILS AND GREASES FOR MOTOR VEHICLES, HYDRAULIC BRAKE OILS, CRANK CASE OILS, SHOCK-ABSORBER OILS, AND PENETRATING OILS. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y.
Filed November 17, 1932. Serial No. 332,218. PUBLISHED JANUARY 17, 1933. Class 15.

302,203. CORN SYRUP. AMERICAN MAIZE-PRODUCTS COMPANY, New York, N. Y.
Filed November 17, 1932. Serial No. 332,213. PUBLISHED JANUARY 17, 1933. Class 46.

302,204. SWEATERS. THE PIQUA HOSIERY COMPANY, INC., Piqua, Ohio.
Filed November 16, 1932. Serial No. 332,199. PUBLISHED JANUARY 10, 1933. Class 39.

302,205. BOYS' SHIRTS. THE KAYNER COMPANY, Cleveland, Ohio.
Filed November 14, 1932. Serial No. 332,120. PUBLISHED JANUARY 10, 1933. Class 39.

302,206. THREAD AND YARN. THE CLARK THREAD COMPANY, Newark, N. J.
Filed November 16, 1932. Serial No. 332,178. PUBLISHED JANUARY 3, 1933. Class 48.

302,207. HOSIERY. BERKSHIRE KNITTING MILLS, Wyomissing, Pa.
Filed November 14, 1932. Serial No. 332,110. PUBLISHED JANUARY 3, 1933. Class 39.

302,208. HOSIERY. BERKSHIRE KNITTING MILLS, Wyomissing, Pa.
Filed November 14, 1932. Serial No. 332,111. PUBLISHED JANUARY 3, 1933. Class 39.

302,209. HOSIERY. BERKSHIRE KNITTING MILLS, Wyomissing, Pa.
Filed November 14, 1932. Serial No. 332,109. PUBLISHED JANUARY 3, 1933. Class 39.

302,210. WOMEN'S DRESSES, SUITS, AND COATS. R. H. MACY & CO., INC., New York, N. Y.
Filed May 12, 1932. Serial No. 327,022. PUBLISHED JUNE 21, 1932. Class 39.

302,211. CAST IRON, TIN, AND STEEL GAS METERS, LARGE CAPACITY POSITIVE GAS METERS, ORIFICE METERS, DEMAND METERS, DOMESTIC AND CURB BOX METERS, COMBINED RECORD GAUGES, WELL TESTING AND PRESSURE GAUGES, METER PROVERS, AND TEST METERS. PITTSBURGH EQUITABLE METER COMPANY, Pittsburgh, Pa.
Filed June 11, 1932. Serial No. 327,961. PUBLISHED JANUARY 17, 1933. Class 26.

302,212. STOVES, GAS AND SPIRIT. THE SILEX COMPANY, Hartford, Conn.
Filed September 24, 1932. Serial No. 330,689. PUBLISHED JANUARY 17, 1933. Class 34.

302,213. WIRE CLOTH. REYNOLDS WIRE CO., DIXON, Ill.
Filed October 4, 1932. Serial No. 330,944. PUBLISHED JANUARY 17, 1933. Class 18.

302,214. HOUSEHOLD FURNITURE. CONANT BALL COMPANY, Boston, Mass.
Filed October 7, 1932. Serial No. 331,040. PUBLISHED JANUARY 17, 1933. Class 32.

302,215. HUMIDIFIERS. PARKS-CRAMER COMPANY, Fitchburg, Mass.
Filed October 17, 1932. Serial No. 331,315. PUBLISHED JANUARY 17, 1933. Class 34.

302,216. HUMIDIFIERS. PARKS-CRAMER COMPANY, Fitchburg, Mass.
Filed October 17, 1932. Serial No. 331,316. PUBLISHED JANUARY 17, 1933. Class 34.

302,217. LAWN MOWERS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed October 20, 1932. Serial No. 331,415. PUBLISHED JANUARY 17, 1933. Class 23.

302,218. ELECTRICAL INSULATORS. WHITALL TATUM COMPANY, Millville, N. J.
Filed October 24, 1932. Serial No. 331,522. PUBLISHED JANUARY 17, 1933. Class 21.

302,219. NAILS. SAMUEL L. MARKOWITZ, INC., New York, N. Y.
Filed October 27, 1932. Serial No. 331,621. PUBLISHED JANUARY 17, 1933. Class 13.

302,220. VIOLINS, VIOLAS, VIOLONCELLOS, ETC. C. MEISEL, INC., New York, N. Y.
Filed November 2, 1932. Serial No. 331,882. PUBLISHED JANUARY 17, 1933. Class 36.

302,221. SAFETY RAZOR BLADES. ROSE GOLDBERG, Brooklyn, N. Y.
Filed November 3, 1932. Serial No. 331,857. PUBLISHED JANUARY 17, 1933. Class 28.

302,222. ELECTRIC FLOOR LAMPS. JAMES H. BOYE MANUFACTURING CO., Chicago, Ill.
Filed November 7, 1932. Serial No. 331,946. PUBLISHED JANUARY 17, 1933. Class 21.

302,223. FURS. PHILIP A. SINGER & BRO. INC., Newark, N. J.
Filed September 27, 1932. Serial No. 330,718. PUBLISHED DECEMBER 13, 1932. Class 1.

302,224. PERCOLATED COMPOUND MADE FROM OAKWOOD, HERBS, ETC., USED FOR A CULINARY FLAVORING. I. & P. HOME PRODUCTS COMPANY, INC., Port Chester, N. Y.
Filed October 12, 1932. Serial No. 331,183. PUBLISHED JANUARY 17, 1933. Class 46.

302,225. CHILE SAUCE AND KETCHUP. MEXICAN IMPORTING COMPANY, New York, N. Y.
Filed October 15, 1932. Serial No. 331,288. PUBLISHED JANUARY 17, 1933. Class 46.

302,226. WHISKY. ALEXANDER FRASER, doing business as A. Fraser & Co., Manchester, England.
Filed November 1, 1932. Serial No. 331,779. PUBLISHED JANUARY 24, 1933. Class 49.

302,227. FRESH APPLES. SOUHEGAN APPLE PACKING ASSOCIATION, Wilton, N. H.
Filed November 4, 1932. Serial No. 331,910. PUBLISHED JANUARY 17, 1933. Class 46.

302,228. TEA. JOSEPH TETLEY & CO., INC., New York, N. Y.
Filed November 5, 1932. Serial No. 331,988. PUBLISHED JANUARY 17, 1933. Class 46.

302,229. PUDDING AND PIE FILLING. ROYAL BAKING POWDER COMPANY, New York, N. Y.
Filed November 17, 1931. Serial No. 321,219. PUBLISHED JANUARY 17, 1933. Class 46.

302,230. WHEAT GERM. GENERAL MILLS, INC., Minneapolis, Minn.
Filed September 28, 1931. Serial No. 319,488. PUBLISHED NOVEMBER 8, 1931. Class 46.

302,231. CRAYONS. SANDUSKY CRAYON COMPANY, INC., Sandusky, Ohio.
Filed March 21, 1932. Serial No. 325,847. PUBLISHED JANUARY 10, 1933. Class 37.

302,232. GELATINE DESSERT. RED & WHITE CORPORATION, Buffalo, N. Y.
Filed October 31, 1932. Serial No. 331,753. PUBLISHED JANUARY 17, 1933. Class 46.

302,233. MOTION PICTURE CARTOONS. FLEISCHER STUDIOS, INCORPORATED, New York, N. Y.
Filed December 3, 1932. Serial No. 332,712. PUBLISHED JANUARY 17, 1933. Class 26.

302,234. SINKS, PARTICULARLY THOSE MADE OF NICKEL OR OF ALLOYS OF NICKEL AND/OR COPPER. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed December 3, 1932. Serial No. 332,719. PUBLISHED JANUARY 17, 1933. Class 13.

302,235. TABLE TOPS, PARTICULARLY THOSE MADE OF NICKEL OR OF ALLOYS OF NICKEL AND/OR COPPER. THE INTERNATIONAL NICKEL COMPANY, INC., New York, N. Y.
Filed December 3, 1932. Serial No. 332,720. PUBLISHED JANUARY 17, 1933. Class 32.

302,236. TOY OF THE BANDALORE TYPE CONSISTING OF A CARDBOARD DISC AND RUBBER BALL ATTACHED TO AN ELASTIC CORD. FRED A. WHITAKER, Columbus, Ga.
Filed December 5, 1932. Serial No. 332,793. PUBLISHED JANUARY 24, 1933. Class 22.

302,237. DRIED SKIM MILK (FOR HUMAN CONSUMPTION). S. T. EDWARDS & CO., INC., Chicago, Ill.
Filed March 19, 1932. Serial No. 325,286. PUBLISHED JANUARY 17, 1933. Class 46.

302,238. MOTH AND VERMIN REPELLENT BAGS AND BOXES MADE OF PAPER. ROSETH CORPORATION, Brooklyn, N. Y.
Filed June 14, 1932. Serial No. 327,986. PUBLISHED JANUARY 24, 1933. Class 2.

302,239. BIRD GRAVEL. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, doing business as The Quaker Maid Co., Inc., New York, N. Y.
Filed August 27, 1932. Serial No. 329,896. PUBLISHED JANUARY 17, 1933. Class 1.

302,240. GAMES, TOYS, AND SPORTING GOODS. STEPHEN SLESINGER, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,700. PUBLISHED JANUARY 24, 1933. Class 22.

302,241. METAL KEY HOLDERS. MECHANICAL IMPROVEMENTS CORPORATION, Camden, N. J.
Filed December 1, 1932. Serial No. 332,657. PUBLISHED JANUARY 17, 1933. Class 13.

302,242. INDUSTRIAL LIQUID FUEL BURNERS, LIQUID FUEL ATOMIZERS, FURNACE RETORTS, AND FURNACE AIR REGISTERS. ROBERT H. RUSSELL, Cleveland, Ohio.
Filed November 30, 1932. Serial No. 332,632. PUBLISHED JANUARY 17, 1933. Class 34.

302,243. HEATING FURNACE FUEL OILS. MAY OIL BURNER CORPORATION, Baltimore, Md.
Filed November 29, 1932. Serial No. 332,593. PUBLISHED JANUARY 17, 1933. Class 15.

302,244. HEATING FURNACE FUEL OILS. MAY OIL BURNER CORPORATION, Baltimore, Md.
Filed November 29, 1932. Serial No. 332,592. PUBLISHED JANUARY 17, 1933. Class 15.

302,245. FLUSH VALVES. SECURITY PRODUCTS COMPANY, St. Louis, Mo.
Filed November 28, 1932. Serial No. 332,558. PUBLISHED JANUARY 17, 1933. Class 13.

302,246. HOSIERY. NATIONAL SILK HOSIERY MILLS, INC., Indianapolis, Ind.
Filed November 26, 1932. Serial No. 332,496. PUBLISHED JANUARY 17, 1933. Class 39.

302,247. OVERHEAD VALVE AND CYLINDER LUBRICANT. KENTUCKY CONSUMERS OIL COMPANY, INC., Louisville, Ky.
Filed November 25, 1932. Serial No. 332,457. PUBLISHED JANUARY 17, 1933. Class 15.

302,248. HEATING FURNACE OILS. PETROLEUM HEAT AND POWER COMPANY, New York, N. Y.
Filed November 25, 1932. Serial No. 332,466. PUBLISHED JANUARY 17, 1933. Class 15.

302,249. MOTOR LUBRICATING OILS. INDUSTRIAL OIL CORPORATION, Warren, Pa.
Filed November 25, 1932. Serial No. 332,455. PUBLISHED JANUARY 17, 1933. Class 15.

302,250. WHEAT FLOUR. COMMONWEALTH FLOUR MILLS, INC., St. Louis, Mo.
Filed November 25, 1932. Serial No. 332,444. PUBLISHED JANUARY 17, 1933. Class 46.

302,251. NON-ALCOHOLIC, MALTLESS FRUIT JUICES, FRUIT JUICE CONCENTRATES, SYRUPS, AND EXTRACTS FOR MAKING SOFT DRINKS; NON-ALCOHOLIC, MALTLESS FRUIT JUICE BEVERAGES. CALIFORNIA FRUIT GROWERS EXCHANGE, Los Angeles, Calif.
Filed November 23, 1932. Serial No. 332,897. PUBLISHED JANUARY 24, 1933. Class 45.

302,252. HOSIERY. WAYNE KNITTING MILLS, Fort Wayne, Ind.
Filed November 21, 1932. Serial No. 332,359. PUBLISHED JANUARY 10, 1933. Class 39.

302,253. HOSIERY. PHOENIX HOSIERY COMPANY, Milwaukee, Wis.
Filed November 21, 1932. Serial No. 332,349. PUBLISHED JANUARY 10, 1933. Class 39.

302,254. LUBRICATING COMPOUND. GEORGE MEYER, doing business as The Puissant Co., St. Louis, Mo.
Filed November 21, 1932. Serial No. 332,346. PUBLISHED JANUARY 17, 1933. Class 15.

302,255. WOMEN'S FROCKS. ELLANAY FROCKS, INC., Los Angeles, Calif.
Filed November 21, 1932. Serial No. 332,337. PUBLISHED JANUARY 17, 1933. Class 39.

302,256. VEHICLE TIRES AND INNER TUBES MADE OF RUBBER AND RUBBER AND FABRIC. UNION OIL COMPANY, Parsons, Kans., and North Kansas City, Mo.
Filed October 14, 1932. Serial No. 331,272. PUBLISHED JANUARY 17, 1933. Class 35.

302,257. SHEEP SKINS. LEON, INC., Los Angeles, Calif., and Peabody, Mass.
Filed October 15, 1932. Serial No. 331,287. PUBLISHED JANUARY 17, 1933. Class 1.

302,258. CANNED NUTS. NORTH PACIFIC NUT GROWERS' COOPERATIVE, Lebanon, Oreg.
Filed October 20, 1932. Serial No. 331,409. PUBLISHED JANUARY 17, 1933. Class 46.

302,259. FROZEN CONFECTIONS. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y.
Filed October 26, 1932. Serial No. 331,563. PUBLISHED JANUARY 17, 1933. Class 46.

302,260. MALT SYRUP. LA CROSSE REFINING COMPANY, La Crosse, Wis.
Filed October 28, 1932. Serial No. 331,645. PUBLISHED JANUARY 17, 1933. Class 46.

302,261. AN INVERTASE PREPARATION SUITABLE FOR USE IN THE CONVERSION OF SUCROSE IN THE PREPARATION OF FOODS AND INGREDIENTS OF FOODS. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed October 28, 1932. Serial No. 331,655. PUBLISHED JANUARY 17, 1933. Class 46.

302,262. CEREAL BREAKFAST FOODS. PAULY AND RAMSEY, Tulsa, Okla.
Filed October 29, 1932. Serial No. 331,714. PUBLISHED JANUARY 17, 1933. Class 46.

302,263. WINES. GEO. G. SANDEMAN SONS & CO. LIMITED, London, England.
Filed October 29, 1932. Serial No. 331,705. PUBLISHED JANUARY 24, 1933. Class 47.

302,264. LEATHER. J. GREENEBAUM TANNING COMPANY, Chicago, Ill.; Boston, Mass.; and Milwaukee, Wis.
Filed October 31, 1932. Serial No. 331,733. PUBLISHED JANUARY 17, 1933. Class 1.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,265. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) FRANK G. HUTH, doing business as Frank Huth Tool & Machine Works, Fort Wayne, Ind. Filed Sept. 24, 1932. Serial No. 330,626.

HUTH

For Electric Water Heaters for Domestic Hot Water Supply.
Claims use since Jan. 2, 1932.

302,266. (CLASS 39. CLOTHING.) WITTENBERG SHIMBERG CORP., New York, N. Y. Filed Aug. 18, 1932. Serial No. 329,662.

Whitley

For Women's, Girls', Juniors', Misses' and Ladies' Coats.
Claims use since Jan. 1, 1932.

302,267. (CLASS 2. RECEPTACLES.) WILLIAM LANGBEIN BRO'S., Brooklyn, N. Y. Filed July 25, 1932. Serial No. 329,053.

"SPOONERWARE"

For Dishes, Trays, Salt and Pepper Shakers, Dredges, Buckets, Pitchers, Jugs, Bottles, Jars, Vases, and Tumblers, Made of Compressed Mixture of Tripoli, Asbestos, and Resinous Binder.
Claims use since Mar. 2, 1931.

302,268. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) SUN RADIO, INC., Akron, Ohio. Filed July 15, 1932. Serial No. 328,822.

Brighton

For Golf Clubs, Golf Balls and Golf Bags.
Claims use since Mar. 1, 1932.

302,269. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed July 5, 1932. Serial No. 328,549.

KARKLEAN

For Non-Streaking Detergent Emulsion.
Claims use since Feb. 22, 1932.

302,270. (CLASS 45. MALT BEVERAGES AND LIQUORS.) FREDERICK BROS., INC., Chicago, Ill. Filed Mar. 8, 1932. Serial No. 324,740.

Queensville

For Malt Beverages With Not More Than the Legal Alcoholic Content.
Claims use since Jan. 28, 1932.

302,271. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) UTICA RADIATOR CORPORATION, Utica, N. Y. Filed Mar. 2, 1932. Serial No. 324,728.

HUMID-HEET

For Heating Radiators.
Claims use since Dec. 15, 1931.

302,272. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) JOHN T. RIDDELL, INC., Chicago, Ill. Filed Sept. 11, 1931. Serial No. 318,954.

RIDDELL

For Shoe Cleats.
Claims use since September, 1928.

302,273. (CLASS 45. MALT BEVERAGES AND LIQUORS.) BRAUHAUS WÜRZBURG, AKTIENGESELLSCHAFT, Wurzburg, Germany. Filed Dec. 27, 1930. Serial No. 309,371.

Würzburger

Hofbräu

For a Malt Beverage With Not More Than the Legal Alcoholic Content.
Claims use since Aug. 4, 1897.

302,274. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 4, 1933. Serial No. 334,648.

OUR BEST

For Ironing Tables.
Claims use since Jan. 1, 1932.

302,275. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) GOODRICH ELECTRIC COMPANY, Chicago, Ill. Filed Jan. 18, 1933. Serial No. 334,054.

HEVYDUTY

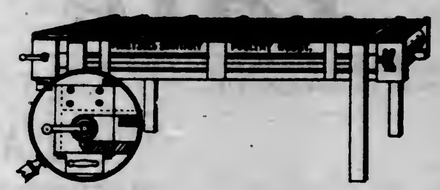
For Unitary Electric Lighting Fixtures.
Claims use since Sept. 15, 1930.

302,276. (CLASS 39. CLOTHING.) JACOB C. LAMM, Baltimore, Md. Filed Jan. 13, 1933. Serial No. 333,909.

Flan-L-Weve

For Men's and Boys' Pants, Knickers, Suits, and Coats, Girls' and Women's Beach Pants and Coats of Cotton Twill and Corded Materials.
Claims use since Feb. 20, 1931.

302,277. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) EDWARD H. PRIETZEL, St. Louis, Mo. Filed Jan. 12, 1933. Serial No. 333,863.



For Poultry Roosts.
Claims use since Nov. 1, 1931.

302,278. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) EVANS PRODUCTS COMPANY, Detroit, Mich. Filed Jan. 9, 1933. Serial No. 333,761.

AUTO-LOADER

For Mechanical Apparatus for Loading and Suspension of Motor Vehicles Within Freight Cars.
Claims use since Nov. 15, 1931.

302,279. (CLASS 38. PRINTS AND PUBLICATIONS.) KURTZ BROS., Clearfield, Pa. Filed Jan. 7, 1933. Serial No. 333,731.

MODERN

For Wall Calendars.
Claims use since Dec. 20, 1930.

302,280. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PERLEY A. HILLIARD, Newtonville, Mass. Filed Dec. 13, 1932. Serial No. 333,095.

Hilliard's
Good Candy
Made Right
To Sight



For Candy.
Claims use since Sept. 22, 1930.

302,281. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ADOLPH W. BUHLMANN, New York, N. Y. Filed Dec. 20, 1932. Serial No. 333,218.

Yale

For Finishing Machine for Processing Fabrics.
Claims use since April, 1911.

302,282. (CLASS 3. BAGGAGE, ANIMAL EQUIPMENTS, PORTFOLIOS, AND POCKETBOOKS.) FIBERBILT SAMPLE CASE CO., INC., New York, N. Y. Filed Oct. 1, 1932. Serial No. 330,880.

FIBERBILT

For Drum Cases, Salesmen's Telescope Cases, Sample Trunks, Photographers' Conveying Cases, Animal Carriers, Salesmen's Hat and Shoe Cases, Luggage for Men and Women Comprising Suit Cases, Grips, Hand Bags, Dressing Cases, Hand Wardrobe Trunks.
Claims use since Aug. 21, 1931.

LABELS

REGISTERED APRIL 4, 1933

41,875.—*Title:* A. P. W. SOFT WHITE A TOILET TISSUE FOR WOMEN. For Toilet Tissue. A. P. W. PAPER COMPANY, INC., Albany, N. Y. Published December 22, 1932.

41,876.—*Title:* HOOD RIVER BRAND. For Apples. APPLE GROWERS ASSOCIATION, Hood River, Oreg. Published December 1, 1932.

41,877.—*Title:* TRUE VALUES. For Footwear. BIRD & SON, INC., East Walpole, Mass. Published January 6, 1933.

41,878.—*Title:* LEED'S. For Footwear. BIRD & SON, INC., East Walpole, Mass. Published January 24, 1933.

41,879.—*Title:* BB FOOTWEAR. For Footwear. BIRD & SON, INC., East Walpole, Mass. Published January 26, 1933.

41,880.—*Title:* CALIFORNIA. For Angelica. CALIFORNIA MEDICINAL WINE CO., Los Angeles, Calif. Published September 10, 1932.

41,881.—*Title:* CROSSBUCK. For Sweaters. COLUMBIA KNITTING MILLS, Portland, Oreg. Published September 24, 1932.

41,882.—*Title:* COMET TARGETS. For Targets. DIAMOND SPRINGS LIME COMPANY, doing business as El Dorado Chemical Company, Diamond Springs, Calif. Published November 12, 1932.

41,883.—*Title:* MOUNT HOPE. For Tomatoes. ECONOMY WHOLESALE GROCERY COMPANY, Fall River, Mass. Published September 16, 1932.

41,884.—*Title:* GLOBE "A1" COMPLETE BISCUIT FLOUR. For Complete Biscuit Flour. GLOBE GRAIN AND MILLING COMPANY, Los Angeles, Calif. Published November 16, 1932.

41,885.—*Title:* GOLDEN BRAND MAYONNAISE. For Mayonnaise. GOLDEN BRAND FOOD PRODUCTS CO., Philadelphia, Pa. Published December 15, 1931.

41,886.—*Title:* SPARTAN. For Canned Salmon. P. E. HARRIS & CO., Seattle, Wash. Published September 21, 1932.

41,887.—*Title:* HAVEN'S ELIXIR. For an Elixir for Use as an Aid to Digestion and for Treating Sour Stomach, Heartburn, Sour Eructations, Etc. G. B. HAVENS, doing business as G. B. Havens and Co., Mobile, Ala. Published December 1, 1931.

41,888.—*Title:* STURDY FUT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 1, 1931.

41,889.—*Title:* JAEGER'S OLD KENTUCKY SAUSAGE SEASONING. For Sausage Seasoning. J. EDWARD JAEGER, Los Angeles, Calif. Published May 25, 1931.

41,890.—*Title:* RAYS OF HEALTH IN KIMBALL TABLETS. For Stomach Tablets. H. B. KIMBALL, Milwaukee, Wis. Published April 6, 1932.

41,891.—*Title:* LARSON'S PEPTOMINT GUM. For Chewing Gum. L. P. LARSON JR. COMPANY, Chicago, Ill. Published October 15, 1930.

41,892.—*Title:* CLASS 1 BUTTER. For Butter. ROY F. LESLIE, South Euclid, Ohio. Published October 24, 1932.

41,893.—*Title:* YANKEE BASE BALL PUZZLE. For Base Ball Puzzle. WILLIAM H. NICOLAY, Brooklyn, N. Y. Published February 7, 1933.

41,894.—*Title:* SAFETY MATCHES. For Safety Matches. NORTHAM TRADING CORPORATION, New York, N. Y. Published January 3, 1933.

41,895.—*Title:* PAGE & SHAW LOLLY-ETTES. For Lolly-Ettes (a Form of Lollypop). PAGE & SHAW, INC., Cambridge, Mass. Published December 6, 1932.

41,896.—*Title:* PEERLESS RUBBER TYPEWRITER KEYS PROTECTS FINGER NAILS MAKES TYPING EASIER. For Rubber Typewriter Keys. PEERLESS KEY COMPANY, INC., New York, N. Y. Published August 1, 1932.

41,897.—*Title:* APEX BALSAM A STAINLESS OINTMENT WITH THE FRAGRANCE OF FLOWERS. For Ointment. PRUDEN CHEMICAL COMPANY, Orlando, Fla. Published December 30, 1932.

41,898.—*Title:* THRIF T (YELLOW AND RED PLAID LABEL—ORANGE PEKOE AND PEKOE). For Tea. ROYAL ESTATES TEA CO., Jersey City and Hoboken, N. J. Published December 1, 1932.

41,899.—*Title:* CROSS COUNTRY MOTOR OIL. For Motor Oil. SEARS, ROEBUCK AND CO., Chicago, Ill. Published December 30, 1932.

41,900.—*Title:* CHASE & SANBORN'S GREEN LABEL ORANGE PEKOE AND PEKOE TEA. For Tea. STANDARD BRANDS, INCORPORATED, New York, N. Y. Published August 18, 1932.

41,901.—*Title:* CHASE & SANBORN'S BONITA BRAND GUNPOWDER GREEN TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published July 27, 1932.

41,902.—*Title:* CHASE & SANBORN'S NASSAC BRAND YOUNG HYSON GREEN TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published August 19, 1932.

41,903.—*Title:* CHASE & SANBORN'S BASKET FIRED JAPAN UNCOLORED TEA. For Tea. STANDARD BRANDS INCORPORATED, New York, N. Y. Published August 18, 1932.

41,904.—*Title:* CHASE AND SANBORN'S SEAL BRAND TENDER LEAF JAPAN GREEN. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published February 7, 1933.

41,905.—*Title:* CHASE AND SANBORN'S SEAL BRAND TENDER LEAF ORANGE PEKOE AND PEKOE. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published February 7, 1933.

41,906.—*Title:* STEARNS' ELECTRIC RAT AND ROACH PASTE. For Rat and Roach Paste. STEARNS' ELECTRIC PASTE COMPANY, INC., Chicago, Ill. Published December 22, 1932.

41,907.—*Title:* TASTY-MALT. For Chocolate Flavored Healthful Malted Drink. SUPERIOR PACKING CORP., New York, N. Y. Published November 23, 1931.

41,908.—*Title:* UNGE'S SHRIMP. For Canned Shrimp. E. L. UNGE, doing business as B. W. Unge, Topeka, Kans. Published November 15, 1932.

41,909.—*Title:* WRIGLEY'S LICORICE GUM. For Licorice Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published January 26, 1933.

41,910.—*Title:* WRIGLEY'S LICORICE GUM. For Licorice Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published January 26, 1933.

41,911.—*Title:* WRIGLEY'S LICORICE GUM. For Licorice Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published January 26, 1933.

PRINTS

REGISTERED APRIL 4, 1933

14,124.—*Title:* THE AMERICAN FARMER. For Nitrate of Soda. THE BARRETT COMPANY, New York, N. Y. Published December 20, 1932.

14,125.—*Title:* FLYING IRON. For Electric Heated Sad-Irons and Stands. STANLEY ALEXANDER DUVALL, Edinburg, Tex. Published November 26, 1932.

14,126.—*Title:* SUNSHINE CHAMOIS. For Chamois Leather. HOYT & WORTHEN TANNING CORP., Haverhill, Mass. Published January 19, 1933.

14,127.—*Title:* POCKET PACKETS KLEENEX DISPOSABLE TISSUES. For Pocket Packets of Disposable Tissue Handkerchiefs. KLEENEX COMPANY, Chicago, Ill. Published December 7, 1932.

14,128.—*Title:* DRINK ORANGE-CRUSH AND THE OTHER FRESH FRUIT CRUSHES. For Delicious Cooling Vitamin Drinks. ORANGE-CRUSH COMPANY, Chicago, Ill. Published October 19, 1932.

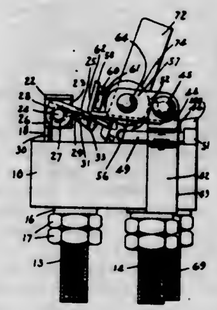
14,129.—*Title:* MEW SUNBRITE CLEANSER. For Cleansing and Scouring Powder. SWIFT & COMPANY, Chicago, Ill. Published January 10, 1933.

14,130.—*Title:* WRIGLEY'S LICORICE GUM. For Licorice Gum. WM. WRIGLEY JR. COMPANY, Chicago, Ill. Published January 26, 1933.

REISSUES

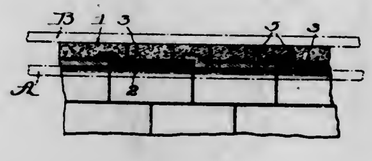
APRIL 4, 1933

18,784. **SELF-SOLDERING CIRCUIT BREAKER.** Roy H. Maple, Indianapolis, Ind., assignor, by mesne assignments, to I-T-E Circuit Breaker Co., a Corporation of New Jersey. Original No. 1,777,888, dated Oct. 7, 1930, Serial No. 555,275, filed Apr. 18, 1922. Renewed Nov. 12, 1928. Application for reissued filed Oct. 3, 1932. Serial No. 636,076. 30 Claims. (Cl. 200—116.)



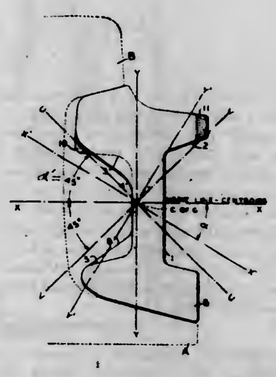
1. In a thermal circuit breaker, contact means, a movable switch contact, a latch for holding said movable switch contact in contact with said first mentioned contact means, thermally releasable means for releasing said latch, means hingedly supporting said latch upon said movable switch contact, a finger portion included in said latch for manually releasing the same, and additional contact means engageable by the movable switch contact when moved into the open-circuit position.

18,785. **SEWER PIPE.** Clare H. Currie, Webster City, Iowa, assignor, by mesne assignments, to L. E. Armstrong Realty & Investment Co., Fort Dodge, Iowa, a Corporation of Iowa. Original No. 1,834,608, dated Dec. 1, 1931, Serial No. 383,005, filed Aug. 2, 1929. Application for reissue filed Jan. 18, 1933. Serial No. 651,501. 4 Claims. (Cl. 72—52.)



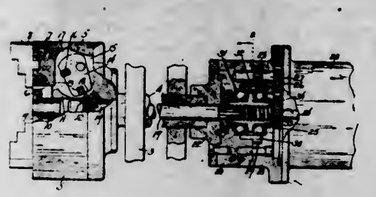
1. A sewer pipe comprising an outer shell of cementitious material, a protective lining for the interior of said shell consisting of plate-like sections laid edge to edge, a layer of a sealing compound interposed between said outer shell and lining and anchoring members inserted through holes in said plates and embedded in said shell.

18,786. **RAILWAY JOINT BAR.** Charles W. Breed, Western Springs, and George R. Burkhardt, Chicago, Ill. Original No. 1,809,104, dated June 9, 1931, Serial No. 492,886, filed Nov. 3, 1930. Application for reissue filed Nov. 17, 1931. Serial No. 575,652. 27 Claims. (Cl. 238—243.)



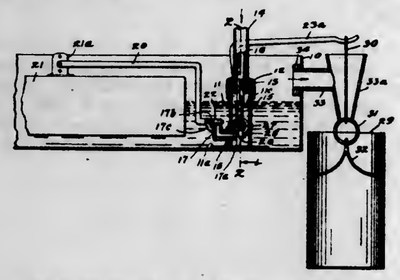
1. A rail joint bar comprising inner and outer upper flanges united by a web to inner and outer lower flanges with integral bracing portions at intervals connecting the web to the inner upper flange and terminating downwardly in the web.

18,787. **CHUCK.** Harry E. Sloan, Hartford, and George A. Highberg, West Hartford, Conn., assignors to The Cushman Chuck Company, Hartford, Conn., a Corporation of Connecticut. Original No. 1,844,445, dated Feb. 9, 1932, Serial No. 464,241, filed June 27, 1930. Application for reissue filed July 18, 1932. Serial No. 622,280. 10 Claims. (Cl. 279—119.)



1. An actuating mechanism for work holding members, said mechanism including a rotating driving shaft, a work-holding body secured to one end of said shaft, a motor secured to the opposite end of said shaft, a holding member movably mounted on said body, an actuating spindle projecting through said shaft and operatively connected with said member to operate it, a rotatably mounted operating member for positively imparting reciprocatory movement to said spindle in opposite directions, means for positively preventing longitudinal movement of said operating member in opposite directions, a connection between said spindle and operating member to effect longitudinal reciprocating movement of the latter, and an operative connection between said operating member and said motor for operation of said operating member.

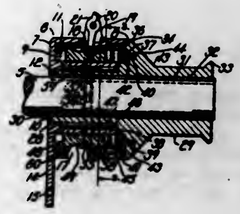
18,788. FLOAT AND SAFETY VALVE. EDWARD C. ROSENOW, Rochester, Minn. Original No. 1,788,251, dated Jan. 6, 1931, Serial No. 271,731, filed Apr. 21, 1928. Application for reissue filed Sept. 26, 1932. Serial No. 634,932. 20 Claims. (Cl. 137—68.)



1. A valve structure for a water tank having in combination with a supply pipe for said tank, a chamber with which said supply pipe communicates, a discharge conduit leading from said chamber, a valve adapted to engage the end of said conduit to prevent the flow of water therefrom, a float operated lever in said tank for moving said valve, a valve in said chamber adapted to control the flow of liquid through said conduit, said valve being normally open, and an overflow means adapted to move said latter valve to prevent the flow of water through said conduit from said chamber when said first mentioned valve fails to operate.

18,789. CATHEAD. ORREN M. GAHAGAN, Oklahoma City, Okla. Original No. 1,762,715, dated June 10, 1930, Serial No. 332,465, filed Jan. 14, 1929. Application for reissue filed June 9, 1932. Serial No. 616,290. 10 Claims. (Cl. 254—173.)

6. In combination with a rotatable shaft, a shaft support, a cable, a clutch fixed to the shaft, a collar rotatable over the shaft and engaged with the cable, an abutment fixed to the support, and a camming means on the collar



engageable with the abutment for shifting the collar from clutching position.

18,790. PRODUCTION OF TITANIUM DIOXIDES. WERNER MECKLENBURG, Moscow, Union of Soviet Socialist Republics, assignor, by mesne assignments, to Krebs Pigment and Color Corporation, Newark, N. J., a Corporation of Delaware. Original No. 1,758,528, dated May 13, 1930, Serial No. 336,918, filed Feb. 1, 1929, and in Czechoslovakia May 5, 1928. Application for reissue filed Apr. 12, 1932. Serial No. 604,861. 26 Claims. (Cl. 23—202.)

1. A composition comprising titanium hydroxide in aqueous suspension at a hydrogen ion concentration of about pH 2.5–6.0.

3. In a process of preparing a seed suspension for use in the hydrolysis of a titanium salt solution, the steps of mixing caustic soda and a titanium sulfate solution until precipitation is effected and heating the mixture to about 80° to 100° C. for 15 to 30 minutes.

PLANT PATENTS

GRANTED APRIL 4, 1933

59. HYBRID TEA ROSE. ALBERT J. AMLING and ERNST C. AMLING, Orange, Calif., assignors to Amling Brothers, Santa Ana, Calif., a Partnership. Filed June 21, 1932. Serial No. 618,566. 1 Claim. (Cl. 47—1.)

The variety of hybrid tea rose herein shown and described, characterized particularly by its carmine buds changing to various shades of pink in the opened flower, its full petallage and pleasing form, and its superior growing qualities.

DESIGNS

APRIL 4, 1933

89,563. COMBINED MATCH AND ASH TRAY OR SIMILAR ARTICLE. FERDINAND S. BARBIERS, Lancaster, Ohio, assignor to The Diamond Match Company, Baltimore Md., a Corporation of Maryland. Filed Jan. 31, 1933. Serial No. 47,060. Term of patent 7 years.



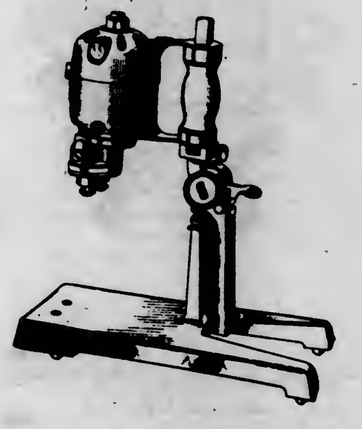
The ornamental design for a combined match and ash tray or similar article as shown and described.

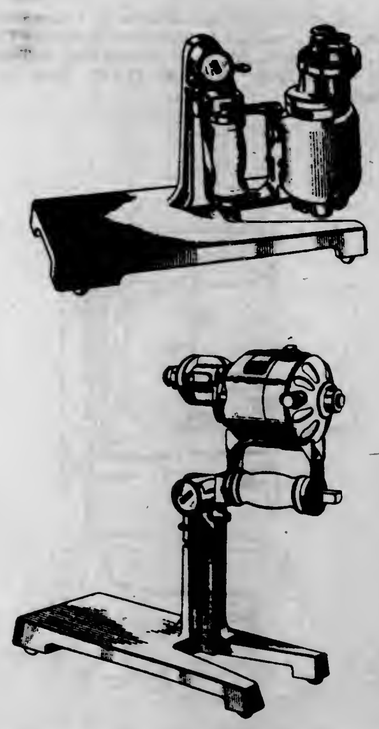
89,564. FINGER RING. RITA BASSEL, New Orleans, La., assignor to Mary Barbara Klaholt, Kirkwood, Mo., as Provincial of and as representing the Central Province of the Ursulines of the Roman Union in the United States, and her successors. Filed Dec. 29, 1932. Serial No. 46,646. Term of patent 14 years.



The ornamental design for a finger ring, substantially as shown.

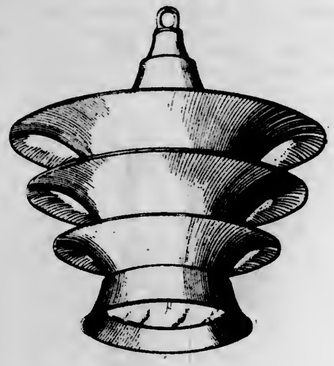
89,565. FOOD MIXING, JUICE EXTRACTING AND GRINDING APPARATUS. PATRICK J. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Apr. 16, 1932. Serial No. 43,517. Term of patent 7 years.





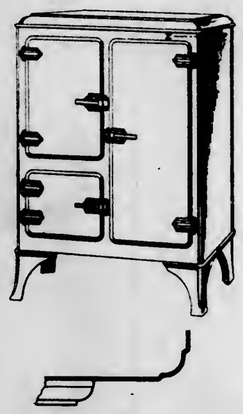
The ornamental design for a food mixing, juice extracting and grinding apparatus, as shown and described.

89,566. LIGHTING FIXTURE. HENRY A. FRAMBURG, Chicago, Ill. Filed Jan. 21, 1933. Serial No. 46,931. Term of patent 3½ years.



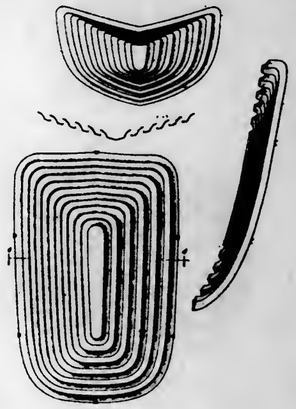
The ornamental design for a lighting fixture, as shown.

89,567. REFRIGERATOR. ROBERT T. FRAZIER, Chattanooga, Tenn., assignor to Tennessee Furniture Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed Feb. 6, 1933. Serial No. 47,115. Term of patent 7 years.



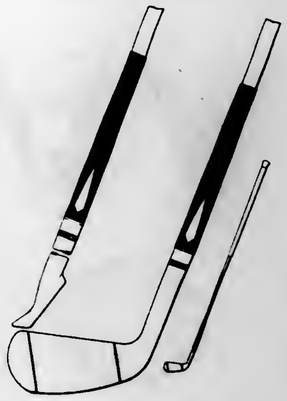
The ornamental design for a refrigerator, substantially as shown and described.

89,568. RADIATOR SHELL FRONT. LEE B. GREEN, Lakewood, Ohio, assignor to The Globe Machine & Stamping Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1933. Serial No. 46,760. Term of patent 14 years.



The ornamental design for a radiator shell front, substantially as shown.

89,569. GOLF CLUB. ALLEN F. HERTER, Chicago, Ill., assignor to R. H. Buhrke Company, a Corporation of Illinois. Filed Sept. 26, 1931. Serial No. 41,232. Term of patent 3½ years.



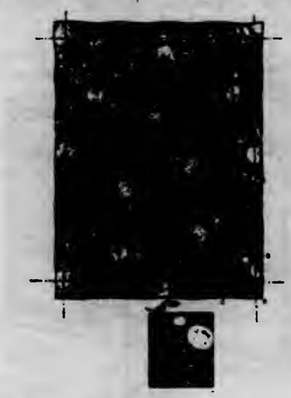
The ornamental design for a golf club as shown and described.

89,570. TOP FOR A GAME TABLE OR SIMILAR ARTICLE. CARL F. KLEIN, Chicago, Ill., assignor to Richard Groetchen, Chicago, Ill. Filed Jan. 14, 1933. Serial No. 46,880. Term of patent 3½ years.



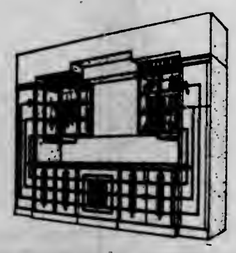
The ornamental design for a top for a game table or similar article, as shown.

89,571. TEXTILE FABRIC OR SIMILAR ARTICLE. ALEXANDER KOHUT, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Nov. 4, 1932. Serial No. 45,736. Term of patent 3½ years.



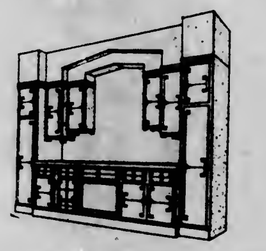
The ornamental design for a textile fabric or similar article as shown and described.

89,572. KITCHEN CABINET. SALVATORE J. LA SUSA and WILLIAM SAMBUR, Jamaica, N. Y. Filed Dec. 9, 1932. Serial No. 46,410. Term of patent 3½ years.



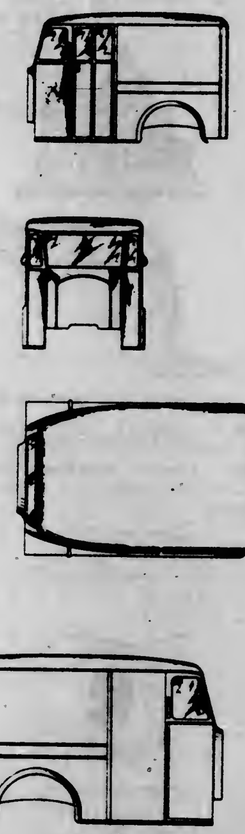
The ornamental design for a kitchen cabinet, as shown.

89,573. KITCHEN CABINET. SALVATORE J. LA SUSA and WILLIAM SAMBUR, Jamaica, N. Y. Filed Dec. 9, 1932. Serial No. 46,412. Term of patent 3½ years.



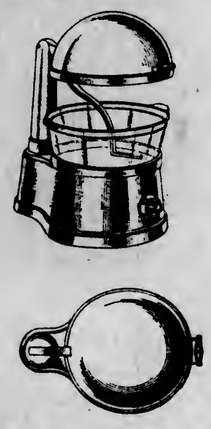
The ornamental design for a kitchen cabinet, as shown.

89,574. HOUSE-TO-HOUSE DELIVERY VEHICLE BODY. JOHN NICOL, Detroit, Mich., assignor to Continental-Divco Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 9, 1932. Serial No. 46,409. Term of patent 14 years.



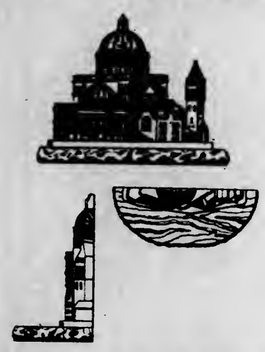
The ornamental design for a house-to-house delivery vehicle body, substantially as shown.

89,575. FOOD WARMER. FRANKLIN J. PETSKE, Minneapolis, Minn. Filed Oct. 26, 1932. Serial No. 45,564. Term of patent 3½ years.



The ornamental design for a food warmer, as shown.

89,576. BOOK END. KURT H. ROY and ROSS R. SWEANEY, Los Angeles, Calif. Filed June 28, 1932. Serial No. 44,213. Term of patent 3½ years.



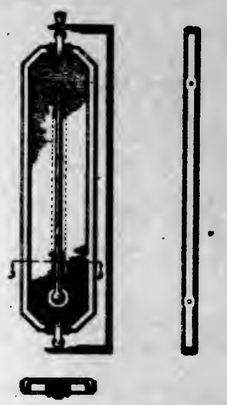
The ornamental design for a book end as shown.

89,577. LAMP. JOSEPH SCHRADER, Cleveland, Ohio. Filed Jan. 20, 1933. Serial No. 46,908. Term of patent 3½ years.



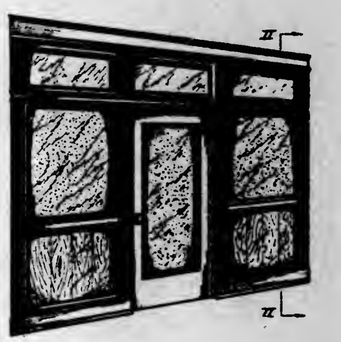
The ornamental design for a lamp as shown and described.

89,578. COMBINED THERMOMETER AND BRACKET. WALTER DORWIN TEAGUE, Forest Hills, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,916. Term of patent 3½ years.



The ornamental design for a combined thermometer and bracket as shown.

89,579. OFFICE PARTITION. WALTER B. WEBER, Merwood Park, Pa. Filed Jan. 19, 1932. Serial No. 42,547. Term of patent 3½ years.





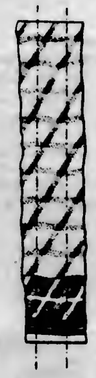
The ornamental design for an office partition, as shown and described.

89,580. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,883. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,581. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,940. Term of patent 3½ years.



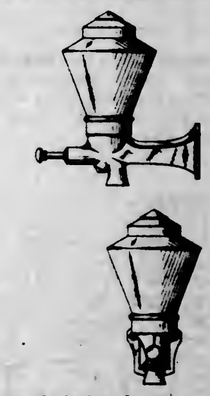
The ornamental design for a textile fabric or similar article as shown and described.

89,582. SAFETY RAZOR. CURT O. WINTER, Sayleeville, R. I. Filed Jan. 19, 1933. Serial No. 46,884. Term of patent 7 years.



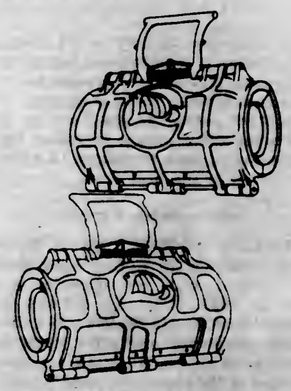
The ornamental design for a safety razor, as shown.

89,583. SOAP DISPENSER. PHILIP A. WOOSTER, San Francisco, Calif. Filed Nov. 16, 1932. Serial No. 46,010. Term of patent 3½ years.



The ornamental design for a soap dispenser, substantially as shown.

89,584. HOSE LEAK STOP. FLORENCE B. MYERS, Los Angeles, Calif. Filed Dec. 30, 1931. Serial No. 42,821. Term or patent 14 years.

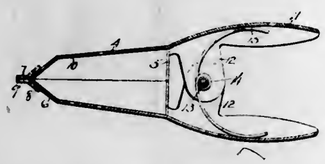


The ornamental design for a hose leak stop, as shown.

PATENTS

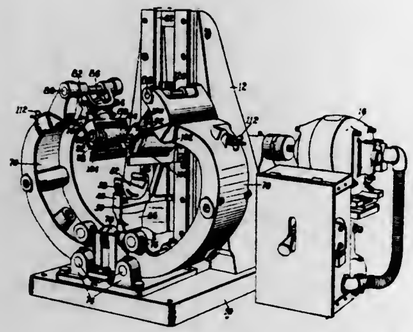
GRANTED APRIL 4, 1933

1,908,277. SINK CLEANING UTENSIL. BRIEN F. BARNES, Hartford, Conn. Filed Apr. 11, 1930. Serial No. 443,342. 2 Claims. (Cl. 15—104.)



2. A sink cleaning utensil including two blades one at least of which is of pan shape having a raised front edge creating a dam to retain matter therein, means for pivotally connecting said blades, handles extending from said blades, and collectors of flexible materials secured to the front edges of said blades and extending forwardly therefrom in contact when the blades are closed.

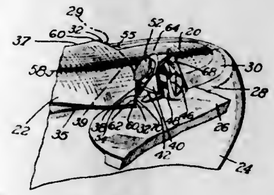
1,903,278. HEEL-COVERING APPARATUS. LEWIS J. BAZZONI, Swampscott, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 30, 1929. Serial No. 417,423. 24 Claims. (Cl. 12—42.)



1. In a heel-covering apparatus, the combination of a heel support, means for supporting a spread-out heel cover above a heel upon said support, mechanism for effecting relative movement between the heel support and the cover support to apply a portion of the cover to the heel, and means constructed and arranged to engage the cover during a continuation of said movement to apply other portions of the cover to the heel.

1,903,279. ROTARY CUTTER. EARL A. BESSOM, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 11, 1929, Serial No. 377,438, and in Great Britain July 12, 1928. 15 Claims. (Cl. 12—31.5.)

1. A rotary cutter for operating upon leather comprising two series of circumferentially arranged teeth having cutting edges of the shape of a conic section, the cutting edges of the teeth of one series being in staggered relation circumferentially of the cutter to the teeth of the other series and the teeth of one series forming with the teeth of the other series a chip disposing channel extending substantially circumferentially of the cutter and defined in



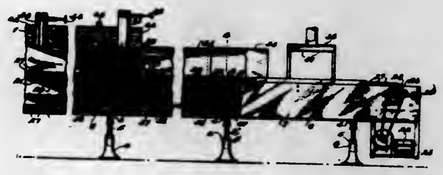
part by opposed faces formed on consecutive teeth, respectively, and each of which terminates in one of said cutting edges.

1,903,280. METHOD OF MAKING ROTARY CUTTERS. EARL A. BESSOM, Marblehead, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed July 11, 1929, Serial No. 377,438. Divided and this application filed Apr. 1, 1932. Serial No. 602,493. 11 Claims. (Cl. 76—10.)



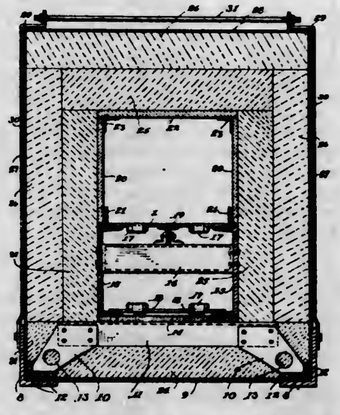
1. That method of making a rotary cutter which comprises the steps of forming a blank of the general shape of two cones having a common base, cutting in the blank a series of grooves each of which begins at the conical surface of one of the cones and terminates at the conical surface of the other cone, and cutting in the blank another series of grooves connecting the grooves of the first series thereby forming two series of circumferentially staggered teeth spaced from each other by a chip-disposing opening extending substantially circumferentially of the cutter.

1,903,281. LEER. SAMUEL B. BOWMAN, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 18, 1928. Serial No. 286,125. 6 Claims. (Cl. 49—47.)



6. A leer including a tunnel, a conveyor extending through and beyond said tunnel, means spaced rearwardly from the tunnel for applying cooling air to the ware on the conveyor, and means for varying the distance through which the top and sides of the ware are fully exposed to the atmosphere before reaching the first-mentioned means.

1,903,282. LEER. SAMUEL B. BOWMAN, Zanesville, Ohio, assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Sept. 14, 1929. Serial No. 392,608. 10 Claims. (Cl. 49—47.)

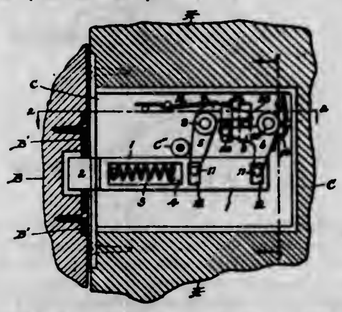


1. A leer including channel irons partly forming the side walls of the tunnel, heat insulating blocks mounted on said channel irons and completing the tunnel side walls, a roof of heat insulating material mounted on said blocks, and an endless conveyer traveling through the tunnel.

1,903,283. PREPARATION OF FRESH FRUIT FOR MARKET. ERNEST M. BROGDEN and MILES L. TROWBRIDGE, Pomona, Calif., assignors to Brogdex Company, Winter Haven, Fla., a Corporation of Florida. Filed Nov. 23, 1928. Serial No. 321,510. 8 Claims. (Cl. 99—1.)

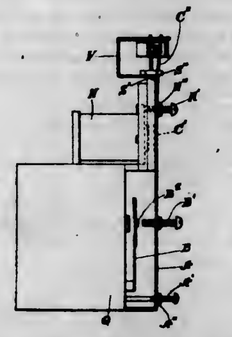
8. In the preparation of fresh fruit for market, the process of protecting the fruit against blue mold or other decay-producing organisms which comprises applying to fresh fruit a solution comprising borax, together with a quantity of casein and glucose insufficient to render the solution substantially viscous, and allowing a substantial quantity of said solution to dry upon the surface of the fruit.

1,903,284. DOORLOCK. STANLEY H. BURTON, Detroit, Mich. Filed Dec. 30, 1931. Serial No. 583,828. 6 Claims. (Cl. 292—164.)



1. A door lock comprising a casing, a longitudinally movable latch bolt in said casing, two bell cranks pivotally mounted in said casing and each having a laterally extending arm in opposed and overlapping relation to and spaced from said arm on the other bell crank, each bell crank being also provided with an arm operatively connected with said latch bolt, and an operating handle member pivotally supported at each side of said casing and each having an arm extending into said casing between said opposed arms on said bell cranks and each adapted to operate one of said bell cranks and retract said bolt when said arm is swung in one direction and to operate the other of said bell cranks and retract said bolt when said arm is swung in an opposite direction.

1,903,285. ELECTRICAL CURRENT CONTROLLING MECHANISM. CARL F. CAPELL and EDWIN H. PENDLETON, Santa Monica, Calif., assignors to Pencap Corporation, Santa Monica, Calif., a Corporation of California. Filed Mar. 10, 1931. Serial No. 521,568. 8 Claims. (Cl. 177—329.)



2. An electrical current controlling mechanism comprising, a primary coil functioning both as the primary of an induction coil and also as a vibrator coil, a secondary coil functioning as the secondary of the induction coil, said primary coil being inductively coupled to said secondary coil, a core for the primary coil, a resilient vibratory member of conducting material opposing and normally spaced from said core, said member having one end free and its other end anchored, said member having a contact mounted thereon on the side opposite the core, an electro-magnetic device spaced from the primary coil and including a resilient vibratory armature of conducting material opposing and permanently spaced from said member, said armature having one end anchored and its other end free, the free end of said armature being extended beyond said device, an electrical source, a circuit connection between one side of said source and said device, a circuit connection between the said connection and said primary coil, a circuit connection between said primary coil and said vibratory member, a circuit connection between the opposite side of said source and said armature, a contact piece carried by said armature for intermittently engaging the contact on said vibratory member, a spring controlled governor including a contact mounted thereon in circuit with said electromagnetic device for intermittently engaging the free end of the armature for intermittently closing the circuit of said magnetic device to intermittently energize the latter thereby moving the armature towards said device to cause the contact piece to intermittently engage said member to provide for the vibration of the latter thereby making the induction coil intermittently active.

1,903,286. BAG AND METHOD OF FORMING THE SAME. THOMAS EARL COTY, Watertown, N. Y. Filed Aug. 5, 1930. Serial No. 473,236. 5 Claims. (Cl. 229—59.)

1. As a new article of manufacture, a bag formed from a tube in which the cuts made by the slitters of the bag-

machine are polygonal, so that the corners of the side flaps are cut off, the lines of the cuts crossing the creaser lines of the bag-bottom at an angle other than a right

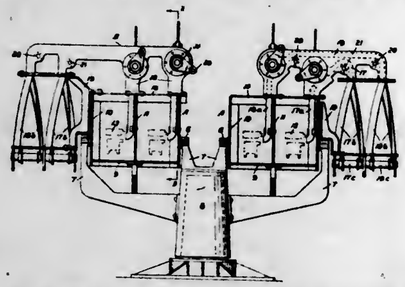


angle, the paste extending substantially to the outer edges of the side flaps on the portions thereof which are folded upon themselves, sealing the corners of the bag-bottom.

1,903,287. CORROSION INHIBITOR. HENRY L. COX, South Charleston, W. Va., assignor to Carbide and Carbon Chemicals Corporation, a Corporation of New York. Filed Apr. 25, 1932. Serial No. 607,507. 8 Claims. (Cl. 252—5.)

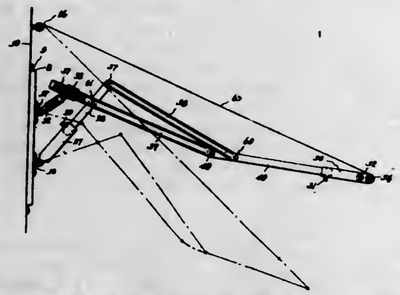
1. Fluid medium suitable for use in heat-exchange devices and pressure-transmitting devices comprising an aqueous solution containing at least one corrosion inhibitor chosen from the group consisting of morpholine and substituted morpholines.

1,903,288. CARTRIDGE FEED MECHANISM. AUGUST DABRASKY, Washington, D. C., and GEORGE W. BEATTY, Decatur, Ill. Filed Feb. 23, 1932. Serial No. 594,648. 9 Claims. (Cl. 89—33.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



7. In cartridge feed mechanism, a belt advancing member, a driving member, means for normally maintaining a clutch engagement between said members, means for declutching the members, and means for intermittently rotating the driving member.

1,903,289. AWNING OUTRIGGING. JERRY H. DAZZO, New York, N. Y. Filed June 19, 1931. Serial No. 545,536. 2 Claims. (Cl. 156—44.)

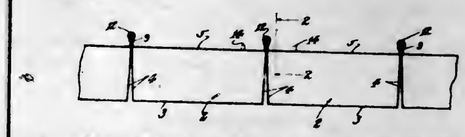


1. A foldable awning frame comprising a wall bracket, pivot brackets adjustably mounted in the wall bracket, an outer terminal arm, arms pivotally connected with each of the pivot brackets, and intermediate arms pivotally connected with the outer arm at spaced points, one of said intermediate arms having a terminal pivotal connection with one of the bracket arms and the other intermediate arm having a pivotal connection with the other bracket arm and an intermediate pivotal connection with the other bracket arm, both bracket arms being adjustable as to length to vary the drop by the change in length of the one and vary the projection by the change in length of the other.

1,903,290. METHOD OF TREATING CELLULOSE DERIVATIVE MATERIAL AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and HERBERT PLATT, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 16, 1929. Serial No. 355,657. 6 Claims. (Cl. 8—20.)

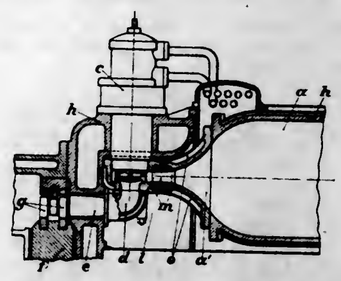
1. Process of imparting stiffness to textile materials containing esters of cellulose comprising partially saponifying the cellulose ester and then subjecting the textile material to the action of strong sulfuric acid, whereby the amount of stiffness imparted will be controlled by the degree of partial saponification of the cellulose ester.

1,903,291. FLOATING DECK. ALVAH M. GRIFFIN, Los Angeles, Calif., assignor to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Original applications filed Feb. 23, 1927, Serial No. 170,168, and Oct. 8, 1927, Serial No. 224,786. Divided and this application filed Sept. 6, 1930. Serial No. 480,058. 5 Claims. (Cl. 220—26.)



1. A floating deck comprising a plurality of pontoons, said pontoons being disposed in substantially horizontal alignment with their upper edges connected to form a substantially gas tight deck and their side walls somewhat separated to provide gas channels between the same under the deck and a continuous depending gas retaining skirt attached to the periphery of said deck.

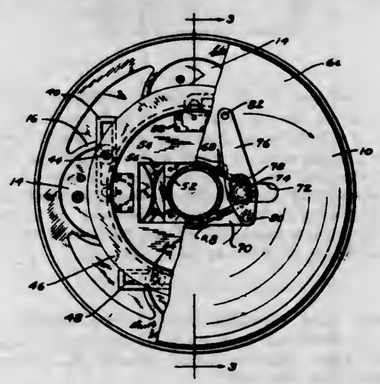
1,903,292. EXPLOSION TURBINE. HANS HOLZWARTH, Dusseldorf, Germany, assignor to Holzwarth Gas Turbine Co., San Francisco, Calif., a Corporation of Delaware. Filed Feb. 5, 1929, Serial No. 337,624, and in Germany Feb. 15, 1928. 1 Claim. (Cl. 60—41.)



The method of operating an explosion turbine having a pistonless constant volume explosion chamber associated therewith and provided with means for intermittently charging air and coal dust into said chamber at the inlet end thereof, which comprises depositing a body of slag of large superficial area at a portion of the chamber near its outlet end, maintaining said portion of the chamber at such an elevated temperature above its surroundings with

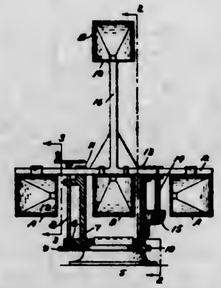
the aid of the hot explosion gases generated in the chamber that said deposit is capable of igniting a coal dust charge and molten slag particles are able to cling thereto, but not at so high a temperature as to cause the deposit to become molten and subject to being blown away by the discharging gases, charging air under pressure into said chamber, and injecting a suspension of coal dust into the body of air in such chamber, whereby such coal dust is suspended in such air and travels in the form of a cloud toward the outlet end of the chamber where it is ignited by the heated slag deposit at the proper instant predetermined by the explosion cycle of the chamber.

1,903,293. FLUID BRAKE. MAX ISAACSON, Dayton, Ohio. Filed Dec. 27, 1930. Serial No. 505,149. 23 Claims. (Cl. 188—90.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A brake adapted for a vehicle wheel supported on an axle, comprising fluid actuating means for dissipating energy bodily rotatable with said wheel, said actuating means including impeller means and an orifice and control means transversely movable relative to said axle for causing said first mentioned means to be actuated at a linear speed in accordance with the speed of rotation of the wheel and the extent of movement of the control means relative to said axle for retarding the rotation of said wheel, said orifice having the same cross-sectional area for like positions of said impeller means for any setting of said control means.

1,903,294. SOUND LOCATING APPARATUS. JAMES C. KARNES, Buffalo, N. Y. Filed Nov. 2, 1931. Serial No. 572,543. 6 Claims. (Cl. 181—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



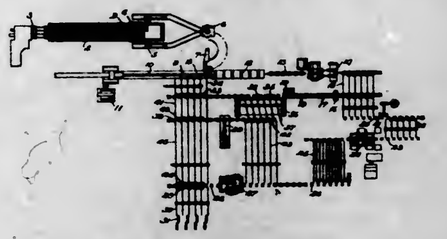
1. In a sound apparatus, a mount including spaced standards, a horizontal support trunnioned in the standards and including a perpendicular arm at its center, a horn on each end of the support outside the standards and on the side of the support opposite the arm, a horn on the support in line with the end horns and positioned between the standards, and a horn on the end of the arm, said arm and horn counterbalancing the remaining horns.

1,903,295. COMPOSITE GUN BARREL. GREGORY J. KRASNICH, Madison, Wis. Filed Mar. 24, 1931. Serial No. 524,939. 8 Claims. (Cl. 89—16.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



8. In a gun, a jacket, a tube insertable in the jacket and spaced therefrom to establish a radial play space, and a deformable seal restorable after firing between the forward end of the jacket and the tube for closing the radial play space.

1,903,296. APPARATUS FOR TUBE MANUFACTURE. CARL W. LITTLER, Pittsburgh, Pa., assignor to Jones & Laughlin Steel Corporation, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 9, 1931. Serial No. 536,142. 8 Claims. (Cl. 29—33.)



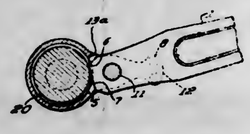
1. Apparatus for tube manufacture comprising a push bench wherein tubes are formed over mandrels, means for stripping the tubes from the mandrels, a straightening machine, means for conveying the formed tubes from the stripping means to the straightening machine, means for conveying the mandrels thereto from the stripping means, and means for returning straightened mandrels from the straightening machine to a position for use in the push bench.

8. Apparatus for tube manufacture comprising a push bench wherein tubes are formed over mandrels, means for stripping the tubes from the mandrels, a straightening machine, means for conveying the formed tubes to the straightening machine, means for conveying mandrels from the stripping means to the push bench, sizing means for the mandrels, means for conveying mandrels to the straightening machine, and means whereby the straightened mandrels may be fed to the sizing means.

1,903,297. RATCHET WRENCH. RICHARD B. PATTERSON, Chicago, Ill., assignor, by direct and mesne assignments, of one-half to Pansy H. Miller, Chicago, Ill., and one-half to H & E Standard Auto Parts, Chicago, Ill., a Partnership composed of Frank S. Heimbach and Harold J. Ellsworth. Filed Oct. 25, 1930. Serial No. 491,204. 1 Claim. (Cl. 81—58.)

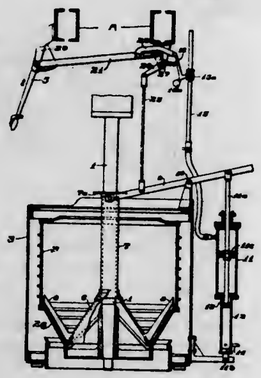
In a ratchet wrench, a hollow chuck open at one end and at its other end provided with an annular flange defining a central opening, an annular wall for the chuck being formed with an opening, a spool in said chuck rotatable therein and having flanges at its ends fitting snugly in the chuck with one flange closing the open end of the chuck, ears extending from said chuck above and below the open-

ing in the marginal wall, one ear being longer than the other, a handle having its front end fitting between said ears, a fastener extending through the ears and handle to pivotally mount the handle, the front end of the handle being cut straight across to form a flat end face and having its corners cut diagonally to form flat corner faces intersecting ends of the end face and forming teeth to



be selectively moved into gripping engagement with the marginal face of the spool between its flanges by rocking the handle upon its pivot, the longer arm being formed with recesses in its inner face spaced from each other transversely thereof and a latch carried by said handle to engage in said recesses and releasably secure the handle in a set position with a desired tooth in engagement with the spool.

1,903,298. CENTRIFUGAL MACHINE. EUGENE ROBERTS, Hastings, N. Y. Filed July 26, 1929. Serial No. 381,171. 11 Claims. (Cl. 210—74.)

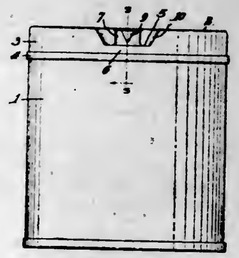


1. In a centrifugal, the combination with a centrifugal basket having a frusto-conical bottom with a central discharge opening, a gyratory basket suspending shaft, a slidable bottom closing valve mounted on said shaft, means for raising said valve from the bottom, and means secured to the valve to disrupt the walled up material when the valve is raised.

1,903,299. PRODUCTION OF ARTIFICIAL MATERIALS FROM CELLULOSE DERIVATIVES. ROBERT PIERCE ROBERTS, REGINALD IVOR REID DEAN, and LOUIS WILFRED GREGORY, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Feb. 27, 1930, Serial No. 431,966, and in Great Britain May 9, 1929. 7 Claims. (Cl. 18—54.)

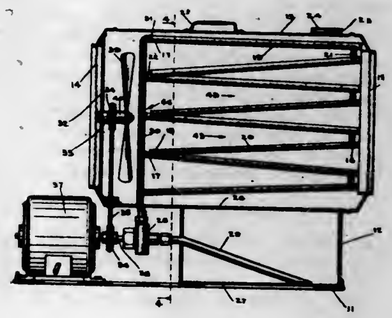
1. Process for the manufacture of artificial materials by wet spinning processes from solutions of cellulose derivatives in organic solvents, comprising subjecting the materials continuously with their production to the action of a strong solution of a substance selected from the group consisting of strong mineral acids and acid esters of strong mineral acids.

1,903,300. SHEET METAL CONTAINER AND HEAD THEREFOR. CHARLES H. ROLLASON, Wheeling, W. Va., assignor to Wheeling Steel Corporation, Wheeling, W. Va., a Corporation of Delaware. Filed Oct. 27, 1930. Serial No. 491,358. 4 Claims. (Cl. 220—24.)



1. A container of the character described comprising a head having therein adjacent to and opening outward through its peripheral edge portion a sunken area, an upright pouring spout located within said area adjacent to said edge portion, the spout encircling portion of said area constituting a drainage channel for receiving and conducting away from said head overflow from said spout, and means below the plane of the bottom of said spout for securing the head to the container.

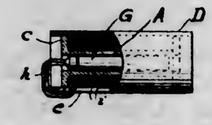
1,903,301. AIR COOLER AND HUMIDIFIER. FREDERIC E. SNOWDEN and JOHN P. ROACH, Los Angeles, Calif. Filed June 20, 1927. Serial No. 200,055. 9 Claims. (Cl. 261—29.)



1. In an air cooler and humidifier, a structure having a plurality of superimposed trays, adjacent trays being inclined in opposite directions, means to force air under pressure simultaneously over the trays from one end in the same direction, the trays at the intake end discharging substantially an upper one into the tray next below and at the discharge end an upper tray discharging into a lower tray by pipes, said trays being spaced apart at the discharge end.

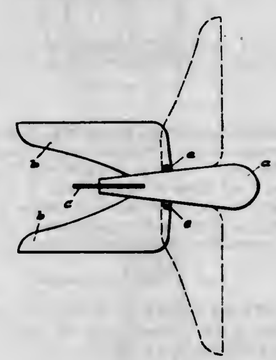
1,903,302. PACKAGE FOR BLASTING CAPS. JOSEPH STUART, 2d, Wilmington, Del., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 3, 1932. Serial No. 596,501. 5 Claims. (Cl. 102—10.)

1. In combination a base having a bore extending from one end, a casing for said base provided with a longitudinally extending slot and a blasting cap provided with lead wires, said lead wires being wrapped from their free ends about said base, and said cap being positioned in the



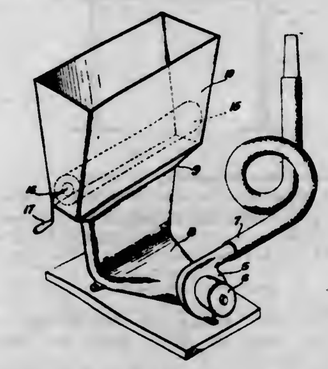
bore therein, said casing being positioned on said base and said lead wires extending from the cap over one end of the casing and through the slot therein.

1,903,303. FLYING ROCKET. REINHOLD TILING, Osnabruck, Germany. Filed June 13, 1931. Serial No. 544,142. 2 Claims. (Cl. 244—18.)



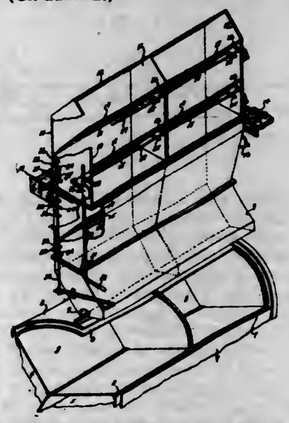
1. A flying rocket, comprising in combination a rocket body, supporting planes shiftable on said body adapted during the ascending to lie behind the centre of gravity of the rocket and in passing over into gliding to move towards the front portion of said body so that their centre of pressure is in line with the centre of gravity of the rocket.

1,903,304. FEEDING HOPPER FOR PNEUMATIC CONVEYERS. EDWIN H. WENZEL, Whitefish Bay, Wis. Filed Nov. 14, 1929. Serial No. 407,101. 2 Claims. (Cl. 302—36.)



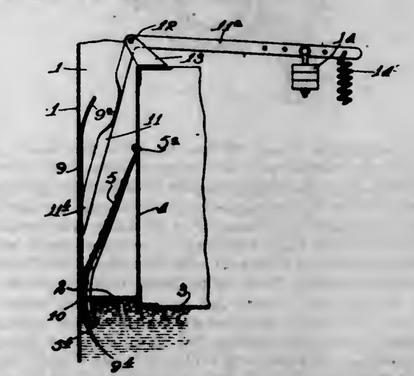
1. In a fluid conveyer, the combination with a fluid propelling device having an inlet pipe, of a hopper serving as the sole inlet port for said pipe, and a rotatable cylindrical brush disposed in said hopper in superficial engagement with the walls thereof, said brush being adapted to support material in the hopper and coacting with the walls thereof to meter said material for delivery into fluid passing through the hopper and brush.

1,903,305. LOADING APPARATUS FOR LAUNDRY WASHERS AND THE LIKE. GEORGE B. WALLACE, Grantwood, N. J., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 18, 1931. Serial No. 516,605. 5 Claims. (Cl. 214—1.)



1. In load maintaining and feeding mechanism, a casing having an upper receiving and lower delivering opening, a plurality of hopper forming door portions arranged one above the other and mounted to swing between open and closed positions, means normally tending to move said doors to closed position, first mentioned latch means for holding said doors in closed position, second mentioned latch means for holding said doors in open position, operator operated means for releasing the second mentioned latch means to permit the doors to close, and operator operated control means for successively releasing the first mentioned latch means to produce successive discharges from the hoppers.

1,903,306. SEALING CONSTRUCTION FOR TANKS. DJALMA D. WILLIAMS, Dallas, Tex., assignor to Chicago Bridge & Iron Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1930. Serial No. 459,798. 6 Claims. (Cl. 220—26.)

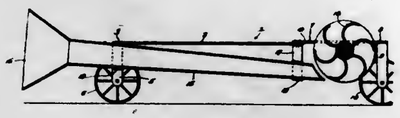


1. A liquid storage tank including: a shell; a roof adapted to float on liquid in the tank; and a substantially gas-tight continuous semi-flexible metal apron of unbroken

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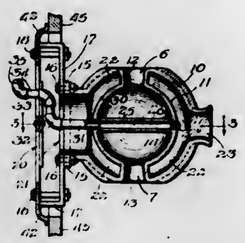
continuity throughout its circumference and with portions having relatively flexible folds therein to make said apron expansible and contractible, said apron having its upper and inner edge attached by one continuous gas-tight connecting seal to the periphery of the roof and its lower and outer edge adapted to be immersed in liquid in the tank.

1,903,307. ELECTRICITY GENERATING APPARATUS. BATTISTA GIOVANNI GILLIO, Worcester, Mass. Filed Jan. 11, 1932. Serial No. 586,004. 1 Claim. (Cl. 170—14.)



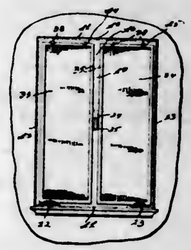
In combination with a vehicle including a frame, a transverse shaft journalled in the rear part of the frame, an elongated wind wheel carried by the shaft, a transversely arranged hanger depending from the frame in front of the wind wheel, a substantially channel-shaped bracket depending from the hanger and having its bight part formed with a number of substantially semi-circular recesses, a similar bracket depending from the forward part of the frame, a substantially horizontal row of rearwardly tapered tubes, each of which has its rear part fitting in a recess of the rear bracket and a forward part fitting in a recess of the front bracket, the rear ends of the tubes directing air passing therethrough against the wind wheel and the front ends extending in front of the frame, and a horizontally arranged elongated flaring mouth forming member having a horizontal row of openings in its rear and small end for receiving the front ends of the tubes, the length of the rear end of the row of tubes being slightly greater than the length of the wind wheel.

1,903,308. COMBUSTION DEVICE. WILLIAM R. HULBERT, Chicago, Ill. Filed Oct. 19, 1931. Serial No. 569,601. 2 Claims. (Cl. 110—174.)



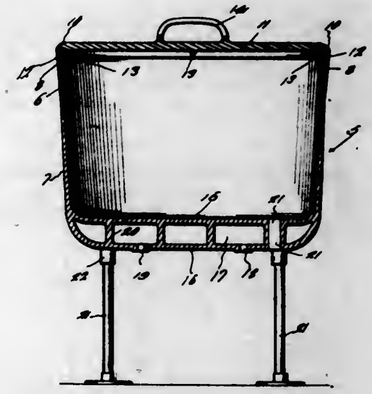
1. A combustion device of the character described comprising walls forming a hollow bulbous outer body having an intake port and a discharge port substantially at opposite ends of the body respectively and having means for securing the body to a furnace at an air intake opening thereof with such intake opening in communication with said intake port and with said body extending into the fire box of such furnace, there being walls forming an inner hollow bulbous body within and spaced from the walls of the outer body to provide a substantially shallow passageway substantially surrounding the inner body and extending between and opening into said ports respectively, there being at least two tubular devices connecting the interior of said inner body with the exterior of said outer body at widely spaced-apart intervals circumferentially of the outer body for the purpose specified, together with a pipe-like member extending across the interior of said hollow bulbous body and opening at one of its ends adjacent to said discharge port, with means for conducting live steam to the other end of said pipe-like member.

1,903,309. WINDOW CONSTRUCTION. CLYDE W. KELLY, Detroit, Mich., assignor to Detroit Steel Products Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 17, 1931. Serial No. 557,656. 9 Claims. (Cl. 189—69.)



1. A window construction comprising a frame having a pair of window openings therein, an outwardly swinging ventilator for each opening, a separate screen for each opening positioned upon the inner side of the frame, and means for latching both of the ventilators in closed position including a single latch mechanism supported upon the frame intermediate the adjacent edges of the screens.

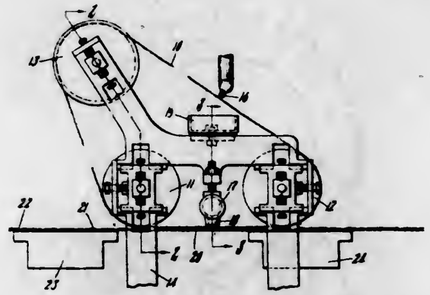
1,903,310. STEAM COOKER. HAROLD E. LAUNDERVILLE, Ogdensburg, N. Y. Filed Aug. 19, 1931. Serial No. 558,169. 4 Claims. (Cl. 53—1.)



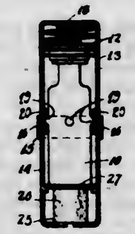
1. A steam cooker comprising in combination a receptacle having a peripheral wall provided with a uniform surface on one side, and having oppositely inclined continuous merging surfaces on its other side, said inclined surfaces merging with one another near the top of the receptacle.

1,903,311. DANDY. FRANK S. MCDONNELL, Milton, Mass. Filed Sept. 15, 1931. Serial No. 562,843. 1 Claim. (Cl. 92—48.)

In a paper making machine, a pair of spaced lower rolls supported tangent to a pulp web produced on said machine, an upper roll above and laterally offset from said lower rolls, an endless foraminous belt passing around the three rolls, means for vertically adjusting each of said lower rolls, means for adjusting the upper roll to regulate the tension on said belt, suction means adjacent to the stretch of belt between said lower rolls, means for washing a stretch of belt between the upper roll and one of the lower rolls, and means for collecting and leading off the washing fluid.

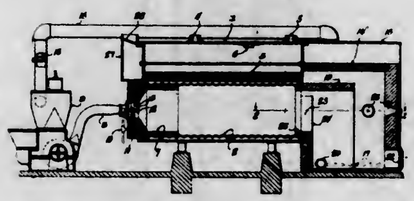


1,903,312. CORN CURE PACKAGE. BERTIE ELLIS, New York, N. Y. Filed July 11, 1931. Serial No. 550,091. 5 Claims. (Cl. 206—47.)



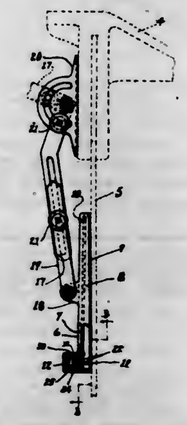
1. A corn cure package, comprising a bottle of liquid corn cure for initial application upon one's corns or the like, pads of corn cure for subsequent application, a carton with an open end engaging upon one end of said bottle and said pads being located between the bottle and the closed end of said carton, and means for bringing the pads to the open end of the carton upon removal of the bottle.

1,903,313. SCOTCH MARINE BOILER CONSTRUCTION. WILLIAM G. JOHNSON, Milwaukee, Wis. Filed Feb. 2, 1931. Serial No. 512,794. 7 Claims. (Cl. 122—149.)



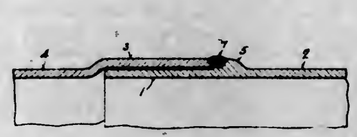
1. A boiler having a furnace tube and flue tubes, means for supplying fuel and air to said furnace tube, a secondary combustion chamber communicating with said furnace tube and said flues, a combustion arch of refractory material beneath and over which the gases from said furnace tube pass, said combustion arch being located within said secondary combustion chamber, and means for admitting air to said secondary combustion chamber.

1,903,314. WINDSHIELD HEATER. ARVID OSNBERG, Chicago, Ill. Filed Jan. 20, 1930. Serial No. 422,026. 4 Claims. (Cl. 219—19.)



2. A heater of the character described comprising the combination, of a heating device having detachable electrical heating units, a recessed window frame providing a frame for enclosing said device, a window pane in said recessed frame, a pocket in said frame, an opening through a side of said frame and communicating with said pocket, said unit being adapted to be inserted through said opening and into said pocket, means for removably securing said device in place, and means for automatically making an electrical connection with said units and said frame on inserting said device in place and to form a portion of an electric circuit.

1,903,315. PIPE JOINT. ARTHUR W. PAIERE, Milwaukee, Wis., assignor to A. O. Smith Corporation, Milwaukee, Wis., a Corporation of New York. Filed July 15, 1929. Serial No. 378,330. 4 Claims. (Cl. 285—111.)

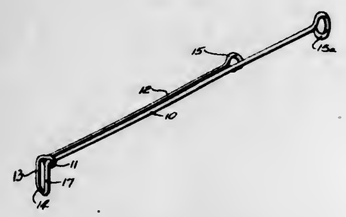


1. A pipe joint comprising a bell on one end of a section being joined, a spigot on another end of the other section being joined, said spigot being inserted in said bell and having a welding dam circumferentially thereof adjacent the end of the bell, a spacer provided between said welding dam and the end of the bell to determine the width of the welding groove, and welding metal deposited in the groove between the welding dam and the end of the bell.

1,903,316. COMBINATION POKER AND CLINKER TONGS. JOSEPH RITLEY, Cleveland, Ohio. Filed May 9, 1932. Serial No. 610,158. 1 Claim. (Cl. 294—11.)

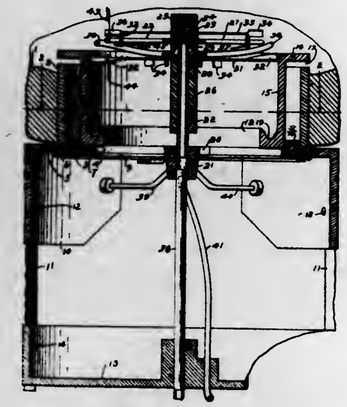
The combination with a poker having a bent end, of an attachment comprising a rod bent laterally to form a

loop through which the poker extends, the end of the rod beyond the loop being bent laterally to form a prong



arranged to cooperate with the bent end of the poker to form a tongs, the poker being rotatable in the loop to open and close the tongs by a pivotal movement.

1,903,317. BURNER. GUY B. TIBBOT, Santa Cruz, Calif. Filed Mar. 15, 1932. Serial No. 598,987. 11 Claims. (Cl. 158—77.)

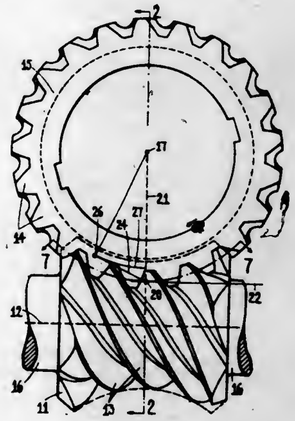


1. A burner of the character described comprising, a tubular member and supporting means therefor, a reaction wheel axially mounted to rotate freely therein, means for discharging fluid under pressure through the wheel to effect the rotation thereof, the wheel having vanes mounted thereon and disposed to move air toward the points of discharge of fluid from the wheel.

10. A structure of the character described comprising, the combination with a fire-box of an annulus seated therein, a base member engaging the annulus from below and forming a seat, a tubular member disposed upon the seat in spaced relation to the annulus and carrying a flange overlying the annulus in spaced relation thereto, an air passage communicating with the space between the tubular member and annulus, and a reaction wheel operatively mounted in the tubular member to discharge over said flange.

1,903,318. WORM GEARING. ERNEST WILDHABER, Brooklyn, N. Y. Filed Sept. 3, 1931. Serial No. 560,904. 23 Claims. (Cl. 74—41.)

1. Worm gearing, comprising two conjugate worm gears at least one of which has composite tooth surfaces, one component of said tooth surfaces corresponding to a mathematical surface of action which intersects a plane containing the axis of rotation and perpendicular to the axis of the mating worm gear in a curve, said curve extending

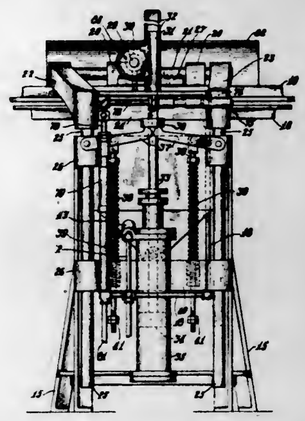


from the pitch point in a general direction inwardly towards the axis of rotation and sidewise towards the tooth ends of larger pressure angle.

1,903,319. LINER FOR RECEPTACLE CLOSURES. DANIEL M. GRAY, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed June 13, 1929. Serial No. 370,739. 2 Claims. (Cl. 91—68.)

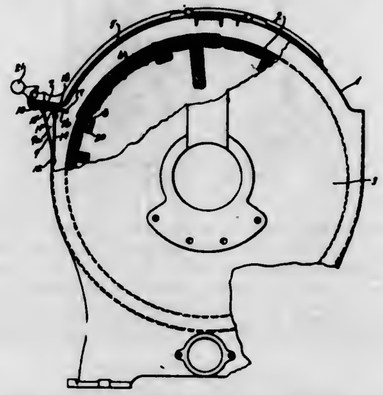
2. A liner for closures including a disc of paper of sufficient density to reduce to a minimum any permeation by a coating applied thereto, and a film of coating material applied to said disc, said material comprising an artificial polymerized vinyl resin treated with a plasticizing agent.

1,903,320. GARMENT PRESSING MACHINE. HARRY H. MCDERMOTT, Chicago, Ill., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 21, 1927, Serial No. 241,560. Renewed Nov. 11, 1930. 15 Claims. (Cl. 68—9.)



7. A press comprising a buck; a vertically reciprocating head over said buck; and means for first lowering and then laterally sliding said head; said means including a reciprocating element and independent connections between the head and said element operable successively during actuation of said element to effect the said movements of the head.

1,903,321. UNLOADING APRON AND DRAIN TROUGH FOR WASHERS. ALONZO D. STALEY, Cincinnati, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 21, 1930. Serial No. 430,274. 4 Claims. (Cl. 68—18.)



1. Apparatus of the class described comprising, in combination with a washing machine including a tub having an opening therein and a door closure therefor and a rotatable drum within said tub having a door opening movable into registry with said tub opening and a door closure therefor, a hinged unloading apron mounted within the interior of said tub adjacent the lower edge of the door opening and adapted to be moved from an inoperative position to bridge the gap between said tub and said drum, and means permitting fluid flowing from treated goods being removed from said drum to drain back into said tub including a perforated member having a top portion forming substantially a continuation of said unloading apron when said apron is in bridging position.

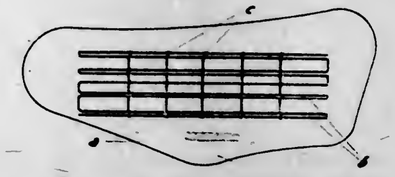
1,903,322. MEASURING GAUGE. WARREN AMES, Waltham, Mass. Filed Aug. 16, 1928. Serial No. 299,960. 14 Claims. (Cl. 33—172.)



7. An instrument of the character described having, in combination, a casing, indicator mechanism comprising a reciprocating rack and a rack gear meshing therewith, said casing having an opening and a perforated screw-threaded nipple projecting exteriorly from said casing and aligned with said opening, said rack having a rod extending through said opening and nipple in spaced relation to the walls thereof, and an elongated guide bearing sleeve for said rod in screw-threaded engagement with said nipple.

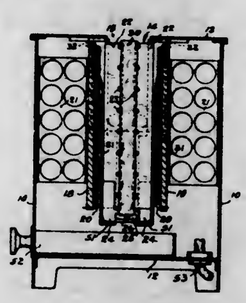
8. An instrument of the character described having, in combination, a casing, a nipple, said nipple carried by said casing at the exterior thereof, said nipple being exteriorly screw threaded and having a longitudinal perforation opening to the interior of said casing, a contact feeler rod in said casing projecting through said perforation of said nipple in spaced relation to the walls thereof, and an elongated guide bearing sleeve for said rod screw threaded on said nipple.

1,903,323. INSOLE. JAKOB BRÖDL, Munich, Germany. Filed Apr. 4, 1931, Serial No. 527,741, and in Germany Feb. 26, 1931. 3 Claims. (Cl. 36—71.)



1. An insole for feet to be orthopedically treated, comprising in combination a piece of leather cut to size and curved like an insole, and an element composed of longitudinal and transverse gut strings stretched on the concave side of said piece of leather, connected at their ends directly to said piece of leather and interconnected at their points of intersection and adapted to limit the depressing of the curved portion of the insole and to return said piece of leather into its initial curved shape when the insole is not loaded.

1,903,324. ELECTRIC BROILER. ALLEN BYRON CODLING, Seattle, Wash. Filed June 6, 1931. Serial No. 542,583. 10 Claims. (Cl. 53—5.)



1. In a broiler, a housing, two heating elements disposed in spaced apart parallel relation within said housing, a grill member of adjustable thickness movable into and out of said housing, movable guide members in the housing for receiving therebetween the grill member and movement equalizing devices connecting said movable guide members and compelling equal movement in opposite directions of the same.

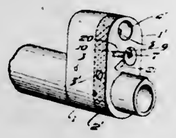
1,903,325. PAPER COATING METHOD AND APPARATUS. CHARLES C. COLBERT and GEORGE E. PRESTON, Elkhart, Ind., assignors to American Coating Mills, Elkhart, Ind., a Corporation of Indiana. Filed Jan. 21, 1929. Serial No. 333,775. 12 Claims. (Cl. 91—68.)



1. The improvement in coating paper characterized by applying to the surface of the paper a preliminary light coat of clay solution, air drying the same, at room tem-

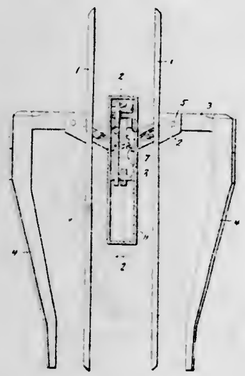
perature while hanging up the sheet in folds, withdrawing the sheet from said folds and applying and brushing similar clay solution on the preliminary coated surface, and then drying the paper by heated air.

1,903,326. FRONT SIGHT FOR RIFLES. THEODORE B. CRAWLEY, West Point, Ky. Filed Jan. 27, 1930. Serial No. 423,799. 8 Claims. (Cl. 33—54.)



1. A front sight for firearms comprising a base having a sight aperture therein, an arm pivoted for movement within and transversely of the base and having a ring sight at its end of less diameter than said aperture adapted to be brought into axial alignment with the sight aperture with said arm at an angle to the vertical axis of the base to permit clear vision below the sight end of said arm.

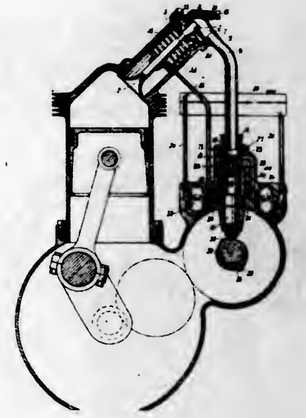
1,903,327. LATCHING MECHANISM. ALVA L. KERR, Mansfield, Ohio. Filed Sept. 21, 1932. Serial No. 634,241. 2 Claims. (Cl. 292—164.)



1. Latching mechanism of the class described comprising a housing, a latch bolt having a portion located therein, a lever having an offset upper end of cam shape located in the housing, a pin and slot connection between the bolt and the lower end of the lever, a pair of oppositely arranged handle members having portions entering the housing, said portions having toothed ends, a pinion located in the housing and arranged between said ends and engaging the teeth thereof, each of said handle parts having a head portion for engaging the cam end of the lever for swinging the same when the head part is raised to move the latch bolt to released position, and a spring for normally holding the lever in a position with the latch bolt projected.

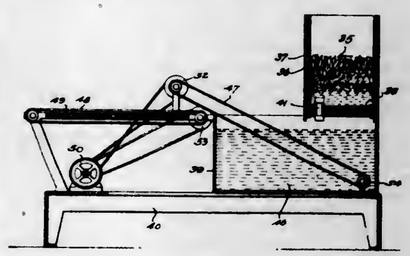
1,903,328. HYDRAULIC VALVE GEAR. WARREN NOBLE, Detroit, Mich. Filed Apr. 1, 1927. Serial No. 180,119. 17 Claims. (Cl. 123—90.)

1. In combination with a puppet valve, valve-closing means, valve actuating means comprising a closed hydraulic fluid casing to the interior of which the stem of said valve is exposed, timed mechanism imposing impulses on fluid in casing whereby said valve is actuated, a source of fluid pressure supply having a communicating passage to said casing, means closing said passage during activity of said



valve, a nonreturn relief valve opening from a region of air accumulation in said casing, and means for closing said relief valve.

1,903,329. METHOD OF PRODUCING LINOTYPE PELLETS FROM LINOTYPE SLUGS. ELMER E. BEARD, Olympia, Wash. Filed Nov. 21, 1929. Serial No. 408,775. 6 Claims. (Cl. 83—91.)

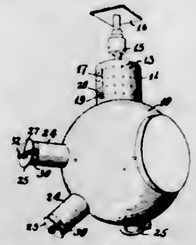


1. The method of melting used slugs of linotype metal and forming from the molten metal particles of shot-like or pellet form for reuse in the melting pot of the machine, which consists in melting the slugs in a container at a temperature above but close to the melting point of the metal, collecting from the metal the oil and other impurities carried thereby and disposing the same in the form of a coating over the metal to protect the same from oxidation during the melting action, and drawing off the molten metal and discharging drops of the same from the container substantially as rapidly as melted into a cooling bath through an air space of restricted depth so as to effect a rapid cooling and hardening of the drops.

1,903,330. MULTIPLE DISPLAY LAMP. ALBERT M. YOUNG, Brooklyn, and WALTER POLLACK, Richmond Hill, N. Y. Filed Apr. 1, 1932. Serial No. 602,608. 10 Claims. (Cl. 240—10.)

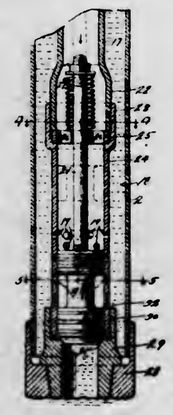
4. A multiple electric display lamp, comprising a hollow casing having a tubular portion at the top, a support attached on the top and including a universal, a bracket within said tubular portion and having studs extended through longitudinal slots formed in said tubular portions, nuts upon said studs, a lamp socket mounted upon

said bracket and in the lowered position of the bracket located within the center of said casing, a plurality of tubes with lenses extended through said casing radially with the center of said lamp when the latter is lowered, a mirror cover adjustably mounted upon the ends of each of the tubes, resilient means for holding said tubes in



various projected positions and catch fingers upon said bracket adapted to engage the peripheries of said tubes when the bracket is in its lowered position, each of said mirror covers being slidably mounted upon an arm, said arm being hingedly mounted upon the tube, and means for holding said cover in various adjusted positions along said arm.

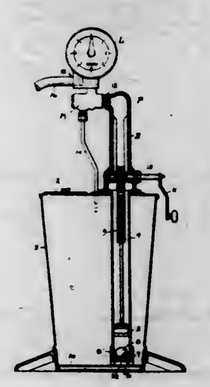
1,903,331. LIQUID LIFT PUMP. PETER R. ALPHONSO, Longview, Tex., assignor to The Argent Corporation, Shreveport, La., a Corporation of Louisiana. Filed Mar. 26, 1932. Serial No. 601,392. 14 Claims. (Cl. 103—240.)



1. A well pump comprising a casing adapted to be disposed in a well, a valve carried by the lower end of said casing and moved to open position upon relief of fluid pressure within the well, a liquid discharge pipe disposed within the casing in spaced relation thereto thereby forming a chamber around the discharge pipe through which air may be forced downwardly, means whereby air forced downwardly through the casing around the discharge pipe will engage and seat the valve and will lift liquid within the casing and force the same upwardly through the discharge pipe.

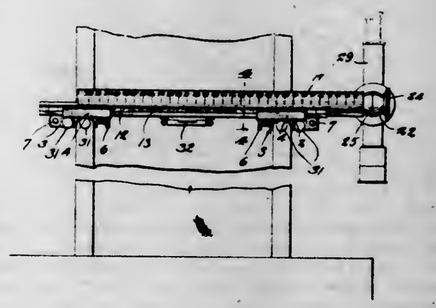
1,903,332. ATTACHMENT FOR DISPENSING AND MEASURING PUMPS. CHARLES J. BELLAR and CHARLES R. YIRAVA, Cleveland, Ohio. Filed Jan. 14, 1932. Serial No. 586,527. 6 Claims. (Cl. 221—95.)

1. An attachment for a liquid dispensing pump, comprising a body, a valve chamber within said body, inlet, outlet, and by-pass passages communicating with said valve chamber, a pressure operated piston valve shiftably arranged within said valve chamber controlling said inlet and outlet passage, a perforation in the end wall of said valve and a needle valve centrally mounted within



said chamber and co-operating with said perforation in the end wall of said piston valve for preventing communication of said by-pass passage and said inlet passage, when said outlet passage communicates with said inlet passage at predetermined pressures therein.

1,903,333. PLUMBING AND LEVELING INSTRUMENT. CHARLES BOTEL, New York, N. Y. Filed Jan. 24, 1931. Serial No. 511,034. 4 Claims. (Cl. 33—46.)

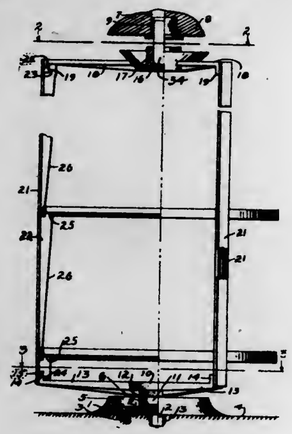


1. An instrument of the class described including an elongated base having a scale thereon graduated from the center to the ends thereof, means for detachably and adjustably connecting said base to either of two angularly disposed faces of an angle column or the like, a graduated bar adjustably mounted on the base, a telescope mounted for angular adjustment on the bar, and level indicating devices carried by the telescope and the bar, respectively.

1,903,334. CABINET SHELVING. LEON E. DAMPIER, San Jose, and ROLY H. DAMPIER, San Mateo, Calif. Filed May 2, 1931. Serial No. 534,582. 2 Claims. (Cl. 211—144.)

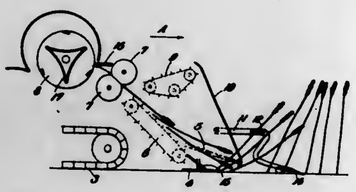
1. In a shelf supporting frame, the combination of top and bottom supporting members having opposing flanges

formed thereon equally distant from their centers, said flanges having opposed notches formed therein, and vertically disposed shelf supporting bars having interlocking



engagement with said flanges and notches, said bars having shelf supporting means, and shelves mounted on said means.

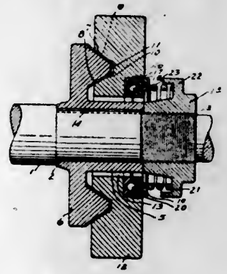
1,903,335. CANE HARVESTING MACHINERY. RALPH SADLEIR FALKINER, Melbourne, Australia, assignor to Falkiner Cane Harvester Corporation of America, New York, N. Y. Filed Feb. 28, 1929, Serial No. 343,516, and in Great Britain May 14, 1928. 8 Claims. (Cl. 56—60.)



1. In a cane harvesting machine, means for severing cane from the ground, mechanism for cutting the cane into pieces, conveying means to the rear of said severing means and adapted to feed the cane, with the stalks lengthwise of the machine, to the cutting mechanism, and means comprising gathering means in advance of severing means and a guiding member above and behind said severing means, said third-named means being constructed and arranged for causing the severed cane to be fed butts first to said conveying means.

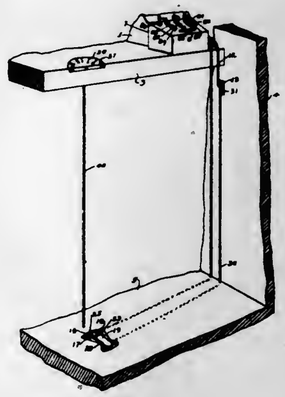
1,903,336. HARMONIC BALANCER. ALBERT F. FIFIELD, St. Catharines, Ontario, Canada. Filed Feb. 9, 1928. Serial No. 252,966. 5 Claims. (Cl. 74—6.)

1. In a vibration damper, in combination with a rotatable shaft, an annular fly wheel encircling the shaft but radially spaced therefrom, a clutch disk and a flanged collar both rigidly secured to the shaft, the clutch disk having an axially extending wedge shaped annular portion making wedging engagement with the fly wheel to dispose the fly wheel concentrically with the shaft and thrust means interposed between the collar flange and the fly wheel comprising a compression spring and a non-friction bearing adapted to resiliently hold the fly wheel and the said clutch part in wedging engagement whereby



the fly wheel will be maintained concentric with the shaft and in spring pressed engagement with the clutch element.

1,903,337. MEANS FOR OPERATING ADDING MACHINES AND THE LIKE. LOUIS HAGB, San Jose, Calif. Filed June 8, 1931. Serial No. 542,902. 6 Claims. (Cl. 235—146.)

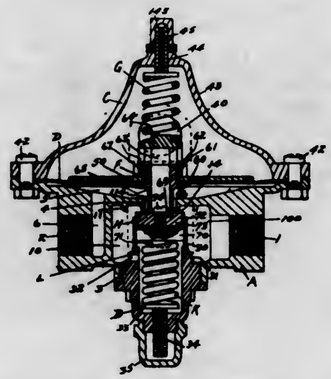


1. The combination with a machine having a bank of keys, of foot controlled mechanism adapted to selectively actuate said keys, said mechanism including a plurality of control elements, one for each key, disposed in an arc and both above and below a given horizontal plane, and a pedal element pivotally mounted at the center of the arc and swingable into engagement with each control element to render the same operative.

1,903,338. PRESSURE REGULATING AND RELIEF VALVE. BURCHARD E. HORNE, Andover, Mass. Filed Apr. 3, 1929. Serial No. 352,289. 6 Claims. (Cl. 50—23.)

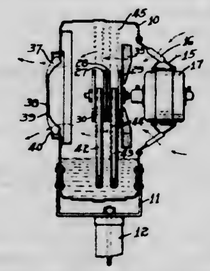
1. In a pressure regulating and relief valve, the combination of a body having at its top a control valve stem chamber from which extends an outlet passage and a centrally disposed control passage to a regulating valve chamber including a strainer section and an enlarged flow section around it, a main fluid inlet, a fixed valve seat below and around the control passage and a plug hole opposite thereto; with a plug which engages and stops up the plug hole, said plug having an annular strainer recess and a tubular valve disc guide; a dome having a drain

outlet, said dome being attached to the top of said body; a diaphragm held at its rim between the dome and body; a movable tubular control valve stem centrally fixed to the diaphragm and which at one end forms a movable valve seat concentric with the fixed valve seat and extends loosely into the control passage and has at its other end



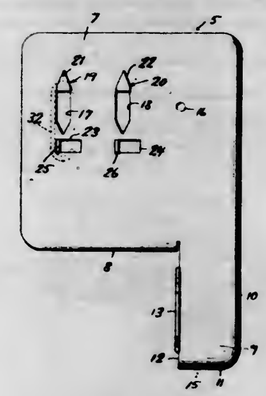
an outlet into the dome above the diaphragm; a relief pressure spring; a valve disc slidable in the disc guide and adapted to engage both valve seats; a disc seating spring adapted to cause the disc to engage the nearest one of the valve seats; means to adjust the strength of the relief pressure spring; and means to adjust the pressure of the disc seating spring.

1,903,339. AIR CONDITIONER. THOMAS J. KEHOE, Perrysburg, Ohio. Filed Feb. 10, 1932. Serial No. 591,956. 2 Claims. (Cl. 261—29.)



2. An air conditioner comprising a receptacle adapted to contain liquid in the lower portion thereof and having opposed openings providing a substantially horizontal air passage through the receptacle, motor supported by said receptacle and having a shaft extending inside of said receptacle, a fan rotatable with said shaft for drawing air into said receptacle through one opening and expelling sand through the opposite opening, a pair of laterally spaced spray-forming plates rotatable with said shaft, a substantially cylindrical spacer between said plates, and an endless belt supported by said spacer and provided with a substantially flat spacer-engaging surface, the lower part of said belt extending into the liquid, the width of the belt being such that a slight space is provided between the sides of the belt and the adjacent plate so that liquid adhering to the underside of the belt is rolled laterally to the plates.

1,903,340. BRACKET. CHARLES MCCULLOUGH, Canonsburg, Pa. Filed May 4, 1932. Serial No. 609,199. 2 Claims. (Cl. 156—24.)



1. A combination bracket comprising a plate adapted to be secured to a vertical surface, curtain rod attaching means on that side of the plate nearest the position of the curtain, plate attaching means at the opposite side of the plate, and shade roller mounting means on the plate vertically alined with the securing means, said shade roller mounting means being located below the curtain rod attaching means and laterally offset with respect thereto.

1,903,341. COMBINATION SLIDING SUBBASE AND SCRAPER FOR AUTO JACKS. WAYNE BRICE MITCHELL, Quebec, Quebec, Canada. Filed Mar. 16, 1932. Serial No. 599,267. 2 Claims. (Cl. 254—1.)



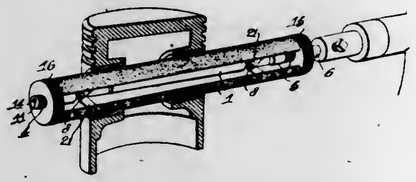
1. A device for the purpose described, comprising a platform having its front and rear ends flanged in the same direction and the said flanges being centrally notched, said plate having upstanding lugs adjacent the rear flange and having a roughened surface between the lugs and the front flange, a handle pivotally secured to the plate inward of the rear flange and swingable through the notches thereof, said handle comprising two hingedly supported sections, the outer section being formed with a lip extension to overlie the inner section, both handle sections, when swung together, designed to be received through the notch in the outer flange, and means carried by the outer handle section for latching the folded handles to the plate.

1,903,342. PROCESS FOR COATING AND SEALING RED CEDAR LUMBER TO PREVENT THE ESCAPE OF CEDAR AROMA. FRANK RABAK, Washington, D. C., dedicated to the Government and the People of the United States of America. Filed Aug. 2, 1930. Serial No. 472,742. 2 Claims. (Cl. 20—91.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A lining for containers such as closets and chests consisting of cedar boards one surface of which is coated

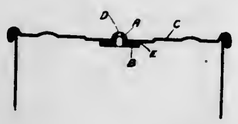
with a transparent sealing substance comprising paraffin which substance is adapted to seal the pores of the wood against the escape of the volatile oil or aroma but at the same time leave the wood surface exposed to view, and the other surface of which is left uncoated whereby the volatile oil or aroma of the cedar may escape freely into the interior of containers lined therewith.

1,903,343. PINHOLE GRINDING OR HONING TOOL. WILLIAM PAUL ROBERTS, Greensburg, Ind. Filed Feb. 17, 1932. Serial No. 593,608. 13 Claims. (Cl. 51—184.1.)



1. A hone of the character stated comprising a mandrel having threaded portions spaced apart, a threaded abutment member on each of said threaded portions, abrasive carrier bars, sets of links and pivot pins for mounting said carrier bars on said mandrel, said threaded abutments arranged to abut the ends of said bars and adjust and secure said bars in their adjusted positions, and abrasives carried by said bars.

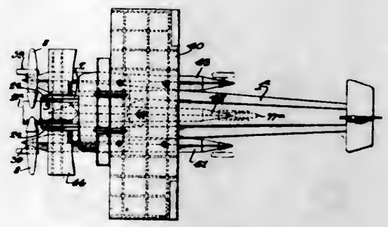
1,903,344. VALVE. LORE A. ROGERS, Washington, D. C., dedicated to the free use of the Public. Filed Oct. 10, 1931. Serial No. 568,159. 2 Claims. (Cl. 220—44.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A one-way valve comprising a dome-shaped nipple projecting through an annular opening formed in a container and consisting of pliable rubber having a V-shaped slit with its apex on the convex side of said dome, and its opposite end opening into the interior of the container, said dome-shaped nipple having an annular collar affixed to said container.

1,903,345. FLYING MACHINE. FRANK STEINMANN, Sr., De Soto, Mo. Filed Feb. 18, 1932. Serial No. 593,808. 6 Claims. (Cl. 244—14.)

1. In a flying machine in combination with the main sustaining plane and cabin, a pivoted crosshead having a lubricating housing, a pivoted motor shaft mounted on said crosshead, a main propeller of variable pitch type mounted on said motor shaft, a stabilizing wing affixed to the underside of the crosshead, an extension motor shaft located in the interior of lubricating housing, means to move the pivoted crosshead by means of cables fixed to winding drums adapted to shift the pivoted motor shaft in conjunction with main propeller in the desired direction of ascending or descending when in the air, detachable circular propeller guides adapted for inspecting power plant and the interior of lubricating and propeller shaft housing fastened to the forward end of cabin, means for shifting the guides relative to the forward end of cabin, means in the interior of lubricating housing for shifting variable propeller blades including encased therein a plunger pivoted to toothed levers for varying the pitch of propeller blades, ball bearings affixed for extension motor

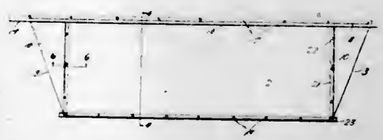


shaft in the interior of lubricating crosshead housing, adjusting rod having a threaded end connected to the plunger and extending to a pilot's operating hand wheel for manipulating the speed of machine and reversing the angle of propeller blades.

1,903,346. COMPOSITION FOR REFINISHING ENAMELED SURFACES. GOTTLEB WELSCH, Sheboygan, Wis. Filed Sept. 17, 1928. Serial No. 306,619. 2 Claims. (Cl. 51—280.)

1. The process of eradicating blemishes from the surfaces of enameled metal ware comprising burnishing the surface of the blemished portion by the burnishing effect of a wet compound containing predominating portions of an abrasive substance such as quartz, and a glossing substance such as zinc flour rubbed on to the blemished portion until the mixture has become dry through heat developed incidental to burnishing.

1,903,347. MORTAR BOX. JOSEPH A. WHELAN, Greenwich, Conn. Filed Aug. 20, 1931. Serial No. 558,219. 1 Claim. (Cl. 220—1.)

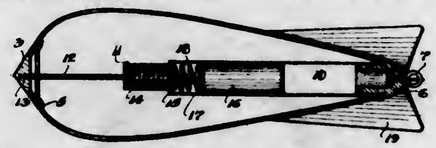


A sheet metal mortar box, the same embodying an elongated, rectangular bottom portion channeled along its lateral margins, elongated, rectangular side walls locked at their lower margins within the said channels of the bottom portion and flared outwardly from bottom to top, the upper margins of the side walls being reinforced, end walls flared from bottom to top to correspond with the flared side walls, the said end walls having laterally disposed triangular wings connected with the end margins of the side walls and having their lower margins interfolded with the extended margins of the bottom portion, and a bottom rail extended along medially from end to end beneath the bottom portion and secured at its ends to the said interfolded margins of bottom portion and end walls.

1,903,348. AERIAL BOMB. GROVER C. ANDERSON, Gateway, Mont. Filed June 18, 1932. Serial No. 617,940. 5 Claims. (Cl. 102—2.)

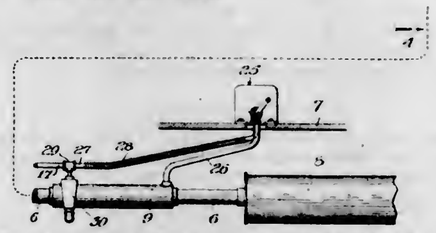
1. The combination in a bomb as described with a frangible shell having a cap, of a longitudinally extending

interior barrel having a cartridge chamber formed as an extension thereof, a spring-supported plunger in the barrel having a firing pin for contact with a cartridge in the



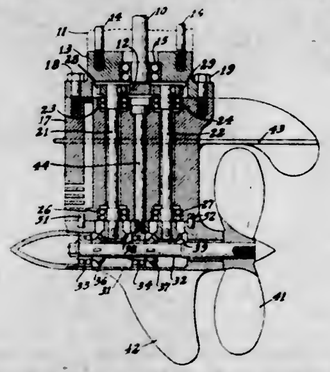
chamber, and a closure plug for the rear end of the bomb, and coacting means on the plug and barrel for joining these parts.

1,903,349. HEATING SYSTEM FOR MOTOR VEHICLES. JOHN H. GOULD, Detroit, Mich., assignor to McCord Radiator & Mfg. Co., Detroit, Mich., a Corporation of Maine. Filed Oct. 3, 1927. Serial No. 223,541. 1 Claim. (Cl. 237—12.3.)



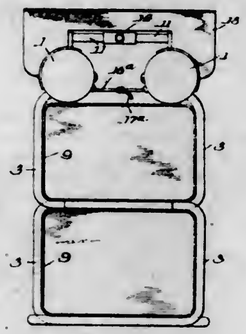
The combination with a motor vehicle of the type having a body, a liquid cooled internal combustion engine, and a liquid cooling system and exhaust pipe for the engine, of a heating system and exhaust pipe for the engine, of a heating system for the vehicle comprising a steam radiator mounted on the body and disposed to heat the interior thereof, a steam generator carried by the vehicle below the radiator and connected with the exhaust pipe to be heated by the exhaust gases of the engine passing through said pipe, means for supplying liquid to the generator from the cooling system for the engine, supply and return conduits directly connecting the radiator to the generator, the supply conduit connecting the outlet of the generator to the inlet of the radiator and the return conduit connecting the outlet of the radiator to the inlet of the generator, and a trap in the connection between the return conduit and the generator to provide a liquid seal at the inlet to the generator to cause the steam produced in the generator to flow in a direction toward the radiator.

1,903,350. TRANSMISSION FOR OUTBOARD MOTORS. JOHN P. LANDRUM, Birmingham, Ala. Filed June 20, 1932. Serial No. 618,252. 4 Claims. (Cl. 115—17.)



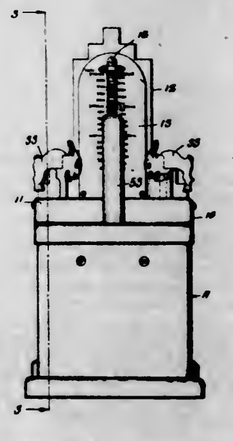
1. In an outboard motor transmission, a motor shaft, a propeller shaft, a pair of parallel vertically disposed intermediate shafts arranged one behind the other in the direction of thrust of the propeller shaft, gear means between the motor shaft and the upper end of the intermediate shafts disposed above the water line, and other gear means between the intermediate shafts and the propeller shaft.

1,903,351. EVAPORATOR. CARL E. L. LIPMAN, Chicago, Ill., assignor to Lipman Patents Corporation, Chicago, Ill., a Corporation of Delaware. Filed Feb. 27, 1931. Serial No. 518,745. 7 Claims. (Cl. 62—126.)



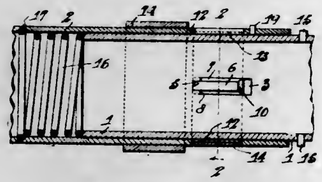
1. In an evaporator, a pair of unitary sections, each section comprising a header and a plurality of spaced refrigerant tubes extending therefrom and terminating at both ends in said header, the tubes of one section being interleaved with the tubes of the other section to form an enclosure constituting a refrigerating chamber and in such a manner that the tubes of each section bound at least two sides of said chamber.

1,903,352. HANDGRIP TESTING MACHINE. GEORGE M. RAMSEY, Amarillo, Tex. Filed June 26, 1931. Serial No. 547,099. 2 Claims. (Cl. 272—68.)



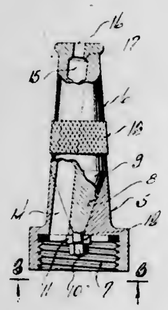
1. In a machine of the character described, a runner, movable images supported for butting action and adapted to perform opposite each other, mechanism operable by the runner to automatically effect the performance of the images, means releasable by a coin to permit actuating the runner and constituting grips, and means for locking the last named mechanism when the runner is in lowermost position.

1,903,353. MEANS FOR HOLDING TOGETHER PARTS HAVING TELESCOPIC ENGAGEMENT. CHARLES LEO WINGARD, Portland, Oreg. Filed Nov. 17, 1930. Serial No. 496,268. 19 Claims. (Cl. 285—174.)



1. Means for securing the joints of male and female members together, which means comprises a spring band carried by one of said members, a locking member cooperating with said band, each said male and female member having provisions in part to receive said locking member whereby said locking member will hold said joint against separation, said members being arranged to be brought together and locked by said locking member upon insertion of the male member into the female member with rectilinear movement along the axes of the members, and means which upon relative rotation of said male and female members on their axes will cause said locking member to become released to provide for separation of said male and female members when desired.

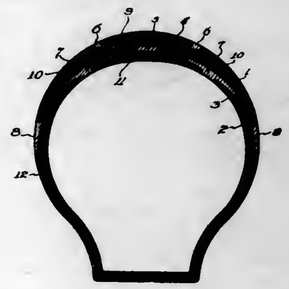
1,903,354. NOZZLE. OSCAR E. BACKUS, Milwaukee, Wis. Filed Nov. 14, 1929. Serial No. 407,162. 6 Claims. (Cl. 299—139.)



1. In a nozzle of the character described, a member having a tapered bore axial to the longitudinal axis of the nozzle as a whole, a second member having a correspondingly tapered portion receivable in said bore to be rotatable with respect to the first-mentioned member about said axis of the nozzle, each of said members having straight bores eccentric to the axis of the nozzle and adapted to be aligned when the members are in a predetermined relative position, and the second member having means for spreading liquid issuing therefrom.

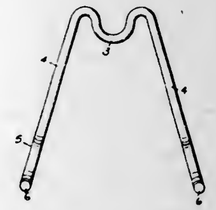
1,903,355. PUNCTURE SEALING FLUID CONTAINER. JOSEPH A. BERGER, Chicago, Ill. Filed Oct. 21, 1929. Serial No. 401,258. 2 Claims. (Cl. 152—13.)

1. A pneumatic member for wheels comprising a tubular body having concentric peripheral tread chambers, a pair of lateral chambers partly interposed edgewise between said tread chambers, each of said chambers containing plastic sealing material, said chambers being arranged to provide three concentric layers of sealing material over



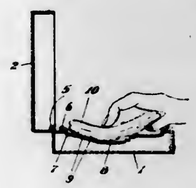
the greater part of the tread portion of said member, and two concentric layers of sealing material at the portions of said member bordering the tread portion.

1,903,356. REENFORCE CHAIR. DEWEY H. BITNEY, Albion, Mich., assignor to Union Steel Products Company, Albion, Mich. Filed Jan. 31, 1931. Serial No. 512,550. 1 Claim. (Cl. 72—122.)



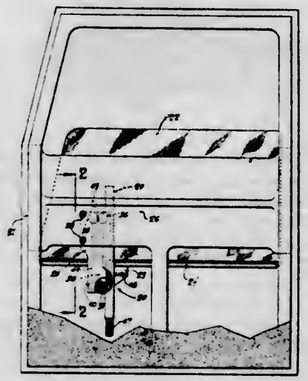
A reenforce chair comprising a U-shaped seat member having its arms extended into downwardly diverging legs, the seat member, arms and legs occupying substantially the same vertical plane, said legs terminating in similarly facing U-shaped extensions, the bottom arms of said extensions being disposed horizontally at right angles to the legs constituting feet and projecting at each side of the vertical plane of the legs.

1,903,357. CONTAINER. WILLIAM FRIEDMAN, New York, N. Y., assignor to Lupé, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 17, 1927. Serial No. 233,784. 9 Claims. (Cl. 132—82.)



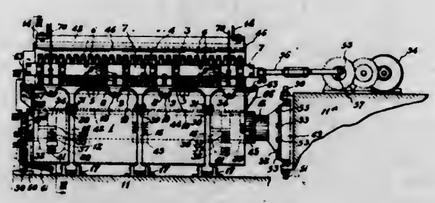
1. A container for powdered substances having a dispensing retainer, said retainer having a plurality of depressible resilient segments, the depression of which provides crevices therebetween substantially in the direction of depression for dispensing the powdered substances within the container.

1,903,358. WINDOW REGULATOR. STANLEY W. NICHOLSON, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed June 24, 1931. Serial No. 546,487. 11 Claims. (Cl. 268—126.)



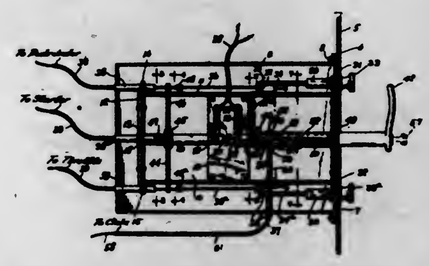
1. In a device of the character described, a frame, a window mounted in said frame for movement in the plane thereof, a window regulator mounted in said frame having a part thereof adjustably connected to said window, means including a rack and a pin of spaced pinions alternatively engageable with said rack to move said window, and a link connected at the opposite ends thereof to said pinions whereby one pinion is driven from the other pinion.

1,903,359. METHOD OF AND APPARATUS FOR ELECTRIC WELDING AND HEATING OF METALS. FRANK L. SESSIONS, Lakewood, Ohio. Filed Aug. 26, 1929. Serial No. 388,548. 38 Claims. (Cl. 219—6.)



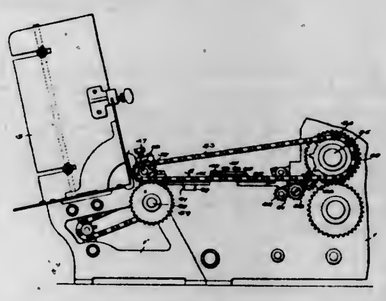
10. The method of electrically welding together an open seam in metal which consists in causing the opposite surfaces of the seam to be pressed together, causing electric currents to be induced in the metal and to flow across said seam in spaced-apart zones, simultaneously causing relative reciprocating movements of said metal and said zones and simultaneously causing progressive, relative traversing movement of said zones and said metal parallel to said reciprocating movements.

1,903,360. INTERNAL COMBUSTION ENGINE STARTER MECHANISM. HAROLD NEWTON WILL, Kettle Falls, Wash. Filed Mar. 16, 1931. Serial No. 523,086. 14 Claims. (Cl. 123—179.)



1. A structure of the type described comprising rotatable plunger means for actuating the starter, the ignition switch, the throttle and the spark distributor, simultaneously with a single axial movement of the means, said single operating means being also rotatable to actuate the carbureter choke, by a movement continuous with the movement entailed in actuating said ignition switch, said starter switch, said throttle, and said spark distributor.

1,903,361. FEEDING DEVICE. CLAUDE L. POST, Chicago, Ill. Filed Aug. 29, 1928. Serial No. 302,833. 6 Claims. (Cl. 271—49.)

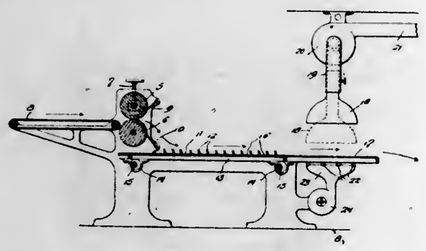


1. Envelope feeding mechanism comprising envelope advancing means, a frame providing a support for said advancing means, means for driving said advancing means, and means for supporting said frame and providing means for adjusting said advancing means relative to said drive means so as to permit any desired variation in feeding.

1,903,362. ROASTED COFFEE PRODUCT AND METHOD OF MAKING SAME. RONALD B. MCKINNIS, Pittsburgh, Pa., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed July 21, 1932. Serial No. 623,918. 12 Claims. (Cl. 99—11.)

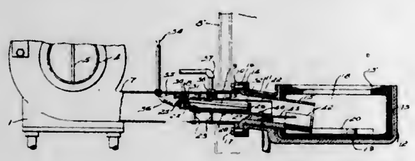
11. A method of treating roasted coffee consisting in subjecting the coffee bean after roasting to a tempering agent and subjecting the roasted coffee to pressure for breaking the bean and crushing the cells and expelling the greater portion of the gas therefrom and for reducing said coffee to the form of thin flakes of such uniform thinness as to render the components therein substantially equally accessible to an extracting liquid.

1,903,363. APPARATUS FOR UNHAIRING SKINS. ELIJAH BRAUER, Jersey City, N. J. Filed Feb. 10, 1932. Serial No. 592,097. 6 Claims. (Cl. 149—8.)



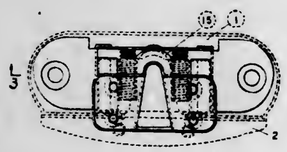
1. In an apparatus for unhairing skins, means for loosening and partially detaching the hairs, and means to subsequently subject the skins to a shaking and combing action to complete the detachment of the hairs.

1,903,364. OIL BURNER. WINFIELD S. GRANT and FRANCIS H. SHOOP, Detroit, Mich. Filed May 20, 1930. Serial No. 454,127. 10 Claims. (Cl. 158—28.)



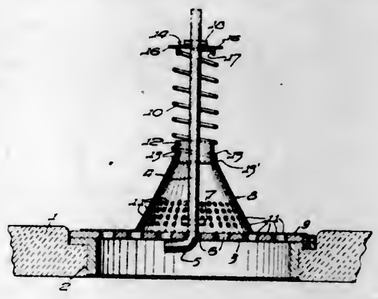
8. An oil burner including an air supply conduit, a fire pot attached thereto having an inlet passage, a separate nozzle extending through said passage and secured to said conduit and fire pot at the junction thereof, an absorbent pad at the discharge end of said nozzle, fuel igniting apparatus in the path of said air current, a fuel inlet for feeding fuel to said apparatus, and means surrounding said apparatus for collecting fuel supplied thereto and conveying it to said pad.

1,903,365. COMBINATION DOVETAIL AND DOOR BUMPER. HOWARD B. HASKINS, Highland Park, and EMORY GLENN SIMPSON, Detroit, Mich., assignors to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 8, 1931. Serial No. 549,448. 18 Claims. (Cl. 16—86.)



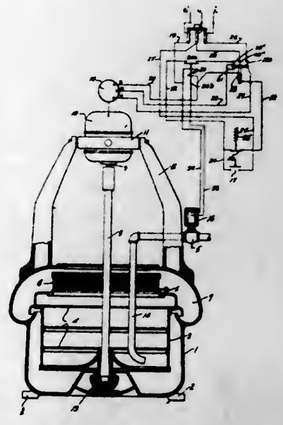
1. A combined dovetail and bumper adapted for use with a vehicle door comprising in combination male and female members having correspondingly formed sides, a coil spring for yieldingly cushioning in and out movement of the said female member, parallel guide surfaces for guiding the in and out movement of said female member, and a rubber block for yieldingly cushioning up and down movement of the said female member whereby the said members are free to float in a plane normal to the plane of the door.

1,903,366. DETACHABLE SINK STRAINER. CLIFFORD MERCIER and FRED DIETRICH, Lowell, Mass. Filed Mar. 10, 1932. Serial No. 598,064. 7 Claims. (Cl. 4—292.)



1. An auxiliary strainer for kitchen sinks, comprising a rigid pin adapted to be mounted on a sink strainer, said pin having a smooth shank, an auxiliary strainer element slidable along said pin, and cooperating means between said auxiliary strainer and smooth shank for mounting said auxiliary strainer element on said pin and dismounting it therefrom while the pin remains in place on the sink strainer.

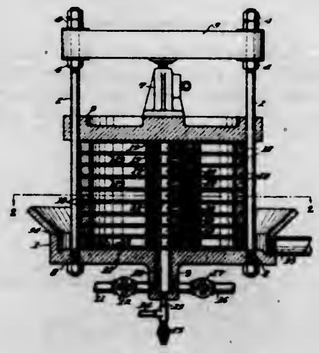
1,903,367. SAFETY DEVICE FOR PAPER PULP EXTRACTORS. LEMUEL V. REESE and GEORGE W. JOHNSON, Cincinnati, Ohio, assignors to The American Laundry Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 24, 1931. Serial No. 517,881. 5 Claims. (Cl. 233—45.)



1. A centrifugal extractor for liquid materials comprising, a rotatable basket, a driving motor therefor, a normally closed valve controlling the supply of liquid material to the basket, controlling and operating means for said motor including a device sensitive to variations in motor speed during its acceleration, and connections therefrom to said valve arranged to open the same when the motor speed reaches a predetermined value.

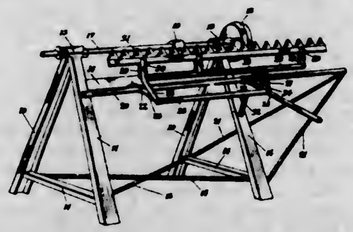
1,903,368. FILTER PRESS. FRANCIS E. SYMONS and FRANK M. COWGILL, Columbus, Ohio, assignors to Ralston Steel Car Company, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 17, 1932. Serial No. 599,470. 3 Claims. (Cl. 210—188.)

1. In a filter press, a plurality of juxtaposed frame members, each of said members being provided with a plurality of relatively non-communicating compartments adapted to contain a filtering medium, there being individual fluid supply ports leading to each of said compartments from a common source of fluid supply, means for



retaining said members in assembled relationship, and filtering pads disposed between said members and separating said compartments.

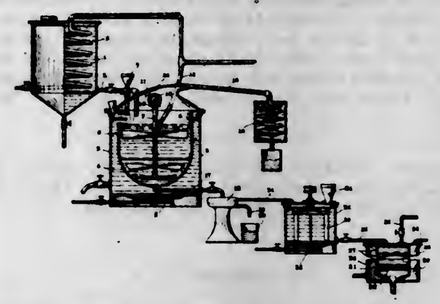
1,903,369. SICKLE GRINDER. JACK BROWN and WILLIAM F. REUTER, Otoe, Nebr. Filed Dec. 31, 1930, Serial No. 505,785. Renewed Aug. 31, 1932. 3 Claims. (Cl. 51—222.)



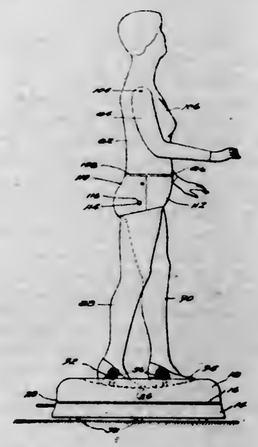
1. In a sickle grinder, a main frame having a grinder shaft journalled thereon, a support on said main frame positioned in parallelism with said grinder shaft, a frame pivotally and slidably secured to said support, a sickle carrying frame pivotally connected to said pivoted frame, said sickle carrying frame being provided with clamps for securing a sickle thereto, a handle projecting from said pivoted frame, stops on said main frame and on said handle for maintaining said sickle carrying frame in inoperative position, and an additional stop on said handle for engaging said sickle carrying frame when raising said handle to operatively position said sickle carrying frame.

1,903,370. PROCESS FOR RECLAIMING OILS. JAMES STORMONTH, Epping, New South Wales, Australia. Filed Sept. 14, 1932, Serial No. 633,119, and in Australia Aug. 12, 1931. 4 Claims. (Cl. 196—16.)

2. A process for rejuvenating used mineral lubricating oil comprising the following steps: heating the oil and removing a part of the impurities therefrom by gravitational settling out; mixing the oil with a fluid reagent comprising castor oil blended with about 10% of mineral oil of high specific gravity at a temperature of about 160° F. with which it will not blend except at high temperature; heating the resultant mixture and subjecting it to superheated steam while being stirred to drive off diluent material of no lubricating value; adding about 3% of an element of the trimethanolamine type for the purpose of assisting subsequent separation of the oil from the re-agent; cooling the mixture to about 70° F., separating the oil from the re-agent and deleterious matters by centrifuging; adding decolorising material; and passing the resultant mixture through a straining medium to thereby clarify the oil.

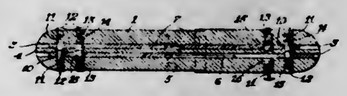


1,903,371. MECHANICAL FIGURE. JAMES G. CONNOR, Kansas City, Kans., assignor to The Animated Roboquin Display Company, a Corporation of Missouri. Filed May 18, 1931. Serial No. 538,114. 6 Claims. (Cl. 223—18.1.)



1. A mechanical figure comprising a torso; arms pivotally carried by said torso; legs pivotally mounted on said torso; a turntable having carriage adapted to serve to support said figure; means to rotate said turntable; means operable, as said turntable is rotated to oscillate said legs in opposite directions and relative to said torso; and means actuated by one of said legs to move said arms in opposite directions.

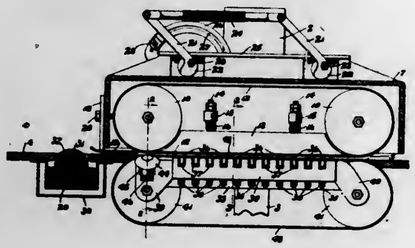
1,903,372. KEY HOLDER. DANIEL COPELL, Atlantic City, N. J. Filed Jan. 20, 1932. Serial No. 587,768. 3 Claims. (Cl. 59—96.)



1. A key holder comprising a body provided with longitudinal slots, a partition plate between the slots, a spring centrally fixed in the slots adjacent to the bottom thereof

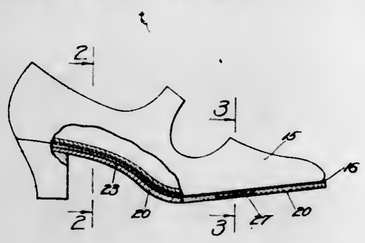
and having oppositely extending arched arms, keys designed to be received in the slots and having their head portions provided each with a pair of spaced round openings, and spring influenced dogs having their confronting ends rounded, movable through the sides and into the partition of the body to pass through the openings in the key head and to afford respectively pivots and latches for the keys, and each of said dogs having its outer end provided with a button head that normally hugs the sides of the body.

1,903,373. VENEER JOINING MACHINE. ALFRED A. DENNIS, Grand Rapids, Mich. Filed Feb. 10, 1930. Serial No. 427,407. 11 Claims. (Cl. 144—279.)



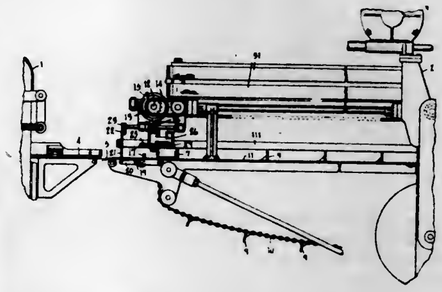
1. A machine of the class described comprising, a horizontal table having an elongated slot therein, two endless belts mounted on spaced apart rollers below said table and having the upper runs thereof located in said slot in the table so as to be flush with the upper side of the table, said belts being spaced a short distance apart, heating means extending between the rollers under the upper runs of said belts, a second pair of endless belts mounted over the table on spaced apart rollers with their lower runs spaced a short distance above the upper runs of the lower belt, said pair of upper belts being lengthwise spaced a short distance apart, heating means above the lower runs of the upper belts and extending between the rollers on which they are mounted, means located on the table in front of the belts for simultaneously gluing adjacent edges of two veneers manually moved over the table to said belts, said veneers having their glued edges contacting when engaged and carried by said belt over the table, the joint formed by said glued edges being in a vertical plane passing through the spaces between said upper and lower pairs of belts.

1,903,374. METHOD OF SHOE MAKING. THOMAS J. CUTHBERT, Weymouth, Mass., assignor to The Stetson Shoe Company, Inc., Weymouth, Mass., a Corporation of Massachusetts. Filed May 24, 1930. Serial No. 455,158. 3 Claims. (Cl. 12—142.)



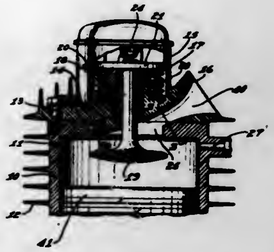
2. The method of making shoes of the Goodyear welt type, which includes lasting and welting the shoe, associating therewith an outsole having its shank portion trimmed to substantially its final outline and molded into approximately its final shape, and attaching the edges of said shank portion to the welt in close proximity to the upper solely by adhesive.

1,903,375. CONVEYER MECHANISM. CARL LITTLEFIELD, Battle Creek, Mich., assignor to Battle Creek Bread Wrapping Machine Company, Battle Creek, Mich. Filed Mar. 12, 1932. Serial No. 598,492. 19 Claims. (Cl. 198—20.)



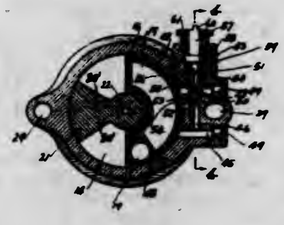
1. In an apparatus of the class described, the combination with a conveyer way, of an endless conveyer provided with flights operatively associated with said way for propelling articles along the way, a feed table disposed at the front end of said conveyer way, a delivery table disposed to deliver to said feed table and provided with guide members for supporting and guiding the articles as they are delivered to said feed table, transfer means operatively associated with said feed table and comprising oval rotary grippers having resilient facings, rotatably mounted arms on which said gripper members are rotatively mounted disposed so that the grippers engage the ends of the articles on said feed table and deliver the same to said conveyer way, stationary gears, said grippers having pinions meshing with said gears whereby said grippers are simultaneously given a planetary and rotating movement upon the actuation of said arms, driving means for said arms including a rotatable slip friction drive member, a tappet for releasing said slip friction drive member at a predetermined point in its rotation, and trip means for said tappet controlled by the articles delivered to said table.

1,903,376. INTERNAL COMBUSTION ENGINE. HERMANN I. A. DORNER, Hanover, Germany, assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1931. Serial No. 576,122. 5 Claims. (Cl. 123—79.)



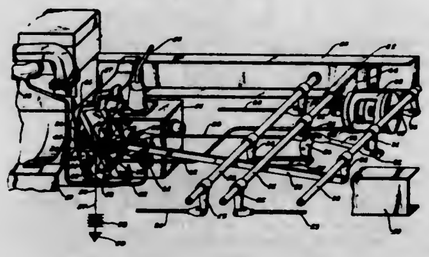
1. In an internal combustion engine, a cylinder, an inwardly opening valve in the cylinder head, and an elliptical air inlet passage through the head controlled by said valve, said elliptical passage being of Venturi form and extending tangentially of the cylinder and obliquely to the axis of said valve.

1,903,377. HYDRAULIC SHOCK ABSORBER. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 29, 1929. Serial No. 366,975. 4 Claims. (Cl. 188—89.)



1. In a hydraulic shock absorber, a casing structure having a fluid containing working chamber, a piston in the working chamber, said casing structure having a passage establishing communication between portions of the chamber on opposite sides of the piston, an adjustable valve member screwed into the casing wall forming the passage and cooperating therewith to regulate the flow of fluid therebetween, key means carried by the casing for adjusting the position of said member, and a clamping member for securing the key means in a stationary relation with the valve member and the casing.

1,903,378. COMBINATION CLUTCH AND BRAKE CONTROL MECHANISM. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 1, 1929. Serial No. 336,755. 15 Claims. (Cl. 192—13.)



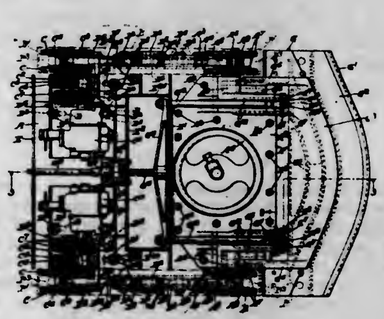
1. In a motor vehicle, the combination with a brake and a clutch, of means for operating the clutch, means for operating the brake, and means actuated by the motor for operating the clutch and brake concomitantly by movement of the clutch operating means only.

1,903,379. HANGING DOOR. BICKNELL HALL, Gloucester, Mass. Filed Dec. 10, 1929. Serial No. 415,205. 9 Claims. (Cl. 16—164.)



1. Means for hinging a closure to swing about an exterior axis comprising a pair of adjacent toggles, each toggle having a central pivot which produced intersects said axis and terminal pivots which revolve about said intersection, said toggles being oppositely arranged.

1,903,380. ENDLESS TRACK VEHICLE. HENRY H. TALBOTT, Milwaukee, Wis., assignor to Nordberg Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Feb. 12, 1930, Serial No. 427,736. Divided and this application filed Nov. 21, 1930. Serial No. 497,087. 10 Claims. (Cl. 180—9.1.)

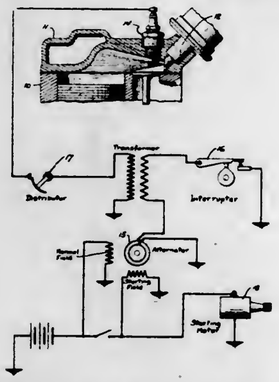


1. In a movable support for machinery and the like, means for moving said support across a supporting surface, including endless tracks, pulleys about which said tracks pass, a separate motor means for each track associated with one of the pulleys about which the track passes, a driving connection interposed between each said motor means and said pulley, and means for adjusting each said motor means, driving connection and pulley as a unit in relation to said movable support.

1,903,381. INTERNAL COMBUSTION ENGINE. HARRY E. KENNEDY, Berkeley, Calif. Filed Sept. 23, 1932. Serial No. 634,497. 13 Claims. (Cl. 123—32.)

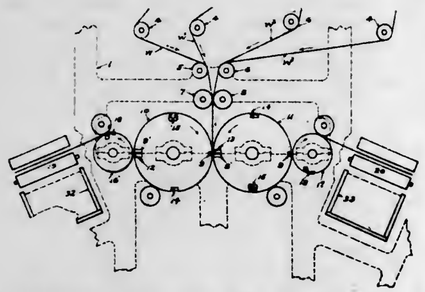
1. A method of combustion used in starting and operating an internal combustion engine which comprises fully

charging the cylinder thereof with air drawn from the atmosphere during the intake stroke, injecting unvaporized fuel into the cylinder, creating a high tension and high energy arc in the cylinder prior to commencement of the



injection and terminating approximately coincident therewith, said arc being of sufficient intensity to create sufficient energy in the cylinder to ignite the unvaporized fuel during the injection thereof.

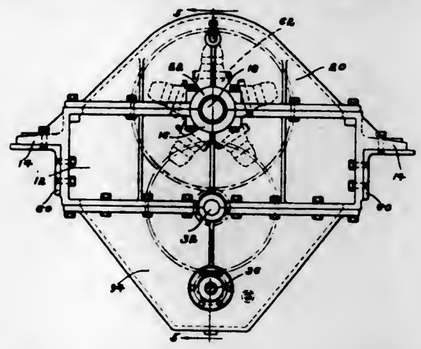
1,903,382. FOLDING MECHANISM. ADOLPH M. ZUCKERMAN, New York, N. Y., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 11, 1932. Serial No. 598,144. 8 Claims. (Cl. 270—63.)



8. In a folder, the combination of means for forwarding and associating a plurality of webs at press speed, a pair of folding cylinders operating at press speed and having means for severing the webs into product lengths, a pair of chopping blade folders, a pair of intermediate transfer cylinders acting alternately to transfer products from the folding cylinders to the chopping blade folders, means for driving the transfer cylinders at a lower peripheral speed than the folding cylinders, and means for registering the products for the second fold.

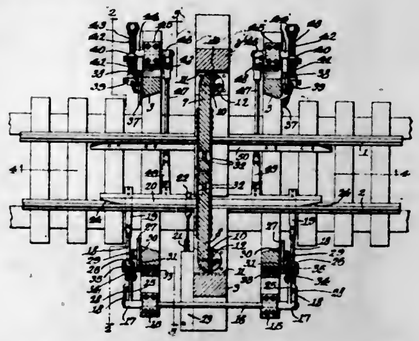
1,903,383. CONVEYER DRIVE MEANS. VICTOR H. WINQUIST, Seattle, Wash., assignor to Mill Engineering and Supply Company, Seattle, Wash., a Corporation of Washington. Filed June 13, 1931. Serial No. 544,276. 8 Claims. (Cl. 74—7.)

1. A log haul drive means consisting, in combination, of a central housing member, having outstanding support brackets; an upper housing member; a lower housing member; a main shaft journaled in bearings formed half in each of the central and upper housing members and disposed in the vertical axis of said members; a chain drive sprocket secured to said main shaft, having a hub, a plurality of tooth bases formed as part of said hub and having radially disposed tooth recesses and tangential key receiving openings; sprocket teeth, having chain bearing shoulders, adapted to seat in the tooth recesses; a taper key adapted to secure the teeth in the recesses; means adapted to space the teeth from the tooth bases and permit variations of the sprocket pitch diameter; a sprocket shaft gear secured to said main shaft; an intermediate shaft disposed directly below said main shaft; and secured between the central and lower housing members; a bushing pinion journaled on said intermediate shaft and adapted



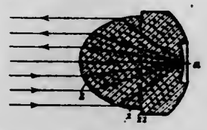
to drive said sprocket shaft gear; an intermediate gear secured to said bushing pinion; a drive shaft disposed directly below the main shaft and journaled in bearings secured within the lower housing member; a drive pinion secured to the drive shaft adapted to drive the intermediate gear; a plurality of webs formed in the upper and central housing members and radially disposed from the main shaft bearings; a vertical web connecting the main shaft bearing and the intermediate shaft supports and a vertical web connecting the intermediate shaft supports and the drive shaft bearings.

1,903,384. MINE DOOR. BEE COOKE, Davy, W. Va. Filed July 8, 1932. Serial No. 621,498. 3 Claims. (Cl. 246—299.)



1. In a device of the class described, a track, a car-operated member disposed adjacent to the track, a frame disposed adjacent to the track, a door hinged to the frame and cooperating with the track, the door being disposed in the path of a vehicle on the track, a keeper on the door, a latch movably mounted on the frame and engageable with the keeper to hold the door open, the door being freely movable with respect to the latch, whereby the door may be bunted open, to bring the keeper into engagement with the latch, by engagement with a vehicle moving along the track, and mechanism connecting the car-operated member with the latch for moving the latch into the path of the keeper, said mechanism embodying means for holding the latch yieldably in the path of the keeper, whereby the latch may yield and engage the keeper when the door is opened, means for actuating the car-operated member, to disengage the latch from the keeper when the car is clear of the car-operated member, and means for then closing the door.

1,903,385. REFLECTING UNIT. SIGGE SCHILLER, Elisabeth, N. J., assignor to Traffic Signs & Signals, Inc., Paterson, N. J., a Corporation of Delaware. Filed Sept. 19, 1930, Serial No. 483,023. Renewed Feb. 13, 1933. 4 Claims. (Cl. 88—1.)



1. A reflecting unit including, with a lens having a convex and substantially elliptical refracting surface, a reflecting medium back of said surface having a portion thereof arranged and formed to reflect rays refracted by one portion of said surface and another portion thereof set relatively back and lateral of its first portion and arranged and formed to reflect rays refracted by a portion of said surface having a greater radius than the first-named portion of said surface.

1,903,386. SUSPENDED RAILWAY SWITCH. GILBERT D. FISH, Pelham, N. Y., assignor to Frank S. Lyon, Minneapolis, Minn. Filed Feb. 17, 1931. Serial No. 516,463. 1 Claim. (Cl. 104—101.)



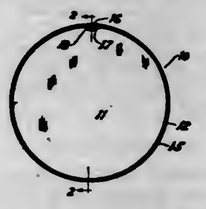
In combination, an overhead structure carrying a main track rail and two diverging track rails for a suspended car and also carrying corresponding side guide rails at a lower level for such a car, a switch structure rotatable about a longitudinal axis for said main and diverging track rails, and a similar co-acting switch structure for said guide rails.

1,903,387. AUTOMOBILE HEATER. JAMES M. HOWE, Cleveland Heights, Ohio, assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 20, 1930. Serial No. 476,555. 6 Claims. (Cl. 257—241.)



1. In an automobile heater, in combination, a central tube adapted to receive the motor exhaust gases, a casing surrounding said tube and forming therewith an annular air chamber, said chamber having an inlet and an outlet, and a plurality of staggered radial fins therebetween, said fins having central apertures, and retaining means extending longitudinally of said chamber and passing alternately through said apertures and between said fins.

1,903,388. LID STRAIGHTENING AND SEALING TOOL. JACOB Z. HUMBERT, North Canton, Ohio. Filed Sept. 1, 1931. Serial No. 560,647. 4 Claims. (Cl. 81—15.1.)



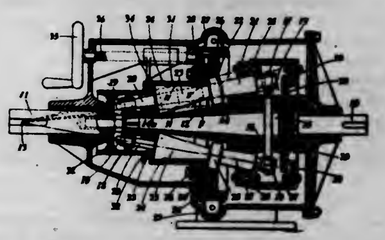
1. A rotatable cup-shaped tool for straightening and sealing a jar lid having an outwardly flared sealing flange, said tool having a wall adapted to fit around said lid, the lower edge of said wall being adapted to ride upon the top of the sealing flange of the lid, and the wall having an inwardly tapered depending lug formed therein for engaging over the edge of the sealing flange.

1,903,389. CLOSURE. JAMES S. REID, Cleveland, Ohio, assignor, by mesne assignments, to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 25, 1928. Serial No. 280,543. 4 Claims. (Cl. 220—40.)



1. A closure, comprising a locking part provided with an outstanding arm and a cover part provided with a member having a slot through which said arm extends, means on the free end of said arm for preventing escape of said cover part member, said escape preventing means being provided with a threaded opening, and a threaded member carried by said cover part and threaded in said opening, whereby rotation of said threaded member causes said cover part to move without rotation toward or from said locking part.

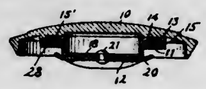
1,903,390. GEAR. MAURICE WALTER PIERCEY, Norbury, London, England, assignor to Joan Oram Chrystal, Summit, N. J. Filed June 8, 1932, Serial No. 616,147, and in Great Britain Sept. 29, 1931. 21 Claims. (Cl. 74—34.)



1. An infinitely variable conical friction gear comprising a driving and a driven shaft, a plurality of conical satellite friction gears carried by cage means, the latter being adapted to be rotated about an axis suitably disposed with regard to the driving and driven shafts, each conical satellite gear comprising a driven cone and a rolling cone having a common apex on the axis of the cage but having different apex angles, the said satellite gears also including a driving cone of the opposite conicity to the driven and

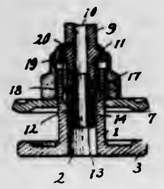
rolling cones, driving means in connection with the driving shaft for frictionally engaging with the driven cones to rotate the satellite gears, a fixed track upon which the rolling cones engage and roll, rotatable means in frictional engagement with the driving cones and adapted to be set into various axial positions with respect thereto, and connecting means between said last-mentioned rotatable means and the driven shaft for imparting the movements of the said rotatable means to the driven shaft, for the purposes set forth.

1,903,391. CLOSURE. LYLE K. SNELL, Detroit, Mich., assignor to Eaton Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 17, 1930. Serial No. 468,595. 3 Claims. (Cl. 220—40.)



1. A radiator cap comprising a cast metal top, a gasket, a carrier for the gasket, said carrier comprising a sheet metal body having an imperforate central portion and a circular flange-like portion rigidly connected to the lower portion of said top, said top having a depending circular rib on the lower portion thereof against which the edge of said flange-like portion impinges and mechanical holding means on said central portion.

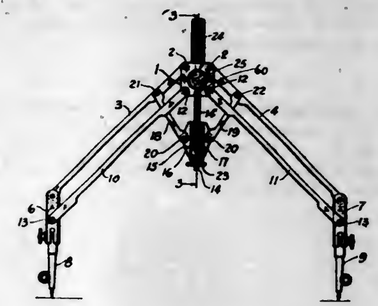
1,903,392. VALVE STEM AND ADAPTER. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 1, 1929. Serial No. 403,996. 3 Claims. (Cl. 285—122.)



1. In combination, a valve stem having an exteriorly threaded portion at one end and a head at the other end and provided with a bore extending therethrough, said bore adjacent the exteriorly threaded end of the stem being provided with a circumferential series of inwardly projecting teeth, an adapter having a bore extending therethrough and an end portion arranged in the bore of the valve stem, and a nut cooperating with the threaded portion of the valve stem and having a swiveled connection with the adapter for moving the end of the latter into the bore of the stem and holding the stem and adapter assembled, said series of inwardly projecting teeth cutting into the end portion of the adapter and forming an interlock therewith to maintain the adapter and stem against relative rotation.

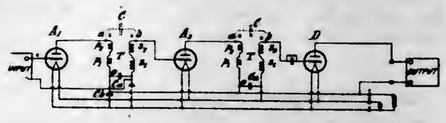
1,903,393. MEASURING INSTRUMENT. ADOLPH A. VLCEK, Cleveland, Ohio, assignor of one-half to Arthur H. Van Horn, Lakewood, Ohio. Filed Jan. 24, 1931. Serial No. 510,977. 1 Claim. (Cl. 33—151.)

A device of the class described including a head, legs pivoted to the head, elongated instrument carrying extensions pivotally carried by the legs, means for maintaining the extensions substantially parallel throughout the movement of said legs, and means for moving the legs to a predetermined adjusted position, said last named means including a stem operable in the head and threaded throughout its major portion, a carriage threadedly engaging the threads of the stem and movable along the stem, and links pivotally connecting the carriage with the



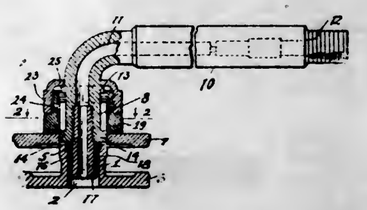
said respective legs, and a set screw carried by the said head and engageable with the stem to lock the same in predetermined adjustment in the head.

1,903,394. RADIOFREQUENCY AMPLIFIER. FREDERICK K. VREELAND, Montclair, N. J., assignor to Vreeland Corporation, Hoboken, N. J., a Corporation of New Jersey. Original application filed Aug. 6, 1923, Serial No. 655,794, patented Sept. 4, 1928, No. 1,682,874. Divided and this application filed Aug. 9, 1928. Serial No. 298,586. 24 Claims. (Cl. 179—171.)



1. In an amplifier for high frequency currents, a plurality of amplifier tubes, a polarity reversing inductive coupling between these tubes, and a capacity shunting the polarity reversing inductive coupling.

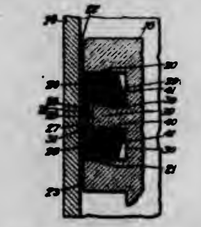
1,903,395. VALVE STEM. JOHN C. CROWLEY, Cleveland Heights, Ohio, assignor to The Dill Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 31, 1929. Serial No. 367,313. 3 Claims. (Cl. 152—12.)



1. A two piece valve stem construction comprising, in combination, an exteriorly threaded stem part provided with a longitudinal bore and having a head at one end adapted to be arranged within a tire tube, a nut arranged on said stem part and adapted to hold a spreader plate in clamping relation with the said head and having an exteriorly threaded portion adapted to extend into the usual opening in the tire rim, a second stem part adapted to removably receive at its outer end the usual valve insides and having its inner end extending into the bore of the

first named stem part, a nut arranged on the exteriorly threaded portion of said first named nut, and cooperating means on said second named stem part and said second named nut effecting a swivel connection therebetween.

1,903,396. PISTON AND PISTON RING THEREFOR. HARRY M. BRAMBERRY, Newcastle, Ind., assignor to Piston Research Corporation, Norfolk, Va., a Corporation of Virginia. Filed July 25, 1929. Serial No. 380,952. 11 Claims. (Cl. 74—109.)

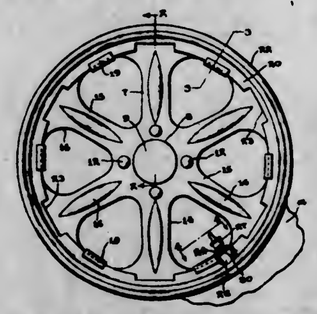


1. In an internal combustion or other compression engine having a cylinder, the combination of a piston reciprocable in said cylinder, with an annular clearance intervening between the piston and cylinder, the piston being formed with a circumscribing annular imperforate ring-receiving groove; and a resilient compression packing ring structure within the groove, said ring structure and piston having surfaces cooperating to form a lubricant receiving reservoir which is in communication with the oil film on the cylinder wall through a feathering passage having a width within the approximate range of .004 inch and .020 inch, and the reservoir being sealed from the compression space under pressure conditions.

1,903,397. METHOD OF SEPARATING FATTY CONSTITUENTS FROM OLEAGINOUS MATERIALS. BRUNO REWALD, Hamburg, Germany. Filed Apr. 24, 1931, Serial No. 532,703, and in Germany July 29, 1930. 9 Claims. (Cl. 87—6.)

1. Method of separating fatty constituents from seed material having a high content of an oleaginous constituent and a substance which is not soluble in said oleaginous constituent, and which material does not contain a large percentage of lecithin, which process comprises incorporating a small percentage of lecithin with said material and subjecting the mixture to a sufficient pressure to squeeze out oleaginous constituents therefrom.

1,903,398. VEHICLE WHEEL. HUGH B. TOWNSLEY, Spokane, Wash. Filed Jan. 30, 1931. Serial No. 512,888. 8 Claims. (Cl. 152—21.)



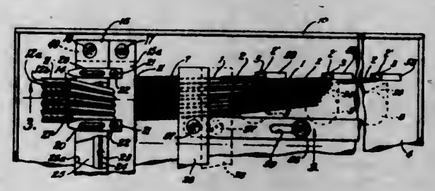
1. In a vehicle wheel for pneumatic tires, a disc provided with a rim section and a tire engaging flange, a ring having a rim section and a tire engaging flange for cooperation with the rim section and flange of the disc, the disc having hooks engageable with the ring to support the latter on the disc, the ring having notches adapted to be rotated into registration with the hooks on the disc to permit separation of the ring from the disc to release the tire from the wheel, and means including the valve casing of the tire to positively prevent accidental rotative movement of the ring on the disc and thereby prevent accidental movement of the hooks along the rim of said ring into alignment with said notches while the tire is deflated.

1,903,399. LEVEE MACHINE. CLINTON F. WAIT, Pine Bluff, Ark. Filed Nov. 9, 1931. Serial No. 573,991. 8 Claims. (Cl. 37—117.)



1. In an excavating apparatus, the combination of a pair of spaced apart elevated supports, a power means associated with one of the supports, a supporting line extending between the supports and operatively associated with the power means, a carriage movably carried by the supporting line, a carriage drawline connected with the carriage and operatively associated with the power means, a bucket, a suspension means for movably connecting the bucket with the carriage, draw means connected with an end of the bucket, a dragline connected with the draw means and operatively associated with the power means, and a spacing trolley connected with the draw means and operatively associated with the supporting line and carriage drawline for holding said lines in spaced apart relationship.

1,903,400. VOTING MACHINE. JOSEPH M. GARR, Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind., a Corporation of Indiana. Filed May 2, 1930. Serial No. 449,295. 12 Claims. (Cl. 235—54.)

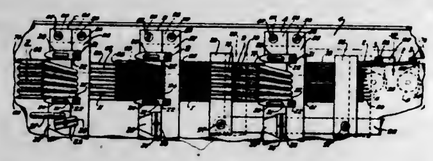


1. A voting machine interlocking mechanism for wedge blocks carried by superimposed straps arranged with the blocks in groups, comprising C-shaped abutments between the straps for interlocking the wedge blocks, a structure providing a channel in which said wedge blocks are interlockable, said structure being provided with slots transverse to the longitudinal extent of the channel, said abutments being laterally removable from between said straps through said slots.

1,903,401. VOTING MACHINE. JOSEPH M. GARR, Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind., a Corporation of Indiana. Filed May 2, 1930. Serial No. 449,296. 2 Claims. (Cl. 235—54.)

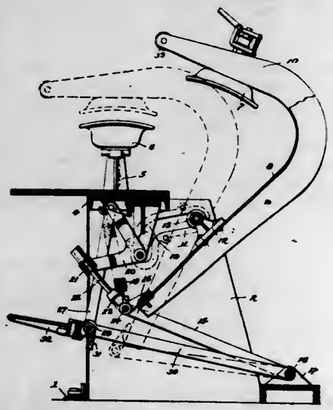
1. In a voting machine, selective interlocking mechanisms, a group of straps overlapping each other through-

out a part of their extent, wedge blocks carried by the overlapping portions of said straps, abutments removably inserted between the straps for interlocking said wedge blocks and straps within said group, sub-groups in said group each comprising alternate straps of said group, additional



wedge blocks carried by said straps of each sub-group, abutments removably inserted betweeen said straps for interlocking said second-named wedge blocks and said straps within sub-groups, and means for selectively rendering said interlocking mechanisms inoperative by removing the abutments of the respective group or sub-group.

1,903,402. GARMENT PRESS. SANFORD J. LOCKE, Syracuse, N. Y., assignor to United States Hoffman Machinery Corporation, New York, N. Y., a Corporation of Delaware. Filed May 6, 1927. Serial No. 189,384. 6 Claims. (Cl. 68—9.)



1. In a garment press the combination of a frame, a buck supported thereon; a head; a carrying member to which the head is attached, said member having a downwardly extending portion; guideways on the frame adjacent the upper portion thereof, said ways having lower portions substantially vertically disposed merging into upwardly and rearwardly inclined portions; rollers carried by the head carrying member and extending into the guideways; at least one radius link pivotally secured to the lower portion of the head carrying member, said link being pivotally secured at the rear of the frame; springs normally acting to elevate the head carrying member; and operator actuated means for forcing the head carrying frame downwardly.

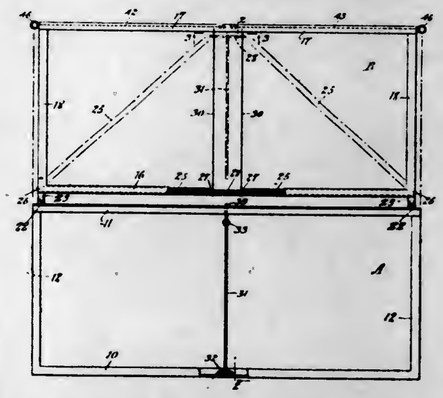
1,903,403. SLIP-ON GARMENT. CHARLES B. JACOBS, Baltimore, Md. Filed Sept. 8, 1932. Serial No. 632,098. 1 Claim. (Cl. 2—74.)

A house dress having a neck portion at the top and a back and side portion formed of continuous vertical sections joined at the edges, the sections having an oppositely reducing taper from the collar portion and the bottom edge respectively, toward the waist, the garment also having a front section on each side, each front section being adapted to overlap the other front section at and below the waistline, each front section below the waistline extending substantially across the entire front of the garment and having an offset at the waist line providing a horizontal edge extending along the waistline, each front section above the offset being narrowed relatively to its lower portion by the offset and having its free edge inclined outwardly from the offset and upwardly toward the neck, said inclined edges being provided with a collar turned over the corresponding front sections, the collar extending continuously from the offset at the waistline



at each side upwardly and around the neck and tapering downwardly to a point at both ends of the collar which points meet the inclined edges at the waistline and a belt section secured to each offset, the ends of the belt being adapted to be connected at the front, the garment having an aperture at each side on the waistline through which the belt sections on the opposite sides may be passed, the aperture on the overlapping side of the garment only being utilized by passing the belt section on the side which is covered through said aperture and around the back of the wearer and joining with the other belt section at the front.

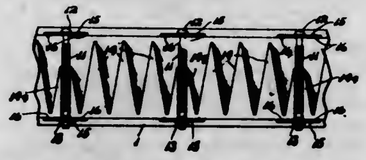
1,903,404. COMBINATION FURNITURE. THEODORE ABRAMS, Woodhaven, N. Y., assignor to Studio Couch Patents Co. Inc., a Corporation of New York. Filed June 16, 1932. Serial No. 617,622. 8 Claims. (Cl. 5—17.)



7. In a combination article of furniture of the character set forth including a pair of laterally nestable frames; interengageable means on said frames for shifting the same from a nested to an unnested or extended position comprising an elastic element extending longitudinally across one side of one frame and a rigid element extending transversely across the other frame for engaging said elastic

element and placing the same under tension when the frames are moved to nested relation, said elastic element comprising a pair of coiled contractile springs anchored at their outer ends to the opposite ends of the frame and an abutment plate to which the inner ends of the springs are connected and means for supporting and guiding said abutment plate for transverse movement, said transverse rigid means on the other frame consisting of a bar having a depending leg adjacent its free end for engagement with said abutment plate, means at the free end of said bar and on the other frame adapted to interengage when the frames are nested, for locking the same and means for releasing said locking means.

1,903,405. TIRE. DONALD J. CAMPBELL, Muskegon Heights, Mich. Filed Jan. 20, 1930, Serial No. 421,884. Renewed Jan. 20, 1932. 6 Claims. (Cl. 152—17.)



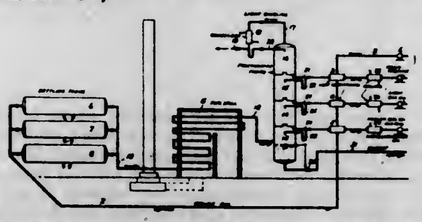
5. In combination, a tire casing, a separable tread located around the casing, complementary projections on the outer side of the casing and inner side of the tread interlocking with each other to hold the tread against creeping movement and a plurality of means extending alternately through the projections on the casing and those on the inner side of the tread for the purpose described.

1,903,406. SEAM FOR DRIER FELTS AND METHOD OF MAKING SAME. GEORGE F. PUTVIN, Munising, Mich. Filed Jan. 8, 1931. Serial No. 507,505. 5 Claims. (Cl. 24—38.)



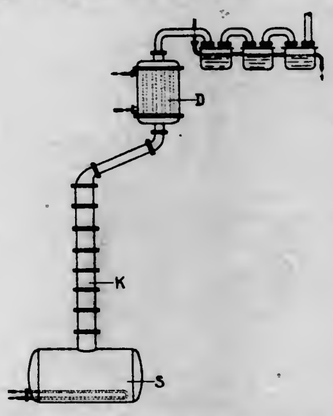
1. A seam for a fabric felt for paper machines having terminal portions adjacent each other at their edges, means for joining the portions comprising a patch having ravelled ends, and waterproof adhesive interposed between the patch and its ravelled ends and the felt, whereby the seam is rendered resistant to disintegration by moisture.

1,903,407. PROCESS FOR PREPARING CRUDE OIL FOR DISTILLATION INTO LUBRICATING OILS. ARTHUR M. PEW, Jr., Bryn Mawr, Pa., assignor to Sun Oil Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Feb. 28, 1928. Serial No. 257,559. 7 Claims. (Cl. 196—35.)



6. The process of preparing mineral oil stock for distillation of lubricating oils which comprises establishing a flowing stream of hot liquid oil containing lubricating oil fractions, adding an alkali solution to the hot liquid oil stream and then, without substantial drop of pressure or temperature, distributing the mixture over a large area and thereby effecting evaporation of solvent introduced with the alkali and leaving a residual oil containing lubricating oil fractions and alkali.

1,903,408. PROCESS OF PREPARING HYDROFLUORIC ACID. JULIUS SOLL, Frankfort-on-the-Main-Schwanheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 7, 1931, Serial No. 549,291, and in Germany Jan. 30, 1930. 6 Claims. (Cl. 202—41.)

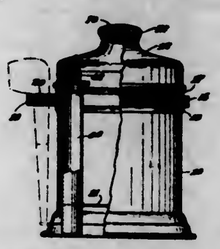


1. The process of preparing hydrofluoric acid practically free from silicic acid which comprises subjecting a crude hydrofluoric acid containing silicic acid and up to 60–65 per cent of hydrogen fluoride to a fractional distillation and causing an aqueous hydrofluoric acid poor in silicic acid to act upon the vapors of hydrogen fluoride distilling over.

1,903,409. PROCESS OF MAKING IRON-CHROMIUM NICKEL ALLOYS. FREDERICK M. BECKET, New York, N. Y. Filed Nov. 18, 1930. Serial No. 496,569. 11 Claims. (Cl. 75—45.)

8. A process of making chrome-nickel stainless steel which comprises reacting on nickel matte with lime and an excess of carbon in the form of high-carbon ferrochrome, oxidizing at least a part of the residual carbon by Bessemerization, and adding iron to the alloy produced by the first-mentioned reaction.

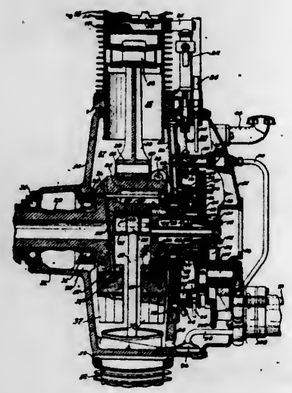
1,903,410. PIPE RACK. WILLIAM CECIL, New York, N. Y. Filed Jan. 21, 1933. Serial No. 652,889. 5 Claims. (Cl. 131—51.)



1. A pipe supporting attachment for a tobacco jar comprising a plurality of units in assembled relation, each unit comprising means adapted to secure it to the tobacco

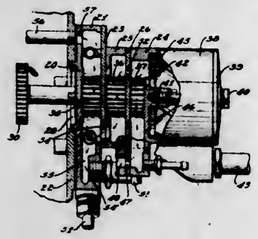
jar so that the units are capable of relative adjustment relatively to each other and to the tobacco jar, each unit comprising additionally means for supporting a pipe so devised and constructed that as the units are relatively adjusted, the pipe supporting means may be varied positionally relatively to each other and to the tobacco jar and the pipe supporting capacity of the assembly increased or decreased.

1,903,411. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 3, 1930. Serial No. 441,390. 12 Claims. (Cl. 184—6.)



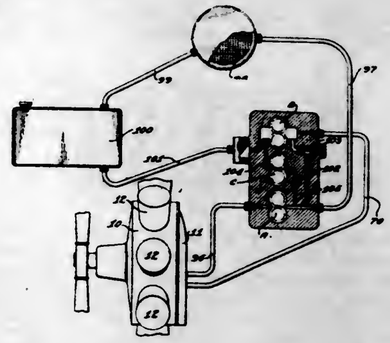
1. In an internal combustion engine, a crank case, a diaphragm in the crank case having passages therein each communicating with engine parts to be lubricated and serving as a lubricant distributer, pressure means for forcing a continuous stream of oil through the diaphragm passages to the parts to be lubricated during engine operation, and means for removing collected oil draining from the lubricated engine parts.

1,903,412. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 25, 1930. Serial No. 491,255. 8 Claims. (Cl. 184—6.)



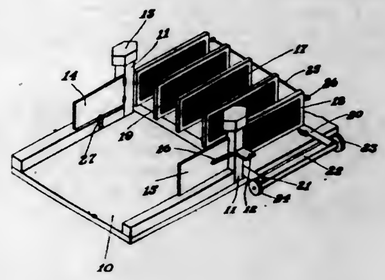
2. In a lubricating system for engines, a pump structure comprising a casing forming a feeding chamber, an outlet chamber and shunt chamber, a pair of pump gears in each chamber, means for driving a gear of each pair of gears when the engine is operating, and duct means connecting the shunt chamber with the inlet portion of the feeding chamber and the outlet portion of the outlet chamber.

1,903,413. INTERNAL COMBUSTION ENGINE. LIONEL M. WOOLSON, deceased, Detroit, Mich., by Emma F. Woolson, executrix, Bloomfield Village, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed Apr. 3, 1930, Serial No. 441,390. Divided and this application filed Feb. 14, 1931. Serial No. 515,801. 7 Claims. (Cl. 184—6.)



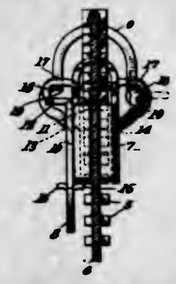
1. In a compression-ignition internal combustion engine, a crank case having a plurality of bearings therein, a tank, a cooler, means connecting the cooler and the tank, means connecting the oil tank with the bearings including a pressure pump, return means for removing excess oil from the crank case to the cooler, and means for moving a stream of oil from the tank into the return means.

1,903,414. RACE TRACK STARTER BARRIER GATE AND STALL. WILLIAM ALBRIGHT, New York, N. Y.; Ida Albright administratrix of said William Albright, deceased. Filed July 2, 1929, Serial No. 375,511. Renewed Feb. 28, 1933. 1 Claim. (Cl. 119—15.5.)



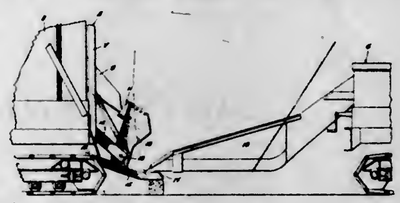
A starting barrier comprising starting posts, normally closed gates hingedly mounted on said posts, springs secured to said posts and said gates, and a wheeled stall carriage removably positioned behind said starting posts and gates, said carriage comprising a body wheeled at one end and a plurality of spaced apart upright panels mounted on said body, said panels being surfaced by a non-injuring wire mesh.

1,903,415. SLIDE FASTENER. IRVING GREENBERG, Union City, N. J. Filed Dec. 8, 1932. Serial No. 645,505. 14 Claims. (Cl. 24—205.)



9. A slide fastener, comprising cooperating fastener elements, a slide for engaging and disengaging the same, a pull pivotally connected to and reversible over one end of the slide from one side to the opposite side of the same and means for releasably retaining said pull in position at either side of the slide, said means including members adjacent the free end of the pull and cooperable in releasable retaining engagement with opposed end portions of the slide in the positions of the pull at the opposite sides of the slide.

1,903,416. CONCRETE MIXING APPARATUS. RUDOLPH F. LINDOW, Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 10, 1930. Serial No. 501,397. 4 Claims. (Cl. 83—73.)



1. In a concrete mixer, the combination with a frame, a mixing receptacle and a discharge chute, of an auxiliary chute pivotally mounted on said frame for oscillatory movement to and from a position in which it may receive concrete from said discharge chute; and a weighted arm connected with said auxiliary chute, adapted to normally urge said auxiliary chute toward its non-receiving position, said arm having an extension to which a force may be applied to move said auxiliary chute to its receiving position.

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Patents Nos. 1,903,417 to 1,903,749

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April 11, 1933

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Designs	22—No.	89,585 to No.	89,606, inclusive.
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Total	531		

Transfers of Classes

ORDER No. 3,231

U. S. PATENT OFFICE, *Washington, Jan. 16, 1933.*

The following transfers to take effect at once, are hereby ordered:

Class 294 from Division 1 to Division 4.
Class 260, Subs. 2–8, 10, 100–102, 145, 146, 148, and 152, from Division 6 to Division 50.
Class 216 from Division 17 to Division 53.
Class 237 from Division 19 to Division 46.
Class 17 from Division 25 to Division 2.
Class 123, Subs. 179 and 185, from Division 28 to Division 12.
Class 123, Subs. 143–169, from Division 28 to Division 48.
Class 94 from Division 33 to Division 38.
Class 24 from Division 35 to Division 5.
Class 132 from Division 35 to Division 53.
Class 137, Subs. 99, 112, 71, 90, 77, 75, 76, 78, 79, 73, 72, 91, 100, from Division 39 to Division 52.
Class 150 from Division 40 to Division 62.
Classes 4 and 182 from Division 43 to Division 1.
Classes 221 and 226 from Division 44 to Division 35.
Class 74, Subs. 21, 31, 32, 42, 43, 44, 49, 51, 61, 62, 63, 64, 65, 66, 67, 103, from Division 45 to Division 12.
Class 303 from Division 47 to Division 34.
Class 192, Subs. 116.5 to 150, from Division 47 to Division 12.
Class 53 from Division 49 to Division 1.
Class 134, except Subs. 17, 26, 54, and 79, from Division 50 to Division 64.
Class 106, Subs. 24–36, from Division 50 to Division 38.
Class 91, Subs. 1–67.8, from Division 50 to Division 22.
Class 197 from Division 58 to Division 41.
Classes 44 and 195 from Division 59 to Division 64.
Class 222 from Division 59 to Division 38.
Class 149 from Division 59 to Division 11.
Classes 187, 227, 228, and 304 from Division 61 to Division 4.

THOMAS E. ROBERTSON,
Commissioner.

Interference Notice

U. S. PATENT OFFICE, *Washington, Mar. 28, 1933.*

Frank L. Myers, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Edwin Archer Turner, 250 Madison Avenue, New York, N. Y., and patent granted January 12, 1932, No. 1,840,913, to Frank L. Myers, 508 Cathedral Street, Baltimore, Md., and a notice of such declaration sent by registered mail to said Myers at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Myers, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Mar. 24, 1933.*

Lee E. Gribbens, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Lee E. Gribbens, of 58 East 29th St., Chicago, Ill., No. 217,523, dated August 31, 1926, and the notice of such proceeding sent by registered mail to the said Gribbens at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Gribbens, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business March 25, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 52,767; Trade-Mark Division, 1,014. Oldest new case, Oct. 31, 1932; oldest amended, Nov. 2, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Nov. 15	Nov. 15	681
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Nov. 25	Nov. 26	920
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	†Jan. 5	†Jan. 4	623
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 9	Dec. 19	555
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 4	†Jan. 13	501
4898C	6. LEWERS, A. M., Carbon Chemistry	Nov. 17	Nov. 18	1,036
5725	7. JARBOE, C. G., Optics; Photography	Nov. 28	Nov. 29	1,071
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Jan. 21	†Jan. 19	564
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 3	†Jan. 3	657
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	Dec. 19	Dec. 22	496
6067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Nov. 26	Nov. 25	661
7701	12. HENRY, C. C., Machine Elements	Dec. 10	Dec. 12	585
8096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 12	Dec. 12	511
8097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	†Jan. 3	†Jan. 5	565
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Nov. 25	Nov. 25	1,297
5612	16. SPENCER, C. J., Telegraphy; Telephony	Dec. 29	†Jan. 4	607
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Nov. 11	Nov. 11	1,124
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Jan. 26	†Jan. 26	316
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Nov. 11	Nov. 14	1,138
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 26	†Jan. 27	349
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Nov. 26	Dec. 1	808
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 1	Dec. 1	865
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Nov. 19	Nov. 25	569
8063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Jan. 25	†Jan. 18	465
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Nov. 21	Nov. 25	1,132
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	Dec. 14	Dec. 15	513
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	Dec. 27	Dec. 27	663
4628	28. BENSON, A. R., Internal-Combustion Engines	Nov. 4	Nov. 3	955
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Nov. 9	Nov. 26	428
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	Dec. 3	Dec. 23	629
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Nov. 15	Nov. 21	1,216
6096	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	Dec. 30	Dec. 30	643
6625	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 1	Dec. 1	1,208
3600	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Nov. 5	Nov. 3	948
7624	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Nov. 12	Nov. 16	867
5889	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Oct. 31	Nov. 2	1,304
7510	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	Dec. 6	Dec. 23	622
4874	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Nov. 22	Nov. 22	726
7880	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Nov. 25	Nov. 25	957
6082	40. OBERLIN, J. J., Receptacles	Dec. 1	Dec. 1	1,466
5882	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles: Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Nov. 30	Dec. 1	644
4886B	42. CUTTING, H. O., Electric Signaling	Nov. 14	Nov. 10	999
4087B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Nov. 4	Nov. 9	1,081
7097	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Nov. 19	Nov. 25	742
4613	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Jan. 16	†Jan. 16	508
7600	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Nov. 30	Nov. 30	640
5731	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Nov. 17	Nov. 17	1,322
7736	48. ROEPKE, O. B., Electricity, General Applications	Nov. 30	Nov. 28	707
4701	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Nov. 17	Nov. 3	948
5628	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Nov. 18	Nov. 22	1,041
7709	51. BACKUS, C. D., Radiant Energy	Dec. 20	Dec. 20	894
6807	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 3	†Jan. 3	575
5874	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Jan. 27	†Feb. 1	424
6887	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Nov. 16	Nov. 16	867
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery {Designs	†Jan. 3	†Jan. 3	322
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	†Feb. 21	†Mar. 2	270
3625	57. NICOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 1	Dec. 1	988
5005	58. DOWELL, E. F., Abrading; Typewriting	Dec. 3	Nov. 29	501
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Nov. 26	Nov. 26	541
5906	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Nov. 25	Nov. 25	649
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Nov. 15	Nov. 15	1,060
7526	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Nov. 18	Nov. 18	813
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive, Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Nov. 20	Nov. 20	1,209
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Nov. 14	Nov. 14	1,182
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Dec. 1	Dec. 2	1,015
		Nov. 14	Nov. 10	1,189
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND.—{Trade-Marks {Labels and Prints	†Feb. 28	†Mar. 13	836
		†Feb. 27	†Mar. 13	189

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

Derby Oil Company *v.* White Star Refining Company

No. 3,955. Decided January 23, 1933

1. Trade-Marks—Appeals—Errors Not Assigned Will Not Be Considered by the Court.

"The assignments of error are silent as to this matter. No reason for appeal being averred upon this point, cognisance of it will not be taken here."

2. Same—Trade-Mark Use.

"This, in our opinion, shows a sufficient trade-mark use. It is not essential that every gallon of gasoline or quart of cylinder oil sold, shall be in a container bearing the trade-mark of the company."

3. Trade-Marks—Cancellation—Validity of Petitioner's Mark.

In a cancellation proceeding the question of the validity of the mark of the petitioner for cancellation is irrelevant.

4. Same—Similarity.

A trade-mark consisting of the representation of a road sign with a circular target surmounting the base, the target being red and having a white star in the center thereof with a monogram thereabove, *Held* confusingly similar to the trade-mark "White Star" used on the same goods.

Appeal from the Patent Office. Affirmed.

Mr. Albert J. Fihe for Derby Oil Company.

No appearance for White Star Refining Company.

Graham, *P. J.*:

The appellant, Derby Oil Company, filed its application in the United States Patent Office for registration of a trade-mark used in connection with the sale of gasoline, motor oils, and greases, on April 7, 1926, and, on October 26, 1926, the same was duly registered. In said application it was alleged that said mark had been used by appellant, continuously, since December 1, 1925. The mark consists of the

representation of a road sign having a substantially rectangular base with a circular target surmounting the base, this circular target being red and having a white star in the center thereof, and upon the white star appeared the initials "D. O. Co." in a monogram.

On the base portion of the representation of a sign appear the words "Derby Oil Co Gasoline Motor Oils & Greases." All these words, except the corporate name, are disclaimed.

The appellee, White Star Refining Company, thereafter, to wit: on April 14, 1930, filed its petition for cancellation of said mark. In its petition, it alleged that its predecessor, The Brooks Oil Company, on October 18, 1927, was granted trade-mark registration Number 234,141, and on October 25, 1927, was granted trade-mark registration 234,446, registering the trade-mark "White Star" for motor fuels, which registrations were duly assigned to the appellee and are owned by it. The petitioner further alleged that appellant's registered mark was "deceptively similar" to appellee's said mark, was applied to goods of the same descriptive character, was essentially petitioner's corporate name, and that the registration would result in confusion in trade and damage to appellee. Appellee alleged that since long prior to December 1, 1925, it and its predecessors had used this mark in interstate commerce.

The appellant answered the petition, denying confusing similarity with either corporate name or mark, requiring strict proof of prior use by appellee of the mark "White Star," and proffering a large number of prior registrations to support the contention that the use of a white star is publici juris.

The Examiner of Interferences sustained the petition for cancellation, holding that the conflicting marks are so similar as to cause at least a reasonable doubt that confusion in trade is likely to result from their use. He also held confusion would be likely to result because of petitioner's corporate name, under the name clause of section 5 of the Trade-Mark Act of February 20, 1905, namely:

Sec. 5. That no mark by which the goods of the owner of the mark may be distinguished from other goods of the same class shall be refused registration as a trade-mark on account of the nature of such mark unless such mark—

* * * * * * * *

(b) Consists of or comprises * * * *any name,* * * * *adopted by any institution, organization, club, or society which was incorporated in any State in the United States prior to the date of the adoption and use by the applicant:* * * *

The Examiner of Interferences sustained the petition for cancellation, holding that petitioner was the prior user of the mark.

The Commissioner, on appeal, reversed the decision of the Examiner of Interferences on the second ground above stated, and affirmed it upon the first, ordering cancellation of the mark.

[1] The appellant raises some preliminary questions which may be disposed of here. Counsel argues that there is no showing of a continuity of use, and transfer of appellee's trade-mark from The Brooks Oil Company to appellee. The assignments of error are silent as to this matter. No reason for appeal being averred upon this point, cognisance of it will not be taken here. *Mas* v. *Root*, 19 C. C. P. A. (Patents) 819, 54 F.(2d) 435, 416 O. G. 804; *Southgate* v. *Greene*, 19 C. C. P. A. (Patents) 1129, 57 F.(2d) 374, 420 O. G. 811; *Jantzen Knitting Mills* v. *West Coast Knitting Mills*, 18 C. C. P. A. (Patents) 1142, 47 F.(2d) 954, 406 O. G. 5-7.

It is next argued that photostatic reproductions of certain photographs were introduced in evidence by petitioner, which were improperly verified and objectionable. It does not appear that either tribunal in the Patent Office considered these photostats as evidentiary. Even if they were so considered, no reason for appeal is grounded thereon. This contention, therefore, cannot be sustained.

The record shows, by what seems to us a preponderance of the evidence, that since 1914, the appellee and its predecessor have been using the mark "White Star" in conjunction with the sale

of its products, greases, machine shop lubricants, motor oil, and, later, but before appellant's entrance into the field, on fuel oil, gasoline, and automobile accessories. This mark was placed upon its packages, cans and barrels, railroad tank cars, trucks, and filling stations. This mark was a white five pointed star, upon a blue background.

[2] This, in our opinion, shows a sufficient trade-mark use. It is not essential that every gallon of gasoline or quart of cylinder oil sold, shall be in a container bearing the trade-mark of the company. The record contains ample evidence of the interstate use of this mark by appellee. In addition, it quite plainly shows that motor fuels were retailed at filling stations from pumps bearing this mark of a white star. It would be going far afield to say that this was not a trade-mark use. In our opinion, it conforms fully to the definition of a trade-mark given by the court in *Elgin National Watch Co.* v. *Illinois Watch Co.* 179 U. S. 665, 673, 94 O. G. 755:

> The term has been in use from a very early date, and, generally speaking, means a distinctive mark of authenticity, through which the products of particular manufacturers or the vendible commodities of particular merchants may be distinguished from those of others.

It is next urged that the design of a white star is and was at the time of appellee's adoption of the same as a trade-mark, publici juris, and that, therefore, appellee can claim no exclusive right of use thereof. The petition of appellee is not based alone upon its registrations of its trade-mark consisting of a representation of a white star upon a blue field and the words "White Star." It further relies upon the provision of section 13 of the Trade-Mark Act of February 20, 1905:

> * * * whenever any person shall deem himself injured by the registration of a trade-mark in the Patent Office, he may at any time apply to the Commissioner of Patents to cancel the registration thereof.

We have held, under this provision, that a strictly trade-mark use of the words or mark by the petitioner, in cancellation proceedings, is not necessary. Injury to the business of the petitioner may be otherwise shown. *Model Brassiere Co.* v. *Bromley-Shepard Co.*, 18 C. C. P. A. (Patents) 1294, 1301, 49 F.(2d) 482, 411 O. G. 538.

The record now before us shows quite clearly that since, approximately, the year 1914, and long prior to appellant's use of the mark here sought to be cancelled, appellee made a trade-mark use of a white star, upon a blue ground, together with its corporate name, "White Star Refining Company," in conjunction with its sale of goods of the same descriptive properties as those sold by appellant under its registered trade-mark, here in issue. This use was followed by registrations in the name of The Brooks Oil Company, of October 18, 1927, and October 25, 1927.

[3] Whether, because at least a part of appellee's alleged trade-mark, the white star feature, at the time of its adoption and later registrations was invalid because the subject matter was publici juris, is an issue, in our opinion, not properly now before us. The validity of the marks will be assumed for the purposes of these proceedings. *American Cyanamid Co.* v. *Synthetic Nitrogen Prod. Corp.*, 19 C. C. P. A. (Patents) 1235, 58 F.(2d) 834, 423 O. G. 299. In the case last cited, we held that similar rules, insofar as the same may be applicable, having in mind the nature of such proceedings, are applicable in opposition and cancellation proceedings. An attack upon the validity of opposer's mark is not an issue in opposition proceedings. *Sharp & Dohme* v. *Parke, Davis & Co.*, 17 C. C. P. A. (Patents) 842, 37 F.(2d) 960, 394 O. G. 545; *Lever Bros. Co.* v. *Riodela*, 17 C. C. P. A. (Patents) 1272, 41 F.(2d) 408, 398 O. G. 356; *Leschen & Sons* v. *Amer. Steel & Wire Co.*, 19 C. C. P. A. (Patents) 851, 55 F.(2d) 455, 418 O. G. 3. No reason appears why the same rule should not be applicable to cancellation proceedings. Of course, nothing that we have said here should be construed as an expression of our opinion as to the validity or lack of validity of appellee's mark.

[4] But one inquiry remains. Are the marks of appellant and appellee confusingly similar to the extent that prospective purchasers might be led to mistake the goods of one for those of the other? This presents, as do all such cases, largely a question of the effect which the competing marks make upon the mind of the observer. We may take judicial knowledge that, in our day, the goods of appellant and appellee are retailed, almost exclusively, at service and filling stations. Modern traffic moves rapidly. The customer desiring to purchase these goods is attracted to symbols or signs on service stations and pumps, which he has associated with the goods he ordinarily buys. A white star upon the target of a pump, or upon a service station, will attract his attention, and, in our judgment, a lettered monogram upon its face, or the nature of its background, will not distinguish it sufficiently to prevent mistakes and confusion. We agree with the decision of the Commissioner that the star is the salient feature of the mark. It follows that the marks are confusingly similar, within the meaning of the statute.

In view of these considerations, the decision of the Commissioner of Patents is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

DERBY OIL COMPANY *v.* WHITE STAR REFINING COMPANY

No. 3,056. Decided January 23, 1933

TRADE-MARKS—SIMILARITY.

A mark for motor fuels consisting of the representation of a white five-pointed star upon a circular red background with the initials "D. O. Co." arranged in a monogram and the word "Aeroplane" thereabove *Held* confusingly similar to a white star and the words "White Star" used on the same goods.

APPEAL from the Patent Office. Affirmed.

Mr. Albert J. Fihe for Derby Oil Company.

No appearance for White Star Refining Co.

GRAHAM, *P. J.*:

This appeal is a companion case to *Derby Oil Company* v. *White Star Refining Company*, 20 C. C. P. A. (Patents) ——, — F.(2d) —, decided concurrently herewith. The parties are the same in both cases, and the issues substantially so, this being an opposition proceeding and the case cited being a cancellation proceeding.

In this case the appellant, Derby Oil Company, filed its application for registration on August 13, 1929, and sought to register a trade-mark used by it in connection with the sale of motor fuels, said trade-mark being the representation of a white, five-pointed star upon a circular red background, with the initials "D. O. Co." in a monogram inscribed thereon, and with the word "Aeroplane" arranged in the arc of a circle above and around the upper part of the background of the star. This mark, it was claimed, had been used by the applicant since January 1, 1917. The word "Aeroplane" is disclaimed, apart from the mark.

The appellee, White Star Refining Company, opposed registration of said mark, claiming prior use of a white star and the words "White Star" as a trade-mark, long prior to the first day of January, 1917, and continuously since that time. It further alleged the registration by The Brooks Oil Company, its predecessor, of said marks, on October 18, 1927, and October 25, 1927. The opposer claimed confusion with its corporate name, and also that the registration would result in confusion in trade and as to the origin of the goods sold thereunder, to the damage of the opposer.

The appellant filed answer to said notice of opposition, denying confusion and priority of use, and pleading publici juris as to said "White Star" mark, making reference to many prior registrations of a white star by others selling petroleum products.

The Examiner sustained the opposition, which decision was affirmed by the Commissioner.

It will be unnecessary to again state what we have said in *Derby Oil Company* v. *White Star Refining Company*, supra. In our opinion there are no facts in this case which will justify any different conclusion than that arrived at in the case cited. The mark here is somewhat different, in that it bears the word "Aeroplane." This, however, in our opinion, is not enough to change the distinguishing characteristic of the mark which, to our mind, is the representation of a white star, or the use of the words "White Star." Therefore, the same reasoning is held to be applicable here as in the companion case.

For this reason the decision of the Commissioner of Patents is affirmed.

Affirmed.

Court of Appeals of the District of Columbia

U. S. EX REL FREY *v.* ROBERTSON, COMMISSIONER OF PATENTS

No. 5,791. Decided January 30, 1933

1. MANDAMUS—APPEALABLE MATTER.

It is settled law that the writ of mandamus can not be used to perform the office of an appeal or writ of error, or granted in any case where there is another adequate remedy.

2. SAME—SAME.

The petition for mandamus asked that the Commissioner be directed to vacate an order setting a 30-day limit within which relator could appeal from a rejection of a claim copied by him from a patent *Held* that relator has an adequate remedy by appeal from the final rejection of the claim and the petition for mandamus dismissed.

APPEAL from the Supreme Court of the District of Columbia.

[*Argued January 4, 1933. Decided January 30, 1933*]

Mr. J. Howard Flint, of Washington, D. C., for appellant.

Mr. T. A. Hostetler, Solicitor of the Patent Office, for appellee.

Before MARTIN, Chief Justice, and ROBB, VAN ORSDEL, HITZ, and GRONER, Associate Justices

PER CURIAM:

Appeal from a judgment in the Supreme Court of the District dismissing appellant's petition for a writ of mandamus against the Commissioner of Patents. The cause was heard upon the petition, the rule to show cause, and the return.

On January 28, 1932, appellant filed an application for Letters Patent. The application contained certain claims, including claim 2 copied from a patent. On May 18, 1932, the Primary Examiner rejected certain of the claims, including claim 2, but ruled that, inasmuch as that claim had been copied from a patent, rule 63 was applicable and that appellant would be required to respond to the rejection of that claim within 30 days.

Rule 63 provides that where an applicant copies claims from a patent and the Examiner is of the opinion that such claims can not be made, the Examiner shall state the grounds for the rejection—

> and set a time limit, not less than twenty days, for reply. If, after response by the applicant, the rejection is made final, a similar time limit should be set for appeal. Failure to respond or appeal, as the case may be, within the time fixed will in the absence of a satisfactory showing, be deemed a disclaimer of the invention claimed.

Appellant contends that rule 63 is invalid as in conflict with section 4894, Revised Statutes (U. S. C., title 35, sec. 37), which it is insisted allows an applicant six months to respond to any action of the Patent Office with respect to the application.

It is settled law—

> that the writ of mandamus can not be used to perform the office of an appeal or writ of error, or granted in any case where there is another adequate remedy. *Moore* v. *U. S. Ex rel. Lindmark*, 33 App. D. C. 597, 602; *U. S. Ex rel. Connor* v. *District of Columbia*, No. 5786, — App. D. C. —, — F.(2d) —, 60 W. L. R. 849.

In the present case adequate remedy by way of appeal was available to appellant upon the final rejection of the claim. In the event of an adverse decision by the Board of Appeals, appellant might appeal to the United States Court of Customs and Patent Appeals or file a bill in equity under section 4915, Revised Statutes (U. S. C., title 35, sec. 63).

It follows that the judgment of the court below was right. It is, therefore, affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,173,079, Ernst F. W. Alexanderson, Selective tuning systems; 1,195,632, William C. White, Circuit connections

of electron discharge apparatus; 1,251,377, Albert W. Hull, Methods of and means for obtaining constant current potentials; 1,573,374, Paul A. Chamberlain, Radio condenser; 1,728,879, Chester W. Rice, Amplifying systems, filed Jan. 12, 1933, D. C., S. D. N. Y., Doc. E 73–378, *Radio Corp. of America et al.* v. *Model's Radio Outlets, Inc., et al.* Decree for plaintiff (notice Mar. 3, 1933).

1,185,394, Albert E. Greene, Process of melting scrap metal; 1,449,319, same, Process of melting and deoxidising steel; 1,532,052, same, Process of refining metals; 1,616,796, same, Electric furnace; 1,616,798, same, Electrode mechanism for electric furnaces; 1,639,340, same, Combination induction furnace, filed Oct. 2, 1929, D. C., N. Div. Washington (Seattle), Doc. 692, *Albert E. Greene et al.* v. *Washington Iron Works.* Dismissed without costs as to 1,616,796, 1,616,798, 1,639,340 Mar. 1, 1933.

1,195,632. (See 1,173,079.)

1,210,762, Melvin B. Church, Automobiles for collecting and distributing; 1,619,775, Eddy R. Whitney, Delivery truck, filed Feb. 21, 1933, D. C., W. D. N. Y. (Buffalo), Doc. 1748, *Continental Divco Co.* v. *International Harvester Co. of America.*

1,231,764, Fritz Lowenstein, Telephone relays; 1,618,017, same, Wireless telegraph apparatus; 1,403,475, Harold D. Arnold, Vacuum tube circuits, filed Jan. 12, 1933, D. C., S. D. N. Y., Doc. E 73–379, *Radio Corp. of America et al.* v. *Model's Radio Outlets, Inc., et al.* Consent decree for plaintiff (notice Mar. 3, 1933).

1,247,540, 1,247,542, Re. 15,140, Walter Jones, Purification of sewage and analogous liquids; 1,282,587, same, Apparatus for purification of sewage and analogous liquids, filed June 15, 1928, D. C., E. D. Wis. (Milwaukee), Doc. 2323 Civ., *Activated Sludge, Inc.*, v. *City of Milwaukee.* Interlocutory decree holding patents valid Feb. 27, 1933.

1,247,542. (See 1,247,540.) 1,247,543. (See 1,247,540.)

1,251,377. (See 1,173,079.)

1,259,917, Eliel L. Sharpneck, Heels for shoes; 1,718,177, William H. Nutt, Heel covering, filed Mar. 7, 1933, D. C., S. D. W. Va. (Charleston), Doc. 3251, *United Shoe Machinery Corp.* v. *Meadow River Lumber Co.*

1,280,572, Alexander S. Spiegel, Expansion joint for roads; 1,328,107, Swinton B. Waring, Expansion joint strips; 1,339,094, Ford C. Bowman, Preformed expansion joint strips: Re. 16,554, Albert C. Fischer, Elastic and expansible paving joints; 1,572,474, same, Expansion joints, filed July 29, 1932, D. C., N. D. Ill. (Chicago), Doc. 12154, *Construction Materials Patents, Inc.*, v. *Bivas Corp.* Patents held valid and infringed Oct. 4, 1932.

1,282,587. (See 1,247,540.)

1,307,733, Arthur V. Guilborg, Lubricating apparatus; 1,307,734, same, Lubricating means, filed Jan. 25, 1932, D. C., S. D. Calif. (Los Angeles), Doc. D–25–M Eq., *Alemite Corp.* v. *Charles F. Bickler, et al.* Patents held valid and infringed Feb. 9, 1933.

1,307,734. (See 1,307,733.) 1,328,107. (See 1,280,572.)

1,339,094. (See 1,280,572.)

1,352,581, Alexander A. Clarke, Handle attachments for surface treating machines; 1,352,582, 1,356,338, same, Surface treating devices; 1,352,583, 1,356,337, 1,356,339, 1,363,312, 1,404,842, same, Surface treating machines; 1,366,633, same, Work engaging supports for surface treating machines; 1,390,503, same, Motor driven surface treating machines; 1,407,381, same, Surface treating tools, filed Feb. 23, 1933, D. C., D. W., S. Div. Mich (Grand Rapids), Doc. 2623 Eq., *Alexander A. Clarke et al* v. *Clarke Sanding Machine Co.*

1,352,582. (See 1,352,581.) 1,356,339. (See 1,352,581.)

1,352,583. (See 1,352,581.) 1,356,339. (See 1,352,581.)

1,356,337. (See 1,352,581.) 1,366,633. (See 1,352,581.)

1,356,338. (See 1,352,581.) 1,390,501. (See 1,352,581.)

1,402,589, Hiram A. Farrand, Rule; 1,799,044, 1,799,094, same, Means for controlling resilient rules; 1,828,401, same, Resilient rules, filed Sept. 30, 1932, D. C., E. D. Pa. (Philadelphia), Doc. 7825, *Hiram A. Farrand, Inc.*, v. *W. T. Grant Co.* Consent decree Feb. 28, 1933. Doc. E 74–310, D. C., S. D. N. Y., filed Feb. 23, 1933, *Hiram A. Farrand, Inc., et al.* v. *Adolph Hauptman.*

1,403,475. (See 1,231,764.) 1,404,842. (See 1,352,581.)

1,407,381. (See 1,352,581.)

1448,279, Edwin S. Pridham et al., Electrodynamic receiver; 1,579,892, same, filed June 6, 1929, D. C., N. D., Ill. (Chicago), Doc. 9145, *The Magnavox Co.* v. *Oxford Radio Corp.*, Doc. 9146, *The Magnavox Co.* v. *Temple Corp.* Both bills dismissed Sept. 19, 1932.

1,449,319. (See 1,185,894.)

1,460,808, Oscar A. Wirkala, Logging bull hook; 1,464,161, same, Logging choker rigging; 1,464,162, same, Choker hook; 1,675,778, same, Choker hook rigging; 1,685,473, same, Bull hook, filed May 23, 1930, D. C., W. D., No. Div. Washington (Seattle), Doc. 20373, Law, *O. A. Wirkala et al.* v. *D. M. Burdon et al.*

1,464,161. (See 1,460,808.) 1,464,162. (See 1,460,808.)

1,469,305, 1,529,544, James Allen Kammerdiner, Rotary jar; 1,683,096, Robert McDonald Pyles, Rotary jar; 1,798,337, Lewis W. Newsom, Jar for drilling operations, filed Jan. 16, 1933; D. C., S. D. Calif. (Los Angeles), Doc. Y–121 C., *James A. Kammerdiner* v. *Rotary Jar and Tool Co., Ltd., et al.*

1,503,942. (See Re. 16,554.)

1,529,544. (See 1,469,305.) 1,579,892. (See 1,448,279.)

1,532,052. (See 1,185,894.) 1,572,474. (See 1,328,107.)

1,573,374. (See 1,173,079.)

1,593,889. (See Re. 16,566.)

1,616,796, Albert E. Greene, Electric furnace; 1,616,797, same, Electrode mechanism for electric furnaces; 1,639,340, same, Combination induction furnace; 1,687,936, same, Electric furnaces and method of operation, filed Dec. 2, 1929, D. C., W. D. Washington (Tacoma), Doc. 407–E, *Albert E. Greene et al.* v. *Ludgerwood Pacific Co.* Dismissed with prejudice Mar. 1, 1933.

1,616,796. (See 1,185,894.) 1,616,797. (See 1,616,796.)

1,616,798. (See 1,185,894.) 1,675,778. (See 1,460,808.)

1,618,017. (See 1,231,764.) 1,683,096. (See 1,469,305.)

1,619,775. (See 1,210,762.) 1,685,473. (See 1,460,808.)

1,622,957. (See Re. 17,393.)

1,639,340. (See 1,616,796 and 1,185,894.)

1,674,341. (See Re. 17,342.)

1,687,936. (See 1,616,796.)

1,710,073, 1,714,191, Samuel Ruben, Electrical condensers, filed Feb. 27, 1933, D. C., S. D. N. Y., Doc. E 74–347, *Ruben Condenser Co. et al.* v. *Concourse Electric Co., Inc., et al.*

1,714,191. (See 1,710,073.) 1,718,177. (See 1,259,917.)

1,728,879. (See 1,173,079.)

1,739,280, Marcus B. Behrman, Razor and blade therefor; 1,773,614, Godfrey Dalkowitz, Safety razors, filed Mar. 1, 1933, D. C., N. D., Wes. Div. Ohio (Toledo), *American Safety Razor Corp.* v. *Crescent Mfg. Co.*

1,773,614. (See 1,739,280.) 1,799,094. (See 1,402,589.)

1,798,337. (See 1,469,305.) 1,828,401. (See 1,402,589.)

1,799,044. (See 1,402,589.)

Re. 15,140. (See 1,247,540.)

Re. 16,554. (See 1,828,107.)

Re. 16,566, Edna S. Ward, Bathing shoe, filed Feb. 4, 1930, D. C., S. D. N. Y., Doc. E 52–22, *Edna S. Ward* v. *Miller Rubber Co. of N. Y.* Dismissed without prejudice (notice Feb. 25, 1933).

Re. 17,342, Albert Penn, Automatic air-volume-controlling device for water-storage tanks, appeal filed Mar. 6, 1933, C. C. A., 8th Cir. (St. Louis) Doc. 9490, *Penn Electric Switch Co.* v. *Luthe Hardware Co. et al.* Decree affirmed with costs Mar. 7, 1933.

Re. 17,393, Josef Mayer, Hair waving appliance and method, filed Feb. 23, 1933, D. C., S. D. Ohio (Cincinnati), Doc. 851 Eq., *The Philad Co. et al.*, v. *National Mineral Co. et al.* Doc. 850, Eq., *The Philad Co. et al.* v. *Murray's Beauty Salon et al.*

Des. 87,991, Jean Aemisegger, Textile fabric; Des. 88,091, Max U. Juestrich, Textile fabric, filed Mar. 7, 1933, D. C., S. D. N. Y., Doc. E 74–449, *The American Fabrics Co.* v. *Mitchell and Weber, Inc.*

Des. 88,091. (See Des. 87,991.)

Des. 89,316, Des. 89,317, Des. 89,318, Samuel Sheindelman, Sweater or similar article, filed Feb. 27, 1933, D. C., S. D. N. Y., Doc. E 74–346, *Peerless Sport Apparel Co., Inc., et al.* v. *R. H. Macy and Co., Inc.*

Des. 89,317. (See Des. 89, 316.)

Des. 89,318. (See Des. 89,316.)

Adjudicated Patents

(D. C. N. J.) Strong patent, No. 1,127,826, for toy sand-pail, claims 1, 2, and 8 *Held* invalid. *Strong* v. *J. Chein & Co.*, 2 F. Supp. 388.

(D. C. Mich.) Currier patent, No. 1,221,030, for telephone system, claim 6 *Held* invalid. *Kellogg Switchboard & Supply Co.* v. *Michigan Bell Telephone Co.*, 2 F. Supp. 335.

(D. C. Mich.) Currier patent, No. 1,261,492, for telephone system, claims 12, 16, and 17 *Held* invalid but not infringed. *Id.*

(D. C. Mich.) Currier patent, No. 1,283,400, for trunk circuit, claims 6 and 7 *Held* invalid, claims 24 and 27 *Held* valid, but not infringed. *Id.*

(C. C. A. Colo.) Greenawalt patent, No. 1,374,446, for apparatus for treating liquids with gases, claims 9 and 10 *Held* not infringed. *Stearns-Roger Mfg. Co.* v. *Greenawalt*, 62 F.(2d) 1033.

(C. C. A. Colo.) Greenawalt patent, No. 1,374,500, for apparatus for treating liquids with gases, claims 10 and 11 *Held* not infringed. *Id.*

(C. C. A. N. Y.) Frederickson patent, No. 1,687,013, for armored electric cable, claims 2, 7, 8, 9, and 10 *Held* valid and infringed. *National Electric Products Corporation* v. *Circle Flexible Conduit Co.*, 62 F.(2d) 996.

(D. C. N. Y.) Lawrence patent, No. 1,718,966, for marking composition, claims 1–4 and 6–8 *Held* not infringed. *Kosmagraph Co.* v. *Superior Trade-Mark Mfg. Co.*, 2 F. Supp. 360.

(C. C. A. N. Y.) Suter patent, No. 1,720,801, for hair drying, claims 3 and 4 *Held* not infringed. *Eugene, Limited*, v. *Charles Arnao Co.*, 62 F.(2d) 1000.

(C. C. A. N. Y.) Suter patent, No. 1,720,802, for hair drying, claim 4 *Held* not infringed. *Id.*

(D. C. N. J.) Bocchino reissue patent, No. 17,469, for safety device for fire escapes, *Held* valid and infringed. *Safety Device Fire Escape Co.* v. *Golish*, 2 F. Supp. 386.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,739,268, Frederich Stein, Device for copying on machine tools, decided March 11, 1933, claims 1 and 2.

Pat. 1,785,274, N. E. Loomis, A. H. Tomlinson, and F. A. Howard, Art of pyrolysis, decided March 11, 1933, claims 7 and 8.

Pat. 1,791,479, H. A. Silven, Cam grinding apparatus, decided March 14, 1933, claims 1, 2, 5, 6, 7, 8, 9, and 12.

Pat. 1,837,599, S. L. Walsoe and L. J. Bets, Computing machine, decided March 10, 1933, claim 4.

Disclaimers

1,492,541.—*John C. Bergner*, Philadelphia, Pa. COOKING APPARATUS. Patent dated April 29, 1924. Disclaimer filed March 9, 1933, by the assignee, *Doughnut Machine Corporation.*

Hereby enters the following disclaimer, to wit:

The assignee, Doughnut Machine Corporation, hereby disclaims claim 51.

The assignee, Doughnut Machine Corporation, hereby disclaims from claims 7, 8, 36, 37, 38, 58, and 59 of said Letters Patent any apparatus except one for receiving raw dough and automatically forming annular doughnut forms, wherein the cutter successively cuts the annular doughnut forms free to release them and drop them in a horizontal position into the liquor, and the moving progressing means engage the doughnut forms only after the horizontally falling forms encounter or are immersed in the liquor, so as to be thereby supported and protected against deformation while cooking and acquiring stable form, whereby the doughnut forms in their soft or raw state are transferred from the cutter to the liquor and brought under the action of the progressing means without deformation by encounter with either the liquor or the progressing means, and cooked and produced as doughnuts in undeformed substantially circular formation.

1,531,668.—*Joseph W. Legg*, Wilkinsburg, Pa. ELECTRIC-ARC CONTROL. Patent dated March 31, 1925. Disclaimer filed February 28, 1933, by the assignee, *Westinghouse Electric & Manufacturing Company.*

Hereby enters the following disclaimer, to wit:

1. Your petitioner hereby disclaims the subject-matter of claim 8, except structures in which the line connecting the contact members while open is at least approximately parallel to the plane of the coil and in which the blow-out coil is disposed circumferentially of at least a portion of each terminal member for all positions of said terminal members.

2. Your petitioner hereby disclaims the subject-matter of claim 10, except structures in which the means for establishing a definite magnetic flux zone comprises a coil positioned with its plane at least approximately parallel to the line connecting the contact members while open and in which at least a part of each electrical terminal member, in all operative positions thereof, lies within the perimeter of the coil.

3. Your petitioner hereby disclaims the subject-matter of claim 13, except structures in which the line connecting the contact members while open is at least approximately parallel to the plane of the coil and in which at least a part of each contact member, in the wide open position, lies within the perimeter of the coil.

4. Your petitioner hereby disclaims the subject-matter of claim 15, except structures in which the line connecting the contact members while open is at least approximately parallel to the plane of the coil and in which at least a part of each contact member, in wide open position, lies within the perimeter of the coil and in which also the fraction of said perimeter embraced within the confines of each said contact member is small.

1,716,562.—*John Roger Oliver*, Medfield, Mass. WELT-SEWING MACHINE. Patent dated June 11, 1929. Disclaimer filed March 14, 1933, by the assignee, *Reece Shoe Machinery Company.*

Hereby enters this disclaimer to that part of the claim of said patent which is in the following words, to wit:

"1. In a welt sewing machine, a reciprocating needle, a welt guide adjacent the stitching point delivering the welt to the work, a cutter fitted to cut the welt substantially beyond the stitching point, and mechanism operable after the completion of stitching for causing the advance of the work and welt before severing, to carry the stitched part of the work and welt beyond the cutting point, and for causing the actuation of the cutter."

"9. In a welt sewing machine, a shaft, a needle operated from the shaft, a welt guide adjacent the stitching position delivering the welt to the work, and means constitut-

ing a part of the machine and adapted to be operated after the completion of a seam for bringing about a substantial advance of the work and the pulling of welt through the guide before severing."

1,770,582.—*Robert D. Pike*, Piedmont, Calif. BUSHING. Patent dated July 15, 1930. Disclaimer filed March 15, 1933, by the assignee, *Kalif Corporation*.

Hereby enters this disclaimer to that part of the claim in said specification, namely, claim 3, which is in the following words, to-wit:

"3. As an article of manufacture, a bushing comprised of a layer of relatively infusible copper-lead alloy welded to a backing of stronger supporting metal."

except when the backing of stronger supporting metal mentioned in said claim consists of an alloy of copper.

1,812,749.—*Roy H. Kienle*, Schenectady, and *William J. Scheiber*, Troy, N. Y. RESINOUS MATERIAL AND METHOD OF MAKING THE SAME. Patent dated June 30, 1931. Disclaimer filed February 28, 1933, by the assignee, *General Electric Company*.

Hereby disclaims the subject matter of claims 1, 2, 3, 4, 5, 6, 7, 9, 11, and 12 of said Patent 1,812,749 which claims read as follows:

"1. A sheet material comprising a fibrous substance which has incorporated with the fibres thereof the infusible condensation product of aniline and formaldehyde.

"2. A sheet material composed of suitably treated fibres having incorporated therewith an infusible condensation product of an aromatic amine and formaldehyde.

"3. A paper-like moldable sheet material composed of suitably treated fibres having incorporated therewith a moldable condensation product of an aromatic amine and formaldehyde.

"4. A laminated sheet material composed of superposed sheets of suitably treated fibres having incorporated therewith a condensation product of an aromatic amine and an aldehyde.

"5. A laminated sheet material composed of superposed sheets of suitably treated fibres having incorporated therewith a condensation product of aniline and formaldehyde.

"6. The method of producing a sheet material which comprises reacting an aromatic amine with an aldehyde in aqueous acid solution to form a condensation product in solution, saturating suitably hydrated pulp with this solution, precipitating with alkali from the solution the condensation product on and around the fibres of the pulp, beating the stock so obtained, and forming a sheet therefrom on a paper making machine.

"7. The method of producing a sheet material which comprises reacting aniline with formaldehyde in aqueous acid solution, to form a condensation product in solution, saturating suitably hydrated pulp with this solution, precipitating with alkali from the solution the condensation product on and around the fibers of the pulp, beating the stock so obtained and forming a sheet therefrom on a paper making machine."

"9. The method of producing a molded sheet material which comprises reacting an aromatic amine with an aldehyde in aqueous acid solution until a condensation product forms, saturating suitably hydrated pulp with said condensation product, precipitating said condensation product from solution with alkali on and around the fibers of the pulp, beating the stock so obtained, forming a sheet therefrom on a paper making machine, and heating and compressing the sheeted stock."

"11. The method of producing a molded laminated sheet material which comprises reacting an aromatic amine with an aldehyde in aqueous acid solution to form a condensation product in solution, saturating suitably hydrated pulp with this solution, precipitating the condensation product from solution with alkali on and around the fibers of the pulp, beating the stock so obtained, forming a sheet therefrom on a paper making machine, superposing a plurality of layers of said sheeted stock, and heating and compressing the same.

"12. The method of producing a molded laminated sheet material which consists in reacting aniline and formaldehyde in aqueous acid solution to form a condensation product in solution, saturating suitably hydrated pulp with this solution, precipitating the product from solution with alkali on and around the fibers of the pulp, beating the stock so obtained, forming a sheet therefrom on a paper making machine, superposing a plurality of layers of said sheeted stock, and heating and compressing same."

1,822,977.—*Ferdinand Münz*, Frankfort-on-the-Main-Fechenheim, Germany. FATTY ACID DERIVATIVES AND PROCESS OF MAKING THEM. Patent dated September 15, 1931. Disclaimer filed March 7, 1933, by the assignee, *General Aniline Works, Inc.*

Hereby enters this disclaimer to such products as are set forth in said claims 2 and 4, except when said products are produced by the processes claimed in claims 1 and 3, respectively.

1,822,979.—*Ferdinand Münz*, Frankfort-on-the-Main-Fechenheim, Germany. ESTERIFIED FATTY ACID DERIVATIVES AND PROCESS OF PREPARING SAME. Patent dated September 15, 1931. Disclaimer filed March 7, 1933, by the assignee, *General Aniline Works, Inc.*

Hereby enters this disclaimer to said claims 3 and 4.

1,828,312.—*Albert O. Buckius*, Cleveland, Ohio. JOURNAL BOX. Patent dated October 20, 1931. Disclaimer filed March 20, 1933, by the assignee, *National Malleable and Steel Castings Company*.

Hereby disclaim from the scope of claims 2, 4, and 8 of said Letters Patent any constructions other than those in which the complementary arc-shaped surfaces on the journal box and side frame are concave toward the vertical axis of the journal box.

TRADE-MARKS

OFFICIAL GAZETTE, APRIL 11, 1933

[VOL. 429. NO. 2]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 327,885. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Latex Composition.
Claims use since Mar. 21, 1932.

Ser. No. 327,886. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Latex Composition.
Claims use since Mar. 21, 1932.

Ser. No. 330,611. EZL. DUNWOODIE CO., Philadelphia, Pa. Filed Sept. 23, 1932.

SUPER X

For Peat Moss for Poultry and Animal Bedding (Poultry Litter), Peat Moss for Horticultural and Floral Use, Poultry Feeding Grit, Poultry Feeding Charcoal, and Crushed Oyster Shells for Poultry Feeding.
Claims use since September, 1924.

Ser. No. 333,240. TITUS NURSERY COMPANY, Waynesboro, Va., and Baltimore, Md. Filed Dec. 20, 1932.

PLANT CRAFT

No claim being made to the word "Plant" apart from the mark as shown.
For Nursery Products—e. g., Natural Trees, Roots, Plants, Evergreens, and Perennials.
Claims use since August, 1932.

Ser. No. 334,748. JACK FORMAN & Co., New York, N. Y. Filed Feb. 8, 1933.

Patphox

For Dressed and Dyed Fur Skin Pieces Sold for Use as Apparel, Trimmings, and Scarfs.
Claims use since Feb. 2, 1933.

Ser. No. 334,793. GEISMAN, MUSLINER & BRIGHTMAN, INC., Brooklyn, N. Y. Filed Feb. 9, 1933.

GE-M-BE

For Leather.
Claims use since Mar. 28, 1914.

Ser. No. 334,915. THE GAY COAL & COKE COMPANY, Mount Gay, W. Va. Filed Feb. 13, 1933.



For Coal.
Claims use since Jan. 1, 1933.

Ser. No. 335,042. JULIUS ULLMAN'S SONS, Reading, Pa. Filed Feb. 16, 1933.

"OAK-BROOK"

The descriptive word "Oak" not being claimed apart from the mark as shown.
For Leather.
Claims use since Jan. 5, 1933.

CLASS 2

Receptacles

Ser. No. 318,874. WALTER LEE GWYNNE, doing business as The Bagwin Company, New York, N. Y. Filed Sept. 9, 1931.

BAGWIN

For Cloth, Paper, and Rubberized Fabric Bags and Similar Bags Equipped with Metal Mouth Holders and Supports.
Claims use since Aug. 10, 1931.

Ser. No. 335,200. HERZ CUP COMPANY, INCORPORATED, New York, N. Y. Filed Feb. 23, 1933.

Sunshine

For Paper Drinking Cups.
Claims use since Feb. 10, 1933.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 334,650. PARFUMERIE ROGER ET GALLET, SOCIETE ANONYME, Paris, France. Filed Feb. 4, 1933.



For Toilet Soaps.
Claims use since July 8, 1924.

Ser. No. 334,876. S. H. KRESS & Co., New York, N. Y. Filed Feb. 11, 1933.



Applicant disclaims use of the words "Shoe Polish" apart from the mark as shown on the drawing.
For Shoe Polish.
Claims use since Nov. 1, 1932.

Ser. No. 334,937. STEVENS SOAP CORPORATION, Brooklyn, N. Y. Filed Feb. 13, 1933.

PRIDE OF THE KITCHEN

For Washing Powder for General Household and Laundry Use.
Claims use since 1863.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 334,966. ERNEST JOHN MALLETT, Riverdale, Md. Filed Feb. 14, 1933.

SKYLINE

For Household Cleaning Preparation Used in Cleaning and Polishing Metal, Porcelain, Glass, Painted Surfaces, and for Cleaning the Hands, in Liquid, Cake, or Paste Form.
Claims use since Jan. 30, 1933.

Ser. No. 335,051. THE BLUE HEVEN CORPORATION, North Kansas City, Mo. Filed Feb. 17, 1933.

BLUE HEVEN

For Clarifier for Cleaning Solvent, Detergent in Liquid Form to be Mixed with Cleaning Solvent, Dry Cleaner's Spotting Solution, Medicated Soap, Laundry Soap.
Claims use since Aug. 14, 1931.

CLASS 5

Adhesives

Ser. No. 331,618. HOWE & FRENCH, INC., Boston, Mass. Filed Oct. 27, 1932.



No claim is made in this application to the words "Ever Fast" apart from the mark shown on the drawing.
For Liquid Adhesive Cement.
Claims use since Aug. 18, 1930.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 325,818. WIZARD, INC., Chicago, Ill. Filed Apr. 4, 1932.

WIZARD

For Insecticides.
Claims use since Feb. 21, 1931.

Ser. No. 325,980. COLUMBIA PLUSH & PUFF CO., INC., Brooklyn, N. Y. Filed Apr. 11, 1932.

Betty Lou

For Nail Cream, Nail Bleach, Nail Paste, Cuticle Cream, Deodorant Dentifrices, Nail Powder, Nail Liquid, Astringents, Astringent Cerates, Bleach Creams, Cold Creams, Obesity Creams, Vanishing Creams, Foundation Creams, Obesity Astringent, Face Bleaches, Face Packs Cream, Eye Brow and Eyelash Growers Cream, Eye Drops, Hand Lotion, Skin Lotion, Talcum Powder, Hair Salve, Hair Elixir, Hair Oils, Hair Shampoo, Hair Dyes, Bath Salts, Smelling Salts, Mouth Wash Lotions.
Claims use since January, 1921.

Ser. No. 331,855. DOVEDOWN HOSIERY MILLS, Griffin, Ga. Filed Nov. 3, 1932.

DOVEDOWN
Stop-O-Run

No claim is made to the words "Stop" and "Run" apart from the mark as shown.
For Liquid Substance to Cement Runs in Silk Hosiery.
Claims use since Oct. 17, 1932.

Ser. No. 332,261. WALTER MILDNER, Buenos Aires, Argentina. Filed November 18, 1932.

VINDOBONA

For Hair Tonics, Cream for the Hair, Pomade for Fixing the Hair, Hair Lotions, Eau de Cologne, Rouge for Lips and Face, Lipsticks, Colouring Liquids and Pomades for Eyebrows and Eyelashes, Pencils for Painting Eyebrows, Face Creams, Face Lotions, Astringent Lotion, Antisudorific, Shampoos, Enamel for Painting Finger Nails, Pomade for Chapped Hands, Pomade to Eliminate Sunburn, Perfumes, Milk to be Used for Beautifying the Skin, Face Powders, Perfumed Talcum Powder, Perfumed Salts for Bath, Salts Recommended for Preventing Overweight, Pomades Recommended for Preventing Obesity, Depilatory Preparation in Liquid, Cream and Powdered Form.
Claims use since Feb. 10, 1925.

Ser. No. 332,918. HERBERT M. COULTER, doing business as Sal Rheumatica Company, South Pasadena, Calif. Filed Dec. 9, 1932.



No claim is made to the exclusive use of the word "Sal" apart from the mark as shown.
For Medicinal Preparation Consisting of a Pure Granular Crystalline Sulphur Salt Used in the Treatment of Gout, Rheumatism, Neuralgia, Neuritis, Arthritis and the like.
Claims use since June 28, 1932.

Ser. No. 333,831. JOSEPH S. HOULE, Manchester, N. H. Filed Jan. 11, 1933.

MEG-LO-SHUN

No claim is made to the exclusive use of the word "Lo-Shun" apart from the mark as shown.
For Hand Lotions, Face Lotions, and Skin Lotions.
Claims use since Sept. 7, 1932.

Ser. No. 334,038. GUY W. ALBERTY, doing business as Alberty Drug Co., Batavia, N. Y. Filed Jan. 18, 1933.

KREMAG
"THE CREAM OF MILK OF MAGNESIAS"

No claim is made to the words "The Cream of Milk of Magnesias" for registration purposes apart from the mark shown in the drawing.
For Milk Magnesia.
Claims use since Jan. 24, 1925.

Ser. No. 334,289. THE PERFUMER AND COSMETIC GUILD CORPORATION, West Haven, Conn. Filed Jan. 24, 1933.



For Cold Cream, Vanishing Cream, Face Cream, Massage Cream, Bleaching Cream and/or Lotions, Wrinkle Remover in the Form of a Massage Cream for the Removal of Wrinkles, Deodorants, Depilatories, Nail Polish and Polish Remover in the Form of a Chemical Fluid for Dissolving and Removing Nail Polishes and Enamels, Face Powder, Toilet Water, Perfumes, Emollients, Antiseptic Solutions, Cuticle Remover in the Form of a Chemical Fluid for Dissolving and Removing the Cuticle, Camphor Ice, Lip and Face Rouge and Eye Brow Pencil.
Claims use since June 1, 1926.

Ser. No. 334,294. VIVINY PERFUMERS, INC., West Haven, Conn. Filed Jan. 24, 1933.

Septol
No. 6X

For Cold Cream, Vanishing Cream, Face Cream, Massage Cream, Bleaching Cream and/or Lotions, Wrinkle Remover, Deodorants, Depilatories, Nail Polish and Polish Remover, Face Powder, Toilet Water, Perfumes, Emollients in the Form of Creams and Liquids for the Treatment of the Skin, Antiseptic Solutions, Cuticle Remover in the Form of a Chemical Fluid for Dissolving and Removing the Cuticle, Camphor Ice, Lip and Face Rouge, Eye Brow Pencil.
Claims use since Feb. 3, 1932.

Ser. No. 334,468. THE PEPSODENT CO., Chicago, Ill. Filed Jan. 30, 1933.

Ingis

For Facial Cream.
Claims use since July 1, 1932.

Ser. No. 334,683. JOHN LECROY & SON, Camden, N. J. Filed Feb. 6, 1933.

Kit-a-Fly

For Insecticides.
Claims use since Dec. 27, 1932.

Ser. No. 334,716. JOHN J. NORTON, doing business as First Aid Medicine Co. Inc., Laurel, Md. Filed Feb. 7, 1933.



For Medicinal Oil for the Treatment of Cuts, Bruises, Burns, Sprains, and as a Rub Down After Exercise.
Claims use since May 1, 1932.

Ser. No. 334,723. FRANK J. WELICKA, doing business as Welco Laboratories, Jamaica, N. Y. Filed Feb. 7, 1933.

WELCO

For Liniment Used in the Treatment of Aches, Sprains, Bruises, Rheumatism, and Neuralgia.
Claims use since January, 1929.

Ser. No. 334,783. WORTHALL, LTD., New York, N. Y. Filed Feb. 8, 1933.

EFFEX

For Antacid Salt for the Relief of Stomach Disorders.
Claims use since Jan. 30, 1933.

Ser. No. 334,861. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Feb. 11, 1933.

Defindol

For Chemical Dye Aids—Namely, Moistening, Protecting, Penetrating, Smoothing, and Tanning Preparations for Thread and Fibre.
Claims use since Jan. 20, 1933.

Ser. No. 334,862. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Feb. 11, 1933.

Plibol

For Chemical Dye Aids—Namely, Moistening, Protecting, Penetrating, Smoothing, and Tanning Preparations for Thread and Fibre.
Claims use since Jan. 20, 1933.

Ser. No. 334,863. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Feb. 11, 1933.

Lorikal

For Chemical Dye Aids—Namely, Moistening, Protecting, Penetrating, Smoothing, and Tanning Preparations for Thread and Fibre.
Claims use since Jan. 20, 1933.

Ser. No. 334,864. H. TH. BÖHME AKTIENGESELLSCHAFT, Chemnitz, Germany. Filed Feb. 11, 1933.

Bensola

For Chemical Dye Aids—Namely, Moistening, Protecting, Penetrating, Smoothing, and Tanning Preparations for Thread and Fibre.
Claims use since Jan. 20, 1933.

Ser. No. 334,879. MANUEL S. LEHRFELD, Philadelphia, Pa. Filed Feb. 11, 1933.

VERNALIN

For Medicinal Preparation for the Treatment of Hay Fever.
Claims use since Sept. 1, 1932.

Ser. No. 335,110. CHAPPEL BROS., INC., Rockford, Ill. Filed Feb. 20, 1933.

GLUCUROSE

For Composition Used for Medical Treatment Where There Are Certain Cephalgias and Hepatic Insufficiencies.
Claims use since Feb. 2, 1933.

Ser. No. 335,120. GEORGE W. FILLAUER, doing business as Red Star Drug and Surgical Co., Chattanooga, Tenn. Filed Feb. 20, 1933.

FEDROLATE

For Nasal Cream for the Relief of Head Colds, Nasal Catarrh, and Hay Fever.
Claims use since Oct. 1, 1929.

CLASS 11

Inks and Inking Materials

Ser. No. 334,761. THE RANDALL COMPANY, Cincinnati, Ohio. Filed Feb. 8, 1933.

KODYE

For Typewriter Ribbons.
Claims use since Dec. 20, 1932.

CLASS 12

Construction Materials

Ser. No. 334,885. REILLY TAR & CHEMICAL CORPORATION, Indianapolis, Ind. Filed Feb. 11, 1933.

TARODE

For Bituminous Road-Surfacing and Road-Resurfacing Materials.
Claims use since Jan. 19, 1933.

CLASS 13

Hardware and Plumbing and Steam-Fitting Supplies

Ser. No. 333,024. THE BRITISH MANNESMANN TUBE COMPANY LIMITED, London, England. Filed Dec. 13, 1932.



For Metal Pipe and Tubing and Metal Tubular Poles and Posts.
Claims use since July 16, 1932.

Ser. No. 334,292. W. A. STILLWAGGON, INC., Jamaica and Richmond Hill, N. Y. Filed Jan. 24, 1933.

THE 20-MINUTE PLUMBER

For Metal Pipe and Tubing, Pipe Clamps, Metal Bath and Shower Fittings, Metal Drainage Fittings, Metal Tank Fittings, Metal Urinal Fittings, Traps, Cocks, Faucets, and Valves.
Claims use since July 2, 1926.

CLASS 15

Oils and Greases

Ser. No. 334,655. THE SUNFLOWER REFINING CORPORATION, Abilene, Kans. Filed Feb. 4, 1933.



For Motor Fuel Oil, Fuel Oil for Burner and Furnace Use, Lubricating Oil and Petroleum Products—Namely, Gasoline and Kerosene.
Claims use since Jan. 7, 1933.

Ser. No. 334,830. COL-TEX REFINING COMPANY, Oklahoma City, Okla. Filed Feb. 10, 1933.

OILOGAS

For Gasoline.
Claims use since Dec. 7, 1932.

Ser. No. 335,009. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del. Filed Feb. 15, 1933.

SAFE-T-ESSO

For Motor Fuel Oils.
Claims use since Jan. 5, 1933.

Ser. No. 335,023. THE FREEDOM OIL WORKS COMPANY, Freedom, Pa. Filed Feb. 16, 1933.



FORT PITT

For Lubricating Oils and Lubricating Greases.
Claims use since Oct. 7, 1931.

CLASS 16

Paints and Painters' Materials

Ser. No. 333,406. PRESERVE SURFACE CO., INC., Detroit, Mich. Filed Dec. 27, 1932.

DURAKO

For Synthetic Varnish.
Claims use since Feb. 1, 1932.

Ser. No. 334,605. HARRY HAMRICK KIRK, doing business as The Hamrick Tank and Barrel Hard Shell Enameling Company, Philadelphia, Pa. Filed Feb. 8, 1933.



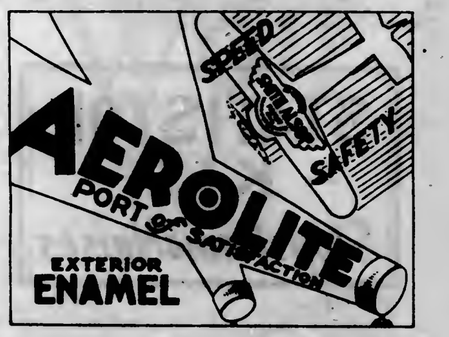
The words "Enamel" and "Trade Mark Registered" are hereby disclaimed apart from the mark shown.
For Paint Enamel for Coating the Interiors and Exteriors of Barrels, Casks, Tanks, Etc.
Claims use since December, 1889.

Ser. No. 334,692. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 6, 1933.



For Touch-Up Paint Enamel, Automobile Cleaner, and Polish.
Claims use since Oct. 7, 1932, on touch-up paint enamel, and Nov. 22, 1932, on automobile cleaner and polish.

Ser. No. 335,007. THE SMITH-ALSOP PAINT & VARNISH COMPANY, INC., Terre Haute, Ind. Filed Feb. 15, 1933.



No claim being made to the words "Exterior", "Enamel", "Speed", "Safety", "Hi-Grade", "Paint", "Varnish", and "Products", apart from the mark shown in the drawing.
For Paint Enamel for Exterior Use.
Claims use since Feb. 1, 1933.

Ser. No. 335,021. DURALITH CORPORATION, New York, N. Y. Filed Feb. 16, 1933.



For Glazing Compound Acting as a Vehicle for Color, Suitable for Glazing Painted or Unpainted Surfaces.
Claims use since August, 1929.

CLASS 17

Tobacco Products

Ser. No. 335,195. THE FORTUNE TOBACCO COMPANY, New York, N. Y. Filed Feb. 28, 1933.

TAR-BABY

For Cigarettes.
Claims use since Feb. 20, 1933.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 331,296. TOBE DEUTSCHMANN CORPORATION, Canton, Mass. Filed Oct. 15, 1932.

STATISTOP
- KIT -
StopsRadioNoises

The applicant corporation disclaims the word "Kit" and the slogan "Stops Radio Noises" apart from the mark shown in the drawing.

For Electrical Filters and Other Electrical Units Made Up of Condensers, Resistors, Inductances, or Impedances Electrically Connected Together as a Unit, and Kits Containing Electrical Resistance, Inductances, and/or Impedances to be Used Together or Individually in Radio Receiving Sets and Telephone Apparatus, in Electric Generators, Motors, and Other Electric Apparatus Where Electrical Circuits are Made and Broken, the Parts Being More Specifically Used for the Elimination of Static, Extraneous Noises, and Electrical Disturbances Created in the Making and Breaking of Electric Circuits.

Claims use since Aug. 9, 1932.

Ser. No. 333,957. WESTINGHOUSE ELECTRIC AND MANUFACTURING CO., East Pittsburgh, Pa. Filed Jan. 14, 1933.

PHOTO-TROLLER

For Electronic Tube Controllers for Package Conveying Apparatus, Door Operating Mechanism, Counting Mechanism, and Similar Mechanism.

Claims use since Sept. 15, 1932.

Ser. No. 334,305. FADA RADIO AND ELECTRIC CORPORATION, Long Island City, N. Y. Filed Jan. 25, 1933.

MOTOSET

For Radio Receiving Sets and Loud Speakers.

Claims use since Jan. 7, 1933.

Ser. No. 334,679. THE A. C. GILBERT COMPANY, New Haven, Conn. Filed Feb. 6, 1933.

Kitchen-ETTA

For Portable Electrically Driven Devices for Mixing, Beating, Grinding, and Extracting Edible Products.

Claims use since Oct. 1, 1932.

Ser. No. 335,107. CARSON PIRIE SCOTT AND COMPANY, Chicago, Ill. Filed Feb. 20, 1933.

Black Hawk

For Radio Receiving Sets.

Claims use since 1926.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 334,390. ESSEM PRODUCTS COMPANY, Milwaukee, Wis. Filed Jan. 27, 1933.

ESSEM
PRODUCTS CO
MILWAUKEE WIS

The drawing is lined for red. No claim is made to the words "Milwaukee, Wis."

For Poker Chips.

Claims use since Jan. 14, 1933.

Ser. No. 334,464. HOWARD B. JONES, Chicago, Ill. Filed Jan. 30, 1933.

HOOT-NANNY

For Toy Drawing Outfits.

Claims use since Dec. 8, 1932.

Ser. No. 334,526. FINLAYSON, BOUSFIELD & CO., LTD., Johnstone, Scotland. Filed Feb. 1, 1933.

FINLAYSON'S
FOUR SQUARE
JOHNSTONE, SCOTLAND.

No claim is made to the words "Johnstone, Scotland."

For Fishing Lines.

Claims May 20, 1932.

Ser. No. 334,833. W. A. HERRINGTON, Green City, Mo. Filed Feb. 10, 1933.

BAG-O-MAD

For Fish Lure or Artificial Bait.

Claims use since July 1, 1932.

Ser. No. 335,194. FORT WAYNE PAPER BOX COMPANY, Fort Wayne, Ind. Filed Feb. 23, 1933.

WAYNE
JIG-A-JIG

For Jig Saw Puzzles and Jig Saw Puzzle Work Boards.

Claims use since Feb. 11, 1933.

Ser. No. 335,231. WILLIAM ROBERT CLUFF, New York, N. Y. Filed Feb. 24, 1933.

FOXAGRAMS

For Puzzles.

Claims use since Jan. 5, 1933.

Ser. No. 335,274. DAVEGA-CITY RADIO STORES, INC., New York, N. Y. Filed Feb. 25, 1933.

Leedall

For Golf Balls.

Claims use since Feb. 1, 1933.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 333,281. THE CUNO ENGINEERING CORPORATION, Meriden, Conn. Filed Dec. 22, 1932.

CUNO *Lifetime* FILTER

No claim is made to the word "Filter" apart from the mark shown.

For Mechanical Fluid Straining and Filtering Apparatus and Parts Thereof for Cleaning the Oil, Gasoline, and Water Supply for Internal Combustion Engines and the Oil Supply for Fuel Oil Burners and the Like.

Claims use since Dec. 10, 1932.

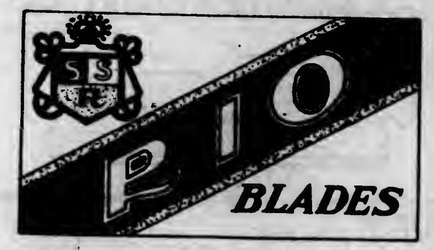
Ser. No. 334,455. AUGUST WOLF, EISENWARENFABRIK GEB. M. BESCHR. HAFTUNG, Betsdorf, Germany. Filed Jan. 28, 1933.

Wolf

For Wooden Tool Handles for Garden and Agricultural Implements.

Claims use since July 19, 1928.

Ser. No. 334,541. STANDARD SAFETY RAZOR CORPORATION, Wilmington, Del., and East Norwalk, Conn. Filed Feb. 1, 1933.



No claim is made to the words "Blades" apart from the mark as shown.

For Razor and Razor Blades.

Claims use since June 2, 1930.

Ser. No. 334,542. STANDARD SAFETY RAZOR CORPORATION, Wilmington, Del., and East Norwalk, Conn. Filed Feb. 1, 1933.



No claim is made to the words "Finest Blades" apart from the mark as shown.

For Razor and Razor Blades.

Claims use since June 2, 1930.

Ser. No. 334,543. STANDARD SAFETY RAZOR CORPORATION, Wilmington, Del., and East Norwalk, Conn. Filed Feb. 1, 1933.



No claim is made to the words "Blades" apart from the mark as shown.

For Razor and Razor Blades.

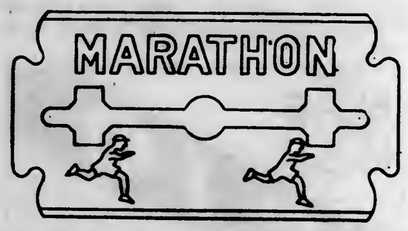
Claims use since Jan. 10, 1931.

Ser. No. 334,643. THE LARVEX CORPORATION, New York, N. Y. Filed Feb. 4, 1933.

LARVEX

For Atomizers for Spraying Insecticides, Mothproofing Compositions, Etc.
Claims use since 1922.

Ser. No. 334,758. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed Feb. 8, 1933.



No claim is made to the representation of the razor blade per se.
For Safety Razor Blades.
Claims use since Aug. 24, 1931.

CLASS 24

Laundry Appliances and Machines

Ser. No. 334,787. THE AMERICAN LAUNDRY MACHINERY COMPANY, Cincinnati, Ohio. Filed Feb. 9, 1933.

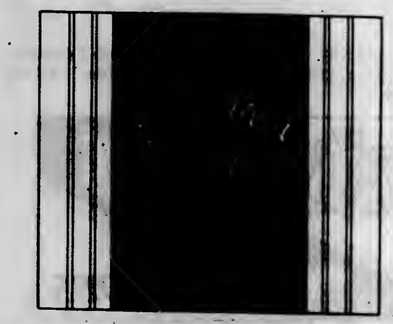
RAYTEX

For Laundry Washing Machines.
Claims use since Apr. 15, 1930.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 333,347. CONTINENTAL OPTICAL COMPANY, Indianapolis, Ind. Filed Dec. 23, 1932.



The descriptive words "Demi Gold" are hereby disclaimed apart from the mark as shown.
For Ophthalmic Frames and Mountings.
Claims use since July 1, 1932.

Ser. No. 333,885. ADAM HILGER, LIMITED, London, England. Filed Jan. 13, 1933.

INSTA

For Optical Device for Visual Quantitative Spectrum Analysis.
Claims use since Aug. 12, 1932.

Ser. No. 334,498. PIONEER INSTRUMENT COMPANY, INC., Brooklyn, N. Y. Filed Jan. 31, 1933.

STRAIGHTFLIGHT

For Compasses.
Claims use since Jan. 27, 1933.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 335,058. JOSEPH GANTZ, doing business as Empire Brush Works, Port Chester, N. Y. Filed Feb. 17, 1933.



For Brooms Made from Bahia, Tampico, and Union Fibre, Piassava, Ricestraw, Bristles, or Horse-Hair and Household Brushes Made from Bristles, Horse-Hair, Soft Hair, or Fiber—Namely, Floor, Sink, and Window Brushes.
Claims use since Dec. 1, 1932.

CLASS 30

Crockery, Earthenware, and Porcelain

Ser. No. 334,730. NORRIS EVANS, New York, N. Y. Filed Feb. 7, 1933.



The words "Thermofor" and "Trade Mark" are disclaimed apart from the mark shown in the drawing.
For Coffeepots, Teapots, Chocolate Pots, Pitchers, Urns, Meat Platters, Entrée Platters, Fish Platters, Vegetable Dishes, Cereal Dishes, Baby-Food Dishes, Deck Service Dishes, Sickroom Service Dishes, Soup Plates, Dinner Plates, "Blue" Plates Consisting of Plates of Any Color Having Partitions Therein for Keeping Different Kinds of Food Separated, Soup Cups, Coffee Cups, Cocoa Cups, and Other Dishes and Vessels for Food and Drinks, All Made of China, Earthenware, Dinnerware, Porcelain, Stoneware, or Pottery and Having Cavities Formed Therein Containing Thermophoric Mixtures for Keeping the Same and Contents Hot.
Claims use since Oct. 15, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 334,934. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 13, 1933.



For Ice Cream Freezers.
Claims use since Dec. 1, 1932.

CLASS 33

Glassware

Ser. No. 332,755. M. B. CHERNIAK MFG. CO., INC., New York, N. Y. Filed Dec. 5, 1932.

Royalite

For Glass Lamp Globes.
Claims use since Jan. 5, 1931.

Ser. No. 334,731. NORRIS EVANS, New York, N. Y. Filed Feb. 7, 1933.

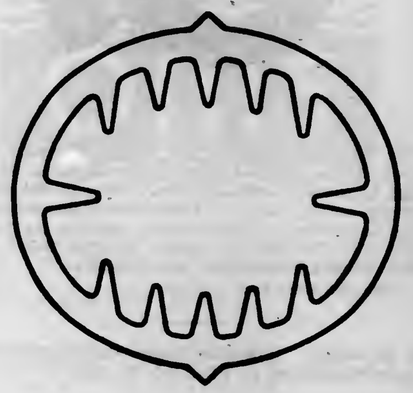


The words "Thermofor" and "Trade Mark" are disclaimed apart from the mark shown in the drawing.
For Coffeepots, Teapots, Chocolate Pots, Pitchers, Urns, Meat Platters, Entrée Platters, Fish Platters, Vegetable Dishes, Cereal Dishes, Baby-Food Dishes, Deck Service Dishes, Sick-Room Service Dishes, Soup Plates, Dinner Plates, "Blue" Plates Consisting of Plates of Any Color Having Partitions Therein for Keeping Different Kinds of Food Separated, Soup Cups, Coffee Cups, Cocoa Cups, Glasses, Goblets, Stemware, Bottles, and Other Dishes and Vessels for Food and Drinks, All Made of Glass and Having Cavities Formed Therein Containing Thermophoric Mixtures for Keeping the Same and Contents Hot.
Claims use since Oct. 15, 1932.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 330,642. ROBERT S. WATERS and WILLIAM G. HEINER, receivers for the National Radiator Corporation, Johnstown, Pa. Filed Sept. 24, 1932.



For Heat Exchange Apparatus in the Form of Hollow Cast Metal Sections Adapted to be Connected Together to Form Units.
Claims use since Sept. 16, 1932.

Ser. No. 335,015. WONDER-WICK COMPANY, Holyoke, Mass. Filed Feb. 15, 1933.



No claim is made to the word "Wick" or to the representation of the goods except in connection with the mark shown.
For Wick for Oil Burners for Domestic and Commercial Heating and Cooking Purposes.
Claims use since Feb. 10, 1933.

CLASS 35

Belting, Hose, Machinery Packing, and Non-Metallic Tires

Ser. No. 324,439. JOHNS-MANVILLE CORPORATION, New York, N. Y. Filed Feb. 24, 1932.



The mark consists of a blue strand appearing on the surface of the goods at intervals as shown by the color lining in the drawing. All other lining in the drawing indicates shading only. No registration rights are claimed in the representation of the packing shown in the drawing.

For Flax Packing for Glands, Stuffing Boxes, Valve Stems, Pistons, Piston Rods, and Plungers.

Claims use since Jan. 7, 1932.

Ser. No. 334,871. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Filed Feb. 11, 1933.

JIFFY

For Fruit Jar Rings.

Claims use since January, 1922.

CLASS 36

Musical Instruments and Supplies

Ser. No. 334,993. FAIRCHILD AERIAL CAMERA CORPORATION, Woodside, N. Y. Filed Feb. 15, 1933.

VISOMATIC

For Phonographs Provided with Signals Indicating the Progress in Relation to the Display of Projected Illustrations Operated Separately from the Phonograph.

Claims use since Jan. 10, 1933.

CLASS 37

Paper and Stationery

Ser. No. 328,195. ZELLSTOFFFABRIK WALDHOF, Mannheim-Waldhof, Germany. Filed June 21, 1932.



For Pasteboard, Cardboard, Writing Paper, Typewriting Paper, Copying Paper, Wrapping Paper, Fancy Paper, Envelope Paper, Drawing and Printing Paper, Blotting Paper, Tissue Paper, Imitation Parchment and Vellum Paper, Cellulose Paper, Packing Paper, Bag Paper, Cigarette Paper, Filter Paper, Cellulose Wadding, Wall Paper, Writing Books, Filing Cards, Postcards, Wrapper Covers, Letter Paper, Envelopes, Sample Displaying Books, Note-Books, Note Blocks.

Claims use since Nov. 25, 1898.

Ser. No. 328,200. ZELLSTOFFFABRIK WALDHOF, Mannheim-Waldhof, Germany. Filed June 21, 1932.



The words "Suomi" and "Finland" appearing on the drawing are disclaimed apart from the mark as shown.

For Pasteboard, Cardboard, Writing Paper, Typewriting Paper, Copying Paper, Wrapping Paper, Fancy Paper, Envelope Paper, Drawing and Printing Paper, Blotting Paper, Tissue Paper, Imitation Parchment and Vellum Paper, Cellulose Paper, Packing Paper, Bag Paper, Cigarette Paper, Filter Paper, Cellulose Wadding, Wall Paper; Writing Books, Filing Cards, Postcards, Wrapper Covers, Letter Paper, Envelopes, Sample Displaying Books, Note-Books, Note Blocks.

Claims use since July 1, 1931.

Ser. No. 332,629. PROSPERITY SALES PLAN CORPORATION, New York, N. Y. Filed Nov. 30, 1932.

PROSPERITY PENS
N.Y.C.

Applicant hereby disclaims the word "Pens" apart from and except in association with the other features of the mark as shown in the drawing.

For Fountain Pens.

Claims use since Nov. 15, 1932.

Ser. No. 333,662. BARNETT AND SCHULMAN CO. INC., New York, N. Y. Filed Jan. 5, 1933.

RADIO
CITY
BOND

No claim to the word "Bond" is made except in combination with the trade-mark as shown on the drawing.

For Printing, Typewriting, and Writing Paper, Envelopes, Bristol Board, Vellum, Parchment, Onion Skin Paper, and Manifold Paper.

Claims use since June 21, 1932.

Ser. No. 334,944. HAMPSHIRE PAPER COMPANY, Hadley Falls, Mass. Filed Feb. 13, 1933.

RESEARCH BOND

Applicant disclaims the exclusive right to the word "Bond" apart from the mark shown in the drawing.

For Writing and Printing Paper.

Claims use since Jan. 7, 1933.

Ser. No. 335,067. KIMBERLY-CLARK CORPORATION, Neenah, Wis. Filed Feb. 17, 1933.

KLEERFECT

For Book Paper.

Claims use since Feb. 7, 1933.

CLASS 38

Prints and Publications

Ser. No. 331,776. LYMAN C. DAVIDSON, Cleveland, Ohio. Filed Nov. 1, 1932.

HIGHWAY GUIDE

For Pamphlets, Booklets, Bulletins, Publications, or Guide Books Containing Information Pertaining to Tourists' Homes and Lodgings, Published from Time to Time, and Credit Vouchers in the Nature of Trading Stamps.

Claims use since October, 1932.

Ser. No. 333,004. JOSEPH LUCHS AND STAFF, INC., Philadelphia, Pa. Filed Dec. 12, 1932.



For Educational Literature in the Form of Printed Sheets, Cards, Posters, and Pamphlets, Sold to the Trade as Such.

Claims use since Nov. 10, 1932.

Ser. No. 335,085. CORN PRODUCTS REFINING COMPANY, New York, N. Y. Filed Feb. 18, 1933.

The CANDY KETTLE

For Monthly Publication.

Claims use since Jan. 25, 1933.

Ser. No. 335,111. COLONIAL COVERLET GUILD OF AMERICA, Chicago, Ill. Filed Feb. 20, 1933.



For Year Books and Booklets Issued from Time to Time.

Claims use since Jan. 1, 1928.

Ser. No. 335,241. WILLIAM E. MCDONALD, San Diego, Calif. Filed Feb. 24, 1933.

INSURETTE

For Premium Certificates.
Claims use since Aug. 1, 1932.

Ser. No. 335,251. SHIPPING NEWS, INC., Portland, Oreg. Filed Feb. 24, 1933.

TRADE LANES

For Periodical.
Claims use since Apr. 7, 1932.

Ser. No. 335,262. UNION SPECIAL MACHINE COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

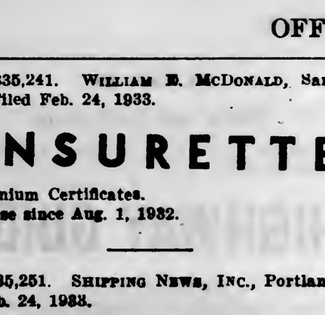
The
NEEDLE'S EYE

For Magazine.
Claims use since Apr. 26, 1930.

CLASS 39

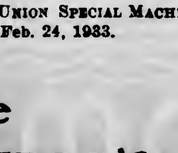
Clothing

Ser. No. 329,334. HICKOK MANUFACTURING COMPANY, INC., Rochester, N. Y. Filed Aug. 4, 1932.



For Suspenders, Including Shirt Hold Down Attachments.
Claims use since July 11, 1932.

Ser. No. 329,349. HICKOK MANUFACTURING COMPANY, INC., Rochester, N. Y. Filed Aug. 5, 1932.



For Suspenders, Including Shirt Hold Down Attachments.
Claims use since July 11, 1932.

Ser. No. 329,701. BOND STORES, INCORPORATED, New York, N. Y. Filed Aug. 20, 1932.

BOND

For Men's and Boys' Suits, Trousers, Coats, Vests; Negligee, Work, and Dress Shirts; Hosiery, Collars, Sweaters, Rain Coats, and Underwear for Men and Boys; Hats, and Shoes Made of Leather, Rubber, Fabric, and/or Any Combinations Thereof.
Claims use since April, 1915.

Ser. No. 332,936. A. M. WEBB & CO. INC., New York, N. Y. Filed Dec. 9, 1932.



No claim is made for the words "Guaranteed", "Genuine Broadcloth" or the representation of the shorts apart from the mark.
For Underwear Shorts.
Claims use since Oct. 17, 1932.

Ser. No. 332,937. A. M. WEBB & CO. INC., New York, N. Y. Filed Dec. 9, 1932.

Cladwell

For Underwear, Hosiery, and Bathing Suits for Men, Women, and Children.
Claims use since July 15, 1932.

Ser. No. 333,120. GARDINER-WARRING COMPANY, INC., Florence, Ala. Filed Dec. 16, 1932.

Eiderknits

The word "Eiderknits" is disclaimed when used apart from the mark as shown on the drawing.
For Men's, Women's, and Children's Sweaters; Men's, Women's, and Children's Sweat Shirts; and Men's, Women's, and Children's Underwear.
Claims use since Aug. 12, 1932.

Ser. No. 333,121. GARDINER-WARRING COMPANY, INC., Florence, Ala. Filed Dec. 16, 1932.

Suedeknits

The word "Suedeknits" is disclaimed when used apart from the mark as shown on the drawing.
For Men's and Women's Sweaters and Men's and Women's Sweat Shirts.
Claims use since Aug. 12, 1932.

Ser. No. 333,641. UNITED DRUG COMPANY, Boston, Mass. Filed Jan. 4, 1933.

DEFENDER

For Household Rubber Gloves.
Claims use since Apr. 28, 1932.

Ser. No. 333,894. E. P. REED & COMPANY, Rochester, N. Y. Filed Jan. 13, 1933.

Collegebred

For Shoes Made of Leather, Fabric, or Rubber, or Combinations Thereof.
Claims use since Nov. 15, 1932.

Ser. No. 334,143. CHAS. R. DE BEVOISE CO., Newark, N. J. Filed Jan. 20, 1933.

Debby-Bandette

For Narrow Brassières.
Claims use since Nov. 28, 1932.

Ser. No. 334,284. INTERNATIONAL SHOE CO., St. Louis, Mo. Filed Jan. 24, 1933.

SEAL-FLEX

Exclusive right to the word "Seal" is claimed only in association with the rest of the mark shown.
For Boots and Shoes of Leather, Fabric, and/or Combinations Thereof.
Claims use since Jan. 10, 1933.

Ser. No. 334,452. X-OTIC, INCORPORATED, New York, N. Y. Filed Jan. 28, 1933.



For a Garment for Infants and Very Young Children, in the Nature of a Sun Suit Provided with Means for Holding a Removable Filler So That the Garment May Also Serve As a Diaper.
Claims use since Jan. 15, 1933.

Ser. No. 334,457. BELLMORE MANUFACTURING COMPANY, Gainesville, Ga. Filed Jan. 30, 1933.

GAINSWORTH

For Men's and Boys' Coats and Pants, Work Shirts.
Claims use since Dec. 14, 1932.

Ser. No. 334,585. VOGUE BRASSIERE MFG. CO., Newark, N. J. Filed Feb. 2, 1933.

Eugov

For Corsets, Brassières, Girdles; Foundations—Namely, Corsets and Brassière Combinations; Garter Belts; Bandeaux and Combinations—Namely, Girdles and Brassière Combinations.
Claims use since Nov. 10, 1932.

Ser. No. 334,674. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y. Filed Feb. 6, 1933.

SHUFLEX

For Middle Soles for Shoes.
Claims use since Dec. 19, 1932.

Ser. No. 334,708. FRANK HIRSHFIELD, Mount Vernon, N. Y. Filed Feb. 7, 1933.

No-Strain

For Women's Hosiery.
Claims use since Jan. 15, 1933.

Ser. No. 334,727. BAKER CLOTHES, INC., Philadelphia, Pa. Filed Feb. 7, 1933.

Cable Twist

Applicant disclaims the word "Twist" apart from the mark as shown on the drawing.
For Men's Woolen Suits.
Claims use since Aug. 25, 1932.

Ser. No. 334,728. BAKER CLOTHES, INC., Philadelphia, Pa. Filed Feb. 7, 1933.

MARBLE TWIST

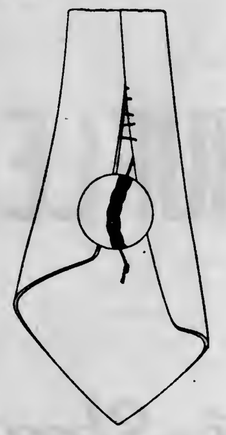
Applicant disclaims the word "Twist" apart from the mark as shown on the drawing.
For Men's Suits.
Claims use since Aug. 25, 1932.

Ser. No. 334,754. LA VALLE, INC., New York, N. Y. Filed Feb. 8, 1933.

VAL-BESPOKE

For Ladies' Shoes Made of Leather, Fabric, and Combinations of These Materials.
Claims use since Jan. 24, 1933.

Ser. No. 334,789. BOTANY WORSTED MILLS, Passaic, N. J. Filed Feb. 9, 1933.



The trade mark consists in a slip stitch which is composed of spirally twisted threads which are colored arbitrarily gold, maroon, and blue, respectively, as indicated on the drawing by the lining of the representation of the end portion of the slip-stitch which is shown in substantial enlargement within a circular outline. No trade-mark claim is made to the representation of the necktie shown in the drawing for the purpose of illustrating how the mark is applied to the neckties.
For Neckties.
Claims use since Jan. 7, 1932.

Ser. No. 334,860. BERGER & WIENER, INC., New York, N. Y. Filed Feb. 11, 1933.

Alice in Wonderland

For Children's and Girls' Blouses and Dresses.
Claims use since Feb. 8, 1933.

Ser. No. 335,046. CHARLES N. WINSHIP, doing business as Winship, Bolt & Co., Wakefield, Mass. Filed Feb. 16, 1933.

Porthole

For Bathing Suits.
Claims use since Feb. 4, 1933.

Ser. No. 335,075. SIEGEL BROTHERS, INC., New York, N. Y. Filed Feb. 17, 1933.

Needletone

For Misses' and Ladies' Coats.
Claims use since Jan. 1, 1933.

Ser. No. 335,094. LARGMAN GRAY COMPANY, Croydon, Pa. Filed Feb. 18, 1933.

Shadopoint

For Hosiery.
Claims use since Jan. 2, 1933.

Ser. No. 335,188. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Feb. 23, 1933.

SLENLESE

For Men's and Women's Underwear.
Claims use since Feb. 21, 1933.

Ser. No. 335,189. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Feb. 23, 1933.

SLENDERLESE

For Men's and Women's Underwear.
Claims use since Feb. 21, 1933.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 333,963. BLOOMINGDALE BROS., INC., New York, N. Y. Filed Jan. 16, 1933.

KARAKHAN

For Woven Floor Rugs.
Claims use since Nov. 9, 1932.

Ser. No. 334,519. FRED BUTTERFIELD & CO., INC., New York, N. Y. Filed Feb. 1, 1933.



PUEBLO

For Fabrics in the Piece of Wool, Cotton, Silk, Rayon, and/or Combinations Thereof.
Claims use since July 12, 1927.

Ser. No. 334,529. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Feb. 1, 1933.

Sarta

For Woolen Piece Goods.
Claims use since Jan. 1, 1933.

Ser. No. 334,661. A. & M. KARAGHEUSIAN, INC., New York, N. Y. Filed Feb. 6, 1933.

MIRASTAN

For Rugs and Carpets of Textile Fabrics.
Claims use since Nov. 21, 1932.

Ser. No. 334,764. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

CHIC-VEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,765. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

FALLVEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,766. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

FANTA-VEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,767. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

Flutevel

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,768. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

FROSTORA-VEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,769. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

GLAMORVEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,770. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

MISTVEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,771. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

SOLOVEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

Ser. No. 334,772. ROSSIE VELVET COMPANY, Mystic, Conn. Filed Feb. 8, 1933.

WHISPER-VEL

For Pile Fabrics.
Claims use since Jan. 11, 1933.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 335,037. SCHWEPPES (COLONIAL & FOREIGN) LIMITED, London, England. Filed Feb. 16, 1933. Under 10-year proviso.

SCHWEPPES

For Natural Mineral and Aerated Drinking Waters and Ginger Beer.
Claims use since May, 1892.

Ser. No. 335,152. THE MOXIE COMPANY, Boston, Mass. Filed Feb. 18, 1933.

MOXIE

The drawing is lined for shading.
For Nonalcoholic, Maltless Carbonated Beverages Sold as Soft Drinks, and Extracts and Syrups Therefor.
Claims use since May 1, 1908.

Ser. No. 335,152. THE MOXIE COMPANY, Boston, Mass. Filed Feb. 18, 1933.

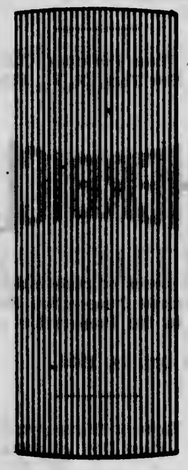


For Nonalcoholic, Maltless Carbonated Beverages Sold as Soft Drinks and Extracts and Syrups Therefor.
Claims use since Jan. 1, 1931.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 308,869. J. W. BEARDSLEY'S SONS, Newark, N. J. Filed July 30, 1930.



The trade-mark consists of a representation of a red band.
For Prepared Meat and Fish Products—Namely, Corned and Dried Beef, Sliced Bacon, Salted and Dried Codfish (Packed in Tins, Vacuum Jars, and Cartons), Fish-Cake, Fish Filet, Fish Chowder, and Salted, Smoked, and Dried Herring (Packed in Glass Jars, Cellophane Transparent Paper Packages, and in Ten-Pound Bulk Boxes).
Claims use since 1893.

Ser. No. 312,017. SHELLABARGER MILL & ELEVATOR COMPANY, Salina, Kans. Filed Mar. 11, 1931.

PEACOCK

For Grey Shorts, Wheat Mixed Feed and Bran, and Poultry Feeds.
Claims use since August, 1908.

Ser. No. 320,219. VIRGINIA SWEET FOODS INC., Indianapolis, Ind. Filed Oct. 19, 1931.

BATTER CREAM

For Prepared Flour for Making Pancakes, Muffins, and the Like, and for Use in Cooking Fish, Chicken, Oysters, Etc.
Claims use since Oct. 13, 1931.

Ser. No. 323,351. OELERICH & BERRY CO., Chicago, Ill. Filed Jan. 23, 1932.

Early Breakfast

For Cane and Maple Syrup.
Claims use since 1890.

Ser. No. 324,040. GREGORY-ROBINSON-SPEAS, INC., Rogers, Ark. Filed Feb. 10, 1932.

SALOME

For Vinegars.
Claims use since February, 1912.

Ser. No. 324,041. GREGORY-ROBINSON-SPEAS, INC., Rogers, Ark. Filed Feb. 10, 1932.

SALOME



For Vinegars.
Claims use since February, 1912.

Ser. No. 325,835. C. J. VAN HOUTEN & ZOON, Weesp, Netherlands. Filed Apr. 5, 1932.

DUTCH BOY

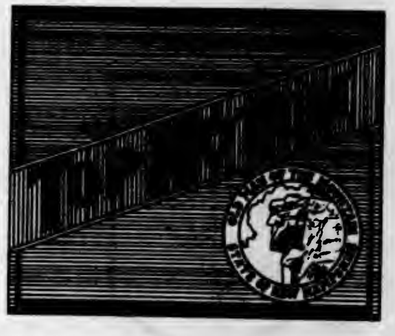
For Cocoa.
Claims use since Aug. 31, 1930.

Ser. No. 329,457. ANSEL W. ROBISON, San Francisco, Calif. Filed Aug. 10, 1932.

SUNSHINE VIT D MIN

The descriptive expression "Vitamin D" is disclaimed apart from the mark as shown on the drawing.
For Bird Seed and Bird Food.
Claims use since July 12, 1932.

Ser. No. 331,911. SOUHEGAN APPLE PACKING ASSOCIATION, Wilton, N. H. Filed Nov. 4, 1932.



No claim is made to the words "State of New Hampshire" apart from the mark as shown. The drawing is lined for red and blue.
For Fresh Apples.
Claims use since Sept. 19, 1932.

Ser. No. 331,977. MILANI'S, INC., doing business as Lunchour Food Products Co., Seattle, Wash. Filed Nov. 5, 1932.

LUNCHOUR

For Chicken Broth with Rice and Egg Noodle Chicken Dinner.
Claims use since August, 1932.

Ser. No. 332,894. THE POPSICLE CORPORATION OF THE UNITED STATES, New York, N. Y. Filed Dec. 8, 1932.

SHERBICLE

Applicant is the owner of registration No. 171,328.
For Vanilla Flavored Composition Syrup, Extract and Concentrate Used in the Preparation of Frozen Confections.
Claims use since Oct. 24, 1932.

Ser. No. 333,227. GORDON DISTRIBUTING CO., INC., West New York, N. J. Filed Dec. 20, 1932.

Golden Wedding

For Distilled Non-Alcoholic and Maltless Flavoring Extracts for Culinary Purposes.
Claims use since Dec. 16, 1932.

Ser. No. 333,437. PARAMOUNT CANNING CO., Haines, Fla. Filed Dec. 28, 1932.

'ZAKLY - RITE

For Canned Fruits and Vegetables.
Claims use since Dec. 20, 1932.

Ser. No. 334,015. MAATSCHAPPIJ TOT EXPLOITATIE VAN RADEMAKER'S KONINKLIJKE CACAO & CHOCOLADEFABRIEKEN, The Hague, Netherlands. Filed Jan. 17, 1933. Under 10-year proviso.



The trade-mark consists of the words "Rademaker's Hopjes" in yellow on a black background, surmounted by a crown, the words "S. Rademaker's Koninklijke Cacao En Chocoladefabriek Gravenhage" surrounding in a circle the black background.
For Coffee Flavored Candies of the Type Known as Hopjes.
Claims use since Jan. 1, 1885.

Ser. No. 334,075. MRS. C. H. SMITH NOODLE COMPANY, Ellwood City, Pa. Filed Jan. 18, 1933.

MRS. SMITH'S



Mrs. C. H. Smith

The trade-mark consists of the words "Mrs. Smith's", the facsimile signature of "Mrs. C. H. Smith", a co-partner of the applicant firm, appearing on a yellow background; and the triangle colored red; the wording on the triangle is not claimed apart from the other features of the mark shown, and the label per se is not claimed. The lines enclosing the trade-mark matter are only to indicate the presence of the background and are not claimed as a part of the mark.
For Alimentary Pastes.
Claims use since 1920.

Ser. No. 334,259. THE C. H. MUSSELMAN COMPANY, Biglerville, Pa. Filed Jan. 23, 1933.

PENN MAID

For Canned Fruits, Fruit Preserves, Jellies, Vinegar, Apple Sauce, and Apple Butter.
Claims use since Jan. 10, 1933.

Ser. No. 334,415. WILLIAM UNDERWOOD COMPANY, Watertown, Mass. Filed Jan. 27, 1933.

"Brownit"

For Canned Meat Hash.
Claims use since Dec. 30, 1932.

Ser. No. 334,555. THE ALBERT DICKINSON COMPANY, Chicago, Ill. Filed Feb. 2, 1933.



In the drawing the lining indicates shading only. The word "Brand" is disclaimed except in connection with the mark as shown.
For Popcorn Dressing, Composed of Pure Cocoanut Oil.
Claims use since Jan. 30, 1933.

Ser. No. 334,660. THE BURGESS BROS. COMPANY, Cincinnati, Ohio. Filed Feb. 4, 1933.

Buckeye

For Malt Syrup for Beverage Making and Food Purposes.
Claims use since June 1, 1918.

Ser. No. 334,749. GUILLERMO BOESCH SUCS. S. EN C., Orizaba, Mexico. Filed Feb. 8, 1933.



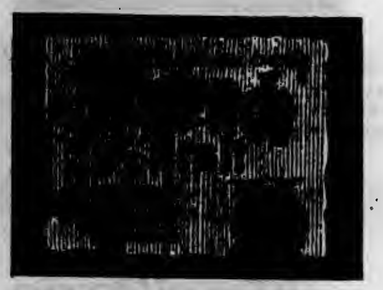
The drawing is lined for the colors green and red, these colors being essential features of the mark.
For Coffee.
Claims use since 1901.

Ser. No. 334,949. APPLE GROWERS ASSOCIATION, Hood River, Oreg. Filed Feb. 14, 1933.

Parkdale

For Canned Fruit.
Claims use since Oct. 1, 1929.

Ser. No. 334,975. ASBACH & CO. AKTIENGESELLSCHAFT, Rudesheim-on-the-Rhine, Germany. Filed Feb. 15, 1933.



The word "Uralt" is disclaimed separate and apart from the mark as used. No claim is made to the words "Marke", "Pralinen", and "ist ein echter alter Weinbrand aus erlesencn Weinen . . . Rüdesheim a. Rh."
For Cocoa, Sweetened and Unsweetened Chocolate in Powdered, Lump, or Bar Form; Baking Powder, Yeast, and Confections—Namely, Candies, Sweetmeats, and Preserves.
Claims use since May 15, 1924.

Ser. No. 334,987. STEFANO CRISAFULLI, New York, N. Y. Filed Feb. 15, 1933.

BONOIL

For Olive Oil.
Claims use since Oct. 19, 1932.

CLASS 47

Wines

Ser. No. 333,282. COUVREUR & CIE., Ay (Marne), France. Filed Dec. 22, 1932. Under 10-year proviso.

MAISON FONDÉE EN 1814

DUMINY & Co

ROYAL CROWN AY (CHAMPAGNE)

EXTRA SEC

For Champagne Wines.
Claims use since 1814.

Ser. No. 333,472. JOSÉ LOPEZ DE CARRIZOSA Y MARTEL, MARQUES DEL MERITO, Jerez-de-la-Frontera, Spain. Filed Dec. 29, 1932.

MARQUÉS DEL MÉRITO

For Wines.
Claims use since Oct. 11, 1912.

Ser. No. 334,974. ASBACH & CO. AKTIENGESELLSCHAFT, Rudesheim-on-the-Rhine, Germany. Filed Feb. 15, 1933.



All the words appearing in the drawing except the name "Asbach" are disclaimed and no claim is made to the representation of the labels per se.
For Wines.
Claims use since 1907.

Ser. No. 335,123. M. KEMPINSKI & Co., Berlin, Germany. Filed Feb. 20, 1933. Under 10-year proviso.

Kempinski

For Wines and Champagnes.
Claims use since 1862.

Ser. No. 335,232. ANDREW DRASS, Los Angeles, Calif. Filed Feb. 24, 1933.



The autograph on the drawing is that of the applicant. No claim is made to the words "Orange Honey Punch" separate and apart from the mark as shown.
For Wines.
Claims use since Jan. 26, 1928.

CLASS 48

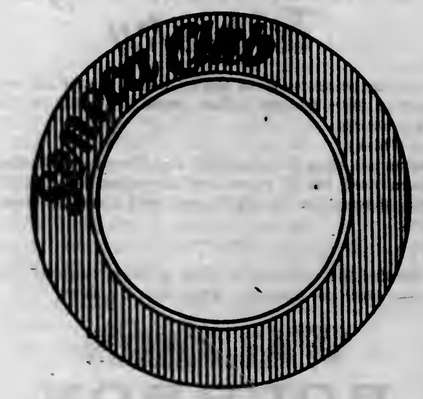
Malt Beverages and Liquors

Ser. No. 309,372. BRAUHAUS WÜRZBURG, AKTIENGESELLSCHAFT, Wursburg, Germany. Filed Dec. 27, 1930.



The drawing is lined for red. The words "Wursburger hofbrau" are disclaimed except in association with the other features of the mark.
For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since Oct. 23, 1929.

Ser. No. 335,217. SENECA FOOD PRODUCTS CORPORATION, Utica, N. Y. Filed Feb. 28, 1933.



The drawing is lined for red.
For Malt Beverages with Not More Than the Legal Alcoholic Content.
Claims use since February, 1928.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 334,212. JOS. S. FINCH & COMPANY, New York, N. Y. Filed Jan. 21, 1933.



For Whiskey and Other Potable Spirits.
Claims use since Sept. 20, 1929.

Ser. No. 334,503. HIRAM WALKER & SONS, LIMITED, Walkerville, Ontario, Canada. Filed Jan. 31, 1933.

Walker's American Rye Whisky

No claim being made to the exclusive use of the words "American Rye Whisky" apart from the mark as shown in the drawing.

For Whisky.

Claims use since March, 1927, and the name "Walker's" has been used for 10 years next preceding Feb. 20, 1905, namely, since June 14, 1887, and such use has been exclusive.

Ser. No. 334,504. HIRAM WALKER & SONS, LIMITED, Walkerville, Ontario, Canada. Filed Jan. 31, 1933.

WALKER'S BOURBON WHISKY

No claim being made to the exclusive use of the words "Bourbon Whisky" apart from the mark as shown in the drawing.

For Whisky.

Claims use since March, 1927, and the name "Walker's" has been used for 10 years next preceding Feb. 20, 1905, namely, since June 14, 1887, and such use has been exclusive.

Ser. No. 334,505. HIRAM WALKER & SONS, LIMITED, Walkerville, Ontario, Canada. Filed Jan. 31, 1933.

WALKER'S LONDON DRY GIN

No claim being made to the exclusive use of the words "London Dry Gin" apart from the mark as shown in the drawing.

For Gin.

Claims use since April, 1927, and the name "Walker's" has been used for 10 years next preceding Feb. 20, 1905, namely, since June 14, 1887, and such use has been exclusive.

Ser. No. 334,506. HIRAM WALKER & SONS, LIMITED, Walkerville, Ontario, Canada. Filed Jan. 31, 1933.

Walker's Old Rye

No claim being made to the exclusive use of the words "Old Rye" apart from the mark as shown in the drawing.

For Whisky.

Claims use since June, 1915, and the name "Walker's" has been used for 10 years next preceding Feb. 20, 1905, namely, since June 14, 1887, and such use has been exclusive.

CARNEGIE LIBRARY OF ATLANTA

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

APRIL 11, 1933

302,283. BEAN SPROUTS, WATER CHESTNUTS, BAMBOO SHOOTS, ETC. LA CHOY FOOD PRODUCTS, INC., Detroit, Mich.
Filed October 28, 1932. Serial No. 331,646. PUBLISHED JANUARY 24, 1933. Class 46.

302,284. WHISKY. SLATER RODGER & COMPANY LIMITED, Glasgow, Scotland.
Filed November 8, 1932. Serial No. 331,997. PUBLISHED JANUARY 31, 1933. Class 49.

302,285. WAX AND MOULDING COMPOUNDS FOR PURPOSES OF DENTAL SURGERY, FILLING MATERIAL FOR TEETH, AND TOOTH POLISHING MATERIAL FOR THE PURPOSE OF DENTAL SURGERY. RICHTER & HOFFMANN HARVARD GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany.
Filed October 27, 1932. Serial No. 331,624. PUBLISHED JANUARY 31, 1933. Class 44.

302,286. BREAKFAST CEREALS, PANCAKE OR WAFFLE SYRUPS, AND PANCAKE AND WAFFLE FLOUR. HOMER N. YOUNG, doing business as Zingo Products Company, Spokane, Wash.
Filed October 26, 1932. Serial No. 331,602. PUBLISHED JANUARY 24, 1933. Class 46.

302,287. HOUSEHOLD AND/OR STORE REFRIGERATORS. TREMBLETT & DAVIN, Chicago, Ill.
Filed October 19, 1932. Serial No. 331,386. PUBLISHED JANUARY 31, 1933. Class 31.

302,288. FINISHED MONUMENT STONES USED AS GRAVE STONES. S. GOLDSTEIN MONUMENT WORKS, INC., New York, N. Y.
Filed October 19, 1932. Serial No. 331,371. PUBLISHED JANUARY 24, 1933. Class 50.

302,289. CANNED VEGETABLES. GOLDBERG, BOWEN & Co., San Francisco, Calif.
Filed October 17, 1932. Serial No. 331,308. PUBLISHED JANUARY 24, 1933. Class 46.

302,290. COAL, CHARCOAL, COKE AND SAWED, SPLIT, AND PREPARED FIREWOOD. LESTER S. RICHARDS, White Haven, Pa.
Filed October 14, 1932. Serial No. 331,267. PUBLISHED JANUARY 24, 1933. Class 1.

302,291. CIGARS. EBY-LOMER COMPANY, Rockford, Ill.
Filed October 18, 1932. Serial No. 331,222. PUBLISHED JANUARY 24, 1933. Class 17.

302,292. PRINTED ADVERTISING MATTER IN THE NATURE OF TRADING STAMPS. FERRY-HANLY ADVERTISING COMPANY, Kansas City, Mo.
Filed October 12, 1932. Serial No. 331,178. PUBLISHED JANUARY 17, 1933. Class 38.

302,293. INDICATOR TABS, OR FILE SIGNALS. GEORGE B. GRAFF Co., Cambridge, Mass.
Filed October 5, 1932. Serial No. 330,951. PUBLISHED JANUARY 17, 1933. Class 37.

302,294. TEA. WEDDLE TEA COMPANY, New York, N. Y.
Filed October 4, 1932. Serial No. 330,941. PUBLISHED JANUARY 24, 1933. Class 46.

302,295. DRAPES, CURTAINS, PORTIÈRES, AND ATTACHABLE MATERIALS FOR SUSPENDING OR HANGING THE SAME, SAID DRAPES, CURTAINS, PORTIÈRES, AND SUSPENDING MATERIALS BEING MADE OF SILK, WOOL, LACE, VELVET, AND THE LIKE. PHOENIX TRIMMING Co., Chicago, Ill.
Filed September 30, 1932. Serial No. 330,828. PUBLISHED JANUARY 3, 1933. Class 42.

302,296. FINGERING YARNS FOR KNITTING AND CROCHETING. ERNEST B. DANE and ALBERT J. MESERVE, doing business as The Shepherd Worsted Mills, Newton, Mass., a Massachusetts Trust.
Filed September 30, 1932. Serial No. 330,810. PUBLISHED JANUARY 17, 1933. Class 43.

302,297. OLIVE OIL. GOLDBERG, BOWEN & Co., San Francisco, Calif.
Filed September 20, 1932. Serial No. 330,513. PUBLISHED JANUARY 3, 1933. Class 46.

302,298. WHEAT FLOUR AND BREAD MADE FROM WHEAT FLOUR. FEDERAL MILL, INC., Lockport, N. Y.
Filed September 6, 1932. Serial No. 330,124. PUBLISHED JANUARY 24, 1933. Class 46.

302,299. BREAD. GNOME BAKERY, INC., New York, N. Y.
Filed August 19, 1932. Serial No. 329,680. PUBLISHED JANUARY 24, 1933. Class 46.

302,300. BLANKETS, CARRIAGE SETS, CARRIAGE ROBES MADE OF WOOL, SILK, RAYON, AND/OR COTTON. WALTER J. MUNRO, New York, N. Y.
Filed July 19, 1932. Serial No. 328,892. PUBLISHED JANUARY 17, 1933. Class 42.

302,301. SMOKED FISH, SALADS, PICKLES, ETC. CALIENTE FOOD PRODUCTS CO., San Bernardino, Calif.
Filed July 16 1932. Serial No. 328,837. PUBLISHED JANUARY 24, 1933. Class 46.

302,302. GOLF BALLS. WALGREEN Co., Chicago, Ill.
Filed June 13, 1932. Serial No. 327,954. PUBLISHED JANUARY 31, 1933. Class 22.

302,303. MACHINES FOR APPLYING HOODS TO BOTTLES. PACKAGE MACHINERY COMPANY, Springfield, Mass.
Filed November 22, 1932. Serial No. 332,881. PUBLISHED JANUARY 24, 1933. Class 23.

302,304. BINDER FOR MAGAZINES. WILLIAM DANA SEIBERT, New York, N. Y.
Filed November 22, 1932. Serial No. 332,384. PUBLISHED JANUARY 17, 1933. Class 37.

302,305. LEATHER FOR SHOE UPPERS. NEWMARKET LEATHER Co., INC., New York, N. Y.
Filed November 21, 1932. Serial No. 332,348. PUBLISHED JANUARY 24, 1933. Class 1.

302,306. FRESH CITRUS FRUITS. VALENCIA HEIGHTS ORCHARDS, INC., Covina, Calif.
Filed November 28, 1932. Serial No. 332,558. PUBLISHED JANUARY 24, 1933. Class 46.

302,307. PAINTS, PAINT COLORS, WHITE LEAD, PUTTY, ETC. LEON FINCH LTD., Los Angeles, Calif.
Filed November 28, 1932. Serial No. 332,524. PUBLISHED JANUARY 17, 1933. Class 16.

302,308. WHEAT FLOUR. VICTOR FLOUR MILLS, INC., Pittsford, N. Y.
Filed November 26, 1932. Serial No. 332,501. PUBLISHED JANUARY 24, 1933. Class 46.

302,309. YARN. EVERLASTIK, INC., Chelsea, Mass.
Filed November 26, 1932. Serial No. 332,480. PUBLISHED JANUARY 24, 1933. Class 43.

302,310. INDOOR AND OUTDOOR GAMES PLAYED WITH A PEG, CORD, AND BALL. STYLECRAFT, Los Angeles, Calif.
Filed November 30, 1932. Serial No. 332,686. PUBLISHED JANUARY 31, 1933. Class 22.

302,311. AN INDOOR AND OUTDOOR GAME PLAYED WITH A PEG, CORD, AND BALL. STYLECRAFT, Los Angeles, Calif.
Filed November 30, 1932. Serial No. 332,635. PUBLISHED JANUARY 31, 1933. Class 22.

302,312. ROSE BUSH PLANTS. LEON A. SACKETT, doing business as Glendale Distributing Company, Glendale, Long Island, N. Y.
Filed November 29, 1932. Serial No. 332,599. PUBLISHED JANUARY 31, 1933. Class 1.

302,313. MANICURE IMPLEMENTS—NAMELY, NAIL FILES, TWEEZERS, NAIL CLIPPERS, BLACKHEAD REMOVERS, CUTICLE SHAPERS, AND CUTICLE SCISSORS. BERNARD WIGDER, doing business as The Wigder Manufacturing Co., Newark, N. J.
Filed November 28, 1932. Serial No. 332,562. PUBLISHED JANUARY 31, 1933. Class 44.

302,314. PICKLES. WEINRICH PICKLE CO., Los Angeles, Calif.
Filed November 28, 1932. Serial No. 332,561. PUBLISHED JANUARY 24, 1933. Class 46.

302,315. COFFEE. C. D. KENNY CO., Baltimore, Md.
Filed December 1, 1932. Serial No. 332,650. PUBLISHED JANUARY 24, 1933. Class 46.

302,316. TOOL STEEL. COLUMBIA TOOL STEEL COMPANY, Chicago Heights, Ill.
Filed December 1, 1932. Serial No. 332,646. PUBLISHED JANUARY 24, 1933. Class 14.

302,317. DENTAL WIRE. JULIUS ADERER, INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,673. PUBLISHED JANUARY 31, 1933. Class 44.

302,318. TOY PAINT BOX KITS, INCLUDING PAINTS, CHARTS, AND DUPLICATING MATERIALS. WALTER E. WILSON, doing business as Kolorkraft Company, Detroit, Mich.
Filed December 1, 1932. Serial No. 332,708. PUBLISHED JANUARY 31, 1933. Class 22.

302,319. COOKING CHOCOLATE. MOFFAT INCORPORATED, Boston, Mass.
Filed November 16, 1932. Serial No. 332,196. PUBLISHED JANUARY 24, 1933. Class 46.

302,320. PRINTED BOOKS PUBLISHED IN A SERIES. BLUE RIBBON BOOKS, INC., New York, N. Y.
Filed November 15, 1932. Serial No. 332,140. PUBLISHED JANUARY 17, 1933. Class 38.

302,321. ALL TYPES OF FARM SEEDS, INCLUDING GARDEN SEEDS, FLOWER SEEDS, AND FIELD SEEDS. NEWDAY SEEDS, INC., Fargo, N. Dak.
Filed November 12, 1932. Serial No. 332,137. PUBLISHED JANUARY 24, 1933. Class 1.

302,322. YARNS OF WOOL, WORSTED, OR HAIR. PATONS & BALDWINS, LIMITED, Halifax, England.
Filed November 14, 1932. Serial No. 332,134. PUBLISHED JANUARY 17, 1933. Class 43.

302,323. CANDY. EUROPA SALES CORPORATION, New York, N. Y.
Filed November 12, 1932. Serial No. 332,088. PUBLISHED JANUARY 24, 1933. Class 46.

302,324. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed November 12, 1932. Serial No. 332,082. PUBLISHED JANUARY 17, 1933. Class 42.

302,325. POULTRY, DAIRY, AND STOCK FEED. GENERAL MILLS, INC., Minneapolis, Minn.
Filed November 10, 1932. Serial No. 332,038. PUBLISHED JANUARY 24, 1933. Class 46.

302,326. WRITING AND PRINTING PAPER. HURLBUT PAPER COMPANY, South Lee, Mass.
Filed November 18, 1932. Serial No. 332,324. PUBLISHED JANUARY 17, 1933. Class 37.

302,327. SPAGHETTI SAUCE. CAESAR G. MONGELLI, Brooklyn, N. Y.
Filed November 18, 1932. Serial No. 332,262. PUBLISHED JANUARY 24, 1933. Class 46.

302,328. PASTE AND LIQUID PAINTS, PAINT ENAMELS, VARNISHES, STAINS, PAINT, VEHICLE AND SIMILAR OILS, JAPANS, PRIMERS, LACQUERS, AND SURFACERS. THE TRUSCON LABORATORIES, Detroit, Mich.
Filed November 17, 1932. Serial No. 332,241. PUBLISHED JANUARY 17, 1933. Class 16.

302,329. FABRICS IN THE PIECE OF WOOL, COTTON, SILK, RAYON, AND/OR COMBINATIONS THEREOF. FRED BUTTERFIELD & CO., INC., New York, N. Y.
Filed November 18, 1932. Serial No. 332,247. PUBLISHED JANUARY 17, 1933. Class 42.

302,330. READY-MIXED PAINT, PAINT ENAMELS, LACQUERS, VARNISHES, STAINS, AND JAPANS; PAINT AND LACQUER THINNERS, PAINT FINISHES, ENAMEL FINISHES, TOUCH-UP PAINTS, WOOD POLISHING OILS, ALUMINUM BRONZE, PREPARED SHELLACS, MOTOR VEHICLE ENGINE ENAMELS, AND TIRE PAINT. BILTRITE MOTOR EQUIPMENT CO. INC., New York, N. Y.
Filed November 17, 1932. Serial No. 332,219. PUBLISHED JANUARY 17, 1933. Class 16.

302,331. COTTON PIECE GOODS. WILLIAM L. BARRELL COMPANY, INC., New York, N. Y.
Filed November 17, 1932. Serial No. 332,217. PUBLISHED JANUARY 17, 1933. Class 42.

302,332. SILK AND RAYON FABRICS IN THE PIECE. L. & E. STIRN, INC., New York, N. Y.
Filed November 16, 1932. Serial No. 332,202. PUBLISHED JANUARY 17, 1933. Class 42.

302,333. CORN MEAL, SCRATCH FEED, DEVELOPER SCRATCH FEED, BABY CHICK SCRATCH FEED, LAYING MASH, GROWING MASH, CHICK STARTER, POULTRY FATTENER, TWENTY-FOUR PER CENT PROTEIN DAIRY FEED, PIG FEED, PROTEIN SUPPLEMENT FOR PIGS. SEGUIN MILLING & POWER CO., Seguin, Tex.
Filed November 25, 1932. Serial No. 332,489. PUBLISHED JANUARY 31, 1933. Class 46.

302,334. CARBONIFEROUS FUEL BRIQUETTES. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif.
Filed November 23, 1932. Serial No. 332,400. PUBLISHED JANUARY 24, 1933. Class 1.

302,335. CARBONIFEROUS FUEL BRIQUETTES. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif.
Filed November 23, 1932. Serial No. 332,399. PUBLISHED JANUARY 24, 1933. Class 1.

302,336. CARBONIFEROUS FUEL BRIQUETTES. CALIFORNIA FUEL & UTILITIES, INC., Los Angeles, Calif.
Filed November 23, 1932. Serial No. 332,398. PUBLISHED JANUARY 24, 1933. Class 1.

302,337. SPECTACLES, EYEGLASSES, AND PARTS THEREOF. SHURON OPTICAL COMPANY, INC., Geneva, N. Y.
Filed December 5, 1932. Serial No. 332,788. PUBLISHED JANUARY 24, 1933. Class 26.

302,338. MALT BEVERAGES CONTAINING LESS THAN ONE-HALF (1/2) OF ONE PER CENT (1%) OF ALCOHOL BY VOLUME. K B BEVERAGE COMPANY, Bay City, Mich.
Filed December 8, 1932. Serial No. 332,888. PUBLISHED JANUARY 31, 1933. Class 48.

302,339. PERIODICALLY ISSUED MAGAZINES. GREEN-HALL, INC., Chicago, Ill.
Filed December 9, 1932. Serial No. 332,917. PUBLISHED JANUARY 17, 1933. Class 38.

302,340. BROOMS. WESCO FOODS COMPANY, Cincinnati, Ohio.
Filed December 9, 1932. Serial No. 332,989. PUBLISHED JANUARY 24, 1933. Class 29.

302,341. WHITE PASTE. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 12, 1932. Serial No. 333,015. PUBLISHED JANUARY 17, 1933. Class 5.

302,342. CLOCKS, WATCHES, AND PARTS THEREOF. GORHAM MANUFACTURING COMPANY, Providence, R. I.
Filed December 14, 1932. Serial No. 333,064. PUBLISHED FEBRUARY 7, 1933. Class 27.

302,343. RESILIENT VEHICLE TIRES AND INNER TUBES COMPOSED IN WHOLE OR IN PART OF RUBBER. THE KELLY-SPRINGFIELD TIRE COMPANY, New York, N. Y.
Filed December 17, 1932. Serial No. 333,158. PUBLISHED JANUARY 24, 1933. Class 35.

302,344. MALT BEVERAGES HAVING AN ALCOHOLIC CONTENT NOT IN EXCESS OF THAT PERMITTED BY LAW. CLOVERDALE SPRING CO., Baltimore, Md.
Filed December 23, 1932. Serial No. 333,312. PUBLISHED JANUARY 31, 1933. Class 48.

302,345. GOLF BALLS. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed July 28, 1930. Serial No. 303,882. PUBLISHED NOVEMBER 4, 1930. Class 22.

302,346. GOLF BALLS. ENDICOTT JOHNSON CORPORATION, Endicott, N. Y.
Filed July 28, 1930. Serial No. 303,884. PUBLISHED MARCH 24, 1931. Class 22.

302,347. BREAD. HALLER BAKING COMPANY, Pittsburgh, Pa.
Filed March 5, 1931. Serial No. 311,780. PUBLISHED JANUARY 4, 1933. Class 46.

302,348. ADVERTISING SIGN FRAMES FOR USE ON AUTOMOBILE SPARE TIRE CARRIERS. CARY FARROW, Houston, Tex.
Filed April 3, 1931. Serial No. 312,908. PUBLISHED JANUARY 24, 1933. Class 50.

302,349. PAPER TOWELS IN ROLL FORM. SCOTT PAPER COMPANY, Chester, Pa.
Filed November 10, 1931. Serial No. 320,990. PUBLISHED JANUARY 10, 1933. Class 37.

302,350. TULIP BULBS. SIEBES BROTHERS, N. V., Lisse, Netherlands.
Filed November 10, 1931. Serial No. 320,991. PUBLISHED JANUARY 31, 1933. Class 1.

302,351. LEATHER BELTING. BALTIMORE BELTING COMPANY, Baltimore, Md.
Filed November 13, 1931. Serial No. 321,093. PUBLISHED JANUARY 24, 1933. Class 35.

302,352. CANNED ORANGE AND GRAPEFRUIT SECTIONS. FLORIDA FRUIT CANNERS, INC., Frostproof, Fla.
Filed November 17, 1931. Serial No. 321,208. PUBLISHED JANUARY 24, 1933. Class 46.

302,353. PAINTS, PAINT COLORS, WHITE LEAD, ETC. NORTH AMERICAN PAINT & CHEMICAL CO. LTD., Los Angeles, Calif.
Filed December 5, 1931. Serial No. 321,815. PUBLISHED JANUARY 17, 1933. Class 16.

302,354. TOFFY. W. A. JOHNSON, doing business as California Fruit Chimes Co., San Gabriel, Calif.
Filed December 12, 1931. Serial No. 322,047. PUBLISHED JANUARY 24, 1933. Class 46.

302,355. SICILY AND OTHER CANARY SEED, HOLLAND AND OTHER RAPE SEED, AND MIXTURES OF SUCH SEEDS. THE GOLDEN BIRD INC., Chicago, Ill.
Filed January 23, 1932. Serial No. 323,828. PUBLISHED JANUARY 24, 1933. Class 46.

302,356. GOLF BALLS. WALGREEN CO., Chicago, Ill.
Filed June 13, 1932. Serial No. 327,952. PUBLISHED JANUARY 31, 1933. Class 22.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,357. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DONALD S. MOORE, doing business as Old Vienna Sales Co., Buffalo, N. Y. Filed Feb. 2, 1933. Serial No. 334,570.

Old Vienna

For Malt Syrup.
Claims use since Mar. 20, 1931.

302,358. (CLASS 37. PAPER AND STATIONERY.) JUD YOHO, Youngstown, Ohio. Filed Feb. 1, 1933. Serial No. 334,546.

EVERMARK

For Pencil.
Claims use since Jan. 1, 1932.

302,359. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CENTRAL STATES DEPARTMENT STORES, INC., Chicago, Ill. Filed Jan. 30, 1933. Serial No. 334,458.

Clair Carlyle

For Red Mouth Wash, Amber Mouth Wash, Cold Cream, Cleansing Cream, Foundation Cream, Nourishing Cream, Lemon Cream, Skin Tonic, Astringent, Face Powder.
Claims use since Oct. 10, 1931.

302,360. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) BURTON PRESTON & CO., Mansfield, Ohio. Filed Jan. 18, 1933. Serial No. 334,070.

MULTI-MAROON

For Granite and Marble Monuments and Statues.
Claims use since Mar. 1, 1932.

302,361. (CLASS 39. CLOTHING.) JACOB C. LAMM, Baltimore, Md. Filed Jan. 13, 1933. Serial No. 333,910.

Flan-L-Like

For Men's and Boys' Pants, Knickers, Suits, and Coats; Girls' and Women's Beach Pants and Coats of Cotton Twill and Corded Materials.
Claims use since Feb. 20, 1931.

302,362. (CLASS 37. PAPER AND STATIONERY.) THE GUMMED PRODUCTS COMPANY, Troy, Ohio. Filed Dec. 9, 1932. Serial No. 332,918.

Sterling

For Gummed Paper Tape.
Claims use since Jan. 21, 1931.

302,363. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT S. STONE, doing business as The Klenz-Wel Products Company, Cleveland, Ohio. Filed Nov. 17, 1932. Serial No. 332,212.

KLENZ-WEL

For a Water Softener Having Incidental Cleaning Properties.
Claims use since Jan. 11, 1932.

302,364. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AGAR PACKING & PROVISION CO., Chicago, Ill. Filed June 23, 1932. Serial No. 328,234.

Agar's Sugar Meats

For Boneless Smoked Pork Butts and Spiced Ham.
Claims use since Feb. 15, 1932.

302,365. (CLASS 5. ADHESIVES.) MAURICE KOEHLER, doing business as The Plastik Products Co., Masillon, Ohio. Filed May 18, 1932. Serial No. 327,059.

PLASTIK

For Metallic Adhesive Cement.
Claims use since Sept. 1, 1931.

302,366. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) INGERSOLL-RAND COMPANY, New York, N. Y. Filed Feb. 24, 1932. Serial No. 324,437.

PICKHAMER

For Coal Picks.
Claims use since Feb. 10, 1932.

302,367. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SHU-SAVER CO., Los Angeles, Calif. Filed Dec. 16, 1931. Serial No. 322,189.

SHU-SAVER

For Shoe Straighteners or Outside Shoe Lasts.
Claims use since Oct. 24, 1931.

302,368. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LINDSAY FARM BUREAU FRUIT ASSN., Lindsay, Calif. Filed Nov. 13, 1931. Serial No. 321,112.

HEALTH GIVER

For Fresh Citrus Fruits.
Claims use since Nov. 1, 1929.

302,369. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LINDSAY FARM BUREAU FRUIT ASSN., Lindsay, Calif. Filed Nov. 13, 1931. Serial No. 321,110.

DISTINCTIVE

For Fresh Citrus Fruits.
Claims use since Nov. 1, 1929.

TRADE-MARK REGISTRATIONS RENEWED

38,865. BUTTER. Registered September 2, 1902. E. O. WHITFORD & Co. Renewed September 2, 1932, to National City Dairy Company, Washington, D. C., a Corporation of the District of Columbia, successor.

39,624. CERTAIN NAMED ELECTRICAL SUPPLIES. Registered January 6, 1903. SOCIETE ANONYME LE CARBONE, Levallois-Perret, France, a Corporation of France. Renewed January 6, 1933.

39,792. TOOL-STEEL. Registered February 10, 1903. CRUCIBLE STEEL COMPANY OF AMERICA, Pittsburgh, Pa. Renewed February 10, 1933, to Crucible Steel Company of America, New York, N. Y., a Corporation of New Jersey.

39,994. WOMEN'S WOVEN UNDERGARMENTS. Registered March 31, 1903. THE DIELHENN MANUFACTURING COMPANY, Massillon, Ohio, a Corporation of Ohio. Renewed March 31, 1933.

40,136. RAZOR HONES. Registered April 21, 1903. SEVERIN ROBERT DROESCHER, New York, N. Y. Renewed April 21, 1933.

40,323. RAZOR HONES. Registered May 12, 1903. SEVERIN ROBERT DROESCHER, New York, N. Y. Renewed May 12, 1933.

40,331. MANUFACTURED FERTILIZERS. Registered May 12, 1903. SWIFT FERTILISER WORKS, Chicago, Ill., and Atlanta, Ga. Renewed May 12, 1933, to Swift and Company, Chicago, Ill., a Corporation of Illinois, assignee.

40,391. CANNED FRUITS AND VEGETABLES. Registered May 19, 1903. J. C. AINSLEY PACKING CO. Renewed May 19, 1933, to J. C. Ainsley Packing Co., Campbell, Calif., a Corporation of California, successor.

40,392. CANNED FRUITS AND VEGETABLES. Registered May 19, 1903. J. C. AINSLEY PACKING CO. Renewed May 19, 1933, to J. C. Ainsley Packing Co., Campbell, Calif., a Corporation of California, successor.

40,456. RAZORS. Registered May 26, 1903. SEVERIN ROBERT DROESCHER, New York, N. Y. Renewed May 26, 1933.

40,457. RAZORS. Registered May 26, 1903. SEVERIN ROBERT DROESCHER, New York, N. Y. Renewed May 26, 1933.

90,295. CERTAIN NAMED ELECTRIC FITTINGS, RECEPTACLES AND PARTS THEREOF. Registered February 18, 1913, CROUSE-HINDS COMPANY, Syracuse, N. Y., a Corporation of New York. Renewed February 18, 1933.

90,330. REMEDIES FOR CERTAIN NAMED DISEASES. Registered February 18, 1913. C. J. HEWLETT & SON, LIMITED, London, England, a Corporation of Great Britain. Renewed February 18, 1933.

90,374. CERTAIN NAMED FIELD-SEEDS. Registered February 18, 1913. J. G. PEPPARD SEED CO., Kansas City, Mo., a Corporation of Missouri. Renewed February 18, 1933.

90,381. LUBRICATING-OIL. Registered February 18, 1913. WM. C. ROBINSON & SON CO., Baltimore, Md., and Coraopolis, Pa. Renewed February 18, 1933, to Wm. C. Robinson & Son Co., Baltimore, Md., a Corporation of Maryland.

90,525. SAUSAGE. Registered March 4, 1913. L. FRANK & SON COMPANY. Renewed March 4, 1933, to Frank and Company, Milwaukee, Wis., a Corporation of Wisconsin, assignee.

90,585. CASTERS. Registered March 4, 1913. THE M. B. SCHENCK COMPANY, Meriden, Conn. Renewed March 4, 1933, to The Bassick Company, Bridgeport, Conn., a Corporation of Connecticut, assignee.

90,685. BOOTS AND SHOES MADE OF HIDES, SKINS, OR LEATHER. Registered March 18, 1913. LEWIS A. CROSSETT, INC., North Abington, Mass. Renewed March 18, 1933, to Crossett Shoe Co., Augusta, Me., a Corporation of Maine, assignee by mesne assignments.

90,722. METAL WEATHER-STRIPS. Registered March 18, 1913. MONARCH METAL WEATHER STRIP COMPANY. Renewed March 18, 1933, to Monarch Metal Weather Strip Corporation, St. Louis, Mo., a Corporation of Missouri, successor.

90,762. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered March 18, 1913. W. A. TYZACK & Co., Sheffield, England, a Firm. Renewed March 18, 1933.

90,774. CANNED SARDINES. Registered March 25, 1913. M. AMIEUX & CIE. Renewed March 25, 1933, to Maison Amieux Freres, Societe Anonyme, Nantes, France, a Corporation of France, successor.

90,845. CERTAIN METAL AND METAL CASTINGS AND FORGINGS. Registered March 25, 1913. SANDVIKENS JERNVERKS AKTIEBOLAG, Sandviken, Sweden, a Corporation of Sweden. Renewed March 25, 1933.

90,889. LUBRICATING-OILS. Registered April 1, 1913. E. F. HOUGHTON & Co., Philadelphia, Pa., a Corporation of Pennsylvania. Renewed April 1, 1933.

91,011. BISCUIT. Registered April 8, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed April 8, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

91,013. BELTING, HOSE, AND PACKING COMPOSED OF CERTAIN NAMED MATERIALS. Registered April 8, 1913. NEW YORK BELTING AND PACKING COMPANY, as assignee of New York Belting & Packing Co. Ltd. Renewed April 8, 1933, to New York Belting and Packing Company, New York, N. Y., a Corporation of New York, assignee.

91,113. BISCUIT. Registered April 15, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed April 15, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

91,115. BISCUIT. Registered April 15, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed April 15, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

91,227. BISCUIT. Registered April 22, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed April 22, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

91,532. METAL GATE-VALVES AND COUPLINGS. Registered May 6, 1913. WALWORTH MANUFACTURING Co. Renewed May 6, 1933, to Walworth Company, Boston, Mass., a Corporation of Massachusetts, by change of name.

91,651. MEN'S OUTER SUITS AND OVERCOATS. Registered May 20, 1913. DAVIDSON & FINKELBRAND. Renewed May 20, 1933, to P & Q Shops Inc., New York, N. Y., a Corporation of New York, assignee.

91,686. SELF-RISING BUCKWHEAT FLOUR. Registered May 20, 1913. NORTHERN LIGHT MILLING CO., Owatonna, Minn. Renewed May 20, 1933, to Campbell Cereal Company, Northfield, Minn., a Corporation of South Dakota, assignee.

91,758. INSECTICIDES. Registered May 27, 1913. CORONA CHEMICAL COMPANY, Milwaukee, Wis. Renewed May 27, 1933, to Pittsburgh Plate Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania, assignee.

91,837. RUBBER BOOTS, SHOES, ARCTICS, OVERSHOES, SANDALS, INSOLES, SPATS, AND OVERGAITERS. Registered June 3, 1913. THE BEACON FALLS RUBBER SHOE COMPANY. Renewed June 3, 1933, to The Beacon Falls Rubber Shoe Company, Beacon Falls, Conn., a Corporation of Massachusetts, assignee.

91,890. AN OIL LINIMENT. Registered June 3, 1913. DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed June 3, 1933.

91,891. AN OIL LINIMENT. Registered June 3, 1913. DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed June 3, 1933.

91,984. MEDICINES AND PREPARATIONS FOR THE TREATMENT OF CERTAIN NAMED DISEASES. Registered June 10, 1913. DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed June 10, 1933.

91,986. MEDICINES, PREPARATIONS, COMPOUNDS, AND TABLETS FOR CERTAIN NAMED DISEASES. Registered June 10, 1913. DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo., a Corporation of Missouri. Renewed June 10, 1933.

92,004. CERTAIN CHEMICALLY PREPARED SUBSTANCES FOR FILTERING PURPOSES. Registered June 10, 1913. SEITZ-WERKE THEO. & GEO. SEITZ. Renewed June 10, 1933, to Seitz-Werke G. m. b. H., Kreuznach, Germany, a Corporation of Germany, successor.

92,178. FISH-LINES. Registered June 24, 1913. LEONARD A. BURNHAM, Gloucester, Mass. Renewed June 24, 1933, to American Net & Twine Company, Boston, Mass., a Corporation of Massachusetts, successor.

92,319. TANNING EXTRACTS. Registered July 1, 1913. THE CHAMPION FIBRE COMPANY, Hamilton, Ohio. Renewed July 1, 1933, to The Champion Fibre Company, Canton, N. C., a Corporation of Ohio.

92,371. LAGER-BEER. Registered July 1, 1913. THE PETER SCHOENHOFEN BREWING COMPANY. Renewed July 1, 1933, to Schoenhofen Company, Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

92,390. RUBBER GOODS FOR PLUMBERS' USE. Registered July 8, 1913. THE H. O. CANFIELD COMPANY, Bridgeport, Conn., a Corporation of Connecticut. Renewed July 8, 1933.

92,427. LEATHER BOOTS AND SHOES. Registered July 8, 1913. HURLEY SHOE COMPANY, Rockland, Mass., a Corporation of Massachusetts. Renewed July 8, 1933.

92,447. BISCUIT. Registered July 8, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed July 8, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New York.

92,534. PETROLEUM JELLY. Registered July 15, 1913. CHESEBROUGH MANUFACTURING COMPANY, Consolidated, New York, N. Y., a Corporation of New York. Renewed July 15, 1933.

92,572. CYLINDER, CUP, FIBER, JOURNAL, AUTO, AND BEARING GREASE, AND COMMUTATOR COMPOUND. Renewed July 15, 1913. THE OHIO GREASE LUBRICANT CO. Renewed July 15, 1933, to The Ohio Grease Company, Londonville, Ohio, a Corporation of Ohio, by change of name.

92,782. VARNISHES. Registered July 29, 1913. BERRY BROTHERS, Detroit, Mich., a Corporation of Michigan. Renewed July 29, 1933.

92,805. COCOA. Registered July 29, 1913. P. C. LARKIN, Toronto, Ontario, Canada, and New York, N. Y. Renewed July 29, 1933, to Salada Tea Company, Inc., Boston, Mass., a Corporation of Maine, assignee.

92,829. MEN'S AND BOYS' ATHLETIC UNDERWEAR AND CERTAIN OUTER GARMENTS. Registered July 29, 1913. RICE-STIX DRY GOODS CO., St. Louis, Mo., a Corporation of Missouri. Renewed July 29, 1933.

92,849. METAL KETTLES. Registered July 29, 1913. THE JACOB J. VOLLRATH MFG. CO. Renewed July 29, 1933, to The Vollrath Company, Sheboygan, Wis., a Corporation of Wisconsin, assignee.

92,858. RICE AND BLENDED COFFEE. Registered July 29, 1913. YOUNG-MAHOOD COMPANY. Renewed July 29, 1933, to Young-Mahood Company, Pittsburgh, Pa., a Corporation of Pennsylvania, successor.

92,944. A MONTHLY PERIODICAL. Registered August 12, 1913. BROWN & BIGELOW, St. Paul, Minn., a Corporation of Minnesota. Renewed August 12, 1933.

92,949. SPARK-PLUGS. Registered August 12, 1913. CHAMPION SPARK PLUG COMPANY. Renewed August 12, 1933, to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware, assignee.

92,950. SPARK-PLUGS. Registered August 12, 1913. CHAMPION SPARK PLUG COMPANY. Renewed August 12, 1933, to Champion Spark Plug Company, Toledo, Ohio, a Corporation of Delaware, assignee.

92,989. GRANULAR EFFERVESCENT SALT. Registered August 12, 1913. THE JADS SALTS COMPANY, New York, N. Y. Renewed August 12, 1933, to Wyeth Chemical Company, Jersey City, N. J., a Corporation of Delaware, assignee by mesne assignments.

93,006. CORNCOB PIPES. Registered August 12, 1913. MISSOURI MEERSCHAUM COMPANY, Washington, Mo., a Corporation of Missouri. Renewed August 12, 1933.

93,009. BISCUIT. Registered August 12, 1913. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Renewed August 12, 1933, to National Biscuit Company, New York, N. Y., a Corporation of New Jersey.

93,012. A LIQUID REMEDY FOR DANDRUFF. Registered August 12, 1913. JOHN LOUIS NEEDHAM. Renewed August 12, 1933, to The Mahdeen Company, Nacogdoches, Tex., a Firm, successor.

93,046. DIGESTIVE TABLETS. Registered August 12, 1913. TAILBY-NASON COMPANY, South Berwick, Me., and Boston, Mass. Renewed August 12, 1933, to Tailby-Nason Company, Cambridge, Mass., a Corporation of Massachusetts.

93,049. A REMEDY FOR COUGHS. Registered August 12, 1913. JAMES B. TOTTEN. Renewed August 12, 1933, to Anna Mullendore, Newark, N. J., assignee.

93,077. CANNED SALMON. Registered August 19, 1913. COLUMBIA RIVER PACKERS ASSOCIATION, Astoria, Oreg. Renewed August 19, 1933, to Portland Trust and Savings Bank, Portland, Oreg., a Corporation of Oregon, assignee.

93,078. CANNED SALMON. Registered August 19, 1913. COLUMBIA RIVER PACKERS ASSOCIATION, Astoria, Oreg. Renewed August 19, 1933, to Portland Trust and Savings Bank, Portland, Oreg., a Corporation of Oregon, assignee.

93,114. OLIVE-OIL. Registered August 19, 1913. JOSEPH PETROCELLI & COMPANY. Renewed August 19, 1933, to Cellas', Inc., New York, N. Y., a Corporation of New York, assignee by mesne assignments.

93,173. GLASS SHADES, GLOBES, AND REFLECTORS FOR ARTIFICIAL ILLUMINATION. Registered August 26, 1913. GLEASON-TIEBOUT GLASS COMPANY, New York, N. Y., a Corporation of New York. Renewed August 26, 1933.

93,354. CERTAIN PHARMACEUTICAL PREPARATIONS. Registered September 9, 1913. ERNEST D. HIRSCHY, Kewanee, Ill. Renewed September 9, 1933.

LABELS

REGISTERED APRIL 11, 1933

41,912.—*Title:* KWIK-SODER. For Solder for Leaky Radiators and Cracks in Blocks and Cylinder Heads. B-B CHEMICAL WORKS, INC., Atlanta, Ga. Published November 29, 1932.

41,913.—*Title:* INTERIALL. For a Washable Finish for All Interiors. BACKUS PAINT PRODUCTS, INC., Philadelphia, Pa. Published January 12, 1933.

41,914.—*Title:* SEA BEACH. For Canned Shrimp. BILOXI CANNING & PACKING CO., INC., Biloxi, Miss. Published April 29, 1932.

41,915.—*Title:* APPLEKRIT. For Apple Jelly. P. H. BOERGERMANN, Brooklyn, N. Y. Published February 3, 1933.

41,916.—*Title:* WINDEX. For Liquid Cleaner for Vitreous Surfaces. THE DRACKETT CHEMICAL COMPANY, Cincinnati, Ohio. Published January 23, 1933.

41,917.—*Title:* SWEET CREAM BUTTER. For Sweet Cream Butter. FLOODWOOD COOPERATIVE CREAMERY ASSOCIATION, Floodwood, Minn. Published November 23, 1932.

41,918.—*Title:* GENESEE. For Eggs. GENESEE COUNTY FRESH EGG PRODUCERS ASSOCIATION, also doing business under the name Genesee County Producers Ass'n., Flint, Mich. Published August 1, 1931.

41,919.—*Title:* STURDY FUT. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published April 1, 1931.

41,920.—*Title:* IL PRIMO. For Tonno. IL PRIMO OLIVE OIL & PRODUCTS COMPANY, Philadelphia, Pa. Published January 21, 1933.

41,921.—*Title:* CERTIFIED MINERAL SPRING WATER. For Mineral Spring Water. MANITOWOC PRODUCTS CO., Manitowoc, Wis. Published February 13, 1933.

41,922.—*Title:* SNOWFLAKE KOLOR KLOTH. For Colored Cotton Piece Goods. M. SNOWES & COMPANY, Chicago, Ill. Published March 15, 1932.

41,923.—*Title:* SWIFT'S. For Gelatin. SWIFT AND COMPANY, Chicago, Ill. Published January 23, 1933.

41,924.—*Title:* SWIFT'S SUPERWHIP. For Gelatin. SWIFT AND COMPANY, Chicago, Ill. Published January 23, 1933.

41,925.—*Title:* UPHOLSTERERS', CARPET AND LINOLEUM MECHANICS' INTERNATIONAL UNION OF NORTH AMERICA. For Awnings. UPHOLSTERERS', CARPET AND LINOLEUM MECHANICS' INTERNATIONAL UNION OF NORTH AMERICA, New York, N. Y. Published February 4, 1933.

41,926.—*Title:* WART REMEDY. For Wart Remedy. ELEANOR FRANCES VAUGHAN, College Point, N. Y. Published December 17, 1932.

PRINTS

REGISTERED APRIL 11, 1933

14,131.—*Title:* DAIRYLEA—DIRECT FROM OUR FARMS TO YOU. For Milk, Cream, and Buttermilk. DAIRYMEN'S LEAGUE CO-OPERATIVE ASSOCIATION, INC., Utica and New York, N. Y. Published July 15, 1932.

14,132.—*Title:* KNOCORD ELECTRIC IRON. For Electric Heated Sadirons. STANLEY ALEXANDER DUVALL, Edinburg, Tex. Published January 13, 1933.

14,133.—*Title:* KESTER JUNIOR MENDER. For Solder. KESTER SOLDER COMPANY, Chicago, Ill. Published December 13, 1932.

14,134.—*Title:* TUBE O. For Icing. TUBE-O FOOD PRODUCTS CO., Philadelphia, Pa. Published July 1, 1932.

REISSUES

APRIL 11, 1933

18,791. RECIPROCATING PUMP. ALBERT F. RUTHVEN, Amarillo, Tex., assignor to Leatherless Plunger Pump Corporation, Amarillo, Tex., a Corporation of Texas. Original No. 1,730,297, dated Oct. 1, 1929, Serial No. 167,709, filed Feb. 12, 1927. Application for reissue filed Feb. 19, 1931. Serial No. 517,085. 6 Claims. (Cl. 103—204.)



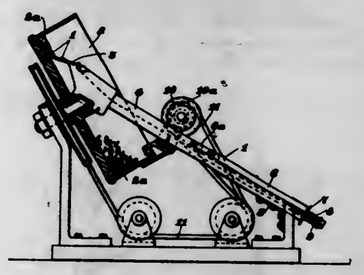
2. A pump of the character described comprising a barrel, a plunger operatively mounted therein and having a passageway therethrough, and cooperating grooves formed in the opposing surfaces of the plunger and barrel to resist the flow of liquid therebetween, each of said grooves having a lower side thereof at right angles to the axis of the plunger and an upper side thereof at an acute angle to said axis.

18,792. CONTAINER. HAROLD M. WARREN, St. Petersburg, Fla., assignor to Steel-Bound Container Corporation, St. Petersburg, Fla., a Corporation. Original No. 1,846,291, dated Feb. 23, 1932, Serial No. 486,751, filed Oct. 6, 1930. Application for reissue filed Mar. 24, 1932. Serial No. 601,064. 6 Claims. (Cl. 217—44.)



1. A flat comprising a fiber wall member, a thin flat metal binding strip located at one face and along one edge of said wall member, means holding said strip to said wall member, and a relatively shallow anchoring means adjacent the holding means presenting a relatively broad resistance surface substantially parallel to the longitudinal axis of the strip.

18,793. METHOD OF MANIPULATING MULTIPLE FASTENERS. JOSEPH B. PERRAULT, Watertown, Mass., assignor, by mesne assignments, to Heckless Fastener Company, a Corporation of Pennsylvania. Original No. 1,679,626, dated Aug. 7, 1928, Serial No. 185,634, filed Sept. 15, 1926. Application for reissue filed Jan. 20, 1932. Serial No. 587,880. 10 Claims. (Cl. 29—148.)



1. The herein described method of manipulating multiple fastener elements of the type described which consists in cutting through the bases of the elements to form slots, widening the slots by a spreading action, inserting a carrier tape, and thereafter compressing the walls of the slots upon said tape.

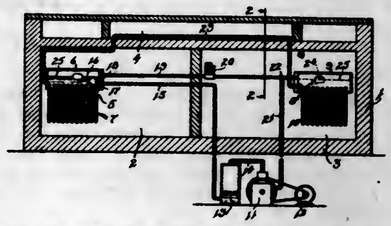
18,794. SPLICE BAR. EMANUEL WOODINGS, Oakmont, Pa., assignor to Woodings-Verona Tool Works, Verona, Pa., a Corporation of Pennsylvania. Original No. 1,547,854, dated July 28, 1925, Serial No. 1,552, filed Jan. 10, 1925. Application for reissue filed Feb. 16, 1933. Serial No. 657,070. 3 Claims. (Cl. 238—138.)



1. A reclaimed splice bar for railway rails having straight end portions with parallel top and bottom rail engaging surfaces which respectively have a flat engagement with the undersides of the rail heads and with the upper sides of the rail flanges, and having only its medial portion above the bolt holes re-shaped to form a crown local to the central portion of the bar and projecting above the contiguous straight top surfaces thereof, the said bar also having its bottom surface straight and flat throughout for flatly engaging the upper surfaces of adjacent rail flanges.

18,795. REFRIGERATING SYSTEM. FRANKLIN B. HUNT, Chicago, Ill., assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Original No. 1,746,896, dated Feb. 11, 1930, Serial No. 162,601, filed Jan. 21, 1927. Application for reissue filed June 27, 1930. Serial No. 464,411. 13 Claims. (Cl. 62—3.)

1. In combination with compartments, evaporators positioned within said compartments, means for supplying liquid refrigerant to said evaporators in series comprising a compressor and condenser, a liquid supply line connecting said condenser and the first of said evaporators, a second liquid supply line connecting said first evaporator and the second evaporator, means for conducting vaporized refrigerant from said evaporators to said compressor comprising a common return conduit and branch conduits connecting said evaporators with said common return conduit, and means independent of the rate of refrigerant

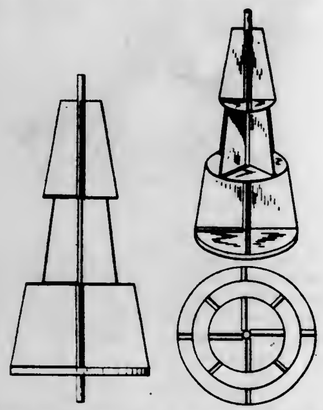


supply for limiting the maximum level of liquid refrigerant in each evaporator.

DESIGNS

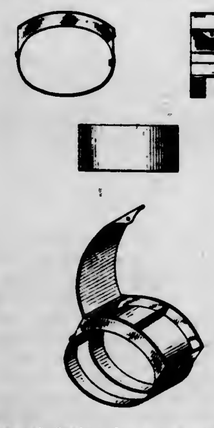
APRIL 11, 1933

89,585. DISPLAY RACK. FERDINAND F. DUGAN and WILLIAM S. CAMPBELL, Akron, Ohio. Filed Aug. 1, 1932. Serial No. 44,508. Term of patent 3½ years.



The ornamental design for a display rack as shown.

89,586. BRACELET. LEO GLASS, Brooklyn, N. Y. Filed Sept. 16, 1932. Serial No. 44,866. Term of patent 3½ years.



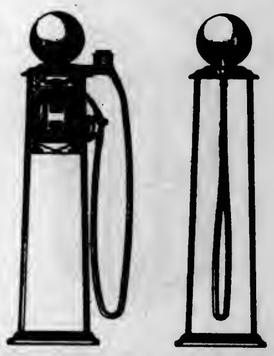
The ornamental design for a bracelet, as shown.

89,587. CLOCK CASE. JOSEPH GOTTLIEB, Jersey City, N. J. Filed Feb. 11, 1933. Serial No. 47,184. Term of patent 3½ years.



The ornamental design for a clock case, as shown.

89,588. FLUID DISPENSING APPARATUS. WILLIAM M. GRIFFIN, Fort Wayne, Ind., assignor to Wayne Company, Fort Wayne, Ind., a Corporation of Indiana. Filed Jan. 21, 1933. Serial No. 46,920. Term of patent 7 years.



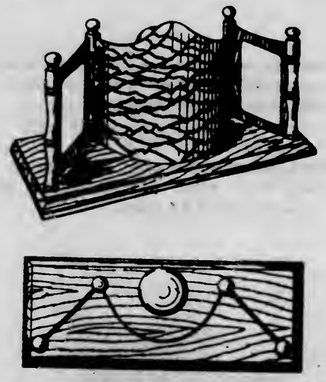
The ornamental design for a fluid dispensing apparatus as shown and described.

89,589. COMBINED CHARGING AND TESTING APPARATUS AND STOCK STAND. BENJAMIN F. W. HEYER, Belleville, N. J. Filed Dec. 1, 1932. Serial No. 46,276. Term of patent 3½ years.



The ornamental design for a combined charging and testing apparatus and stock stand, as shown.

89,590. COMBINED ELECTRIC LAMP AND PICTURE FRAME. HERBERT H. HOWLAND, Jeffersonville, Ind. Filed Oct. 3, 1932. Serial No. 45,197. Term of patent 14 years.



The ornamental design for a combined electric lamp and picture frame, substantially as shown and described.

89,591. KITCHEN CABINET. LEO L. MILLER, Frankfort, Ind., assignor to McDougall Company, Frankfort, Ind., a Corporation. Filed Feb. 25, 1932. Serial No. 42,997. Term of patent 3½ years.



The ornamental design for a kitchen cabinet, as shown and described.

89,592. TEXTILE FABRIC OR THE LIKE. HANS J. NEEGER, New York, N. Y., assignor to The Schwarzenbach Huber Co., New York, N. Y., a Corporation of New Jersey. Filed Jan. 18, 1933. Serial No. 46,870. Term of patent 3½ years.



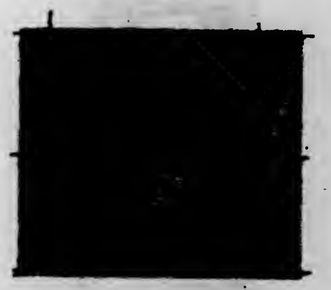
The ornamental design for a textile fabric or the like as shown.

89,593. WATCHCASE. CHARLES OPPENHEIM, Chicago, Ill. Filed Jan. 4, 1933. Serial No. 46,729. Term of patent 3½ years.



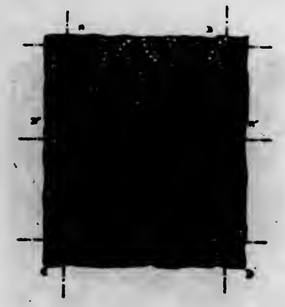
The ornamental design for a watchcase as shown and described.

89,594. TEXTILE FABRIC OR THE LIKE. WILLARD D. ROBERSON, New York, N. Y. Filed Feb. 3, 1933. Serial No. 47,094. Term of patent 3½ years.



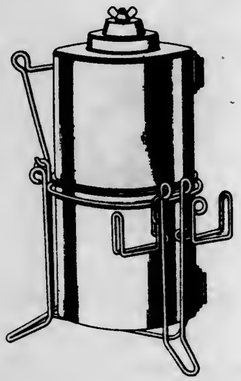
The ornamental design for a textile fabric or the like as shown and described.

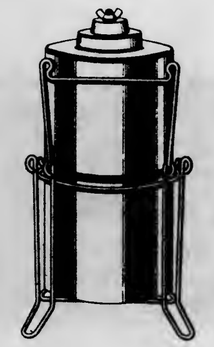
89,595. TEXTILE FABRIC OR SIMILAR ARTICLE. JACK SCHWEIZER, New York, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,719. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

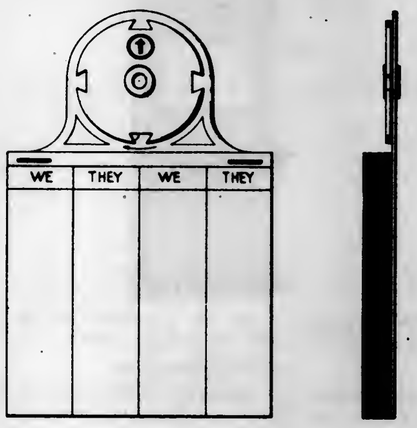
89,596. PORTABLE WATER SOFTENER. EDGAR M. SORENG, Chicago, Ill., assignor to Soreng-Manegold Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 5, 1932. Serial No. 44,530. Term of patent 3½ years.





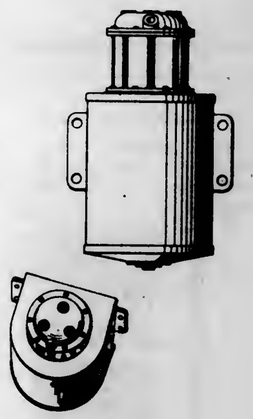
The ornamental design for a portable water softener, as shown.

89,597. COMBINATION INDICATOR AND SCORE KEEPING DEVICE FOR BRIDGE GAMES OR SIMILAR ARTICLE OF MANUFACTURE. MAX J. STRASBERGER, Brooklyn, N. Y. Filed Feb. 2, 1933. Serial No. 47,089. Term of patent 3½ years.



The ornamental design for a combination indicator and score keeping device for bridge games or similar article of manufacture substantially as shown.

89,598. FUEL FEEDING TANK. HORACE A. STUKES, San Antonio, Tex. Filed May 21, 1932. Serial No. 43,862. Term of patent 14 years.



The ornamental design for a fuel feeding tank as shown.

89,599. RADIOCABINET. JOSEPH TAYLOR, Chicago, Ill., assignor to Grigsby-Grunow Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1933. Serial No. 47,057. Term of patent 7 years.



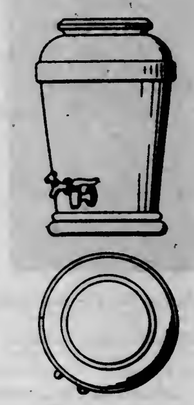
The ornamental design for a radio cabinet as shown.

89,600. EMBROIDERED TEXTILE FABRIC TRIMMING. EMIL G. ZULLIG, Bergenfield, N. J., assignor to Samuel Ellen, New York, N. Y. Filed Feb. 10, 1933. Serial No. 47,177. Term of patent 3½ years.



The ornamental design for an embroidered textile fabric trimming substantially as shown and described.

89,601. DISPENSING CONTAINER. ERNEST L. BYFIELD, Chicago, Ill., assignor to College Inn Food Products Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 21, 1932. Serial No. 45,438. Term of patent 3½ years.



The ornamental design for a dispensing container, as shown.

89,602. HAND MIRROR. CECIL H. LAWRENCE, Attleboro, Mass., assignor to Evans Case Company, North Attleboro, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1933. Serial No. 46,860. Term of patent 3½ years.



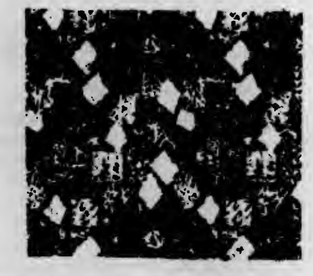
The ornamental design for a hand mirror, as shown and described.

89,603. TEXTILE FABRIC. PAUL MOUTON, deceased, Paris, France, by Jacques Mouton, administrator, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Feb. 1, 1933. Serial No. 47,069. Term of patent 3½ years.



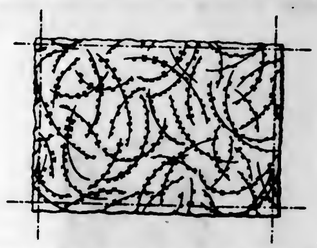
The ornamental design for a textile fabric, substantially as shown.

89,604. TEXTILE FABRIC. PAUL MOUTON, deceased, Paris, France, by Jacques Mouton, administrator, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Feb. 1, 1933. Serial No. 47,070. Term of patent 3½ years.



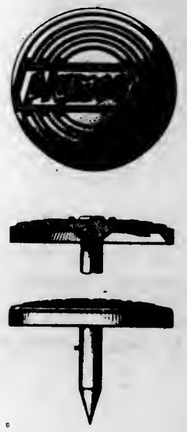
The ornamental design for a textile fabric, substantially as shown.

89,605. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Jan. 4, 1933. Serial No. 46,707. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown and described.

89,606. TRAFFIC MARKER. WILLIAM P. FAVORITE and HARRY A. MOLER, Detroit, Mich. Filed Dec. 9, 1932. Serial No. 46,404. Term of patent 14 years.

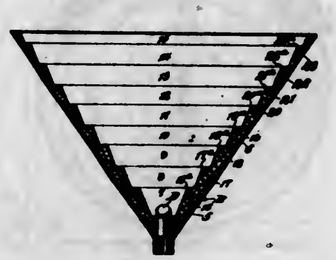


The ornamental design for a traffic marker substantially as shown and described.

PATENTS

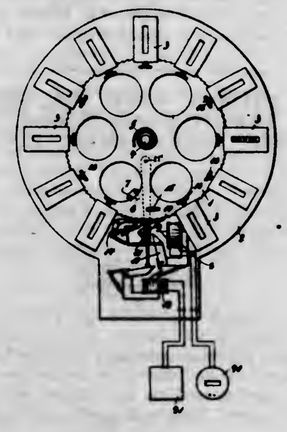
GRANTED APRIL 11, 1933

1,903,417. HEADLIGHT. JOHN AUDLEY GRANT, Atlanta, Ga. Filed May 25, 1931. Serial No. 539,939. 5 Claims. (Cl. 240—41.36.)



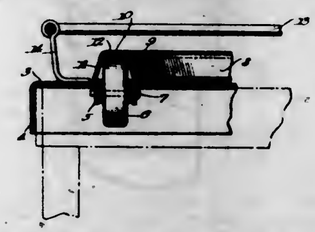
1. The combination with a pair of non-glaring headlights arranged side by side, each headlight comprising a conical reflector unit having its inner surface formed with a plurality of ring-shaped frustum surfaces disposed to form a series of annular continuous alternately arranged reflecting and nonreflecting surfaces, the ring-shaped frustum surfaces of one unit being respectively disposed in advance of the corresponding surfaces and shoulders of the other unit whereby the surfaces and shoulders of the respective reflector units will be arranged intermediately abreast.

1,903,418. INTEGRATING METER FOR GRADED MEASUREMENTS. FRITZ MAURITZ JACOBSSON, Stockholm, Sweden, assignor to Telefonaktiebolaget L. M. Ericsson, Stockholm, Sweden, a Company of Sweden. Filed Oct. 8, 1927, Serial No. 223,764, and in Sweden Oct. 9, 1926. 5 Claims. (Cl. 235—92.)



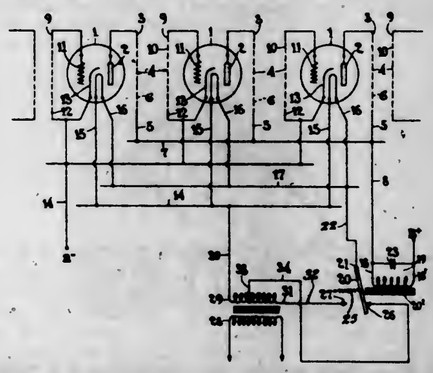
1. An apparatus for graded measurements of a fluctuating quantity comprising an integrating meter, a number of counters, means for the individual actuation of the said counters in accordance with the advancement of said meter, timed means for the automatic and periodical restoration of said actuation means to starting position at even fixed time intervals.

1,903,419. COMBINATION TABLE TOP AND ROTATABLE TRAY. ADOLPH KELLER, St. Louis, Mo. Filed Sept. 29, 1930. Serial No. 485,194. 13 Claims. (Cl. 45—26.)



1. In a device of the class described, a base member having depending flanges, rollers mounted on said base members, and a tray member having an annular flange rotatably supported by said rollers, said annular flange cooperating with said rollers to guide said tray member in rotation.

1,903,420. RADIO RECEIVING SYSTEM. ALEX BADMA, Buffalo, N. Y. Filed Jan. 23, 1931. Serial No. 510,816. 4 Claims. (Cl. 250—20.)

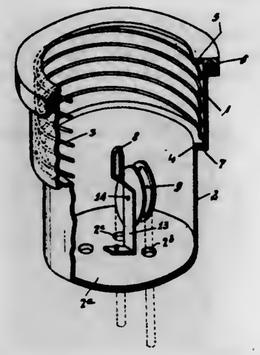


1. In a radio receiving system including an audion having a cathode and an anode coupled respectively to an input and an output circuit, a heater filament for heating the cathode thereof, a source of filament potential and a filament circuit connecting the filament to its source of potential, the combination of a source of reduced filament potential, a switch operable to connect either of the sources of potential to the filament, and electro-magnetic means interposed in the anode circuit and operative upon energization of the anode circuit to move switch means to connect the source of reduced filament potential to the filament circuit, and said means when said anode circuit is deenergized moving said switch means to connect the first named source of potential to the filament.

1,903,421. TOP MEMBER FOR FASTENING ILLUMINATING BODIES TO CEILINGS. OTTO BRENHARDT, Cassel-Wilhelmshohe, and ERNST VORMANN, Cassel, Germany. Filed Feb. 16, 1931, Serial No. 516,200, and in Germany Oct. 16, 1930. 1 Claim. (Cl. 240—67.)

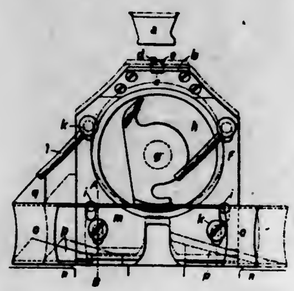
A support for suspending illuminating bodies from ceilings, comprising, in combination, two tubular members arranged telescopically with respect to one another in ver-

tical position; a compressive helical spring inserted between said members and being located at the inner circumferential surface of the upper tubular member, and supporting the upper member elastically upon the lower mem-



ber, thus permitting movement of the upper member down upon and over the lower member; and means for connecting the lower member with a ceiling hook, substantially as set forth.

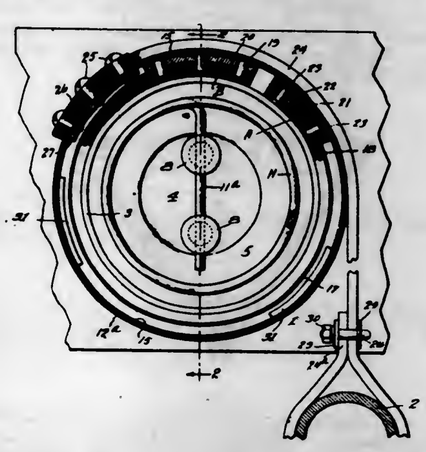
1,903,422. SOLING MACHINE. ADAM EHRESMANN and LUDWIG STREIBEL, Karlsruhe, Germany. Filed Apr. 16, 1931, Serial No. 530,610, and in Germany Apr. 28, 1930. 2 Claims. (Cl. 112—45.)



1. In a soling machine the combination of a machine frame having a bed plate, a presser foot, a stitch plate disposed below said presser foot and provided with a slot, a lever arm, the free end of said arm being disposed below said stitch plate, a knife forming both a feeding and a channeling tool, said knife being secured to the free end of said arm and projecting upwardly through said slot, a slider carrying said stitch plate and being disposed on the front of said frame and adapted to be moved thereon up and down, a second slider disposed in front of said frame and on said bed plate and adapted to be moved horisontally and to effect the vertical movement of the first said slider, and means for fixing the latter.

1,903,423. SHOCK ABSORBER. CLAUD H. FOSTER, Wickliffe, Ohio. Filed June 16, 1928. Serial No. 285,910. 13 Claims. (Cl. 267—10.)

1. A shock absorber comprising a brake drum adapted to be secured to one of two relatively movable vehicle members, a housing surrounding the said drum and spaced therefrom, a strap connected at one end to the exterior of said housing and adapted to be connected at its other end to the other vehicle member and arranged to engage the outer surface of the housing, a spring having one end anchored with respect to the housing and its other end connected to said housing, and a brake band on the said drum having one end secured to the housing and having its opposite end in proximity to such first-mentioned end, the second mentioned end of the brake band



substantially filling the space between the brake drum and the housing and the first mentioned end of the brake band being spaced from the brake drum, the said housing being mounted so as to be movable toward the brake drum through the pull of said strap upon said housing.

1,903,424. UPHOLSTERY PAD. LE-ROY V. GORDON, Cleveland, and LEO L. WILLIAMS, Cleveland Heights, Ohio. Filed June 26, 1930. Serial No. 463,966. 5 Claims. (Cl. 154—54.)



1. Upholstery padding comprising a backing sheet, a sheet of batting, bats between said sheets, and lines of stitching connecting said sheets between said bats.

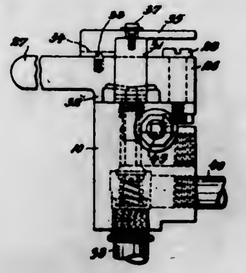
1,903,425. PADDING GUIDE FOR SEWING MACHINES. LE-ROY V. GORDON, Cleveland, Ohio. Filed Aug. 18, 1930. Serial No. 475,907. 11 Claims. (Cl. 112—151.)



1. A padding guide comprising a body having a parting portion at the front end thereof, a needle aperture to the rear of said parting portion, and flanges flared upwardly and outwardly away from said needle aperture.

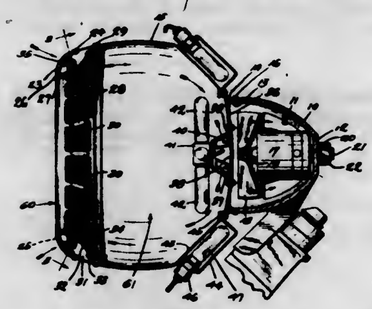
1,903,426. VALVE. WALTER HINS, East Cleveland, Ohio, assignor to The Ferro Machine & Foundry Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 20, 1930. Serial No. 462,680. 2 Claims. (Cl. 251—163.)

1. In apparatus of the character described the combination of a body having a fluid passage, a valve seat associated with said passage, a valve for cooperation with said seat and having an actuating stem reciprocable in said body, an operating member pivoted on said body and having means adapted to engage said stem, and means for indicating a position of said operating member which corre-



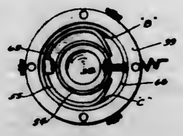
sponds with a desired valve opening, the last mentioned means including a member adjustably mounted with respect to said body, and a spring pressed detent movably mounted on one of said members for releasable engagement in a recess on the other of said members.

1,903,427. DRIER. WENDELL L. MARTIN, Cleveland, Ohio, assignor to The Martin Brothers Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 25, 1930. Serial No. 463,646. 10 Claims. (Cl. 34—26.)



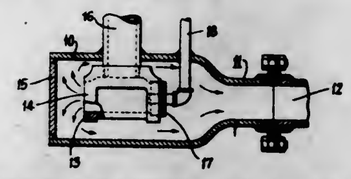
1. A drier, comprising: a casing having an opening therein disposed in the front of the casing into which an object to be treated is adapted at least partially to project; air inlet means disposed in the front of said casing and spaced laterally from said opening for establishing direct communication between the outer atmosphere and the interior of said casing; air outlet means; and means disposed within said casing for causing a current of air from the outer atmosphere in a zone adjacent said object to flow inwardly through said inlet means, rearwardly through said casing and outwardly through said outlet means.

1,903,428. ELECTRIC SWITCH. PATRICK J. MCMANAMAN, Cleveland, Ohio. Filed Nov. 3, 1931. Serial No. 572,780. 2 Claims. (Cl. 200—1.)



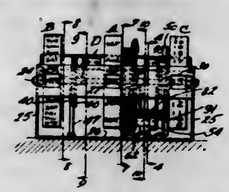
1. A switch comprising a casing, a pivoted pedal and its stem having tilting movements in said casing in various directions, a contact spring extending around in the casing and arranged to close contacts at different places around the outer wall of the casing, said spring having at one point a bent finger contact cooperating with one of the contacts around the outer wall, and means actuated by the tilting of the pedal to selectively close said contacts.

1,903,429. MIXING DEVICE. PAUL W. MERCHANT, Port Arthur, Tex. Filed Aug. 8, 1929. Serial No. 384,425. 2 Claims. (Cl. 261—75.)



1. A mixing device comprising an outer chamber having an outlet port, an inner chamber positioned within the outer chamber and having an outlet port disposed oppositely to the outlet port of the outer chamber, pipes extending thru the outer chamber to the inner chamber to form means for admitting fluids to the inner chamber, whereby fluids admitted to the inner chamber are commingled therein, discharged into the outer chamber in one direction and passed to the outlet port of the outer chamber in the opposite direction.

1,903,430. CALENDAR MECHANISM. MAURICE N. RICHTER and FRANK LOWITZ, New York, N. Y. Filed Mar. 26, 1932. Serial No. 601,439. 14 Claims. (Cl. 40—112.)

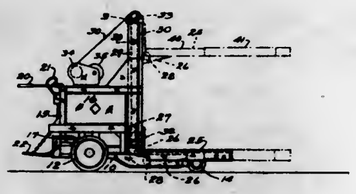


1. In a calendar mechanism, a rotatable date element, a rotatable month element which is advanced at the termination of each month by the movement of said date element, an oscillatory operating member for rotating said date element, means for controlling the stroke of said member to normally effect daily step by step movements of said date element, means for permitting a greater stroke of said member at the end of certain months to move said date element a greater than normal distance, and mechanism including a yielding connection between said date element and said month element which permits said date element to move through said abnormal distance without rotation of the month element until the termination of said greater stroke of said operating member, whereby said month element is prevented from premature advance and registration of the next month.

1,903,431. INDUSTRIAL TRUCK. EDWARD J. ABBE, Cleveland, Ohio, assignor to The Elwell Parker Electric Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 5, 1931. Serial No. 520,257. 3 Claims. (Cl. 187—9.)

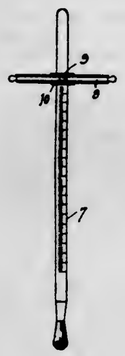
1. In an industrial truck, a main frame, wheels dirigibly arranged to support said frame, a vertical guideway mounted on said frame, a carriage slidably arranged for vertical movement in said guideway and having a forwardly extending member, means adapted to raise and lower said carriage, a load supporting platform rigidly secured to the upper surface of the forwardly extending member and having downwardly extending flanges embracing the sides

of the carriage member and the frame, a supplemental platform carried by the first named platform, the two platforms being arranged so that they may be slid one relative to the other to increase or decrease the overall



length of the combined platforms, and wherein the length of said platform may be increased or decreased, regardless of the position of the carriage and platform relative to the truck supporting surface.

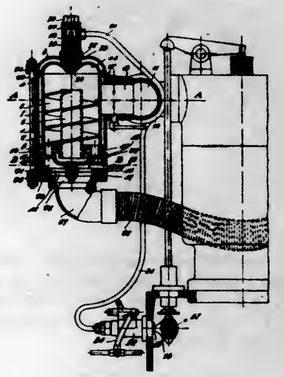
1,903,432. SURGICAL THERMOMETER. KAORU AKASHI, Los Angeles, Calif. Filed Jan. 3, 1931. Serial No. 506,408. 4 Claims. (Cl. 73—52.)



2. A surgical thermometer, comprising a thermometer body, a clamp member in frictional engagement with the thermometer body, a pivot shaft projecting from the clamp member, a handle operatively mounted on the pivot shaft, a rubber liner for the clamp, and projections on the clamp engaging with the handle in its operative position.

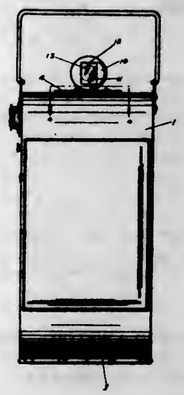
1,903,433. CARBURETOR. HELGE BJERING, Buenos Aires, Argentina. Filed June 24, 1931. Serial No. 546,590. 3 Claims. (Cl. 261—24.)

1. A carburetor for heavy oils comprising essentially a fuel pulveriser, a chamber connected to the intake tube of the engine and provided with an air entrance, in which chamber the fuel is pulverized and mixed with the air proceeding from said entrance, means for heating said chamber and consequently the mixture circulating therein, and an entrance for additional fresh air that adds the necessary air to the mixture leaving the chamber and entering the intake tube of the engine, said pulveriser being adapted to work at high pressure (approximately 3000 lbs.), and consisting in a conical headed valve which opens towards the mixing chamber by the pressure of the liquid, overcoming an opposing spring, so that the liquid enters the chamber by the space between the valve and its seat, thus forming a divergent conical jet, a crown being provided in the form of a conical comb placed in the passage of this jet in such a manner that a part of same is diverted



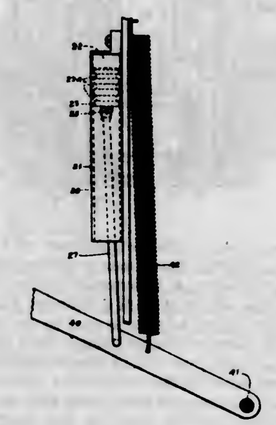
towards the center of the chamber by the teeth of the comb, the origin of the pulverization being situated in a somewhat projecting position in the chamber with respect to that part of the bottom surrounding the pulveriser.

1,903,434. COMBINED VIEW FINDER AND CATCH FOR CAMERAS. CARL A. BORNMANN, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y. Filed Mar. 22, 1928. Serial No. 263,923. 1 Claim. (Cl. 95—32.)



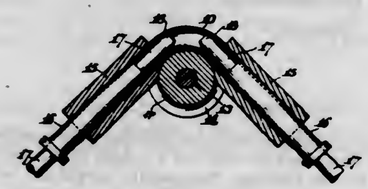
In combination, a camera comprising a body, a back therefor, a movable locking member on said back cooperating with fixed pins on said body for securing the same thereto in closed position, and a direct view finder on said locking member for operating the same, said finder comprising a tubular housing providing with aligned openings in each end and being in operative position when said back is closed and locked to said body.

1,903,435. AIR DASHPOT. FREDERICK G. L. BOYER, Dayton, Ohio. Original application filed Feb. 2, 1923, Serial No. 616,509. Divided and this application filed Jan. 23, 1925. Serial No. 4,847. 4 Claims. (Cl. 188—96.)



1. In combination with manually operated mechanism: an air dash pot comprising a cylinder having a gradually enlarging internal diameter towards the closed end thereof.

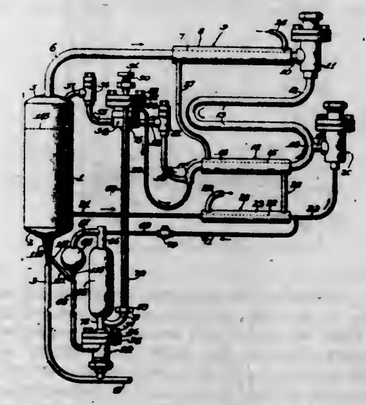
1,903,436. METHOD OF AND MEANS FOR THE MANUFACTURE OF PIPE FITTINGS. EDMUND BROWN, Palmyra, N. J. Filed July 3, 1931. Serial No. 548,519. 14 Claims. (Cl. 153—32.)



2. The method of making pipe fittings which consists in taking a section of metal tube having oblique ends, bending the same over an external curved form, and imparting pressure to both ends of the tube during the bending operation.

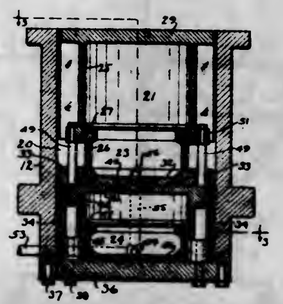
8. Means for forming pipe fittings from tubes comprising a curved form over which a section of tube is adapted to be bent, movable sleeves for engaging the ends of the tube during the bending operation, and bushings slidably mounted in said sleeves adapted to impart pressure to the ends of the tube during the bending operation.

1,903,437. REFRIGERATING DEVICE. JULES BUCHEL, New Orleans, La., assignor of one-half to the estate of Charles Louque, one-twentieth to Lester H. Rayner and one-twentieth to Joseph Frederick Dupuy, New Orleans, La. Filed Aug. 29, 1928. Serial No. 302,760. 21 Claims. (Cl. 62—5.)



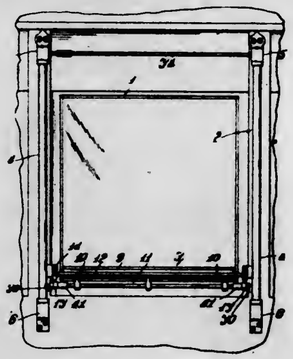
1. A refrigerating device comprising a generator, a freezer, an absorber, means for receiving absorbed material, and heat exchange means for forcing received material to the generator.

1,903,438. PRESS. ARTHUR A. BYRELEIN, Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Feb. 1, 1932. Serial No. 590,059. 6 Claims. (Cl. 267—1.)



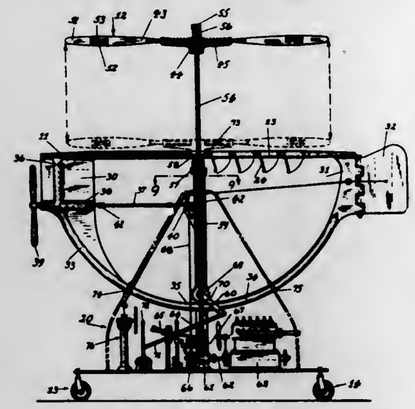
1. A yielding pressure cushion of the character described comprising cooperating fixed and movable elements forming a top fluid pressure chamber of variable capacity, additional fixed and movable elements forming a lower fluid pressure chamber of variable capacity, a fixed element of one of said pressure chambers being located adjacent a movable element of the other chamber, and a connection between the movable elements of said cushion provided externally of said chambers.

1,903,439. WINDOW WIPER. JOHN W. CAIN, Chicago, Ill. Filed Dec. 7, 1929. Serial No. 412,370. 7 Claims. (Cl. 15—251.)



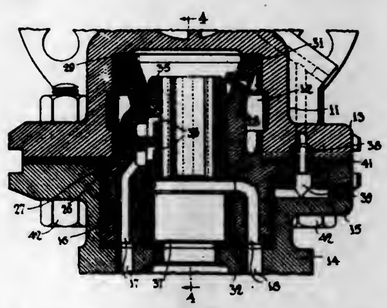
1. In a device of the character described, the combination of a window wiper structure comprising a squeegee, a rock shaft on which said squeegee is supported, bearing brackets for said rock shaft, slides rigidly connected with said bearing brackets, guiding means on the outside of the window for said slides, rods extending through said slides and carrying enlargements spaced from said slides, means connected to said rods and operable from the inner side of the window for imparting movements to said rods, and enlargements relatively to said slides, and means on one of said enlargements for positively rocking said shaft upon movement of the respective enlargement in a predetermined direction.

1,903,440. HELICOPTER DEVICE. WALTER R. CAMBRIDGE, Fort Bidwell, Calif. Filed Dec. 30, 1931. Serial No. 583,882. 4 Claims. (Cl. 244—19.)



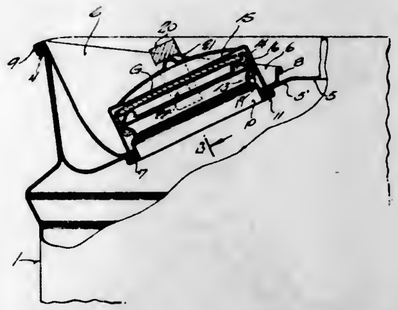
1. In a helicopter device of the class described, a body section, a shaft extending from said body section, a helicopter propeller slidably mounted on said shaft and embodying a splined hub having a plurality of blades radiating therefrom, means for normally holding said blades in flat positions, means for causing the same to change their pitch angle when in operation, including elements in the form of springs surrounding the shanks of the blades and cooperating therewith to cause the blades to normally lie flat when in inoperative positions and to assume a pitch angle of substantially thirty degrees when in operative positions.

1,903,441. AIR BRAKE VALVE HOUSING. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Sept. 2, 1931. Serial No. 560,805. 7 Claims. (Cl. 303—1.)



1. In a triple valve, the combination of a triple valve body having a bolting face from which extends an emergency piston chamber; a lower case having a companion bolting face from which extends a chamber alined with the chamber in the body, and counterbored to form a shoulder; an insert having a flange which seats on said shoulder and forms a continuation of the second-named bolting face; a compressible gasket interposed between the first-named bolting face on the one hand, and said flange and the second-named bolting face on the other hand; and compressible gaskets, one interposed between the end of the insert and the end of one chamber, and the other interposed between the other end of the insert and the end of the other chamber.

1,903,442. DISPENSING CONTAINER. ALFRED J. CHAMBERLAIN, Milwaukee, Wis. Filed Apr. 27, 1932. Serial No. 607,699. 6 Claims. (Cl. 221—11.)

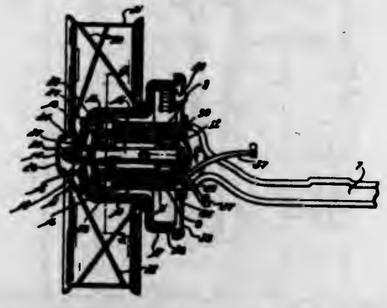


1. A dispensing container of the character described having the usual body portion and provided with a top formed with a portion inclining downwardly toward the periphery of the container, said inclined portion having an outlet opening, a separate spout formation interconnected with the container adjacent the outlet opening, an outlet fitting for the outlet opening, and a closure cooperable with the outlet fitting, said separate spout formation surrounding said outlet fitting.

1,903,443. VEHICLE WHEEL AND MOUNTING THEREFOR. JOSEPH DRZEWIECKI, Detroit, Mich. Filed Feb. 20, 1930. Serial No. 429,899. 4 Claims. (Cl. 280—96.3.)

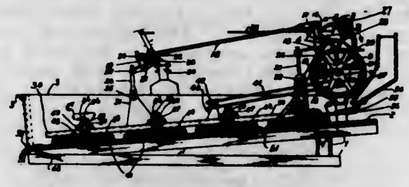
1. A wheel and axle unit of the class described comprising, a wheel assembly having brake mechanism of the internal expanding type including a brake drum formed with an axially extending reduced hub portion, a backing plate

cooperating with the drum to enclose portions of the brake mechanism, an axle having a forked end projecting through elongated slots in the backing plate and extending into the reduced hub portion aforesaid of the drum, a spindle extending axially of the wheel assembly intermediate the furcations of the forked end of the axle and having the



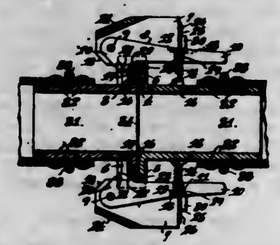
outer end secured to the wheel assembly, means for swivelly connecting the wheel assembly to the forked end of the axle including a sleeve journaled upon said spindle between the furcations aforesaid, and means for pivotally connecting the ends of the furcations to the forward end of the sleeve.

1,903,444. MILLING MACHINE. THEODOSE EARLE, Denver, Colo. Filed May 8, 1928. Serial No. 276,015. 6 Claims. (Cl. 209—6.)



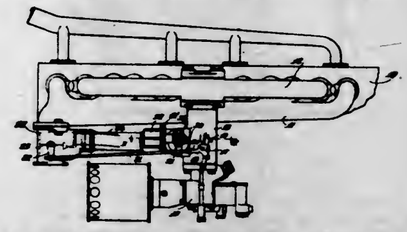
1. In a device for the disassociation of the separable constituents of a substance, including a stationary surface, a movable surface adapted to be reciprocated upon an outward and a return stroke and to rest upon the stationary surface during substantially one of said strokes, a frame adapted to be reciprocated and to raise and lower during such reciprocation, cushion means carried by the frame, and means carried by the movable surface and adapted to be engaged by said cushion means after a predetermined upward movement of the frame from its limit of travel.

1,903,445. HOSE AND PIPE COUPLING. CLEMENS JOSEPH ERNST, Minster, Ohio. Filed Oct. 11, 1930. Serial No. 488,108. 19 Claims. (Cl. 285—170.)



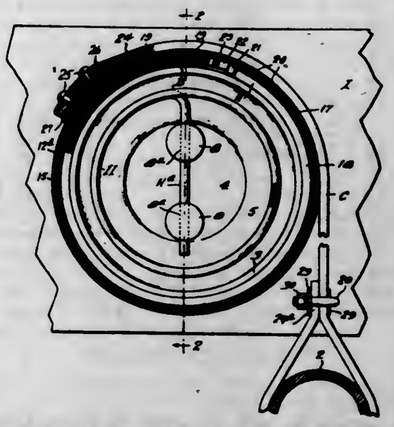
1. In a joint of the character described, a pair of opposed coupling heads each having an annular abutment flange, and a pivoted joint securing lever carried by one head and adapted to engage the abutment flange of the other head to hold the abutment flanges in engagement, the flange engaging portion of said lever being struck on an arc eccentric to the lever pivot and lying in a radial plane.

1,903,446. AUTOMATIC CONTROL OF EXHAUST GASES FOR MIXTURE HEATING. DAVID FIRTH, Flint, Mich., assignor to Marvel Carbureter Company, Flint, Mich., a Corporation of Illinois. Filed Apr. 6, 1931. Serial No. 528,217. 9 Claims. (Cl. 123—122.)



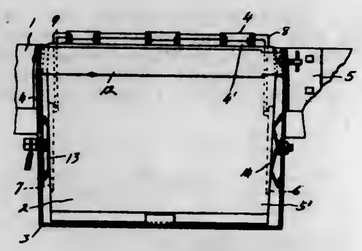
1. In a device to divert products of combustion from the exhaust conduit of an automobile engine to heat the combustible mixture, a heating chamber in heat exchanging relationship to the mixture conduit, said heating chamber having an entrance and an exit, passages connecting said entrance and said exit to said exhaust conduit, a bypass passage between said entrance and exit passages, a valve in said bypass passage, and a thermo sensitive element to operate said valve, a valve in said exhaust conduit, a throttle valve in said mixture conduit, and means inter-connecting said last mentioned valves for coincident operation.

1,903,447. SHOCK ABSORBER. CLAUD H. FOSTER, Wickliffe, Ohio. Filed June 7, 1929. Serial No. 369,038. 8 Claims. (Cl. 267—10.)



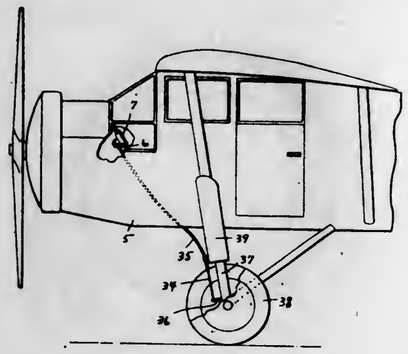
1. A shock absorber comprising an inner brake drum, a housing surrounding and spaced from said drum and radially movable with respect to the said drum, a brake band interposed between the housing and the drum, the said band comprising an inner friction band and an outer spring metal band, one end of the spring metal band pressing the adjacent end of the friction band against the drum, means connecting the opposite end of the friction band and spring band to the housing, there being a space normally provided between such attached ends of the said bands and the brake drum, a strap connected to the said housing, a spring connected to the housing and tending to resist turning of the housing by the strap, and anti-friction means interposed between the housing and the free end of the spring metal band.

1,903,448. BATTERY. JOHN E. FURTNEY, Detroit, Mich. Filed Mar. 5, 1929. Serial No. 344,404. 2 Claims. (Cl. 136—171.)



1. In combination, a battery casing of insulating material having substantially parallel top and bottom walls and having end walls extending between said top and bottom walls, the outer faces of said end walls inclining inwardly from points adjacent the top wall to the bottom wall, terminal plugs on the top wall, electrical contact plates wholly embedded in said side walls with their outer faces flush with the inwardly inclined outer faces of said end walls, and connections between said plates and plugs including straps embedded in the end walls and rising above the top wall, the connections between said straps and plates being embedded within said end walls.

1,903,449. FLIGHT INDICATOR. KENNETH EARL GATH, Harrisburg, Pa. Filed Dec. 14, 1929, Serial No. 414,112. Renewed Sept. 20, 1932. 1 Claim. (Cl. 161—15.)



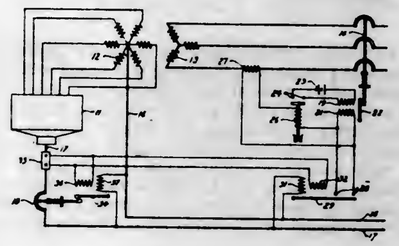
In combination with an aeroplane having a resilient landing gear, and a time recording mechanism carried by the aeroplane, a lever pivoted to the recording mechanism and having a part adapted to engage a part of the recording mechanism to atop the same, a spring for normally holding the lever out of engagement with said part, said lever having an inclined face on its tail end, a flexible member connected to a part of the movable portion of the landing gear and having its upper end arranged adjacent the inclined face of the lever whereby when the said movable part of the gear is moved upwardly the flexible member is moved upwardly so that its upper end will engage the inclined face of the lever and move the lever into engagement with a part of the recording mechanism to stop the same, and a flexible casing enclosing the flexible member.

1,903,450. CIGARETTE CONTAINER. LESLIE BEN GOODMAN, Port Arthur, Tex. Filed Sept. 2, 1931. Serial No. 560,835. 3 Claims. (Cl. 312—33.)



1. In a device of the class described, the combination of a casing provided in its back with a plurality of longitudinally extending elongated slots, flat spring separators fastened at their inner ends to the back of said casing and having their outer ends bowed in said elongated slots, a hinged door on said casing and provided with rearwardly and upwardly extending fingers corresponding in number to said flat spring separators, and said fingers engaging the bowed ends of said spring separators, substantially as shown and described.

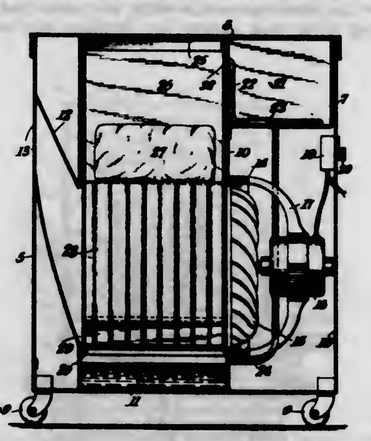
1,903,451. PROTECTIVE SYSTEM FOR ELECTRIC CURRENT RECTIFIERS. ALFREDO GRECO Zurich, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Dec. 3, 1929, Serial No. 411,380, and in Germany Dec. 3, 1928. 6 Claims. (Cl. 175—363.)



1. In a system of the character described, current-rectifying apparatus of the metallic vapor type, an alternating-current supply line therefor, a direct-current supply line, a circuit breaker for placing said apparatus into and out of effective relationship with respect to said alternating current supply line, a circuit breaker for placing said apparatus into and out of effective relationship with respect to said direct-current line; and means responsive selectively to a short-circuit condition in said system and operable upon occurrence of such condition to effect opening of said first-named breaker with a time-delay action, and to a backfire condition in said apparatus and operable upon occurrence of such condition to effect opening of both breakers substantially instantaneously.

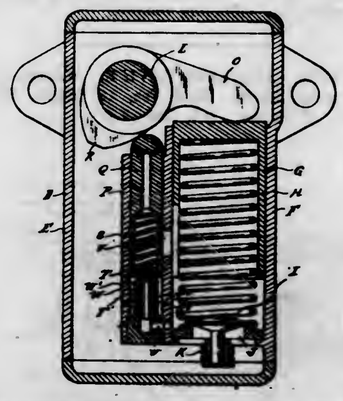
1,903,452. AIR CONDITIONING DEVICE. JOSEPH GRISON, New York, N. Y. Filed Sept. 6, 1932. Serial No. 631,787. 5 Claims. (Cl. 62—91.5.)

4. In an air conditioning device, a cabinet having apertures in the front wall thereof, a casing mounted in the cabinet, an upwardly directed air duct attached to and communicating with the casing and having its mouth in register with the apertures in the cabinet, a plurality



of spaced vanes mounted in the casing, means for chilling said vanes to a low temperature, and means for blowing a draft of air over the vanes.

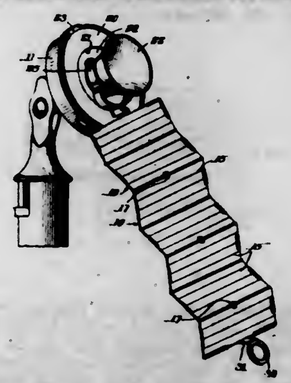
1,903,453. SHOCK ABSORBER. EARL G. GUNN, Racine, Wis. Filed Oct. 26, 1925. Serial No. 64,948. 18 Claims. (Cl. 267—8.)



1. The combination with a stationary member and an oscillatory member movable with negligible resistance in either of opposite directions from a neutral position with respect to said stationary member, of means reacting between said members but independent of any movement of said stationary member for resisting the return movement of said oscillating member from one side of its neutral position with an undiminishing force jointly determined by the amplitude and velocity of the free movement.

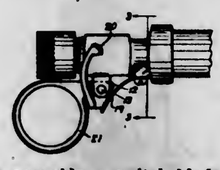
1,903,454. RECORD CARRYING OR MEMORANDUM DEVICE. DE WITT C. HARRIS, Lakeland, Fla. Filed June 20, 1930. Serial No. 462,586. 8 Claims. (Cl. 40—10.5.)

1. A device of the character described comprising a plurality of plates pivotally connected at their edges to form an extensible series movable from a compacted face to face relation, wherein the faces of the intermediate plates are concealed, to an extended relation wherein the corresponding faces of all of said plates may be seen from the same general direction, means on the plate at one end of the series to mount the device on a support, means on the plate at the other end of the series for grasping



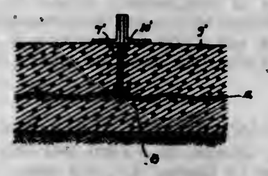
that plate to move the plates to their extended relation, and spring means acting between the adjacent plates to draw said plates toward their compacted relation.

1,903,455. ELECTRIC SWITCH. WALTER A. HEINRICH, St. Louis, Mo. Original application filed May 16, 1929, Serial No. 360,781. Divided and this application filed Aug. 4, 1930. Serial No. 473,000. 3 Claims. (Cl. 200—169.)



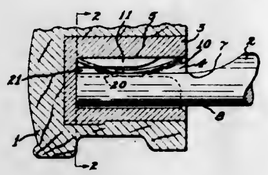
3. In a switch assembly, a switch blade, a contact portion near one end of the switch blade provided with opposite, lateral contact surfaces, a pair of spaced, parallel fixed contacts adapted to engage the contact surfaces on the blade, a blade-latching device including a pair of pivot arms disposed between the planes of said blade contact surfaces, and at one side of the blade contact portion, a pivot journalled in said arms, a one-piece bifurcate latch carried by said pivot and having its legs extended into overlying, spaced relation to said blade contact surfaces, terminal locking lugs on said legs, a latch-actuating lever extending between the legs of the latch and mounted for a limited rotation on the latch pivot, a latch spring carried at one side of the contact portion of the blade, and bearing against the central portion of the latch, and a keeper formed by a lateral projection on each of the fixed contacts, the projections adapted for releasable latching engagement by said locking lugs.

1,903,456. CONCRETE JOINT. JOHN N. HELTZEL, Warren, Ohio. Filed Nov. 19, 1926. Serial No. 149,442. 7 Claims. (Cl. 94—18.)



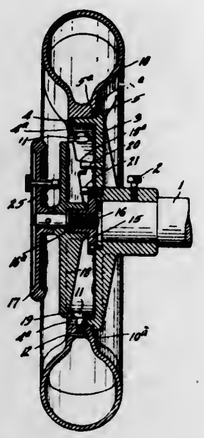
1. A concrete surfacing structure having reinforcement embedded therein below its upper surface, and a foraminous strip embedded in the concrete between said reinforcement and upper surface of the concrete to define the line of break of the concrete.

1,903,457. MEANS FOR FRICTIONALLY SECURING TWO PARTS TOGETHER. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Apr. 4, 1931. Serial No. 527,776. 8 Claims. (Cl. 287—53.)



6. The combination of a member having a socket for receiving a shaft, and a bowed spring in the socket, said spring having its ends engaged with one of the sides of the socket, and its intermediate portion arranged to engage the shaft, the socket being formed with shoulders extending toward the intermediate portion of the bowed part of the spring for limiting the compressing movement thereof.

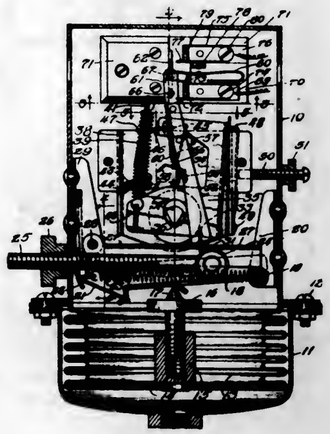
1,903,458. COLLAPSIBLE CORE. FRANK L. JOHNSON, Akron, Ohio. Filed Jan. 11, 1930. Serial No. 420,041. 12 Claims. (Cl. 154—9.)



1. A collapsible tire building form comprising a member adapted to be received on the driving shaft of a tire building machine, said member having an annular peripheral portion, a plurality of mating form sections received on the annular portion of said member, a spider journaled axially of said member, means for moving said spider circumferentially to and from engagement with the form sections, and means for moving said spider axially to clamp said form sections on the annular portion of said member.

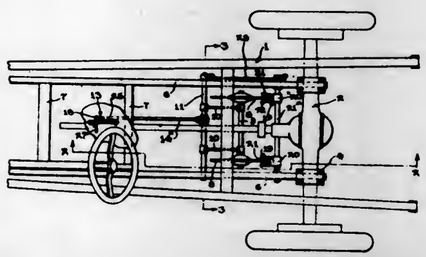
1,903,459. CONTROLLING APPARATUS. EMIL T. JOHNSSON, Chicago, Ill. Filed May 28, 1931. Serial No. 540,709. 9 Claims. (Cl. 200—83.)

1. In an apparatus of the character set forth, the combination of an actuating member having a bearing thereon, a bell crank lever engaging with said bearing and a fulcrum adjacent thereto, a spring tending to swing the bell crank lever around on its fulcrum, a vibrating tongue pivoted on said bearing, a swinging lever pivoted to the bell crank lever and having spaced apart tappets adapted to engage with the vibrating tongue, a spring connecting the upper end of the vibrating tongue with the lower end of the swinging lever and means for limiting the swinging



movement of the upper end of the vibrating tongue, the arrangement being such that when the bearing is raised it will swing the bell crank lever and cause the last named spring to swing the swinging lever and to cooperate therewith to swing the vibrating tongue.

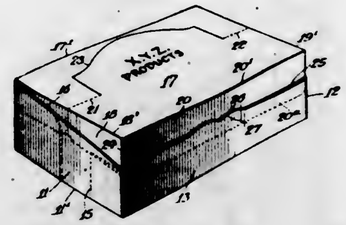
1,903,460. ANTISKID DEVICE. WALTER L. JONES, East Tawas, Mich. Filed Feb. 13, 1931. Serial No. 515,611. 6 Claims. (Cl. 188—5.)



1. In combination with an automobile, an anti-skid device, comprising anti-skid members for engagement with the road surface, arms for supporting said anti-skid members, an oscillatory shaft mounting said arms, a crank-arm on said shaft, a link pivoted to said crank arm, and a hand-lever operatively connected to said link for moving said discs into and out of engagement with the road surface at will, the connection between said hand-lever and said link being resilient.

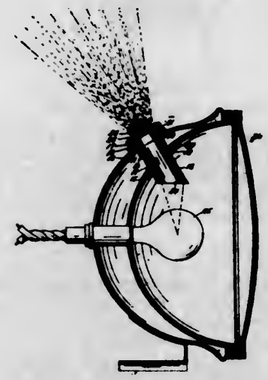
1,903,461. SHIPPING AND DISPLAY BOX. IRA C. KELLER, Winnetka, Ill., assignor, by mesne assignments, to Container Corporation of America, Chicago, Ill., a Corporation of Delaware. Filed May 10, 1928. Serial No. 276,529. 5 Claims. (Cl. 229—51.)

1. In a paper carton, a plurality of side walls, a cover supported by one of said side walls, a fastening flap along the unsupported edge of said cover, said flap having a cut-out in its mid-portion, said flap on the opposite sides of said cut-out being adapted for attachment to the inner surface of another of said side walls, said latter side wall having an extension projecting from its upper edge



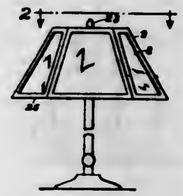
and adapted to cover said cut-out when the cover is closed, leaving a free space between said latter extension and flap for the insertion of an object to break the fastening connection between said flap and the side wall to which it is attached.

1,903,462. HEADLIGHT ATTACHMENT FOR AUTOMOBILES. WILLIAM A. KNOX, Los Angeles, Calif. Filed Dec. 26, 1931. Serial No. 583,307. 2 Claims. (Cl. 240—8.4.)



1. In an automobile headlight having an outer casing, an inner reflector and a lamp, a rearwardly directed cylindrical attachment extending through both the reflector and casing so that its inner end is in close proximity to said lamp and its outer end directed so that the light therefrom will illuminate the side of an automobile, said attachment being composed of an inner member extended through said reflector and having a shoulder integral therewith arranged to engage the inner wall of said reflector and also an outer member extended through said casing that is adapted to be screwed on the outer end of said inner member and having a head with an integral shoulder arranged to engage said casing to limit the inward movement of said outer member, and a colored crystal lens in said head.

1,903,463. LIGHTING FIXTURE. WILLIAM C. KOCH, Cheviot, Ohio. Filed Apr. 28, 1932. Serial No. 608,044. 10 Claims. (Cl. 240—108.)



1. A lighting fixture having in combination a lamp shade frame and panels therefor, means on the frame for supporting the shade panels, and self-latching means adapted to operate upon application of the panels to the frame for securing the panels in position thereon.

1,903,464. COLLAPSIBLE TUBE. HERMAN J. KONANZ, Grantwood, N. J. Filed Dec. 1, 1931. Serial No. 578,263. 2 Claims. (Cl. 221—60.)



1. A collapsible tube comprising a body provided at one end with a neck having an opening in its side wall and which neck has a cylindrical outer surface at the base of which is provided an annular seat and in which outer surface is formed a bayonet channel having an upstanding portion terminating short of the upper end of the neck and at the lower end of which upstanding portion is formed a circumferential downwardly inclined bayonet channel portion, a cap provided with a cylindrical interior to have a sliding fit with the neck, and a projection formed on the interior of the cap, there being formed in the cylindrical surface of the neck a branch channel extending from the upper end of the neck to the upright portion of the bayonet channel, whereby the projection on the cap may be passed through the branch channel into the bayonet channel during the assembly of the cap on the neck, the lower edge of the cap being beveled to cooperate with the seat at the base of the neck.

1,903,465. INK FOUNTAIN OR DIP WELL. CHARLES L. KUBISTA, Le Sueur, Minn. Filed Mar. 12, 1932. Serial No. 598,419. 8 Claims. (Cl. 120—68.)

1. In combination with an ink container, a well formed integrally from compressible material, the upper end of said well being open and sealed about its periphery to the upper portion of said container, the lower end of said

well being spaced above the bottom of the container substantially the distance to which it is ordinarily desirable to dip a pen and being provided with intersecting grooves



extending partly through the material, said grooves being adapted to form slits defining flexible flaps when breakage has been effected therealong.

1,903,466. PROCESS OF PURIFYING SULPHONIC ACIDS. HYMAN LIMBURG, Amsterdam, Netherlands, assignor, by mesne assignments, to The Flintkote Corporation, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 18, 1928, Serial No. 313,385, and in the Netherlands Nov. 11, 1927. 8 Claims. (Cl. 260—159.)

1. In a process for the purification of oil soluble sulphonic acids containing inorganic impurities the steps which comprise treating the material to be purified to convert the sulphonic acids into soaps, mixing the soap with water, treating the mixture with a volatile distillable basic substance to flocculate the soaps, removing the aqueous liquid containing said impurities and freeing the product of said volatile substance.

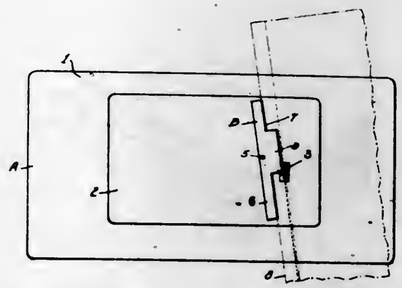
1,903,467. PROTECTOR FOR DRILL PIPE AND THE LIKE. JOHN W. MACCLATCHIE, Compton, Calif. Filed May 27, 1929. Serial No. 366,264. 7 Claims. (Cl. 308—4.)



1. A protector comprising a sleeve adapted to encircle a drill pipe, retaining means encircling the sleeve, and a wedge adapted for insertion beneath the retaining means for tightening the same so as to radially contract the sleeve for gripping engagement on the pipe.

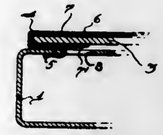
1,903,468. SHADE SEWING DEVICE. PETER P. MATT, St. Louis, Mo. Filed July 9, 1931. Serial No. 549,654. 1 Claim. (Cl. 112—153.)

In a sewing machine for stitching relatively stiff shade cloth and having a bed plate with cloth-feeding points and a needle cooperatively positioned thereon; means for guiding said shade cloth past said needle and holding it folded while so guided and comprising a plate having a cloth guiding edge adapted to receive and engage the folded edge of the shade during its travel through the machine and extending from a point in advance of said needle to a point beyond said needle, said guiding edge being at an angle to the path of movement of the cloth-feeding points so that the latter presses the folded edge of the shade



against said guiding edge, and an overhanging portion extending onto said folded shade from a point well in advance of said needle to adjacent the needle and spaced sufficiently above the bed plate to permit the folded cloth to pass thereunder and be held folded over a substantial area.

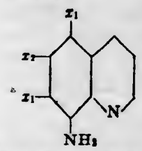
1,903,469. UPHOLSTERY ATTACHING DEVICE. ALBERT W. MEADER, Detroit, Mich., assignor of one-half to Robert Mitchell, Detroit, Mich. Filed May 31, 1930. Serial No. 458,861. 9 Claims. (Cl. 45—138.)



4. An upholstery pad having binding strips applied to selected edges thereof, integral members formed on said strips, and directed substantially parallel to the plane of said pad, in combination with a body member having slots for receiving said hook members.

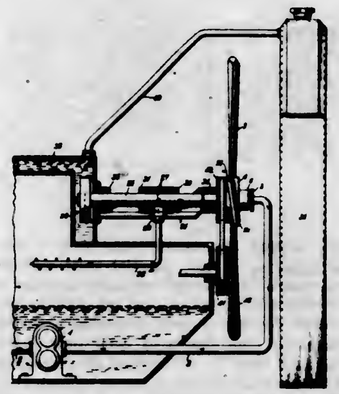
1,903,470. PROCESS OF MAKING 8-HYDROXYQUINOLINE COMPOUNDS. FRITZ MIETZSCH and HEINRICH KLÖS, Elberfeld, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed July 11, 1928, Serial No. 292,015, and in Germany Sept. 18, 1926. 5 Claims. (Cl. 260—38.)

1. The process which comprises heating an 8-amino-quinoline of the general formula



wherein the ω_1 means H, alkyl, halogen, and ω_2 means H, alkyl, halogen, hydroxyl, alkoxy, and wherein at least two of the symbols ω_1, ω_1, ω_2 represent hydrogen, in an aqueous solution in the presence of an acid reacting agent of the group consisting of dilute non-sulfonating sulfuric acid, hydrochloric acid, hydrobromic acid and zinc chloride in an autoclave to a temperature above 150° C.

1,903,471. FLUID HEAT EXCHANGE SYSTEM. MORTIMER T. MURPHY, Imlay, Nev. Filed Sept. 16, 1930. Serial No. 482,313. 14 Claims. (Cl. 257—260.)

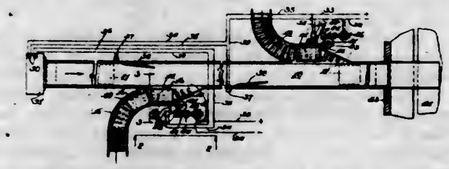


1. In a heat exchange system for fluids, in combination, a shaft mounted for rotation upon a suitable support, a fan having its hub portion mounted on the shaft and secured for rotation therewith, the fan being provided with a series of blades formed with hollow interior portions, the first blade only of said series being provided with an entrance opening through which fluid is admitted to its hollow portion, said blade having an opening in its wall adjacent the base thereof connected to an opening in the wall of an adjacent blade, to provide a conduit connecting the hollow portion of the blade with the hollow portion of an adjacent blade, the succeeding blades in the series having their hollow portions similarly connected to the hollow portions of the preceding blades, the last blade only in the series being provided with a passage at its base through which the fluid circulating through the fan blades is withdrawn.

1,903,472. PROCESS FOR THE EXTRACTION OF ETHYLENE GLYCOL OR ITS HOMOLOGUES. HERMANN OEHME, Cologne, Germany, assignor to Chemische Fabrik Kalk Gesellschaft mit beschränkter Haftung, Cologne-Kalk, Germany. Filed June 17, 1930, Serial No. 461,759, and in Germany Apr. 30, 1930. 4 Claims. (Cl. 260—156.5.)

1. A process for the extraction of ethylene glycol from an aqueous solution containing a metal chloride comprising agitating the solution in vacuum at temperatures between 250–400° C.

1,903,473. REMOTE CONTROL CONVEYER SWITCHING SYSTEM. SAMUEL OLSON, Oak Park, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Jan. 8, 1931. Serial No. 507,329. 5 Claims. (Cl. 198—20.)



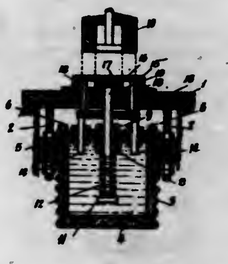
1. In combination with a main conveyer, a plurality of branch feeding runways adjacent the main conveyer and arranged to serve as storage for a plurality of load units, means adjacent each feeding runway for discharging load units one at a time onto the main conveyer; selective control means for actuating any of said load-discharging means of the respective feeding runways, and means extending into the path of travel of loads on the main conveyer, forwardly of the junction of the main conveyer with a corresponding branch feeding runway, adapted when engaged by a load on said conveyer for rendering the said discharging means temporarily inoperative.

1,903,474. ERASER ATTACHMENT FOR LEAD PENCILS. LOUIS J. RECKFORD, New York, N. Y.; Louise King Reckford, John King Reckford, and Louis J. Grumbach, executors and trustees of said Louis J. Reckford, deceased, assignors to American Lead Pencil Company, Hoboken, N. J., a Corporation of New York. Filed June 19, 1926. Serial No. 117,014. 1 Claim. (Cl. 120—38.)



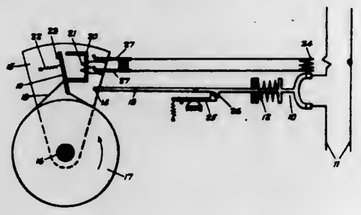
An article of manufacture consisting of an integrally formed ferrule whose wall is approximately concentric throughout to a common axis and which comprises an annular shoulder at the middle portion thereof, a pencil receiving portion of relatively small diameter extending from said shoulder in one direction and an eraser receiving portion of substantially larger diameter extending from said shoulder in the opposite direction; a pencil one extremity of which fits within said pencil receiving portion of said ferrule, being closely embraced by the wall thereof and permanently and immovably secured therein; and an eraser of substantially larger diameter than said pencil secured within and closely embraced by the wall of said eraser receiving portion of said ferrule and extending substantially beyond the outer extremity thereof.

1,903,475. PRESS FOR DRAWING SHEET METAL. CHARLES JOSEPH RHODES, Wakefield, England. Filed May 24, 1930, Serial No. 455,251, and in Great Britain Nov. 4, 1929. 13 Claims. (Cl. 113—46.)



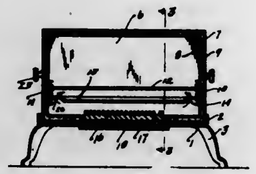
1. In a press for drawing sheet metal, a fixed die, a movable block in said fixed die, a closed chamber containing a liquid, a plunger connected to the movable block and passing into said chamber, a spring opposing the movement of said plunger in one direction, a drawring, a table supporting said drawring, and plungers passing into said chamber and supporting said table.

1,903,476. CIRCUIT-BREAKING APPARATUS. LUDWIG ROEBEL, Mannheim, Germany, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Mar. 9, 1928, Serial No. 260,408, and in Germany Mar. 12, 1927. 6 Claims. (Cl. 200—92.)



1. In electrical circuit control apparatus comprising a circuit breaker, constantly-operating motive means for actuating said circuit breaker, and means responsive to a predetermined condition of the electrical circuit and operable upon occurrence of such condition to effect mechanical connection between said circuit breaker and said motive means.

1,903,477. ELECTRIC OVEN. MAUDE M. ROLFSON, Portland, Oreg. Filed Mar. 29, 1932. Serial No. 601,794. 4 Claims. (Cl. 219—35.)



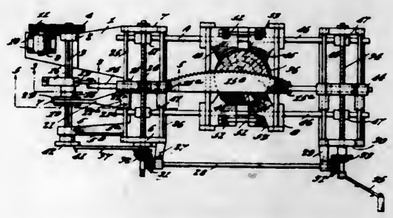
3. In a device of the class described, the combination of a leg-supported base, a superstructure adapted for being placed upon the base and for being supported thereby, either at its top, or bottom side, an oven comprising the primary portion of the superstructure, a hinged door adapted to one side of the superstructure, a hot plate adapted to one side of the superstructure, independent electric heating elements for supplying heat to the oven and for heating the hot plate, and an electric switch adapted for conducting electric current into each of the heating elements.

1,903,478. ADJUSTABLE MAIN CONVEYER. FREDERICK N. ROSS, Detroit, Mich., assignor, by mesne assignments, to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed June 20, 1930. Serial No. 462,620. 4 Claims. (Cl. 45—138.)



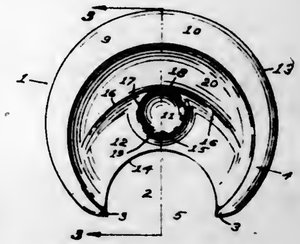
1. In a structure of the character described, a conveyer comprising a plurality of slats, a plurality of longitudinally spaced forming blocks secured to each slat, said forming blocks cooperating to form substantially continuous longitudinal ribs in the upper flight of said conveyer.

1,903,479. TREE SAWING DEVICE. ERNEST C. RUMOHR, Seattle, Wash. Filed Oct. 21, 1931. Serial No. 570,203. 2 Claims. (Cl. 143—63.)



1. A tree sawing apparatus comprising a pair of jaw blocks for engaging a tree, parallel rods carried by said jaw blocks, pairs of bearings on said parallel rods and carried on opposite sides of the jaw blocks, a pair of parallel shafts carried by said bearings by means of end blocks connecting the shafts of each pair together supported from said bearing, a threaded shaft associated with each pair of parallel shafts, a block threadedly mounted on each of said threaded shafts, a saw reciprocally carried by said threadedly mounted blocks, a motor for reciprocating said saw, and a ratchet mechanism connected with the motor for turning the threaded shafts and advancing the saw during the sawing operation.

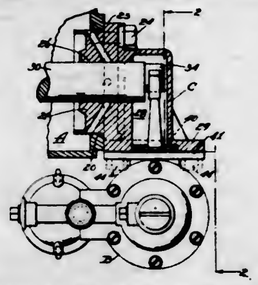
1,903,480. GAME APPARATUS. HERBERT E. RYAN, Clayton, Mo. Filed Nov. 9, 1929. Serial No. 405,890. 8 Claims. (Cl. 273—36.)



1. A portable golf putting cup having a substantially crescent-shaped upper face that inclines from the edge of the recess formed between the extremities of the crescent, said face having a golf hole defined by an inclosing circular ridge behind said recess, and an upwardly presented flange that is co-extensive with the outer margin of said upper face, the extremities of the crescent being equidistance from a line passing through the center of the golf hole.

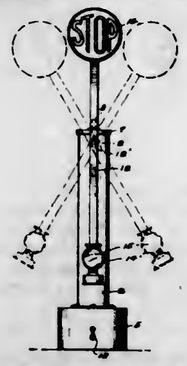
1,903,481. ENGINE-OPERATED PUMP. FRED G. SCHWEISTHAL, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed June 17, 1929. Serial No. 371,681. 6 Claims. (Cl. 103—218.)

1. In combination with an internal combustion engine having an aperture in its casing at which an essential operating member of the engine mounted for support within the engine casing is exposed for communicating motion, a pumping apparatus comprising a pumper actuator, and a casing in which said actuator is mounted, said casing being formed with an aperture at which said actuator is exposed for being actuated, a coupling casing having a cavity extending through it from an opening in said casing at one side thereof to an opening at another side thereof, said casing being arranged to be secured to the pump casing and to the engine casing with its said openings respectively mated to the openings of the pump casing and engine casing, said engine member and said pumper actuator, exposed at the engine casing and pump casing



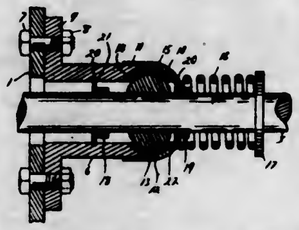
apertures respectively being arranged for direct operative engagement with each other when the coupling casing is thus secured to the pump and engine casing.

1,903,482. PORTABLE ROAD SIGN. HARVEY G. SENSENEY, Jr., Florence, S. C. Filed Dec. 5, 1932. Serial No. 645,816. 8 Claims. (Cl. 116—63.)



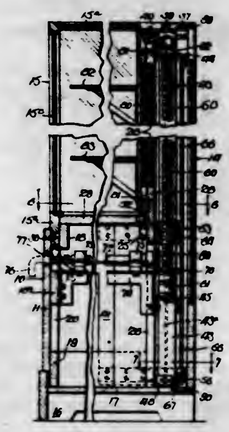
1. A portable signal device for use on roadways, comprising an upstanding casing having a base, a handle connected with the upper end of the casing, a transverse rock shaft carried by the casing, a motor mounted within the base, a longitudinal shaft extending through the casing and connected with the motor to be driven thereby, driving connecting means between the driving shaft and the rock shaft so that the rotation of the drive shaft is employed to rock the rock shaft, and a signal arm mounted upon the rock shaft to be oscillated thereby.

1,903,483. SHAFT MOUNTING. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed Aug. 2, 1926. Serial No. 126,522. 7 Claims. (Cl. 308—72.)



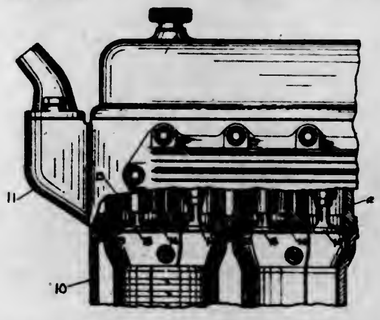
1. The combination with a rotatable shaft, of a mounting for said shaft comprising a supporting base and cap having complemental spherical surfaces, a frusto-spherical member fixed upon said shaft and universally movable relative to said base and cap, an initially compressed and shaped lubricant impregnated bushing of fibrous material comprising cooperating annular sections respectively compressed into and rigidly mounted in said base and cap and together forming a frusto-spherical bearing surface for direct engagement with said frusto-spherical member, an abutment upon said shaft and a coil spring between said abutment and cap for yieldably forcing said cap toward said base.

1,903,484. DISPLAY CABINET. MICHAEL SMETKO, Cicero, Ill., assignor to The Art Institute of Chicago, Chicago, Ill., a Corporation of Illinois. Filed May 5, 1932. Serial No. 609,380. 12 Claims. (Cl. 312—139.)



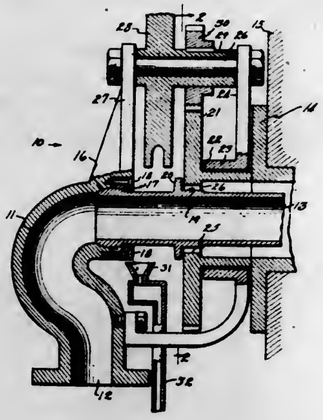
11. A display cabinet comprising a base having an upstanding back member, an open-bottom cover member slidably mounted on the back member, the back member including vertical guiding means for the cover, and means for raising and lowering the cover member on and relatively to the back member.

1,903,485. INTERNAL COMBUSTION ENGINE. GEORGE W. SMITH, Jr., Cleveland, Ohio, assignor to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 10, 1930. Serial No. 494,556. 11 Claims. (Cl. 123—188.)



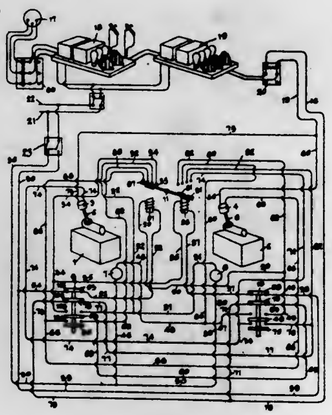
1. A valve seat unit for an internal combustion engine comprising an inner portion of metal having a coefficient of thermal expansion materially different than the metal of the part to which the unit is to be attached, and an external portion of metal having a coefficient of thermal expansion similar to the coefficient of expansion of the metal of the aforesaid part.

1,903,486. BOILER CLEANER. NORMAN L. SNOW, Detroit, Mich., assignor to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed Oct. 30, 1924. Serial No. 746,904. 18 Claims. (Cl. 122—392.)



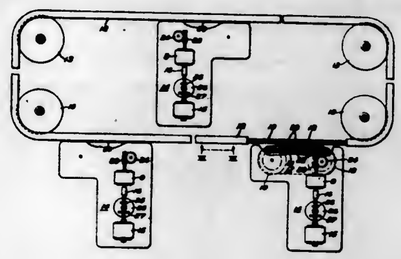
1. In a boiler cleaner, a blower head, a rotatable cleaner element, a gear mounted on the cleaner element for rotating the same, a driving worm meshing with the gear, and means for mounting said cleaner element, worm and gear for floating movement with respect to the blower head.

1,903,487. SOUND RECORDING AND REPRODUCING APPARATUS. JAY C. SNYDER, Toledo, Ohio. Filed July 7, 1930. Serial No. 466,099. 5 Claims. (Cl. 179—100.4.)



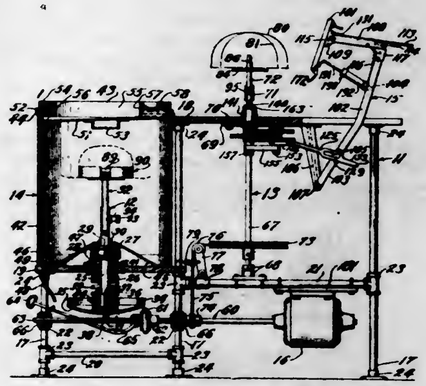
1. In a sound recording and reproducing system in combination with amplifying speaking circuit, a pair of phonographs, a source of supply of electric current for operating the motors of the phonographs, a pair of switches operated by the said phonographs, the switch operated by one phonograph for controlling the motor of the other phonograph to complete the circuit of the motor of the other phonograph, a second switch having fixed contacts in circuits in parallel to the contacts of the first named switches, means for operating the second named switch for completing circuits that by-pass the said first named switches, and means for causing the operation of the second named switches subsequent to the operations of the first named switches to permit opening of the first named switches and to alternately connect the phonographs to the amplifying speaking circuit.

1,903,488. CONVEYER SYSTEM. HARRY STIBBS, Philadelphia, Pa. Filed Dec. 28, 1931. Serial No. 583,479. 2 Claims. (Cl. 104—172.)



1. In a conveyer system, a conveyer chain, a driving mechanism engaging said chain, a motor, and a transmission unit connecting said driving mechanism and said motor, said transmission unit comprising a plurality of friction discs and means for changing the relative positions of said discs in response to a change in load on said motor.

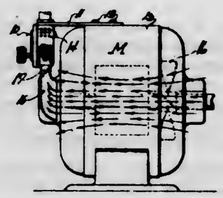
1,903,489. HAT CLEANING MACHINE. MORRIS A. WEITZMAN, Chicago, Ill. Filed Sept. 29, 1930. Serial No. 484,977. 6 Claims. (Cl. 223—26.)



1. Mechanism for ironing hats and the like comprising, a hat block, a spindle for supporting said block, means for rotating the spindle, an ironing plate arranged for movement about the hat block, a pivoted carrier for said ironing plate, transmission devices associated with said spindle, and a reciprocating link yieldingly connecting said carrier and said transmission devices, said link being longitudinally yieldable and constructed and arranged to provide a latch for holding the ironing plate in an inoperative position.

1,903,490. [WITHDRAWN.]

1,903,491. MOTOR PROTECTIVE APPARATUS. GUSTAV O. WILMS, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed May 14, 1928. Serial No. 277,446. 11 Claims. (Cl. 175—294.)



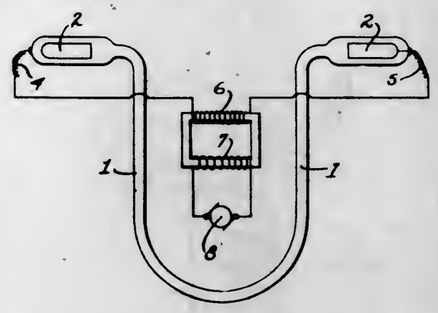
1. The combination with a dynamo electric machine having an enclosing housing, and a circuit for supplying electric current thereto, of means active upon operation of the machine for creating a draft of ventilating air within the housing, a thermally actuated protective device for interrupting the supply circuit and including a resistance heating element electrically connected with the supply circuit to receive current therefrom, and means mounting the protective device on the dynamo electric machine so that the draft of ventilating air after being influenced by the thermal condition of the motor contacts directly with the heating element, whereby the temperature of the heating element produced by the passage of electric current therethrough is rapidly effected by the presence and absence of ventilating air and also by the temperature of the ventilating air.

1,903,492. LUMINESCENT TUBE. GEORGES CLAUDE, Boulogne sur Seine, France, assignor to Claude Neon Lights, Inc., New York, N. Y., a Corporation of New York. Filed June 8, 1929, Serial No. 369,534, and in France Aug. 30, 1928. 6 Claims. (Cl. 176—122.)

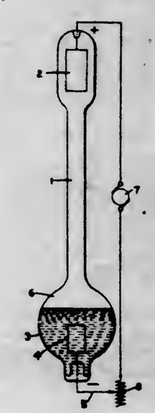
6. The method of obtaining a blended neon-helium light in which the spectra of both gases are blended which comprises blending neon with helium in the ratio of not over 15 per cent neon and discharging an electric current through the mixture.

1,903,493. GAS DISCHARGE LIGHT.. LEO L. BECK, Westfield, N. J., and AUBREY B. NOBLE, Lynbrook, N. Y., assignors, by mesne assignments, to General Tube Lights Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,679. 4 Claims. (Cl. 176—122.)

1. A cold cathode gaseous discharge luminous tube device comprising in combination an envelope, an anode and a cathode therein, a helium-neon gaseous mixture adapted to emit positive column white light containing neon in the proportion of 0.1 to 3 per cent, the said cathode comprising an active oxide.



1,903,494. WHITE LIGHT TUBE. LEO L. BECK, Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 12, 1929. Serial No. 413,471. 8 Claims. (Cl. 176—122.)

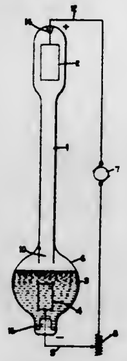


1. A positive column tube for emitting a light which does not distort the natural colors comprising a transparent envelope, electrodes within the envelope, and a mixture of helium, neon, and a gas selected from the group consisting of krypton and xenon within the envelope, said helium comprising from about 92.00 to 98.00 per cent of the gaseous contents of the tube.

1,903,495. WHITE LIGHT. LEO L. BECK, Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 17, 1929, Serial No. 414,629. Renewed Nov. 28, 1932. 5 Claims. (Cl. 176—13.)

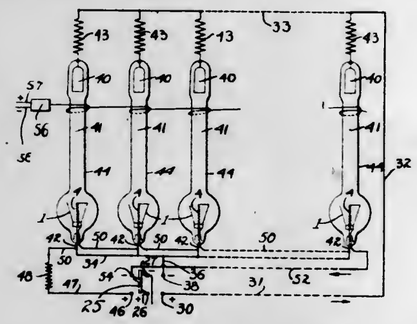
1. A gaseous discharge luminous tube device comprising in combination an envelope, an anode, a cathode com-

prising a pool of alkali metal, a gas mixture comprising helium and neon, the said device being adapted to operate



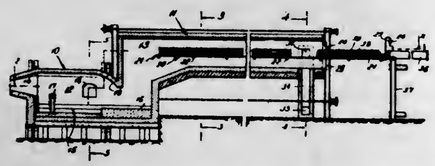
at a current density of 0.15 to 0.60 amperes per square centimeter of tube cross-section and the gas mixture containing neon in proportion of 3 to 9 per cent.

1,903,496. LIGHTING SYSTEM. LEO L. BECK, Westfield, N. J., assignor, by mesne assignments, to General Tube Lights Corporation, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1930, Serial No. 431,674. Renewed June 22, 1932. 7 Claims. (Cl. 176—124.)



1. In combination, a plurality of luminescent tubes, a plurality of cathodes and heating elements for said cathodes, and a series circuit comprising the said plurality of heating elements and a source of current of predetermined potential.

1,903,497. METALLURGY OF COPPER. HARRY H. ALEXANDER, Westfield, and ALEXANDER W. CARROLL, Elizabeth, N. J.; Henry L. Wheeler, jr., Elizabeth, N. J., executor of said Alexander W. Carroll, deceased, assignor to said Harry H. Alexander. Filed Feb. 5, 1931. Serial No. 513,488. 6 Claims. (Cl. 75—62.)



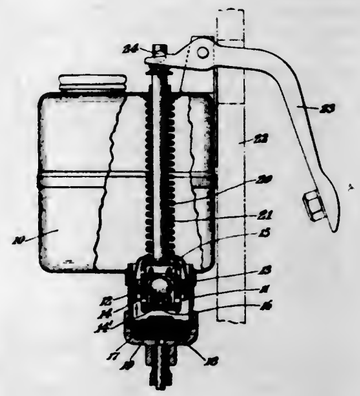
1. In a process for refining copper, the step of preheating a plurality of copper cathodes as they are progressively advanced to a refining furnace, and then depositing the preheated copper cathodes on a draining shelf above the level of a pool of molten copper maintained in the refining furnace.

1,903,498. METHOD OF MAKING WELTING. WALTER G. BARBOUR, Quincy, Mass., assignor to Perley E. Barbour, Quincy, Mass., doing business as Barbour Welting Company, Brockton, Mass. Filed Aug. 2, 1930. Serial No. 472,722. 4 Claims. (Cl. 12—146.)



1. The method of making composite welding fillets and strips which comprises removing an unlimited long thin grain ribbon from the face of an unlimited long grain fillet and then securing this ribbon as a progressive process to one face of an unlimited long ungrained fillet.

1,903,499. LUBRICATING INSTALLATION AND APPARATUS. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Filed Dec. 20, 1926. Serial No. 155,810. 27 Claims. (Cl. 184—7.)



1. A distributing installation for viscous liquids and more especially for conveying lubricant concurrently to the bearings to be supplied through a piping system having a plurality of outlet branches connected in multiple for concurrent emission, said system having near the inlet thereof a filter through which the lubricant or other liquid is forced under pressure exerted by a pump or other source of pressure, each of the branches having a controlling outlet including a strainer of texture so close as to intercept any solid particles picked up and entrained by the lubricant in the pipe line, yet sufficiently loose to pass with the oil any greasy constituent thereof that has been forced through the filter.

1,903,500. SYNTHETIC RUBBER AND PROCESS OF ITS MANUFACTURE. WILLIAM S. CALCOTT, Penns Grove, FREDERICK B. DOWNING, Carneys Point, and DONALD H. POWERS, Penns Grove, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 12, 1927. Serial No. 212,605. 41 Claims. (Cl. 260—6.)

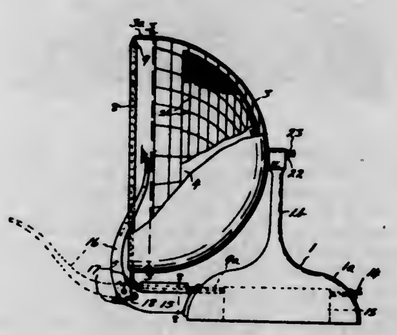
1. The process of making a synthetic rubber-like material from a polymerizable hydrocarbon which comprises coagulating an emulsion of a polymerizable hydrocarbon, said emulsion containing a resinous constituent.

25. A rubber-like product comprising a 2-phase emulsoid system, the disperse phase comprising particles of polymerized hydrocarbon, the degree of polymerization decreasing toward the center of said particles, and the external phase comprising a viscous liquid or plastic solid, said system showing, under the X-ray, a diffraction pattern of the type ordinarily considered characteristic of a crystalline body.

1,903,501. HYDROGENATION OF HYDROCARBONS. WILLIAM S. CALCOTT, Penns Grove, N. J., ALBERT S. CARTER, Wilmington, Del., and FREDERICK B. DOWNING, Carneys Point, N. J., assignors to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 24, 1930. Serial No. 438,658. 19 Claims. (Cl. 260—169.)

1. The process which comprises reacting under non-oxidizing conditions, a polymerizable nonbenzenoid acetylene polymer, in the presence of a hydrogenation catalyst, with hydrogen.

1,903,502. OPTICAL PERIMETER. MALCOLM D. CAMPBELL, Detroit, Mich. Filed June 23, 1930. Serial No. 462,953. 22 Claims. (Cl. 88—20.)

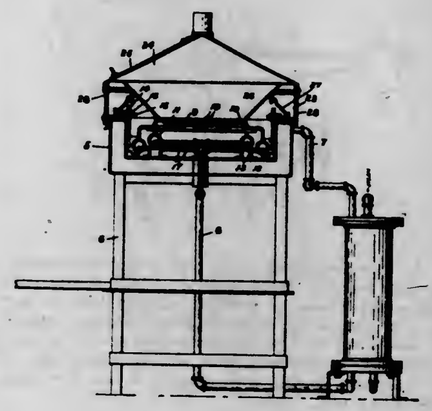


1. A spherically curved, dished shell for perimetric use, having upon its interior face a pattern comprising a plurality of small spaces alternately differing in color.

1,903,503. METHOD AND PROCESS OF EXTRACTING OIL AND MOISTURE FROM "FISH PRESS CAKE." WALLACE T. CONN, Washington, D. C., assignor to The Government of the United States. Filed Aug. 8, 1929. Serial No. 384,504. 4 Claims. (Cl. 99—11.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

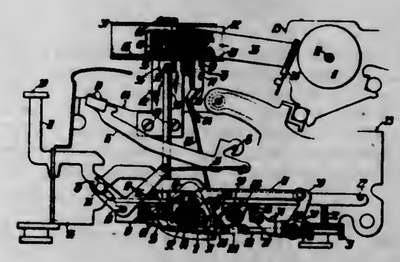
1. The process which comprises forming "fish press cake", upsetting at least a portion of the material in the fish cake so as to expose the oil particle and facilitate the penetration of a solvent, subjecting the same to a volatile solvent, removing the moisture, volatile solvent and oil, and converting the remainder into meal or the like.

1,903,504. APPARATUS FOR MELTING EXPLOSIVES. HOWARD S. DECK, Dover, N. J. Filed Oct. 1, 1929. Serial No. 396,467. 8 Claims. (Cl. 126—343.5.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



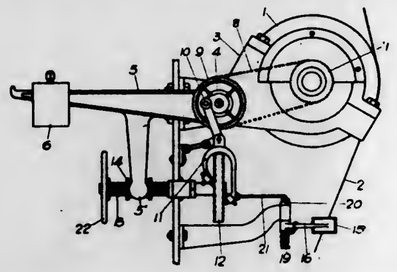
1. Apparatus for melting explosives comprising a double walled pan, means for circulating a heating medium between the walls of the pan, a fixed coil in the pan, a movable coil nested with respect to the fixed coil and means for heating the coils.

1,903,505. TYPEWRITING MACHINE. WILLIAM A. DOBSON, Bridgeport, Conn., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,580. 9 Claims. (Cl. 197—165.)



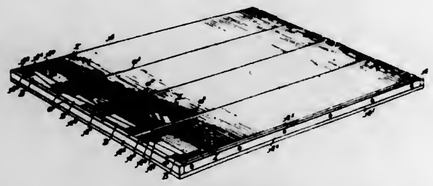
1. In a typewriting machine, the combination of type-operating keys, ribbon-spools, a gear-wheel connected to each spool, a worm connectible to each of said gear-wheels, a single drive shaft carrying one of said worms on each end, a swiveled mounting for said drive shaft, whereby, upon engagement of one of said worms with its associated gear-wheel, the other worm is swung out of engagement with its associated gear-wheel, crowding instrumentalities dependent upon the rotation of the drive shaft for engaging either worm with its associated gear-wheel, said instrumentalities including a ratchet-wheel on each end of said shaft and a normally idle crowding pawl for each ratchet-wheel, and means operable by unwinding movement of said ribbon for moving either of said pawls into engagement with its associated ratchet-wheel, to co-operate therewith to enable the shaft by its rotation to crowd itself to make a swinging movement upon its swiveled mounting, to cause the ribbon to become rewound upon the empty spool.

1,903,506. WIRE GUIDE. HILAND R. FARNSWORTH, Sandusky, Ohio, assignor to The Paper & Textile Machinery Company, Sandusky, Ohio. Filed Nov. 22, 1928. Serial No. 321,170. 9 Claims. (Cl. 74—51.)



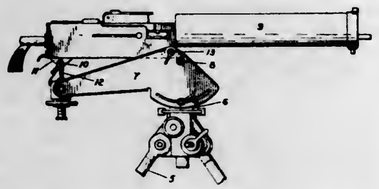
1. A wire guide for paper machines comprising an adjustably movable guide roll over which a wire travels, a stationary frame, a movable support for an end of said roll comprising a lever arm pivotally supported upon said stationary frame, and means driven by the roll for pivotally moving said lever arm to change the axial inclination of the roll with respect to the direction of travel of the wire.

1,903,507. PRINTING UNIT. FRANK C. FROLANDER, Elisabeth, N. J., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 21, 1930. Serial No. 490,141. 21 Claims. (Cl. 276—43.)



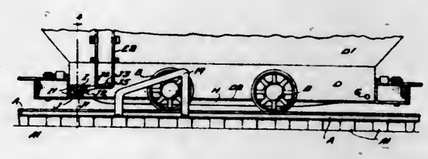
1. A galley adapted to be placed in a printing press, said galley containing printing slugs of substantially less than standard type height and presenting means rigidly secured to and forming a permanent part of the galley and adapted to anchor the individual slugs against vertical displacement, in combination with a chase adapted to support the galley at the standard type-high level.

1,903,508. MOUNTING FOR MACHINE GUNS. THOMAS J. HEAVEY, U. S. Army, Fort Riley, Kans. Filed Mar. 28, 1932. Serial No. 601,688. 2 Claims. (Cl. 89—40.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



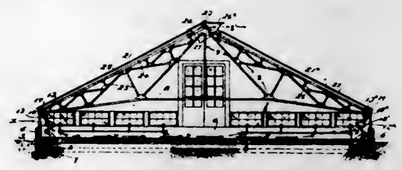
2. A gun including side plates, a trunnion block at the forward end of the side plates and having an aperture, the bottom of the trunnion block in rear of the aperture formed with a recess, and the side plates formed with aligned apertures on an axis passing transversely across the recess of the trunnion block.

1,903,509. RAILWAY CAR. HARRY W. JONES, Webster Groves, Mo., assignor to Sanford Investment Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 25, 1930. Serial No. 431,152. 16 Claims. (Cl. 105—253.)



1. In a car of the kind described, the combination with side walls, of a door located between said walls and having its forward end hinged on an axis which is horizontal and transverse to said walls, bearings on an axis which is horizontal and transverse to said walls and rearward of and below the rear end of the door when the door is closed, a door supporting rock-shaft resting in said bearings and having an upward extension adapted to be rocked under and against a part of the door when the door is closed, and means supported by said shaft outside the car and adapted to be engaged for rocking said shaft.

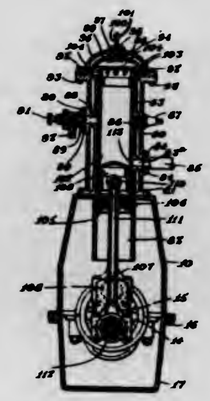
1,903,510. PLANT CONSTRUCTION. JOHN F. LABOON, Pittsburgh, Pa., and FREDERICK B. BARNS, New York, N. Y.; said Barns assignor to Donald Campbell, New York, N. Y. Filed Mar. 10, 1930. Serial No. 434,804. 1 Claim. (Cl. 34—41.)



In a sewage drying plant the combination of the lateral walls and roof enclosing the working space, such walls having a base section standing above the ground level and thereabove a substantially continuous horizontal series of sash openings in a location elevated substantially above the ground level, an enclosed base adapted to hold a bed of sewage sludge to be dried by evaporation, at a level substantially below said sash openings, and a series of air deflecting sashes in said openings set at an inward-downward incline and with the lower inner edges of such sashes spaced inwardly of the wall; whereby at the windward side natural air currents entering said openings are diverted by the sashes to flow at a descending slant on to the sludge bed and thence across the working space adjacent to the sludge bed and thence ascendingly for continuous discharge of vapors beneath the sashes at the lee side of the plant.

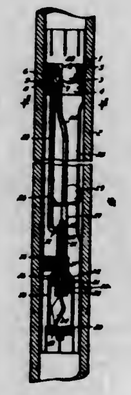
1,903,511. ENGINE. JOHN J. MCCARTHY, Malden, Mass. Filed Nov. 16, 1929. Serial No. 407,631. 6 Claims. (Cl. 123—50.)

1. In an internal combustion engine, in combination, a working cylinder, a compression chamber formed at the upper end thereof, means for admitting air to said chamber, a fuel inlet port formed in the wall of said working cylinder, means to inject fuel through said fuel inlet port at predetermined intervals, a hollow cylindrical piston slidably mounted in the working cylinder, an inlet port formed in the head of said piston and alternately communicating at predetermined times with the inlet port in the working cylinder and with said chamber, a combustion chamber arranged in the hollow piston below the head thereof, a spark plug extending through the wall of the working cylinder and a port formed in the head of said



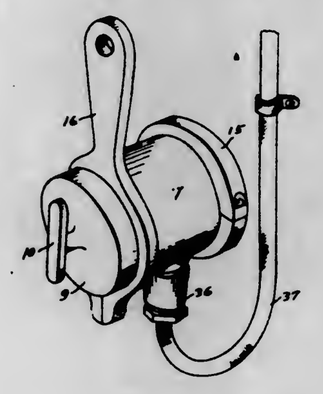
piston and registering at predetermined times with the spark plug to expedite ignition of the explosive material in the combustion chamber.

1,903,512. INSTRUMENT FOR RECORDING INCLINATION. WILLIAM I. MCLAUGHLIN, Piedmont, and RUPERT G. WEDEMEYER, Palo Alto, Calif.; said Wedemeyer assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 493,057. 7 Claims. (Cl. 234—1.)



1. An instrument for recording inclination including the combination of a plumb-bob and disc recording means, an actuating ball, means operable by said ball to actuate said bob and disc into recording engagement, and automatic means operable thereafter to actuate said bob and disc out of recording engagement.

1,903,513. MERCURY CONTACT SWITCH. JAMES N. MCTWIGGAN, U. S. Navy. Filed Dec. 7, 1931. Serial No. 579,550. 8 Claims. (Cl. 200—152.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



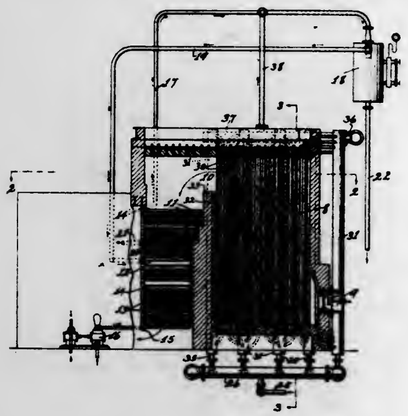
8. In an electric switch, a rotatably mounted body having space therein to contain an electrically conducting fluid, insulating means to divide said fluid into two masses in one rotational stage of said body, said means having through it a relatively small tortuous passage adapted to cause making and breaking of the contact between the two masses within said passage when said body is rotated to the proper position therefor, and means to make connection between said fluid and the exterior of said body.

1,903,514. WRENCH. HENRY H. MERRIMAN, Kalamazoo, and FRANK W. PICHE, Detroit, Mich. Filed Apr. 11, 1932. Serial No. 604,434. 5 Claims. (Cl. 81—60.)



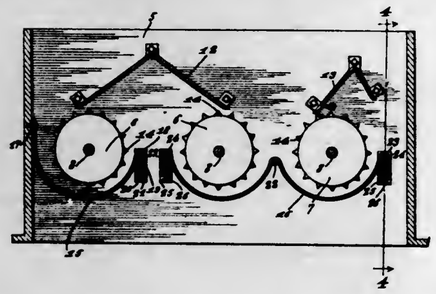
1. A wrench consisting of a hollow apertured handle, a spindle extending therethrough, a ratchet wheel on said spindle and rotatable therewith, a member rotatable around said spindle, said ratchet wheel and member being within the hollow handle, a spring actuated pawl engaging said ratchet wheel, a cord wound around said member and attached thereto, an element arranged exteriorly of said handle to which said cord is connected so that when the element is pulled the member is rotated, spring means for turning said member and rewinding said cord thereabout, and means carried by said member and cooperating with the ratchet wheel for rotating the latter as the cord is unwound, said means permitting rotation of the member independently of the ratchet wheel when said cord is being rewound.

1,903,515. BOILER. WILLIAM S. MONROE, Chicago, Ill. Filed Jan. 19, 1928, Serial No. 247,762. Renewed June 23, 1932. 11 Claims. (Cl. 122—235.)



1. In a boiler, a furnace, upright furnace wall tubes, upright containers located outside of said furnace with the ends of said tubes connected thereto, connections from the upper ends of said containers to a steam and water separator, and connections from said separator to the lower ends of said containers.

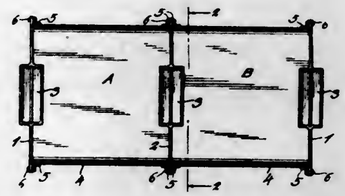
1,903,516. CORN SHELLER. SOLOMON N. REVIS, Ashland, Nebr., assignor to Vernon Elmer Revis, Ashland, Nebr. Filed June 1, 1931. Serial No. 541,433. 1 Claim. (Cl. 130—6.)



In a corn sheller, a body open at its top and bottom, a plurality of rolls journaled transversely in the body in spaced relation to each other in a horizontal row, foraminous concaves disposed below the rolls, one of the concaves being fixed intermediate thereof between two of said rolls with its ends yieldably supported, the other concave having one fixed end and a yieldably supported other end, feeder plates above the rolls forming a hopper and disposed for directing materials toward the fixed points of the concaves, and connections between the rolls for operating the same in unison.

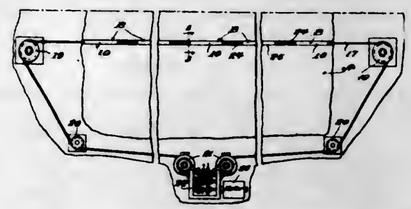
1,903,517. CELL CONSTRUCTION FOR FLOTATION MACHINES. JOSEPH P. RUTH, Jr., Denver, Colo., assignor to The Ruth Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 14, 1931. Serial No. 562,748. 8 Claims. (Cl. 209—168.)

1. In a flotation machine comprising a number of cells separated by partitions that form a common wall for two cells, each partition comprising a substantially rectangular plate having a portion of its area formed from two spaced walls whose sides and lower ends are joined to the plate whereby a compartment is formed that is open at the top, the inside surfaces of the end walls of the compartment having grooves for the reception of remov-



able separator plates that divide the compartment into two parts, the side walls having openings near their lower ends whereby liquid may flow from one cell to the next by flowing through one of the openings into the compartment and then over the separator plates and out through the opening in the other compartment wall.

1,903,518. STONE SAW. JOSEPH W. SIMMONS and JOHN A. SIMMONS, Salisbury, N. C. Filed Oct. 16, 1931. Serial No. 569,283. 2 Claims. (Cl. 125—12.)



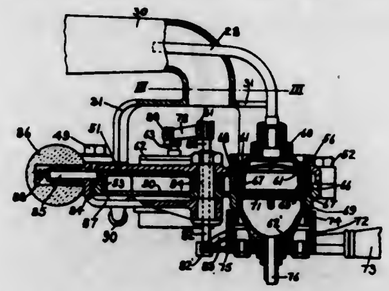
1. In a rigging of the character described, a flexible cable movably mounted with a stretch thereof for travel in a straight path, a plurality of cutting elements, each having a wedge-shaped groove in one side for receiving the cable and also having in its working face distributing channels disposed lateral to the direction of travel of said elements, a securing wedge engaged in the groove in each element to make fast the latter upon the cable without creeping of said element thereon, and spherical members movably confined in the grooves in the elements for cutting action upon a foundation.

1,903,519. APPARATUS FOR THE COMMERCIAL PREPARATION OF COFFEE BEVERAGES. GUIDO SNIDER, Milan, Italy. Filed Sept. 22, 1928. Serial No. 307,701. 1 Claim. (Cl. 53—3.)

An apparatus for the preparation of a beverage comprising a pair of fixed horizontal plates in spaced relation, a feed plate positioned between said fixed plates having a series of apertures therein, bushings located in said apertures, the upper fixed plate having a series of apertures therein with which the apertures in said feed plate are adapted to be aligned, a supply station connected with one of said apertures in said upper fixed plate, hot water and steam conducting means connected with another of said apertures in said upper plate defining a brewing station, discharge mechanism associated with another aperture in said upper plate defining a discharge station, the lower fixed plate having an aperture therein aligned with the aperture in said upper fixed plate above which is located the supply means, a percolator located in said last mentioned aperture, means for detachably securing said

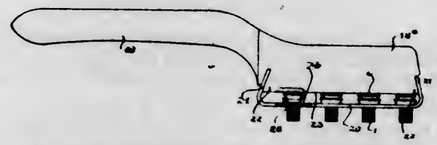
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percolator in position, a cam track upon said means for securing said percolator in position, said lower plate having another aperture therein in alignment with the



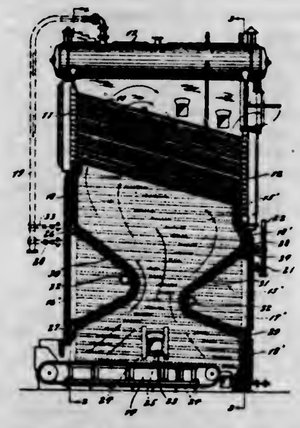
aperture in said upper fixed plate above which said discharging means are located and means operated by said cam track for operating said discharging means.

1,903,520. ABRADING BRUSH. CHARLES E. STURGIS, Rochester, N. Y., assignor of one-half to Waddel P. Andrus, Rochester, N. Y. Filed Aug. 13, 1930. Serial No. 474,908. 13 Claims. (Cl. 15—200.)



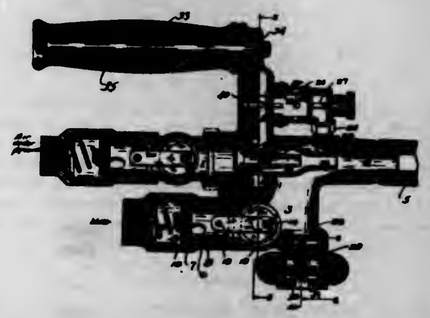
1. The combination with a tuft of coiled bristles, of a holding device surrounding the tuft and in the form of a cap forming a band exteriorly compressed around the tuft of bristles to clamp the same, said cap having a marginal expanded portion adjacent the top wall of the cap into which the ends of the coils are laterally deflected to spread the same, said top wall holding the ends of the coils under compression.

1,903,521. FURNACE. JAMES M. TAGGART, Port Washington, N. Y. Filed Mar. 6, 1926, Serial No. 92,675. Renewed June 23, 1932. 8 Claims. (Cl. 122—481.)



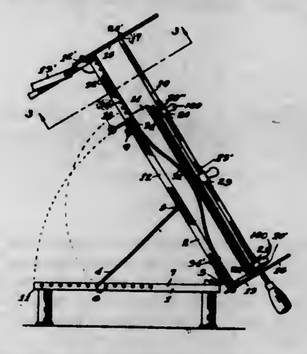
1. A furnace having a combustion chamber with a substantially rectangular cross section, horizontally disposed tubes in the side walls of the furnace, vertically disposed headers connected to the ends of said horizontally disposed tubes, vertically disposed bent tubes at the front and back of the furnace with their ends in the furnace wall and with at least a portion of the body portions of said bent tubes extending into the furnace space, a steam inlet and a steam outlet connected to all said tubes, and a source of steam supply connected to said inlet.

1,903,522. APPARATUS FOR PRODUCING A STREAM OF ATOMIZED LIQUID. WILLIAM C. UHRI, Jr., St. Louis, Mo., assignor, by mesne assignments, to Central Engineering & Sales Company, St. Louis, Mo., a Corporation of Missouri. Filed May 2, 1928. Serial No. 274,548. 5 Claims. (Cl. 299—84.)



2. In a tool of the class described, a receptacle for air under pressure, a nozzle leading therefrom, a passage having separately operable elements for alternately admitting atmospheric air and another fluid, a nozzle leading from said passage and surrounding said first mentioned nozzle and receiving the discharge from the latter, a chamber having an inlet for water and a port open to atmospheric air, and a nozzle leading from said chamber and surrounding said second mentioned nozzle.

1,903,523. COPY AND BOOK HOLDER. BONNIE E. VAN ALSTINE, San Francisco, Calif. Filed Dec. 8, 1930. Serial No. 500,896. 8 Claims. (Cl. 45—86.)

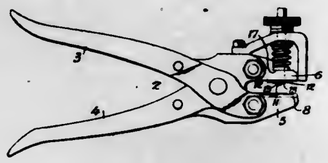


1. In a copy and book holder, a frame for supporting a sidewise-opening book thereon in reading position, a rod adapted for placing over the book hinge, and a transverse member slidable on the rod and having a depending flange for supporting the uppermost leaves of the book and preventing them from sagging.

6. In a copy and book holder, a substantially rectangular-shaped frame for supporting a book in reading position, leaf springs anchored to the frame and extending along the opposite sides thereof, and means for flexing the springs and holding them in flexed position whereby the

sections of the book may be raised into the same plane, said springs when in inoperative position providing a trimming for the frame.

1,903,524. HARDNESS TESTING DEVICE. ROBERT A. WEBSTER, Santa Monica, Calif. Filed Apr. 17, 1929. Serial No. 355,769. 10 Claims. (Cl. 265—12.)



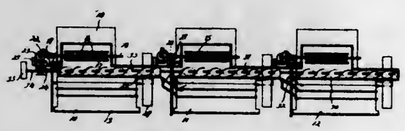
8. A hardness testing device comprising a support for the work, a support for an impression plunger, an impression plunger carried by the latter-named support and provided with a plurality of impression teeth of different effective lengths projecting therefrom, a spring for backing said plunger, means for regulating the resistance of the spring to recession of the plunger, and means for moving said supports toward or from each other.

1,903,525. BLEACHING COMPOUND. CYRUS B. WOOD, Takoma Park, D. C. Filed Feb. 12, 1932. Serial No. 592,662. 6 Claims. (Cl. 8—2.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

1. A method of bleaching textile materials which comprises subjecting the materials to the action of an aqueous solution of succinchlorimide.

4. A composition for bleaching textile material consisting of aqueous solutions of succinchlorimide.

1,903,526. APPARATUS FOR REDUCING PAPER STOCK. HENRY J. ANDREWS, Fort Wayne, Ind., assignor, by mesne assignments, to Black Clawson Company, Hamilton, Ohio, a Corporation of Ohio. Filed Apr. 11, 1927. Serial No. 182,862. 4 Claims. (Cl. 92—28.)



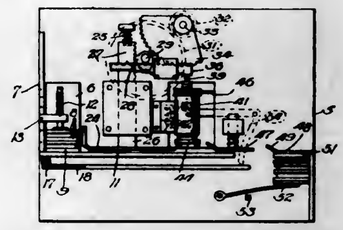
1. In an apparatus for reducing paper stock, a plurality of tub beaters having aligned screen elements, the screen elements having a continuous chute common to all the beaters, said chute having outlets for the pulp screened from one beater leading into an adjacent beater.

1,903,527. STRAINING AND PULP MAKING MACHINE. WALTER B. BARNHISEL, Los Angeles, Calif. Filed May 21, 1928. Serial No. 279,526. 2 Claims. (Cl. 146—175.)

1. The combination in a straining and pulp making machine comprising a conical strainer receptacle having the apex portion only perforated and a positively rotated conical pressing and stirring member, unconnected with the receptacle, said conical stirring member having a plurality of spiral grooves in the face thereof so constructed and arranged as to terminate at the lower end at right angles to each other adjacent the apex of the conical member and each groove having a surface facing downwardly and outwardly whereby the material in the receptacle is forced downwardly and outwardly through the strainer apertures.



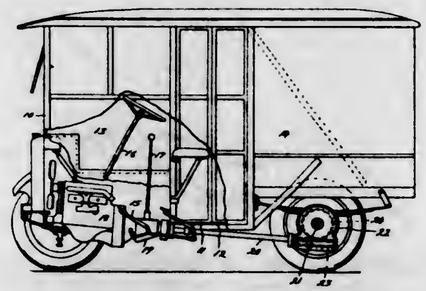
1,903,528. COMBINED SLUG GAUGE AND THICKNESS TRIMMER. CHARLES W. CURLE, San Francisco, Calif. Filed May 26, 1930. Serial No. 455,664. 2 Claims. (Cl. 90—19.)



1. In a slug trimming device, a support, a stationary guide positioned on said support, a movable guide positioned on said support and arranged parallel to said first mentioned guide, means for moving a slug between said guides, a slider secured to said movable guide, said slider having teeth formed thereon, a stepped gauge movably mounted on said support, teeth formed on said gauge, gearing interposed between the teeth on said slider and the teeth on said gauge, a cutter mounted on said support, a stop carried by said cutter, said stop being in alignment with one of the steps of said gauge, and means for retaining said stop in engagement with its step while said cutter is being actuated.

1,903,529. DROP CENTER DELIVERY VEHICLE. EDWIN R. MAURER, Detroit, and DONALD M. FERGUSON, Highland Park, Mich., assignors, by mesne assignments, to Continental-Divco Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 1, 1929. Serial No. 382,819. 9 Claims. (Cl. 180—54.)

1. A motor delivery vehicle having in combination, a body formed with an unobstructed transversely extending passage depressed to substantially curb level, driving means for the vehicle including, an axle connected to the body in rear of the passage and having its axis approximately at the floor level of the passage, a motor carried by the body in advance of the passage and having its crank shaft arranged above the level of the passage floor, and a propeller shaft in substantial alignment with said crank shaft and axle passing beneath the floor of the passage and operatively connecting the motor shaft and axle.

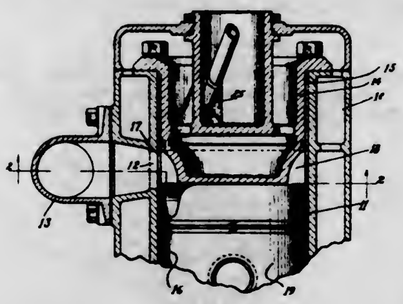


1,903,530. METHOD OF AND MEANS FOR MAKING ARTICLES FROM CELLULOID AND THE LIKE. WILLIAM MENDEL, Beverly, N. J. Filed Nov. 14, 1928. Serial No. 319,280. 7 Claims. (Cl. 18—51.)



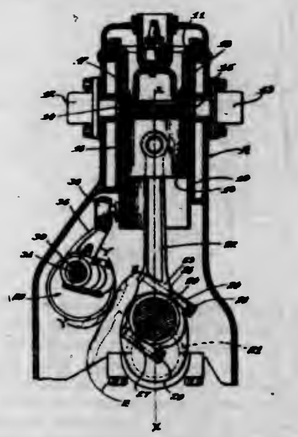
1. The method of softening celluloid, which consists in subjecting it to the action of a composition including acetone which has the capacity to penetrate and soften the celluloid, and an anhydrous diluent of the acetone which is miscible therewith but has no such effect upon the celluloid; continuing such action until the celluloid is softened, and terminating such action before the celluloid is dissolved in said composition.

1,903,531. INTERNAL COMBUSTION ENGINE. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed May 30, 1930, Serial No. 457,626. Renewed Apr. 6, 1931. 20 Claims. (Cl. 123—75.)



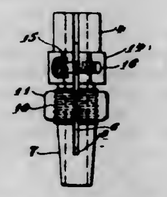
1. In a sleeve valve Diesel engine, a cylinder structure provided with an air intake port, sleeve valve means for said cylinder having a port cooperating with the cylinder port, a cylinder head structure having a portion depending within said cylinder and spaced from the walls thereof to form a sleeve pocket for receiving the upper end of the sleeve valve means, and means for deflecting the incoming air to impart directional forces to the air for causing the same to flow in a predetermined direction.

1,903,532. ENGINE. ANDRE J. MEYER, Detroit, Mich., assignor to Continental Motors Corporation, Detroit, Mich., a Corporation of Virginia. Filed June 8, 1931. Serial No. 542,728. 9 Claims. (Cl. 123—81.)



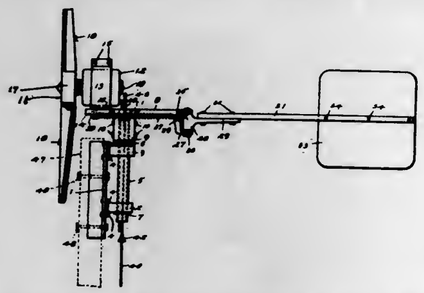
1. In an internal combustion engine, the combination of a cylinder, a piston, sleeve valve means arranged to have both axial reciprocation and circumferential oscillation, a crankshaft, a connecting rod intermediate the piston and crankshaft, a bearing cap for the connecting rod at its connection with the crankshaft, a valve operating shaft parallel to the crank-shaft, said valve operating shaft having a wobble crank, an operating connection between the wobble crank and said sleeve valve means, said bearing cap being offset for the most part to that side of the plane extending longitudinally of the engine containing the connecting rod axis opposite to the valve operating shaft, said valve operating shaft being closer to the cylinder axis than it could be save for such offset.

1,903,533. VALVE SEAT REAMER SLEEVE. HENRY C. PRESTON, Baltimore County, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed June 16, 1931. Serial No. 544,808. 1 Claim. (Cl. 279—1.)



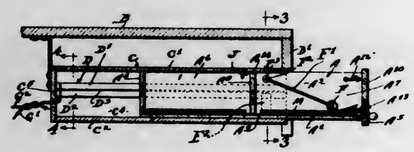
A valve seat reamer sleeve adapted to carry a reamer, the same being tapered at its lower end to form an arbor for the reamer, the central aperture of the sleeve being adapted to engage a valve seat surfacing pilot, the sleeve immediately above the taper being threaded and provided with a nut for backing the reamer off the seat, the sleeve being slotted in the direction of the axis for substantially its entire length downwardly to a point approaching the lower end of the taper, the slot extending upwardly to and through the upper end of the sleeve, the sleeve being provided immediately above the backing off thread with an angular slotted collar for engagement with a handle or wrench, said collar being bored in a direction which is substantially tangential to the pilot, and threaded to receive a screw which engages the sleeve on both sides of the slot and a screw in said bore for adjusting the diameter of the sleeve to the pilot.

1,903,534. WIND DRIVEN ELECTRIC POWER PLANT. GILBERT A. RIME, Northwood, N. Dak. Filed July 15, 1930. Serial No. 468,121. 1 Claim. (Cl. 170—48.)



A power plant comprising a standard, a shaft rotatably supported in vertical position in said standard, a horizontally disposed head secured to the upper end of said shaft, a vane fixed to said head, a second vane pivoted to said head and disposed at right angles to the first vane, a pair of laterally extending arms secured to said second vane, a spring engaging one of said arms and said head, a split clamp upstanding from said head in substantial alinement with said second vane, a propeller, and means disposed in the clamp for rotatably supporting the propeller on the head, said clamp comprising a base portion, means for securing the base portion to the head, complementary clamping arms extending upwardly from the base portion and engaging about said latter means and terminating thereabove in vertical ears, and means for drawing the ears together to tighten the said latter means in the arms.

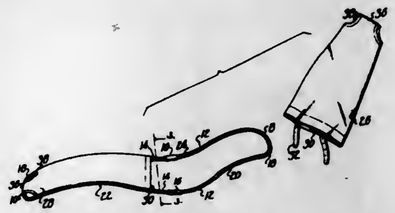
1,903,535. CASH DRAWER ALARM DEVICE. GEORGE T. SCOTT, Los Angeles, Calif. Filed Apr. 15, 1929. Serial No. 355,256. 1 Claim. (Cl. 200—52.)



In a cash drawer, a bottom forming an electrical contact, conductor guides, conductor rails on the drawer slidable in said guides, whereby the drawer is slidably mounted, a conductor rod extending across the drawer and secured at one end to one of said rails but not to the other rail, a conductor connecting said other rail and said bottom contact, and a second contact hingedly mounted on said rod for resting upon money placed within the drawer and for resting upon said bottom contact when money is removed from the drawer.

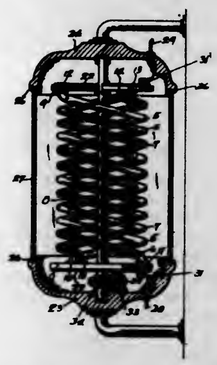
1,903,536. STRETCHER. FRED B. SKINNER, Coffeyville, Kans. Filed Sept. 19, 1931. Serial No. 563,697. 1 Claim. (Cl. 5—82.)

A stretcher including a tubular frame comprising a pair of U-shaped separable members, each having arms bent upwardly and then downwardly from each end of the frame, one of said members having sleeves on the ends of its arms and adapted to slidably receive the ends of the arms of the remaining member, a pair of sack-like covers having open inner ends whereby the covers may be sleeved over opposite ends of the frame to bring the inner end edges of said covers into abutment at the middle of the frame, and closed outer ends to engage the end members of the frame, each of said covers having corner portions at the outer ends of said covers cut away to permit a portion of the frame members to protrude from the covers, and cooperating means at the inner



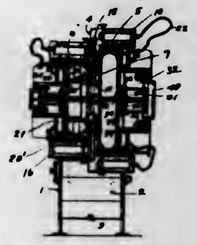
end edges of the covers for securing said covers together on the frame, said means also preventing the separation of the frame members.

1,903,537. ILLUMINATED SIGN. FRANK C. SUTLIFFE, San Francisco, Calif. Filed June 12, 1929. Serial No. 370,284. 10 Claims. (Cl. 40—126.)



1. An illuminated sign comprising a plurality of illuminating elements disposed in parallel windings and connected in series with each other; rotating means to carry said illuminating elements as a unit; means to rotatably support said rotating means; and means outside the space surrounded by the tubes to connect said elements to a source of electricity.

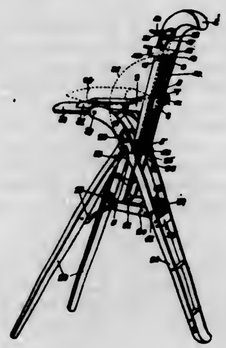
1,903,538. TIRE VULCANIZING MACHINE. KARL K. A. THORSEN, San Francisco, Calif. Filed Oct. 29, 1928. Serial No. 315,628. 14 Claims. (Cl. 18—18.)



5. A vulcanizing machine comprising a body member having walls therein defining a tire receiving recess therein and having a heating jacket in the walls defining

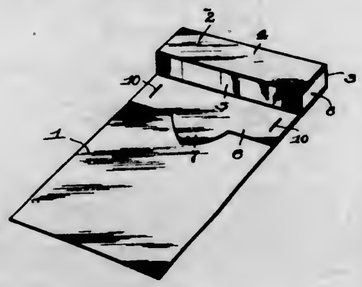
said recess, a mold member hingedly and bodily slidably connected with said body member and arranged to extend into said recess, which mold member is provided with a heating jacket, a screw threaded member secured to said body member, a screw threaded collar movable on said threaded member, and being rotatably secured to said mold member, a hand wheel connected with and for turning said collar, locking blocks carried by said mold members, means for moving said blocks into and out of locking relation to said body members, a sectional matrix removably mounted in said mold space, and removable fastening elements for said matrix carried by said body member and said mold members.

1,903,539. IMPLEMENT FOR PLAYING THE GAME OF CAT. EDWARD WARNER, Union City, N. J. Filed Apr. 1, 1930. Serial No. 440,683. 7 Claims. (Cl. 273—95.)



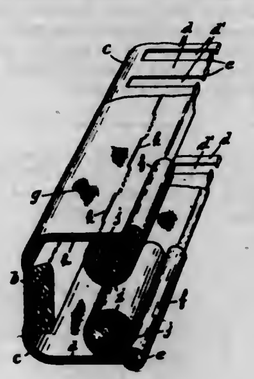
1. A portable platform for the purpose described comprising a rest for a cat, a plane before the said rest on which the forward point of a cat may glance on being struck with a bat, rising above the platform a handle with an open way therein to guide the rearward end of a cat in its upward ascent, and underpinning to raise the whole above the ground.

1,903,540. PACKAGE MAILING CARD. HENRY L. WEBSTER, Chicago, Ill., assignor to Wm. Wrigley Jr. Company, Chicago, Ill., a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,232. 3 Claims. (Cl. 229—87.5.)



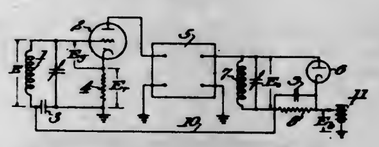
1. A mailing card for the purpose described, comprising a card having a portion along one edge folded inwardly and over upon the body of the card to form therewith an integral container consisting of connected walls adapted to surround three sides of the contents and a flap adapted to bear flatwise against the body of the card, a band adapted to extend around the contents at right angles to said walls, and means for fastening said band and flap to the body of the card.

1,903,541. WINDOW GLASS CHANNEL. DAVID C. BAILEY, Amesbury, Mass., assignor to Bailey Company, Inc., Amesbury, Mass., a Corporation of Massachusetts. Filed June 7, 1932. Serial No. 615,826. 8 Claims. (Cl. 296—44.5.)



1. A window glass guide comprising a U-form channel of bendable metal having a series of notches extending inwardly from the edges of both sides thereof and a metal bead mounted on the edge portion of each side and arranged to permit a slight relative movement therebetween when the base portion of the channel is bent.

1,903,542. AUDION AMPLIFIER. ALFRED W. BARBER, Boonton, N. J. Filed Feb. 12, 1931. Serial No. 515,847. 12 Claims. (Cl. 250—20.)



1. In the operation of an electrical wave amplifier working into a rectifier and subject to signals of varying magnitude, the method of automatically controlling the gain of said amplifier, which comprises impressing upon the amplifier input circuit two discrete direct current potentials which vary automatically and according to different functions of the magnitude of the incoming electrical wave, one of said potentials being predominately effective for weak signals and the other predominately effective for strong signals.

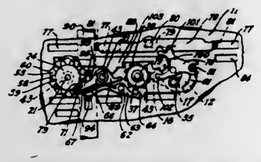
1,903,543. ROOF DECK. ALBERT LINDSAY DOERING, Germantown, Pa., assignor to J. S. Thorn Company, Germantown, Pa., a Corporation of Pennsylvania. Filed July 22, 1931. Serial No. 552,357. 9 Claims. (Cl. 189—35.)



1. In a roof deck; the combination with a plate corrugated to form a rib therein, projecting from one face thereof, the opposite walls of the rib being in spaced re-

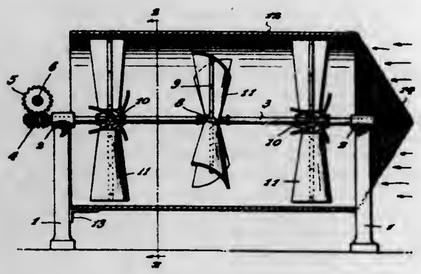
lation; of another similar plate having one edge overlapping said first plate and with a similar rib entered in said rib of the first plate; and means for detachably rigidly holding said plates in such engaged relation, including a clip having a coupling member inserted in one of the ribs of said first plate, between that rib and the rib of the second plate engaged therewith; said coupling member extending above the top of the interengaged plates and having flanges parallel with said top and engaged with the respective plates.

1,903,544. VOTING MACHINE. JOSEPH M. GARR, Calumet City, Ill., assignor to Peoples Voting Machine Corporation, Knox, Ind., a Corporation of Indiana. Filed May 3, 1930. Serial No. 449,624. 2 Claims. (Cl. 235—54.)



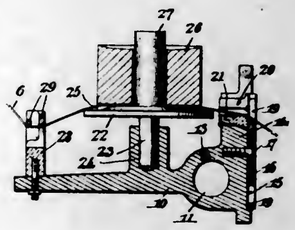
1. In a voting machine registering mechanism, intermeshing counting units, tens and hundreds gears, a ratchet rotatable with the units gear, a tongue projecting from the hundreds gear, a pivotal spring-urged latching dog for the units gear and a pivotal latching dog for the hundreds gear, the latching dog for the hundreds gear being provided with a notch for the reception of said tongue, a slidable member, and spaced elements on said slidable member engageable with and for pivoting said dogs.

1,903,545. CURRENT MOTOR. ALVAH T. HAMPTON, Coulee, Wash. Filed Mar. 3, 1931. Serial No. 519,817. 1 Claim. (Cl. 170—133.)



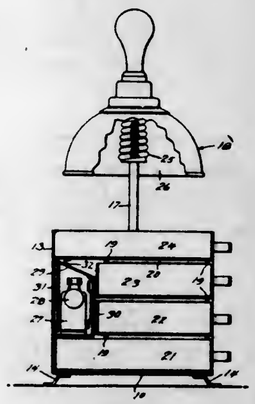
A current motor comprising spaced standards having their upper ends provided with horizontally alined bearings, a horisontal shaft mounted for rotation in said bearings, gearing for taking off power from one end of the shaft, spaced hubs rigidly secured to the shaft, spokes radiating from the hubs, anchoring collars disposed on opposite sides of the hubs, substantially segmental shaped concavo-convex blades secured to the spokes and having their inner ends disposed at substantially right angles to the longitudinal axes of the spokes and spaced from the hubs, stay rods secured to the anchoring collars and connected with the spokes between the inner ends of the blades and said hubs, the convex faces of the blades being presented to the inflowing stream, a cylindrical housing secured to the standards and encircling the shaft and blades, and a reticulated conical screen forming a closure for the housing at the upstream end of said housing.

1,903,546. COMBINED CLEARER, WAXER, AND TENSION DEVICE. JOSEPH KAUFMANN, Cleveland, Ohio. Filed Dec. 5, 1930. Serial No. 500,369. 2 Claims. (Cl. 28—70.)



1. In a device of the class described, a bracket, an enlarged head at one end of said bracket and providing an annular forward face, said face having a recess therein, a clearer disc rotatably supported within said recess, said disc having kerfs in its edges, said head having a guide slot for registration with one of said kerfs, a post rotatably carried by said bracket immediately in the rear of said head, a table supported upon said post and disposed above said guide openings, and a waxing block carried by said post and resting upon said table.

1,903,547. TOASTING AND STORAGE CABINET. WILLIAM W. KELLY, Cleveland Heights, Ohio, assignor to The Nut Products Company. Filed June 5, 1931. Serial No. 542,359. 5 Claims. (Cl. 34—21.)



1. In a device of the class described, a cabinet having an open top, means for supporting a roasting pan within said cabinet adjacent said open top, means for supporting a drawer below said first means, a drawer supported thereon, said first means comprising openwork whereby material may be dumped from said roasting pan into said drawer and a heating means positioned above said cabinet and said roasting pan for directing heat upon the material in said pan.

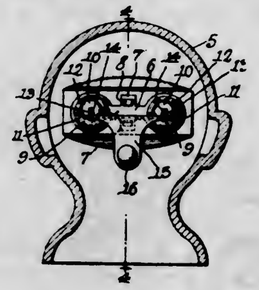
1,903,548. SLIDE HAMMER. HARRY GAIL KREIS, Cleveland, Ohio. Filed Jan. 26, 1932. Serial No. 589,022. 8 Claims. (Cl. 29—85.)

1. In slide hammer construction, the combination of a rod having a stop to receive a hammer blow, and a hammer slidingly mounted on the rod to deliver such hammer blow, the hammer being free to move angularly or



rotate relative to the rod, and the sliding engagement between the hammer and rod being limited to spaced lines of contact.

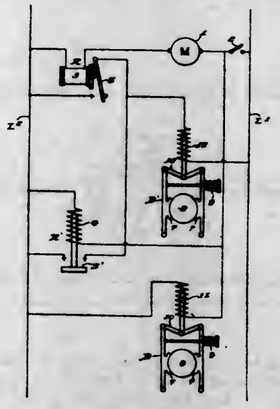
1,903,549. EYE MOUNTING FOR DOLLS. JOSEPH ALEXANDER MANNING, Pawtucket, R. I. Filed Jan. 6, 1932. Serial No. 585,100. 2 Claims. (Cl. 46—40.)



1. The combination with a doll head having eye sockets, of an eye mounting comprising a plate fitted over the eye sockets and having socket portions registering with the eye sockets, eye balls fitted within the sockets and held in place by the plate, said socket portions of the plate having cut out portions defining elongated flat lower edges and curved upper edges, rods extending from the eye balls and passing through the cut out portions of the plate, said rods resting on the flat lower edges of the cut out portions, and weights connected to the free ends of the rods for moving the eye balls within their sockets.

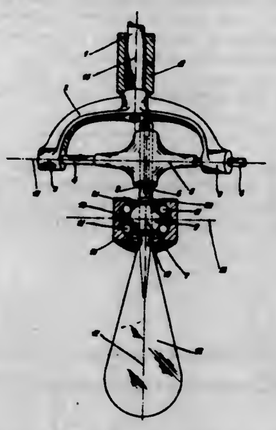
1,903,550. ELEVATOR BRAKING SYSTEM AND METHOD OF ACTUATING THE SAME. WILLIAM H. MECHLING, Whitemarsh, Pa., assignor to Atlantic Elevator Company, Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1929. Serial No. 334,150. 9 Claims. (Cl. 188—172.)

1. The combination with an electric motor, of braking means therefor normally effective to prevent rotation of the motor while the motor is de-energized, and a current relay in series with the motor adapted to effect the release of the braking means upon the passage of a current through the motor and adapted to maintain the



braking means in released position for a predetermined period after interruption of the passage of the current through the motor.

1,903,551. FIN PROPELLER. WIGGER MEINDERSMA, Wassenaar, Netherlands. Filed Nov. 25, 1931, Serial No. 577,331, and in the Netherlands Dec. 1, 1930. 2 Claims. (Cl. 170—94.)

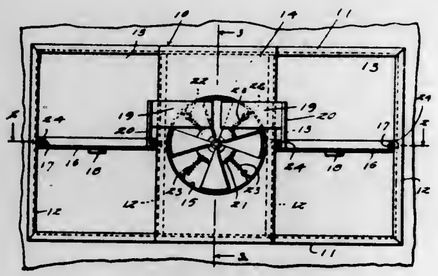


1. In a fin propeller the combination of a shaft, a bearing to suspend the said shaft rotatably, a propeller blade, a spherical bearing to suspend said propeller blade in a universally rotatable manner, said spherical bearing being displaced with regard to the axis of the said shaft, two coupling members to couple the said blade to the said shaft, said coupling members being mutually coupled to slide hingedly along each other in a sense perpendicular to the axis of the said shaft, one of the said members being fixed to the said shaft, the other being slidably connected to the said blade.

1,903,552. AIR FORCING APPARATUS FOR AIR FURNACES. WILLIAM N. MUELLER, Fredericksburg, Iowa. Filed June 17, 1930. Serial No. 461,817. 2 Claims. (Cl. 126—110.)

1. An air circulating device of the character described comprising a frame adapted to be positioned in an air duct, a fan carried by the frame, an air duct positioned about

the fan, a rockable damper mounted in the frame and positioned on one side of the air duct and normally disposed in horizontal open position, an arm fixedly carried by said damper, an outstanding fin carried by said arm

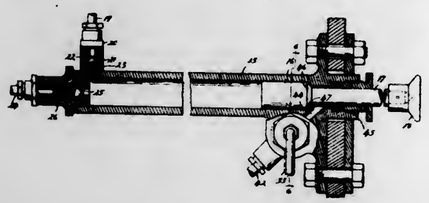


and extending into said air duct, said fin upon operation of the fan being adapted to be forced into alignment with the draft of air and coactively swing the damper into vertical closed position.

1,903,553. PROCESS FOR SHREDDING PALMETTO AND PRODUCT PRODUCED THEREBY. MARION H. PARTRICK and KATHERYN B. CURTIS, Tampa, Fla. Filed Sept. 30, 1930. Serial No. 485,561. 1 Claim. (Cl. 19—5.)

The process of producing a stuffing of the class described consisting of, first stripping the bark and skin from the green foliage of the American grown palm, second shredding the remaining fibrous material in its green state, third subjecting the shredded fibrous material to a natural drying process for approximately three hours, and fourth impregnating the dried shredded fibrous material with a cedar oil.

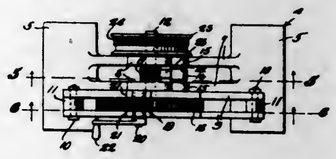
1,903,554. LUBRICATING SYSTEM. WILLIAM S. PRITCHARD, Detroit, Mich., assignor to Motor Products Corporation, Detroit, Mich., a Corporation of New York. Filed June 13, 1927. Serial No. 198,476. 6 Claims. (Cl. 184—7.)



1. In a lubricating system, the combination with a motor driven pump, of a system of conduits extending to the parts to be lubricated, a manually operated pump having a plunger for forcing lubricant under pressure through said conduits and means connecting said manual pump to the pressure side of said motor driven pump for supplying lubricant to the former and for moving said plunger in one direction.

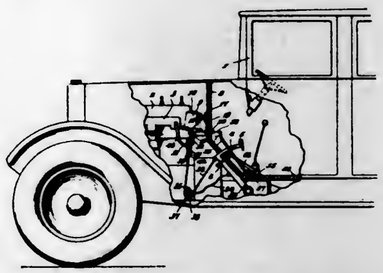
1,903,555. PUMP. IVY B. ROBERTSON, Charlotte, N. C., assignor of one-half to F. M. Gresham, Charlotte, N. C. Filed May 22, 1931. Serial No. 539,348. 1 Claim. (Cl. 103—205.)

Actuating mechanism for a pump, comprising transversely-spaced foot plates having upstanding lugs, there being a space between the foot plates, cross bars joined integrally at their ends to the foot plates and affording a permanent connection between the foot plates, the cross bars having upwardly projecting posts disposed between the foot plates, upwardly extended inner and outer brackets located on opposite sides of the lugs, the inner bracket having lateral contacting support on one of the posts, securing elements connecting the ends of the brackets with the lugs, a main shaft journaled in the posts, a drum on one end of the main shaft, outwardly of the other post and located above said space, a flexible



element wound about the drum and extended downwardly through said space, a pinion secured to the main shaft, between the posts, a rack bar between the posts and extended downwardly through said space, the rack bar meshing with the pinion, a roller supported by and between the posts and engaging the outer edge of the rack bar, a gear wheel secured to the main shaft and located between the brackets, an operating shaft journaled in the brackets, means for rotating the operating shaft, and a pinion secured to the operating shaft, between the brackets, and meshing with the gear wheel.

1,903,556. VACUUM CONTROLLED CLUTCH AND BRAKE OPERATING MECHANISM. ELWYNE O. SHREFFLER and AARON D. LESAGE, Manteno, Ill. Filed Mar. 2, 1931. Serial No. 519,555. 16 Claims. (Cl. 192—.01.)

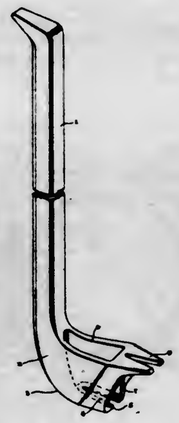


1. In a motor vehicle, an engine having a manifold, a clutch pedal, a brake pedal, an accelerator plunger, and control means for said pedals comprising a cylinder, a piston in said cylinder having a piston rod extending through the lower head of the cylinder, means connecting said pedals with the piston rod, a tube having communication with the cylinder and manifold whereby a vacuum may be created in the cylinder to raise the piston and actuate the pedals, a valve to control passage of air into and out of said cylinder carried by said piston rod, a treadle in operative relation to said plunger, and means to actuate said valve when the treadle is moved.

1,903,557. SPIKE AND NAIL EXTRACTOR. FRED SWOYER, Silver Grove, Ky. Filed Nov. 6, 1931. Serial No. 573,460. 7 Claims. (Cl. 254—25.)

1. An implement of the character specified comprising a bar having an end portion curved laterally to provide

a rolling fulcrum, spaced side walls adjacent the fulcrum end of the bar, an inner claw connecting the outer ends



of the side walls, and an outer claw in line with the outer edges of the side walls and the face of the rolling fulcrum.

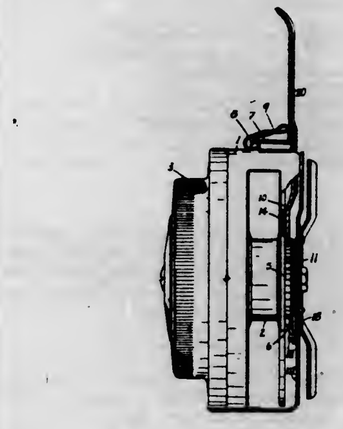
1,903,558. ARTIFICIAL BAIT. ROLLAND W. TAYLOR, Remus, Mich. Filed Mar. 13, 1931. Serial No. 522,864. 1 Claim. (Cl. 43—45.)



An artificial bait of the type described comprising a pear-shaped spoon having in its broad end a longitudinally centrally aligned hole for attaching a hook assembly and in its narrow end a longitudinally and centrally aligned hole for attaching a line coupling, the longitudinal marginal parts of the spoon being oppositely and angularly bent on lines removed from but parallel to the central longitudinal axis of the spoon, said parts being cupped for a portion of their longitudinal extent.

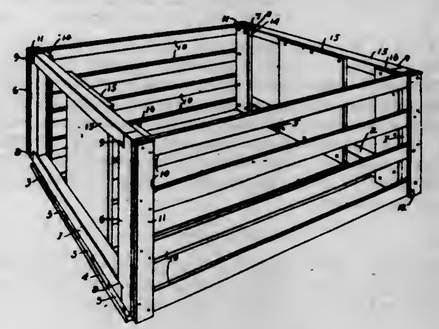
1,903,559. FISHING REEL. WILLIAM SHAKESPEARE, Jr., Kalamazoo, Mich., assignor to Shakespeare Company, Kalamazoo, Mich. Filed Oct. 1, 1928. Serial No. 309,579. 21 Claims. (Cl. 242—84.3.)

1. The combination in a spring winding reel, of a casing, a spool staff, a spool on said staff, a driving spring operatively associated with said spool, a brake lever of spring material mounted in said casing to project therefrom, a latch for holding said brake lever in released position, a brake shoe mounted on the side of said lever facing said spool for oscillating movement in coacting relation to said spool, said brake lever being provided with stops limiting the movement of said brake shoe, coacting cam members on said brake lever and brake shoe



for actuating the brake on the winding movement of the spool, and a spring acting to move said brake shoe to cam engaging position.

1,903,560. CRATE. FRANCIS V. BIRBECK, Aromas, Calif. Filed Jan. 21, 1930. Serial No. 422,336. 2 Claims. (Cl. 217—36.)

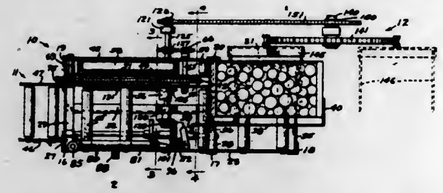


1. A crate comprising, a bottom section including a plurality of slats having end bars mounted thereon and end cleats mounted thereon opposite the bars, two side sections, each section including a plurality of slats having end bars mounted thereon and end cleats mounted thereon opposite the bars, the end bars of the side sections being mounted upon and secured to the ends of the end bars of the bottom section, and a pair of end sections including top bars mounted upon the upper ends of the end bars of the side sections and slats overlapping and secured to the end bars of the bottom and side section.

1,903,561. BOX DELIVERY DEVICE. EARL G. GRIFFITH, Huntington Park, Calif. Filed Dec. 26, 1931. Serial No. 583,199. 1 Claim. (Cl. 198—21.)

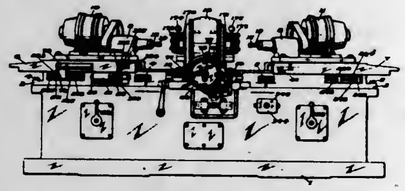
In combination: means forming a delivery station; means for removing boxes from said delivery station one by one; a continuously operating feed means for deliver-

ing boxes positively to said delivery station, said feed means operating in timely relation with said box removing means; means for conveying a series of boxes one by one to a timing station which is outside the path of said positive feed means; and means responsive to the



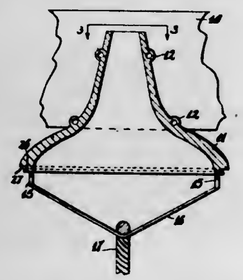
arrival of a box at said timing station to shift said box into the path of said feed means, said shifting means operating in timely relation with said feed means and being normally inoperative until rendered operative by said box arriving at said timing station.

1,903,562. GRINDING MACHINE. ROGER N. HEALD and EDWARD M. TAYLOR, Worcester, Mass., assignors to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 14, 1929. Serial No. 407,248. 18 Claims. (Cl. 51—50.)



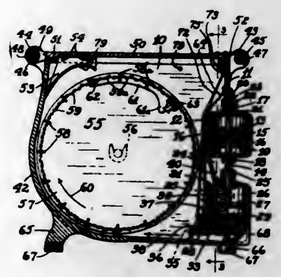
1. In a grinding machine, a table or carriage by the reciprocation of which a grinding traverse is produced, adjustment means to vary the path of reciprocation of said carriage, fluid pressure operating means for procuring the movements of said carriage beyond and outside of its reciprocatory grinding traverse, and mechanical means, against which the carriage is urged by the pressure fluid, for imparting to said carriage its reciprocatory grinding traverse.

1,903,563. PARACHUTE. HENRY HOJDA, Moravska-Ostrava, Czechoslovakia. Filed June 2, 1932. Serial No. 614,943. 6 Claims. (Cl. 244—21.)



1. A parachute, comprising a cup-shaped container for attachment upon one's back and having bottom apertures, means for attaching said container upon one's back, rings upon the periphery of said cup-shaped container and extending outwards and inwards, a parachute sail, funnels attached upon the edge of said sail and seatable selectively upon said rings, ropes attached upon said funnels and extending through said rings and through the bottom of said container, and means upon the bottom of the container for storing said ropes in a wound condition to constitute the inoperative condition of the parachute.

1,903,564. WASHING MACHINE. SAMUEL C. SHAFFNER, Chicago, Ill. Filed Dec. 23, 1929. Serial No. 415,944. 9 Claims. (Cl. 68—37.)



1. In a machine of the class described, the combination of a casing having side and bottom walls, a motor comprising a rotor and a field magnet, a shaft extending from said motor, an impeller carried by said shaft, there being passageways for directing liquid in said casing to said impeller and from the latter into the casing in a circulatory path, one of said side walls having a recess constituting said side wall a support for said field magnet, a first cap member detachably connected with said side wall and enclosing said motor and clamping said field magnet on its said support, and a second cap member detachably connected with said side wall and enclosing said impeller.

1,903,565. SUPPORT FOR TELEPHONE HEAD-SETS. FRANK D. VARTANIAN, Portland, Me. Filed Mar. 25, 1932. Serial No. 601,260. 2 Claims. (Cl. 179—157.)

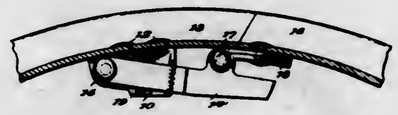


1. A support for telephone head-sets comprising in combination with a receiver and a transmitter, a frame, including an inclined portion telescopically connected to said receiver and a horizontal portion revolubly connected to said transmitter, means to prevent outward displacement of the receiver from the user's ear, a standard jointedly connected to and depending from said frame, and means adjustable to different positions on said standard adapted to engage portions of the user's clothing and partially support said head-set.

1,903,566. RIM END CONNECTING DEVICE. JAMES H. WAGENHORST, Detroit, Mich. Filed Nov. 7, 1929. Serial No. 405,428. 3 Claims. (Cl. 301—33.)

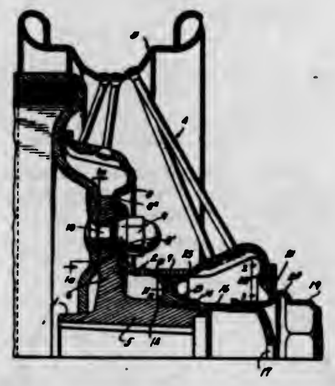
1. The combination of a transversely split wheel rim, a link pivotally connected to both ends of said rim, said

link having a slot therein, a lug attached to one rim end having a notch therein, said lug being adapted to engage said link to position the rim ends in lateral alinement, and



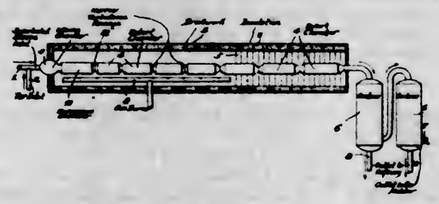
a pin extending through the slot in said link and shiftable therein into engagement with the notch in said lug to hold the link against movement radially of said lug.

1,903,567. VEHICLE WHEEL. WILLIAM N. BOOTH, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Jan. 21, 1927. Serial No. 162,653. 2 Claims. (Cl. 301—9.)



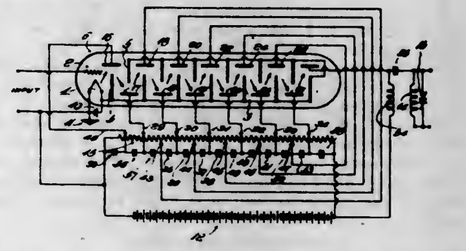
1. In a vehicle wheel, the combination with a hub having a barrel, of a hub shell having a barrel spaced from said hub barrel and provided with an inwardly extending shoulder and an abutment member secured to an end of said barrel, a spacer between said barrels for supporting the one from the other, means threadedly engaging said hub barrel and abutting said spacer to hold said spacer and hub shell in fixed relation to said hub, and means threadedly engaging said first mentioned means and frictionally engaging said abutment member to lock said first mentioned means upon said hub.

1,903,568. PRODUCTION OF BENZINES, BENZENES, AND OTHER HYDROCARBONS FROM COAL TARS AND OILS. ROBERT EDWIN GOLDSBROUGH, Slough, England. Filed Mar. 21, 1932, Serial No. 600,363, and in Great Britain Oct. 21, 1930. 2 Claims. (Cl. 196—52.)



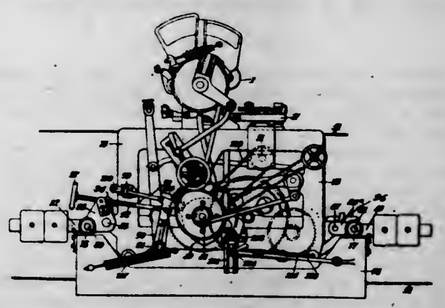
1. In a process for the production of benzines, benzenes and other hydrocarbons from coal-tars and oils, the steps of injecting the primary material together with steam into a heating zone, the temperature of which is from 450° C. to below 700° C. and being provided with metal surfaces made of about 90% nickel-chromium alloy containing definite small proportions of silicon, zinc, aluminium and iron, vaporising the oil and allowing the reaction material to expand, subjecting the expanded material to turbulence and pressure changes while gradually reducing the temperature of the reaction mixture.

1,903,569. ELECTRON TUBE. KENNETH W. JARVIS, Cincinnati, and RUSSELL M. BLAIR, Norwood, Ohio. Filed Sept. 15, 1926. Serial No. 135,604. 12 Claims. (Cl. 250—27.5.)



1. An electron tube device comprising an evacuated vessel, a plurality of electrodes within said vessel one of said electrodes comprising an electron emitting body, a grid electrode mounted adjacent said electron emitting body, a pair of plate electrodes adapted to be charged to different positive potentials mounted adjacent said grid electrode, and a shield connected inside of said vessel with said electron emitting body and having a solid portion thereof physically interposed between said electron emitting body and the plate electrode of largest positive potential for substantially eliminating the effects of capacity coupling between said grid electrode and the plate electrode of largest positive potential.

1,903,570. APPARATUS FOR DEPOSITING PLASTIC OR SEMIFLUID SUBSTANCES. ARIBERT KREMMLING, Hamersleben near Oschersleben, Germany. Filed Sept. 15, 1932, Serial No. 633,354, and in Germany July 19, 1930. 5 Claims. (Cl. 107—27.)



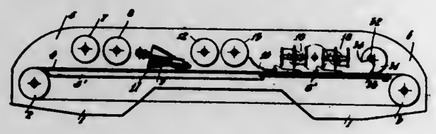
1. A machine for depositing confectionery shapes upon a travelling surface, comprising a depositing machine having a nozzle or nozzles, means for intermittently extruding material from the nozzles, cam controlled means for moving the nozzles according to the shape of the deposited articles, a carriage supporting the depositing machine, counterweight levers pivoted to and supporting the carriage, cam controlled means for adjusting the angle of the counterweight levers with respect to the carriage for moving the carriage vertically relative to the receiving surface and cam controlled means for moving the carriage in accordance with the travel of the receiving surface.

1,903,571. CHAIN GUIDING DEVICE FOR PORTABLE MOTOR TREE SAWS. FRIEDRICH WILHELM MEYER, Vienna, Austria. Filed Jan. 8, 1932, Serial No. 585,624, and in Austria Jan. 13, 1931. 4 Claims. (Cl. 143—32.)



4. In portable motor tree saws, in combination a guiding device for the saw chain consisting of a guide rail, two chain wheels connected therewith, one of these chain wheels having means for engaging with the corresponding part of the motor shaft, further a shield placed on one side of the wheel and corresponding to a flange on the motor, this shield having a bearing for this wheel and being connected to the rail and adapted to be fastened to and above said flange for the purpose of rendering possible a quick fit of the unit composed of chain wheels and guide to the motor as well as a rapid exchange of such units.

1,903,572. MACHINE FOR WORKING, MOLDING AND SHAPING DOUGH. JOHANNES NUMAN SCHRÖDER, Leeuwarden, Netherlands. Filed Nov. 10, 1930, Serial No. 494,724, and in the Netherlands Apr. 11, 1930. 18 Claims. (Cl. 107—9.)



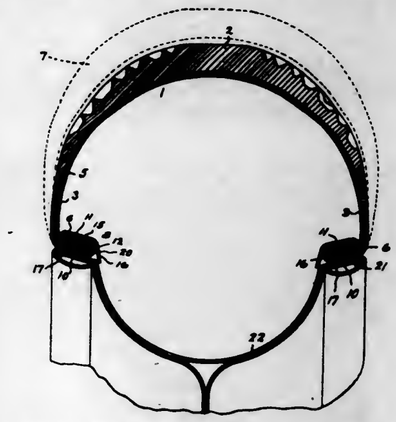
3. A device for closing the seam of an entirely or almost entirely rolled up sheet of dough in a machine for working, molding and shaping dough in which the scroll of dough is advanced by a conveyor, comprising a concave member rotatably suspended above the conveyor, which member in the position of rest faces with its concavity the arriving scroll of dough ready to receive the latter.

1,903,573. DISTILLATION PROCESS. WILLI SCHULTZE, Halle-on-the-Saale, Germany. Filed Oct. 23, 1929, Serial No. 401,956, and in Germany Oct. 10, 1928. 2 Claims. (Cl. 202—52.)

1. A continuous distillation process of organic evaporable substances of the wood rosin type at a pressure of less than 1 mm. of mercury; which process consists of preheating a suitable quantity of the substance to a temperature between 180° and 255° C., then spreading the thus liquefied substance in a thin stream to form a layer 3 to 4 mm. thick on a surface having substantially the same temperature, while maintaining the stated pressure, then after 7 to 10 minutes time collecting the evaporated portion of the substance and condensing the same and simultaneously collecting the non-vaporizable portion of said substance in suitable vessels, thus obtaining a yield of about 83% bright resin and 16% hard resin.

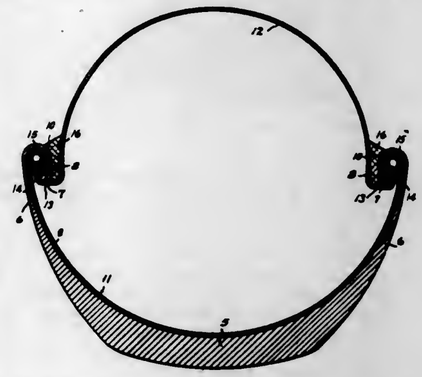
1,903,574. AUTOMOBILE TIRE. ALVIN H. SHOEMAKER, Seattle, Wash. Refiling of abandoned application Serial No. 258,178, filed Mar. 1, 1928. This application filed Apr. 24, 1929. Serial No. 357,875. 4 Claims. (Cl. 152—20.)

3. In a tire of the character described, a one-piece pneumatic tire having its transverse curvature on an arc of approximately 180°, cord reinforcing means extending radially of the tire, said tire being constructed oversize and means engaging the lateral edges of the tire and adapted



when engaged therewith to hold the periphery of the tire in a circumferentially compressed condition with the tire reduced to normal size.

1,903,575. RADIAL CORD PNEUMATIC TIRE. ALVIN H. SHOEMAKER, Seattle, Wash. Filed Feb. 24, 1932. Serial No. 594,844. 5 Claims. (Cl. 152—13.)



1. In a radial cord tire structure adapted for mounting on a rim having reversely bent side edges defining tire bead receiving channels, a tire member having its transverse curvature on an arc of approximately 180° and having bead portions, relatively firm longitudinally elastic bead fillers embedded in said bead portions, and reinforcing cords embedded in said tire in radial planes and anchored to said bead fillers, said bead portions adapted to be extended over the reversely bent portions of the rim for reception in the channel to occupy positions opposite adjacent portions of the side walls of the tire with the reversely bent portions of the rim therebetween.

1,903,576. FLOATING TOOL. LEWIS SKEEL and JOHN ARTHUR SPOHR, Meadville, Pa. Filed Mar. 13, 1930. Serial No. 435,529. 5 Claims. (Cl. 279—16.)

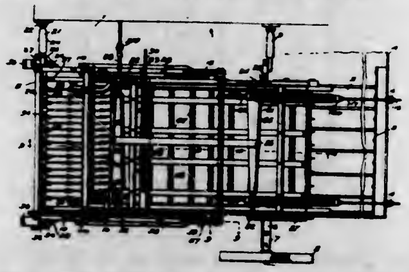
5. In a cutter, a tool having a shank, said shank being provided with a transversely extending opening having parallel side walls, a pin extending through said opening, there being means providing for oscillation of the shank about a line extending transversely of the longitudinal axis of said pin, and a driving sleeve receiving

a portion of said shank and having driving connection with the end portion of said pin, said shank being formed with a circumferential rib in the plane of the axis of



said opening and being intersected by the ends of said opening, said driving sleeve being engaged by said circumferential rib.

1,903,577. PICK UP FOR COMBINE HARVESTERS. HENRY STRUEVER, Faulkton, S. Dak. Filed Dec. 6, 1930. Serial No. 500,645. 27 Claims. (Cl. 56—364.)

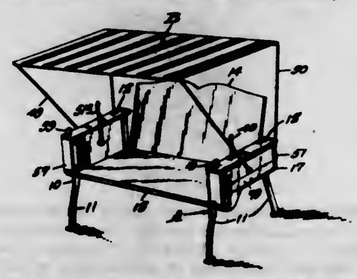


1. In a device of the class described, a towing vehicle, a pick-up connected to the towing vehicle and comprising a main frame mounted for vertical swinging movement, cooperating collecting and conveying mechanisms, one of which is carried by the main frame, and a spring connection between the towing vehicle and the main frame and forming a counterpoise for the frame and said cooperating mechanisms.

1,903,578. MAKING OF RUBBER COLORING MATERIAL. THEODORE G. SULLIVAN, Rutherford, N. J. Filed Mar. 26, 1931. Serial No. 525,628. 2 Claims. (Cl. 18—50.)

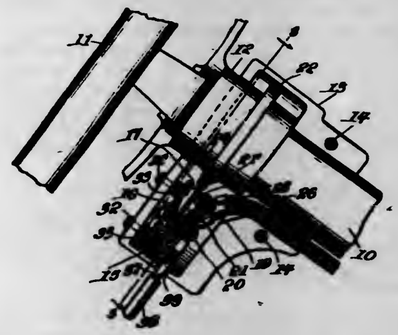
1. That process of producing a coloring compound for rubber manufactures which consists in mixing a color intermediate with rubber in equal parts until the color intermediate is in a state of colloidal dispersion, mixing a color intermediate complementary to the first with an equal quantity of rubber until the complementary color intermediate is in a state of colloidal dispersion, mixing the two batches thus prepared together and drying and sheeting the final mixture.

1,903,579. COIN CONTROLLED CHAIR AND CANOPY. WILLIAM F. TAYLOR, Norfolk, Va. Filed Sept. 25, 1931. Serial No. 565,175. 7 Claims. (Cl. 194—61.)



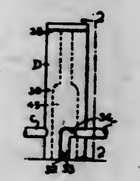
6. In a chair, a depressible seat, a swinging back, mechanism operable to move the back forwardly to overhang the seat, latching means for holding the back in forward position, coin controlled means for releasing the latching means and moving the back rearwardly, and latching means for holding the back in its rearward position controlled by the depression of the seat.

1,903,580. AUTOMATIC SWITCH. THOMAS WILLIAM THIELWELL, St. Albans, W. Va. Filed Aug. 30, 1929. Serial No. 389,498. 1 Claim. (Cl. 200—59.)



In combination with a steering wheel having a collar, a rib mounted upon the collar and partially circumscribing the same, said rib having spaced ends with beveled surfaces, a casing located opposite the rib, an insulated supported member in said casing and having a recess disposed opposite the rib, means adjustably securing the insulated member to the casing, oppositely disposed contacts located in the recess, a switch arm movably mounted in the recess to control electric circuits, said switch arm having an end portion adapted to be engaged by the surfaces of the rib and said switch arm adapted to pass through the space between the ends of the rib.

1,903,581. VALVE LOCK AND HOUSING. BARRY F. TURNER, Holdenville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation. Filed June 14, 1932. Serial No. 617,197. 17 Claims. (Cl. 70—123.)



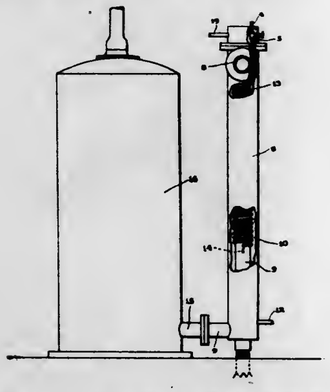
6. In a protector for valves, a main housing including a closure therefor, a minor housing within the main housing and spaced from the walls thereof, and locking means carried by the closure and minor housing to close the main housing.

1,903,582. PROCESS FOR THE PRODUCTION OF ALKALI PHOSPHATES FROM METAL PHOSPHORUS COMPOUNDS. CONWAY, BARON VON GERSDORFF, HANS WEIDMANN, and GERHARD ROSENHEIM, Frankfort-on-the-Main, Germany, assignors to American Lurgi Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 21, 1931, Serial No. 510,830, and in Germany Jan. 27, 1930. 9 Claims. (Cl. 23—106.)

1. A process for the production of alkali phosphates which comprises decomposing at elevated temperatures

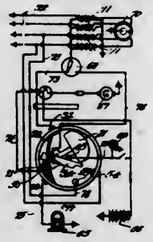
in the presence of a reducing agent an alkali sulphate with a metal phosphorus alloy, the metal content of which is not sufficient as such to combine with all the sulphur of the alkali sulphate, the reducing agent being present in an amount sufficient to protect practically all the sulphur from oxidation to SO_2.

1,903,583. METHOD AND APPARATUS FOR PRODUCING FIXED CARBURETED AIR GAS. WALTER G. WATKINS, Eldorado, Kans., assignor to Skelly Oil Company, Eldorado, Kans. Filed Dec. 8, 1930. Serial No. 500,961. 14 Claims. (Cl. 48—219.)



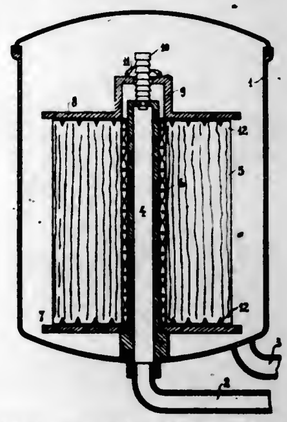
1. The method of producing fixed carbureted air gas for heating purposes which consists in passing heated air through a conduit under a pressure above atmospheric, utilizing the heat of said air by indirect contact to partially vaporize a liquid hydrocarbon fuel, introducing said partially vaporized fuel directly into said air and mixing the same.

1,903,584. AUTOMOBILE THEFT DEVICE. GEORGE A. WETTENGEL, St. Louis, Mo. Filed June 1, 1927. Serial No. 195,837. 2 Claims. (Cl. 177—314.)



1. The combination with an automobile having a high tension ignition circuit and a signal, a weighted member, means for pivotally supporting said weighted member for movement from a normal upper to a lower operative position and for allowing the same to vibrate at right angles to the plane of the first movement when away from its normal position, latch means for retaining said weighted member in its upper normal position, means for releasing said latch as an incident to the operation of some member involved in the conditioning of the automobile for movement, means whereby the primary of the ignition circuit of the automobile will be broken when said weighted member is released, a circuit including the signal means whereby the signal circuit may be intermittently established upon the lateral vibration of said weighted member, and means whereby the secondary of the ignition circuit will be grounded after the primary circuit has been opened and as the weighted member moves toward its lower position, and means for restoring said weighted member to an initial position.

1,903,585. DEVICE FOR TREATING FABRICS BY MEANS OF A CIRCULATING BATH. JOSEPH ANNICQ, Renaix, Belgium. Filed June 19, 1931, Serial No. 545,538, and in Belgium May 2, 1931. 2 Claims. (Cl. 8—18.)



1. In a device for dyeing, bleaching, sizing and similarly treating fabric wound in the shape of a spool, the combination of a vat, a central perforated tube within said vat, a conduit connected to said central tube, a second conduit issuing laterally into said vat, a lower stationary supporting plate for the spool of fabric within the vat, a movable upper pressure plate engaging the top of the spool of fabric under treatment, a hub member formed on the top of said upper plate, a central hole in the top wall of said hub member, a vertical rod formed with rack teeth extending from the top of the central perforated tube through the central hole in the top wall of the hub member, series of pawls pivoted on said hub member and engaging the rack teeth on said rod, said pawls being arranged in such a way that in any position of the hub member at least one pawl will engage the rack, whereby the upper plate will be enabled to be moved downwardly and prevented from being moved upwardly, and circular concentric ribs formed on the upper side of the lower supporting plate and the lower side of the upper pressure plate respectively, substantially as and for the purpose set forth.

1,903,586. SWITCH CONTROL MEANS FOR VEHICLE LAMPS. HEINRICH ARNOLD, Waiblingen, and EUGEN LUTSCHER, Ravensburg, Germany, assignors to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Apr. 24, 1931, Serial No. 532,582, and in Germany May 1, 1930. 8 Claims. (Cl. 200—42.)



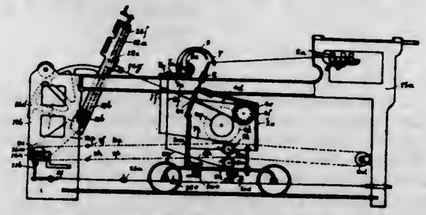
1. Switch control means for vehicle lamps comprising a casing, a rotatable switch member mounted in said casing and adapted to assume a plurality of positions corresponding to different conditions of illumination of said lamps, a key adapted to be inserted in said casing to engage and operate said switch member, and means within said casing

cooperating with said key to permit free rotation of said switch member in one direction to all the switch positions without longitudinal displacement of said key, but limiting rotation of said switch member in the other direction unless said key is first longitudinally displaced.

1,903,587. PROCESS FOR THE MANUFACTURE OF HALOGEN ALCOHOLS. JÜRGEN CALLSEN, Wuppertal-Elberfeld, Germany, assignor to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 16, 1932, Serial No. 599,330, and in Germany Mar. 21, 1931. 21 Claims. (Cl. 260—156.)

1. The process which comprises reacting upon an aliphatic halogen aldehyde with a halogen magnesium alcoholate and decomposing the condensation product formed by means of water.

1,903,588. REGULATOR FOR WINDING ON INSTALLATIONS. JOSEPH DETHIER, Brussels, Belgium. Filed July 8, 1930, Serial No. 466,570, and in France July 10, 1929. 15 Claims. (Cl. 118—28.)



1. In a self-acting mule composed of a carriage having an outward run and an inward run relative to a fixed part of the mule, spindles mounted on the carriage and on which threads may be wound, means for producing by the displacement of the carriage the rotation of the spindles when the said carriage is displaced in the direction of the inward run, a faller for guiding the threads on to the spindles during the inward run, a counter faller tending to tension the threads during the said inward run, a sector pivoted on a fixed part of the mule, a screw moving along an arm of said sector and acting, during its displacement on the means for rotating the spindles, to vary the speed of the latter, means for registering the variations of the length of reserve, a clutch device acting between the means for registering the variations on the length of reserve and the screw of the sector, and means for determining the commencement of the action of the said clutch device in order to realise a partial transformation of the registered displacements in accordance with the fineness of the thread.

1,903,589. TIRE PRESSURE RESPONSIVE SWITCH. WILLIAM C. EDWARDS, Battle Creek, Mich. Filed Oct. 10, 1930. Serial No. 487,824. 1 Claim. (Cl. 200—58.)



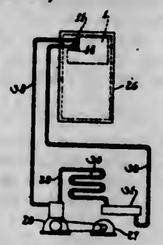
A pneumatic pressure responsive switch comprising a housing, an expansible elastic cylinder in the housing having a closed movable end and a fixed open end adapted for communication with a source of pneumatic pressure adapted to distend the cylinder, a piston attached to the closed movable end of the cylinder, a coil spring arranged about said cylinder having one end attached to said piston and having its other end fixed at the closed end of the cylinder so as to tend to contract the cylinder against said pressure, a stop element on the inner wall of the housing, and a circuit closing element adjustably mounted in said piston having a portion for engagement with said stop element.

1,903,590. STITCH FORMING MECHANISM FOR SEWING MACHINES. HORACE F. GRUMAN, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Original application filed Jan. 31, 1931, Serial No. 512,661. Divided and this application filed Sept. 19, 1931. Serial No. 563,842. 5 Claims. (Cl. 112—154.)



1. In a sewing machine, the combination with an oscillatory shaft; of a radially extending arm fixed to said shaft; a curved needle fixed to said arm for oscillation in a plane at right angles to the longitudinal axis of the shaft; a 4-motion threaded looper independent of the shaft and cooperating with the needle, driving connections between the shaft and the looper for imparting loop-taking and loop-shedding movements to the looper, and means separate from the shaft for imparting needle-avoiding movements to the looper.

1,903,591. FLOODED TYPE REFRIGERATION UNIT. RAYMOND C. HAIMBAUGH and ANTHONY F. HOSSEL, Chicago, Ill., assignors to Peerless Ice Machine Company, Chicago, Ill. Filed Mar. 5, 1929. Serial No. 344,418. 2 Claims. (Cl. 62—95.)



1. A refrigeration unit comprising a hollow one-piece casting having a short portion provided with an opening, a cover for closing the opening, an outlet shut-off valve secured to the cover and communicating with the interior of said casting, an inlet shut-off valve secured to the cover and communicating with the interior of the casting, a straining element disposed between the inlet shut-off valve and the cover for straining a refrigerant fluid, and means for securing the inlet shut-off valve to the cover and for holding the straining element between said valve and the cover.

1,903,592. PROCESS FOR THE DEHYDRATION OF MAGNESIUM CHLORIDE. HAROLD GEORGE LACELL, deceased, Finchley, London, England, by Irma Lacell, executrix, Finchley, London, England. Filed Mar. 31, 1930, Serial No. 440,637, and in Germany Apr. 5, 1929. 11 Claims. (Cl. 23—91.)

1. A process for the dehydration of magnesium chloride, which comprises gradually adding, to a relatively large

mass of molten anhydrous magnesium chloride, relatively small quantities of hydrated magnesium chloride, thus causing a rapid vaporization of the water of hydration and thereby preventing the formation of magnesium oxide.

1,903,588. EYEGLASSES. KARL MARTIN, Rathenow, Germany. Filed Nov. 27, 1928, Serial No. 322,259, and in Germany Mar. 24, 1928. 1 Claim. (Cl. 49—82.1.)

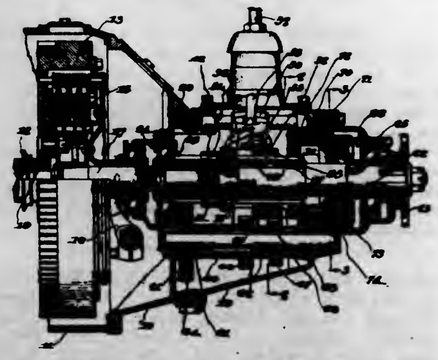


The process for the manufacture of a multiple focus lens consisting of a distance portion and a reading portion formed of a fractional part of a lens having a spherically-shaped surface and a plane lateral surface, which comprises preparing only the spherically-shaped and lateral surfaces of said reading portion, formed of a fractional part of a lens, which are designed to be joined to the distance portion, heating the non-recessed distance portion to a point above the softening point thereof and below the softening point of said reading portion, superimposing the spherically-shaped surface of said reading portion with said distance portion in its heated condition, joining said distance portion of the spherically-shaped and lateral surfaces of said reading portion by applying a pressure to the former in addition to normally existing pressures without affecting the prepared surfaces upon said reading portion, and finishing the composite lens thus formed.

1,903,594. PROCESS FOR PREPARING EXPLOSIVE CHARGES. OSKAR MATTER, Cologne-Marienburg, Germany. Filed Apr. 20, 1931, Serial No. 531,623, and in Germany May 21, 1930. 4 Claims. (Cl. 102—1.)

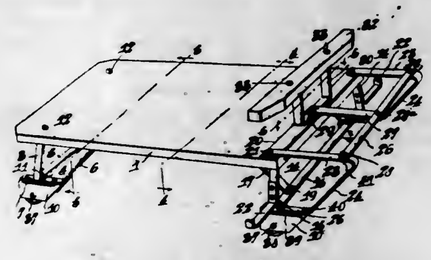
1. A process for preparing explosive charges in which the explosive to be worked is first dissolved in a solvent, the solution then added to a liquid in motion which is miscible with the solvent in any proportions but which does not dissolve the explosive, the precipitated explosive after washing and drying partially melted to form a fluid mass containing unmelted granules in suspension, and the broth-like mass thus obtained cast in moulds.

1,903,595. MOTOR VEHICLE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 19, 1925. Serial No. 69,973. 21 Claims. (Cl. 74—57.)



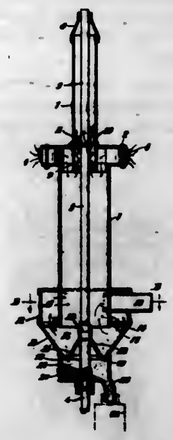
1. In a motor vehicle, the combination of a supporting casing, a shaft mounted in bearings therein, an aligned shaft supported at one end in a bearing in said casing and at the other end in a bearing in the first said shaft, a shaft of uniform diameter mounted in bearings on said aligned shaft, and means adapted to directly connect the first named shaft with either the aligned shaft or the shaft mounted on the aligned shaft for the transmission of power through either one or the other shafts.

1,903,596. CONVERTIBLE SLED AND WHEELED COASTER. CURTIS H. RICHARDS, San Francisco, Calif. Filed Apr. 29, 1931, Serial No. 533,819. Renewed Sept. 22, 1932. 14 Claims. (Cl. 280—12.)



1. In a convertible sled and wheeled coaster, a platform, a front standard and a rear standard secured to and beneath the platform, each standard comprising a transverse cross cleat bar, having downwardly extended legs terminating in inwardly extended feet, a lower cross bar brace connecting said feet, diagonal brace bars connected to said platform and to said cross bar brace, an inverted U-shaped stirrup at each side of said frame which constitutes runner carriers, axle bolts carried by said stirrup, runners pivotally held in said stirrup on said axle bolts, means rigidly securing the rear pair of stirrups to the rear framework, means pivotally securing the forward pair of stirrups to the front framework, and a suitable steering mechanism secured to said platform and to said forward pair of stirrups.

1,903,597. AIR CLEANER FOR INTERNAL COMBUSTION ENGINES. JOHANN ALBERT LUDWIG RUWOLDT, Kewell, Victoria, Australia. Filed Dec. 26, 1929, Serial No. 416,703, and in Australia July 9, 1929. 5 Claims. (Cl. 183—85.)



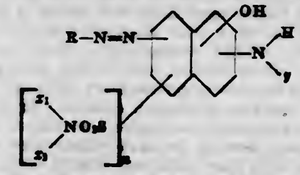
1. An improved air cleaner and concentrator for internal combustion engines comprising in combination, a main vertically disposed casing having air inlet openings, a plurality of inclined and curved vanes in said air inlet openings to cause the air to have a whirling action while passing downwardly through said casing, a dust separating chamber at the lower end of said casing formed with inner and outer inclined walls and having openings in its bottom for the passage of accumulated dust, a horizontal partition above the inclined walls dividing said chamber into upper and lower compartments, an outlet in the upper compartment connected to the engine intake, and openings in the horizontal partition allowing the cleaned conditioned air to pass to the upper compartment, the bottom walls of said openings being upwardly inclined.

1,903,598. SHELLAC SUBSTITUTE. JOHANNES SCHNIBER, Leipzig, Germany, assignor to Walter DUX, Hanover, Germany. Filed Nov. 15, 1928, Serial No. 319,717, and in Germany Nov. 21, 1927. 12 Claims. (Cl. 260—2.)

1. A process for the manufacture of shellac substitutes which comprises combining hydroxy-carboxylic acids of an aliphatic nature and the products which are obtained by addition of halogen to resinolic acids by subjecting the mixture to the action of heat.

1,903,599. MONOAZODYESTUFFS. HUGO SCHWEITZER, Leverkusen-Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1931, Serial No. 506,309, and in Germany Jan. 4, 1930. 8 Claims. (Cl. 260—92.)

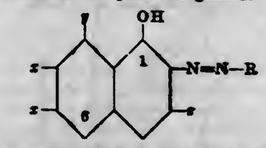
1. Monoazo dyestuffs of the probable general formula:



wherein R stands for the residue of an aromatic diazo-compound of the benzene or naphthalene series, a_1 and a_2 stand for hydrogen, alkyl, hydrophenyl, phenyl or benzyl, y stands for hydrogen, an acyl, alkyl or phenyl group, "n" stands for one of the numbers one and two, the components of the dyestuffs being selected in such a manner that at least one of them contains a sulfonic acid group, and wherein the nuclei may be further substituted by substituents selected from the group consisting of the sulfonic acid group, an arylsulfone group, the carboxylic acid group, the sulfoneamide group, halogen, the nitro group, the alkyl group, the alkoxy group, the hydroxy group, a substituted amino group, being generally red to black powders, dyeing wool clear red to black shades fast to light.

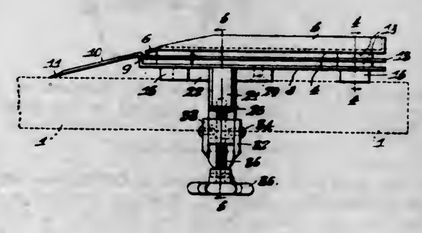
1,903,600. AZO DYESTUFFS. HUGO SCHWEITZER, Leverkusen-Wiesdorf, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed May 11, 1931, Serial No. 536,664, and in Germany May 24, 1930. 5 Claims. (Cl. 260—94.)

1. Azodyestuffs of the probable general formula:



wherein s and one s stand for a sulfonamide group, the hydrogen atoms of which may be substituted by alkyl or a radical of the benzene series, the other s stands for hydrogen, y stands for hydrogen which in case the s in the 6-position of the naphthalene nucleus stands for a sulfonamide group may be substituted by halogen or a sulfonamide group the hydrogen atoms of which may be substituted by alkyl or a radical of the benzene series, and R stands for a benzene or naphthalene nucleus, containing at least one sulfonic acid group and which nucleus may be otherwise substituted by substituents of the group consisting of alkyl, alkoxy, halogen, an acylamino group, the hydroxy-group and the nitro group, being in form of their alkali metal salts generally water soluble dark substances, soluble in concentrated sulfuric acid with a red to bluish-violet coloration and dyeing wool from an acid bath clear red to blue shades which are distinguished by a good fastness to light, washing and fulling.

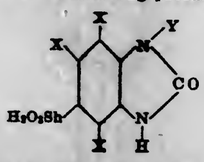
1,903,601. IRON STAND. MATTHEW SMOLKO, Chicago, Ill. Filed May 2, 1932. Serial No. 608,772. 9 Claims. (Cl. 68—27.)



1. In an iron holder, a top plate having a downwardly inclined lip along one edge, a bottom plate having an upstanding wall adjacent said lip and a downwardly inclined extension, means holding said plates spaced apart with said lip having its lower edge flush with the inclined extension, and a clamp secured to the lower plate and spacing it from an ironing table to which it may be attached, with the lower edge of the extension in contact with the ironing table.

1,903,602. BENZIMIDAZOLONE-STIBONIC ACIDS. KARL STREITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad Soden on Taunus, and WALTER HERRMANN, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 25, 1929, Serial No. 402,540, and in Germany Nov. 7, 1928. 5 Claims. (Cl. 260—11.)

1. A compound of the following probable formula:

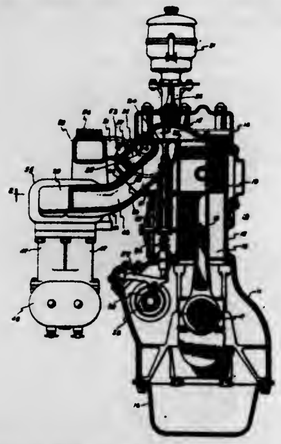


wherein one X stands for chlorine, the other X's stand for hydrogen and Y stands for hydrogen or alkyl.

1,903,603. INTERNAL COMBUSTION ENGINE. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1929. Serial No. 417,261. 26 Claims. (Cl. 123—32.)

1. The combination in an internal combustion engine of a cylinder block having valve ports communicating with

the cylinders, said block being formed on one side with adjacent faces diagonally disposed and provided with



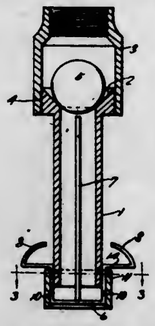
ports, passages in said block connecting the ports to said valve ports, and a manifold connected to the ports in each face.

1,903,604. METHOD OF FORMING ELECTRICAL HEATING ELEMENTS. EDWIN L. WIEGAND, Pittsburgh, Pa. Filed Dec. 31, 1928. Serial No. 329,630. 3 Claims. (Cl. 201—67.)



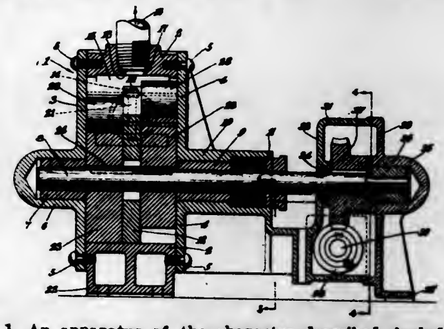
1. The method of making resistor heating elements of the character described in which the resistor is in the form of a thin ribbon of considerable width with respect to its thickness, which consists in holding the resistor against displacement and pouring insulating material over and about the resistor then compacting the insulating material about the resistor until the same is enveloped, then enclosing the mass with resistor therein within a sheath.

1,903,605. AUTOMATIC NOZZLE OR FAUCET. WILLIAM D. ALLEN, Kosse, Tex. Filed Aug. 12, 1931. Serial No. 556,560. 1 Claim. (Cl. 251—116.)



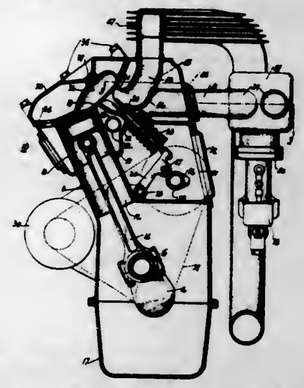
In combination with a faucet tube having a valve seated at one end, an operating bracket having arms mounted at the opposite end and adapted for both longitudinal and rotative movement relative to the tube, a push rod extended from the bracket thru the tube to the valve and adapted to open the latter on the inward movement of the former, cooperating means upon tube and bracket for locking the latter in its inmost position upon its rotation, and an open cap seated over the bracket, the said cap having an inturned flange for engaging the tube, the said flange being recessed to provide passages for the bracket arms.

1,903,606. ROTARY PUMP. CARL E. ANDERSON, Brooklyn, N. Y. Filed June 6, 1928. Serial No. 283,150. 2 Claims. (Cl. 103—122.)



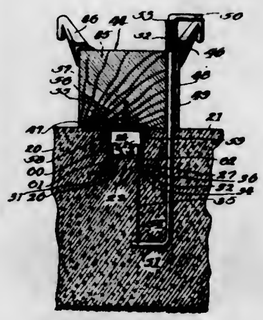
1. An apparatus of the character described, including, in combination, a casing having a circular pump chamber and a common abutment and outlet chamber therein, a partition dividing said chambers into a plurality of compartments to provide a duplex pump, said partition being inserted and fixedly secured in said casing, a shaft journaled in said casing, a rotor mounted eccentrically on said shaft in each of said compartments, each rotor having an extended cut-off surface, said casing having an inlet and an outlet adapted to communicate with said compartments, said partition having an extension fixedly secured thereto extending into said outlet chamber, a cylindrical rotary abutment member for each compartment positioned between said inlet and outlet and bearing upon the upper surface of its rotor, said rotary abutments being separated by said extension and also having a side and end bearing or contact with part of the casing.

1,903,607. INTERNAL COMBUSTION ENGINE. ALFRED MOORHOUSE, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Original application filed May 10, 1928, Serial No. 276,563, now Patent No. 1,878,165. Divided and this application filed June 24, 1929. Serial No. 373,279. 9 Claims. (Cl. 123—75.)



1. In a multi-cylinder internal combustion engine, in combination, a pair of cylinders each having an exhaust port, an exhaust manifold, an intake manifold, a passage communicating with the exhaust port of each cylinder, a passage for each cylinder connecting the first mentioned passage and the exhaust manifold, the second mentioned passage having a restricted portion, and a conduit enclosing a portion of the intake manifold connecting the first mentioned passages.

1,903,608. EXPANSION JOINT, METHOD AND APPARATUS FOR THE INSTALLATION OF THE SAME. CLIFFORD OLDER, Wilmette, Ill. Filed Aug. 7, 1931. Serial No. 555,726. 16 Claims. (Cl. 94—51.)



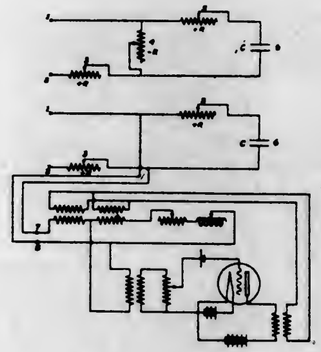
1. A template for installing expansion strips comprising the combination of a flexible body adapted to conform to the surface of the concrete pavement, with means for engaging an expansion strip in predetermined position with respect to said template, and detachable fastening devices for releasably holding said expansion strip and said template whereby said expansion strip may be released from said template after it has been located in the concrete by means of said template.

1,903,609. GLIDER FOR FURNITURE LEGS. CLEMENT R. UHL, Toledo, Ohio, assignor to The Toledo Metal Furniture Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 18, 1931. Serial No. 574,708. 3 Claims. (Cl. 16—42.)



1. A device of the class described, comprising a cup member of soft vulcanized rubber having the side wall of its cavity portion thinned and inwardly directed to form a restricted mouth, a glider plate anchored in the base portion of the cup member with its bottom surface exposed and forming a portion of the bottom surface of the cup member, said cup member having a portion surrounding the edge of the plate which is heavier than the side wall portion of the cavity to provide the cup member with a side buffer portion between the plate and the relatively thin side wall portion of the cup cavity.

1,903,610. NEGATIVE INDUCTANCE. MIHRAN M. DOLMAGE, Washington, D. C. Filed Oct. 4, 1928. Serial No. 310,395. 6 Claims. (Cl. 178—44.)

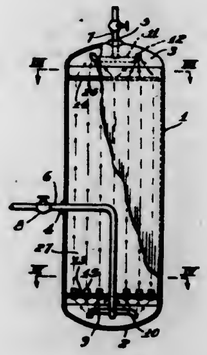


1. An automatic device having reactance characteristics of opposite sign to that of an inductance, such reactance varying in direct proportion with frequency, in accordance with the formula:

$$\text{Reactance} = -2\pi f(L)$$

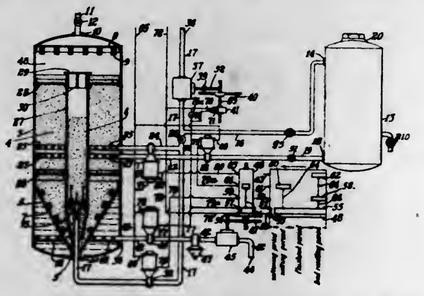
where (f) is the frequency and (L) is a constant.

1,903,611. WATER SOFTENING APPARATUS. ANDREW J. DOTTSWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Dec. 27, 1927. Serial No. 242,612. 3 Claims. (Cl. 210—24.)



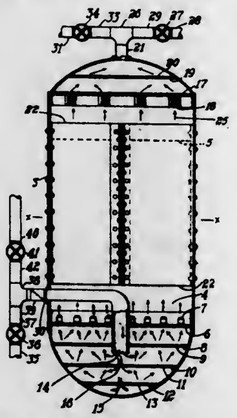
1. In a water softening apparatus comprising a tank, partition member for supporting a softening material within the tank, and a plurality of strainer nozzles for distributing the flow of fluid through said tank, each of said nozzles comprising a cup shape member, and a bolt for fastening said cup shape member, said bolt having a central bore opening on one side of the partition and a communicating transverse bore opening inside of said cup member, and said cup member having a serrated face for engaging said partition member.

1,903,612. WATER SOFTENING APPARATUS. ANDREW J. DOTTERWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 25, 1929. Serial No. 395,018. 2 Claims. (Cl. 210—24.)



1. A water softener comprising a container for a bed of water-softening material, means for introducing water into the bed between its upper and lower parts, an outlet pipe in connection with the upper part of the container, valve-controlled means for introducing regenerating material into the bed between its upper and lower parts and below the point where the water is introduced, a valve-controlled drain pipe in connection with the lower part of the container, a transfer tube establishing communication between the lower portion of the bed and the upper part of the container, valve-controlled means for directing a stream of water up through said tube for a bed-rearranging operation, and means for shutting off the supply of water to the first mentioned means during such bed-rearranging operation.

1,903,613. WATER SOFTENING APPARATUS. ANDREW J. DOTTERWEICH, Pittsburgh, Pa., assignor to Automatic Water Softener Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 6, 1929. Serial No. 405,109. 4 Claims. (Cl. 210—24.)

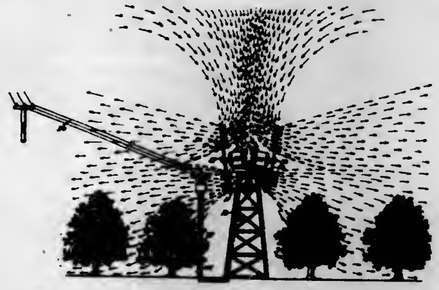


1. An apparatus for softening water comprising a tank adapted to contain a softening material and having inlet and outlet connections and a means within the tank for controlling the flow of fluids from the inlet connection to the softening material, said means consisting of a series of baffle plates adjacent the discharge of the inlet connection in the tank and provided with openings in the path of flow towards the bottom of the tank which decrease in area in each succeeding plate and provided with openings in the path of flow from the bottom of the tank towards the water softening material which increase in area in each succeeding plate.

1,903,614. DISINFECTING SOLUTION. GEORGE M. KARNS and LEONARD H. CRETCHER, Pittsburgh, Pa., assignors to Iodine Educational Bureau, Inc., a Corporation of New York. Filed Dec. 15, 1930. Serial No. 502,620. 3 Claims. (Cl. 167—72.)

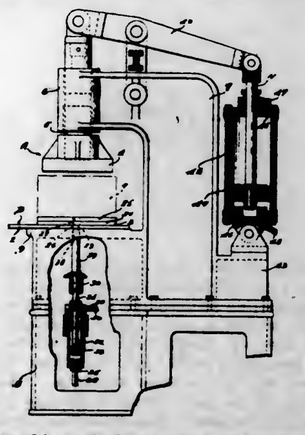
2. A disinfecting solution of free iodine in a solvent which itself is an aqueous solution of sodium iodide, potassium iodide, and calcium iodide, in substantially the ratio of 1104 : 48 : 32.

1,903,615. APPARATUS FOR PREVENTING FROST DAMAGE TO VEGETATION. CHARLES WARREN TOWT, Lindsay, Calif., assignor to Charles Warren Towt and Donald Gale Towt, as trustees of the Charles Warren Towt Holding Company, a Common-Law Trust of California. Filed Mar. 9, 1932. Serial No. 597,718. 7 Claims. (Cl. 47—2.)



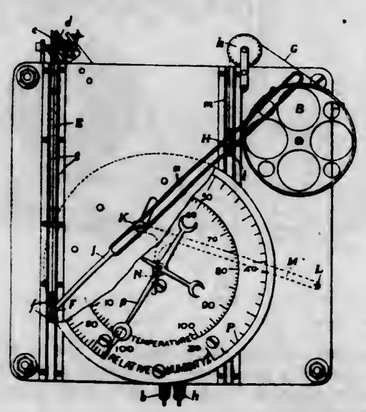
1. Apparatus for preventing frost damages to orchards and like vegetation, including a tower, a pair of oppositely arranged rotary propellers mounted at substantially the same elevation on the upper part of said tower, and similarly inclined with reference to a vertical line between them so that the ends of their propeller blades when in an upper position of rotation will be further from each other than when in the lower position of rotation, and when actuated they will draw the air from above the tower downward in a funnel-shaped course and discharge it outwardly and downwardly into the trees of said orchard, substantially as set forth.

1,903,616. SPRUE FORMING AND TABLE LOCKING MECHANISM. GEORGE F. YAGER and OLIVER J. HEATH, Toledo, Ohio, assignors to The Bunting Brass & Bronze Company, Toledo, Ohio, a Corporation of Ohio. Original application filed Aug. 31, 1931, Serial No. 560,455. Divided and this application filed May 31, 1932. Serial No. 614,578. 9 Claims. (Cl. 22—21.)



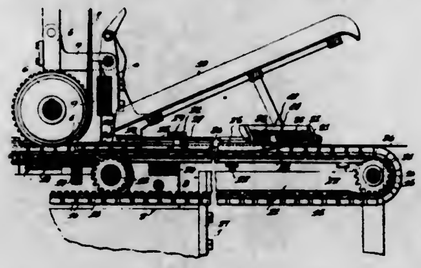
1. In a machine of the character described, a mold forming machine including a platform, a dial movable over the platform and adapted to carry a flask, and means associated with the platform for forming a sprue in the flask and for holding the dial from movement relative to the platform.

1,903,617. HYGROMETER. RICHARD GORDON BATESON, Princes Risborough, Bucks, England. Filed Sept. 16, 1931, Serial No. 563,076, and in Great Britain Sept. 17, 1930. 4 Claims. (Cl. 73—24.)



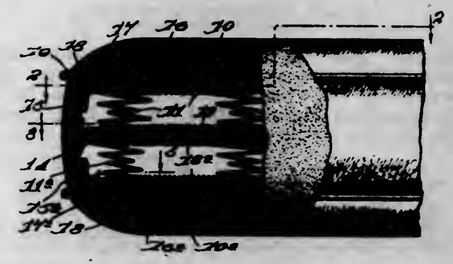
4. A direct reading hygrometer having a dry bulb thermometer, a straight guide, a slide moving in said guide, means to cause said slide to move by amounts which are functions of the dry bulb temperature, a wet bulb thermometer, a straight guide parallel to said first guide, a slide moving in said second guide, means for causing said second slide to move by amounts which are functions of the wet bulb temperature and in a direction opposite to that in which said first slide is caused to move for a temperature change of the same sign, a pivoted arm, a humidity scale, a pointer moving over said humidity scale and connected to said pivoted arm, and a link connecting said moving slides and pivoted at an intermediate point to said pivoted arm.

1,903,618. PLAIT FORMING APPARATUS. FRANK W. BRINTNALL, Detroit, Mich., assignor, by mesne assignments, to National Automotive Fibres, Inc., Wilmington, Del., a Corporation of Delaware. Filed May 16, 1928. Serial No. 278,234. 13 Claims. (Cl. 45—113.)



1. In plait forming apparatus, the combination of means to feed the material-to-be-formed longitudinally, means to form the material into plaits in progressive sequence laterally as it is being fed, and a rotatable body to engage at least one edge of the material to hold the material relatively taut while being formed, said body comprising a rotating brush arranged to impart an outward and forwardly directed drag to the said material edge.

1,903,619. MATTRESS. LEO D. CANFIELD, Chicago, Ill., assignor to Superior Felt & Bedding Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1931. Serial No. 582,819. 1 Claim. (Cl. 5—351.)

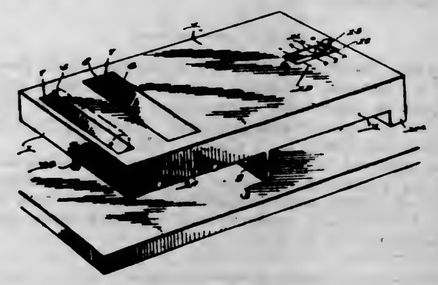


A reversible mattress, including; a double layer of spiral springs, one superimposed upon the other; a flexible insulating pad between the layers of springs; means attaching the periphery of the pad to the lower coils of the outer springs of the upper layer and to the upper coils of the outer springs of the lower layer; outer padding covering the top and bottom of the mattress and the sides thereof, said padding at the sides being in contact with the edges of the insulating pad to confine separate air spaces both above and below said insulating pad; and a casing outside of the outer padding.

1,903,620. WELDROD COATING. FREDERICK JULIUS ESSLINGER, Petroleum, Hubbard Township, Trumbull County, Ohio, assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa., a Corporation of Ohio. Filed June 14, 1930. Serial No. 461,265. 2 Claims. (Cl. 219—8.)

2. A weldrod having a coating formed from a plastic composition comprising the following components in substantially the proportions stated, kaolin 7., sodium silicate 41., glass 22., ferro-manganese 22., soda ash 6. and sufficient moisture to effect a mixture.

1,903,621. COUNT CHECKING DEVICE FOR PACKAGED COINS. FRED H. FISCH, Reading, Pa. Filed May 17, 1930. Serial No. 453,335. 11 Claims. (Cl. 265—50.)



1. A device for checking the full count of standard packages of coins by weight comprising a plate balance scale having a coin package seat thereon having a coin column end abutment, gauge means associated with said seat to initially measure the length of said column, said gauge means having associated calibrations in terms of degrees of permissible loss of column length through wear in a full count of coins of the said selected denomination up to the maximum permissible length wear for full count, and a weight on said plate opposed to said package seat normally positioned therein to counter balance the weight of a full count package of new coins of the selected de-

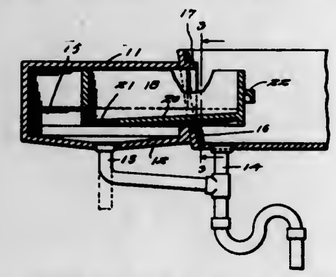
nomination on said seat, and arranged for adjustment from said normal position to calibration-indicated positions coordinating and counterbalancing proportionate weight loss to the coin column length loss by wear indicated by a gauge calibration.

1,903,622. METHOD OF PRODUCING CELLULOSE ARTICLES. WILLIAM F. HENDERSON, Chicago, Ill., assignor to The Visking Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 26, 1930. Serial No. 498,467. 3 Claims. (Cl. 18—57.)



1. The method of forming a cellulose product, which method comprises extruding viscose and regenerating it and subjecting the regenerated viscose to several baths of heated water of increasing temperature.

1,903,623. GARBAGE HOLDER FOR SINKS. WALTER S. HOWE, Ontario, Calif. Filed June 9, 1932. Serial No. 616,297. 6 Claims. (Cl. 4—190.)



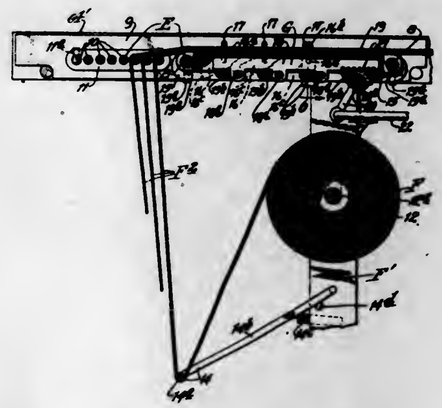
1. The combination with a sink, of a compartment having a drain opening, the compartment having an opening through which a drawer may be inserted and a drawer insertible into said opening and adapted to receive garbage and having an opening permitting the discharge of the liquid portion of the garbage on to the bottom of the compartment.

1,903,624. MOTOR FUEL. ROY T. HURLEY, Dobbs Ferry, N. Y., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 16, 1928. Serial No. 293,316. 1 Claim. (Cl. 44—9.)

An improved motor fuel comprising a low compression fuel, an anti-knock substance comprising iron carbonyl, and a corrective agent comprising a tetraethyl lead, the ratio of anti-knock substance and corrective agent being substantially ten to one.

1,903,625. DUPLICATING MACHINE. LOUIS JENSEN, Chicago, Ill., assignor to United Autographic Register Co., Chicago, Ill., a Corporation of Illinois. Filed July 2, 1928. Serial No. 289,820. 8 Claims. (Cl. 197—133.)

1. In means of the character set forth, a bed equipped with strip supporting and guiding means over which strips provided with punch-holes may be drawn, pins fixed to the front end of said bed for holding the advance ends of the strips, a strip-supply source, strip-tensioning means tending to retract the strips, a safety-catch mounted on said bed beneath the path of the strips and serving as a feeler and adapted to automatically engage a punch-hole in the strips in case of accidental release of the strips, said safety-catch being automatically released by the strips when they are drawn forwardly, means above

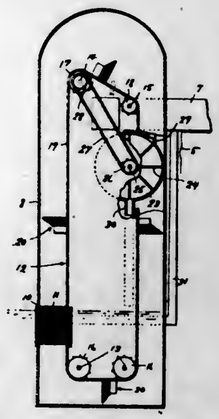


the strip for limiting displacement of the safety-catch when it engages a punch-hole, and means normally accessible to the operator for locking said safety-catch in inoperative position.

1,903,626. REMEDY FOR COMBATING PLANT DISEASES AND FOR THE PROTECTION OF PLANTS AGAINST ATTACKS FROM FUNGI AND INSECTS. FINN JOHNSEN, Fuur, Denmark. Filed Sept. 8, 1928, Serial No. 304,840, and in Germany Sept. 12, 1927. 6 Claims. (Cl. 167—14.)

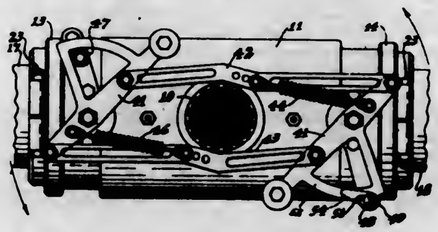
1. A remedy for abating plant diseases and for protecting plants against attacks from fungi and insects, comprising a mixture of moler and inorganic metal salts.

1,903,627. FISH ELEVATOR. FRANK KOCH, Sebewaing, Mich. Filed Sept. 1, 1932. Serial No. 631,418. 3 Claims. (Cl. 61—21.)



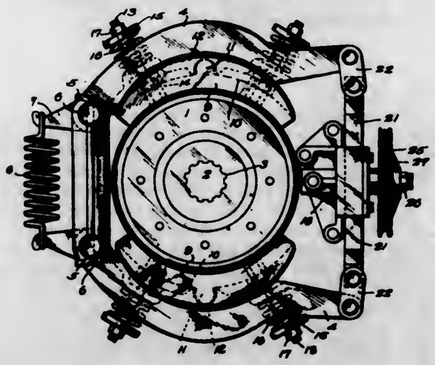
1. In a fish elevator of the class described, a casing, an endless elevator operating within said casing, and including spaced receptacles, and means for driving said elevator comprising a casing disposed laterally in the first named casing, a water wheel arranged in the second named casing, driving connection between said water wheel and said elevator, and means for directing water through the second named casing for rotating said water wheel.

1,903,628. AIRPLANE PROPELLER. JOHN P. LANDRUM, Birmingham, Ala., assignor of one-half to Perry R. McCormack, Birmingham, Ala. Filed May 16, 1930, Serial No. 452,956. Renewed May 20, 1932. 14 Claims. (Cl. 170—162.)



1. In an airplane propeller, a pair of propeller blades, a housing in which the blades are mounted, means movable responsive to angular velocity of the propeller for changing the pitch of the propeller blades from a predetermined minimum to a predetermined maximum, a positive latch means carried by the housing and adapted to hold said blades against movement in a predetermined position, and manually operable means for disengaging said latch means while the propeller is turning.

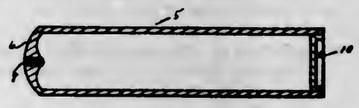
1,903,629. VEHICLE BRAKE. HOLMAN HARRY LINN, Morris, N. Y., assignor to The Linn Manufacturing Corporation, Morris, N. Y., a Corporation of New York. Filed Apr. 2, 1928. Serial No. 266,823. 4 Claims. (Cl. 188—75.)



1. A braking system including a brake drum, arms, brake shoes having a self centering connection with said arms, and means for operating said arms including a cable-operated sheave rotatively adjustable to compensate for ineffectiveness of the cable due to wear of the braking parts.

1,903,630. MANUFACTURE OF GAS CYLINDERS. JOHN C. MINOR, New Canaan, Conn., assignor to William Wharton, Jr., & Company, Incorporated, Easton, Pa., a Corporation of Pennsylvania. Filed Apr. 25, 1930. Serial No. 447,818. 1 Claim. (Cl. 29—148.2.)

The method of forming seamless drawn metal cylinders, which consists in forming from a billet by piercing and drawing a cylinder having a closed head portion characterized by its thickness with relation to the side wall section and by an inwardly directed axial boss, the other end of the cylinder being open its full diameter, boring



and tapping said closed head portion, including its co-extensive boss, for the reception of a valve, and ultimately closing the open end of the cylinder.

1,903,631. COLLAPSIBLE TABLE. ALFRED J. MORRISON, Denver, Colo. Filed Jan. 26, 1932. Serial No. 588,929. 5 Claims. (Cl. 45—31.)



1. A collapsible table comprising: a pedestal; top brace members extending oppositely outward adjacent the top of said pedestal and provided with horizontal slots extending inwardly into the extremities of said top brace members; a table top; and flange members formed in said top and arranged to extend downwardly and inwardly into said slots so as to hold said top in place.

1,903,632. PAPER CONTAINER. RUTH OLIVER, New York, N. Y., assignor to Lydia B. Koch, New York, N. Y. Filed July 21, 1931. Serial No. 552,236. 2 Claims. (Cl. 225—5.5.)

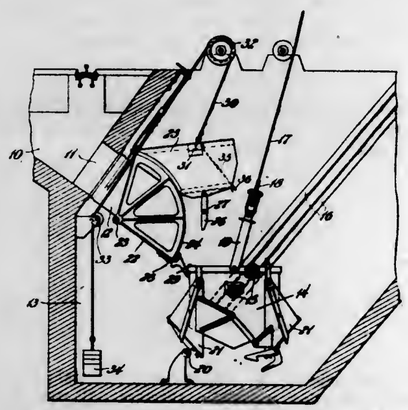


1. The combination with a container formed of sheet paper stock, of a band wrapped about and affixed to one end portion of the container, said band being formed of sheet paper stock having slots adapted to register to form grooves opening through one edge of the band, said grooves being closed at their inner sides and held against spreading by the container wall to which the band is affixed, and an over-all cap for embracing the container and band and having inwardly extended nodes for insertion in the grooves.

1,903,633. GATE. FRANK B. PRESLAR, Hudson, N. Y., assignor to Gifford-Wood Company, Hudson, N. Y., a Corporation of New York. Filed Dec. 9, 1930. Serial No. 501,115. 1 Claim. (Cl. 198—21.)

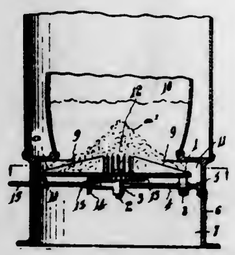
In combination with a fixed chute and a chute-like gate pivoted upon the fixed chute to swing vertically to stop

and to permit flow of loose, fluent materials out of the fixed chute, a gravity-operated gate pivoted within the chute-like gate near the mouth thereof and at the top of said gate; said gravity-operated gate being as long as the chute-like gate is wide and being of such width as to close the lower part of the mouth of the chute-like gate; the location of the pivot axis of said gravity-operated gate being such, and the center of gravity of said gravity-operated



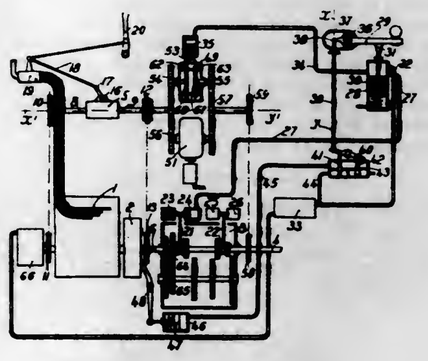
gate being so disposed relative to the lower edge of the mouth of the chute-like gate, that whenever the chute-like gate is elevated to a point a few degrees below the horizontal, said gravity-operated gate will tend to engage said lower edge to close the lower part of said mouth, and said gravity-operated gate will remain in said chute-closing position during further elevation of the chute-like gate.

1,903,634. GRATE. ROBERT T. ROBINSON, Penetanguishene, Ontario, Canada. Filed Apr. 19, 1930, Serial No. 445,604, and in Canada May 31, 1929. 1 Claim. (Cl. 126—182.)



In an apparatus for effecting the combustion of solid fuel of any degree of fineness, in combination, an imperforate-walled approximately cylindrical fire pot, a cylindrical ash pit disposed thereunder, means providing a single circular opening between said fire pot and said ash pit of less diameter than that of said ash pit at a point immediately beneath said opening, a rotary horizontal grate disposed beneath said opening and comprising a substantially flat imperforate circular disc of a diameter greater than that of said opening by an amount sufficient to afford a support for the burnt fuel at its natural angle of repose between said opening and the rim of said grate when supported on its horizontal surface, the continuous circular rim of said grate being spaced from the vertical wall of said ash pit to provide the sole passage for air through the fuel thereon whereby the initial combustion and the highest temperatures will occur at the margins of the fuel bed, and raised radiating ribs formed upon the upper surface of said grate, extending from points near the center of said grate substantially to the rim thereof and decreasing in height from the inner to their outer ends where they merge with the surface of said grate, said ribs adapted to move said burnt fuel toward the rim of said grate for discharge over the entire periphery thereof upon periodic rotation of said grate, supporting means for said grate, and means for rotating said grate.

1,903,635. METHOD OF OPERATING LOCOMOTIVES HAVING INTERNAL COMBUSTION ENGINES. LÉON SAIVES, Billancourt, France, assignor to Louis Renault, Billancourt, France. Filed Mar. 12, 1932, Serial No. 598,524, and in France Apr. 17, 1931. 4 Claims. (Cl. 74—107.)

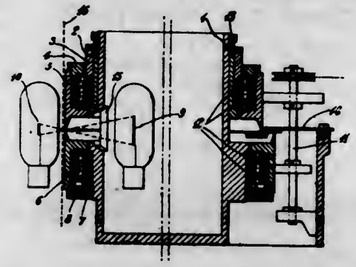


1. Control mechanisms for locomotives or tractors, comprising a motor and its shaft, a clutch, a second shaft driven by said motor shaft through said clutch, a transmission shaft, a change-speed box carrying movable gears adapted to transmit motion from said driven shaft to said transmission shaft, means acting upon the fuel supply of said motor and adapted to equalise, at each instant, the speeds of said motor shaft and of said driven shaft, means for connecting said driven shaft and said transmission shaft with a motion reduction corresponding to the gear to be engaged in said change-speed box, a control lever adapted for movement to as many operative positions as the change-speed box has speeds, means for simultaneously transmitting the control of said lever, for each of its positions with respect to said clutch, to said movable gears of the change-speed box, and to said means for connecting together said driven shaft and said transmission shaft, with a suitable motion reduction.

1,903,636. PRODUCTION OF SOLID CALCIUM NITRATE. CHRISTOPHER CAIGER SMITH, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Jan. 15, 1930, Serial No. 421,075, and in Great Britain Jan. 28, 1929. 7 Claims. (Cl. 23—102.)

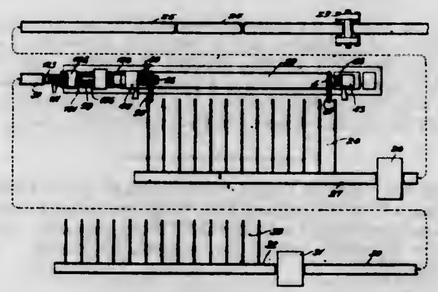
1. Process for the production of solid calcium nitrate which consists in forming said calcium nitrate in a solution saturated with respect to calcium nitrate and containing about 50% nitric acid.

1,903,637. REPRODUCTION OF SOUNDS. HARRY BENWELL STOCKS, South Tottenham, England, assignor to Alfred James Munro and Theodore Darch Parkin, London, England. Filed Mar. 28, 1931, Serial No. 526,668, and in Great Britain Mar. 28, 1930. 4 Claims. (Cl. 179—100.8.)



1. In sound-reproducing apparatus, the combination of elements having opposed edges forming a light-transmitting slit, means for moving said elements in the planes of their respective opposed edges, and cleaners continuously engaging said edges whereby movement of the elements will effect removal of deposits.

1,903,638. STRETCHING MACHINE. WILFRED SYKES, Chicago, Ill., assignor to Inland Steel Company, Chicago, Ill., a Corporation of Delaware. Filed July 8, 1931. Serial No. 548,675. 19 Claims. (Cl. 153—35.)

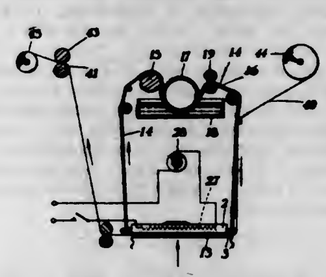


1. A stretching machine comprising spaced apart members for engaging the ends of the work, said members being relatively movable to perform the stretching operation, said members having openings therethrough for lengthwise movement of the work into, and out of, the machine and means for moving the work lengthwise in the machine.

1,903,639. TRANSFER PRESS. HAROLD JOHN TAPLIN, Wembley, London, England. Filed Feb. 12, 1931, Serial No. 515,881, and in Great Britain Feb. 13, 1930. 4 Claims. (Cl. 41—1.)

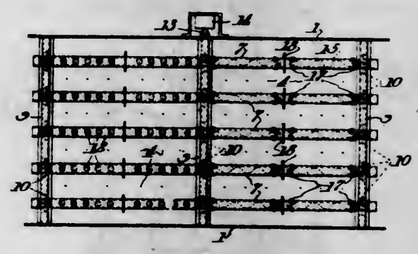
1. In a press, a pair of press plates, means to apply heat to one of said plates, an endless band of porous material located principally above said plates and having a bight extending between said plates, means to apply moisture to said band, means to support a transfer web with its bight extending between said plates below the bight of said band, and means to simultaneously feed forward said band and said web intermittently.

4. The combination claimed in claim 1 in which the web is supported from rollers arranged on opposite sides of the machine, one of said rollers being driven by a chain and sprocket gear, the rollers being carried by a yoke adjust-



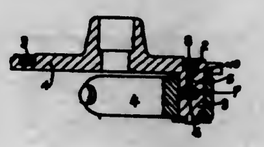
able in the direction of feed of said web within tthe limit allowed by the amount of slack permissible in the chain of said gear.

1,903,640. ELECTRICAL PRECIPITATOR. HARRY A. WINTERMUTE, Plainfield, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed Aug. 22, 1931. Serial No. 558,809. 19 Claims. (Cl. 183—7.)



1. In an electrical precipitator, a casing having inlet and outlet openings, a plurality of collecting electrodes dividing the space within said casing into a plurality of parallel gas passages, and discharge electrodes in each of said gas passages, the portions of said collecting electrodes adjacent the inlet opening of said casing being apertured to permit equalization of gas flow in the several gas passages, and the remaining portions of said electrodes being substantially imperforate.

1,903,641. INTERRUPTER FOR IGNITION DEVICES. FRITZ ALLENDORFF, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Aug. 20, 1931, Serial No. 558,408, and in Germany Aug. 29, 1930. 4 Claims. (Cl. 200—19.)

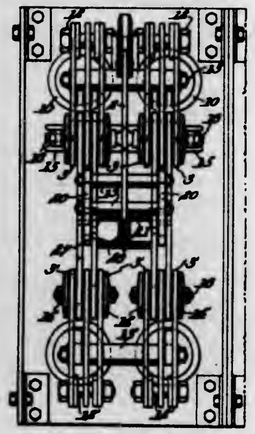


1. A circuit interrupter for ignition devices comprising a base plate, an interrupter arm, a pivotal support for said interrupter arm, a felt ring eccentrically positioned on one side of said base plate, a wick connected to said felt ring at its innermost part and adapted to supply lubricant to the said pivotal support.

1,903,642. PRESERVATION OF ETHYL ETHER. HENRY L. COX, South Charleston, and PAUL S. GREER, Charleston, W. Va., assignors to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Feb. 26, 1932. Serial No. 595,420. 8 Claims. (Cl. 23—250.)

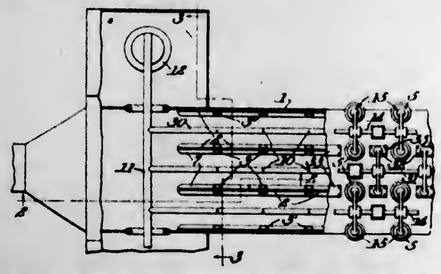
1. The improvement in the preservation of ethyl ether, which ether tends to deteriorate under ordinary storage conditions even in glass containers, which consists in subjecting the ethyl ether to the action of a metallic substance selected from the group composed of metallic chromium, metallic nickel, and iron alloys containing both chromium and nickel whereby to diminish the content of detrimental impurities.

1,903,643. ELECTRIC SWITCH. CARL G. KOPPITZ and HEMSLEY B. MASSEY, Greensburg, Pa., assignors to Railway and Industrial Engineering Company, Greensburg, Pa., a Corporation of Pennsylvania. Filed Apr. 28, 1931. Serial No. 532,298. 25 Claims. (Cl. 200—170.)



1. In a switch of the knife blade type, a blade, means providing a pivotal support for said blade, a switch jaw comprising members having opposed faces between which said blade may be moved, and bosses projecting respectively from the opposed faces of said members and from said blade to restrict the contact area when said switch is closed.

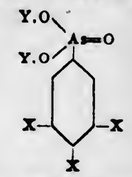
1,903,644. CONCENTRATED FIELD PRECIPITATOR. ARCHIBALD F. MESTON, Middlesex, N. J., assignor to Research Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 4, 1932. Serial No. 584,684. 10 Claims. (Cl. 183—7.)



1. A method of operating an electrical precipitator of the type having discharge and collecting electrode systems which comprises establishing successive fields of high and low concentration and maintaining the field of high concentration in substantially a uniform condition.

1,903,645. CROTONYL-AMINOBENZENE-ARSONIC ACIDS AND SALTS THEREOF. KARL STEINITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad Soden on Taunus, and WALTER HERRMANN, Frankfort-on-the-Main, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 29, 1930, Serial No. 424,488, and in Germany Sept. 8, 1928. 4 Claims. (Cl. 260—14.)

1. Compounds of the following formula:

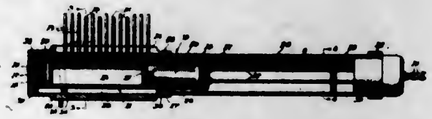


wherein one of the X's stands for the group

$$-NH.CO.CH=CH.CH_3,$$

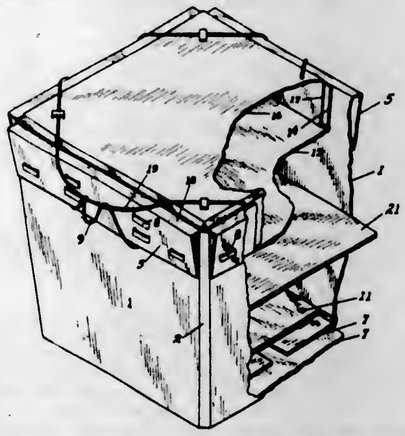
the other X's for hydrogen, chlorine or the hydroxy group and Y for hydrogen, an alkali metal, or NH_4 wherein three of the hydrogen atoms may be substituted by two ethyl groups and one hydroxyethyl group being products of therapeutically valuable properties.

1,903,646. SCALP TREATING DEVICE. CHARLES V. JAMESON, Chicago, Ill. Filed Oct. 5, 1931. Serial No. 566,848. 10 Claims. (Cl. 132—13.)



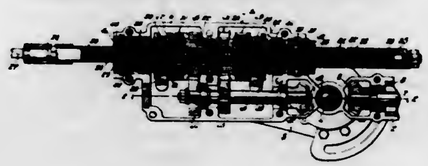
1. In a device for applying liquids to the scalp, the combination of a tubular barrel having a transversely extending partition therein dividing the barrel into two axially alined compartments, a plurality of liquid conducting members leading from one of said compartments, and a heating element disposed in the other compartment.

1,903,647. FRUIT AND VEGETABLE CONTAINER. DAVID T. USHER, Mount Airy, N. C.; Geraldine B. Usher administratrix of said David T. Usher, deceased. Filed Oct. 31, 1929. Serial No. 403,864. 3 Claims. (Cl. 229—15.)



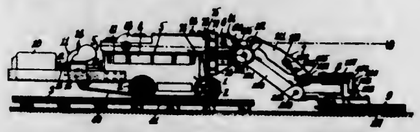
1. A container for fruits or vegetables comprising a formed cut and scored blank having reinforcing flaps at the upper ends of the side walls folded over and attached to the side walls, a compartment lid for receiving display samples comprising a bottom having upwardly extending reinforcing flaps, pressing out against the side walls to hold the lid in position, and a cover for both the container and the compartment, and means for securing same to the container walls.

1,903,648. DRILLING MECHANISM. MORRIS P. HOLMES, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Original application filed June 23, 1927, Serial No. 200,826. Divided and this application filed Apr. 20, 1931. Serial No. 531,424. 40 Claims. (Cl. 255—47.)



1. In a drilling mechanism, tool rotating and feeding mechanism comprising a plurality of coaxial driving elements, a tubular tool driving member operatively connected to one of said driving elements, a rotatable tool feeding member operatively connected to another of said driving elements and extending within said tubular driving member, means for simultaneously rotating said driving elements for effecting axial movement of said driving member relative to said feeding member in one direction, and means for alternatively driving said driving elements for effecting movement of said driving member at different speeds in opposite directions.

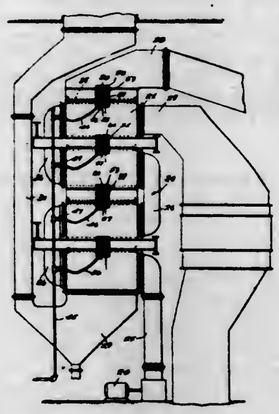
1,903,649. MINING APPARATUS. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Mar. 31, 1930, Serial No. 440,310. Renewed June 11, 1931. 82 Claims. (Cl. 262—28.)



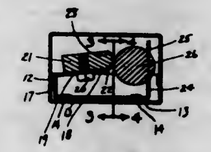
1. In a mining apparatus, a wheeled truck adapted to run along a mine trackway, and kerf cutting mechanism on said truck including a kerf cutter, adjustable supporting means for said kerf cutter whereby the latter may be positioned wholly outside the trackway and in horizontal planes below the top of the trackway to cut a horizontal kerf at the level of the mine bottom outside and below the level of the mine trackway, or to cut a vertical kerf extending in the direction of the trackway and midway between the sides of the apparatus, and motor operated devices for adjusting said kerf cutter into aforesaid positions.

1,903,650. BLOWER FOR AIR HEATERS. NORMAN L. SNOW, New Canaan, Conn., and WILLIS P. THOMAS, Detroit, Mich., assignors to Diamond Power Specialty Corporation, Detroit, Mich., a Corporation of Michigan. Filed July 19, 1928. Serial No. 293,934. 26 Claims. (Cl. 257—1.)

1. In combination, an air heater having a plurality of air boxes, the said air boxes being spaced from each other by gas passages, a blower element for discharging a cleaning fluid through the said gas passages, means for moving the said blower element, and means cooperating with said last mentioned means for effecting a rapid movement of said blower element past each of said air boxes and for compelling a stopping of the movement of said blower element in alignment with each of said gas passages.

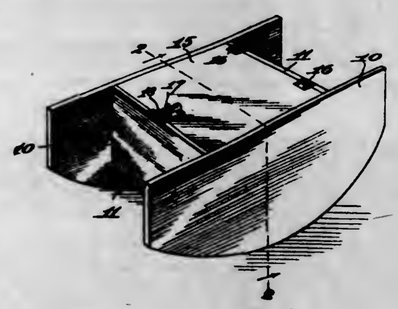


1,903,651. BLADE SHARPENER. ALBERT M. WHEELER, Catlettsburg, Ky. Filed June 2, 1932. Serial No. 614,928. 7 Claims. (Cl. 51—204.)



1. A sharpener including in combination a steel block having a flat face, a steel ball tangentially contacting the face, and means for causing yielding engagement therebetween.

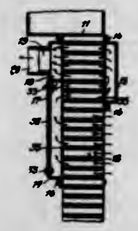
1,903,652. ICE CREAM FREEZER. SAMANTHA A. WILSON, Bell, Calif. Filed June 20, 1931. Serial No. 545,815. 1 Claim. (Cl. 259—78.)



An ice cream freezer comprising a pair of side panels provided with curved lower edges that are adapted to rock on a flat surface, end walls arranged between said side panels, which end walls are inset from the ends of

said side panels, a bottom wall arranged between the lower portions of said end walls and extending from one side panel to the other, ledges secured to the inner faces of the side panels and end walls a short distance below the upper edges thereof, a cover adapted to close the space between the upper portions of the side panels and end walls, which cover when closed rests snugly upon the ledges, hinges connecting one end of the cover to the upper edge of one of the end walls and a readily releasable latch for securing the free edge of the cover to the upper portion of the other one of the end walls.

1,903,653. AUTOMOBILE HEATER. JACK F. BROCK, Scio, Oreg. Filed Feb. 11, 1931. Serial No. 515,113. 3 Claims. (Cl. 257—241.)



1. In a heater of the class described, the combination of a radiator having air passages extending therethrough, and boxes closing front and rear sections of said radiator to cause air to circulate upwardly and forwardly and then upwardly and rearwardly and said rear box having a removable rear wall to allow air to flow through the radiator in the usual way when said wall is removed.

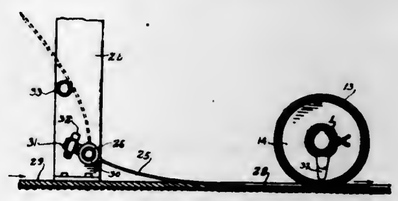
1,903,654. VOLTAGE AMPLIFIER. HENRY G. OBATRICHER, Los Angeles, Calif. Filed Oct. 11, 1932. Serial No. 637,315. 1 Claim. (Cl. 123—148.)



A spark voltage amplifier including a cup formed of insulative material, a plug closing the top of the cup and having a socket for a circuit terminal, a contact in said socket, a contact in the bottom of the cup, top and bottom discs in the cup, and means for constantly pressing said discs against the respective contacts; said discs having an electric gap forming medium on each side.

1,903,655. MEANS FOR MAKING PAPER. LESTER C. PERKINS, Holyoke, Mass., assignor to Parsons Paper Company, Holyoke, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1932. Serial No. 595,351. 7 Claims. (Cl. 92—44.)

1. In paper making apparatus, the combination with a supporting frame, of a member movable therethrough to carry a web of pulp, standards adjustable on said frame, a rod supported by said standards and extending transversely of the direction of movement of said member, of a tracker pivoted on said rod and adjustable lengthwise thereof, said tracker being normally held by gravity in contact with the moving web to form a track therein, means for varying part of the force of gravity operating on that part of said tracker member in contact with said web, a second support on said frame parallel to the first named support, and means adjustable on said second support in advance of the tracker and rotatable by contact

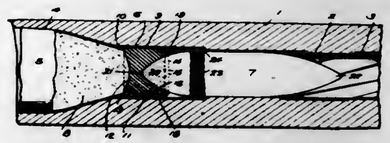


with said web to convert the track to a flat bottomed channel, said standards being adjustable toward and from the last named means to vary the distance of the tracker therefrom.

1,903,656. NONDRYING OIL AND PRODUCT THEREOF. FLOYD M. REECE, South Bend, Ind., assignor to O'Brien Varnish Company, South Bend, Ind., a Corporation of Indiana. Filed Nov. 26, 1930. Serial No. 498,509. 5 Claims. (Cl. 134—26.)

1. A coating composition comprising a soluble lacquer base and a non-drying liquid oil product having the characteristics of China-wood oil which has been heated as high as 625° F. in the absence of gelatinization inhibiting substances in so short a time as to avoid gelatinization while reducing the index of refraction to a point below 1.499.

1,903,657. CARTRIDGE. WILLIAM L. REED, Miami, Fla. Filed Feb. 23, 1932. Serial No. 594,664. 2 Claims. (Cl. 102—12.)

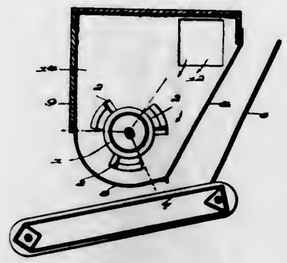


1. A cartridge including a shell having a powder holding portion and a bullet receiving portion, a pusher in the bullet holding portion, the shell including means for seating the pusher, the pusher including a concaved recess and a surrounding annular face, the front of the pusher including a conical recess having a surface of alternate ribs and grooves, a cupped portion surrounding the conical recess and an outer tapered portion, a bullet having a conical rear end to be received in the conical recess in the pusher and to be engaged by the ribs therein, an annularly grooved portion on the bullet, the shell having a crimped end for engaging the grooved portion of the bullet.

1,903,658. PEA THRESHING MACHINE. FRANK PITTIS RYDER, Niagara Falls, N. Y. Filed July 28, 1930. Serial No. 470,151. 4 Claims. (Cl. 130—30.)

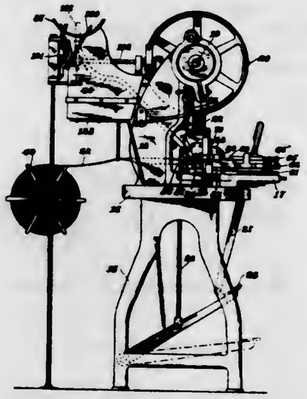
1. In a machine for threshing green peas or beans a beater cylinder, a series of beater arms carried by the beater cylinder having their faces inclined rearward from a radius, a stationary screen arranged opposite one side of the beater cylinder having its lower edge below the lowest point in the path of movement of the beater arms, a shoe extending beneath the beater cylinder with its

forward edge connected to the lower edge of the screen, the screen and shoe being so arranged with reference to the beater cylinder that a substantial space is left between



their inner faces and the ends of the beater arms of such extent as to permit vines carrying pods to pass without rubbing action on the pods.

1,903,659. MACHINE AND METHOD FOR APPLYING FASTENER ELEMENTS. ROSCOE J. SMITH, Glen Ridge, N. J., assignor to Hookless Fastener Company, a Corporation of Pennsylvania. Filed Jan. 30, 1932, Serial No. 589,918, and in Great Britain Aug. 10, 1931. 52 Claims. (Cl. 153—1.)



1. A machine for permanently applying a series of fastening elements to a mounting member in the manufacture of slide fasteners including means for moving said mounting member, means for disposing fastening elements adjacent one edge of said mounting member and applying the same thereto, and means periodically interrupting the operation of such last named means whereby said fastening elements will be disposed in groups along one edge of said mounting member.

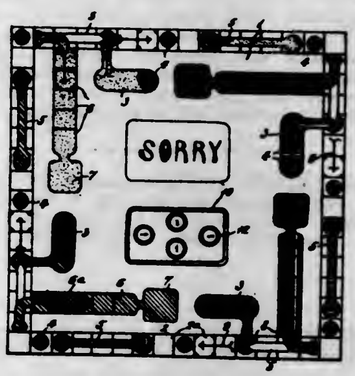
49. The method of making stringers for slide fasteners of the type having a mounting member and a plurality of interlocking elements each having at one end a pair of jaws clamped to the edge of the mounting member and an interlocking head projecting from the mounting member, which consists in manipulating a loose mass of fastener elements to arrange elements from the mass with all the jaws extending in the same direction and all the heads facing in the same direction, and then feeding said elements one by one to the edge of an intermittently moving mounting member, and clamping them to the mounting member while the latter is stationary.

1,903,660. WRENCH. JOSEPH B. SMITH and JAMES HATHAWAY SMITH, Emporium, Pa. Filed Mar. 24, 1932. Serial No. 600,986. 2 Claims. (Cl. 81—177.)



1. A tool of the character described comprising a flexible tubular housing, a handle connected at one end with said housing and having a passage therethrough, a portion of said passage being of relatively large diameter and opening through the end of the handle remote from the housing, a rigid shaft extending through said handle and having a pair of collars thereabout located in the enlarged portion thereof, a sleeve nut removably engaged in the handle at the outer end thereof and engaging one of said collars, the end of said shaft adjacent said sleeve nut being formed to facilitate the attachment of an operating implement therewith, a flexible shaft extending through said housing and having one end connected with the rigid shaft, a sleeve connected with the housing at its other end, and a head member having a reduced stem portion rotatably mounted in said sleeve and coupled with the adjacent end of the flexible shaft.

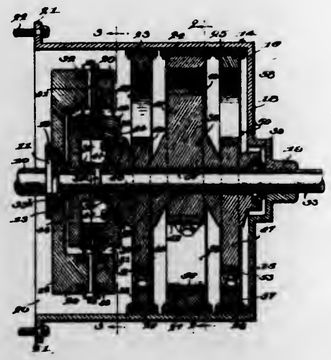
1,903,661. APPLIANCE FOR PLAYING GAMES. WILLIAM HENRY STOREY, Southend-on-Sea, England. Filed Aug. 4, 1930, Serial No. 473,018, and in Great Britain Sept. 12, 1929. 2 Claims. (Cl. 273—134.)



1. A game apparatus including a game board having the marginal edge marked to define a track, with such track divided transversely to indicate squares, each side of the board adjacent the track being formed with a marked outline to receive a number of playing units, and serve as a starting point for each unit, each side of the board adjacent the track being further provided with an additional track extending parallel to one side trackway and at right angles to the adjacent side trackway, such additional track having plain communication with the right angle portion of the trackway and being transversely divided to form squares and terminating in an enlarged space, the trackway at each edge of the board being further provided with a supplemental trackway of relatively narrow width and extending throughout a pre-

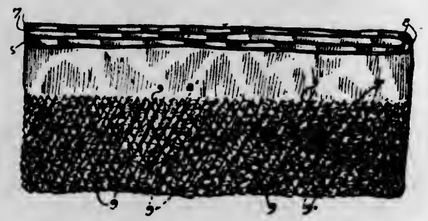
determined number of squares of such trackway, said supplemental trackway serving to provide for a particular playing function in connection with the units reaching such supplemental trackway.

1,903,662. TRANSMISSION MECHANISM. JOHN B. WHITLOW, Lexington, Ky. Filed Apr. 7, 1932. Serial No. 603,865. 3 Claims. (Cl. 74—34.)



1. The combination of a rotatable driving member having a fly wheel, a shaft to be driven, a casing enclosing said fly wheel and revolubly supporting said driven shaft, pinion gears carried by said fly wheel, a ring gear fixed to said driven shaft and in mesh with said pinion gears, a hollow crank shaft revolubly mounted upon said driven shaft, said crank shaft having eccentric members, guide ways carried by said casing, weight members slidably supported within respective guide ways, the guideways having a fixed position in the housing, connecting rods associated with respective eccentrics and weight members, and a ring gear carried by said crank shaft and in mesh with said pinion gears whereby to rotate said crank shaft to oscillate said weight members.

1,903,663. FABRIC DUSTER. RALPH YUTTS, Miami, Fla. Original application filed Aug. 3, 1931, Serial No. 554,847. Divided and this application filed Oct. 29, 1931. Serial No. 571,927. 5 Claims. (Cl. 15—225.)



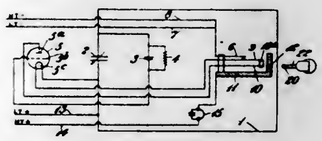
1. A duster of the character described, comprising a sheet of material folded upon itself to provide a handle portion, and a bristle portion including a plurality of wisps, said wisps being formed by diagonal slits in the sheet material so that the wisps will extend the length of the bristle portion and flare outwardly at their free ends in a helical fashion.

1,903,664. DUSTER AND HANDLE. RALPH YUTTS, Miami, Fla. Filed Oct. 29, 1931. Serial No. 571,928. 2 Claims. (Cl. 15—226.)



1. The combination with a duster having a flared duster portion and a cylindrical handle shank portion, of a tubular handle on the cylindrical handle shank portion including a rolled sheet carrying a projecting gummed strip at one side edge for retaining the handle in tubular formation on the cylindrical handle shank portion.

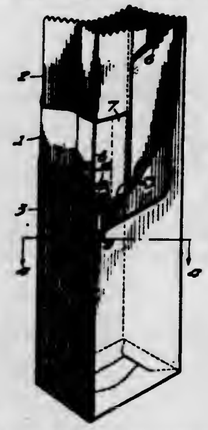
1,903,665. RADIO RECEIVING AND TRANSMITTING APPARATUS. HORACE WILLIAM ADEY, London, England. Filed Oct. 3, 1929, Serial No. 397,092, and in Great Britain Oct. 24, 1928. 3 Claims. (Cl. 250—14.)



3. A radio receiving apparatus, comprising a detector valve having a plate, a filament and a grid, a frame aerial and a variable condenser in an oscillatory circuit in series with the grid of the valve, an output circuit that includes the plate and filament of the valve, circuits for energizing said valve, leaf springs arranged in the said output and energizing circuits, a jack arranged adjacent said leaf springs, a jack plug that actuates said leaf springs to close the output and energizing circuits upon its insertion into the jack, a coil mounted on said jack plug and rotatable therewith that is inserted into the output circuit by insertion of the jack plug into the jack and is in inductive relationship with the frame aerial, and a sound reproducing means associated with the output circuit.

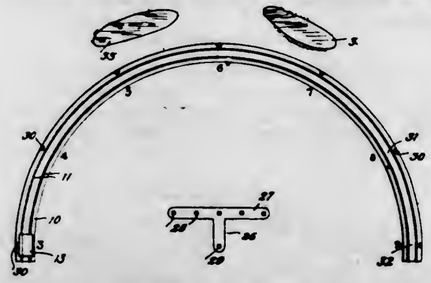
1,903,666. MOISTURE-PROOF COVERED BAG. TRUE M. AVERY, Glens Falls, N. Y., assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y., a Corporation of New Jersey. Filed June 6, 1932. Serial No. 615,715. 3 Claims. (Cl. 229—55.)

1. A bag having a longitudinal seam, and a moisture proof outer covering therefor also having a longitudinal seam, an edge of the seam of the covering being turned under an edge of the seam of the bag for a portion of the width of the bag seam and being directly united to



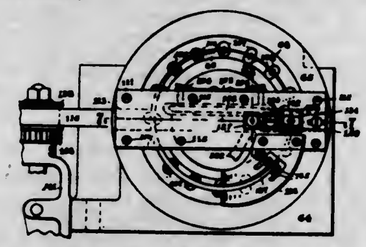
the other edge of the seam of the covering, and the edges of the bag seam being directly united for another portion of the width of the bag seam.

1,903,667. TRAP-SHOOTING APPARATUS OR LAYOUT. CHARLES EDWARD BAND, Los Angeles, Calif. Filed May 18, 1932. Serial No. 612,122. 7 Claims. (Cl. 124—8.)



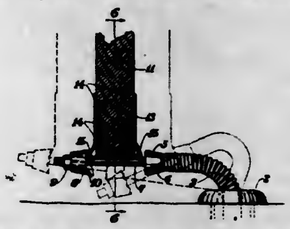
1. An apparatus of the character described comprising a trap-shooters' area having series of electric switches, a trench disposed about said area, a movable trap in said trench, a track arranged in the trench and traversed by the trap, a target thrower on the movable trap, and electrically operated means for controlling the thrower and having its electric circuit including said switches.

1,903,668. MACHINE FOR MAKING CHAPLETS AND THE LIKE. EUGENE H. FONTAINE, Pittsburgh, Pa. Filed Jan. 17, 1931. Serial No. 509,868. 14 Claims. (Cl. 10—156.)



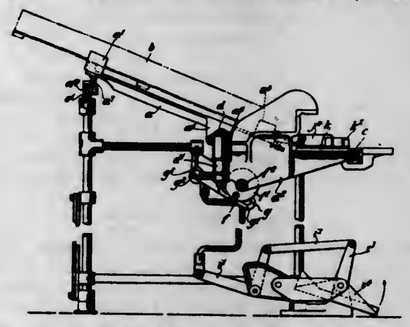
1. In a machine for forming chaplets and other articles, the combination with a tool and means for reciprocating the tool, of a pair of carriers arranged in nested relation and mounted for rotation on parallel axes and in a plane angular to that of the movement of the tool, the adjacent surfaces of the carriers being provided with coacting work-clamping means which are caused to converge and diverge by the rotation of the carriers, means for adjusting the relative eccentricity of the carriers, means for imparting an intermittent rotary movement to the carriers, and mechanism for feeding the material to the carriers in a line of feed parallel to the path of movement of the tool.

1,903,669. YIELDABLE DOOR STOP AND CATCH. CURTIS GREENE, San Diego, Calif. Filed Aug. 18, 1930. Serial No. 475,869. 5 Claims. (Cl. 292—87.)



1. In a device of the class described, a support, a coil spring secured at one end thereto and extended with its opposite end therefrom, a frusto-conical catch having its small end of substantially the diameter of the spring and secured with said end to the free end of the spring, a reduced stem secured to and extending outwardly and coaxially from the large end of the catch, and a second frusto-conical catch secured with its large diameter end coaxially with and to the extended end of the stem.

1,903,670. MECHANISM FOR WRAPPING MACHINES. FREDERICK GROVER, Leeds, England, assignor to The Forgrove Machinery Company Limited, Leeds, England, and John Mackintosh & Sons Limited, Halifax, England. Filed Feb. 5, 1932, Serial No. 591,137, and in Great Britain Apr. 24, 1931. 10 Claims. (Cl. 93—2.)

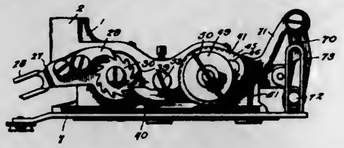


1. In wrapping machines, the combination of a tray support adapted to receive and support in an inclined position a tray for the tablets to be fed to said machine, a vertical pivot carrying said tray support, rollers on said tray support and horizontal bearing surfaces for said rollers whereby the tray support can be vibrated in a horizontal plane, mechanism for vibrating said tray support and controlling means for said mechanism adapted to permit the amplitude of vibrations imparted to said tray to be varied from stationary up to a predetermined maximum.

1,903,671. ATTACHMENT FOR SEWING MACHINES. RALPH P. HACKET, Allentown, Pa. Filed June 8, 1932. Serial No. 615,191. 2 Claims. (Cl. 112—77.)

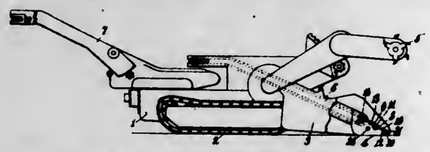
1. Button sewing and button hole stitching attachment for sewing machines comprising a body adapted to be

fixedly attached to a sewing machine, and a carriage reciprocably and oscillatably mounted at the bottom of said body, a button holding element detachably connected to said carriage, means carried by said body for imparting step by step reciprocatory movement to said carriage throughout a range of movement first in one direction and then the other, means for imparting oscillations of major amplitude to said carriage at the end of the range of its reciprocatory movements whereby the latter movements take place in opposite directions in displaced parallel paths, means for imparting a plurality of oscillations of minor amplitude to said carriage throughout its



reciprocatory movement, the means for imparting reciprocatory movement, the major oscillations and the minor oscillations functioning for the button-hole stitching operation, needle bar operated means for actuating said minor oscillations imparting means, a connection between said last named means, and said means for imparting major oscillations and said means for imparting reciprocatory movements, and adjustable means for moving said connection out of operative relation to said major oscillation imparting means and said reciprocatory movement imparting means for inhibiting the last two named movements during the button sewing operation.

1,903,672. LOADING MACHINE. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Feb. 18, 1929. Serial No. 340,815. 18 Claims. (Cl. 198—7.)



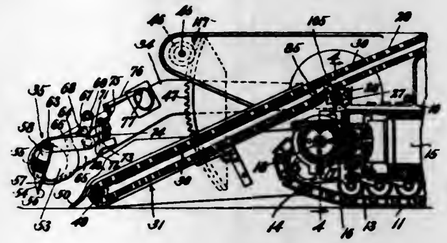
1. In a loading machine, material penetrating means comprising a frame portion, and a pair of angularly movable plates hinged together and mounted on and extending transversely of said frame portion, and mechanism for actuating said plates to cause the same to impart an agitating movement to the material penetrated thereby.

1,903,673. LOADING MACHINE. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed July 9, 1929. Serial No. 376,948. 8 Claims. (Cl. 198—9.)



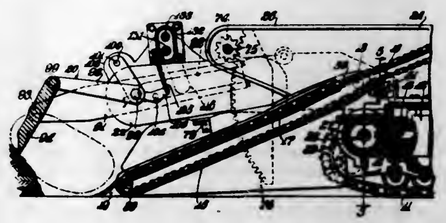
1. In a loading machine, a gathering mechanism including a plurality of shovel-like blades disposed in parallel relation for rotation on parallel horizontal axes spaced materially less than the maximum dimension of said blades transverse to their said axes and for orbital movement, and mechanism for simultaneously positively rotating said blades unidirectionally about their own axes and orbitally moving said blades to cause said blades to penetrate, elevate and discharge rearwardly the material to be loaded.

1,903,674. COAL LOADER. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 7, 1929. Serial No. 412,469. 13 Claims. (Cl. 198—10.)



1. In loading apparatus of the character described, the combination with conveying means, of a broad long gathering member pivoted on a horizontal transverse axis and having a digging edge, said axis extending lengthwise of said member, means for bodily moving said member to carry said axis through an orbit, and means for positively oscillating said member about its axis of pivoting during the bodily movement of said member including a link pivotally connected adjacent one of its ends to said gathering member at a point remote from the digging edge of said member and between the points of pivotal support of said member, and means cooperating with the other end of the link for supporting said end, guiding the same for movement in a relatively flat path, and imparting to said end longitudinal thrusts and retractions.

1,903,675. LOADING MACHINE. ANDREW HAUGE, Michigan City, Ind., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Dec. 16, 1929. Serial No. 414,612. 22 Claims. (Cl. 198—10.)

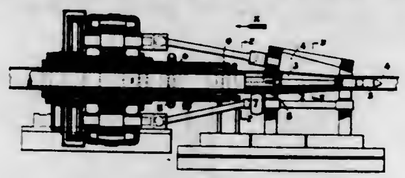


1. In a loading mechanism, the combination of a support, a pair of rotatable members carried by said support for rotation on a common axis, means for rotating said members, gathering means, supporting members for said gathering means supported by said rotatable members, supplemental means cooperating with said supporting members for controlling the movement thereof during actuation by said rotatable members, said gathering means being pivoted to each of said gathering means supporting members on a second axis parallel to but offset from the first mentioned axis, and a guiding element pivotally connected to said gathering means and normally pivotally connected to said support.

1,903,676. ROLLING MILL FOR WIDENING OUT TUBES. HEINRICH HEUTKAMP, Duisburg, Germany, assignor to Demag Aktiengesellschaft, Duisburg, Germany. Filed May 27, 1931, Serial No. 540,428, and in Germany June 11, 1930. 3 Claims. (Cl. 80—13.)

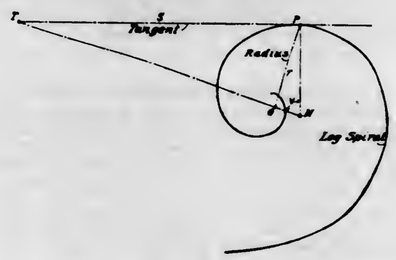
1. A tube widening mill provided with a mandrel with conical head, externally disposed inclined rollers co-

operating with said conical mandrel head, smoothing rolls behind said inclined rollers, means within the tube



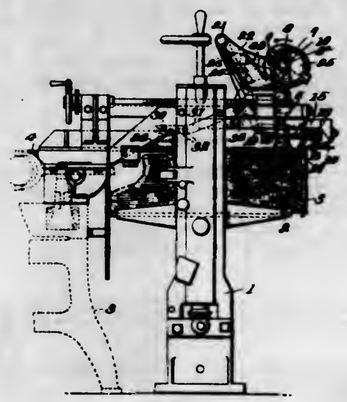
for its support against the smoothing rolls, and a former bush following the smoothing rolls, which bush is rotated around the tube with a relative speed.

1,903,677. LOGARITHMIC GEARING. MILLER R. HUTCHISON, Jr., East Orange, N. J., assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 30, 1929. Serial No. 359,306. 10 Claims. (Cl. 74—41.)



1. A logarithmic gear train, comprising in combination helical and logarithmic spiral gearing elements arranged on curves, whose tangents coincide at the point of contact.

1,903,678. SHEET FEEDING DEVICE. HENRY KRATZ, Baltimore, Md., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Oct. 23, 1931. Serial No. 570,692. 7 Claims. (Cl. 271—30.)



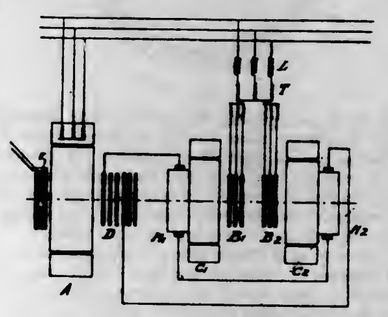
1. A sheet feeding mechanism comprising a support for the stacked sheets, a reciprocating feeding device engaging the rear edge of the sheet for feeding the same from the stack, means for lifting the rear portion of the topmost sheet from the stack for permitting the engagements of the feeding device therewith, and means adapted to engage the topmost sheet adjacent the forward edge thereof for retracting and lifting the forward edge portion of said sheet for freeing the same from the stacked sheets prior to the engagement of the feeding device with the sheet for the movement of the same from the stack.

1,903,679. BED SPRING. DAVID KURKCHEE, Schenectady, N. Y. Filed Mar. 31, 1932. Serial No. 602,334. 1 Claim. (Cl. 5—202.)



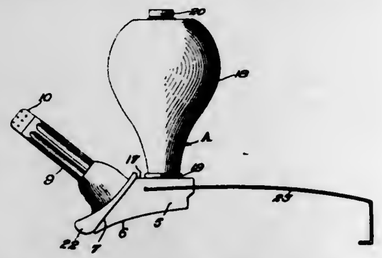
A bed spring structure comprising a pair of sections, one section including a pair of side members and a pair of channel end members having their flanges horizontally arranged and the other section including a single side member and a pair of angle end members, one limb of each angle member being horizontally arranged and its other limb depending vertically from said horizontal limb, a vertically arranged strip having its lower edge connected to the outer edge of the lower flange of each channel member, a horizontally arranged strip connected to the upper edge of said vertical strip with the lower edge of the vertical limb of the end member of the second section sliding in the space which is formed by the bight of the channel member and said vertical strip, and screws carried by the bight parts of the channel members for pressing the vertical limbs of the angle end members of the second section against the said vertical strips, the spring assembly of the first section being connected to the said horizontal strips and the spring assembly of the second section being connected to the horizontal limbs of the angle end members.

1,903,680. ALTERNATING CURRENT GENERATOR. PIERRE LETRILLIART, Paris, France, assignor to Forges & Ateliers de Constructions Electriques de Jeumont, Paris, France, a French Société Anonyme. Filed June 15, 1928, Serial No. 285,681, and in France June 18, 1927. 8 Claims. (Cl. 172—281.)



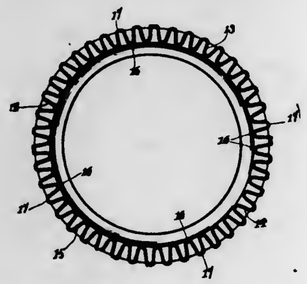
1. A variable speed alternating current generator, comprising an induction machine and two separate but complementary commutator machines coupled mechanically thereto, said commutator machines being directly connected by their commutator brushes with the rotor slip rings of said induction machine, means for feeding alternating current to the rotors of said commutator machines, said commutator machines providing unequal voltages, and means for modifying symmetrically the relative position of the two sets of commutator brushes for varying the resultant of said unequal voltages.

1,903,681. SYRINGE. REUBEN MERLISS, Detroit, Mich. Filed May 23, 1932. Serial No. 613,115. 1 Claim. (Cl. 128—232.)



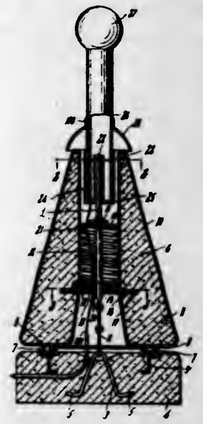
A syringe of the character described comprising a base formed with a lower curved face conforming to the curvature of an upper surface of a lavatory collar and an inclined side provided with an externally threaded nipple, a nozzle threaded with said nipple and having a perforated head at its outer end, said nozzle being formed with a chamber next to the head and merging into a central bore, a valve seat located at the merger of the chamber and bore, a ball check valve engageable with said seat to prevent back flow of fluid through the bore, said base being formed with a passage opening through the top thereof and an inclined side to meet the bore in the nozzle, a compressible bulb container supported by the base and communicating with the passage therein, and a wire clamp hinged to the base and having a jaw to detachably engage the collar for the mounting of the base at rest thereon.

1,903,682. PIE SEALER. EMMA E. MOORE, Warren, Ohio. Filed Mar. 3, 1931. Serial No. 519,875. 1 Claim. (Cl. 53—6.)



A pie sealer comprising an annular body formed from a single length of wire having stretches thereof bent upon themselves to provide a plurality of groups of a series of radially disposed, flat U-shaped straight sealing portions and a plurality of resilient U-shaped latching parts angularly disposed with respect to, depending from and corresponding in number to the number of said groups, each of said groups being of arcuate contour, said groups disposed in the same arc, each end of one group being separated from an end of a pair of adjacent groups by radially disposed endless spaces, the sealing portions of each group being oppositely disposed with respect to each other whereby the open end of one sealing portion will align with the closed end of an adjacent sealing portion, the closed ends of the sealing portions at the outer edge of a group being arranged in an arcuate row, the closed ends of the sealing portions at the inner edge of a group being disposed in an arcuate row and concentric to the arc in which is disposed the closed ends of the sealing portions at the outer edge of the group, and each latching part having the arms thereof merging into the outer ends of the opposed ends of a pair of opposed groups of sealing portions.

1,903,683. PEDESTAL FOR TRAFFIC SIGNALS OR THE LIKE. GEORGE A. NUTE, Somerville, Mass., assignor of one-half to David H. Young, Willimansett, Mass. Filed Jan. 14, 1932. Serial No. 586,488. 2 Claims. (Cl. 40—145.)

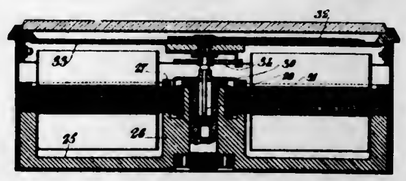


1. In a pedestal for a traffic signal or the like, a post in a normally upright position for supporting the signal element, a base to which the lower end of said post is anchored, a bumper column surrounding said post and revolvable about said post, and bearing means on said base on which said column is free to ride, said bearing means including a circular race-way fixed to said base and rotatable bearings within said race-way and on which the lower end of said column bears.

1,903,684. PROCESS FOR THE SIMULTANEOUS PRODUCTION OF PRECIPITATED DICALCIUM PHOSPHATE AND NITRATES. FRANCESCO CARLO PALAZZO and FORTUNATO PALAZZO, Florence, Italy. Filed Mar. 21, 1929, Serial No. 348,985, and in Italy Aug. 1, 1928. 3 Claims. (Cl. 71—7.)

1. Process for the production of dicalcium phosphate and nitrate comprising in combination: attacking phosphatic raw material with nitric acid in an amount in excess of that necessary to form calcum nitrate from the total CaO content of the phosphatic material, admixing alkali metal hydrates to the resulting acid solution to precipitate dicalcium phosphate and neutralise the solution and then treating the resulting solution of alkali nitrate and calcium nitrate obtained from the precipitation to produce nitrate mixtures.

1,903,685. SPEED INDICATOR. RENÉ JACQUES HENRI PLANIOL, Paris, France, assignor to Etablissements Ed. Jaeger, Levallois-Perret, France, a Joint-Stock Company of France. Filed July 8, 1929, Serial No. 376,774, and in France July 20, 1928. 2 Claims. (Cl. 175—183.)



1. In a speed indicator, a casing having two pairs of opposed polar pieces and cores, with windings thereon, each opposing pair adapted to be energized at the same time by an electric current, said cores being of reduced cross section whereby they are maintained saturated regardless of variations in the current supply, an inverted metal bell having a pintle pivotally mounted in the magnetic field created by the polar pieces, resilient resisting means acting in opposition to the rotation of the metal bell, a dial on the casing, and an indicating pointer on the end of the metal bell pintle for registering the revolution of the metal bell on the dial, when the windings and cores are energized from a source of electrical energy.

1,903,686. TREATMENT OF CHINA WOOD OIL TO PRODUCE A LIQUID UNGELLED OIL AND PRODUCT THEREOF. FLOYD M. REECE, South Bend, Ind., assignor to O'Brien Varnish Company, South Bend, Ind., a Corporation of Indiana. Filed Oct. 6, 1930. Serial No. 486,865. 6 Claims. (Cl. 87—12.)

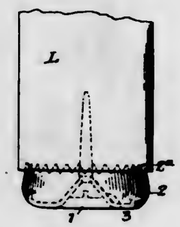
1. The method of treating China-wood oil to produce a liquid, ungelled oil wherein the oil is forced rapidly through a restricted conduit of such cross-sectional area as to permit of rapid input of heat, said conduit being heated to bring the oil to a temperature of at least 625° F. in a period of time sufficient to secure substantial reduction of the refractive index of the oil and so short as not to permit gell formation, said period being suitably in the order of fifteen seconds for a temperature of 675° F. for a product having drying properties, and rapidly cooling the oil.

1,903,687. SLIDING CASTER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Sept. 28, 1931. Serial No. 565,621. 6 Claims. (Cl. 16—42.)



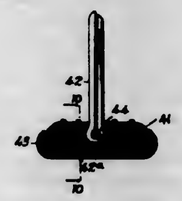
1. A sliding caster comprising a resilient body having a bore extending therethrough; a pintle in the bore; a shell having its edges rolled inwardly around the resilient body to hold the body in the shell; and means in the body for preventing radial compression of the body and separation from the shell after assembly.

1,903,688. SLIDING CASTER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Oct. 28, 1931. Serial No. 571,633. 5 Claims. (Cl. 16—42.)



1. A slider comprising a shell having a central recess on its underside and spring tongues at the upper end of the recess, and an attaching member extending through the recess and having a head seated in the recess and a groove engaged by said tongues.

1,903,689. SLIDING CASTER. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Nov. 25, 1931. Serial No. 577,846. 3 Claims. (Cl. 16—42.)



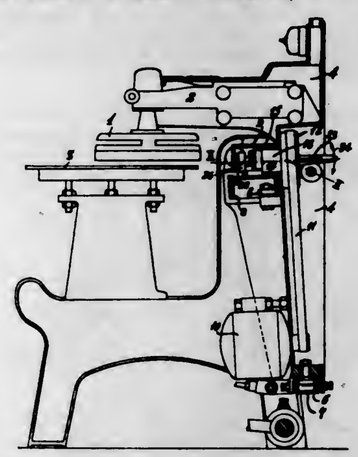
1. A sliding caster comprising a relatively flat resilient body of substantial thickness, a pintle molded in the body and adapted to pivot universally of the body, and a slidable shell for the body having its edges rolled around the body, said pintle comprising a cotter pin having its head molded in the body.

1,903,690. SLIDING CASTER CUP. CLIFFORD A. SCHACHT, Huntington, Ind. Filed Apr. 30, 1932. Serial No. 608,519. 14 Claims. (Cl. 45—137.)



1. A caster cup comprising a relatively flat rubber body having a relatively shallow recess in its top for loosely receiving a furniture leg and having a recess in its bottom; and a glide of hard material below the cap having portions removably engaged with the bottom recess and retained therein by the resiliency of the rubber.

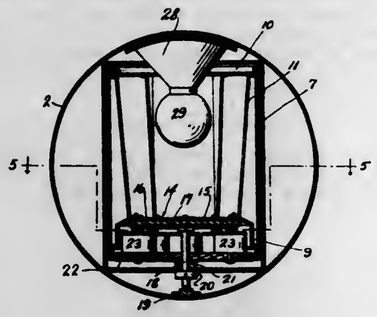
1,903,691. IRONING MACHINE. HERMANUS FRANCISCUS TOL, The Hague, Netherlands, assignor to Naamloose Vennootschap: Vennootschap tot Exploitatie van Strijk- en Persmachine Octrooien (V. E. S. P. O.), The Hague, Netherlands, a Corporation of the Netherlands. Filed Mar. 3, 1931, Serial No. 519,807, and in Great Britain Mar. 14, 1930. 1 Claim. (Cl. 68—9.)



An ironing machine comprising an iron, a table, a pair of tracks fixed adjacent thereto, a frame supporting the iron and having a shaft fixed therein parallel with said

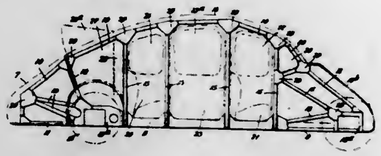
tracks, arms fixed to the shaft, a crosshead journalled in the arms, a second shaft fixed to the crosshead in a plane perpendicular to said tracks, a pulley on said second shaft, means for rotating the pulley, a wheel in the plane of and between the tracks and fixed to the pulley, means for rotating the crosshead to alternatively move the wheel into engagement with either of the tracks for moving the frame, and thus the iron with respect to the table during rotation of the pulley and wheel.

1,903,692. DIRECTION SIGNAL. SAMUEL N. WEBB, Johnstown, Pa., assignor to Roy Withers. Filed May 3, 1929. Serial No. 360,079. 1 Claim. (Cl. 177—327.)



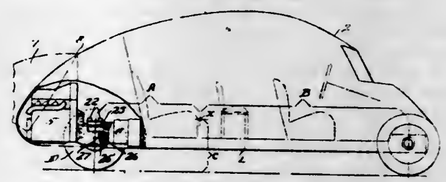
A signal of the class described comprising a horizontal casing having windows in its front and rear ends, a rectangular shell in the casing, having two opposing sides contacting the walls of said casing, and said sides of the shell having openings therein registering with the windows, the bottom of the shell being spaced from the casing and having a hole therein, a cylinder in the shell and comprising a base portion, a centrally arranged pivot member carried by the base portion and extending through the hole in the bottom of the shell and rotatably supported on the bottom part of the casing, spaced uprights having their lower ends attached to the base portion, a ring connected to the upper ends of said uprights, and transparent panes connected at their ends to the ring and base and forming a cylindrical part, said panes having indicating data thereon for appearing at the windows when the cylinder formed of the panes and their supporting means is rotated, electric means for rotating the cylinder located in the lower part of the shell and a lamp supported from the top of the casing and extending into the top portion of the cylinder, the panes which are diametrically opposite each other carrying similar data.

1,903,693. MOTOR ROAD VEHICLE. CHARLES DENNISTON BURNEY, Westminster, England. Filed Aug. 10, 1929, Serial No. 384,946, and in Great Britain Sept. 6, 1928. 7 Claims. (Cl. 296—28.)



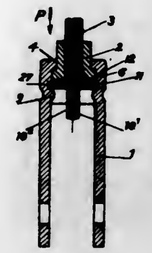
3. In a motor road vehicle of the enclosed type having an engine, a frame, front and rear pairs of wheels supporting said frame, the frame being extended rearwardly beyond the axis of the rear wheels and supporting the engine, an enclosure mounted on said frame and extending forwardly and rearwardly beyond the respective wheel axes, the rear portion of said enclosure housing the engine, said enclosure having substantially the shape of the upper half of a streamlined body, the front wheels having a relatively wide gauge and being positioned a substantial distance from the sides of the enclosure, the rear wheels having a relatively narrow gauge and being positioned so that their leading portions are substantially within the plan projection of the enclosure, and passenger or load-receiving accommodations within the enclosure entirely forward of the leading portions of the rear wheels.

1,903,694. MOTOR ROAD VEHICLE. CHARLES DENNISTON BURNEY, Westminster, England. Filed Jan. 10, 1933, Serial No. 651,063, and in Great Britain Sept. 6, 1928. 30 Claims. (Cl. 180—54.)



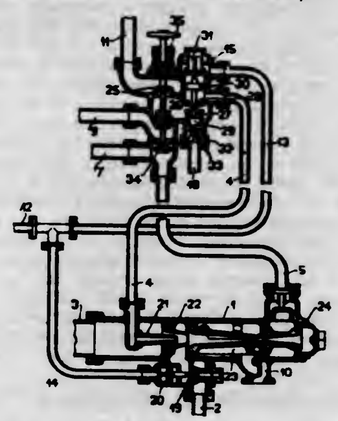
1. A motor road vehicle of the kind set forth, said vehicle comprising a body frame, front and rear pairs of wheels, spring means interposed between the frame and wheels for supporting the frame on the wheels, the frame having a rearward extension beyond the axis of the rear wheels, an engine supported by said frame extension entirely behind the axis of the rear wheels; and means for transmitting power from the engine to the rear wheels comprising a clutch, speed change gearing, and differential gearing all supported by the frame with the differential gearing substantially in the axis of the rear wheels; the engine and power transmitting means being closely associated to form a compact group extending longitudinally of the vehicle, the center of gravity of the said group being to the rear of the axis of the rear wheels but closely adjacent thereto so as to favorably affect the attainment of a center of gravity for the vehicle as a whole a substantial distance in advance of said axis, said power transmitting means also including universally jointed drive shafts connecting the differential gearing and rear wheels and operative in all springing relations of the frame to the wheels.

1,903,695. ADJUSTABLE TURNBUCKLE. JACQUES FRANCOIS GABRIEL CHOBERT, St.-Etienne, France. Filed Apr. 17, 1930, Serial No. 445,149, and in France Apr. 29, 1929. 6 Claims. (Cl. 287—59.)



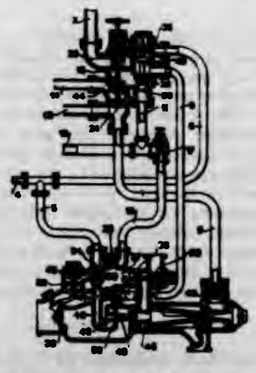
1. A turn buckle comprising a body, an adjustable member mounted in one end thereof, said body having crimps formed therein, and means between the crimps and adjusting member to prevent sliding movement of the adjusting member with respect to the body.

1,903,696. PREHEATER OR ECONOMIZER FOR LOCOMOTIVES. HANS DEUTSCH, Vienna, Austria, assignor to the Firm Alex Friedmann, Vienna, Austria. Filed Feb. 28, 1929, Serial No. 343,420, and in Austria Mar. 10, 1928. 6 Claims. (Cl. 122—458.)



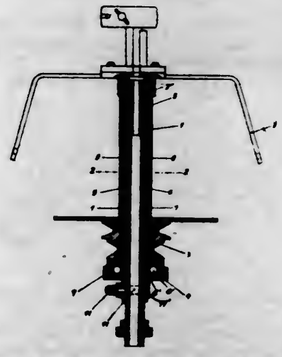
1. An arrangement for supplying feed water to locomotive boilers, comprising a hot water storage tank, a cold water tank, a distinct and separate feeding path leading respectively from each of said tanks to the boiler, a feeding device which when supplied with live steam feeds the water from the hot water storage tank over one of the said feeding paths into the boiler, a second feeding device which when supplied with live steam feeds the water from the cold water tank over the second of said feeding paths into the boiler, and members controlled automatically by the pressure in the valve chest of the engine which depends from the position of the locomotive regulator, said members controlling the admission of live steam to said feeding devices, live steam being admitted to the first named feeding device only when the locomotive regulator is closed and live steam being admitted to the last named feeding device only when the locomotive regulator is open.

1,903,697. BOILER FEED APPARATUS WITH EXHAUST STEAM PREHEATER. HANS DEUTSCH, Vienna, Austria, assignor to Firm: Alex Friedmann, Vienna, Austria. Filed Jan. 6, 1930, Serial No. 418,909, and in Austria Jan. 8, 1929. 14 Claims. (Cl. 122—458.)



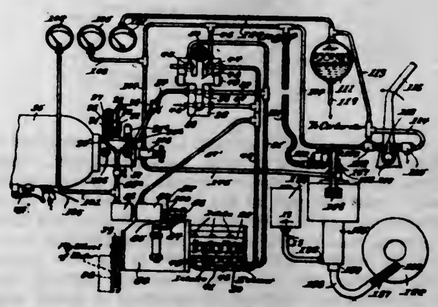
1. In a boiler feed apparatus particularly for locomotives provided with working cylinders and a regulator controlling the supply of steam to the same, a cold water tank and a feeding device cooperating therewith capable of feeding water from said cold water tank into the boiler, means adapted to start and stop said feeding device and controlled by said locomotive regulator in such a manner that the feeding device can deliver only when the regulator is open, a hot water tank to collect water heated by exhaust steam from the cylinders, a feeding device capable of feeding said hot water from the hot water tank into the boiler, means adapted to start and stop the last named feeding device and controlled by the locomotive regulator in such a manner that starting of this feeding device is possible only when said regulator is closed, and further means comprising a hand operated valve controlling the steam flow along a path to which steam is admitted only when the locomotive regulator is closed, said steam operating the feeding device which feeds water from the cold water tank into the boiler.

1,903,698. SPINDLE FOR WIRE COVERING MACHINES. EUGEN DOWALD, Wuppertal-Elberfeld, Germany. Filed June 24, 1930, Serial No. 463,408, and in Germany Feb. 7, 1930. 2 Claims. (Cl. 308—169.)



1. In a spindle for wire covering machines, a stationary supporting shaft having a peripheral channel adjacent its lower end and provided with longitudinal grooves extending upwardly from the channel to the top of the shaft, a short sleeve on said shaft covering the channel and the lower portions of the grooves, an oil connection carried by the short sleeve and communicating with said channel, a ball bearing on said shaft immediately above said short sleeve and having an inner race fitting the shaft and forming an outer wall for said grooves immediately above the short sleeve, a long sleeve fitted on the shaft and extending from the ball bearing to the top of the shaft, an extension on the upper end of the shaft, a second ball bearing engaged on the extension, and a hollow spindle adapted to support a bobbin and supported on said bearings in spaced relation to said sleeves and extension.

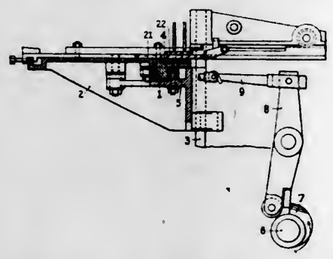
1,903,699. AIR OPERATED VEHICLE CONTROL. CARL A. JOHANSSON, Gottenborg, Sweden. Filed May 15, 1929. Serial No. 363,153. 2 Claims. (Cl. 60—18.)



1. In combination with an engine and a combined compressor and starting motor and an air storage tank, a clutch between the engine and combined compressor and

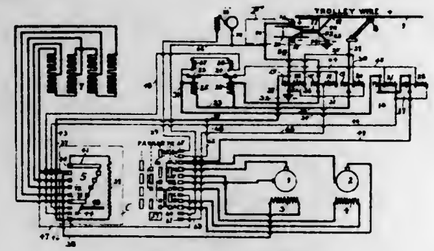
starting motor, an air inlet pipe establishing communication between the atmosphere and the intake manifold of said compressor and starting motor, an air outlet pipe leading from the exhaust manifold thereof, a branch pipe extending from said air outlet pipe and communicating with said storage tank, a check valve in said branch pipe, clutch operating means including a pair of aligned cylinders, pistons operating therein, a piston rod connecting said pistons, valve controlled communication between the storage tank and one of said cylinders, and an exhaust pipe leading from the other of said cylinders and communicating with said air inlet pipe.

1,903,700. NAILING MACHINE. HERMANN KRUSE, Bremen-Sebaldsbruck, Germany. Filed July 8, 1930, Serial No. 466,548, and in Germany July 22, 1929. 2 Claims. (Cl. 1—15.)



1. The combination with a nailing machine provided with means for placing wood to be nailed thereon, of mechanism for bending the end of a nail driven through a board comprising an anvil adapted to engage the ends of the nails driven through the wood and to bend the same, means for moving said anvil in a direction parallel to the length of the board, and means for slightly moving the anvil transversely of the said direction.

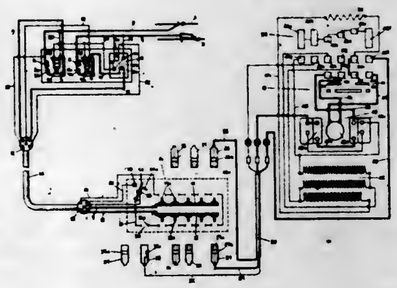
1,903,701. ELECTRIC EQUIPMENT FOR MINING MACHINES. NILS D. LEVIN and JOHN S. BELTZ, Columbus, Ohio, assignors to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 18, 1928. Serial No. 313,323. 9 Claims. (Cl. 172—179.)



1. In a motor control system, a motor, a controller including a commutating cylinder, a resistance unit, contact portions on said cylinder cooperable with associated stationary contact fingers to cut in or out sections of said resistance unit to vary the currents applied to said motor, the extreme ones of said contact portions being in contact with their associated contact fingers in the zero position of the cylinder and all of said contact portions being interconnected and disposed to maintain a closed resistance circuit at the controller in all positions of the cylinder, a main line switch remote from the controller, and means operated in dependence upon movement of the cylinder from zero position and prior to the initiation of commutating action to close said line switch and maintain it closed as the cylinder is moved in either direction throughout its commutating positions.

3. In a motor control system, a motor, a controller including a commutating cylinder, a resistance unit, contact segments on said cylinder cooperable with associated stationary contact fingers to cut in or out sections of said resistance unit to vary the current supplied to said motor, a contact segment on the cylinder adapted to engage a main line contact finger in all positions of the cylinder, all of said segments being interconnected and so disposed as to maintain a closed resistance circuit at the controller in all positions of the cylinder, a main line switch, electro-magnetic means for closing said switch, a circuit for energizing said electromagnetic means, an overload relay including a coil interposed in the main line and a switch member in said energizing circuit, an electro-magnetic reset device for said relay, a contact segment on said cylinder and a fixed contact finger brought into contacting relation upon initial movement of said cylinder from zero position to complete a circuit to said reset device, and a contact segment on said cylinder and a fixed contact finger brought into contacting relation upon further movement of said cylinder to complete said energizing circuit before the cylinder reaches its first commutating position.

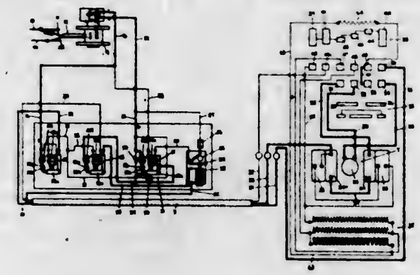
1,903,702. ELECTRICAL CONTROL SYSTEM FOR MINING MACHINERY. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 3, 1929. Serial No. 411,334. 5 Claims. (Cl. 175—298.)



1. In apparatus of the class described, a junction box comprising a pair of bus bars, plugs engageable with said bars; each of said plugs comprising a body of insulating material, a conductor extending longitudinally of the body for connection with a bar, and a conductive strip extending between external points of the body and insulated thereby from the conductor; a second conductor having a plurality of gaps therein bridged by the conductive strips when the plugs are engaged with the bars, and dummy plugs each comprising an insulating body and a conductive strip extending between external points of the body, said dummy plugs being disposable in any of said second conductor gaps not filled by the first-described plugs to bridge such gaps by means of their conductive strips.

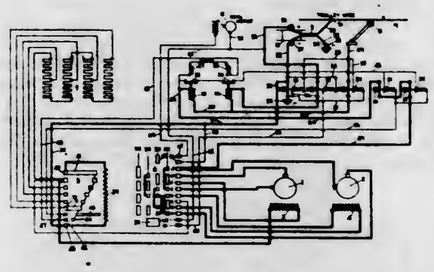
1,903,703. ELECTRIC EQUIPMENT FOR MINING MACHINES. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Dec. 3, 1929. Serial No. 411,335. 12 Claims. (Cl. 172—179.)

1. In apparatus of the class described, an electric motor mounted on a grounded movable metallic support, a base in the vicinity of which the support is movable, an electrical supply line leading to the base, a flexible supply cable for the motor extending between the base and support, a controller on the support having contacts inter-



posed in the negative lead of said supply cable, and a circuit breaker at the base interposed in the positive side of the line.

1,903,704. ELECTRIC EQUIPMENT FOR MINING MACHINES. NILS D. LEVIN and JOHN S. BELTZ, Columbus, Ohio, assignors to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Oct. 18, 1928, Serial No. 313,323. Divided and this application filed Dec. 4, 1929, Serial No. 411,654. Renewed Mar. 19, 1932. 16 Claims. (Cl. 191—8.)



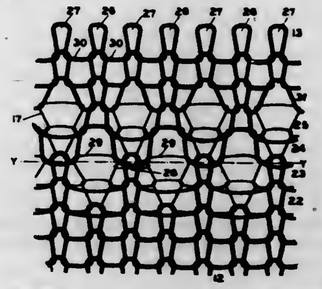
1. In an apparatus of the class described, the combination with a metallic frame normally connected with one side of an electric supply circuit, of a motor mounted thereon, a trolley mounted on said frame and adapted to contact with a conductor of the opposite side of said electric supply circuit, means to connect one side of said motor with said trolley, means to connect the other side of said motor with said frame, means connected between said motor and said frame to control the actuation of said motor, means connected between said motor and said trolley and controlled by said controlling means to interrupt the flow of current to said motor, a pair of conductors adapted respectively to be connected with the opposite sides of said electric supply circuit, and means to transfer the connections of said connecting means from said trolley and said frame to said conductors as and for the purpose set forth.

1,903,705. PRODUCTION OF CARBON OF HIGH ACTIVITY AND COVERING POWER. YASUJURO NIKAIDO, Bay City, Mich. Filed Jan. 10, 1930. Serial No. 420,020. 14 Claims. (Cl. 252—3.)

1. The process of making a carbon of high activity and covering power comprising treating a liquor having present water soluble carbonaceous material and containing potential volatile components with a strong potential volatile components with a strong mineral acid in a quantity sufficient to liberate the said volatile components and to prevent expansion of the material during drying and carbonization, drying at a temperature insufficient to carbonize, and thereafter carbonizing in the presence of a flux fusible at the carbonization temperature.

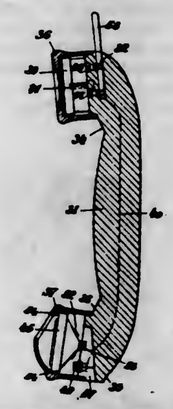
10. The process of making a carbon of high activity and covering power comprising concentrating a liquor containing water soluble carbonaceous material, mixing therewith a sufficient quantity of a sulphur containing gas producing agent functioning to produce sulphur containing gas during the carbonization step and thereby increase the porosity and activity of the resulting carbon, adding a strong mineral acid in a quantity sufficient to liberate volatile components and prevent the expansion of the material during drying and carbonization, drying the reaction product at a temperature insufficient to carbonize the same, and thereafter carbonizing in the presence of a flux fusible at the carbonization temperature.

1,903,706. KNITTED FABRIC. ALBERT E. PAGE, Brooklyn, N. Y., assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Mar. 25, 1932. Serial No. 601,204. 7 Claims. (Cl. 66—173.)



6. A weft knit stocking having a folded welt with a picot edge formation at the upper edge of said welt, said formation being composed of a plurality of courses each having a plurality of yarns, including one yarn heavier than another, the heavier yarn being floated in recurrent wales in a plurality of said courses and the stitch in the adjacent wale in one of said courses being knit of all the yarns.

1,903,707. TELEPHONE. KARL PAREL, Vienna, Austria, assignor to Telephon- und Telegraphenfabriks-A. G. Kapsch U. Söhne, Vienna, Austria, a Company of Austria. Filed July 22, 1930, Serial No. 469,865, and in Germany May 5, 1930. 2 Claims. (Cl. 179—103.)



1. A micro-telephone of pressed material, comprising a handle with raised, flat extensions at either end of the

handle, with easily accessible terminals, contact pins and contact springs for transmitter and receiver on the flat faces of the said extensions and with deeply recessed, box-shaped caps which are screwed on to the said extensions and completely surround the transmitter and the receiver.

1,903,708. PROCESS FOR MANUFACTURING VAT DYESTUFFS OF THE PERYLENE SERIES. ALFRED PONGRATZ and ALOIS ZINKE, Graz, Austria, assignors to Felice Bensa, Genoa, Italy. Filed Apr. 6, 1929, Serial No. 353,249, and in Austria Jan. 9, 1929. 12 Claims. (Cl. 260—60.)

7. As a new article of manufacture, a vat dye stuff comprising a compound of the following formula:

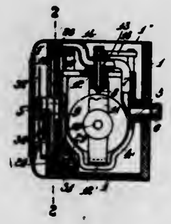


where —NH—R is an amino substitution product of a compound selected from the following group:—anthraquinone, perylene quinone.

1,903,709. TIGHTENING COMPOSITION. MURK JAN SCHOEN, Zaandam, Netherlands. Filed July 11, 1931, Serial No. 550,290, and in the Netherlands July 14, 1930. 4 Claims. (Cl. 106—8.)

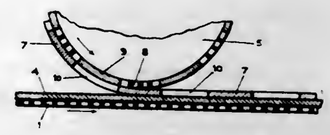
1. A tightening composition for use in fixing-in panes of glass in window frames, tightening of fissures and like purposes, consisting in a homogeneous mixture of two separate pastes to wit: as the first paste a mixture of a water insoluble carbonate, a drying oil, a polyvalent alcohol and a plastifying means; as the second paste a mixture of litharge and water.

1,903,710. GYROSCOPICALLY STABILIZED PENDULUM. ERICH STÖHR, Berlin, Germany, assignor to The Firm Gyrorector G. m. b. H., Berlin, Germany. Filed Nov. 29, 1927, Serial No. 236,576, and in Germany Dec. 2, 1926. 3 Claims. (Cl. 33—204.)



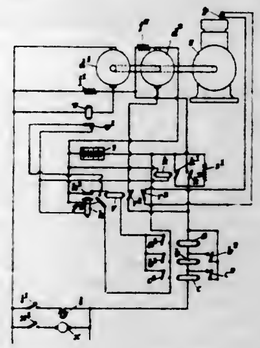
1. In a direction and curve indicator for a moving body, a gyroscope, a support constituting a pendulum and rotatable about a horisontal axis in the body, a frame for supporting the gyroscope for spinning said frame and gyroscope being rotatable about a vertical axis on the support, the respective axes of rotation being disposed at right angles to each other, a pneumatic impulse device, means connecting the impulse device and support for resisting rotation of the support, means for conducting fluid under pressure to the impulse device, and means operated by the precession of the gyroscope and frame, and mounted directly on the indicator pendulum for controlling the flow of fluid to the impulse device.

1,903,711. MANUFACTURE OF DUPLEX OR MULTIPLEX PAPER WITH DIFFERENT APPEARANCE ON VARIOUS SPOTS. REINHOLD M. WENDEL, Hafverud, Sweden, assignor to Aktiebolaget Papyrus, Molndal, Sweden. Filed May 14, 1931, Serial No. 537,447, and in Sweden Apr. 21, 1931. 6 Claims. (Cl. 92—39.)



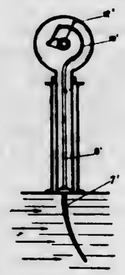
1. A method of making paper having transparent portions, consisting in forming a layer of transparent paper stock, forming a second layer of non-transparent paper stock, applying one layer upon the other layer and felting the two layers together to form a compound paper web, and finishing said paper web.

1,903,712. AUTOMATIC ELECTRIC CURRENT GENERATING APPARATUS. JOHANN HERMANN ARBINK SPAINK, West Smethwick, England, assignor to Chance Brothers and Co. Limited, West Smethwick, England. Filed Oct. 29, 1931, Serial No. 571,915, and in Great Britain Nov. 4, 1930. 8 Claims. (Cl. 290—30.)



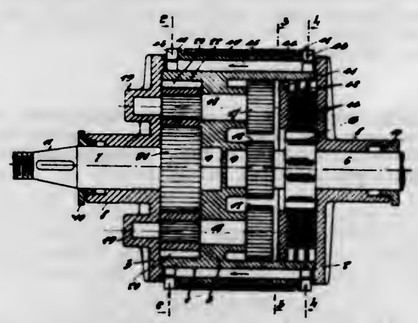
1. In automatic electric current generating apparatus of the kind specified, the combination of a generator consisting of a pair of parts, one of which is adapted to serve as an engine starting motor and to supply current to a low voltage battery which is permanently connected to the distributing circuit and to the said part of the generator, the two generator parts being adapted to operate jointly for supplying current at a higher voltage than that of the battery to the distributing circuit, and means responsive to a current flowing in the distributing circuit for connecting the two parts of the generator to the said circuit and the low voltage part to the battery, substantially as described.

1,903,713. DYNAMOMETRIC LOG. MARIE EMILE ALFRED BAULE, Chaville, France. Filed Mar. 14, 1930, Serial No. 435,935, and in France Mar. 16, 1929. 8 Claims. (Cl. 73—122.)



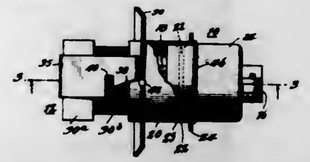
1. A device for measuring the instantaneous speed of a fluid with reference to the device, especially suitable for ship logs, comprising an indeformable tube whose cross-section is elliptically shaped having an end adapted to penetrate into the fluid, a resilient blade adapted to be bent by the fluid pressure, means to secure one end portion of said blade to the end of said tube which is adapted to penetrate into the fluid, a device for indicating the instantaneous speed; and means extending through said tube and connecting said device and said blade and adapted to transmit movements of the blade to the device.

1,903,714. SYSTEM FOR THE TRANSMISSION OF ROTARY MOTION. PASTOR J. FRIAS, CLEMENTE JONES, and MARCELO CHEBU, Buenos Aires, Argentina. Filed Mar. 7, 1932. Serial No. 597,582. 5 Claims. (Cl. 74—84.)



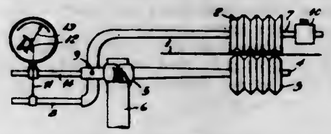
1. Transmission apparatus for rotatory motion, comprising a cylindrical tight case for containing and supporting the mechanism, provided with a transverse partition, a driving shaft extending axially into said case up to the transverse partition, a driven shaft extending axially into the opposite part of said case, a central pinion on each shaft in the interior of said case, planetary shafts which extend through said partition, planetary pinions integral with said shafts which extend through said partition, compensating pinions suitably supported for engaging with the driving pinion and said planetary pinions, planetary pinions integral with the shafts of the aforesaid planetary pinions and in engagement with the central pinion of the driven shaft, a housing snugly fitting against the sides and periphery of the last mentioned planetary pinions and central pinion, forming together with the same a gear pump, passages for the fluid to be pumped between the forcing side and the suction side of the pump, a cylindrical opening parallel to the axis of the housing at each passage for the fluid, a stationary sleeve in said opening, provided with orifices on the forcing side, a piston sliding within said sleeve, provided with annular grooves, the position of which in relation to said orifices allows of controlling the flow of the fluid, a rod extending from said piston outside the housing, a stuffing box on each rod, an annular disk, perpendicular to and concentrical with the shaft of the case, to which are secured the piston rods, means for operating from outside said disk, so as to move the same in a parallel direction to the case, and means for braking said cylindrical case.

1,903,715. ELECTRICAL CONNECTER. EMIL A. HORN, Jamaica, N. Y., assignor to Russell & Stoll Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 28, 1931. Serial No. 526,072. 8 Claims. (Cl. 173—330.)



7. An electric connecting device, a receptacle comprising an insulating body, contacts on said body, a face plate, a strap supporting said body from said plate, said plate having an aperture with a radial recess, said contacts being accessible through said aperture, said strap having a cam surface adjacent said recess and having a slot at the end of said cam surface, in combination with a plug connectible with said receptacle, said plug comprising an insulating body, a sleeve thereon, said sleeve being capable of limited rotary motion relative to said body, a spring tending to rotate said sleeve relative to said body, and a pin on said sleeve adapted to cooperate with said cam surface and slot and to automatically lock said plug and receptacle together when they are fully connected.

1,903,716. MOISTURE INDICATOR FOR PAPER MAKING MACHINES AND PULP COLLECTING MACHINES AND IN SIMILAR APPARATUS. TORSTEN KÄLLS, Saffle, Sweden. Filed Feb. 9, 1928, Serial No. 253,195, and in Sweden Apr. 12, 1927. 3 Claims. (Cl. 73—51.)

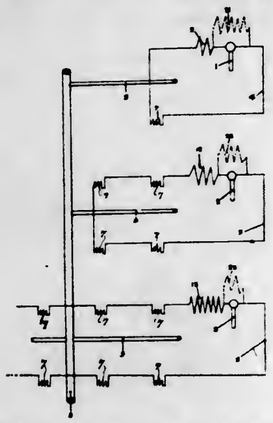


1. In means for indicating the degree of moisture of a travelling web of material the combination of a cylindrical member presenting a grooved surface and rotatably mounted on a stationary support, a shiftable rotatable cylindrical member presenting a grooved surface, said members being located opposite to one another and at opposite sides of the web, the members being so positioned one with respect to the other that the grooves of one are opposite the ridges of the other, means forcing the shiftable member toward the first mentioned member so that the position of the shiftable member is dependent on the moisture of the web, an indicating device, and means for transmitting the motion of the shiftable member to the said device.

1,903,717. HEAT CONSUMPTION METER. AAGE LANGKILDE LARSEN, Copenhagen, Denmark. Filed Aug. 12, 1925, Serial No. 49,857, and in Denmark Aug. 21, 1924. 2 Claims. (Cl. 73—184.)

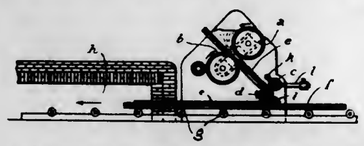
1. In a central heating system, a heat installation unit, an electric heat measuring device for said unit, a thermo-

electric element in circuit with said measuring device, said element being responsive to differences in temperature between said unit and the surrounding air for generating the



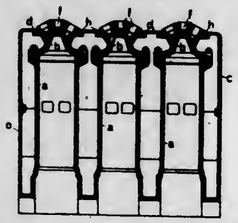
current passing through said measuring device, and a resistance element interposed in said circuit, the resistance of said resistance element being proportional to the volume of space to be heated by said unit.

1,903,718. PROCESS AND APPARATUS FOR PRINTING GLASS SHEETS. CLAUDE LOCRILLE, Fauques, Belgium. Filed Mar. 27, 1930, Serial No. 439,516, and in Belgium Mar. 28, 1929. 3 Claims. (Cl. 49—33.)



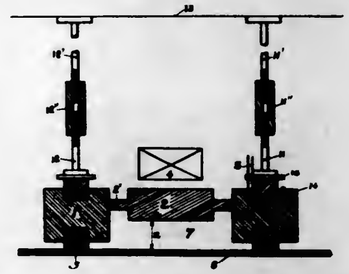
2. In apparatus for printing glass sheets, the combination of a glass rolling train, an annealing furnace, a movable table, a track for said table extending from under said rolling train to said annealing furnace, said glass rolling train comprising an upper pair of rolls and a lower pair of rolls, said lower pair comprising an upper printing roll and a lower smooth roll, and means for guiding a sheet of glass from said rolling train to said table through an angle of more than 90° whereby one side of the sheet will successively come into contact with said printing roll and with said table.

1,903,719. MULTICYLINDER INTERNAL COMBUSTION ENGINE. EUGEN MANDLER, Vienna, Austria, assignor to the Firm Climax Motorenwerke und Schiffswerft Linz A. G., Vienna, Austria. Filed Feb. 27, 1929, Serial No. 343,192, and in Austria Nov. 6, 1928. 3 Claims. (Cl. 123—173.)



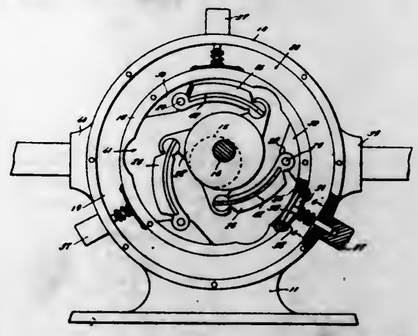
1. In a multi-cylinder internal combustion engine of the two stroke cycle type, a cylinder block comprising a plurality of cylinders open at their upper ends and cast together in one piece, said cylinders having their upper ends exposed to heat extending freely, so as to be capable of expanding without constraint under the action of heat, and separate cylinder heads secured to the said cylinders, as and for the purposes set forth.

1,903,720. EMITTING OR RECEIVING VIBRATION DEVICE FOR SUBMARINE SOUNDING. PIERRE AUGUSTE DANIEL MARTI, Montbeliard, and CHARLES FREDERIC MARIE BERTIN and ALBERT EMILE GUSTAVE NANDILLON, Toulon, France. Filed Sept. 30, 1931, Serial No. 566,134, and in France Oct. 8, 1930. 8 Claims. (Cl. 181—0.5.)



1. In a device for submarine sounding on board of a ship by means of vibrations reflected from the bottom of the sea, comprising a chamber opened on one face, said face bearing against the ship's hull below the water line, a liquid filling said chamber, a vibrating wall on said chamber and in contact with the said liquid, means for fluid tightly insulating the hull from the walls of the said chamber, said means being resilient and damping, attaching means comprising resilient damping devices between the ship and the chamber, both insulating and attaching means being arranged so as to prevent the vibrations to be transmitted to the vibrating surface otherwise than through the liquid.

1,903,721. PUMP. ELVIN R. MUNN, Humansville, Mo., assignor to The Munn Corporation, a Corporation of Missouri. Filed Sept. 26, 1931. Serial No. 565,355. 1 Claim. (Cl. 103—132.)

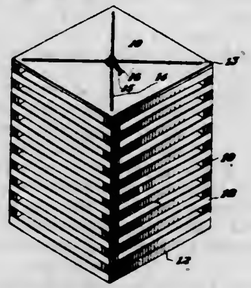


A rotary pump of the class described comprising a pair of circular end members each having a circular recess in the center of its inner face, and a rim part fastened to the marginal portion of the end members, a cylinder fixed in the casing and having its ends closed by a portion of said end members, said cylinder being spaced circumferentially from the rim part of the casing, a circular partition between the rim part and said cylinder and dividing the space between the cylinder and the casing into an intake manifold and an exhaust manifold, said cylinder having a plurality of pairs of ports therein, one port of each pair

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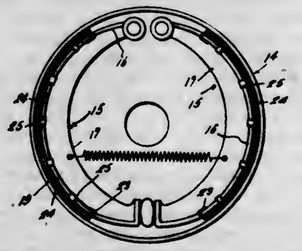
communicating the cylinder with the intake manifold and the other port of each pair connecting the cylinder with the exhaust manifold, spring actuated valves controlling said ports, a pair of disks located in the circular recesses in the end members, a pin having its end eccentrically attached to said disks, a drive shaft connected to one of the disks, a number of disks concentrically arranged on the pin with the outermost disks having their outer faces contacting the inner faces of the end members and portions of the inner faces of the first named disks, an elongated hinge shoe having a portion integrally connected to a part of the periphery of each of the second mentioned disks, each shoe having its ends abutting the end members and each shoe having a substantially semi-circular recess at its forward face, which extends throughout the length of the shoe, inwardly extending lugs on the inner periphery of the cylinder of the same length of the shoe having substantially semi-circular recesses therein, substantially arc-shaped piston members having substantially circular enlargements at their side edges, one enlargement of each piston member fitting in the recess in a shoe and the other enlargement fitting in the recess of a lug, the other edges of said piston member engaging the inner faces of the end members and having packing means thereon.

1,903,722. CRATE. ANDREW J. MERRITT, Walsenburg, Colo. Filed Feb. 18, 1931. Serial No. 516,794. 1 Claim. (Cl. 217—36.)



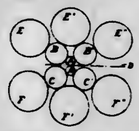
A crate comprising a plurality of bars each having openings at the end portions thereof, the bars being assembled to form the walls of a structure angular in cross section, wherein the corners include the end portions of the bars at an angle with each other, and flexible devices engaging the end portions at the respective corners, the flexible devices passing through the openings of the bars, being connected with each other at the upper portion of the structure, and secured to the lower portion thereof.

1,903,723. MECHANICAL FRICTION BRAKE ENSEMBLE. FRANK C. PALMER, West Palm Beach, Fla. Filed Sept. 22, 1932. Serial No. 634,898. 4 Claims. (Cl. 188—234.)



1. As a new article of manufacture, a brake unit of the class described comprising a lining formed along opposite longitudinal edges with keeper notches and formed at opposite ends with retention seats, and a backing element of measurement commensurate with the lining, said backing being provided along opposite longitudinal edges with bendable ears bent into said keeper notches, and alternate bendable ears adapted to be bent in opposite directions to be secured to a brake band or shoe, said backing being formed at opposite ends with abutment lips adapted to be bent against the end portions of the lining and into said seats and further formed at said opposite ends with elongated tongues adapted to be bent over the adjacent end portions of the shoe or band.

1,903,724. MULTIHIGH ROLLING MECHANISM. WILHELM ROHN, Hanau-on-the-Main, Germany. Filed July 15, 1931. Serial No. 550,922, and in Germany July 29, 1930. 11 Claims. (Cl. 80—38.)



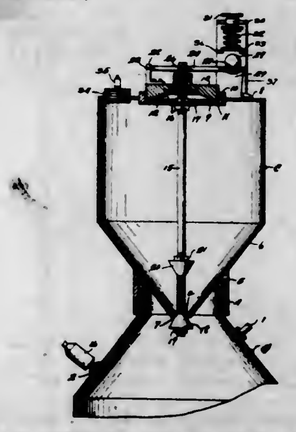
1. A rolling mechanism comprising a pair of operating rolls adapted to engage the opposite faces of the work, a plurality of primary supporting rolls bearing against each of said operating rolls and located at opposite sides thereof, beyond the plane of the work and tangent to the operating roll at points beyond the center lines of the latter, and a plurality of secondary supporting rolls bearing against the primary supporting rolls.

1,903,725. ROAD GUARD. JAMES T. SWEENEY, Scranton, Pa., assignor to Sweeney Bros., Scranton, Pa., a Corporation of Pennsylvania. Filed Apr. 11, 1932. Serial No. 604,570. 8 Claims. (Cl. 256—13.1.)



1. In a road guard for highways, a guard rail adapted to extend lengthwise of the highway at one side thereof, and comprising a continuous smooth surfaced ribbon of metal curved transversely of itself throughout its entire width to present a concave surface to the highway.

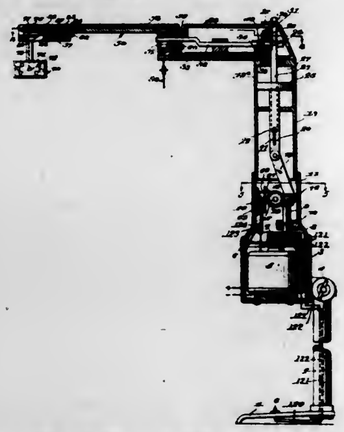
1,903,726. AUTOMATIC FEED CONTROL FOR CARBIDE GENERATORS. LESLIE M. WISE, McKeesport, Pa. Filed Feb. 6, 1933. Serial No. 655,505. 8 Claims. (Cl. 48—53.3.)



1. In a carbide generator, a carbide hopper having a discharge opening, a controlling valve for said opening,

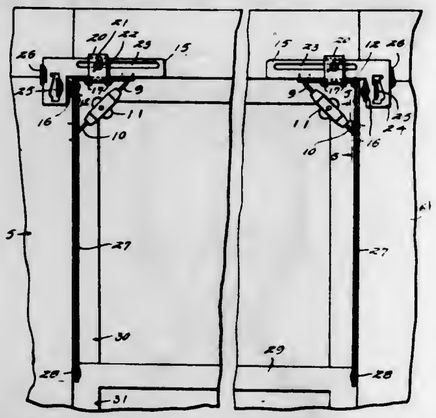
means for supporting said valve for movement toward or from the opening, means for holding the valve open until the pressure of the generator passes a predetermined degree, said means including a movable member, and a weighted member freely engaged with said movable member and having movement in any direction from its mounting on the member, said weighted member readily leaving the movable member upon undue lateral movement of the generator.

1,903,727. LEAF TURNER. ERNST BARTELS, Bandoeng, Java, Dutch East Indies. Filed May 14, 1930. Serial No. 452,368. 9 Claims. (Cl. 84—519.)



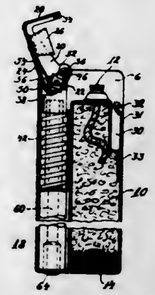
2. In a leaf turner a supporting structure, an arm swingably mounted on said structure, a leaf engaging member swingably mounted on said arm, vacuum controlled means connected to operate said member and the arm, electric means under the control of an operator for producing and releasing the vacuum whereby said member and arm may be swung in one direction on the forming of the vacuum, and means automatically operable on the release of the vacuum for moving the member away from the leaf and for resetting the leaf engaging member.

1,903,728. SUPPORT FOR SHADE ROLLERS AND CURTAIN AND DRAPERY RODS. DAVID FIRESTONE, Canton, Ohio. Filed Nov. 7, 1931. Serial No. 573,684. 2 Claims. (Cl. 156—24.)



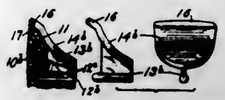
2. A support as set forth comprising in combination, an L-shaped bracket, prongs adjacent the end of each leg of the bracket, a turnbuckle disposed between the ends of the bracket legs, movement of the turnbuckle in one direction spreading the free ends of the legs apart and forcing the prongs into the confronting face of a window frame, a depending member secured to one of the legs of the bracket and having a laterally offset portion engaging about one end of the turnbuckle, and a shade bracket carried by one end of said member.

1,903,729. CIGAR LIGHTER. IRVING FLORMAN, New York, N. Y. Filed Jan. 20, 1933. Serial No. 652,743. 1 Claim. (Cl. 67—7.1.)



A cigar lighter comprising a casing having spaced, parallel quadrilateral rectangular side walls of substantially the same size and shape as the end wall of a package of cigarettes, lighting mechanism between said side walls including a wick located at a point below the upper edges of the side walls and a snuffer movable to cover and uncover the wick, said snuffer having a flat top surface which, when the snuffer is in covering position, lies substantially flush with the top edges of the side walls, and a tongue secured at its upper end to one of said side walls at its top, said tongue extending downwardly substantially parallel to but slightly spaced from the side wall, said tongue being of substantially the same width as said side wall, whereby to support the lighter on the end wall of a package of cigarettes when the tongue is inserted into the package with the end wall of the package between the tongue and the side wall of the lighter.

1,903,730. DIVISIBLE TOOTH. ROBERT HAMILTON GILLESPIE, Little Rock, Ark., assignor to The Columbus Dental Manufacturing Company, Columbus, Ohio, a Corporation. Filed July 1, 1924. Serial No. 723,500. 6 Claims. (Cl. 32—9.)

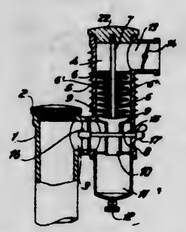


1. The divisible tooth which includes a tooth-body and a cusp-plate; the tooth-body being formed with a forwardly and upwardly inclined surface, a slot intersecting said surface and being open through the rear side of the tooth-body, and a cylindrical bore through said rear surface and extending forward and being in open communication with said slot; the said bore being substantially horizontal, so it is in diverging relation to said forwardly and upwardly inclined surface; said cusp-plate being provided with a cylindrical part to slide and fit in said bore, and a plate to slide and fit in said slot, this plate being thinner than the diameter of said cylinder and serving to unite the latter with the cusp-plate in such relation that the cusp-plate fits on said upwardly inclined surface when the said plate and cylinder are fitting in said slot and bore.

4. An artificial tooth comprising a tooth-body having an inclined occlusally directed end surface provided with an undercut recess directed forwardly in angular relation to said surface, and a cusp structure arranged to support said tooth body and having a similarly directed inclined surface provided with means arranged to so interlock with said recess as to tend to maintain said surfaces wedgedly engaged.

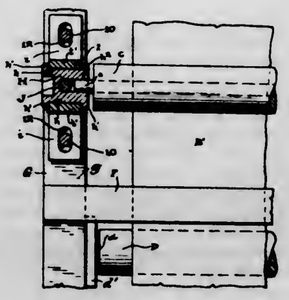
5. An artificial pontic tooth body having a root extension and having in its occlusally directed end surface an undercut socket comprising a slot, terminating away from said surface in a broadened recess inclined with respect to said surface.

1,903,731. PURIFICATION OF LUBRICATING OIL. ANGELA GASTÓN and ESTANISLAO BOODANY, Barcelona, Spain. Filed Apr. 18, 1931, Serial No. 531,150, and in Spain Feb. 7, 1931. 2 Claims. (Cl. 123—119.)



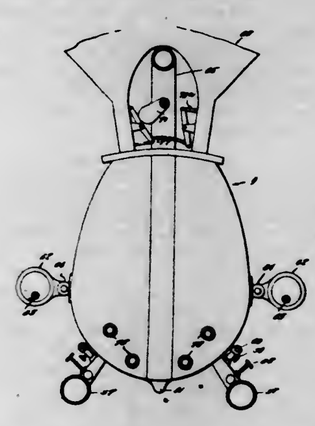
1. An apparatus for the purification by condensation of lubricating oil in the crank casings of internal combustion engines, comprising a cylindrical condenser casing provided at one end with a lateral outlet for connection to a suction pipe and at the other end with a lateral inlet for connection to a vent in the crank casing, and an open lower end formed with an annular seating, an axial support within said casing, a plurality of baffle plates disposed in series on said axial support, and a receptacle for water and impurities condensed from the air passing through the casing, said receptacle being fitted to said seating.

1,903,732. CONVEYER. JOHN C. WALTER and RUDOLPH VOGT, Cincinnati, Ohio, assignors to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 9, 1930. Serial No. 474,221. 14 Claims. (Cl. 198—127.)



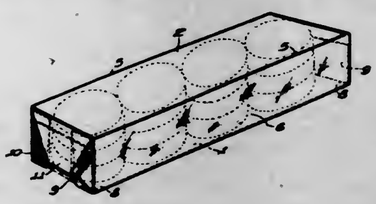
3. A bearing means for the end of a conveyer roller, said bearing means comprising a first member and a second member slidably mounted in the first member, together with means cooperating with the first member for supporting the second member and for fixing the latter in the position to which it has been set in said first member; said second member having a block-like body, two of whose opposite sides are formed with substantially broad channels and one of whose remaining sides is formed with an opening to receive an axial projection from the corresponding end of the roller; the first member having spaced flat sides which are fitted to the channels in the sides of the second member and a top member which overlies the top of said second member, said sides also having, at their lower ends, elements, including lateral flanges, for securing the bearing means in position; said supporting and fixing means including an element extending from the upper end of the second member through the top of the first member and provided with means operative thereon to adjust the second member and to hold the same in adjusted position.

1,903,733. SMELTING PROCESS AND APPARATUS. JAMES MADISON LIVELY, Gold Hill, Oreg. Filed Aug. 1, 1931. Serial No. 554,542. 5 Claims. (Cl. 266—24.)



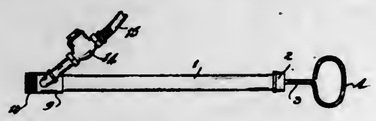
1. A smelting furnace, comprising, an elongated horisontally disposed furnace structure having by-products outlets, a hopper on its upper side at one end, a partition in the hopper defining separate fuel and ore receiving chambers, valve means for controlling the introduction into the furnace of the fuel and ore introduced into the hopper, rocking support means for the said furnace, said furnace being adapted to be rocked on its longitudinal axis, from side to side.

1,903,734. TRANSPARENT COVERED TRAY. TRUE M. AVERY, Glens Falls, N. Y., assignor to Union Bag & Paper Corporation, Hudson Falls, N. Y., a Corporation of New Jersey. Filed Mar. 18, 1931. Serial No. 523,615. 3 Claims. (Cl. 206—44.)



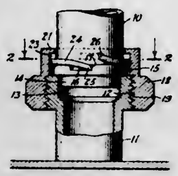
1. A display tray comprising a bottom composed of a strip of relatively stiff material having its ends bent upwardly, and a cover composed of a strip of transparent material of the same length as said strip of stiff material and having its longitudinal edges secured to the longitudinal edges of the bottom and forming an interior chamber between it and said bottom, and having ends folded against the outer sides of the upwardly bent ends of the bottom.

1,903,735. PIPE WASHING AND CLEAN OUT PUMP. ERNEST KRIEGER, Winnipeg, Manitoba, Canada. Filed Dec. 27, 1929, Serial No. 417,011, and in Canada July 29, 1929. 1 Claim. (Cl. 4—256.)



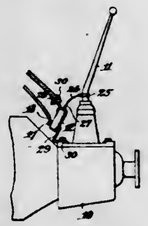
A pump for removing obstruction in a sewerage system having a vent pipe communicating with the system on the side of the obstruction opposite to the sewer discharge, comprising a cylinder adapted to be attached to a sewerage discharge pipe at the side of the obstruction opposite to the sewer and at all times in communication with the discharge pipe, a plunger tightly fitting the cylinder and boldly reciprocal therein, a piston rod for operating the piston, a liquid supply pipe communicating with the discharge end of the cylinder below the piston and a check valve in the supply pipe and opening in the direction of the pump.

1,903,736. NONREUSABLE COUPLING. JOHN J. LAUSTER, St. Albans, N. Y., assignor to George T. Ritchings, Maplewood, N. J. Filed Mar. 11, 1932. Serial No. 598,227. 5 Claims. (Cl. 285—120.)



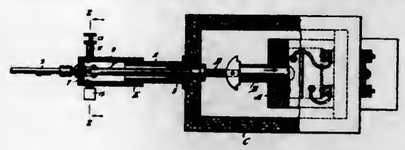
1. The combination with a pair of members to be coupled, of a non-reusable coupling movable in one direction with reference to said members to effect coupling thereof and cooperative means for fracturing the coupling element upon movement in an opposite direction, said means including notched portions of the coupling element in one of said members and a split resilient element interposed therebetween with the opposite ends engageable respectively with the notched portions to lock the same upon attempted movement of the coupling in said opposite direction.

1,903,737. SAFETY SWITCH. FRANCIS MOSCATO, Central Park, N. Y. Filed Sept. 26, 1931. Serial No. 565,374. 7 Claims. (Cl. 200—59.)



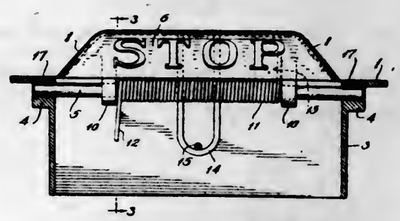
1. The combination with a gear shift lever of a motion transmission means; of a safety switch comprising a casing in fixed relation to the lever, a contact within the casing and insulated therefrom and provided with means exteriorly of the casing for connecting the same with a suitable conductor, a contact within the casing and insulated therefrom and movable into and out of engagement with said first contact, and a push and pull flexible element connected with said lever and the movable contact to move the latter into engagement with the first contact in the movement of the lever into its neutral position, and the movable contact being moved out of engagement with said first contact by said element in the movement of the lever into any of its gear shifting positions.

1,903,738. SILENCER AND REGULATOR. HARRY MUNSON, Wantagh, N. Y., assignor to Van Kannel Revolving Door Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 21, 1930. Serial No. 490,307. 2 Claims. (Cl. 188—94.)



1. A device for controlling the operation of an electromagnetically operated element to retard the movement of said element in one direction and to permit of free movement of the same in the opposite direction, said device comprising telescopically associated fixed and movable fluid chamber defining sections, a constantly opened fluid venting means communicating with said chamber and an inwardly opening, outwardly closing check valve controlled intake means communicating with said chamber and a connection between said movable section and said element, said connection extending through the fluid chamber.

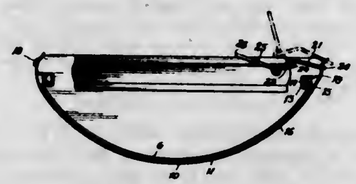
1,903,739. DEPRESSIBLE TRAFFIC SIGNAL. ROBERTS TATLOCK, Gastonia, N. C., assignor to E. E. Groves and George R. Poston, Gastonia, N. C. Filed Mar. 19, 1930. Serial No. 487,215. 9 Claims. (Cl. 40—125.)



1. A signal device of the class described, comprising a base plate in the form of a substantially rectangular frame, adapted to be supported flush with the surface of the road bed, a housing depending from the frame and encircling the opening thereof, a signal member composed of converging relatively long side walls, and converging relatively short end walls, a hinge connection between one of the side walls and the frame, resilient means on said hinge and engaging said frame and one of said side walls to normally support the member with the bottoms of the side walls substantially flush with the base plate, whereby the said member offers an inclined surface to vehicles approaching from any direction, and a stop for limiting the upward movement of the member.

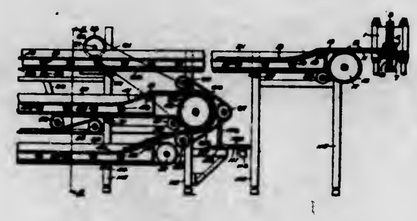
1,903,740. STENCIL PRINTING DEVICE. WILLIAM A. WINTHER, Menominee, Mich., assignor to Edmund P. Smith, Menominee, Mich. Filed Dec. 1, 1931. Serial No. 578,359. 4 Claims. (Cl. 101—125.)

1. In a hand stenciling device, a body having sides cut away to form a handle, means to secure a stencil at one end of the body, cranks pivoted to the said sides at the other end of the body, a clamping member for securing the stencil at the said other end of the body, the clamping member being secured to the cranks, and an operating



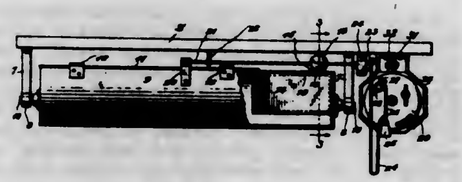
member secured to the cranks and normally disposed at the top of the body with its sides extending at the said cut-away portions of the body to permit of its convenient manipulation.

1,903,741. APPARATUS FOR AND METHOD OF TREATING ASPHALT BLOCKS. ROBERT F. MORRISON, Yonkers, N. Y., assignor to The International Pavement Company, New York, N. Y., a Corporation of Connecticut. Filed Dec. 10, 1929. Serial No. 413,080. 12 Claims. (Cl. 25—1.)



1. Apparatus for treating asphalt blocks delivered from a block forming press comprising means for traversing a row of blocks, said means operative to bend fins at the edges of said blocks for breaking off said fins, said means providing a narrow slot over which said row passes to permit discharge of the broken off fins.

1,903,742. FEEDER AND WATERER. ARTHUR F. BENDEL, Reading, Pa. Filed Jan. 17, 1931, Serial No. 509,513. Renewed Feb. 13, 1933. 4 Claims. (Cl. 119—51.)



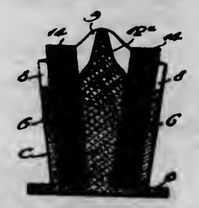
1. A device of the class described comprising an elevated horisontal support, brackets secured to and projecting downwardly from said support, the lower ends of said brackets having horisontally alined bearings, a container between said brackets having trunnions engaged with said bearings, said container being provided also with a keeper spaced from the axis of said trunnions, a horisontal rod under said support normally engaging said keeper, said rod, keeper, trunnions and bearings normally supporting said container, said trunnions being positioned to allow tilting of said container to discharge position upon release of said rod, a bearing carried by said support and slidably supporting one end of said rod, a bell crank to which the other end of said rod is pivoted, a bracket carried by said support and carrying said bell crank, and means for moving said bell crank to release said rod from said keeper.

1,903,743. APPARATUS FOR HAIR WAVING. GEORGE DECKER, Cleveland, Ohio, assignor to The Philad Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 5, 1929. Serial No. 368,544. 3 Claims. (Cl. 132—36.1.)



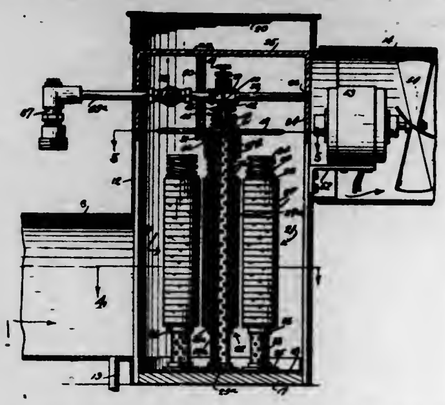
1. Hair waving apparatus including a clamp and a rod, the clamp being arranged to grip a flat strand of hair adjacent the scalp of the wearer and comprising two channel-shaped members having their recessed sides opposed to each other, said members being pivotally connected at one end, a detachable latch connecting said members at the other end, a strip of insulating material secured to the underside of each member, a strip of resilient material received within and extending from the recess of each channel, cradles projecting above and carried by the upper surfaces of said channels, an L-shaped spring having one leg secured to the web of one of said channels and having the other end extending upwardly and provided with a detent, a curler rod of substantially hyperboid of revolution shape provided with a pivoted tongue, and a ratchet formed on said rod adjacent one end and adapted to be releasably retained by said detent.

1,903,744. CARD DECK HOLDER. JULIUS HEUBSER and LESTER TULGREN, Clear Lake, Wis. Filed Nov. 30, 1931. Serial No. 578,132. 8 Claims. (Cl. 273—148.)



1. A holder for two decks of playing cards, comprising an open-topped container having two opposed side walls and two opposed parallel end walls, said side walls having thumb notches in their upper edges, and a vertical partition centrally disposed between said side walls, projecting above the latter and dividing said container into two pockets for card decks, said partition having side portions opposite said side walls and extending from the lower end of the partition to points substantially opposite the lower ends of said thumb notches, the side portions of said partition above said points being curved inwardly and converging upwardly to the upper end of the partition, said notches and inwardly curved portions allowing easy gripping of the decks of cards when removing them from said pockets, said inwardly curved portions also serving to guide the card decks into the pockets.

1,903,745. AUTOMATIC HUMIDIFYING APPARATUS. JAMES J. LAWLER, Mount Vernon, N. Y. Filed Oct. 29, 1931. Serial No. 571,889. 14 Claims. (Cl. 261—39.)



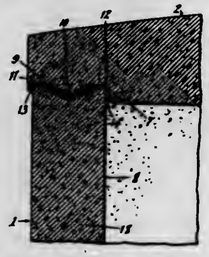
1. Humidifying apparatus comprising means adapted to be saturated with water, water supply means therefor, means for drawing air over the water saturated means and a part of the water saturated means being operable to shut off the water supply means.

1,903,746. NECKTIE SUPPORT. WILLIAM H. LUTZ, San Francisco, Calif. Filed Jan. 28, 1932. Serial No. 589,476. 1 Claim. (Cl. 24—64.)



In a device of the character described, a plate for attachment to a necktie, a shank secured to said plate, a head formed on said shank, a collar button cooperating with said shank, said collar button having a cupped shaped portion, a resilient lining formed in said cup whereby the head of said shank may be inserted in said cup and engaged by said lining.

1,903,747. BURIAL VAULT. ALBERT V. MILNES, West New Brighton, N. Y. Filed July 7, 1932. Serial No. 621,271. 2 Claims. (Cl. 72—7.)



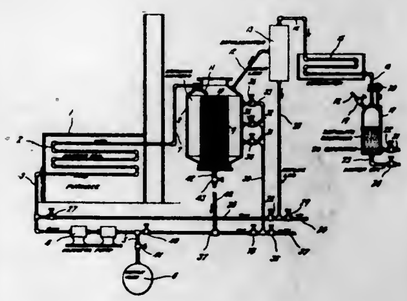
2. A burial vault including a container having a wall with a longitudinal groove at the upper edge, a cover having a recessed portion on the lower surface near the edge, said recessed portion being adapted to fit against said wall with that part of the cover adjacent the inner part of the recessed portion forming a shoulder telescoping over said wall and extending into the container, said cover having a depending bead fitting into said groove, and a sealing medium arranged in said groove positioned to engage said bead, said sealing medium being formed with portions extending over the edges of said wall to present a sealing bead on each edge thereof, one of the sealing beads fitting against said shoulder to provide an inner seal.

1,903,748. ROAD MARKER. WILLIAM H. WOOLUMS and CLYDE B. AMBROSE, Washington, D. C.; said Ambrose assignor to Bulls Eye Road Marker Company, Washington, D. C., a Corporation of Delaware. Filed Apr. 16, 1931. Serial No. 530,620. 8 Claims. (Cl. 88—1.)



1. In a road marker, a translucent body portion, a peripheral retaining ridge coincident with the base portion thereof and forming an extended footing for added support, the upper edge portion of said ridge being rounded to prevent breakage.

1,903,749. ART OF CRACKING AND DISTILLING FUELS. RUSSELL CARTER, Washington, D. C. Filed Feb. 13, 1926. Serial No. 88,100. 11 Claims. (Cl. 196—56.)



1. In the art of recovering values from hydrocarbon containing solids, raising hydrocarbon liquid to cracking temperature while preventing cracking thereof, passing the thus heated liquid into heat transference contact with hydrocarbon solids capable of destructive distillation, and recycling past the heat source and back to the presence of the solids unvolatilized portions of the liquid from which lighter volatile portions have been released, and heating the said liquid while passing the heat source and delivering heat from the said liquid to the solids while in the presence of the solids until the heat balances in the solids are built up sufficiently and the solids are thereby raised to distillation temperature and thereby causing distillation of the hydrocarbon solids, and recovering the resulting mingled vapors.

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Patents Nos. 1,903,750 to 1,904,990

THE OFFICIAL GAZETTE OF THE United States Patent Office

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April 18, 1933

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Designs	66—No.	89,607 to No.	89,672, inclusive.
Patents	1241—No.	1,903,750 to No.	1,904,990, inclusive.
Total	1,514		

Transfers of Classes

ORDER No. 3,231

U. S. PATENT OFFICE, *Washington, Jan. 16, 1933.*

The following transfers to take effect at once, are hereby ordered:

Class 294 from Division 1 to Division 4.
Class 260, Subs. 2–8, 10, 100–102, 145, 146, 148, and 152, from Division 6 to Division 50.
Class 216 from Division 17 to Division 53.
Class 287 from Division 19 to Division 46.
Class 17 from Division 25 to Division 2.
Class 123, Subs. 179 and 185, from Division 28 to Division 12.
Class 123, Subs. 142–169, from Division 28 to Division 48.
Class 94 from Division 33 to Division 38.
Class 24 from Division 35 to Division 5.
Class 132 from Division 35 to Division 58.
Class 137, Subs. 99, 112, 71, 90, 77, 75, 76, 78, 79, 73, 72, 91, 100, from Division 39 to Division 52.
Class 150 from Division 40 to Division 62.
Classes 4 and 182 from Division 43 to Division 1.
Classes 221 and 226 from Division 44 to Division 35.
Class 74, Subs. 21, 31, 32, 42, 43, 44, 49, 51, 61, 62, 63, 64, 65, 66, 67, 103, from Division 45 to Division 12.
Class 303 from Division 47 to Division 34.
Class 192, Subs. 116.5 to 150, from Division 47 to Division 12.
Class 53 from Division 49 to Division 1.
Class 134, except Subs. 17, 26, 54, and 79, from Division 50 to Division 64.
Class 106, Subs. 24–36, from Division 50 to Division 38.
Class 91, Subs. 1–67.8, from Division 50 to Division 22.
Class 197 from Division 58 to Division 41.
Classes 44 and 195 from Division 59 to Division 64.
Class 222 from Division 59 to Division 38.
Class 149 from Division 59 to Division 11.
Classes 187, 227, 228, and 304 from Division 61 to Division 4.

THOMAS E. ROBERTSON,
Commissioner.

Interference Notice

U. S. PATENT OFFICE, *Washington, Mar. 28, 1933.*

Frank L. Myers, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Edwin Archer Turner, 250 Madison Avenue, New York, N. Y., and patent granted January 12, 1932, No. 1,840,913, to Frank L. Myers, 506 Cathedral Street, Baltimore, Md., and a notice of such declaration sent by registered mail to said Myers at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Myers, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. PATENT OFFICE, *Washington, Mar. 21, 1933.*

Lee B. Gribbens, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Lee B. Gribbens, of 55 East 29th St., Chicago, Ill., No. 217,523, dated August 31, 1926, and the notice of such proceeding sent by registered mail to the said Gribbens at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Gribbens, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Condition of Applications Under Examination at Close of Business March 31, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 51,742; Trade-Mark Division, 1,062. Oldest new case, Dec. 1. 1932; oldest amended, Dec. 1, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application awaiting office action	Oldest amended application awaiting office action	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Dec. 2	Dec. 2	672
6708	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 3	Dec 3	925
4093	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	†Jan. 9	†Jan. 9	606
7083	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 9	Dec. 19	569
3628	5. MACNAB, F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 4	†Jan. 13	497
4806C	6. LEWERS, A. M., Carbon Chemistry	Dec. 1	Dec. 1	1,027
5726	7. JARBOE, C. G., Optics; Photography	Dec. 5	Dec. 5	1,076
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Feb. 1	†Feb. 1	552
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 5	†Jan. 6	641
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Jan. 3	†Jan. 3	487
5087B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 5	Dec. 5	663
7701	12. HENRY, C. C., Machine Elements	Dec. 17	Dec. 20	563
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	Dec. 22	Dec. 21	700
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	†Jan. 16	†Jan. 12	537
4897	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 1	Dec. 1	1,273
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 13	†Jan. 13	603
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 1	Dec. 1	1,089
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Feb. 3	†Feb. 2	309
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Dec. 1	Dec. 1	1,105
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Jan. 31	†Feb. 2	360
7733	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 1	Dec. 3	906
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 6	Dec. 9	864
7892	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Dec. 3	Dec. 2	562
5083	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Feb. 1	†Feb. 6	434
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminutors.	Dec. 1	Dec. 1	1,096
5803	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	†Jan. 3	†Jan. 3	505
5706	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 3	†Jan. 3	639
4628	28. BENSON, A. R., Internal-Combustion Engines	Dec. 1	Dec. 1	913
5082	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Dec. 2	Dec. 2	416
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 3	†Jan. 3	629
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Dec. 1	Dec. 1	1,206
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 9	†Jan. 7	624
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 5	Dec. 6	1,247
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Dec. 2	Dec. 1	933
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Dec. 2	Dec. 2	847
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Dec. 1	Dec. 1	1,285
5889	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Jan. 3	†Jan. 3	606
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Wells.	Dec. 1	Dec. 6	731
4874	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 2	Dec. 2	929
7880	40. OBERLIN, J. J., Receptacles	Dec. 7	Dec. 7	1,424
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Dec. 12	Dec 9	658
5882	42. CUTTING, H. O., Electric Signaling	Dec. 2	Dec. 1	992
4886B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 2	Dec. 2	1,002
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Dec. 2	Dec. 2	735
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Feb. 1	†Feb. 1	477
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 3	Dec. 5	631
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Dec. 1	Dec. 1	1,294
5731	48. ROEPKE, O. B., Electricity, General Applications	Dec. 3	Dec. 2	710
7725	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 1	Dec. 1	913
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 1	Dec. 1	1,006
5628	51. BACKUS, C. D., Radiant Energy	†Jan. 3	†Jan. 3	858
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 3	†Jan. 10	527
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 6	†Feb 7	404
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Dec. 1	Dec. 1	865
6887	55. BOWEN, S. T.—{Bread, Pastry, and Confection Making; Cutlery / Designs	†Jan. 5 / †Mar. 6	†Jan. 7 / †Mar. 16	315 / 242
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 5	Dec. 2	963
3625	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 9	Dec. 15	491
5605	58. DOWELL, E. F., Abrading; Typewriting	Dec. 6	Dec. 8	517
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Dec. 2	Dec. 2	617
5896	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Dec. 1	Dec. 1	1,051
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Dec. 2	Dec. 1	805
7525	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Dec. 19	Dec. 19	1,183
4888	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Dec. 1	Dec. 1	1,156
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Dec. 15	Dec. 15	1,007
5624	65. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Dec. 1	Dec. 1	1,163
2099B	Trade-Marks, Labels, and Prints: F. A. RICHMOND—{Trade-Marks / Labels and Prints	†Feb. 25 / †Mar. 2	†Mar. 17 / †Mar. 18	842 / 220

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

DERBY AND CUNNINGHAM *v.* WHITWORTH

No. 3,045. Decided December 27, 1932

1. INTERFERENCES—APPEAL TO COURT OF CUSTOMS AND PATENT APPEALS—WHAT MAY BE CONSIDERED.

"The question of the right of a party to secure a patent cannot be raised in this court on appeals in interference proceedings."

2. SAME—SAME—SAME.

"If appellee was the prior inventor and has in fact already received a patent for the invention, or has dedicated a part of it to the public, such fact affords no ground for an award of priority of invention to appellants."

3. SAME—SAME—SAME—ALLEGATION OF DERIVATION FROM A THIRD PARTY.

A contention that one of the parties derived knowledge of the invention from a party not involved in the interference cannot be considered on appeal from the award of priority.

4. SAME—PRIORITY.

Record reviewed and *Held* that priority was properly awarded to W. on the ground that he was the first to conceive the invention and the first to reduce it to practice.

APPEAL from the Patent Office. Affirmed.

Mr. William W. Dodge for Derby and Cunningham.

Mr. H. C. Bierman and *Mr. Ellis S. Middleton* for Whitworth.

LENROOT, *J.*:

This is an interference proceeding wherein the Board of Appeals of the United States Patent Office affirmed a decision of the Examiner of Interferences, awarding priority of invention upon all the counts in issue to appellee. From such decision appellants have appealed to this court.

The invention involved relates to flotation agents and methods of effecting concentration of minerals therewith. The counts are thirty-three in number, of which the following are illustrative:

1. The method of effecting the concentration of minerals by flotation which comprises adding to the mineral pulp a modifying agent consisting of the reaction product of an organic compound together with sulphur and phosphorus, and subjecting the resulting mixture to a flotation operation.

8. The method of effecting concentration of minerals by flotation which comprises adding to the mineral pulp a reaction product of an oxygen-containing organic compound together with sulphur and phosphorus, and subjecting the resulting mixture to a flotation operation.

10. The method of effecting concentration of minerals by flotation which comprises adding to the mineral pulp a product produced by the reaction of cresol and phosphorus pentasulphide and subjecting the resulting mixture to a flotation operation.

12. A flotation agent comprising the product of reaction of sulphur and phosphorus with an oil.

16. A flotation agent comprising the product of reaction of sulphur and phosphorus with an oil containing distillates of tar including combinations of portions distilling therefrom at higher or lower temperatures.

21. A flotation agent comprising the product of reaction of about 1.5% of phosphorus and about 4% of sulphur with a tar oil.

22. A flotation agent comprising the product of reaction of about 3% of phosphorus and about 8% of sulphur with an oil.

24. A flotation agent comprising the product of reaction of about 1.5% to 3% of phosphorus and about 4% to 8% of sulphur with an oil.

32. As a new flotation agent, a phosphorized and sulphurized oil.

33. A process which comprises subjecting ore to a flotation process while in the presence of an oil containing sulphur and phosphorus.

The interference arises between an application filed by appellants on October 6, 1925 (Serial No. 60,911), and a patent, No. 1,593,232, granted to appellee on July 20, 1926, upon an application filed November 2, 1925, involving counts 1 to 11, inclusive, and between said application of appellants and an application filed by appellee on April 15, 1927, Serial No. 184,171, involving the remainder of the counts.

Inasmuch as appellants' application was pending at the time of the issue of said patent to appellee, and was filed earlier than either of appellee's applications, appellee is the junior party and the burden was upon him to establish priority of invention by him by a preponderance of evidence.

The history of the case with respect to the declarations of interference and the proceedings had in relation thereto, prior to the decision of the Examiner of Interferences, is stated in the decision of the Board of Appeals as follows:

The party Whitworth has a patent No. 1,593,232 but Derby and Cunningham are the senior party, their application having been filed October 6, 1925, while that upon which the Whitworth patent was granted was filed about one month later, on November 2, 1925. Derby and Cunningham copied all the claims of the Whitworth patent, except claim 8, and an interference, No. 54,789, was declared upon eleven counts, which are counts 1 to 11, inclusive, of the present interference. When the preliminary statements were opened Whitworth, on April 15, 1927, filed a second application, Serial No. 184,171, in which he copied all the claims of the Derby and Cunningham application not already in interference, except claims 20 and 28, accompanied by a motion to add these claims to the issue. The description in this second Whitworth application is alleged by both parties to be substantially the same as in the Whitworth patent. A second interference No. 56,876 was declared between the new Whitworth application and the Derby and Cunningham application on February 10, 1928.

On April 15, 1927, Whitworth brought a motion before the Law Examiner to amend the issue of interference No. 54,789 by the addition of the claims of his second application which motion was opposed by Derby and Cunningham on the ground that the claims could not be allowed in the second Whitworth application as this would involve double patenting and also on the ground that neither in his patent nor in his application, has Whitworth disclosed a basis for claims covering any oils or materials except oxygen holding substances. The Law Examiner granted Whitworth's motion except as to proposed claims 20, 21, and 28. Derby and Cunningham now seek to raise the same questions on this appeal under Rule 130.

In interference No. 54,789, Derby and Cunningham filed a preliminary statement alleging conception on May 1, 1925, and a reduction to practice on May 11, 1925. When interference No. 56,876 was declared, Derby and Cunningham filed a statement alleging a date of June 6, 1922, for conception and reduction to practice and accompanied it with a motion to amend the statement in interference No. 54,789 to allege the same date. The motion was denied by the Examiner of Interferences but was renewed on additional showing. Decision on the renewed motion was held in abeyance in view of the proof to be adduced on final hearing with respect to priority and was denied by the Examiner of Interferences in his decision on priority. Derby and Cunningham allege error in this holding and urge it as one of the grounds of appeal.

On May 21, 1928, interferences Nos. 54,789 and 56,876 were consolidated under No. 54,789 and the counts of the consolidated interference were designated as 1 to 33, inclusive, counts 12–33, inclusive, being the counts of the second interference.

The Board of Appeals held that appellants' opposition to the addition of the claims of the second application of appellee, as above stated, was equiva-

lent to a motion to dissolve the interference as to such claims, and affirmatively held that appellee had the right to make all of the claims corresponding to counts 12 to 33, inclusive, of the consolidated interference; that appellants had no right to raise the question that allowance of the claims of appellee's second application to him would involve double patenting, because this was an *ex parte* question and was irrelevant to the question of priority of invention; the Board also denied appellants' contention that a jurisdictional question was presented and that an interference has no standing if there is a statutory bar against one of the parties. The Board further found that the Examiner of Interferences did not err in denying appellants' motion to amend their preliminary statement with respect to counts 1 to 11, inclusive.

Upon the merits of the issue, the Examiner accorded to appellee a date of conception for all the counts as of November 23, 1924, and an actual reduction to practice of all of the counts except counts 20 to 24, inclusive, and count 28, as of April 1, 1925; as to said last named counts, the Examiner accorded appellee November 2, 1925, the filing date of his application, for a constructive reduction to practice. The earliest date accorded by the Examiner of Interferences to appellants for conception with respect to any of the counts in issue was June 16, 1925, which was subsequent to the date accorded to appellee for reduction to practice of all the counts except said counts 20 to 24, inclusive, and count 28, and subsequent to the date of conception awarded to appellee as to said counts. The Examiner further found, with respect to said counts 20 to 24, inclusive, and 28, that appellee was diligent in reducing the invention to practice from just prior to June 16, 1925, the date of conception accorded appellants, to his filing date, November 2, 1925, which was a constructive reduction to practice. He therefore awarded priority of invention to appellee as to all of the counts.

The Board of Appeals concurred with the findings of the Examiner in all respects except as to counts 20 to 24, inclusive, and count 28. As to these counts the Board held that appellee was entitled to a reduction to practice as of April 1, 1925, which is earlier than any date accorded to appellants for conception of the invention. The Board further held that if it be assumed that appellee had not so reduced to practice as of April 1, 1925, he was diligent in reducing to practice the invention embodied in said counts 20 to 24, inclusive, and 28, from immediately prior to the entry of appellants into the field, June 16, 1925, to appellee's filing date, November 2, 1925.

The Board refused to consider a contention made by appellants that the evidence established that the invention was made by certain persons not parties to this interference.

The Board, for the reasons stated in its decision, affirmed the decision of the Examiner awarding priority of invention upon all the counts to appellee, and from such decision of the Board this appeal is taken.

Appellants in their notice of appeal assigned thirty-one reasons of appeal. These may be grouped as to subject matter as follows:

1. That the Patent Office tribunals had no jurisdiction to hear and determine the interference, insofar as the claims of appellee's second application are concerned, because such second application was invalid.

2. That appellee is estopped to assert the claims in his second application.

3. That the Board erred in denying appellants' motion to amend their first preliminary statement.

4. That the Board erred in its findings as to the dates of conception and reduction to practice accorded to the respective parties.

While appellants contended before the Board of Appeals that appellee had no right to make certain of the claims of his second application because, neither in appellee's patent nor his second application, did he disclose a basis for said claims, and said Board ruled adversely to such contention of appellants, the reasons of appeal do not include such ruling, and it is therefore unnecessary for us to consider whether or not the Board erred in said ruling.

With respect to the claim of want of jurisdiction of the Patent Office tribunals to hear and determine the interference, appellants urge three grounds in support of such claim:

(*a*) That to allow to appellee the claims of his second application would result either in double patenting or in a withdrawal of a dedication to the public in the patent already issued to appellee of any portion of the invention not claimed therein.

(*b*) That there was presented to the Patent Office tribunals no "case" or "controversy" within the meaning of said terms as used in section 2 of Article III of the Constitution of the United States.

(*c*) That the record shows that appellee has admitted public use of the invention more than two years prior to the filing of his second application.

[1] With respect to point (*a*) above stated, it is well established that the question of the right of a party to secure a patent cannot be raised in this court on appeals in interference proceedings. *Gowen* v. *Hendry & King*, 17 C. C. P. A. (Patents) 789, 37 F.(2d) 426, 393 O. G. 1024; *Dorer* v. *Moody*, 18 C. C. P. A. (Patents) 1188, 48 F.(2d) 388, 410 O. G. 821.

As was said in the opinion in said case of *Gowen* v. *Hendry & King*, supra,

> • • • the question of the patentability of an alleged invention is an issue between the applicant and the Patent Office—the Patent Office representing the public.

[2] If appellee was the prior inventor and has in fact already received a patent for the invention, or has dedicated a part of it to the public, such fact affords no ground for an award of priority of invention to appellants; under appellants' theory, if appellee was the first inventor, his dedication to the public of the invention or a part of it should be disregarded and a patent issued to appellants, even though they were not the first inventors.

As to point (*b*) above stated, it is not necessary that an interference proceeding, to be valid, shall constitute a "case" or "controversy" within the meaning of said terms as used in section 2 of Article III of the Constitution of the United States. Suffice it to say with respect to this point that the tribunals of the Patent Office are not courts; they are purely administrative bodies, and the provisions of said section 2 of Article III of the Constitution have no reference to administrative tribunals. This is so clear that further discussion, or citation of authority, is unnecessary.

With respect to point (*c*), relating to jurisdiction, whether or not appellee has forfeited his right to a patent upon the claims in his second application, by reason of public use of the invention for more than two years prior to the filing of said second application, cannot be here determined. In the first place, appellants brought no public use proceedings in the Patent Office, as provided for in the rules of the Patent Office; and in the second place, if such proceedings had been brought, they would have gone only to the question of whether the interference should be dissolved. If dissolved, there could of course be no award of priority of invention. If not dissolved, we would have no jurisdiction to review such question, for the only matter before us for determination is that of priority of invention and questions ancillary thereto. *Gowen* v. *Hendry & King*, *supra*; *Mell* v. *Midgley*, 31 App. D. C. 534, 136 O. G. 1584.

In the case of *Burson* v. *Vogel*, 29 App. D. C. 388, 131 O. G. 942, there was directly involved the question of whether public use for more than two years could be raised upon an appeal from an award of priority in an interference proceeding. In its opinion, the court said:

> Whether Burson's use of his machine in his factory for more than two years before applying for a patent amounted to such public use within the meaning of sec. 4886, U. S. Rev. Stat., U. S. Comp. Stat. 1901, p. 3382, as to bar his right to a patent, is not a question which can be raised in this case, which involves priority of inventios as between him and Vogel. The question is one for the consideration of the Commissioner on the final allowance of a patent.

We are clear that there was no lack of jurisdiction of the Patent Office tribunals to consider and determine the question of priority of invention between the parties hereto. There is no contention that appellee's second application did not in form comply with the statute and the rules of the Patent Office, but, upon the contrary, such application appears to be in due form and hence cannot be held to be void upon its face, as contended for by appellants.

With respect to appellants' contention that appellee is estopped to assert any rights to a patent under his second application, upon the ground of equitable estoppel, we hold that there is nothing in the record warranting the application of the doctrine of equitable estoppel, or any doctrine akin thereto, so far as this interference proceeding is concerned.

In the case of *Miller* v. *Hayman*, 18 C. C. P. A. (Patents) 848, 46 F.(2d) 188, 405 O. G. 549, we applied, in an interference proceeding, a doctrine akin to equitable estoppel. The principle upon which it was based is found in the following quotation from the opinion:

> • • • if appellant should now be permitted to prove in this proceeding that he was the first inventor, and therefore entitled to rights under the patent laws, it would be against the principles of equity and good conscience, because by appellant's failure to make public his invention or apply for a patent, appellee devoted his genius and efforts and time to the discovery of that which, in fact, had been discovered by appellant, but which discovery had been concealed and suppressed by him. He did so at his peril, the risk undertaken being that another might independently and in good faith make the same invention and apply for a patent upon it, in which case appellant could not, in equity and good conscience, be awarded priority of invention in a contest between himself and the later inventor, as to which had the prior right of protection of the patent laws.

In the case at bar appellants have not been prejudiced in any way by appellee's failure in his first application to make the claims that are included in his second application. It is admitted that the disclosures in both applications are substantially identical. If there be any estoppel at all against appellee, as to which we express no opinion, only the public, represented by the Patent Office, has the right to assert it, and appellants can not secure an award of priority to themselves based upon the theory that, even though appellee be the first inventor, he has dedicated a part of his invention to the public by reason of the disclosure in his first application.

Respecting appellants' contention that the Board of Appeals erred in denying their motion to amend their first preliminary statement, we find it unnecessary to pass upon this question for the reason that, as hereinafter stated, we find that appellee conceived and reduced the invention to practice as to all the counts prior to any established date of conception by appellants, even if said motion to amend should have been granted. It is presumed that appellants would have introduced no additional evidence had such motion to amend been granted by the Examiner of Interferences; a final ruling upon such motion was held in abeyance until final hearing with respect to priority, and appellants had full opportunity to establish, if they could, the earlier dates set out in their motion to amend.

[3] Appellants make another contention, viz., that appellee derived the invention through parties strangers to this proceeding, and also that he derived it through appellants. With respect to the first of said contentions, the Board of Appeals correctly held that such contention could not be considered in this proceeding. *Cooper* v. *Hubbell*, 19 C. C. P. A. (Patents) 790, 53 F.(2d) 1072, 415 O. G. 475. With respect to the second contention, viz., that appellee derived the invention from appellants, the Board of Appeals found to the contrary, and we agree with this conclusion. We find no competent evidence in the record to support this contention made by appellants.

We now come to a consideration of whether or not the Board of Appeals erred in finding that appellee was the first to conceive the invention and reduce it to practice with respect to all of the counts in issue.

As heretofore stated, the invention here in issue relates to flotation agents and methods of effecting concentration of minerals therewith. The flotation

process consists in the grinding of ore to a high degree, mixing the same with a large amount of water to form a pulp, adding to the pulp suitable reagents in very small amounts, then agitating the pulp in the presence of air to produce a froth which carries the mineral particles, and skimming off the froth to recover the values.

The invention here involved includes a class of compounds obtained by the reconstruction, that is, the heating, of an oil or other organic substance having a hydroxyl group, either with phosphorus pentasulphide or with phosphorus and sulphur in the proper proportions to give phosphorus pentasulphide. The compounds obtained thereby are claimed to be powerful collectors and, to a degree, frothers. An essential element of the invention here involved is the presence of sulphur in one or the other of the forms above indicated.

The evidence introduced by the respective parties is very voluminous, consisting of nearly 500 pages of the record. We have carefully examined said evidence, and are of the opinion that the Board of Appeals was clearly right in its finding that appellee, upon whom the burden of proof rested, has established conception and reduction to practice of the invention as to all of the counts not later than April 1, 1925.

Appellants claim conception of the invention and its reduction to practice in 1922. In support of this claim, reliance is placed upon a certain laboratory experiment reported on a sheet of a laboratory record, under the caption "Sample 19," introduced in evidence as appellants' "Exhibit 2." Said laboratory record made no mention of sulphur. Both the Examiner and the Board of Appeals held that it was not established that sulphur was employed in the making of said experiment, and that, there being no other testimony of conception of the invention by appellants in 1922 which was corroborated, the earliest date which could be accorded to appellants for conception of the invention, under the evidence, was June 16, 1925. We do not see how any other conclusion could have been reached by the Board upon the record before us.

[4] No useful purpose would be served in reviewing the evidence upon which the conclusions of the Board of Appeals are based, and we content ourselves with saying that we have no doubt concerning their correctness.

For the reasons stated, the decision appealed from is affirmed.

Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

1,125,476, Georges Claude, System of illuminating by luminescent tubes, filed July 29, 1931, D. C., S. D. Calif. (Los Angeles), Doc. U–76–H Eq., *Claude Neon Electrical Products, Inc.*, v. *Thomas E. Sargent* (*doing business as Neon Electrical Sign Co.*). Interlocutory decree favor plaintiff Mar. 10, 1933. Doc. U–78–H Eq., *Claude Neon Electrical Products, Inc.*, v. *Technical Neon Laboratories, Ltd., et al.* Decision same as above.

1,147,660, George W. Vaughan, Ballast tampers for railway ties, filed June 7, 1929, D. C., Del. (Wilmington), Doc. 729 Eq., *Fanny Minton Vaughan et al.* v. *Syntron Co.* Dismissed for want of prosecution, Mar. 14, 1933.

1,151,501, Joseph Tomlinson, Printing plate, appeal filed Mar. 14, 1933, C. C. A., 8th Cir. (St. Louis, Mo.), Doc. 9611, *Lawrence O. Kellogg et al.* v. *Speedaumat Mfg. Co.* Dismissed without costs to either party Mar. 14, 1933.

1,171,982, Leo Rosenman, Garment fastener holder, filed Nov. 29, 1932, D. C., E. D. Pa., Doc. 7401, *Yale Hook & Eye Co.* v. *De Long Hook & Eye Co.* Dismissed without prejudice and without costs Mar. 4, 1933.

1,180,159, Irving Langmuir, Incandescent electric lamps, filed Nov. 2, 1932, D. C., S. D. N. Y., Doc. E 72–141, *Gen'l Electric Co.* v. *Stanley Lamp Corp.* Interlocutory decree favor plaintiff Mar. 7, 1933.

1,218,695, Joseph B. Scutti, Cloth covered buckles, filed Mar. 8, 1933, D. C., S. D. N. Y., Doc. E 74–450, *Liberty Die and Button Mould Co., Inc.*, v. *Isidore Elkins & Nathan Cohen* (*doing business under firm name, Elco Metal Products*).

1,231,764, Fritz Lowenstein, Telephone relays; 1,618,017, same, Wireless telegraph apparatus; 1,403,475, Harold D. Arnold, Vacuum tube circuits; 1,465,382, same, Vacuum tube amplifiers, filed Mar. 9, 1933, D. C., S. D. N. Y., Doc. E 74–456, *Radio Corp. of America et al.* v. *Homer F. Lyman* (*doing business as Lyman Mfg. Co. and "Musique Radio Co. & Lyman Radio Mfg. Co., Inc."*

1,240,459, Charles J. Klein, Electric switches; 1,651,035, 1,783,665, George J. Meuer, Electric switches, appeal filed Dec. 24, 1932, C. C. A., 2nd Cir. (New York city), Doc. 12493, *Cutler-Hammer, Inc.*, v. *Cutler Tool & Machine Co., Inc.* Decree affirmed (notice Mar. 14, 1933).

1,291,397. (See Re. 15,061.)

1,293,897, Daniel W. Parker, Stone saw, appeal filed Dec. 15, 1932, C. C. A., 2nd Cir. (New York city), Doc. 12459, *Parker Rotary Stone Saw Co.* v. *Lane Manufacturers Co.* Decree reversed (notice Mar. 21, 1933).

1,293,974, William L. Sullivan, Check-issuing machines, appeal filed Dec. 13, 1932, C. C. A., 2nd Cir., (New York city), Doc. 12472, *General Register Corp.* v. *Lock-Stub Check Co.* Decree reversed (notice Mar. 21, 1933).

1,328,531, Edward R. Hewitt, Means to measure the suction in the manifold of an internal combustion engine; 1,748,417, Butler J. Haskins, Mechanism for testing ignition of automobiles, filed Mar. 9, 1933, D. C., W. D., S. Div. Mich. (Grand Rapids), Doc. 2625 Eq., *Joseph Weidenhoff, Inc.*, v. *Allen Electric & Equipment Co.*

1,383,035, Charles Reuben Short, Bearing shims, filed Feb. 17, 1932, D. C., S. D. N. Y., Doc. E 65–213, *General Motors Corp. et al.* v. *Nat'l Motor Bearing Co., Inc.* Discontinued Mar. 7, 1933.

1,392,629, 1,890,974, Carbon P. Dubbs, Process of converting hydrocarbons; 1,537,593, Gustav Egloff, Process for cracking oil, filed Mar. 9, 1933, D. C. Del. (Wilmington), Doc. 1019 Eq., *Universal Oil Products Co.* v. *Octane Oil Refining Co.*

1,408,475. (See 1,231,764.)

1,440,978, Clinton E. Dolbear, Method of controlling foaming of boiling liquids, filed Mar. 30, 1932, D. C., S. C. Calif. (Los Angeles), Doc. W–71–H Eq., *Clinton E. Dolbear et al.* v. *American Potash & Chemical Corp.* Dismissed Mar. 13, 1933.

1,465,332. (See 1,231,764.)

1,470,524, Harry B. Burt, Process of making frozen confections; 1,718,997, same, Frozen confections, filed Aug. 1, 1932, D. C., N. D. Ga. (Atlanta), Doc. 688 Eq., *Good Humor Corp. of America* v. *George Moore Ice Cream Co., Inc.* Dismissed (notice Mar. 13, 1933).

1,470,723, William R. Gillies, Heat insulating tape; 1,875,297, same, Heat insulating material, filed Mar. 11, 1933, D. C., Del. (Wilmington), Doc. 1020 Eq., *Union Asbestos & Rubber Co.* v. *Southern Asbestos Co.*

1,477,873, Hannah Jacobs, Hair waving devices, filed Mar. 16, 1933, D. C., S. D. N. Y., Doc. E 75–31, *Hannah Jacobs* v. *Hyman & Hyman, Inc., et al.*

1,526,982, Edward W. Hill, Stencil sheets, filed Mar. 10, 1933, D. C., S. D. N. Y., Doc. E 74–458, *A. B. Dick Co.* v. *Kensington Supply Co., Inc., et al.*, Doc. 346 Eq., D. C., S. D. W. Div. Ohio (Dayton), filed Mar. 15, 1933, *A. B. Dick Co.* v. *Clarence E. Bradley.*

1,528,345, Harley W. Russ, Heels and method of making the same, filed Mar. 7, 1933, D. C., S. D. W. Va. (Charleston), Doc. 3250, *United Shoe Machinery Corp.* v. *Meadow River Lumber Co.*

1,537,593. (See 1,392,629.)

1,555,441, Hilding A. Sjodahl, Shingle; Des. 68,552, same, Shingle, filed Sept. 3, 1931, D. C., S. D. Calif. (Los Angeles), Doc. U–102–J Eq., *The Patent and Licensing Corp.* v. *Star Roof Corp. et al.* Consent decree holding patents valid and infringed Mar. 7, 1933.

1,567,863, H. R. Sargent et al., House wire structures; 1,567,864, H. R. Sargent, Wall attachment means for electrical devices, appeal filed Nov. 4, 1932, C. C. A., 2nd Cir. (New York city), Doc. 12399, *General Electric Co.* v. *United States Electric Mfg. Corp.* Decree modified (notice Mar. 14, 1933).

1,567,864. (See 1,567,863.) 1,571,029. (See Re. 16,989.)

1,575,945, Ben K. Stroud, Application of mud-laden fluids to oil or gas wells, filed Apr. 18, 1930, D. C., S. D. Calif. (Los Angeles), Doc. R–26–J Eq., *Nat'l Pigments & Chemical Co.* v. *Chamberlain Co., Inc., et al.* Consent decree holding patent held valid and infringed Mar. 8, 1933.

1,620,116, Dedrick A. Maanum, Can washers, filed Mar. 17, 1933, D. C., Mo., (Kansas City), Doc. 2266, *Cherry-Burrell Corp.* v. *Dairy & Creamery Equipment Co.*

1,635,753, Lloyd A. Johnson, Laminated shims, filed Mar. 8, 1932, D. C., N. D. Calif. (San Francisco), Doc. 3203–S Eq., *Nat'l Motor Bearing Co., Inc., et al.* v. *Federal-Mogul Corp. et al.* Order discontinuing suit and counter suit of defendants Mar. 11, 1933.

1,636,879, Rudolph Tichota, Anti-frost vision appliance, filed Mar. 9, 1933, D. C. Nebr. (Omaha), Doc. 1092, Eq., *Rudolph Tichota* v. *Edward A. Pepau.* Dismissed with costs to plaintiff Mar. 10, 1933.

1,651,035. (See 1,240,459.)

1,683,182, Chester I. Hall, Electric switches, filed Mar. 18, 1932, D. C., E. D. N. Y. (Brooklyn), Doc. E 6900, *Gen'l Electric Co.* v. *C. J. Tagliabue Mfg. Co., Inc.*

1,686,243, Edward B. Meyer, Snow plows, filed Sept. 14, 1932, D. C., N. D., E. Div. Ohio (Cleveland), Doc. 4401, *Edward B. Meyer* v. *John Q. Shunk et al.* Dismissed without prejudice Feb. 9, 1933.

1,718,997. (See 1,470,524.)

1,732,808, Solomon H. Goldberg, Hairpin, filed Mar. 18, 1933, D. C., S. D. N. Y., Doc. E 74–489, *Chain Store Products Corp.* v. *Adolph C. Hauptman*, Doc. E 74–490, *Chain Store Products Corp.* v. *Louis Silverman*, filed Mar. 15, 1933, D. C., E. D. Wis. (Milwaukee), Doc. 4003 Civ., *Chain Store Products Corp.* v. *Scolding Locks Corp.*

1,748,417. See 1,323,531.) 1,783,665. (See 1,240,459.)

1,786,405, Ernest M. Brogden, Apparatus for treating fruit and the like, filed Dec. 23, 1931, D. C., Del. (Wilmington), Doc. 939 Eq., *Brogden Co.* v. *American Fruit Growers, Inc.* Consent decree adjudging claims 5 and 10 of patent valid and infringed Mar. 15, 1933.

1,789,901, Fred Hotchner, Electrode, filed Jan. 2, 1932, D. C., N. D. Calif. (San Francisco), Doc. 3142–K Eq., *Fred Hotchner et al.* v. *Geo. E. Hill et al.* Dismissed for want of prosecution Mar. 6, 1933.

1,797,205, Harry W. Houck, Electron tube apparatus, filed July 29, 1931, D. C., Del. (Wilmington), Doc. 899 Eq., *Dubilier Condenser Corp.* v. *Perryman Electric Co., Inc.* Dismissed for want of prosecution Mar. 14, 1933.

1,831,925, Alfred Ferdinand Niggle, jr., Shoe heel, filed Mar. 10, 1933, D. C., W. D., S. Div. Mich. (Grand Rapids), Doc. 2626, *Alfred F. Niggle, jr.* v. *Ben Krause Co. et al.*

1,836,897, Earl D. Brown et al, Process of reducing the water requirement of compositions of matter embodying vegetable protein containing material and to the product thereof; 1,845,427, Irving F. Laucks and Glenn Davidson, Glues and methods of making; 1,854,703, same, Vegetable protein glues and processes of making; 1,883,989, same, Adhesives and methods of making, filed Mar. 7, 1933, D. C., W. D., N. Div. Wash. (Seattle), Doc. 1004, *I. F. Laucks, Inc.*, v. *Balfour Guthrie & Co., Ltd.*

1,841,159, Leo Silverman, Method of making textile fabrics, filed Feb. 17, 1933, D. C., S. D. N. Y., Doc. E 74–242, *Millinery Braid Manufacturers Research Corp.* v. *Practical Hat Co., Inc.* Consent order of discontinuance Mar. 14, 1933.

1,845,427. (See 1,836,897.) 1,854,703. (See 1,836,897.)

1,855,168, Clair L. Farrand, Loudspeaker, filed Oct. 10, 1932, D. C., S. D. N. Y., Doc. E 71–301, *Utah Radio Products Co., et al.* v. *Gimble Bros., Inc.*. Doc. E 71–304, *Utah Radio Products Co. et al.* v. *R. H. Macy & Co.* Filed Oct. 13, 1932, D. C., S. D. N. Y.: Doc. E 71–323, *Utah Radio Products Co. et al.* v. *The Rudolph Wurlitzer Co.* Doc. E 71–324, *Utah Radio Products Co. et al.* v. *Heins & Bolet Radio & Electric Supply Co.* Filed Oct. 18, 1932, D. C., S. D. N. Y.: Doc. E 71–370, *Utah Radio Products Co. et al.* v. *Stern Bros., Inc.* Doc. E 71–371, *Utah Radio Products Co. et al.* v. *Modells Radio Outlets, Inc.* Doc. E 71–372, *Utah Radio Products Co. et al.* v. *Park Radio Service, Inc.* Doc. E 71–373, *Utah Radio Products Co. et al.* v. *A. Finkenberg's Sons, Inc.* Doc. E 71–374, *Utah Radio Products Co. et al.* v. *Spear & Co., Inc.* Doc. E 71–375, *Utah Radio Products Co. et al.* v. *Roessler-Sterling, Inc.* Doc. E 71–376, *Utah Radio Products Co. et al.* v. *Hearn Department Stores, Inc.* Doc. E 71–378, *Utah Radio Products Co. et al.* v. *Amco Radio Stores, Inc.* Discontinued without prejudice and without costs Mar. 14, 1933. Doc. E 71–377, *Utah Radio Products Co. et al.* v. *Furst Radio Corp.* Discontinued (notice Mar. 18, 1933). Filed Oct. 20, 1932, D. C., S. D. N. Y.: Doc. E 72–11, *Utah Radio Products Co. et al.* v. *L. Bamman & Bro., Inc.* Discontinued without prejudice and without costs, Mar. 14, 1933. Filed Oct. 11, 1932, D. C., S. D. N. Y.: Doc. E 71–321, *Utah Radio Products Co. et al.* v. *Walter H. Nussbaum, Inc.* Discontinued (notice, Mar. 18, 1933). Filed Mar. 9, 1933, D. C., N. D. Calif. (San Francisco), Doc. 3523 K Eq., *Utah Radio Products Co. et al.* v. *William C. Cohen and Milton M. Cohen*, as independently and as jointly (doing business as I. S. Cohen's Sons, Ltd.).

1,856,720, George Stanley Meikle, Apparatus for producing combustion, filed Feb. 21, 1933, D. C., E. D. Mich. (Detroit), Doc. 5792, *George Stanley Meikle* v. *Timken Silent Automatic Co.*

1,865,080, Frank Bowers, Soot blower, filed Aug. 15, 1932, D. C., Delaware (Wilmington), Doc. 990 Eq., *Diamond Power Specialty Corp.* v. *The Vulcan Soot Cleaner Co.* Dismissed Mar. 13, 1933.

1,866,779, Howard F. Snyder, Washing machines, filed Mar. 8, 1933, D. C., E. D. N. Y., Doc. 6888 Eq., *The Maytag Co.* v. *Brooklyn Edison Co.*

1,870,942, Dana C. Beatty, Syringes, filed Mar. 9, 1933, D. C., S. D. N. Y., Doc. E 74–453, *Gynex Corp. et al.* v. *Dilex Institute of Feminine Hygiene, Inc., et al.*

1,875,297. (See 1,470,723.) 1,883,989. (See 1,836,897.)

1,886,517, Hugh W. Batcheller, Electric switches; 1,888,444, 1,888,445, same, Toggle switches, filed Mar. 15, 1933, D. C. Mass. (Boston), Doc. 3846 Eq., *Hugh W. Batcheller et al.* v. *Henry Cole Co.*

1,888,444. (See 1,886,517.) 1,888,445. (See 1,886,517.)

1,890,974. (See 1,392,629.)

Re. 15,061 (of 1,291,397) Edwin B. Cantrell and George E. Miller, Oil retainers, filed Mar. 16, 1933, D. C., E. D. Mich. (Detroit), Doc. 5831, *National Motor Bearing Co.* v. *Chicago Rawhide Mfg. Co.*

Re. 16,989 (of 1,571,029) William J. Waters, Hydraulic jacks, filed Nov. 9, 1931, D. C., S. D., W. Div. Iowa (Council Bluffs), Doc. 4191 Eq., *The Watson-Stillman Co.* v. *Union Pacific Co.* Dismissed at plaintiff's costs Mar. 8, 1933.

Des. 82,325, Elmer Hedeen, Burial vault, filed Mar. 13, 1933, D. C., N. D., E. Div. Ohio (Cleveland), Doc. 4624, *The Sosonian Vault Co.* v. *The Perfection Steel Body Co.*

Des. 82,430, Joseph F. Kasper, Kitchen cabinets, filed Apr. 8, 1932, D. C., Middle Dis. Pa. (Scranton), Doc. 922, March term., *Joseph F. Kasper* v. *Keystone Cabinet Co. et al.* Consent decree favor plaintiff (notice Mar. 11, 1933).

Des. 88,604, William Willheim. Textile fabric or similar article, filed Mar. 10, 1933, D. C., S. D. N. Y., Doc. E 74–473, *William Willheim Co., Inc.*, v. *Abbate-Swift, Inc., et al.*

Des. 88,779, Harry Greene, Textile fabric or the like, filed Mar. 14, 1933, D. C., S. D. N. Y., Doc. E 75–4, *The Schwarzenbach-Huber Co.* v. *Rose Silk Mills, Inc.*

T. M. 217,453, Sylvan M. Edison, Dental plate cleanser, filed July 15, 1932, D. C., N. D. Ill. (Chicago), Doc. 12118, *Sylvan M. Edison et al.* v. *Johnson & Johnson et al.* Dismissed at plaintiff's costs Aug. 25, 1932.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,711,030, E. C. Pifer, Display receptacle, decided February 1, 1933, claims 1, 2, 3, 5, 6, 8, and 9.

Pat. 1,796,285, Asger Eilersgaard, Positive crowd mechanism, decided March 23, 1933, claims 1 and 2.

Pat. 1,878,286, G. D. McCabe, Element supporting stem construction, decided March 20, 1933, claims 1 and 2.

Adjudicated Patents

(App. D. C.) Moore patent, No. 1,100,319, for rubber shoe, *Held* not infringed. *Moore* v. *Lansburgh & Bros.*, 63 F.(2d) 148.

(C. C. A. Ill.) Martin patent, No. 1,269,479, for loose-leaf binder, claims 1, 2, 3, 9, and 10 *Held* not infringed. *Martin* v. *H. C. Miller Co.*, 63 F.(2d) 5.

(C. C. A. Pa.) Daae patent, No. 1,441,217, for gas producer, *Held* not infringed. *Daae* v. *Allegheny Steel Co.*, 63 F.(2d) 107.

(C. C. A. Ill.) Widmer patent, No. 1,585,452, for manufacture of starch, claims 1, 2, 4, 5, 8, 9, 13, 14, and 18 *Held* not infringed. *Corn Products Refining Co.* v. *Penick & Ford*, 63 F.(2d) 26.

(C. C. A. Ill.) McCoy patent, No. 1,651,611, for closed wet-starch system, claims 7, 11, 12, 13, and 14 *Held* invalid. *Id.*

Disclaimers

1,794,358.—*William Bauer*, Neenah, Wis. PAD-MAKING MACHINE. Patent dated March 3, 1931. Disclaimer filed March 28, 1933, by the assignee, *International Cellucotton Products Co.*

Disclaims from the scope of each and all of the claims of said patent any machine or method except such as is used for making surgical pads or sanitary napkins wherein a pad of soft, absorbent, fibrous filling material is enclosed in a wrapper of gauze or other similar soft flexible material and

Limits the scope of each and all of the claims of said patent to machines and methods for making surgical pads or sanitary napkins wherein the wrapping material is made of gauze or other similar soft flexible material and the filling material is fibrous, soft, and absorbent.

1,755,930.—*Washington Irving Middleton*, Watertown, Mass. POWER CABLE. Patent dated April 22, 1930. Disclaimer filed March 29, 1933, by the patentee, assignee. *Simplex Wire & Cable Company*, consenting.

Hereby enters this disclaimer to exclude from the scope of claims 1, 2, 3, 4, and 5 of said specification, cables and conductors in which the interstices within the conductors or between the strands of the conductors are filled with rubber cement, varnish, lacquer, or filling compounds other than rubber or containing volatile solvents, and to limit said claims specifically to cables and conductors in which the interstices within the conductors or between the strands of the conductors are filled with rubber.

TRADE-MARKS

OFFICIAL GAZETTE, APRIL 18, 1933

[VOL. 429. No. 3]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 326,627. WOLF COLLIERIES COMPANY, INC., Freeland, Pa. Filed Apr. 29, 1932.



Applicant does not claim the word "Lehigh" except in combination with the other features of the mark.

For Anthracite Coal.

Claims use since Jan. 1, 1932.

Ser. No. 328,434. THE KOPPERS COAL COMPANY, Pittsburgh, Pa. Filed June 30, 1932.



A trade-mark consisting of red and white spots, the spots being interspersed nonuniformly from each other, on the surface of the coal. Applicant disclaims the representation of a lump of coal shown in the drawing.

For Coal.

Claims use since Mar. 3, 1932.

Ser. No. 332,846. HERBERT R. ISENBURGER, New York, N. Y. Filed Dec. 7, 1932.



For Chemical Preparation in Paste Form and Called a "Paint", Used as a Coating on Permanent Molds, Steel Dies, Iron Chills, Etc., in the Manufacture of Castings of All Varieties Including Aluminum, Brass, and Bronze Permanent Mold Castings, Aluminum, Brass, Zinc, and Tin Base Die Castings, Malleable Iron Castings and the Like. The Application of This Chemical Preparation Gives the Casting a Smooth Surface, Prevents Sticking to the Mold or Die, and Makes for Greater Durability of the Molds and Dies.

Claims use since Jan. 1, 1927.

Ser. No. 334,622. TENNESSEE EASTMAN CORPORATION, Kingsport, Tenn. Filed Feb. 8, 1933.

TENITE

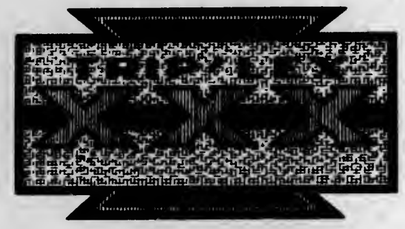
For Molding Composition Comprising Cellulose Acetate and Suitable Plasticisers, and, in Some Cases, Pigments, and Being in the Form of Slabs, Sheets, Granules, or Powder.

Claims use since Nov. 30, 1932.

CLASS 3

Baggage, Animal Equipments, Portfolios, and Pocketbooks

Ser. No. 335,061. HARTMANN TRUNK COMPANY, Racine, Wis. Filed Feb. 17, 1933.



In the drawing, the main background is cross-hatched to represent gold, while the individual letters "X" and the upper and lower stripes are shaded to represent red coloring.

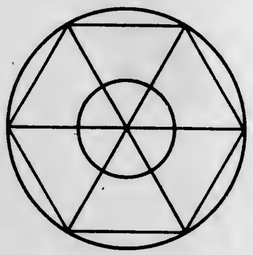
For Suitcases, Hat Boxes for Luggage Purposes, and Wardrobe Hand Luggage.

Claims use since Jan. 20, 1933.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 324,136. DAVID EDWARD BAILEY, Hamlet, N. C. Filed Feb. 11, 1932.



FRUGAL

For Soap, Soap Chips, Jelly Soap, Shaving Soap, and Cleaning Powder for General Household and Laundry Use.

Claims use since Mar. 1, 1931.

Ser. No. 334,664. CLAIRE MFG. CO., Chicago, Ill. Filed Feb. 6, 1933.

CLORENO

For Washing Compound Having Incidental Properties as a Bleach and Disinfectant.

Claims use since Oct. 10, 1932.

Ser. No. 334,872. HERCULES POWDER COMPANY, Wilmington, Del. Filed Feb. 11, 1933.

DRI-TEX

For Liquid Soap Used in Dry Cleaning Processes.

Claims use since Jan. 16, 1933.

Ser. No. 335,278. KLENZIT COMPANY OF NEW JERSEY, doing business as The Pretone Co., Camden, N. J. Filed Feb. 25, 1933.

PRETONE

For Cleaning Compound for Tile, Sanitas, Porcelain, Floors and Flooring, Painted Walls and Woodwork, and Varnished and Lacquered Surfaces.

Claims use since Feb. 2, 1933.

CLASS 5

Adhesives

Ser. No. 327,884. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y. Filed June 10, 1932.



For Rubber Adhesive.

Claims use since Mar. 23, 1932.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 331,420. PERCIVAL L. BONNELL, Saint John, New Brunswick, Canada. Filed Oct. 20, 1932.

bon-o-dent

For Dental Tooth Powder.

Claims use since April, 1932.

Ser. No. 331,631. FAY WOOD CORPORATION, New York, N. Y. Filed Oct. 27, 1932.

FLEET

For Toothpaste.

Claims use since Oct. 18, 1932.

Ser. No. 333,001. FR. KAISER G. M. B. H., Wurtemberg, Germany. Filed Dec. 12, 1932.



3-Pines Cough Drops

The words "Cough Drops" are disclaimed apart from the mark as shown on the drawing.

For Cough Drops.

Claims use since August, 1932.

Ser. No. 333,138. ANTISEPTIC RUBBER PRODUCTS COMPANY, Philadelphia, Pa. Filed Dec. 17, 1932.

ASEPTILASTIC

For Medicated, Surgical Dressings Intended to be Used for All Purposes, Particularly Minor Injuries, and Medicated Elastic Bandages and Plasters Treated with Analgesic to be Used Principally by Athletes and for Racing Horses.

Claims use since Oct. 1, 1932.

Ser. No. 334,034. JAMES A. HENDERSON, Turlock, Calif. Filed Jan. 16, 1933.

HENDERSON'S NU-LIFE

The lining appearing on the drawing is for shading purposes only.

For Insecticide.

Claims use since Nov. 1, 1931.

Ser. No. 334,156. MORTON G. NEUMANN, doing business as Valmor Products Co., Chicago, Ill. Filed Jan. 20, 1933.

LUCKY FORTUNE TELLER

For Incense.

Claims use since Sept. 15, 1932.

Ser. No. 334,402. MASTER LABORATORIES, INC., Omaha, Nebr. Filed Jan. 27, 1933.

Power House

For General Tonic and Mineral Water Crystals for Making Artificial Mineral Water.

Claims use since July 25, 1932.

Ser. No. 334,435. HEALTH PRODUCTS CORPORATION, Newark, N. J. Filed Jan. 28, 1933.

FEEN-A-SWEET

Applicant makes no claim to the word "Sweet" apart from the mark as shown on the drawing.

For Laxative.

Claims use since Jan. 10, 1933.

Ser. No. 335,031. NAOX COMPANY, Boston, Mass. Filed Feb. 16, 1933.

NAOX

For Internal Medicine in the Nature of a General Tonic for the Treatment of Stomach and Liver Troubles, and of Colds.

Claims use since Dec. 12, 1932.

Ser. No. 335,175. TAKARA LABORATORIES, Portland, Oreg. Filed Feb. 21, 1933.

FORFEM

For Tablets and Capsules for Headache, Backache, Neuralgia and Periodic Pains.
Claims use since Dec. 20, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 334,417. ZINSSER & CO., INC., Hastings-on-Hudson, N. Y. Filed Jan. 27, 1933.

VAPOR-INK

Applicant disclaims the exclusive use of the word "Ink" except as part of the mark as shown.
For Printing Ink.
Claims use since Jan. 11, 1933.

Ser. No. 334,850. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 10, 1933.



For Writing Inks, Inking Pads, and Carbon Paper.
Claims use since Nov. 16, 1932.

CLASS 12

Construction Materials

Ser. No. 333,652. JACOB A. MELNICK, Brooklyn, N. Y. Filed Jan. 3, 1933.



No claim is made to any of the words appearing on the drawing except the word "Jamco," except in the association shown.
For Window Frames, Sash, Doors, and Trim.
Claims use since Feb. 1, 1922.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 332,808. BURNDY ENGINEERING COMPANY, INC., New York, N. Y. Filed Dec. 6, 1932.

DURIUM

For Non-Ferrous Alloys and Metals.
Claims use since Oct. 1, 1932.

Ser. No. 333,457. CONTINENTAL STEEL CORPORATION, Kokomo and Indianapolis, Ind., and Canton, Ohio. Filed Dec. 29, 1932.

KONIK

For Alloy Steel in Various Shapes Including Blooms, Billets, Sheets, and Wires.
Claims use since Dec. 21, 1932.

CLASS 15

Oils and Greases

Ser. No. 315,223. MALCOLM B. VILAS, doing business as The Coast-2-Coast Oil Co., Cleveland, Ohio. Filed May 29, 1931.

COAST-2-COAST

For Lubricating Oils and Greases.
Claims use since May 28, 1931.

Ser. No. 330,803. THE LUBRI-GRAPH CORPORATION, Cleveland and Wickliffe, Ohio. Filed Sept. 13, 1932.

LUBRI GAS

The word "Gas" is disclaimed apart from the mark shown in the drawing.
For Gasoline.
Claims use since Aug. 8, 1932.

Ser. No. 335,176. JUSTIN F. WAIT, New York, N. Y. Filed Feb. 21, 1933.

נשר

For Lubricating Oils and Greases, Lubricating Oil, Grease, and Wax Compounds; Mineral Wax, Gasoline, and Motor Fuel Oils, All of Which Substances are Unassociated with Foods.
Claims use since Mar. 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 333,096. BENSON PAINT & VARNISH CO., Birmingham, Ala. Filed Dec. 15, 1932.

MAGIC CITY

THE MAGIC COAT OF MAGIC COLOR

No claim is made to the words "Coat" and "Color" apart from the mark as shown.
For Paints in Paste, Semi-Paste and Ready Mixed Form, and Varnishes.
Claims use since Sept. 7, 1922.

Ser. No. 335,141. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 20, 1933.



For Ready Mixed Paints and for Paint Dryer.
Claims use since Nov. 15, 1932.

CLASS 17

Tobacco Products

Ser. No. 334,744. THE DUVAL TOBACCO CO., INC., New York, N. Y. Filed Feb. 8, 1933.



DUVAL

No claim is made to the exclusive use of the word "Duval," except in the setting and relation in which it appears in the drawing.
For Cigarettes.
Claims use since Dec. 21, 1932.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 323,978. JAMES TRESAWNA BURT-GERRANS, Toronto, Ontario, Canada, assignor to Francis Thomas Routery, Kingsway, Ontario, Canada. Filed Feb. 8, 1932.



The word "Turnlite" is hereby disclaimed apart from the mark shown in the drawing.
For Rear and Front Signal Lights for Vehicles.
Claims use since Mar. 15, 1927.

Ser. No. 335,062. HEART OF AMERICA ELECTRIC COMPANY, Kansas City, Mo. Filed Feb. 17, 1933.

MICKEY MOUSE

For Electric Lamps of the Stand Type, Consisting of Floor Lamps and Table Lamps and Parts Thereof.
Claims use since Oct. 15, 1932.

Ser. No. 335,303. TRIAD MANUFACTURING CO., INC., doing business as Meltron Tube Co., Pawtucket, R. I. Filed Feb. 25, 1933.

MELTRON

For Radio and Television Tubes.
Claims use since Feb. 1, 1933.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 333,527. HERBERT F. PASCHAL, doing business as Historical Toys, Chicago, Ill. Filed Dec. 30, 1932.



No claim is made to the word "Toys" except in the association shown.
For Toy Boats, Aeroplanes, Doll Houses, Jig Saw Puzzles, and Picture Puzzles.
Claims use since Nov. 10, 1932.

Ser. No. 335,146. HURXTHAL VAN SMITH, Tulsa, Okla. Filed Feb. 20, 1933.

ZIG ZAG

For Picture Puzzles.
Claims use since Dec. 13, 1932.

CLASS 23

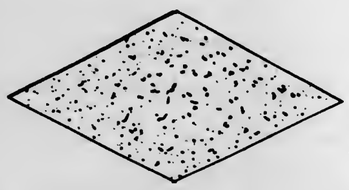
Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 325,007. THE MORRIS-COLLIER CORPORATION, Wilmington, Del., and Monett, Mo. Filed Mar. 10, 1932.

HEX

For Mechanical Razor Blade Sharpeners.
Claims use since Mar. 1, 1932.

Ser. No. 330,940. UTILITY MFG. CO. INC., Baltimore, Md. Filed Oct. 4, 1932.



The trade-mark consists of a silver color diamond-shaped figure. The drawing is stippled to indicate silver color. Applicant claims ownership of trade-mark registration No. 277,350 issued Nov. 11, 1930.
For Ice Picks, Kitchen Forks, Cake Turners, Spatulas, Can Openers, Potato Mashers, Egg Whips, Egg Beaters, Kitchen Spoons, Strainer Spoons, Basting Spoons, Batter Spoons, Stirring Spoons, Mixing Spoons, Apple Corers, Kitchen Trowels, Pan Scrapers, and Kettle Scrapers.
Claims use since Sept. 30, 1932.

Ser. No. 332,398. FREDERICK W. FRANZMANN, doing business as The Boston Grinding Company, Cuyahoga Falls, Ohio. Filed Nov. 22, 1932.

THE BOSTON GRINDING COMPANY STOW, O.

The lining in the drawing indicates red color. The words "Service", "Trade Mark", and "Stow" are disclaimed apart from the mark shown.
For Ground, Manufactured, and Reconditioned Knives, Shears, Edge Tools—To-Wit, Knife Blades, Tinner Snips, and Hollow Ground Knives.
Claims use since Apr. 1, 1930.

Ser. No. 334,484. BROCK, KURIAN & COMPANY, Stamford, Conn. Filed Jan. 31, 1933.



The words "One Good," "Trade Mark," and "Double Edge Blade" are disclaimed.
For Razor Blades.
Claims use since Jan. 14, 1933.

Ser. No. 334,493. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed Jan. 31, 1933.



No claim is made to the representation of the razor blade per se.
For Safety Razor Blades.
Claims use since July 1, 1932.

Ser. No. 335,126. MARATHON RAZOR BLADE CO., INC., Irvington, N. J. Filed Feb. 20, 1933.

GRAND SLAM

For Safety Razor Blades.
Claims use since Feb. 15, 1933.

Ser. No. 335,203. ALDEN KIMBALL, New York, N. Y. Filed Feb. 23, 1933.



No claim is made to the words "Damascus," "Blade," and "Keen As a Scimitar," apart from the mark shown on the drawing.
For Razors and Razor Blades.
Claims use since Jan. 31, 1933.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 334,552. ATLAS SUPPLY COMPANY, Wilmington, Del., and Newark, N. J. Filed Feb. 2, 1933.

ATLAS

For Cameras and Sensitized Films for Photographic Use.
Claims use since Jan. 13, 1933.

CLASS 27

Horological Instruments

Ser. No. 334,205. ADIE BROTHERS LIMITED, Birmingham, England. Filed Jan. 21, 1933.

CRUSADER

For Horological Instruments, Such as Watches, Clocks, Chronometers, and the Like.
Claims use since Nov. 28, 1929.

CLASS 32

Furniture and Upholstery

Ser. No. 334,400. HENRY A. MANZ, New York, N. Y. Filed Jan. 27, 1933.

CABNETOR

For Revolving Cabinets Pivoted on a Door, Wall, or Other Supporting Surface.
Claims use since Sept. 16, 1932.

Ser. No. 334,897. C. L. GREENO CO., Los Angeles, Calif. Filed Feb. 11, 1933.

FLOATING REST SPRINGS

The word "Springs" is disclaimed apart from the mark as shown in the drawing.
For Cushion Springs, Box Springs, Inner Mattress Springs, Upholstery Springs, Bed Springs, Seat Spring Constructions.
Claims use since Oct. 25, 1932.

Ser. No. 334,938. STEWART HARTSHORN COMPANY, New York, N. Y. Filed Feb. 13, 1933.

EL CAPITAN

For Window Shade Rollers.
Claims use since 1900.

CLASS 35

Belting, Hose, Machinery Packing, and Non-metallic Tires

Ser. No. 329,412. WESTERN AUTO SUPPLY AGENCY OF LOS ANGELES, Los Angeles, Calif. Filed Aug. 8, 1932.

SUPER FLOATER WHIPCORD

The word "Whipcord" is disclaimed apart from the remainder of the mark as shown.
For Automobile Tires.
Claims use since Aug. 2, 1932.

Ser. No. 333,847. BRAKE LININGS LIMITED, Buxton, England. Filed Jan. 12, 1933.

DURON

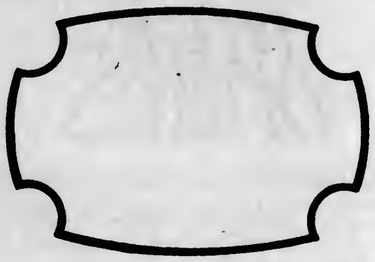
For Brake Linings.
Claims use since May 7, 1929.

Ser. No. 335,226. ALLESTOS CORPORATION, Philadelphia, Pa. Filed Feb. 24, 1933.

BLACK KNIGHT

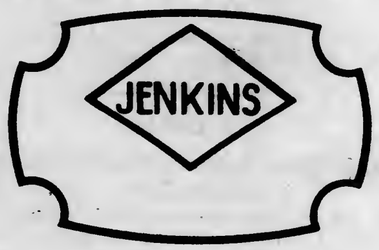
For Brake Linings.
Claims use since Feb. 3, 1933.

Ser. No. 335,321. JENKINS BROS., New York, N. Y. Filed Feb. 27, 1933.



For Rubber and Composition Washers, Gaskets, and Packings.
Claims use since Jan. 5, 1920.

Ser. No. 335,322. JENKINS BROS., New York, N. Y. Filed Feb. 27, 1933.



For Rubber and Composition Washers, Gaskets, and Packings.
Claims use since Jan. 5, 1920.

CLASS 36

Musical Instruments and Supplies

Ser. No. 334,848. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 10, 1933.



For Harmonicas and Violin String Adjusters.
Claims use since Nov. 16, 1932.

CLASS 37

Paper and Stationery

Ser. No. 324,591. THE CHAMPION COATED PAPER COMPANY, Hamilton, Ohio. Filed Feb. 29, 1932.

TYPE-HI

The word "Type" is disclaimed apart from the mark as shown.
For Mineral and Casein Coated Papers Used for Advertising and Publication Printing.
Claims use since Aug. 24, 1931.

Ser. No. 335,286. NORCROSS, New York, N. Y. Filed Feb. 25, 1933.

CELLU-TIES

For Gift Wrapping Paper.
Claims use since Feb. 14, 1933.

Ser. No. 335,287. NORCROSS, New York, N. Y. Filed Feb. 25, 1933.

KRAFT-TIES

Applicant disclaims the word "Kraft" apart from the mark as shown.
For Gift Wrapping Paper.
Claims use since Feb. 14, 1933.

CLASS 38

Prints and Publications

Ser. No. 307,863. HENRY E. MOELLER and HAROLD GILLES, Chicago, Ill. Filed Oct. 30, 1930.

HUNGRY FIVE

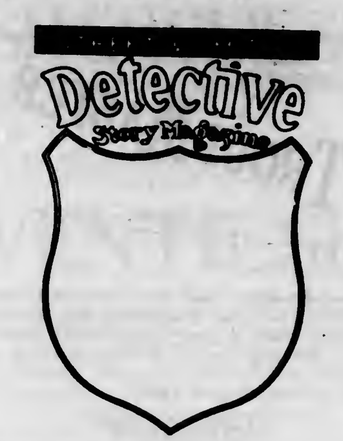
For Periodical Publications.
Claims use since Oct. 1, 1930.

Ser. No. 333,785. LIVING TRUST CLUBS, INC., Boston, Mass. Filed Jan. 7, 1933.

Living Trust Club

For Letter-Heads, Application Blanks, Registers, Record Books, Agreements, Blank Forms, and Accounting Forms, Sold to the Trade as Such.
Claims use since Dec. 16, 1932.

Ser. No. 334,126. STREET & SMITH PUBLICATIONS, INC., New York, N. Y. Filed Jan. 19, 1933.



For Periodical.
Claims use since February, 1931.

Ser. No. 334,231. THE RAPID FIRE PUBLICATIONS, INC., New York, N. Y. Filed Jan. 21, 1933.



For Periodical.
Claims use since September, 1932.

Ser. No. 335,575. THE CATHOLIC BOY, St. Paul, Minn. Filed Mar. 10, 1933.

THE CATHOLIC BOY

For Periodical.
Claims use since Dec. 23, 1932.

CLASS 39

Clothing

Ser. No. 306,738. THE F. & R. LAZARUS AND COMPANY, Columbus, Ohio. Filed Oct. 14, 1930.

Parkton

For Men's Suits.
Claims use since September, 1929.

Ser. No. 315,513. WILSON BROTHERS, Chicago, Ill. Filed June 6, 1931.

advance guard

For Dress and Negligee Shirts, Pajamas, Men's Underwear, Hosiery, and Neckties.
Claims use since Apr. 14, 1931.

Ser. No. 329,543. WILSON BROTHERS, Chicago, Ill. Filed Aug. 13, 1932.

EDEN ROCK

For Men's Dress Shirts.
Claims use since July 22, 1932.

Ser. No. 332,643. CAROLE, INC., Chicago, Ill. Filed Dec. 1, 1932.



For Women's Dresses, Suits, and Coats.
Claims use since Oct. 7, 1932.

Ser. No. 333,476. HALL, HARTWELL & CO. INC., Troy, N. Y. Filed Dec. 29, 1932.

Pound Sterling

For Shirts—Namely, Dress, Negligee, and Work Shirts, Collars, and Underwear, Particularly Shorts and Pajamas.
Claims use since October, 1932.

Ser. No. 334,107. KOPS BROTHERS, INC., New York, N. Y. Filed Jan. 19, 1933.

STEPS

For Corset Girdles.
Claims use since Nov. 21, 1931.

Ser. No. 334,243. BEE HAT & CAP CO., St. Louis, Mo. Filed Jan. 23, 1933.

"Bee" Cool

The word "Cool" is disclaimed apart from the mark as shown.
For Men's and Boys' Hats and Caps.
Claims use since May 2, 1932.

Ser. No. 334,287. MORRIS NAGEL & CO. INC. OF MANHATTAN, New York, N. Y. Filed Jan. 24, 1933.

"Adrienne"
CELEBRITY · FASHIONS ·

The descriptive word "Fashions" is disclaimed apart from the mark as shown on the drawing.
For Junior, Misses', and Women's Coats.
Claims use since Jan. 3, 1933.

Ser. No. 334,410. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Jan. 27, 1933.



For Boots and Shoes.
Claims use since Oct. 12, 1932.

Ser. No. 334,887. SANDFELDER BROS. CO., Chicago, Ill. Filed Feb. 11, 1933.

S.B.C.

For Girdles, Brassières, Combination of Girdle and Brassière in a One Piece Garment, and Step-Ins.
Claims use since Dec. 1, 1932.

Ser. No. 334,980. THE BRINK-LEWIS CO., Logansport, Ind. Filed Feb. 15, 1933.

THE ORIGINAL
TROUT-MASTER
THE BRINK-LEWIS CO.
LOGANSPORT, IND., U. S. A.

Applicant disclaims apart from the mark as shown on the drawing the term "Logansport, Ind., U. S. A."
For Fishing Coats, Fishing Vests, Hunting Coats, Hunting Vests, Hunting and/or Fishing Breeches and/or Trousers.
Claims use since Jan. 20, 1933.

Ser. No. 334,999. ABRAHAM MALOUF, Asbury Park, N. J. Filed Feb. 15, 1933.

Roosvalet

For Ladies' Aprons and Dresses.
Claims use since Jan. 19, 1933.

Ser. No. 335,097. SINCLAIR KNITTING MILLS INC., New York, N. Y. Filed Feb. 18, 1933.

Sus-pend-o

For Bathing Suits and Suspenders.
Claims use since Jan. 12, 1933.

Ser. No. 335,158. BEST & CO., INC., New York, N. Y. Filed Feb. 21, 1933.

SUTTON

For Apparel for Women and Children—Namely, Hosiery, Hats, Pajamas, Sweaters, Shoes Made of Leather, Rubber, Fabric, and/or Combinations Thereof; Underwear Made of Knitted, Netted, Textile Fabrics, and/or Combinations Thereof; and Gloves Made of Leather, Rubber, and Fabrics, and/or Combinations Thereof.
Claims use since Mar. 2, 1932.

Ser. No. 335,349. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Feb. 28, 1933.

SHADOLIESE

For Men's, Women's, and Children's Underwear.
Claims use since Feb. 28, 1933.

Ser. No. 335,351. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Feb. 28, 1933.

VENTIESE

For Men's, Women's, and Children's Underwear.
Claims use since Feb. 28, 1933.

Ser. No. 335,363. NATIONAL SILK HOSIERY MILLS, INC., Indianapolis, Ind. Filed Feb. 28, 1933.

WONDER
HEEL

No exclusive right in the word "Heel" is claimed apart from the mark as shown.
For Hosiery.
Claims use since Jan. 2, 1933.

Ser. No. 335,364. NATIONAL SILK HOSIERY MILLS, INC., Indianapolis, Ind. Filed Feb. 28, 1933.

WONDER
TOE

No exclusive right in the word "Toe" is claimed apart from the mark as shown.
For Hosiery.
Claims use since Jan. 2, 1933.

CLASS 40

Fancy Goods, Furnishings, and Notions

Ser. No. 331,808. JOHN THORNTON & COMPANY, New York, N. Y. Filed Nov. 1, 1932. Under 10-year proviso.



No claim being made to the exclusive use of the words "Needles Warranted, Made In England" apart from the mark as shown.
For Needles for Hand Use.
Claims use since 1876.

Ser. No. 332,812. BENJAMIN GITTLEMAN, doing business as Lincoln Lace & Braid Mfg. Co., Providence, R. I. Filed Dec. 6, 1932.



Applicant makes no claim broadly to the representation of a shoe and a shoe lace, but does claim the particular arbitrary showing appearing in the drawing.
For Shoe Laces.
Claims use since June 15, 1925.

Ser. No. 334,372. THE SIMMON COMPANY, Bridgeport, Conn. Filed Jan. 26, 1933.

HARVITE

For Buttons Not Made of Precious Metal.
Claims use since May 4, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 311,058. WILLIAM S. HERSCHMAN, INC., New York, N. Y. Filed Feb. 14, 1931.

Lapinette

For Cotton Pile Fabrics in the Piece.
Claims use since Feb. 2, 1931.

Ser. No. 327,220. ALFRED S. EISEMAN, New York, N. Y. Filed May 18, 1932.

Duosuede

For Piece Goods of Cotton, Silk, Linen, and/or Rayon or Combinations Thereof; Dish Cloths, Hair Nets, Handkerchiefs, Ribbons, Scarfs for Furniture, Doilies, Centerpieces, Tablecloths, Napkins, Textile Diapers, Wash Cloths, Blankets, Rugs, Carpets, Floor Cloths, and Towels, All Made of Knitted, Netted and/or Textile Fabrics.
Claims use since Mar. 26, 1931.

Ser. No. 332,289. JOSEPH BANCROFT & SONS COMPANY, Wilmington, Del. Filed Nov. 19, 1932.

ROCK-FAST

For Window Shade Fabrics.
Claims use since June 27, 1932.

Ser. No. 335,034. PROGRESSIVE KNITTED RAYON FABRIC MILLS, INC., Brooklyn, N. Y. Filed Feb. 16, 1933.

RULAINE

For Knitted Rayon and Silk Goods in the Piece.
Claims use since Feb. 2, 1933.

Ser. No. 335,087. FORSTMANN WOOLEN CO., Passaic, N. J. Filed Feb. 18, 1933.

Forstone

For Woolen Piece Goods.
Claims use since Feb. 1, 1933.

Ser. No. 335,132. THE ROCHESTER CO. INC., Enid, Okla. Filed Feb. 20, 1933.

Rochell's

For Handkerchiefs.
Claims use since June 25, 1932.

Ser. No. 335,159. CONSOLIDATED STUDIOS, INC., New York, N. Y. Filed Feb. 21, 1933.

MICROSCOPIC PRINTS
ROMANTIC BEAUTY OF AN UNSEEN WORLD

No claim is made to the word "Prints" apart from the mark shown on the drawing.
For Piece Goods of Silk, Rayon, Cotton, Woolen, Linen, and Mixtures of Same.
Claims use since Feb. 1, 1933.

CLASS 43

Thread and Yarn

Ser. No. 330,192. AMERICAN GLANZSTOFF CORPORATION, New York, N. Y. Filed Sept. 9, 1932.

glamour

For Thread and Yarn of Artificial Origin, Known as Rayon.
Claims use since Aug. 25, 1932.

Ser. No. 330,193. AMERICAN GLANZSTOFF CORPORATION, New York, N. Y. Filed Sept. 9, 1932.

Glaray

For Thread and Yarn of Artificial Origin, Known as Rayon.
Claims use since Aug. 25, 1932.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 333,791. DUART MANUFACTURING CO. LTD., formerly Pacific Hair Goods Company, Ltd., doing business as Duart Manufacturing Co. Ltd., San Francisco, Calif. Filed Jan. 10, 1933.

VELZOR

For Hair Waving Machines and Permanent Waving Pads.
Claims use since Nov. 14, 1932.

Ser. No. 334,884. WILLIAM REIFFEL, Tuckahoe, N. Y. Filed Feb. 11, 1933.



For Dental Universal Molding Frame.
Claims use since Dec. 15, 1932.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 334,920. THE KILLIAN MANUFACTURING CO., Akron, Ohio. Filed Feb. 13, 1933.

SILVER-TEX

For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Mar. 4, 1932.

Ser. No. 334,935. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 13, 1933.



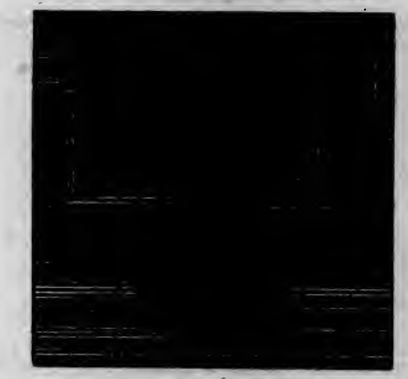
For Therapeutic Bulbs, Abdominal Supporters, Teething Rings, Sterilised Cotton, Gauze Bandages, and Rubber Gloves.
Claims use since Dec. 1, 1932.

Ser. No. 335,049. ARKWRIGHT MERCHANDISING CORPORATION, New York, N. Y. Filed Feb. 17, 1933.

Modernaps

For Catamenial Bandages.
Claims use since Mar. 1, 1931.

Ser. No. 335,265. YOUNGS RUBBER CORPORATION, INC., New York, N. Y. Filed Feb. 24, 1933.



The trade-mark is in a color combination of blue and red shown in the accompanying drawing.
For Prophylactic Rubber Articles for the Prevention of Contagious Diseases.
Claims use since Feb. 17, 1933.

Ser. No. 335,641. GLADE IVES, doing business as Expandex Company, Kansas City, Mo. Filed Mar. 14, 1933.

EXPANDEX

For Dental Inlay Investment.
Claims use since Jan. 1, 1933.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 331,943. GIUSEPPE ARCIDIACO, Detroit, Mich. Filed Nov. 7, 1932.

GA
Giuseppe Arcidiaco

The name forming a part of the mark is a facsimile signature of the applicant.
For Nonalcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since Sept. 15, 1932.

Ser. No. 334,801. KO-LO CORPORATION, Cleveland, Ohio. Filed Feb. 9, 1933.

KO-LO

For Non-Alcoholic, Maltless Concentrate Used in the Preparation of Soft Drinks.
Claims use since Feb. 6, 1933.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 329,915. SCHWARTZ MERCHANDISE CORPORATION, New York, N. Y. Filed Aug. 27, 1932.

"DULCIE"
MADE IN
U.S.A.

No claim is made to the expression "Made in U. S. A.", except in the association shown in the drawing.
For Candy.
Claims use since May 1, 1932.

Ser. No. 331,947. BOYLE & BURGESS, New York, N. Y. Filed Nov. 7, 1932.

CIGS

For Smoke-Containing Chewing Gum.
Claims use since Oct. 19, 1932.

Ser. No. 331,982. J. ARON & COMPANY, INC., New York, N. Y. Filed Nov. 8, 1932.

ARONCO

BUCARITA

LAVADO

No claim being made to the word "Lavado" apart from the mark as shown.
For Green Coffee.
Claims use since August, 1932.

Ser. No. 333,014. RED BAND COMPANY, INC., Johnson City, Tenn. Filed Dec. 12, 1932.

RED BAND

For Flour, Cake Flour, and Self-Rising Flour.
Claims use since Oct. 4, 1932.

Ser. No. 333,050. ADOHR CREAMERY COMPANY, Los Angeles, Calif. Filed Dec. 14, 1932.

ADOHR

For Milk, Cream, Butter, Eggs, Cottage Cheese, Ice Cream, and Skim-Milk.
Claims use since June 10, 1926.

Ser. No. 333,584. FURUYA & COMPANY, Seattle, Wash. Filed Jan. 3, 1933.

CHO-CHIN
(JAPANESE LANTERN)
BRAND



The words "Cho-Chin" are Japanese for "Lantern". The word "Brand" is disclaimed apart from the mark as shown in the drawing.
For Bean Sauce and Fried Noodles.
Claims use since Nov. 20, 1932.

Ser. No. 334,532. HUBER BAKING CO., Wilmington, Del. Filed Feb. 1, 1933.

HONEY-V
BREAD

No claim is made to the words "Honey" and "Bread" apart from the mark shown.
For Bakery Products—Namely, Bread.
Claims use since Jan. 5, 1932.

Ser. No. 335,147. WILKINS-ROGERS MILLING CO., INC., Washington, D. C. Filed Feb. 20, 1933.

TOP FLITE

For Wheat Flour.
Claims use since Sept. 1, 1932.

Ser. No. 335,171. PURE FOOD DISTRIBUTORS, INC., Hillside, N. J. Filed Feb. 21, 1933.

"DATEDNAISE"

For Mayonnaise.
Claims use since Feb. 1, 1933.

CLASS 48

Malt Beverages and Liquors

Ser. No. 333,154. CHARLES V. HERRON, doing business as White Ring Malt Extract Co., Evansville, Ind. Filed Dec. 17, 1932.

WHITE RING

For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since Nov. 12, 1932.

Ser. No. 334,550. AMERICAN BREWING COMPANY, INC., Rochester, N. Y. Filed Feb. 2, 1933.

LIBERTY

For Malt Beverages with Not More Than the Legal Alcoholic Content.
Claims use since 1878.

Ser. No. 335,563. FLOCK BREWING CO., Williamsport, Pa. Filed Mar. 9, 1933. Under 10-year proviso.

FLOCK'S

For Malt Beverages with Not More Than the Legal Alcoholic Content.
Claims use since 1864.

Ser. No. 335,622. NORTH AMERICAN BREWING COMPANY, Brooklyn, N. Y. Filed Mar. 18, 1933.

PARAMOUNT
BREW

The lining appearing in the drawing serves to indicate shading only. No rights are asserted to the exclusive use of the word "Brew" apart from the trade-mark shown in the drawing.
For Malt Beverages with Not More Than Legal Alcoholic Content.
Claims use since September, 1926.

Ser. No. 335,625. ABNER DRURY BREWERY INC., Washington, D. C. Filed Mar. 14, 1933.

OLD GLORY

For Malt Beverages with Not More Than the Legal Alcoholic Content.
Claims use since Feb. 2, 1908.

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 331,781. THE GLENFYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland. Filed Nov. 1, 1932. Under 10-year proviso.

A I W

For Whisky.
Claims use since Apr. 7, 1880.

Ser. No. 331,801. ROBERTSON & BAXTER LIMITED, Glasgow, Scotland. Filed Nov. 1, 1932. Under 10-year proviso.



For Rum.
Claims use since May 16, 1893.

Ser. No. 331,803. ROBERTSON & BAXTER LIMITED, Glasgow, Scotland. Filed Nov. 1, 1932. Under 10-year proviso.



For Whisky.
Claims use since May 8, 1880.

Ser. No. 333,307. THE BRITISH COLUMBIA DISTILLERY COMPANY LIMITED, Vancouver, British Columbia, Canada. Filed Dec. 22, 1932.

FOUR ACES

For Whisky.
Claims use since May, 1928.

Ser. No. 333,711. MACDONALD, GREENLEES LIMITED, Leith, Scotland. Filed Jan. 6, 1933.



No claim is made to any of the words appearing on the drawing with the exception of the words "Robbie Burns" and the name of applicant company.
For Scotch Whisky.
Claims use since 1929.

Ser. No. 333,713. MACDONALD, GREENLEES LIMITED, Leith, Scotland. Filed Jan. 6, 1933.

ROBBIE BURNS

For Whisky.
Claims use since 1906.

Ser. No. 333,714. MACDONALD, GREENLEES LIMITED, Leith, Scotland. Filed Jan. 6, 1933.



No claim is made to any of the words appearing on the drawing with the exception of the words "Old Parr" and the name "Greenlees Brothers", apart from the association.
For Whisky.
Claims use since 1909.

Ser. No. 335,249. SANDEMAN & SONS LIMITED, Edinburgh, Scotland. Filed Feb. 24, 1933. Under 10-year proviso.

"SANDEMAN'S V.V.O. SCOTCH WHISKY."

For Purposes of registration only no claim being made to the exclusive right to the use of the letters "V. V. O." apart from the mark as shown in the drawing.
For Whisky.
Claims use since 1886.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 332,859. REUTTER & CO. SOCIÉTÉ EN COMMANDITE SIMPLE, Berchem, near Antwerp, Belgium. Filed Dec. 7, 1932.

FLY-SUM

For Fly Paper.
Claims use since June 1, 1929.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

APRIL 18, 1933

302,370. ARC LAMP GLOBES OF GLASS. THE C. F. PEASE COMPANY, Chicago, Ill.
Filed December 10, 1932. Serial No. 332,960. PUBLISHED JANUARY 31, 1933. Class 33.

302,371. PAPER AND STATIONERY, PARTICULARLY UNITS CONSISTING OF ASSEMBLED SHEETS OF PAPER WITH OR WITHOUT CARBON PAPER. PACIFIC MANIFOLDING BOOK COMPANY, Emeryville, Calif.
Filed December 6, 1932. Serial No. 332,820. PUBLISHED JANUARY 31, 1933. Class 37.

302,372. CHINAWARE AND POTTERY, BRIC-A-BRAC, AND REFLECTORS, GLOBES AND SHADES OF CHINA AND PORCELAIN. STEPHEN SLESINGER, INC., New York, N. Y.
Filed December 1, 1932. Serial No. 332,663. PUBLISHED JANUARY 31, 1933. Class 30.

302,373. ENVELOPES FOR CORRESPONDENCE, BILLS, AND ADVERTISEMENTS. THE STANDARD ENVELOPE MANUFACTURING COMPANY, Cleveland, Ohio.
Filed November 25, 1932. Serial No. 332,472. PUBLISHED JANUARY 31, 1933. Class 37.

302,374. AUTOGRAPHIC REGISTERS AND PAPER FILLERS THEREFOR. THE EGRY REGISTER COMPANY, Dayton, Ohio.
Filed November 22, 1932. Serial No. 332,369. PUBLISHED JANUARY 31, 1933. Class 37.

302,375. PAPER TOWELS, TOILET PAPERS. CRECO COMPANY, INC., Long Island City, N. Y.
Filed November 23, 1932. Serial No. 332,401. PUBLISHED JANUARY 31, 1933. Class 37.

302,376. MAGAZINES PUBLISHED MONTHLY. UNION PUBLISHING COMPANY, Dallas, Tex.
Filed November 14, 1932. Serial No. 332,132. PUBLISHED JANUARY 31, 1933. Class 38.

302,377. PRINTED BOOKS. THE SETTLEMENT COOK BOOK COMPANY, Milwaukee, Wis.
Filed November 11, 1932. Serial No. 332,076. PUBLISHED JANUARY 31, 1933. Class 38.

302,378. FURNITURE POLISH, FLOOR POLISH-WAX, AND AN AUTOMOBILE POLISH FOR THE BODIES OF AUTOMOBILES. RAYNORSHYNE PRODUCTS, INC., San Antonio, Tex.
Filed December 3, 1932. Serial No. 332,782. PUBLISHED JANUARY 31, 1933. Class 16.

302,379. CARD TABLES. JACK LATHAM, doing business as Latham and Bower, Coscob, Conn.
Filed November 18, 1932. Serial No. 332,259. PUBLISHED JANUARY 31, 1933. Class 32.

302,380. SERIES OF DIFFERENT MOTION PICTURE FILMS. WARNER BROS. PICTURES, INC., New York, N. Y.
Filed November 16, 1932. Serial No. 332,203. PUBLISHED JANUARY 31, 1933. Class 26.

302,381. PRESSURE CONTROL VALVE FOR REFRIGERATION APPARATUS. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga.
Filed November 4, 1932. Serial No. 331,898. PUBLISHED JANUARY 31, 1933. Class 13.

302,382. INSULATED JUGS AND VACUUM BOTTLES. KNAPP-MONARCH COMPANY, Belleville, Ill.
Filed November 3, 1932. Serial No. 331,864. PUBLISHED JANUARY 31, 1933. Class 2.

302,383. PRESSURE CONTROL VALVE FOR REFRIGERATION APPARATUS. LARKIN REFRIGERATING CORPORATION, Atlanta, Ga.
Filed November 2, 1932. Serial No. 331,830. PUBLISHED JANUARY 31, 1933. Class 13.

302,384. PORCH SHADES. INTERNATIONAL DISTRIBUTING CO., Janesville, Wis.
Filed November 15, 1932. Serial No. 332,152. PUBLISHED JANUARY 31, 1933. Class 32.

302,385. LIQUID WAX PREPARATION FOR POLISHING PURPOSES. AMERICAN DISINFECTING COMPANY, Sedalia, Mo.
Filed October 31, 1932. Serial No. 331,720. PUBLISHED JANUARY 31, 1933. Class 16.

302,386. MOTOR BOATS AND CRUISERS. HARRY L. ZOBEL, 3d, Sea Bright, N. J.
Filed October 6, 1932. Serial No. 331,020. PUBLISHED JANUARY 31, 1933. Class 19.

302,387. HYDRANTS. THE KENNEDY VALVE MFG. CO., Elmira, N. Y.
Filed September 28, 1932. Serial No. 330,750. PUBLISHED JANUARY 31, 1933. Class 13.

302,388. MALT SYRUP. P. BALLANTINE & SONS, Newark, N. J.
Filed September 8, 1932. Serial No. 330,191. PUBLISHED JANUARY 24, 1933. Class 46.

302,389. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, West Springfield, Mass.
Filed August 9, 1932. Serial No. 329,432. PUBLISHED JANUARY 31, 1933. Class 37.

302,390. PREPARATION FOR SCALP DISEASES, RHEUMATISM, AND SKIN DISEASES. WILLIAM ROOK NELSON, Dallas, Tex.
Filed October 25, 1932. Serial No. 331,604. PUBLISHED JANUARY 24, 1933. Class 6.

302,391. INSECTICIDE CHEMICALS. THE HAMMOND PAINT & CHEMICAL CO., INC., Beacon, N. Y.
Filed October 21, 1932. Serial No. 331,431. PUBLISHED JANUARY 24, 1933. Class 6.

302,392. BRUSHLESS SHAVING CREAM. SAMUEL TINSKY, Brooklyn, N. Y.
Filed October 17, 1932. Serial No. 331,324. PUBLISHED JANUARY 31, 1933. Class 4.

302,393. GENERAL TONIC. CARL AUGUST TANCRÉ, Naumburg-on-the-Saale, Germany.
Filed October 15, 1932. Serial No. 331,295. PUBLISHED JANUARY 31, 1933. Class 6.

302,394. ELECTROLYTE AND ELECTROLYTE MATERIAL FOR ELECTRIC BATTERIES. THOMAS A. EDISON, INCORPORATED, West Orange, N. J.
Filed October 14, 1932. Serial No. 331,252. PUBLISHED JANUARY 31, 1933. Class 6.

302,395. ABRADANT DISH MOPS. METAL TEXTILE CORPORATION, West Orange, N. J.
Filed September 20, 1932. Serial No. 330,519. PUBLISHED JANUARY 17, 1933. Class 4.

302,396. COAL. SOUTHERN COAL COMPANY, INC., Memphis, Tenn.
Filed July 28, 1932. Serial No. 329,157. PUBLISHED OCTOBER 4, 1932. Class 1.

302,397. MEDICINE FOR THE TREATMENT OF ASTHMA AND HAY FEVER. ELIZUR GOODRICH SMITH, Portland, Oreg.
Filed August 20, 1932. Serial No. 329,723. PUBLISHED JANUARY 24, 1933. Class 6.

302,398. INSECTICIDES, GERMICIDES, AND FUNGICIDES. CALIFORNIA SPRAY-CHEMICAL CORPORATION, Wilmington, Del., and Berkeley, Calif.
Filed July 5, 1932. Serial No. 328,546. PUBLISHED AUGUST 30, 1932. Class 6.

302,399. PHARMACEUTICAL PREPARATIONS—NAMELY, HAIR DYES AND HAIR LOTIONS. FRIEDRICH KLEIN, Berlin-Neukolln, Germany.
Filed March 14, 1932. Serial No. 325,101. PUBLISHED JANUARY 24, 1933. Class 6.

302,400. COMPOUND FOR CLEANING TYPEWRITER PARTS AND TYPE AND FOR DISSOLVING INK. JOHN W. FRANTZ, doing business as Commercial Laboratories, Chicago, Ill.
Filed December 2, 1931. Serial No. 321,661. PUBLISHED MARCH 1, 1932. Class 4.

302,401. LAUNDRY CABINET DRYERS, DRY CLEANING MACHINES, IRONING BOARDS, IRONING MACHINES, WASH TUBS, WASHING MACHINES AND PARTS THEREOF, CLOTHES STRETCHERS. COLUMBIA PHONOGRAPH COMPANY, INC., Bridgeport, Conn.
Filed October 31, 1931. Serial No. 320,711. PUBLISHED NOVEMBER 29, 1932. Class 24.

302,402. WHISK BROOMS. THE DESHLER BROOM FACTORY, Deshler, Nebr.
Filed October 15, 1931. Serial No. 320,085. PUBLISHED JANUARY 31, 1933. Class 29.

302,403. MEDICINAL PREPARATIONS IN CREAM, LIQUID, AND POWDER FORM, SAID PREPARATIONS COMPRISING A DEPILATORY FOR THE FEET, AND MORE SPECIFICALLY FOR RELIEF OF EXCESSIVE PERSPIRATION, BURNING, ITCHING, AND GENERAL DISCOMFORT OF THEIR MUSCLES AND NERVES. G. F. WURTELE, doing business as G. F. Wurtele Company, Philadelphia, Pa.
Filed September 15, 1931. Serial No. 319,129. PUBLISHED JUNE 21, 1932. Class 6.

302,404. WEED GUNS IN THE NATURE OF HAND TOOLS FOR THE ADMINISTRATION OF AN EXTERMINATING POISON TO THE ROOTS OF WEEDS AND PARTS THEREOF. WEED DESTROYER CO., INC., Aberdeen, Wash.
Filed January 23, 1931. Serial No. 310,317. PUBLISHED JANUARY 31, 1933. Class 28.

302,405. REFINED, SEMIREFINED, AND UNREFINED OILS AND GREASES MADE FROM PETROLEUM. STANDARD OIL COMPANY OF NEW JERSEY, Wilmington, Del.
Filed April 11, 1930. Serial No. 298,725. PUBLISHED NOVEMBER 29, 1932. Class 15.

302,406. SHOE POLISH CREAMS. GEO. J. KELLY, INC., Lynn, Mass.
Filed September 24, 1929. Serial No. 290,182. PUBLISHED JANUARY 31, 1933. Class 4.

302,407. SMOKERS' PIPES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 19, 1932. Serial No. 333,208. PUBLISHED JANUARY 31, 1933. Class 8.

302,408. CIGARS. BAYUK CIGARS INCORPORATED, Philadelphia, Pa.
Filed December 19, 1932. Serial No. 333,181. PUBLISHED JANUARY 31, 1933. Class 17.

302,409. NEWS COLUMNS AND SPECIAL ARTICLES APPEARING DAILY OR FROM TIME TO TIME. ANDREW R. PEARSON and ROBERT S. ALLEN, Washington, D. C.
Filed December 17, 1932. Serial No. 333,168. PUBLISHED JANUARY 31, 1933. Class 38.

302,410. MEAT CURING COMPOUND. H. J. MAYER & SONS CO., Chicago, Ill.
Filed October 27, 1932. Serial No. 331,622. PUBLISHED JANUARY 24, 1933. Class 6.

302,411. LINIMENT. THE SKOOT COMPANY, Hamilton and Dayton, Ohio.
Filed October 28, 1932. Serial No. 331,654. PUBLISHED JANUARY 24, 1933. Class 6.

302,412. COMPOUND OF HERBS FOR MAKING A DECOCTION TO BE USED BY DIABETICS. GEORGE W. GARNER, doing business as The Gar-Herb-A Co., North Wales, Pa.
Filed November 1, 1932. Serial No. 331,780. PUBLISHED JANUARY 24, 1933. Class 6.

302,413. PREPARATION FOR USE AS A CARBON REMOVER FOR INTERNAL COMBUSTION ENGINES. EMPIRE STATE PRODUCTS CO., Yonkers, N. Y.
Filed November 2, 1932. Serial No. 331,820. PUBLISHED JANUARY 24, 1933. Class 6.

302,414. FACE POWDER, LIP STICK, FACE ROUGE, CLEANSING CREAM, ETC. HARRY D. KOSNIC, doing business as André, Cosmetician, New York, N. Y.
Filed November 3, 1932. Serial No. 331,863. PUBLISHED JANUARY 24, 1933. Class 6.

302,415. PERFUMES, TOILET WATER, FACE POWDER, FACE CREAM, AND SKIN CREAM. J. L. SINYKIN, doing business as De Ciny Paris, St. Paul, Minn.
Filed November 3, 1932. Serial No. 331,875. PUBLISHED JANUARY 24, 1933. Class 6.

302,416. A PHARMACEUTICAL PREPARATION. BROCIROT, INCORPORATED, New York, N. Y.
Filed November 12, 1932. Serial No. 332,084. PUBLISHED JANUARY 24, 1933. Class 6.

302,417. COSMETIC PREPARATIONS. HOUBIGANT, INC., New York, N. Y.
Filed November 25, 1932. Serial No. 332,454. PUBLISHED JANUARY 24, 1933. Class 6.

302,418. LIQUID DENTIFRICE AND ANTISEPTIC. PARK DRUG COMPANY, INC., doing business as Park Laboratories, New York, N. Y.
Filed November 18, 1932. Serial No. 332,264. PUBLISHED JANUARY 24, 1933. Class 6.

302,419. CALCIUM CHLORIDE. TEXACO SALT PRODUCTS COMPANY, New York, N. Y.
Filed November 18, 1932. Serial No. 332,273. PUBLISHED JANUARY 24, 1933. Class 6.

302,420. PALLIATIVE FOR THE TREATMENT OF LUNG DISEASES. JULIA ZAMORAY, South St. Paul, Minn.
Filed November 18, 1932. Serial No. 332,287. PUBLISHED JANUARY 24, 1933. Class 6.

302,421. CONTAINER FOR PACKAGES OF CIGARETTES. NATIONAL AUTOMATIC CONTAINER CORPORATION, Baltimore, Md., and New York, N. Y.
Filed November 28, 1932. Serial No. 332,542. PUBLISHED JANUARY 31, 1933. Class 8.

302,422. POWDER PUFFS, DUSTING MITTENS, DISH MOPS, ETC. AR. WINARICK, INC., New York, N. Y.
Filed November 19, 1932. Serial No. 332,288. PUBLISHED JANUARY 31, 1933. Class 29.

302,423. VETERINARY NERVE TONIC. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,279. PUBLISHED JANUARY 17, 1933. Class 6.

302,424. TONIC INTENDED FOR THE RELIEF OF HEADACHE AND NERVE PAINS. YEAST-VITE (U. S. A.) INC., Niagara Falls, N. Y.
Filed September 23, 1932. Serial No. 330,609. PUBLISHED JANUARY 31, 1933. Class 6.

302,425. VETERINARY MEDICINAL PREPARATION FOR THE TREATMENT OF DISTEMPER, COUGHS, COLDS, CHILLS, EPIZOOTIC, PINK EYE, MENINGITIS. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,278. PUBLISHED JANUARY 17, 1933. Class 6.

302,426. VETERINARY MEDICINE FOR THE TREATMENT OF COLIC, CONSTIPATION, SHIPPING FEVER, HEAT PROSTRATION, PARALYSIS AND NERVOUS CONDITIONS. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,277. PUBLISHED JANUARY 17, 1933. Class 6.

302,427. A DRAIN PIPE SOLVENT. HIPWELL MANUFACTURING COMPANY, Pittsburgh, Pa.
Filed November 23, 1932. Serial No. 332,411. PUBLISHED JANUARY 31, 1933. Class 6.

302,428. MEDICINES, TOOTH PASTE, AND HAIR TONIC. BORUN BROS., doing business as Rite Laboratories, Los Angeles, Calif.
Filed November 28, 1932. Serial No. 332,515. PUBLISHED JANUARY 31, 1933. Class 6.

302,429. ARTIFICIAL MINERALIZED WATER. ELMI WATERS, INC., Lincoln Park, Mich.
Filed November 28, 1932. Serial No. 332,560. PUBLISHED JANUARY 31, 1933. Class 6.

302,430. CHEMICALS FOR CONTROLLING THE ODOR OF RUBBER. THE NAUGATUCK CHEMICAL COMPANY, New York, N. Y.
Filed December 10, 1932. Serial No. 332,959. PUBLISHED JANUARY 31, 1933. Class 6.

302,431. METAL POLISHES, CLEANING PREPARATIONS, ETC. ARDO HERING, New York, N. Y.
Filed December 24, 1931. Serial No. 322,425. PUBLISHED JANUARY 31, 1933. Class 4.

302,432. MOTOR FUEL OILS, LUBRICATING OILS, LUBRICATING GREASES, AND GASOLINE. PRODUCERS DIAMOND QUALITY OIL & GAS CO., Topeka, Kans.
Filed February 4, 1932. Serial No. 323,840. PUBLISHED JANUARY 31, 1933. Class 15.

302,433. MOTOR VEHICLES, SPEEDBOATS, AEROPLANES, ETC. THE "SOCIÉTÉ FRANÇAISE HISPANO-SUIZA", Bois-Colombes, France.
Filed March 24, 1932. Serial No. 325,442. PUBLISHED JANUARY 31, 1933. Class 19.

302,434. TOILET PAPER. LEVIN BROTHERS PAPER CO., Chicago, Ill.
Filed April 1, 1932. Serial No. 325,715. PUBLISHED JANUARY 31, 1933. Class 37.

302,435. PAINTS, VARNISHES, POLISHES, ETC. RUSSELL SABOR, doing business as Aeronautical Industries Research, Minneapolis, Minn.
Filed April 15, 1932. Serial No. 326,162. PUBLISHED JANUARY 31, 1933. Class 16.

302,436. RECEPTACLES FOR SYNTHETIC RESIN, ETC. REYNOLDS SPRING CO., Jackson, Mich.
Filed May 25, 1932. Serial No. 327,450. PUBLISHED JANUARY 17, 1933. Class 2.

302,437. OIL BURNERS AND PARTS THEREOF. KELVINATOR CORPORATION, Detroit, Mich.
Filed June 30, 1932. Serial No. 328,429. PUBLISHED JANUARY 31, 1933. Class 34.

302,438. AUTOMOBILE POLISH AND FURNITURE POLISH AS WELL AS POLISH WHICH CLEANS AND POLISHES AUTOMOBILES IN ONE OPERATION. NU-RA WAXCOAT CORPORATION, Brooklyn, N. Y.
Filed July 16, 1932. Serial No. 328,844. PUBLISHED JANUARY 31, 1933. Class 16.

302,439. AIRPLANES OR AERIAL VEHICLES AND RAIL CARS AND/OR PARTS THEREOF. EDWARD G. BUDD MANUFACTURING COMPANY, Philadelphia, Pa.
Filed July 28, 1932. Serial No. 329,180. PUBLISHED JANUARY 17, 1933. Class 19.

302,440. PHARMACEUTICAL PREPARATIONS NAMELY, HAIR DYES AND HAIR LOTIONS. FRIEDRICH KLEIN, Berlin-Neukolln, Germany.
Filed March 14, 1932. Serial No. 325,103. PUBLISHED JANUARY 24, 1933. Class 6.

302,441. PREPARATION FOR PRODUCING NARCOSIS AND FOR ANÆSTHETIZING. DR. GEORG FRIEDRICH HENNING CHEMISCHE FABRIK, Berlin, Germany.
Filed June 7, 1932. Serial No. 327,793. PUBLISHED JANUARY 24, 1933. Class 6.

302,442. RUBBING LINIMENT. MACON WARE, doing business as Knox Chemical Company, East Falls Church, Va.
Filed August 24, 1932. Serial No. 329,812. PUBLISHED NOVEMBER 15, 1932. Class 6.

302,443. LINIMENT FOR THE EXTERNAL TREATMENT OF NEURITIS, RHEUMATISM, LUMBAGO, SCIATICA, NEURALGIA PAINS. WILLIAM ANGUS CANADY, doing business as Neuresco Chemical Co., Raleigh, N. C.
Filed September 26, 1932. Serial No. 330,649. PUBLISHED JANUARY 10, 1933. Class 6.

302,444. OINTMENT, COUGH SIRUP, ETC. FRANK GUBA, doing business as St. Ann's Laboratory, Waterbury, Conn.
Filed October 7, 1932. Serial No. 331,046. PUBLISHED JANUARY 17, 1933. Class 6.

302,445. COSMETICS—NAMELY, HAIR TONIC, LIQUID SHAMPOO, FACE POWDER, FACIAL CLEANSING OIL, COLD CREAM, AND BATH ESSENCE. CAMPBELL LABORATORIES, INC., New York, N. Y.
Filed October 11, 1932. Serial No. 331,142. PUBLISHED JANUARY 24, 1933. Class 6.

302,446. FACE CREAMS, FACE AND HAND LOTIONS, FACE POWDER, TALC, BODY POWDERS, LIPSTICK, ROUGE, PERFUMES, AND BRILLIANTINE. TALCUM PUFF CO. INC., doing business as Page Perfumer, New York, N. Y.
Filed October 14, 1932. Serial No. 331,270. PUBLISHED JANUARY 24, 1933. Class 6.

302,447. FUMIGATING APPARATUS CONTAINING A FUMIGATING MATERIAL AND FUMIGATING MATERIALS. HERBERT E. RILEY and HARRY J. TANNENBAUM, doing business as The Electric Moth Bomb Co., New York, N. Y.
Filed October 15, 1932. Serial No. 331,292. PUBLISHED JANUARY 24, 1933. Class 6.

302,448. PREPARATION FOR THE TREATMENT OF THE HAIR. JEAN GRAY, Washington, D. C.
Filed October 19, 1932. Serial No. 331,373. PUBLISHED JANUARY 24, 1933. Class 6.

302,449. INSECTICIDE CHEMICALS. THE HAMMOND PAINT & CHEMICAL CO., INC., Beacon, N. Y.
Filed October 21, 1932. Serial No. 331,430. PUBLISHED JANUARY 24, 1933. Class 6.

302,450. PERFUMERIES, LOTIONS, TOILET WATERS, FACE POWDERS, ROUGE, FACE CREAMS, AND ASTRINGENTS. PARK & TILFORD, New York, N. Y.
Filed October 21, 1932. Serial No. 331,437. PUBLISHED JANUARY 17, 1933. Class 6.

302,451. PERFUMERIES, LOTIONS, TOILET WATERS, FACE POWDERS, ROUGE, FACE CREAMS, AND ASTRINGENTS. PARK & TILFORD, New York, N. Y.
Filed October 21, 1932. Serial No. 331,438. PUBLISHED JANUARY 17, 1933. Class 6.

302,452. ROUGE, CLEANSING CREAM, BLEACH CREAM, ETC. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed October 26, 1932. Serial No. 331,590. PUBLISHED JANUARY 24, 1933. Class 6.

302,453. LIQUID PREPARATION CONTAINING A MIXTURE OF OILS, CHEMICALS, AND METAL SALTS, TO BE APPLIED TO METAL SURFACES TO PREVENT RUST AND CORROSION. RUSTVOID PRODUCTS, INC., Long Island City, N. Y.
Filed October 26, 1932. Serial No. 331,595. PUBLISHED JANUARY 17, 1933. Class 6.

302,454. ROUGE, CLEANSING CREAM, BLEACH CREAM, ETC. J. C. PENNEY COMPANY, Wilmington, Del., and New York, N. Y.
Filed October 26, 1932. Serial No. 331,591. PUBLISHED JANUARY 24, 1933. Class 6.

302,455. HAIR OIL. CLINTON TUSTIN, Denver, Colo.
Filed November 3, 1932. Serial No. 331,879. PUBLISHED JANUARY 24, 1933. Class 6.

302,456. PERFUMES AND PERFUMERY. ELIZABETH ARDEN, INC., New York, N. Y.
Filed November 4, 1932. Serial No. 331,884. PUBLISHED JANUARY 24, 1933. Class 6.

302,457. SURGICAL LUBRICATING JELLY. DAY CHEMICAL COMPANY, Newark, N. J.
Filed November 12, 1932. Serial No. 332,087. PUBLISHED JANUARY 17, 1933. Class 6.

302,458. MOTH-PROOFING MATERIALS. MIDWEST HARDWARE COMPANY, Chicago, Ill.
Filed November 12, 1932. Serial No. 332,096. PUBLISHED JANUARY 17, 1933. Class 6.

302,459. INTERNAL MEDICINE—NAMELY, AN INTRAVAGINAL BACTERIOSTATIC AND PROPHYLACTIC AGENT. SALVATORE A. REINA, doing business as Salva-Gene Chemical Laboratory, San Francisco, Calif.
Filed November 12, 1932. Serial No. 332,101. PUBLISHED JANUARY 17, 1933. Class 6.

302,460. SIZING AND TREATMENT MATERIAL FOR NATURAL AND SYNTHETIC TEXTILE FIBRES. SOLUOL CORPORATION, Providence, R. I.
Filed November 14, 1932. Serial No. 332,128. PUBLISHED JANUARY 17, 1933. Class 6.

302,461. PROPHYLACTIC ASTRINGENT AND ANODYNE, AND PREPARATIONS FOR TREATMENT OF INFLAMMATORY AFFECTIONS OF THE MUCOUS MEMBRANES AND TISSUES OF THE VAGINAL TRACT. ROBERT MCNEIL, Philadelphia, Pa.
Filed November 15, 1932. Serial No. 332,157. PUBLISHED JANUARY 17, 1933. Class 6.

302,462. WASHING SODA. THE BUCKEYE SODA COMPANY, Painesville Township, Lake County, Ohio.
Filed November 17, 1932. Serial No. 332,223. PUBLISHED JANUARY 17, 1933. Class 6.

302,463. ANTISEPTICS, BACTERICIDES, ETC. HYNSON, WESTCOTT & DUNNING, INCORPORATED, Baltimore, Md.
Filed November 18, 1932. Serial No. 332,255. PUBLISHED JANUARY 17, 1933. Class 6.

302,464. VETERINARY MEDICINE FOR USE IN THE TREATMENT OF MUSHY ANKLES, INFLAMED, BOWED, OR WEAK TENDONS, BRUISES, CUTS, CHAFINGS, BUCKED SHINS, SWELLINGS, AND THE LIKE. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,274. PUBLISHED JANUARY 17, 1933. Class 6.

302,465. VETERINARY MEDICINE FOR THE TREATMENT OF CHAFINGS, ABRASIONS, GALLS, AND RAW WOUNDS. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,275. PUBLISHED JANUARY 17, 1933. Class 6.

302,466. GENERAL MEDICINAL PREPARATION FOR THE TREATMENT OF STIFFNESS, SORENESS, SWOLLEN JOINTS, NEURALGIA PAINS, SORE THROAT, COLDS, AND THE LIKE, FOR MAN OR BEAST. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,276. PUBLISHED JANUARY 17, 1933. Class 6.

302,467. MEDICINAL PREPARATION FOR SWOLLEN TENDONS, CAPPED HOCK, BIG KNEE, CAKED BAG IN COWS OR HORSES. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,280. PUBLISHED JANUARY 17, 1933. Class 6.

302,468. VETERINARY MEDICINAL PREPARATION FOR HUMANE BLISTERS. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,282. PUBLISHED JANUARY 17, 1933. Class 6.

302,469. MEDICINAL PREPARATION FOR THE TREATMENT OF SKIN DISEASES FOR MAN OR BEAST. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,283. PUBLISHED JANUARY 17, 1933. Class 6.

302,470. VETERINARY TONIC FOR THE TREATMENT OF RACHITIS, DENTITION, WEAK JOINTS, AND RUN-DOWN CONDITIONS. VETERINARY PRODUCTS LABORATORY, INC., Jamaica, N. Y.
Filed November 18, 1932. Serial No. 332,284. PUBLISHED JANUARY 17, 1933. Class 6.

302,471. PACKET OR PACKAGE CONTAINING QUILT PATCHES, DESIGNS, AND PATTERNS FOR CUTTING SAID PATCHES, ALL SOLD AS A UNIT. W. L. M. CLARK, INCORPORATED, St. Louis, Mo.
Filed September 16, 1932. Serial No. 330,896. PUBLISHED JANUARY 3, 1933. Class 40.

302,472. MOLDED FRICTION LININGS FOR BRAKES AND CLUTCHES, MADE PRINCIPALLY OF ASBESTOS, MINERAL WEAR-RESISTING MATERIALS INCLUDING A MINOR WEIGHT PROPORTION OF GAS BLACK AND HARDENED BINDER INCLUDING RUBBER. REX-HIDE RUBBER MANUFACTURING COMPANY, East Brady, Pa.
Filed December 7, 1932. Serial No. 332,860. PUBLISHED JANUARY 24, 1933. Class 35.

302,473. ANTIMALARIAL PREPARATION. WINTHROP CHEMICAL COMPANY, INC., New York, N. Y.
Filed December 3, 1932. Serial No. 332,745. PUBLISHED JANUARY 31, 1933. Class 6.

302,474. ASTRINGENTS, BLEACH CREAMS, COLD CREAMS, ETC. THE NEW YORKER COSMETIC CORP., New York, N. Y.
Filed November 25, 1932. Serial No. 332,462. PUBLISHED JANUARY 24, 1933. Class 6.

302,475. ELECTRIC RAZORS AND BLADES THEREFOR. TARK ELECTRIC RAZOR CO., INC., Long Island City, N. Y.
Filed November 22, 1932. Serial No. 332,387. PUBLISHED JANUARY 31, 1933. Class 23.

302,476. RADIO RECEIVING SETS. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio.
Filed November 21, 1932. Serial No. 332,332. PUBLISHED JANUARY 31, 1933. Class 21.

302,477. BEESWAX. THEODOR LEONHARD WAX CO. INC., Haledon, N. J.
Filed November 11, 1932. Serial No. 332,068. PUBLISHED JANUARY 31, 1933. Class 6.

302,478. PREPARATION FOR THE TREATMENT OF GONORRHEA. JOHN H. WHITE, doing business as G. C. Medicine Company, Clarksville, Ark.
Filed November 7, 1932. Serial No. 331,971. PUBLISHED JANUARY 24, 1933. Class 6.

302,479. PREPARATION FOR USE AS A BLOOD PURIFIER. ERIN L. VAUGHAN, doing business as Lockhart Bros., Selma, Ala.
Filed November 5, 1932. Serial No. 331,939. PUBLISHED JANUARY 24, 1933. Class 6.

302,480. OIL SHAMPOO. PAULA S. EILERS, doing business as Sani-Skalp Co., Beverly Hills, Calif.
Filed November 5, 1932. Serial No. 331,922. PUBLISHED JANUARY 24, 1933. Class 6.

302,481. FILLING OR SIZING MATERIAL FOR TEXTILES. HAMPDEN SALES CORPORATION, Springfield, Mass.
Filed November 3, 1932. Serial No. 331,859. PUBLISHED JANUARY 31, 1933. Class 6.

302,482. FILLING OR SIZING MATERIAL FOR TEXTILES. HAMPDEN SALES CORPORATION, Springfield, Mass.
Filed November 3, 1932. Serial No. 331,858. PUBLISHED JANUARY 31, 1933. Class 6.

302,483. WATER-PURIFYING MACHINERY AND PARTS THEREOF. THE UNITED STATES OZONE COMPANY OF AMERICA, Scottdale, Pa.
Filed October 26, 1932. Serial No. 331,599. PUBLISHED JANUARY 31, 1933. Class 28.

302,484. MEDICINE IN THE FORM OF A CONFECTION HAVING AN ACIDOPHILUS CONTENT. BROOK HILL LABORATORIES, INC., Genesee Depot, Wis., and Chicago, Ill.
Filed October 25, 1932. Serial No. 331,541. PUBLISHED JANUARY 24, 1933. Class 6.

302,485. LUBRICATING OILS FOR VARIOUS KINDS OF MACHINERY AND VEHICLES. THE PURE OIL COMPANY, Chicago, Ill.
Filed October 21, 1932. Serial No. 331,440. PUBLISHED JANUARY 31, 1933. Class 15.

302,486. AMYLOLYTIC OR STARCH-LIQUEFYING PREPARATION. STANDARD BRANDS INCORPORATED, New York, N. Y.
Filed October 24, 1932. Serial No. 331,516. PUBLISHED JANUARY 31, 1933. Class 6.

302,487. TOOTH PASTE. REISS-PREMIER l'IPE CO., West New York, N. J.
Filed October 14, 1932. Serial No. 331,266. PUBLISHED JANUARY 31, 1933. Class 6.

302,488. ASTRINGENTS, ASTRINGENT CERATES, BLEACH CREAMS, ETC. RIMMEL, INC., West Orange, N. J.
Filed October 11, 1932. Serial No. 331,164. PUBLISHED JANUARY 31, 1933. Class 6.

302,489. MEDICINAL PREPARATION FOR THE TREATMENT OF TUBERCULAR AND LUNG DISEASES. CARL E. WRAY, Salina, Kans.
Filed September 1, 1932. Serial No. 330,076. PUBLISHED JANUARY 24, 1933. Class 6.

302,490. GASOLINE. JAMES B. BERRY SONS' CO., Oil City, Pa., and Chicago, Ill.
Filed April 15, 1932. Serial No. 326,125. PUBLISHED SEPTEMBER 13, 1932. Class 15.

302,491. METALLIC ARC-WELDING ELECTRODES AND OXY-ACETYLENE WELDING WIRE. GEORGE H. ABEL, Roslyn, Pa.
Filed December 17, 1932. Serial No. 333,136. PUBLISHED JANUARY 31, 1933. Class 14.

302,492. WHISKEY. PENNSYLVANIA DISTILLING COMPANY, INC., Logansport, Pa., and Brooklyn, N. Y.
Filed December 28, 1932. Serial No. 333,421. PUBLISHED FEBRUARY 7, 1933. Class 49.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,493. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CARTER MACY TEA & COFFEE CO., INC., New York, N. Y. Filed Dec. 12, 1932. Serial No. 332,990.



For Tea.
Claims use since Sept. 19, 1931.

302,494. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NASSOUR BROTHERS, INC. LTD., Los Angeles, Calif. Filed Nov. 30, 1932. Serial No. 332,624.

NASSOUR'S
CASTILIAN

For Cosmetics—Namely, Cleansing Cream, Tissue Cream, Liquid Cleansing Cream, Cucumber Cream (a Powder Base Cream, Hand Lotion, Toning Lotion), a Skin Lotion, and Muscle Oil.
Claims use since Dec. 31, 1931.

302,495. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SIEGELMAN LABORATORIES, INC., Los Angeles, Calif. Filed Nov. 29, 1932. Serial No. 332,602.

NEV-R-BURN

For Lotion to Prevent Sunburn.
Claims use since Dec. 17, 1931.

302,496. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PETER W. MALONEY, doing business as Dermatological Prescription Laboratories, San Francisco, Calif. Filed Oct. 24, 1932. Serial No. 331,506.

Dermatological Prescription Laboratories

For Lotions, Ointments, and Powders, for Use in the Treatment of Impetigo, Scabies, Ringworm, and All Diseases of the Skin.
Claims use since July 11, 1931.

302,497. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) VIO-RAY COMPANY, New York, N. Y. Filed July 9, 1932. Serial No. 328,675.

the New Improved **VIO-RAY WINDOW FABRIC**

For Article of Manufacture Comprising Cloth Fabric Base Impregnated with or to Which Has Been Applied a Waterproof and Transparent Material.
Claims use since Oct. 18, 1931.

302,498. (CLASS 31. FILTERS AND REFRIGERATORS.) PECHMAN STORE EQUIPMENT CO. INC., New York, N. Y. Filed Apr. 21, 1932. Serial No. 326,340.

PECHMAN
KOOL-RITE

For Refrigerators, Refrigerated Show Cases, Refrigerated Meat Cases, and Refrigerated Store Fixtures.
Claims use since Mar. 15, 1932.

302,499. (CLASS 39. CLOTHING.) H. C. ABBELE CO., Philadelphia, Pa. Filed Mar. 22, 1932. Serial No. 325,360.

KLINGTOP

For Hosiery.
Claims use since Mar. 5, 1932.

302,500. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) S. H. KRESS & CO., New York, N. Y. Filed Mar. 3, 1932. Serial No. 324,747.

Ontite

For Bottle Caps.
Claims use since Feb. 9, 1932.

302,501. (CLASS 39. CLOTHING.) ARTHUR COHEN DRESS CORPORATION, New York, N. Y. Filed Feb. 9, 1932. Serial No. 328,968.

SHEILA-LYNN

For Women's and Misses' Dresses.
Claims use since Feb. 1, 1932.

302,502. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) VICTORY GRANITE COMPANY, Barre, Vt. Filed Feb. 29, 1932. Serial No. 324,636.

Select
BARRE
GRANITE

For Memorials.
Claims use since Feb. 9, 1932.

302,503. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SUPERIOR LABORATORIES, INC., Cleveland, Ohio. Filed Jan. 29, 1932. Serial No. 328,595.

Elaine
Ellwood

For Face Cream, Liquid Skin and Pore Cleanser, Face Lotion, and Face Powder.
Claims use since Jan. 19, 1932.

302,504. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) INSTITUTE OF FEMININE HYGIENE, INC., New York, N. Y. Filed Jan. 25, 1932. Serial No. 328,408.

INSTITUTE OF FEMININE HYGIENE

For Vaginal Syringes, Sanitary Napkins, Abdominal Health Belts, Fountain Syringes, Hot Water Bags, Surgeon's Rubber Gloves, Atomisers, Surgical Dressings, Permanent Wave Machines, Manicure Files, Therapeutic Lamps, Vibrators and Electrical Hair Driers, Elastic Stockings, Non-Medicated Adhesive Tape, Corn and Bunion Pads, Hospital Cotton, Absorbent Gauze, Ice Bags, Breast Pumps; Colon, Rectal, and Stomach Tubes, Seamless and Seamed Leggings for Varicose Veins, Urinal Bags, Clinical Thermometers, Bed Pans, Prophylactic Rubber, Tissue and Membranous Articles for the Prevention of Contagious Diseases.
Claims use since Sept. 1, 1931.

302,505. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. R. MANSFIELD CO. LTD., Los Angeles, Calif. Filed Jan. 18, 1932. Serial No. 328,141.

ADÉLE
MILLAR

For Skin Cleansing, Massaging, Bleaching, and Beautifying Creams, and Lotions.
Claims use since Jan. 1, 1910.

302,506. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOUIS ANGERT, doing business as Claremont Perfume Shop, Yonkers, N. Y. Filed Dec. 24, 1931. Serial No. 322,415.

Arline Ardsley

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Tissue Building Creams, Wrinkle Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs, Skin Whitener in Liquid, Cream and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Tooth Pastes, Mouth Washes, Dentifrices, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.
Claims use since Mar. 10, 1931.

302,507. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LLOYD G. SCHULTZ, doing business as Castilla Company, New York, N. Y. Filed Oct. 16, 1931. Serial No. 320,140.

CASTILLA

For Tooth Soap for Cleaning Teeth.
Claims use since Mar. 1, 1931.

302,508. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EVERETT LOVE & SONS, Laredo, Tex. Filed Mar. 23, 1931. Serial No. 312,440.

LOVE'S

For Fresh Vegetables.
Claims use since September, 1930.

302,509. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) BOUCHER CORK CO., INC., New York, N. Y. Filed Mar. 23, 1931. Serial No. 312,409.

Pearl Tip

For Strips of Cigarette Paper Serving as the Container of the Tobacco Filler for Cigarettes.
Claims use since Mar. 10, 1931.

302,510. (CLASS 25. LOCKS AND SAFES.) DIEBOLD SAFE & LOCK CO., Canton, Ohio. Filed Mar. 4, 1932. Serial No. 324,782.

CASHGARD

For Safes and Metal Structures in the Nature of Safes and Parts Thereof.
Claims use since June 1, 1930.

302,511. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHARLES CARR, Bridgeport, Conn. Filed Feb. 25, 1933. Serial No. 335,271.

CARR

For Storage Batteries.
Claims use since June, 1928.

302,512. (CLASS 26, MEASURING AND SCIENTIFIC APPLIANCES.) MONTGOMERY-FROST COMPANY, Boston, Mass. Filed Jan. 27, 1933. Serial No. 334,408.

"SAVE SITE LENSES"

For Eyeglasses, Spectacles, and Lenses Therefor.
Claims use since November, 1930.

302,513. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LILLIAN EKLUND, doing business as Sox-Saver Chemical Company, Philadelphia, Pa. Filed Jan. 25, 1933. Serial No. 334,383.

SOX-SAVER

For Chemical Preparation for Prolonging the Life of Silk or Cotton Hosiery.
Claims use since Dec. 1, 1931.

302,514. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM M. GABLER, Baltimore, Md. Filed Jan. 25, 1933. Serial No. 334,307.

GABLER'S

For Preparation for the Prevention and Treatment of Diseases of Birds.
Claims use since 1922.

302,515. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KUNETT & CO., INC., New York, N. Y. Filed Jan. 21, 1933. Serial No. 334,242.

Alice LeRoy

For Cosmetics—Namely, Restorative Cream, Astringent Lotion, Cleansing Cream, Blackhead Cream, Hair Tonic, Foundation Cream, Brilliantine, Liquid Dandruff Remover, Pore Cream, and Skin Tonic.
Claims use since Oct. 15, 1930.

302,516. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HERMAN B. LAYMON, doing business as World's Products Co., Spencer, Ind. Filed Jan. 19, 1933. Serial No. 334,108.

Laymon's

For Aspirin.
Claims use since Jan. 1, 1922.

302,517. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE BEST FOODS, INC., New York, N. Y. Filed Jan. 18, 1933. Serial No. 334,040.

"DOUBLE WHIPPED"

For Mayonnaise.
Claims use since Dec. 31, 1931.

302,518. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Territory of Hawaii, and San Francisco, Calif. Filed Jan. 14, 1933. Serial No. 333,935.

DOLE

For Canned Pineapple Juice for Food Purposes.
Claims use since June 22, 1927.

TRADE-MARK REGISTRATIONS RENEWED

39,844. LAXATIVE MEDICINE. Registered February 24, 1903. McKESSON & ROBBINS, New York, N. Y. Renewed February 24, 1933, to McKesson & Robbins, Incorporated, Bridgeport, Conn., a Corporation of Connecticut, successor.

40,090. LEAD PENCILS. Registered April 14, 1903. AMERICAN LEAD PENCIL COMPANY, Hoboken, N. J. Renewed April 14, 1933, to American Lead Pencil Company, New York, N. Y., a Corporation of New York.

40,254. LIQUID MEDICINAL PREPARATIONS FOR THE TREATMENT OF SKIN DISEASES. Registered May 5, 1903. THE NORWICH PHARMACAL COMPANY, Norwich, N. Y., a Corporation of New York. Renewed May 5, 1933.

90,820. CEMENT FOR REPAIRING BROKEN ARTICLES. Registered March 25, 1913. MAJOR MANUFACTURING CO., New York, N. Y., a Corporation of New York. Renewed March 25, 1933.

91,473. A SUNDAY NEWSPAPER. Registered May 6, 1913. THE GEORGIAN COMPANY, Atlanta, Ga., a Corporation of Georgia. Renewed May 6, 1933.

91,474. A DAILY NEWSPAPER. Registered May 6, 1913. THE GEORGIAN COMPANY, Atlanta, Ga., a Corporation of Georgia. Renewed May 6, 1933.

91,589. CIGARETTES. Registered May 13, 1913. M. MELACHRINO & CO., INCORPORATED, as assignee of M. Melachrino & Co. Renewed May 13, 1933, to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

91,678. CIGARETTES. Registered May 20, 1913. M. MELACHRINO & CO. INCORPORATED, as assignee of M. Melachrino & Co. Renewed May 20, 1933, to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey, assignee by mesne assignments.

92,660. WOMEN'S UNDERVESTS. Registered July 22, 1913. E. EMMERS & Co. Renewed July 22, 1933, to The E-Cut Knitting Mills, Royersford, Pa., a Firm, assignee.

92,794. CANDY. Registered July 29, 1913. HENRY HEIDE. Renewed July 29, 1933, to Henry Heide, Incorporated, New York, N. Y., a Corporation of New York, assignee.

92,892. CIGARS. Registered August 5, 1913. HAVANA CIGAR & TOBACCO FACTORIES, LT'D., New York, N. Y., and Habana, Cuba. Renewed August 5, 1933, to The Havana Cigar and Tobacco Factories, Limited, Jersey City, N. J., a Corporation of Great Britain.

92,905. CORK DISKS AND WASHERS. Registered August 5, 1913. NEW PROCESS CORK COMPANY, New York, N. Y. Renewed August 5, 1933, to Crown Cork & Seal Company, Inc., Baltimore, Md., a Corporation of New York, assignee.

93,026. HONEY IN THE COMB, EXTRACTED HONEY, AND GRANULATED HONEY. Registered August 12, 1913. THE A. I. ROOT COMPANY, Medina, Ohio. Renewed August 12, 1933, to Preserves & Honey, Inc., New York, N. Y., a Corporation of Delaware, assignee.

93,179. A PREPARATION FOR DYEING THE HAIR, FOR HUMAN USE. Registered August 26, 1913. INECTO LIMITED. Renewed August 26, 1933, to Rapidol Limited, London, England, a Corporation of Great Britain, assignee by mesne assignments.

LABELS

REGISTERED APRIL 18, 1933

41,927.—*Title:* THE ACME SAFETY GRATER. For Grater Implement for Kitchen Use. ACME METAL GOODS MFG. CO., Newark, N. J. Published January 5, 1933.

41,928.—*Title:* AJUX LINE GUIDE. For Line Guide. AJUX COMPANY, Dallas, Tex. Published February 9, 1933.

41,929.—*Title:* BLUE HEVEN. For Detergents. THE BLUE HEVEN CORPORATION, North Kansas City, Mo. Published February 3, 1933.

41,930.—*Title:* ROYAL GEORGE SCOTCH WHISKY. For Scotch Whisky. V. CASAZZA & BRO., New York, N. Y. Published January 10, 1933.

41,931.—*Title:* CONNECTICUT NEWSTONE. For Cigars. CONNECTICUT CIGAR MFG. CO., INC., Manchester, Conn. Published March 15, 1933.

41,932.—*Title:* ALL AMERICAN. For Chocolate Covered Candy Bars. FOX-CROSS CANDY COMPANY, Oakland, Calif. Published February 1, 1933.

41,933.—*Title:* WHEATIES. For Whole Wheat Flakes. GENERAL MILLS, INC., Minneapolis, Minn. Published January 17, 1933.

41,934.—*Title:* SPORT SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 15, 1933.

41,935.—*Title:* ROSE MARIE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 15, 1933.

41,936.—*Title:* SPORTSTER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 6, 1933.

41,937.—*Title:* THE JOHN ADAMS SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 6, 1933.

41,938.—*Title:* WILL WEAR WELL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1933.

41,939.—*Title:* THE STRONG-WEAR LINE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 30, 1933.

41,940.—*Title:* THE RIVIERA SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 17, 1933.

41,941.—*Title:* THE SAFETY TOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1933.

41,942.—*Title:* SUPER FASHION STOUTS. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 15, 1933.

41,943.—*Title:* THE RESORTER. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1933.

41,944.—*Title:* GINGER SPORT GIRL. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published January 26, 1933.

41,945.—*Title:* MIDNIGHT SUN TEA. For Tea. MCCORMICK & CO., INC., Baltimore, Md. Published January 24, 1933.

41,946.—*Title:* MENASHA BUTTER. For Butter. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Published February 16, 1933.

41,947.—*Title:* MENASHA ICE CREAM. For Ice Cream. THE MENASHA PRODUCTS COMPANY, Menasha, Wis. Published February 16, 1933.

41,948.—*Title:* ZIP. For an Insecticide. JAMES C. MITCHELL, Joplin, Mo. Published June 6, 1932.

41,949.—*Title:* "THE GENUINE VAN HEUSEN COLLAR" VAN HEUSEN-COLLAR ATTACHED SHIRT. For Shirts. PHILLIPS-JONES CORPORATION, New York, N. Y. Published January 28, 1933.

41,950.—*Title:* EIFFEL TOWER. For Butter. POPPER, GRAY & COMPANY, INC., New York, N. Y. Published January 20, 1933.

41,951.—*Title:* ROMAR CIGARS—3 FOR 5—A REAL SHORT SMOKE. For Cigars. ROMAR CIGAR COMPANY, Waterbury, Conn. Published February 14, 1933.

41,952.—*Title:* AIR-O-SEAL. For Coffee Bags. THOMAS M. ROYAL & CO., Philadelphia, Pa. Published November 2, 1932.

41,953.—*Title:* ONE DOZEN EGGS. For Eggs. SELF-LOCKING CARTON COMPANY, Chicago, Ill. Published September 1, 1932.

41,954.—*Title:* THE WONDER MAT BOX SPRING. For Box-Springs. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa. Published September 20, 1932.

41,955.—*Title:* TELECLEANER. For Cleaning Fluid. THE TELEON MFG. CO., Chicago, Ill. Published January 18, 1933.

41,956.—*Title:* TUCO PICTURE PUZZLE. For Picture Puzzles. THE TUCO WORK SHOP, Lockport, N. Y. Published January 17, 1933.

41,957.—*Title:* VAPOR-GAS CRYSTALS, THE TWENTY MINUTE RUG CLEANER. For Cleaner for Rugs, Carpets, Upholstered Furniture, and Auto Upholstery. VAPOR-GAS CRYSTALS COMPANY, Sharpsburg, Pa. Published February 10, 1933.

PRINTS

REGISTERED APRIL 18, 1933

14,135.—*Title:* GREASED LIGHTNING. For Lubricating Gasoline. WM. CHAS. BETTIS, San Francisco, Calif. Published July 14, 1932.

14,136.—*Title:* PEEPS-AND-SQUEALS. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published February 10, 1933.

14,137.—*Title:* FORCE TOASTED WHOLE WHEAT FLAKES. For Cereal Food Products. HECKER-H-O COMPANY, INC., Buffalo, N. Y. Published February 15, 1933.

14,138.—*Title:* HILLS BROS' PATENTED PROCESS "DOES RIGHT" BY THE RARE BLEND OF COFFEES. For Coffee. HILLS BROS., San Francisco, Calif. Published September 30, 1932.

14,139.—*Title:* THEY CALL IT "THE WORLD'S FINEST COFFEE" . . . AND HERE IS THE REASON. For Coffee. HILLS BROS., San Francisco, Calif. Published September 2, 1932.

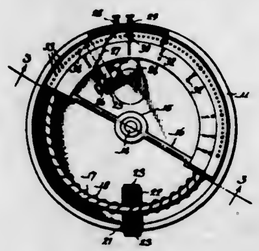
14,140.—*Title:* WHEN YOU TASTE HILLS BROS COFFEE, YOU'LL REALIZE THE IMPORTANCE OF PERFECT ROASTING. For Coffee. HILLS BROS., San Francisco, Calif. Published August 26, 1932.

14,141.—*Title:* HEALTH 10¢ GALLON. For Mineral Water Crystals. GEORGE L. MCCARTY, Washington, D. C. Published February 15, 1933.

REISSUES

APRIL 18, 1933

18,796. INDICATOR FOR RADIORECEIVERS. HYMAN MATZNER, New York, N. Y., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Original No. 1,674,608, dated June 19, 1928, Serial No. 209,517, filed July 30, 1927. Application for reissue filed Jan. 14, 1930. Serial No. 420,768. 8 Claims. (Cl. 177—311.)



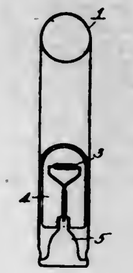
1. A dial for radio receiving sets including an electrical indicator adapted to be rendered active only when the dial is set to tune in a station, a normally open circuit in which said indicator is arranged, and circuit closing means carried by the dial, said circuit closing means including a plurality of contact members carried by the dial and disposed in circuit closing position only when the dial is set to tune in a station.

18,797. AIR-POROUS PAPER AND PROCESS OF MAKING SAME. FREDERICK RIEBEL, Jr., Toledo, Ohio, assignor to Air-Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Original No. 1,854,427, dated Apr. 19, 1932, Serial No. 471,600, filed July 29, 1930. Application for reissue filed Oct. 3, 1932. Serial No. 636,090. 8 Claims. (Cl. 92—38.)

1. An air-porous paper, having its fibers meshed to leave interstices impervious to particles the size of wheat flour, and transmitting air such as to occasion no more back pressure than about two inches against a blower forcing not less than substantially 25 cubic feet of air per minute through a 11¾" square sheet of such paper, and having a tensile strength under such pressure resisting impact of an 0.24 lb. wooden ball falling through a 36 inch arc having a radius of 100 inches.

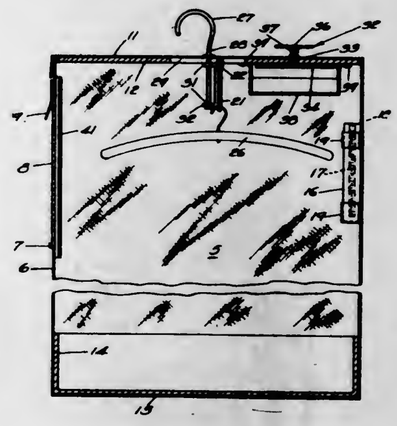
18,798. DISCHARGE TUBE. CARL J. R. H. VON WEDEL, Newark, N. J., assignor, by mesne assignments, to Electrons, Inc., a Corporation of Delaware. Original No. 1,807,140, dated May 26, 1931, Serial No. 259,715, filed Mar. 7, 1928. Application for reissue filed June 18, 1931. Serial No. 544,250. 16 Claims. (Cl. 176—122.)

1. A discharge tube having a single stem portion, a stem in said portion, a pair of electrodes erected on said stem, a hollow toroidal envelope mounted upon said stem portion and forming a continuous elongated discharge path extending in two directions from said stem portion, and a



discharge preventing shield between said electrodes whereby discharges therebetween are confined to said elongated path.

18,799. CLOTHES BAG. ABRAHAM J. LICHTIG, Oakland, Calif. Original No. 1,805,877, dated May 19, 1931, Serial No. 381,802, filed July 29, 1929. Application for reissue filed Sept. 17, 1932. Serial No. 633,697. 3 Claims. (Cl. 206—7.)



1. A clothes bag comprising a top; a rigid spreader frame therefor; flexible walls suspended therefrom; a hanger frame hinged to said spreader frame within the bag for swinging movement in a vertical plane; and a suspending hook swiveled to said hanger frame for rotary movement in a horizontal plane, the swinging of said hanger frame moving both it and said hook from their normal vertical positions to positions approximately parallel to the top of the bag.

PLANT PATENTS

GRANTED APRIL 18, 1933

60. STRAWBERRY. CARL E. SCHUSTER, Corvallis, Oreg., dedicated, by mesne assignments, to the People of the United States of America. Filed May 19, 1931. Serial No. 538,467. 1 Claim. (Cl. 47—1.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

A strawberry plant, as described, bearing fruit characterized by being medium in size, conic to oblate in form, with no neck, the calyx on the larger, early berries reflexed when ripe; having a uniform ripening quality; having a surface glossy and luminous, and bright crimson in color; having seeds that are sunken yellow red; having flesh crimson in color, the texture being firm to melting, very smooth, with little trace of core; and having excellent canning and dessert quality, acid and aromatic, adapted to the frozen and late fresh market trade, as shown.

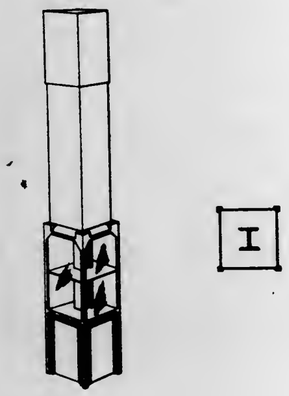
61. APPLE. EDWIN P. WRAY, White Salmon, Wash. Filed Dec. 9, 1931. Serial No. 579,889. 1 Claim. (Cl. 47—1.)

An apple substantially as herein shown and described, characterized by an exceptionally deep stem cavity and short stem, and five points of more or less irregular formation disposed circumferentially about its calyx, the color of the apple being a vari-colored red on a yellow background, with the area of lighter red having slight markings of a darker red, and substantially the entire area of the apple being flecked with small dots, the dots in the darker red portion being yellow and those in the lighter area being of a greenish yellow tint.

DESIGNS

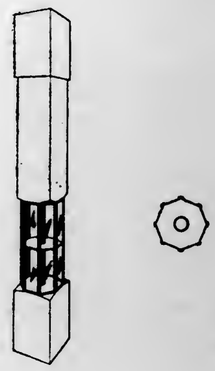
APRIL 18, 1933

89,607. COMBINED BUILDING COLUMN AND DISPLAY CASE. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 6, 1932. Serial No. 43,409. Term of patent 14 years.



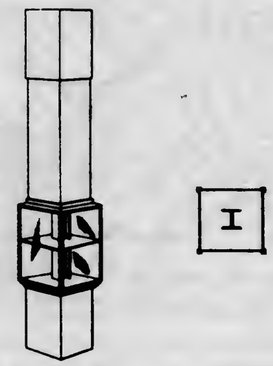
The ornamental design for a combined building column and display case, as shown.

89,608. COMBINED BUILDING COLUMN AND DISPLAY CASE. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 6, 1932. Serial No. 43,410. Term of patent 14 years.



The ornamental design for a combined building column and display case, as shown.

89,609. COMBINED BUILDING COLUMN AND DISPLAY CASE. RALPH N. ALDRICH, San Francisco, Calif., assignor to Standard Stations, Inc., San Francisco, Calif., a Corporation of Delaware. Filed Apr. 6, 1932. Serial No. 43,411. Term of patent 14 years.



The ornamental design for a combined building column and display case, as shown.

89,610. BRIDGE FOR AN OPHTHALMIC MOUNTING. CHARLES O. COZZENS, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 15, 1932. Serial No. 44,838. Term of patent 14 years.



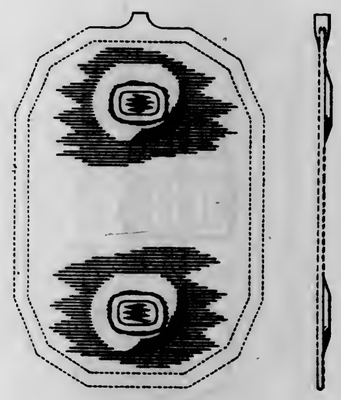
The ornamental design for a bridge for an ophthalmic mounting substantially as shown.

89,611. PASTRY CONFECTION. GERTRUDE H. CRAWFORD, Milliken, Colo. Filed Dec. 9, 1932. Serial No. 46,406. Term of patent 14 years.



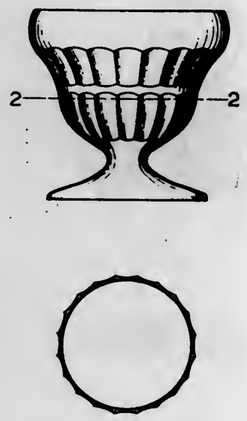
The ornamental design for a pastry confection, as shown.

89,612. HEATING PAD OR SIMILAR ARTICLE. WALLACE W. DE LANEY, New Haven, Conn., assignor to The Seamless Rubber Company, Inc., New Haven, Conn., a Corporation of Massachusetts. Filed Aug. 13, 1932. Serial No. 44,596. Term of patent 14 years.



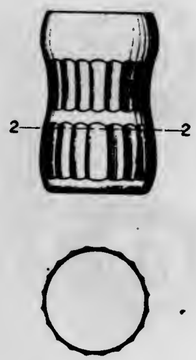
The ornamental design for a heating pad or similar article substantially as shown and described.

89,613. SHERBET GLASS OR SIMILAR ARTICLE. RICHARD C. DIEBENKORN, San Francisco, Calif., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif., a Corporation of Nevada. Filed July 1, 1932. Serial No. 44,236. Term of patent 14 years.



The ornamental design for a sherbet glass or similar article substantially as shown.

89,614. TUMBLER OR SIMILAR ARTICLE. RICHARD C. DIEBENKORN, San Francisco, Calif., assignor to Dohrmann Hotel Supply Co., San Francisco, Calif., a Corporation of Nevada. Filed July 1, 1932. Serial No. 44,237. Term of patent 14 years.



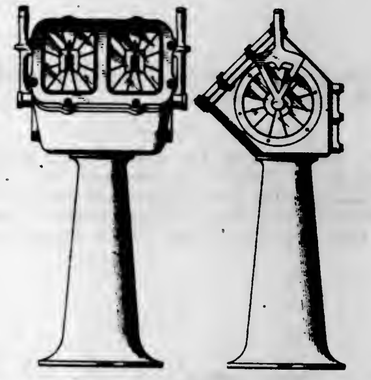
The ornamental design for a tumbler or similar article substantially as shown.

89,615. SHOE. FRANK GRUBS, Larchmont, N. Y., assignor to La Valle, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 15, 1932. Serial No. 46,465. Term of patent 14 years.



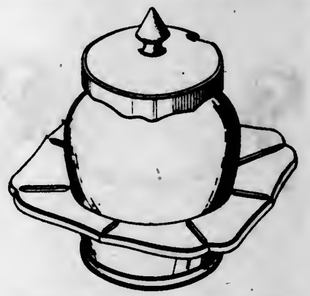
The ornamental design for a shoe substantially as shown.

89,616. SIGNALING INSTRUMENT. CHARLES J. HENSCHEL, Rutherford, N. J. Filed Jan. 21, 1932. Serial No. 42,580. Term of patent 7 years.



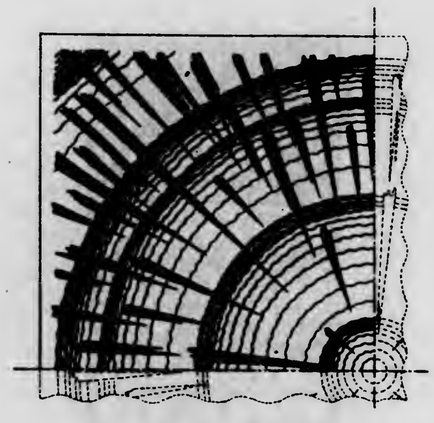
The ornamental design for a signaling instrument, as shown.

89,617. COMPOTIER. CLARENCE S. KEATING, Chicago, Ill., assignor to The Friedman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1932. Serial No. 43,503. Term of patent 7 years.



The ornamental design for a compotier substantially as shown.

89,618. TEXTILE FABRIC OR SIMILAR ARTICLE. GERTRUDE STEINHOLZ, Brooklyn, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Feb. 25, 1933. Serial No. 47,308. Term of patent 3½ years.



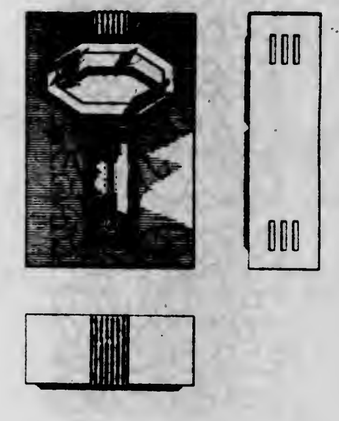
The ornamental design for a textile fabric or similar article as shown and described.

89,619. THERMOMETER. WALTER DORWIN TEAGUE, Forest Hills, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,918. Term of patent 7 years.



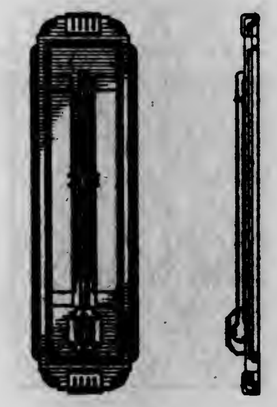
The ornamental design for a thermometer as shown.

89,620. INSTRUMENT CASING. WALTER DORWIN TEAGUE, Forest Hills, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,917. Term of patent 7 years.



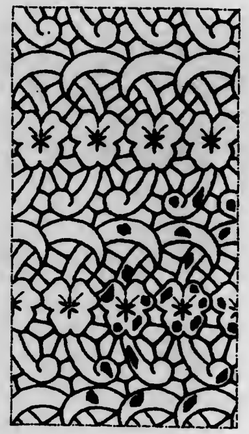
The ornamental design for an instrument casing as shown.

89,621. THERMOMETER. WALTER DORWIN TEAGUE, Forest Hills, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Jan. 21, 1933. Serial No. 46,919. Term of patent 7 years.



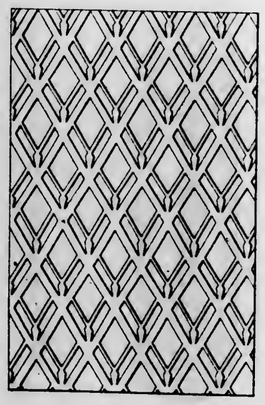
The ornamental design for a thermometer as shown.

89,622. EMBROIDERED TEXTILE FABRIC. JEAN ARMBRUSTER, Bergenfield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 9, 1933. Serial No. 47,423. Term of patent 3½ years.



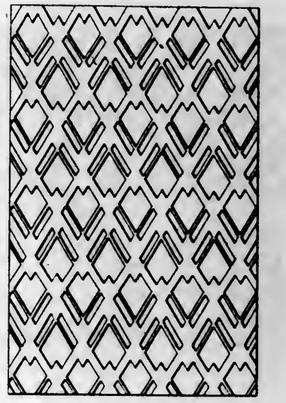
The ornamental design for embroidered textile fabric, substantially as shown and described.

89,623. GRILLE OR THE LIKE. LOIS M. BEAM, Short Hills, N. J., assignor to Hendrick Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1933. Serial No. 46,898. Term of patent 7 years.



The ornamental design for a grille or the like, substantially as shown and described.

89,624. GRILLE OR THE LIKE. LOIS M. BEAM, Short Hills, N. J., assignor to Hendrick Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 20, 1933. Serial No. 46,899. Term of patent 7 years.



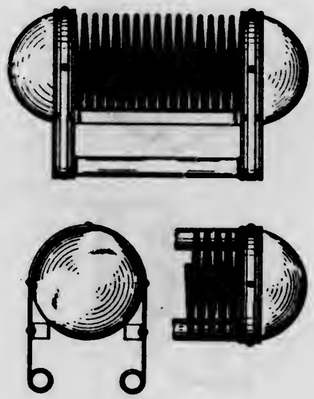
The ornamental design for a grille or the like, substantially as shown and described.

89,625. BUTTON. LEONARD R. CARLEY, Watertown, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 3, 1933. Serial No. 47,095. Term of patent 14 years.



The ornamental design for a button, as shown.

89,626. MAGAZINE RACK. JAMES WARING CARPENTER, Pittsburgh, Pa., assignor to The McKay Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 21, 1933. Serial No. 46,927. Term of patent 7 years.



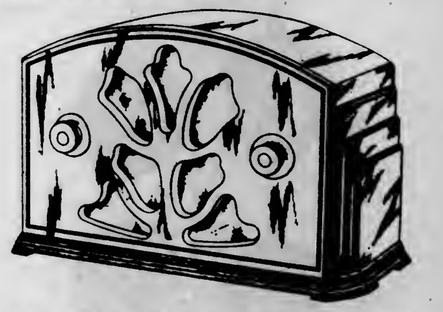
The ornamental design for a magazine rack, as shown.

89,627. POCKET FOR POT HOLDER. MOSES CAPLAN, Boston, Mass. Filed Jan. 20, 1933. Serial No. 46,906. Term of patent 7 years.



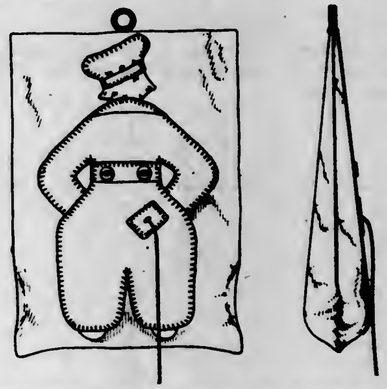
The ornamental design for a pocket for pot holder substantially as shown.

89,628. RADIOCABINET. OSTILIO CICCARELLI, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Jan. 14, 1933. Serial No. 46,834. Term of patent 3½ years.



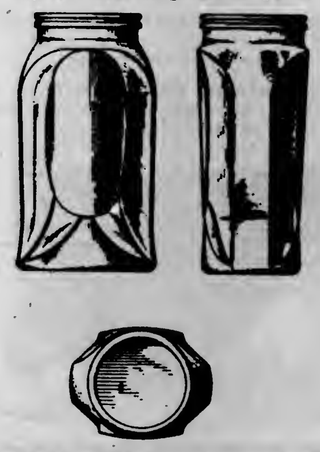
The ornamental design for a radiocabinet substantially as shown and described.

89,629. STRING HOLDER. ALBERT B. COLLINGBOURNE, Elgin, Ill. Filed Jan. 18, 1933. Serial No. 46,815. Term of patent 7 years.



The ornamental design for a string holder as shown.

89,630. JAR. IVOR CORDY, Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Jan. 21, 1933. Serial No. 46,929. Term of patent 14 years.



The ornamental design for a jar, as shown.

89,631. BIRD'S HOUSE. JOHN D. DAGGETT, Shafer, Minn. Filed Nov. 18, 1932. Serial No. 46,055. Term of patent 7 years.



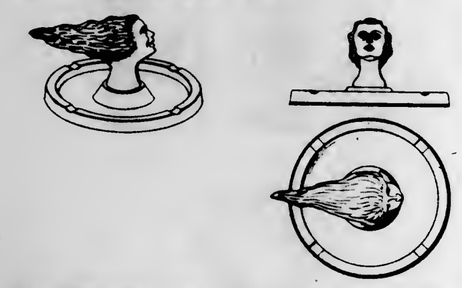
The new and ornamental design for a bird's house substantially as shown and described.

89,632. BOTTLE. EDWARD H. FABRICE, Chicago, Ill. Filed Apr. 18, 1932. Serial No. 43,529. Term of patent 7 years.



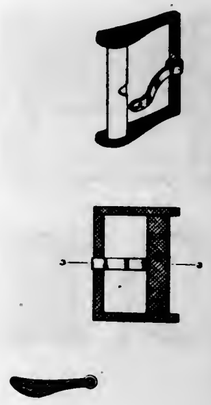
The ornamental design for a bottle as shown.

89,633. ASH TRAY OR THE LIKE. IRVING FLORMAN, New York, N. Y. Filed Aug. 12, 1932. Serial No. 44,585. Term of patent 7 years.



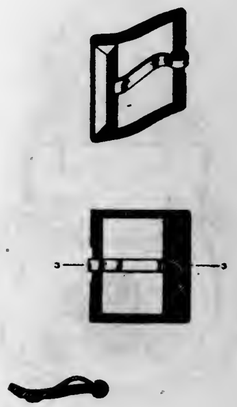
The ornamental design for an ash tray or the like substantially as shown.

89,634. BELT BUCKLE. GEORGE J. FROMM, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 16, 1933. Serial No. 47,227. Term of patent 3½ years.



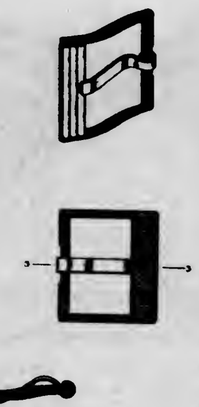
The ornamental design for a belt buckle, as shown and described.

89,635. BELT BUCKLE. GEORGE J. FROMM, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 16, 1933. Serial No. 47,228. Term of patent 3½ years.



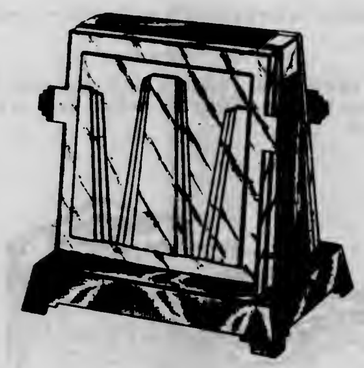
The ornamental design for a belt buckle, as shown and described.

89,636. BELT BUCKLE. GEORGE J. FROMM, Rochester, N. Y., assignor to Hickok Manufacturing Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Feb. 16, 1933. Serial No. 47,229. Term of patent 3½ years.



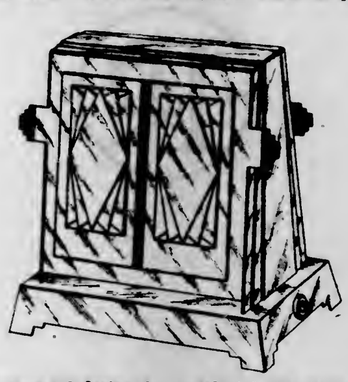
The ornamental design for a belt buckle, as shown and described.

89,637. ELECTRIC TOASTER. JAMES J. GOUGH, Chicago, Ill., assignor to Chicago Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1933. Serial No. 47,058. Term of patent 7 years.



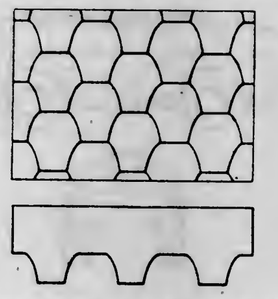
The ornamental design for an electric toaster, substantially as shown.

89,638. ELECTRIC TOASTER. JAMES J. GOUGH, Chicago, Ill., assignor to Chicago Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1933. Serial No. 47,059. Term of patent 7 years.



The ornamental design for an electric toaster, substantially as shown.

89,639. ROOFING. DON B. HUMPHREY, South Bend, Ind., assignor to McHenry-Millhouse Manufacturing Company, South Bend, Ind. Filed Dec. 17, 1932. Serial No. 46,473. Term of patent 14 years.



The ornamental design for roofing as shown.

89,640. TEXTILE FABRIC OR SIMILAR ARTICLE. ADOLPH C. JARGER, Port Chester, N. Y. Filed Dec. 10, 1932. Serial No. 46,428. Term of patent 7 years.



The ornamental design for a textile fabric or similar article substantially as shown and described.

89,641. AUTO-PLATE. DANIEL J. KELLEY, Great Neck, N. Y. Filed Oct. 10, 1932. Serial No. 45,273. Term of patent 3½ years.

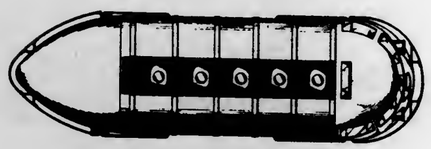


The ornamental design for an auto-plate, as shown.

89,642. MOTOR DRIVEN TANK TRUCK. HOWARD W. KIZER, South Orange, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 20, 1933. Serial No. 46,907. Term of patent 14 years.

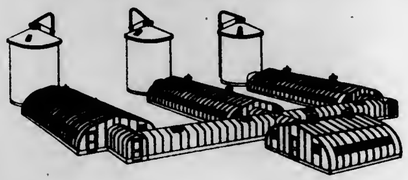






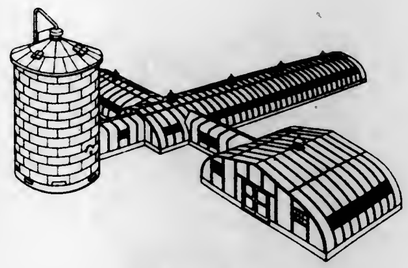
The ornamental design for a motor driven tank truck, as shown.

89,643. FARM BUILDING. FREDERIC J. KREUTZER, Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Original application filed Oct. 17, 1932, Serial No. 45,386. Divided and this application filed Feb. 9, 1933. Serial No. 47,156. Term of patent 7 years.



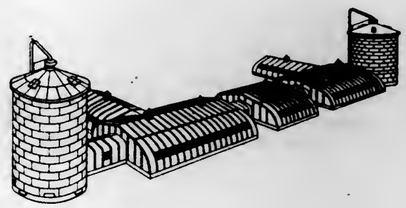
The ornamental design for a farm building substantially as shown.

89,644. FARM BUILDING. FREDERIC J. KREUTZER, Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Original application filed Oct. 17, 1932, Serial No. 45,386. Divided and this application filed Feb. 9, 1933. Serial No. 47,157. Term of patent 7 years.



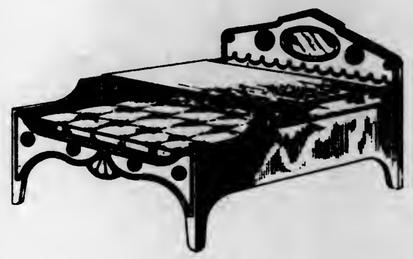
The ornamental design for a farm building substantially as shown.

89,645. FARM BUILDING. FREDERIC J. KREUTZER, Elmira, N. Y., assignor to James Manufacturing Company, Fort Atkinson, Wis., a Corporation of Wisconsin. Original application filed Oct. 17, 1932, Serial No. 45,386. Divided and this application filed Feb. 9, 1933. Serial No. 47,158. Term of patent 7 years.



The ornamental design for a farm building substantially as shown.

89,646. PET'S BED. LOUIS LARSON, Katonah, N. Y. Filed Jan. 25, 1933. Serial No. 46,974. Term of patent 14 years.



The ornamental design for a pet's bed, as shown.

89,647. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM H. MAYER, Jr., New York, N. Y. Filed Feb. 20, 1933. Serial No. 47,269. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

89,648. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1933. Serial No. 47,275. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown, and described.

89,649. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1933. Serial No. 47,276. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown, and described.

89,650. TEXTILE FABRIC OR THE LIKE. GEORGES MEGROZ, Bronxville, N. Y., assignor to The United Piece Dye Works, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1933. Serial No. 47,277. Term of patent 3½ years.



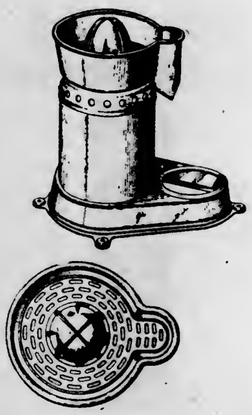
The ornamental design for a textile fabric or the like as shown, and described.

89,651. SMOKER'S STAND. ARTHUR DOUGLAS NASH, Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 11, 1933. Serial No. 47,180. Term of patent 3½ years.



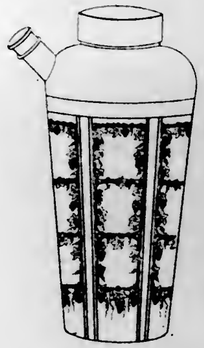
The ornamental design for a smoker's stand as shown.

89,652. ORANGE JUICE EXTRACTOR. EDWARD S. PRESTON, Chicago, Ill., assignor to Chicago Electric Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 9, 1933. Serial No. 46,776. Term of patent 7 years.



The ornamental design for an orange juice extractor, substantially as shown.

89,653. COCKTAIL SHAKER OR THE LIKE. LOUIS W. RICE, New York, N. Y., assignor to Bernard Rice's Sons Incorporated, a Corporation of New York. Filed Oct. 24, 1932. Serial No. 45,538. Term of patent 7 years.



The ornamental design for a cocktail shaker or the like, as shown and described.

89,654. PROTECTOR FOR A NURSING BOTTLE AND NIPPLE THEREOF. JOSEPH SCHNEIDERMAN, Chicago, Ill. Filed Aug. 20, 1932. Serial No. 44,648. Term of patent 3½ years.





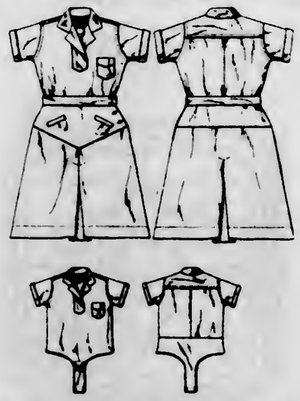
The ornamental design for a protector for a nursing bottle and nipple thereof substantially as shown.

89,655. LAMP SHADE. EUGENE SCHWARZ, Alexandria, Ind., assignor to The Mantle Lamp Company of America, Chicago, Ill., a Corporation of Illinois. Filed Dec. 22, 1932. Serial No. 46,552. Term of patent 3½ years.



The ornamental design for a lamp shade, substantially as shown and described.

89,656. DRESS ENSEMBLE. WALTER A. STRASS, Baltimore, Md. Filed Feb. 21, 1933. Serial No. 47,278. Term of patent 7 years.



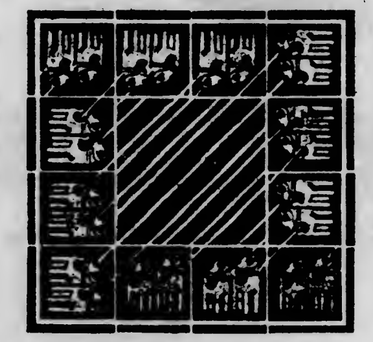
The ornamental design for a dress ensemble, as shown.

89,657. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,131. Term of patent 3½ years.



The ornamental design for a handkerchief substantially as shown.

89,658. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,132. Term of patent 3½ years.



The ornamental design for a handkerchief substantially as shown.

89,659. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,133. Term of patent 3½ years.



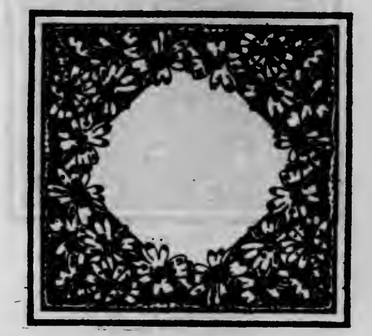
The ornamental design for a handkerchief substantially as shown.

89,660. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,134. Term of patent 3½ years.



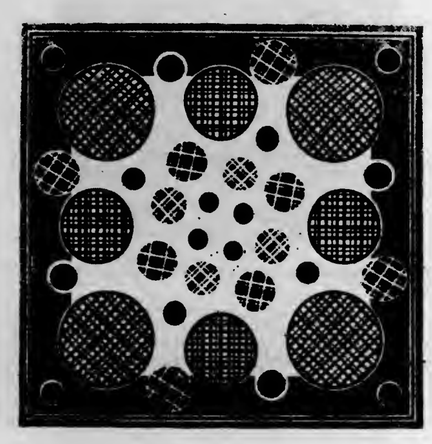
The ornamental design for a handkerchief substantially as shown.

89,661. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,135. Term of patent 3½ years.



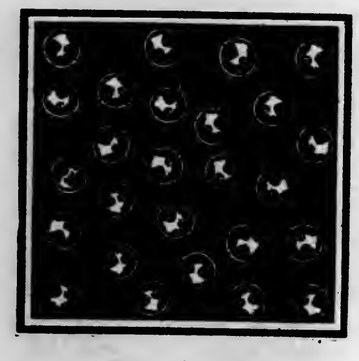
The ornamental design for a handkerchief substantially as shown.

89,662. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,136. Term of patent 3½ years.



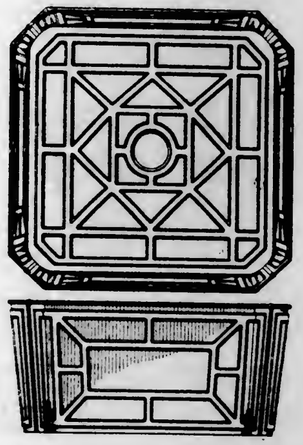
The ornamental design for a handkerchief substantially as shown.

89,663. HANDKERCHIEF. THOMAS W. TANSLEY, New York, N. Y., assignor to Bloch Freres, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1933. Serial No. 47,137. Term of patent 3½ years.



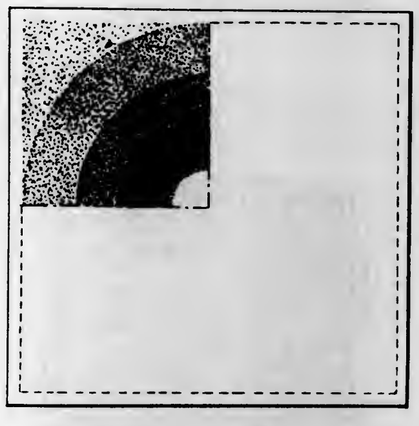
The ornamental design for a handkerchief substantially as shown.

89,664. WASHTUB. FRANK M. VOGAN, Canton, Ohio, assignor to The Reeves Manufacturing Company, Dover, Ohio, a Corporation of Ohio. Filed Feb. 9, 1933. Serial No. 47,155. Term of patent 14 years.



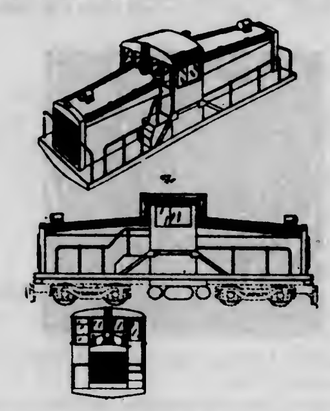
The ornamental design for a wash tub, as shown.

89,665. TEXTILE FABRIC OR SIMILAR ARTICLE. WILLIAM WILLHEIM, New York, N. Y. Filed Sept. 17, 1932. Serial No. 44,912. Term of patent 3½ years.



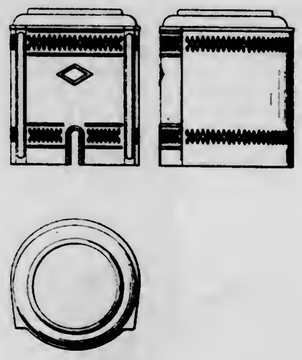
The ornamental design for a textile fabric or similar article as shown and described.

89,666. RAILWAY LOCOMOTIVE. DANIEL B. WORTH, Rochelle, Ill. Filed Jan. 23, 1933. Serial No. 46,940. Term of patent 7 years.



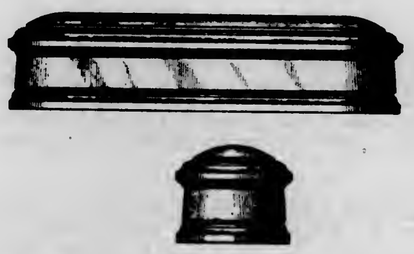
The ornamental design for a railway locomotive, as shown and described.

89,667. OLLA SHELL. MAX ALEX, Alhambra, Calif., assignor to York Water Corporation, Ltd., a Corporation of Nevada. Filed Jan. 24, 1933. Serial No. 46,958. Term of patent 14 years.



The ornamental design for an olla shell, as shown.

89,668. BURIAL CASKET. STEPHEN JUNKUNC, Jr., Chicago, Ill. Filed Oct. 31, 1932. Serial No. 45,672. Term of patent 14 years.



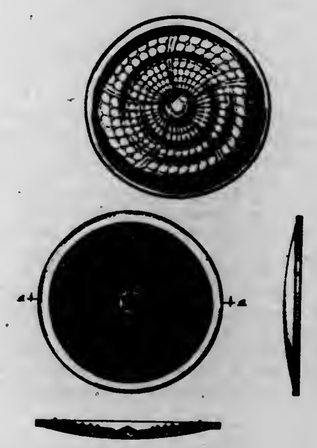
The ornamental design for a burial casket, as shown.

89,669. TEXTILE FABRIC OR THE LIKE. REBECCA SHAPIRO MARANISS, New York, N. Y., assignor to S. Shapiro Co. Inc., New York, N. Y., a Corporation of New York. Filed Mar. 7, 1933. Serial No. 47,413. Term of patent 3½ years.



The ornamental design for a textile fabric or the like as shown.

89,670. GLASS LENS FOR LIGHT REFLECTOR SIGNAL. HERMAN C. REICHHARDT, Evanston, Ill., assignor, by direct and mesne assignments, to Star-Brite Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 31, 1931. Serial No. 42,827. Term of patent 14 years.



The ornamental design for a glass lens for light reflector signal, as shown.

89,671. TEXTILE FABRIC OR SIMILAR ARTICLE. GABRIEL VIRGILS, Long Beach, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Mar. 10, 1933. Serial No. 47,427. Term of patent 3½ years.



The ornamental design for a textile fabric or similar article as shown.

89,672. TEXTILE FABRIC OR THE LIKE. MICHEL BRODSKY, Paris, France, assignor to Cheney Brothers, New York, N. Y., a Corporation of Connecticut. Filed Jan. 25, 1933. Serial No. 46,965. Term of patent 3½ years.



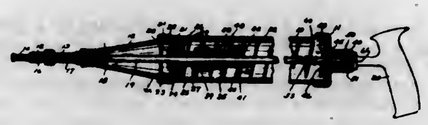
The ornamental design for a textile fabric or the like as shown and described.

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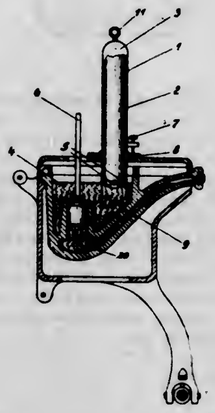
GRANTED APRIL 18, 1933

1,903,750. GREASE GUN. ROLLIN L. BACHER, Lakewood, and PAUL I. SCHULTZ, Cleveland, Ohio, assignors to The United States Air Compressor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 15, 1932. Serial No. 598,944. 12 Claims. (Cl. 221—47.3.)



1. In a lubricant dispensing device, the combination of a storage chamber, pumping means at the forward end of the chamber, a rod for operating the pumping means, a follower slidable upon the rod, a latch associated with the follower, and means for locking the latch at the rear end of the cylinder, means operable to release the latch solely by the movement of the rod with reference to the chamber.

1,903,751. DEVICE FOR FEEDING THE CASTING POTS OF LINOTYPE AND SIMILAR MACHINES WORKING WITH SOFT METALS. KASPAR BADER, Berlin-Grunewald, Germany. Filed June 11, 1931, Serial No. 543,704, and in Germany May 6, 1930. 7 Claims. (Cl. 22—80.)



1. A device for feeding molten metal to linotype machines and the like, comprising the combination with a pot for the molten metal, of a supply reservoir carried by said pot and extending into and above a predetermined molten metal level in said pot and closed airtight above said level and having an air inlet opening at said level.

1,903,752. AIRPLANE. VINCENT BELIZZI, Bronx, N. Y. Filed Apr. 2, 1931. Serial No. 527,287. 5 Claims. (Cl. 244—12.)

1. In an airplane, the combination with a fuselage, of a pivoted wing thereon, an engine for the plane, an air compressor connected to the engine, an air cylinder and piston, the piston connected to the wing, connections between the air compressor and the air cylinder and means for relieving the pressure in the air cylinder when the latter controls the opening of the wing.



1,903,753. CUTTER MECHANISM FOR MOWING MACHINES. DENNIS H. BENNETT, Dorr, Mich., assignor of one-third to Dean Halford and one-third to Walter E. Ihling, Kalamazoo, Mich. Filed Sept. 28, 1932. Serial No. 635,146. 14 Claims. (Cl. 56—300.)

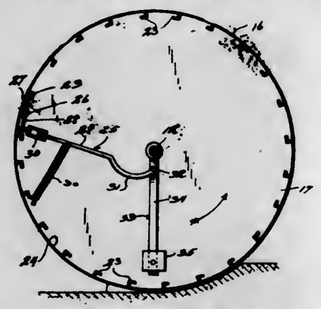


1. A mowing machine of the class described, including an endwise reciprocating cutter bar carrying a series of wide, thin, transversely projecting blades, each blade comprising a forwardly projecting cutter portion having oppositely slanting cutting edges and a body portion having side edges that are forwardly tapered and wedge fitted from the rear through a correspondingly tapered transverse socket in the cutter bar, the parts being so proportioned that if displaced rearwardly, the blades will creep forward under normal cutting stresses, in combination with fixed guides for the cutter bar and a fixed safety bar extending along the rear of all of the blades, but spaced rearwardly therefrom so as to permit only limited rearward movement of each blade in its socket, if and when forced rearwardly during operation of the machine.

1,903,754. SELF-CLEANING FISH GATE. JOHN P. DOYLE, Lolo, Mont. Filed Dec. 30, 1930. Serial No. 505,616. 4 Claims. (Cl. 210—178.)

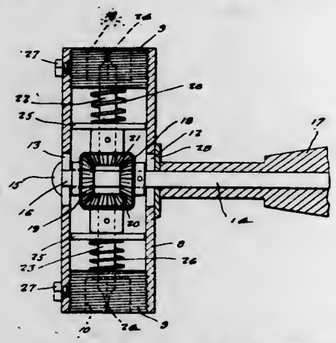
2. A self-cleaning gate of the character described, comprising a rotatable screen structure, a rockable cleaning member carried by said screen structure and operating means for said cleaning member actuated by rotation of

said screen structure, said operating means comprising a weighted member, means for connecting said weighted member to said cleaning member and resilient means en-



gaging said connecting means whereby to rock said cleaning member into inoperative position during one cycle of the rotation thereof.

1,903,755. AUTOMOTIVE TOOL. GEORGE F. FAGAN, Pueblo, Colo. Filed Nov. 29, 1932. Serial No. 644,904. 4 Claims. (Cl. 81—56.)



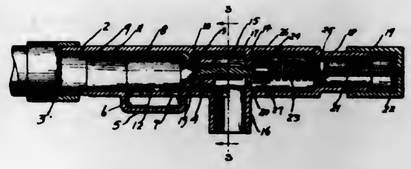
3. A combination tool of the class described comprising an elongated open ended cylinder formed intermediate its ends with diametrically opposed elongated slots, socket wrench elements plugged into the opposite ends of said cylinder, said elements being formed with bearing holes, a pair of longitudinally alined screw drivers located in the cylinder and having their intermediate portions mounted for rotation in the bearing holes of said wrench elements with the bladed ends projecting into the socket portions of said elements, extensible coil springs surrounding said screw drivers to permit the desired receding and projecting action thereof, a rotary operating shaft disposed at right angles to said cylinder and mounted for sliding and rotation in said slots, and operatively connected to the inner adjacent ends of said screw drivers.

1,903,756. EXPANSION JOINT FOR CONCRETE ROADS. ALBERT C. FISCHER, Chicago, Ill., assignor, by mesne assignments, to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed Sept. 4, 1924. Serial No. 735,927. Renewed Mar. 20, 1931. 13 Claims. (Cl. 94—18.)



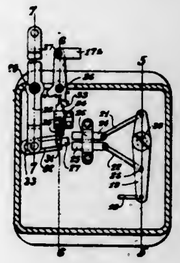
1. An expansion joint strip comprising a body of bituminous composition provided with separable thin reenforcing strips embedded in the surface of the bituminous body.

1,903,757. FAUCET STRUCTURE. PABLO VILAR FLORIDO, Annapolis, Md. Filed Mar. 14, 1932. Serial No. 598,826. 14 Claims. (Cl. 251—137.)



9. In a self-closing faucet, the combination of a casing having a valve chamber therein, primary inlet and outlet ports in said casing, a well formed integral with the casing, secondary inlet and outlet ports in the portion of the casing contiguous to the well, and a movable valve member adapted to simultaneously open or close the outlet ports and the secondary inlet port.

1,903,758. GEAR-SHIFTING MECHANISM. KENNETH W. GARKILL, Cleveland, Ohio. Filed June 19, 1931. Serial No. 545,573. 8 Claims. (Cl. 74—58.)

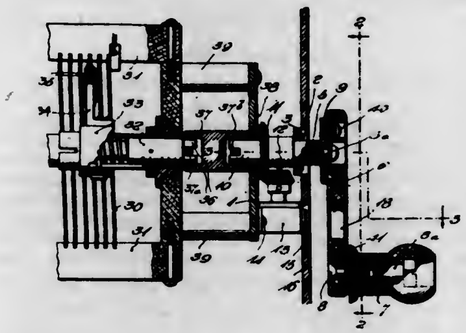


1. In a device of the class described, the combination of an engine, a shaft adapted to be driven thereby, a clutch connection and gear transmission between said engine and shaft, means operatively connected to said gear transmission for effecting change in the gear ratio, said means being capable of lateral adjustment according to and preparatory to the change desired in the gear ratio, cam means operatable through a fixed plane for effecting said lateral adjustment, mechanical means operatively connected to the clutch control for transmitting energy from the clutch control to said first-named means, adjustable means for establishing proper control connections according to the gear ratio desired and for simultaneously actuating said cam means for effecting adjustment of said first-named means laterally in one direction in accordance with the adjustment of said adjustable means, and means for automatically effecting lateral adjustment of said first-named means in the opposite direction.

1,903,759. CONTROL APPARATUS. LOUIS A. GEBHARD, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,721. 3 Claims. (Cl. 116—124.3.)

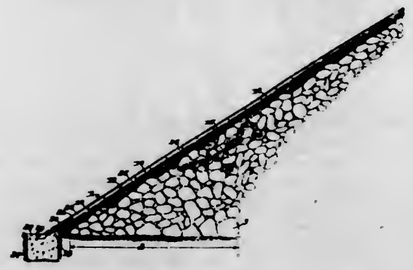
1. In control apparatus for a high frequency signaling system, a rotary shaft for varying the effective impedance of said signaling system, a panel structure through which said shaft projects, a mechanical counter driven by said shaft and having calibrated drums movable by units for each revolution of said rotary shaft member, a crank formed of insulating material with a driving knob thereon, connecting means between said crank and the projecting

end of said rotary shaft member, said panel structure being apertured within the circle described by the outer end of said crank for displaying the indications of said



counter, said crank being apertured in alignment with said mechanical counter for observing the readings of said mechanical counter therethrough.

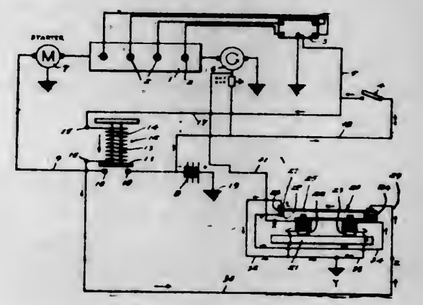
1,903,760. DAM AND METHOD OF MAKING SAME. JAMES B. GIRAND, Phoenix, Ariz. Filed Feb. 25, 1931. Serial No. 518,230. 12 Claims. (Cl. 61—30.)



1. A dam comprising a rock fill base, a water tight diaphragm spaced from the face of the rock fill base, and an interposed mobile stratum of loose-free-moving elements resting on the rock fill base and supporting the diaphragm, being capable of flowing into a depression in the rock fill base and thus maintaining the support of the diaphragm.

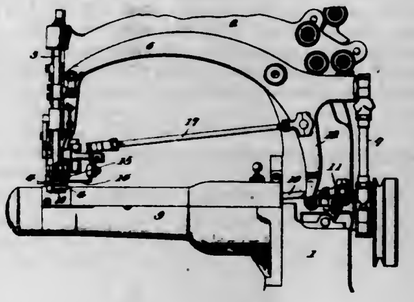
1,903,761. AUTOMATIC ELECTRIC STARTER FOR INTERNAL COMBUSTION ENGINES. FRANK GUETTNER, Jr., Shiner, Tex. Filed Apr. 14, 1931. Serial No. 530,064. 4 Claims. (Cl. 290—37.)

1. In an internal combustion engine starting system, a starting motor, a generator, a storage battery, an electrical connection between the battery and the motor, an ignition switch connected at one side with the battery, a normally open switch including a contact bridging arm controlling the electrical connection of the battery with the motor, an electromagnet including a coil and an armature having a core extending through the coil and carrying said arm and having one side of the coil thereof connected with the dead side of the ignition switch and having the other side grounded, a resistance coil, means interposed between the said other side of the first coil and the ground, actuated by the current from the generator, for connecting said resistance coil in series with said first mentioned coil, to reduce the flow of current through the latter to a point where it becomes ineffective to maintain the second mentioned switch closed, and means actuated by current from the generator for operating said connecting means, said resistance coil constituting the coil of an



electromagnet which when energized maintains said means operative after the discontinuance of the flow of current from the generator.

1,903,762. FEEDING MECHANISM FOR SEWING MACHINES. NATHAN E. HANSON, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1931. Serial No. 566,537. 14 Claims. (Cl. 112—208.)

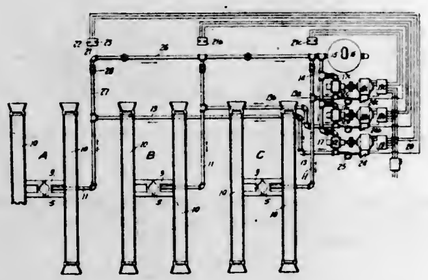


1. A feeding mechanism for sewing machines comprising a main feed dog, an auxiliary feed dog, means for supporting and raising and lowering said feed dogs, means for imparting feeding movements to said feed dogs including a rotating shaft, an eccentrically disposed member carried thereby, means operated by said eccentrically disposed member for imparting feed movements to one of said feed dogs, a device carried by said eccentric member and receiving movements therefrom, and means operated by said device for imparting feeding movements to the other feed dog, said device being disposed eccentrically on said eccentrically disposed member whereby a differential movement is imparted to the feed dog operated thereby.

1,903,763. HYDRAULIC LIFTING MECHANISM. ION VON KERT HOTT, Dayton, Ohio, assignor to The Joyce-Cridland Company, Dayton, Ohio, a Corporation of Ohio. Filed July 15, 1930. Serial No. 468,109. 2 Claims. (Cl. 188—9.)

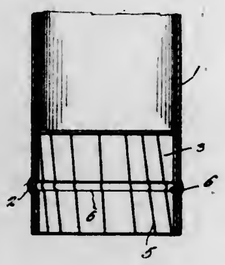
1. In a mechanism of the character described, a plurality of hydraulic lifting mechanisms each comprising a cyl-

inder, a piston, and means carried by said piston to receive and support an automobile; a separate pump connected with the cylinder of each lifting mechanism, said pumps being grouped at a point remote from said lifting mechanism and having their intakes connected with a common supply reservoir, check valves interposed between said intakes and said reservoir, a return pipe connected with the cylinder of each lifting mechanism, a check valve interposed between said return pipe and each cylinder, means arranged adjacent to the respective lift-



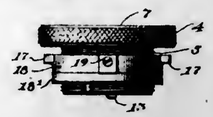
ing mechanisms and under the control of the operator for separately actuating said check valves to permit the escape of fluid from said cylinders, a separate motor connected with each pump, manually operated means arranged adjacent to the respective lifting mechanisms to control the starting and stopping of said motors, and pressure operated switches associated with the respective motors and connected with the cylinders of the corresponding lifting mechanisms and adapted to be operated by excess pressure in said cylinders to interrupt the operation of the respective motors.

1,903,764. ICE CREAM OR CONFECTION CONTAINER. JAMES EARL HOGUE, Hot Springs, Ark. Filed Sept. 2, 1931. Serial No. 560,822. 2 Claims. (Cl. 206—56.)



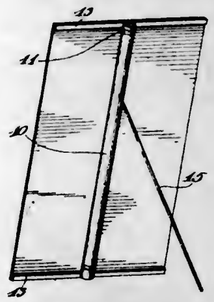
1. A container of the class described comprising a hollow body having its ends opened with an interior annular groove in each end part, a pair of cup-shaped caps provided with flexible flanges fitting in the ends of the container with their open ends outermost, each cap having an exterior annular rib on its flange, formed by an interior annular groove in the flange, for engaging a groove in the container, the flexibility of the flange enabling a cap to be pushed into the container to cause the contents thereof to force the other cap from the container, after which the contents will be forced from the container.

1,903,765. CLOSURE AND LOCK. ALFRED JOHNSON, Uniontown, Pa. Filed Oct. 10, 1930. Serial No. 487,850. 2 Claims. (Cl. 70—90.)



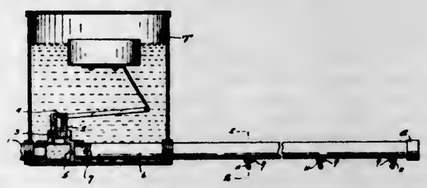
1. A lockable closure for tanks, including a threaded plug section, a cap section having a hub portion disposed on the interior of said plug section, a reciprocably mounted bolt on said cap section adapted to engage said plug, a lock cylinder mounted on the interior of the hub portion of the cap for controlling the operation of the bolt, and a plate in engagement with the lower end of the plug and fixedly secured to the lock cylinder, whereby said cap section is swivelly connected to said plug section.

1,903,766. POSTER SUPPORT. WILBERT R. JOHNS, Chicago, Ill. Filed Dec. 10, 1931. Serial No. 580,060. 4 Claims. (Cl. 40—125.)



1. A display poster comprising a sheet, buttons at the end portions thereof and projecting from the rear side, and a tube applied to the latter and formed with openings at its end portions to receive the buttons, one of the openings being an open slot by way of which the corresponding end of the tube straddles the neck of the related button, and the other opening being of a size for the passage of the button head and extended laterally with a narrow portion terminating with an offset to receive the button neck and lock the button from separation from the tube.

1,903,767. DRINKING FOUNTAIN FOR POULTRY. HENRY C. KARST, Sonoma, Calif. Filed Feb. 21, 1931. Serial No. 517,584. 1 Claim. (Cl. 119—80.)



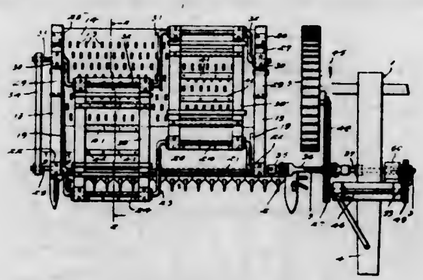
A poultry drinking fountain comprising a tank having two alined openings each in an opposite wall thereof, an inlet pipe extending through one opening and directed toward the opposite opening, a second pipe having an opening within the tank extending through the second opening and directed toward the first pipe in alinement therewith and having downward directed openings in that portion of the pipe extending outwardly of the tank, a

junction member connecting the adjoining ends of both pipes and securing the same within the tank, a float operated valve in the junction member for controlling the flow of water through the first named pipe, nipples in the second named pipe mounted in the openings, and valves mounted in said nipples and extending below the nipples for engagement by the beak of a fowl.

1,903,768. WOOD FILLER AND RELATED MATERIALS. PAUL S. KENNEDY, Newark, N. J., assignor to Murphy Varnish Company, Newark, N. J., a Corporation of New Jersey. Filed Nov. 12, 1929. Serial No. 406,723. 1 Claim. (Cl. 91—68.)

A wood article carrying a filling coating composition consisting of a polyhydric alcohol-polybasic acid-oil acids resin, a wood filler, and a cellulose ester overcoat.

1,903,769. SEED GATHERER FOR MOWING MACHINES. CURRIE KING, Rutherford, Tenn. Filed Mar. 22, 1932. Serial No. 600,488. 12 Claims. (Cl. 56—19.)



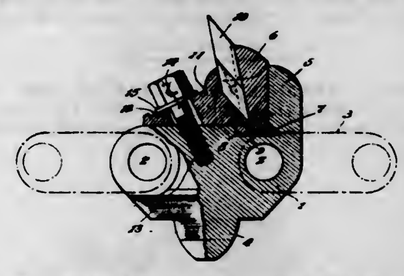
1. A seed gathering attachment for a mowing machine having a cutter bar, comprising a pan having a rearwardly upwardly inclined top, means for coupling the pan with the cutter bar, a beater frame, means for rotating said beater frame to pass over the apertured top of the seed pan, hinged supporting means for said beater frame whereby the same may be raised at one end a substantial distance above the seed pan to facilitate removal of the seeds therefrom, and means for establishing a driving connection between the beater frame operating means and a wheel of the mower.

1,903,770. PROCESS FOR PREPARATION OF A PRODUCT CONTAINING ALL OPIUM ALKALOIDS. THORVALD BERNHART AAGAARD and BJARNE SAMDAHL, Oslo, and FRANTZ PHILIP HOPSTOCK, Krager, Norway, assignors to A/S Farmakon, Krager, Norway. Filed Apr. 11, 1930, Serial No. 443,608, and in Norway Apr. 17, 1929. 3 Claims. (Cl. 87—28.)

1. The process of separating morphine and other alkaloids from opium comprising, carefully extracting crude opium with petroleum ether, liberating the alkaloids from the extracted crude material by treating the same with an alkaline material, drying the mass containing the liberated alkaloids, dissolving the alkaloids in a mixture of solvents composed of a halogenated hydrocarbon and an aliphatic alcohol, precipitating the morphine from the solution by adding water thereto, separating the remaining alkaloids from the solution by evaporating the same to dryness, and extracting the residue with ether.

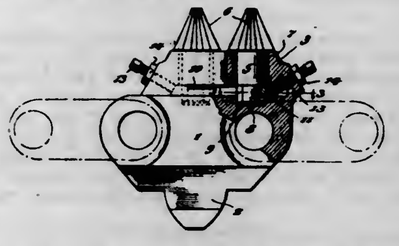
1,903,771. CUTTER-CHAIN BLOCK. NEWTON K. BOWMAN, Bowdil, Ohio. Filed June 10, 1932. Serial No. 616,535. 6 Claims. (Cl. 262—33.)

1. A bit block for cutter chains comprising a link body having a threaded opening therein disposed at an angle to the vertical axis of said body, a bit carried by the link body, a clamping member engaging the bit and having an opening therein registering with but of greater diameter



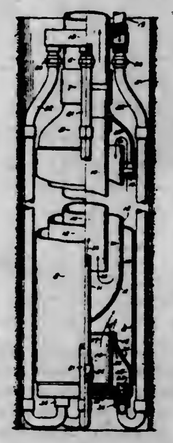
than the threaded opening, and a clamping screw extending through the opening in the clamping member and engaging the threads of the opening in the link body.

1,903,772. CORE-BREAKER. NEWTON K. BOWMAN, Bowdil, Ohio. Filed June 10, 1932. Serial No. 616,536. 6 Claims. (Cl. 262—33.)



3. A core-breaker including a link body having a reinforcing boss extending from one face thereof and provided with spaced sockets disposed one in advance of and offset with respect to the other, there being clean-out openings communicating with the sockets near the lower ends thereof, and core-chipping burrs mounted for rotation in said sockets.

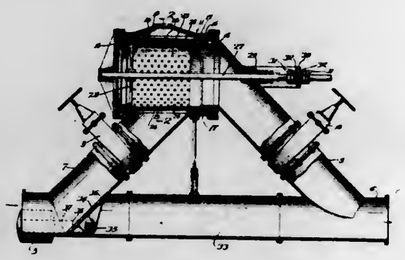
1,903,773. SIPHONIC AIR-LIFT TRAP. WALTER R. BRANDAU, Los Angeles, Calif. Filed Jan. 16, 1932. Serial No. 587,077. 10 Claims. (Cl. 103—261.)



1. A device of the character described, comprising; an intake nozzle; a surface above the inner end of said nozzle adapted to deflect a flow impinging thereagainst; a

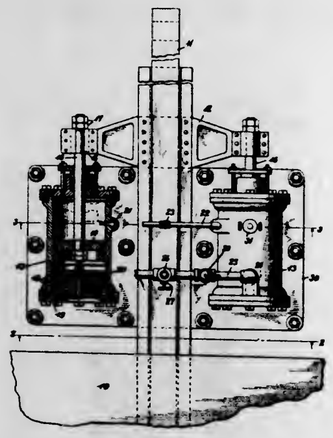
narrow annular passage surrounding the inner end of said nozzle whereby an annular jet may be caused, to draw liquid into the device through said nozzle, and to impinge upon said liquid after it has been deflected by said surface; and means for discharging the liquid from said device.

1,903,774. SCREENER EQUIPPED PIPE LINE. BENJAMIN S. BUARELL, East Chicago, Ind. Filed June 17, 1931. Serial No. 545,126. 6 Claims. (Cl. 210—166.)



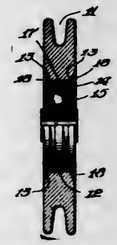
1. A fluid course having means therein for conditioning the fluid, a by-pass around said means, and a valve normally closing said by-pass to the flow of fluid therethrough and so positioned that the fluid sweeps against it in flowing to said means for keeping the face of the valve clean and operating automatically to open said by-pass for by-passing the fluid around said first-named means upon the building up of a predetermined back pressure in the portion of the course leading to said first-named means.

1,903,775. AIR SPRING AND CUSHION. FRANK E. CHRISTOPHER, Morgantown, W. Va. Filed July 21, 1931. Serial No. 552,264. 6 Claims. (Cl. 267—1.)



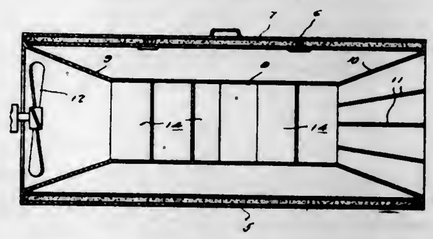
1. An air spring comprising, in combination, a structure to be reciprocated at different speeds in alternate directions, a reciprocating member secured to said structure, a cylinder closed at one end and having a port opening to the atmosphere at a point distant from said end, a piston reciprocable in said cylinder to uncover said port upon recoil from said closed end, means to connect said piston to said reciprocating member and means to vary the clearance of the piston from said closed end.

1,903,776. METHOD OF SECURING A BEARING WITHIN A PULLEY. GEORGE H. CLARK and JOHN L. DETERS, Cincinnati, Ohio, assignors to The Formica Insulation Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 9, 1931. Serial No. 514,640. 3 Claims. (Cl. 29—159.)



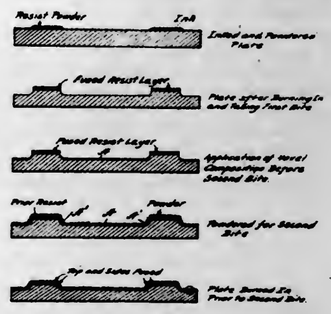
3. A method for securing a cylindrical core to an annular disk, comprising forming a groove in the peripheral edge portion of said core, introducing a metal tube about said core, rolling the metal of the tube into said groove, and spinning the outer edge of the tube against said disk.

1,903,777. AIR REFRIGERATING DEVICE. GEORGE WILLIAM COIN, Manhattan, Kans. Filed May 12, 1932. Serial No. 610,944. 2 Claims. (Cl. 257—202.)



2. An air refrigerating device of the class described comprising a casing including four insulated walls, a tube inside the walls and spaced inwardly therefrom, said tube being formed with outwardly flared ends fixed to the ends of the walls, a plurality of horisontal and vertical partitions in one of the flared ends, a plurality of baffles in the tube.

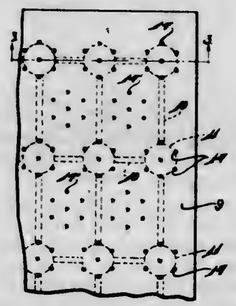
1,903,778. ETCHING PROCESS AND COMPOSITION FOR USE THEREIN. MARCUS F. CONROY, Luzerne, Pa., assignor of one-half to Luzerne Motor Company, Luzerne, Pa., a Copartnership consisting of Leo B. Corgan, William F. Corgan, and Michael H. Corgan. Filed Sept. 8, 1930. Serial No. 480,614. 14 Claims. (Cl. 41—48.)



1. The process of etching a printing plate or flat, which includes the step of applying a material to said plate after

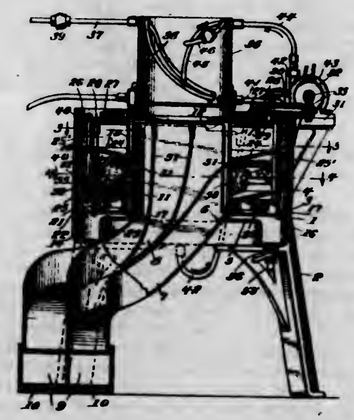
the initial etching to prevent a subsequently applied resist composition from adhering to those portions of said plate which are to be further etched, said material also being adapted to be removed during such subsequent etching.

1,903,779. GRATE. ARTHUR D. CRONIN, Detroit, Mich., assignor to Combustion Machinery Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 28, 1931. Serial No. 511,823. 3 Claims. (Cl. 126—163.)



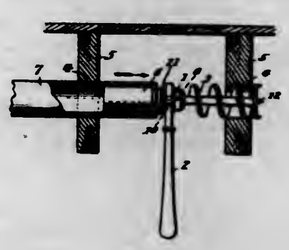
1. A grate of the class described, comprising: a plate; a plurality of tubes projecting downwardly from the undersurface of said plate; reinforcing ribs projecting downwardly from the undersurface of said plate and extending between and connecting to said tubes, said plate having a plurality of openings formed therethrough communicating with each of said tubes.

1,903,780. DISHWASHING MACHINE. PAUL DE ASIS, Burbank, Calif. Filed July 29, 1932. Serial No. 625,881. 4 Claims. (Cl. 15—74.)



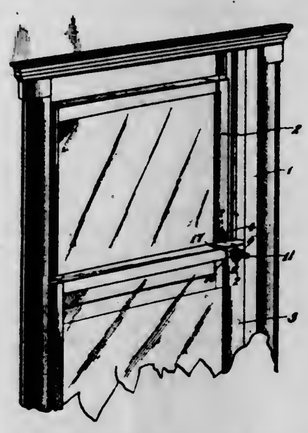
1. A dish washing machine comprising a casing having a washing chamber, a revolving supporting structure in said chamber to rotate about a vertical axis, a power means for rotating the supporting structure, upper and lower plates carried by the supporting structure, means for delivering cups to the upper plate, means for delivering plates to the lower plate, delivery chutes communicative with said upper and lower plates, means for deflecting the cups and dishes from their respective plates into said chutes, and means for spraying the cups and dishes while carried by the plates.

1,903,781. RATCHET GUIDE AND SUPPORT. HARRY T. EISELE, West Dover, Ohio. Filed Apr. 24, 1931. Serial No. 532,663. 1 Claim. (Cl. 145—129.)



In a means for guiding and holding a ratchet tool, a plurality of telescoping sleeve members, each provided at its forward end with a peripheral flange adapted to abut the peripheral edge of the next encircling sleeve, said flanges being stepped with relation to one another when the sleeve members are assembled and limiting the movement of the respective sleeves in one direction, a cylindrical shank fitting snugly in the inner telescoping sleeve member provided with a squared tool engaging outer end portion adapted to project beyond the forward end of the last mentioned sleeve, said squared end portion terminating in a spur, and a circumferential flange formed integral with said shank at the junction of the squared portion with the body of said shank, said latter flange being adapted to abut the forward peripheral edge of the inner sleeve to limit movement of said shank in one direction and also complete the stepped sequence of the aforesaid flanges.

1,903,782. COMBINED WINDOW VENTILATOR AND SASH FASTENER. ADOLF G. EYRING, Pittsburgh, Pa. Filed Aug. 13, 1931. Serial No. 556,885. 1 Claim. (Cl. 292—340.)



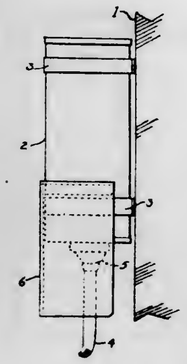
A window having a frame and upper and lower sashes slidable vertically in said frame, a latch in an upper corner portion of the lower sash having a plunger extending through the sash, a series of independent sockets embedded in the upper sash and each having its outer end open and provided with a circumferential substantially elliptical shaped end plate countersunk in the face of the upper sash and disposed in longitudinal alinement with the end plates of adjacent sockets, each end plate having its major axis extending in the direction of the length of said upper sash and inclined inwardly from each end thereof towards the adjacent socket, each socket

being provided with a head formed with a central opening, the plunger being of uniform cross sectional diameter throughout its entire length and adapted to successively enter the sockets and bear snugly against the interior walls thereof, a pad bearing against the head of each socket, and fastening devices passing through the pads and openings in the heads to secure the sockets and pads in place, each pad having a marginal flange projecting towards the open end of the adjacent socket beyond the fastening device and serving to prevent the plunger from striking the fastening devices when successively moved into the sockets to secure the upper sash in an adjusted position.

1,903,783. PRODUCTION AND APPLICATION OF LAYERS SENSITIVE TO LIGHT. WALTER FRANKENBURGER and GEORG ROESSLER, Ludwigshafen-on-the-Rhine, Germany, assignors to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Jan. 11, 1930, Serial No. 420,278, and in Germany Jan. 22, 1929. 13 Claims. (Cl. 95—2.)

1. The process for the production and application of layers sensitive to light, which comprises incorporating a plurality of portions of a liquefied organic colloidal substance, each with a light-sensitive silver halide which is differently and particularly sensitive to the different rays of light for each portion of the colloidal substance, thus forming a plurality of photographic emulsions, incorporating each of the said photographic emulsions with a different, finely divided water-insoluble colouring matter indifferent to light and practically inert to the said silver halide, dispersing each of the said photographic emulsions separately into fine globular particles and spreading the resulting globules to form an inhomogeneous light-sensitive layer onto a substratum having a superficial layer which is sticky with respect to the said globules.

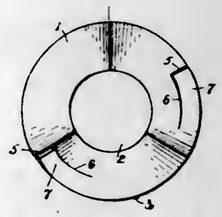
1,903,784. SHIELD FOR IGNITION COILS. BARNWELL R. KING, Kalamazoo, Mich. Filed May 25, 1931. Serial No. 539,978. 9 Claims. (Cl. 175—357.)



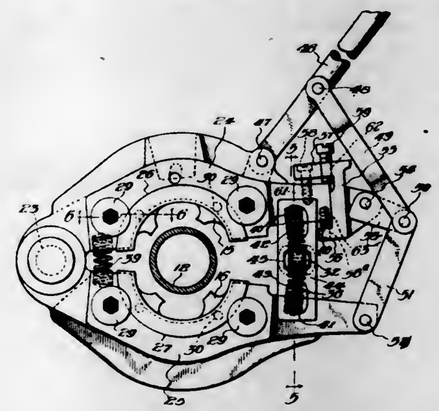
8. An ignition coil shield comprising a resilient split ring of metal, and a split skirt of rubber vulcanized thereon, the ring being disposed near one end of the skirt.

1,903,785. METHOD OF MANUFACTURING LOCK WASHERS. NICHOLAS RICHARD LILLIG, Portland, Oreg., assignor to Tice Lock-Washer Manufacturing Co., Portland, Oreg., a Corporation of Oregon. Filed May 21, 1931. Serial No. 539,099. 7 Claims. (Cl. 10—86.)

1. The method of manufacturing lock washers which consists in taking an annealed sheet metal blank of substantially uniform gauge and cutting therefrom a metal blank having a central bolt hole surrounded by an annular body of uniform thickness and of a definite overall diameter, forming undulations in said body without substantially changing the overall diameter of the blank or that of the hole and thereby "stretching" the metal of the blank in an annular direction.



1,903,786. DIE HOLDING MEANS. TIDEMAN M. LILLEBERG, Chicago, Ill., assignor to The Nye Tool & Machine Works, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1928. Serial No. 286,955. 15 Claims. (10—100.)

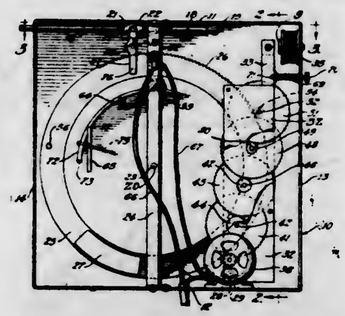


1. A holder for a sectional die comprising a support, a pair of upper and lower die-section-holding levers pivoted at one end to said support, an abutment on said support adjacent the other end of said pair of levers and located between the latter, springs bearing against said abutment and said levers, respectively, and yieldingly forcing said levers to die-open position, stop means for each of said levers limiting the upward movement of the upper one of said levers and the downward movement of the other of said levers, and lever mechanism having an actuating element fulcrumed on one of said die-holding levers, operatively engaging the other of said die-holding levers and by which said die-holding levers may be moved to die-closed position and be locked in such position.

1,903,787. PAPER PRODUCT AND PROCESS OF MAKING SAME. WILLIAM C. LODGE, Montreal, Quebec, Canada, assignor to Manson Chemical Company, a Corporation of New Jersey. Filed Sept. 28, 1929. Serial No. 396,006. 18 Claims. (Cl. 92—21.)

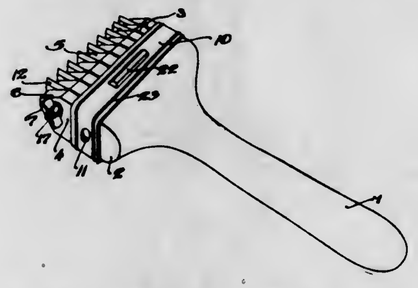
1. Paper material containing wax and starch deposited from a starch emulsion of the wax.

1,903,788. GAS WATER HEATER CONTROL. FRED CARL LORENZ, Chicago, Ill. Filed Apr. 1, 1931. Serial No. 527,005. 8 Claims. (Cl. 161—7.)



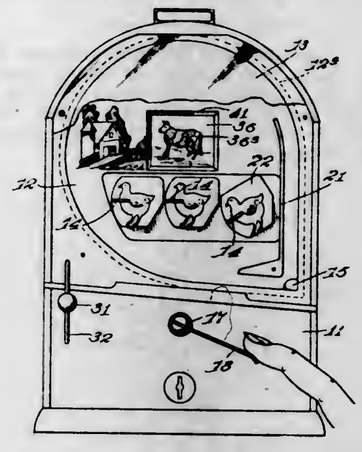
1. In combination an automatically closing pilot light valve including a movable element, a feed line valve of a gas heater burner, a device for opening the pilot light valve, and the burner feed valve and shutting off the burner feed valve after a predetermined length of time, said device comprising a motor, a speed reducing gear train operable by said motor, a pivotal supporting structure for said gear train, a rotatable shaft controlling said burner feed valve, a counterweighted disc fast to said shaft, gear teeth on an arc of the periphery of said disc and said teeth meshing with one of the elements of said gear train when said valves are closed to prevent rotation of said disc, a cam on said disc, electro-magnetic means for attracting said supporting structure to throw said element of said gear train out of mesh with said teeth to permit rotation of said disc and shaft in one direction to open said burner feed valve, a member on said disc engaging said movable element at the beginning of said rotation of said disc to open said pilot light valve, means for meshing said element of said gear train and said disc teeth when said electro-magnetic means are in open circuit position, circuit closing means co-acting with said cam to close circuit to said motor after circuit to said electromagnetic means is opened, and said gear train meshed with said disc teeth, whereby to rotate said disc and cam in the opposite direction, to close said burner feed valve by rotation of said shaft.

1,903,789. MEAT CUTTER. FRANK H. MICHAELS, Dishman, Wash. Filed Feb. 29, 1932. Serial No. 595,827. 1 Claim. (Cl. 17—30.)



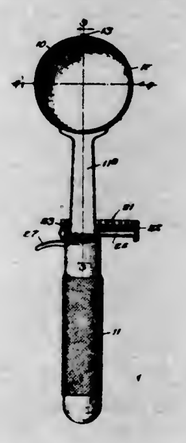
In a duplex-multi-blade, meat cutter, the combination with a head having oppositely disposed gage-faces with differing degrees of angularity, and said head having spaced kerfs forming tongues on the head, of a plurality of cutting blades mounted in the kerfs for co-action with the gage faces, and a fastening bolt passed through holes in said tongues and blades.

1,903,790. GAME APPARATUS. LOUIS MYERS, Chicago, Ill. Filed Sept. 25, 1931. Serial No. 565,167. 4 Claims. (Cl. 273—122.)



1. A device of the character described, including; a target movable from locking position to unlocking position; a shot; means for projecting the shot toward the target, said target adapted to be moved to unlocking position by impact of the shot; a member movable from set to released position; means yieldingly urging the movable member to released position; and a connection between the target and the movable member holding the latter in set position when the target is in locking position, said connection adapted to be released by movement of the target to unlocking position.

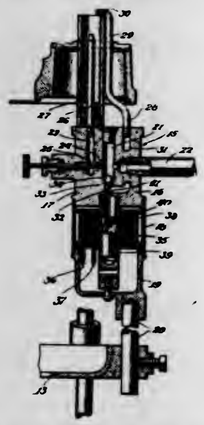
1,903,791. ICE CREAM LADLE. LOUIS MYERS, Chicago, Ill. Filed Apr. 2, 1932. Serial No. 602,799. 5 Claims. (Cl. 107—48.)



1. A ladle, including; a bowl; a handle attached to the bowl, including a cylindrical portion and a flattened bridging member; a bearing on the underside of the bridging member; a scraper swingably mounted in the bowl; a scraper-operating shaft rotatably mounted on the handle and extending through the bearing on the underside of the bridging member; a gear on said shaft; a spiral spring surrounding said shaft with one end attached to said gear; a spring tension adjusting nut on said shaft adjacent the bearing on the bridging member, said nut being

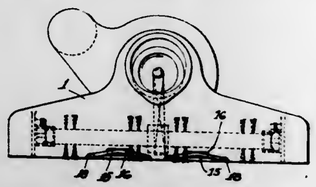
attached to the other end of said spring; means for retaining the spring tension adjusting nut in its adjusted position; and a transversely arranged reciprocable rack bar carried by the handle and engaging said gear.

1,903,792. GAS IGNITION DEVICE. STANLEY PERRY, Chicago, Ill., assignor to Automatic Burner Corporation, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 21, 1929, Serial No. 333,832. Divided and this application filed Jan. 26, 1931. Serial No. 511,430. 2 Claims. (Cl. 158—115.)



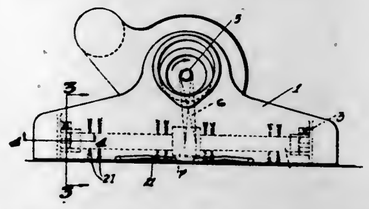
2. In a gas ignition device, a body having a chamber adapted for communication with a source of gas supply, a pilot member extending from said body and communicating with said chamber, a flare jet coacting with the pilot member, said body having a passageway extending downwardly from the base of said chamber and thence upwardly to the flare jet, a ball valve in the base of said chamber normally closing the last mentioned passageway, a sleeve depending from the body, a core within the sleeve and connected to said ball valve, and an electro-magnetic winding surrounding the sleeve and coacting with the core whereby the ball valve may be raised and lowered with respect to its seat to enable gas to pass from said chamber to the flare jet.

1,903,793. VACUUM CLEANER BRUSH GUARD AND ADJUSTING ROLL ASSEMBLY. LEON W. RICHARDSON and ALLEN D. WASSALL, Worcester, Mass., assignors to Sweeper-Vac Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 8, 1931. Serial No. 542,870. 4 Claims. (Cl. 15—8.)



1. The combination of a suction nozzle providing a suction opening with end openings wider than said suction opening, walls between the suction opening and the end openings, recesses provided in said walls outside the area of said suction opening for the reception of bearings, a rod rotatably mounted in said bearings adjacent one longitudinal edge of said suction opening and externally thereof, arms rigidly mounted on said rod adjacent opposite ends thereof, wheels rotatably mounted on the ends of said arms within said end openings, said rod having an offset formed thereon, a screw pivotally connected to said offset, a nut engaging said screw, and a lug formed on said nozzle and engageable by said nut to hold said rod against rotation and limit movement of said wheels in said end openings.

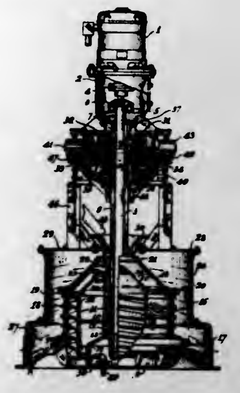
1,903,794. BRUSH SHAFT HOLDING AND DRIVING MEANS FOR VACUUM CLEANERS. LEON W. RICHARDSON and ALLEN D. WASSALL, Worcester, Mass., assignors to Sweeper-Vac Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 8, 1931. Serial No. 542,871. 2 Claims. (Cl. 15—8.)



1. In a vacuum cleaner construction, the combination with a nozzle and a brush shaft therein, said shaft having bearings assembled on opposite ends thereof, of holding means for each bearing, comprising a U-shaped flange formed in the nozzle and opening toward the nozzle opening, an adjusting screw in the base of the flange and adjustable in said flange for determining the position of said bearing therein, and a spring actuated plunger extending into the space between the arms of said flange to engage said bearing and yieldingly hold said bearing against the opposed arm of said flange and the end of said screw.

2. In a vacuum cleaner construction, the combination with a brush shaft removably mounted in the nozzle opening of said cleaner, supports in said cleaner to receive the ends of said brush shaft, a motor having a shaft extending at right angles to the axis of said brush shaft and midway between the ends of said nozzle opening and a flat belt adapted to connect said shafts, of a cylindrical pulley on said brush shaft for receiving said belt, said pulley being located centrally of the nozzle opening and having a width great enough to receive said belt, irrespective of the reversal of said brush shaft within said nozzle opening.

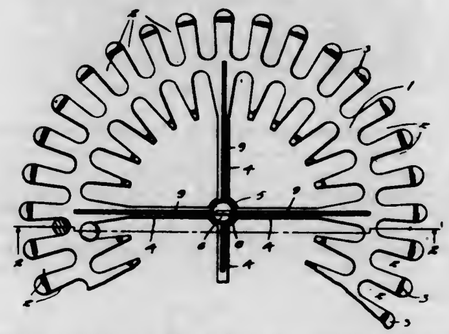
1,903,795. CENTRIFUGAL DRIER. RICHARD W. RIGLER, Philadelphia, Pa. Filed July 18, 1930. Serial No. 468,949. 8 Claims. (Cl. 210—69.)



7. In a centrifugal drier, an outer hollow rotatable screen, and an inner rotatable screw conveyor having upwardly and transversely inclined flights provided with

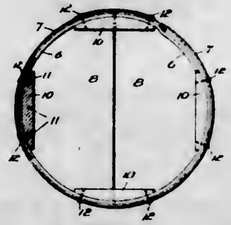
lower lateral surfaces facing in the direction in which the material is moving and having an acute-angle wedge relation to the inner surface of said screen to exert a wedging action upon the material being treated to force said material outwardly of said lateral surfaces towards said screen and through the clearance space between the screen and the conveyor to wipe clean the strainer holes of said screen, the upward incline of said flights facilitating the spreading of the material under the flights and the freeing of the liquid content of the material.

1,903,796. BROOM RACK. JOSEPH M. SMYGEL, St. Joseph, Mo. Filed Apr. 25, 1931. Serial No. 532,887. 2 Claims. (Cl. 211—66.)



1. A broom rack, comprising a flat annular body having a plurality of relatively deep recesses formed in each of the edges thereof, radially disposed arms within the body, connected therewith and joined at their inner ends at the radial center of the body, a post carried by said arms at the radial center of the body, means at the upper end of said post for suspending the structure with the body in horizontal position, and supporting brace arms connecting the body with the post adjacent the upper end of the latter.

1,903,797. SHIPPING BASKET. JOHN B. STEEL, Norfolk, Va., assignor to Farmers Manufacturing Company, Norfolk, Va., a Corporation of Virginia. Filed Nov. 24, 1931. Serial No. 577,077. 1 Claim. (Cl. 217—123.)



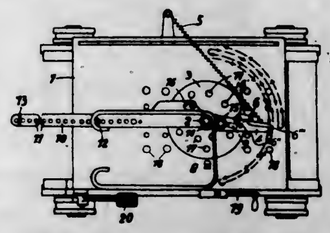
In a shipping basket of the type set forth, a body structure having the lower ends of the staves thereof clamped between a pair of bottom hoops, one inside the body and the other outside thereof, a board bottom whose outer edge rests on the upper edge of the inner hoop, and a plurality of narrow bars fastened to the under-face of the bottom and having their outer edges curved to fit against the inner face of the hoop, the grain in each one of these bars running lengthwise thereof and each bar having its outer face curved to fit against the inner face of the hoop, whereby the center portion of the bottom is left unobstructed, said bars being spaced apart around the hoop structure and being directly fastened to the hoop structure by fastenings passing inwardly through the hoop structure and entering said bars across the grain thereof.

1,903,798. CARRIER CASE. EDWIN B. TURNER, Wellington, Ohio. Filed Apr. 29, 1930. Serial No. 448,829. 2 Claims. (Cl. 224—5.)



1. A carrier case comprising a tubular body of thin cross section, a cup secured over one end of said body to provide a bottom and a reinforcement, a ring through which the opposite open end of the body is extended, a cap on the extended open end of the body being abutted by the cap, a carrier strap, eyes attached to the cup and ring, one end of the strap being connected with the cup eye and said strap being threaded through the ring eye, the cup and ring relieving the body of strains imposed on their respective eyes, and means on the cap to which the remaining end of the strap is secured.

1,903,799. BENDING MACHINE. ANTON WAGENBACH, Elberfeld, Germany. Filed Mar. 10, 1928, Serial No. 260,788, and in Germany Sept. 24, 1927. Renewed Feb. 21, 1933. 4 Claims. (Cl. 153—46.)



1. A bending machine, comprising in combination a frame plate, a substantially vertical shaft extending upward through said frame plate, a freely rotatable bending arm on said shaft, a driver arranged on said shaft above said frame and adapted to rotate said bending arm when said shaft is in rotation, means for automatically bringing said driver out of engagement with said arm, and means for withdrawing said arm into a resting position when disengaged.

1,903,800. DOUBLE-COLOR MECHANICAL PENCIL OR SHARP PENCIL. TAKEHIRO YAMASHITA, Koishikawa-Ku, Tokyo, Japan. Filed Mar. 28, 1932, Serial No. 601,630, and in Japan Aug. 28, 1931. 7 Claims. (Cl. 120—14.)

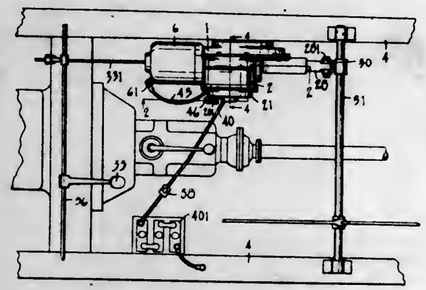
1. In a double-color sharp pencil, a guide-and-magazine unit made from one blank cut from a sheet metal and having two semi-cylindrical lead magazines and two guide

channels, lead propelling members respectively mounted in said guide channels, and a tubular driving screw having crossing helical grooves engaging with said lead propelling members.



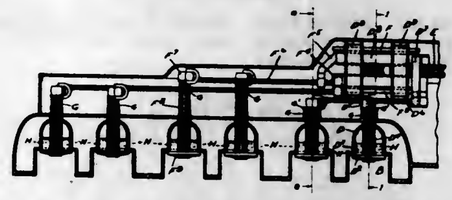
7. In a double-color sharp pencil, a lead holder, a lead propelling member, a flexible rod consisting of a wire rope and connecting said lead propelling member and the lead holder, and means for discharging the remaining short lead from said lead holder.

1,903,801. ELECTRICAL CONTROL MEANS FOR BRAKES. ROYAL E. ADAMS, Los Angeles, Calif., assignor to Edwin Pederson, trustee, Los Angeles, Calif. Filed Feb. 23, 1932. Serial No. 594,502. 16 Claims. (Cl. 188—162.)



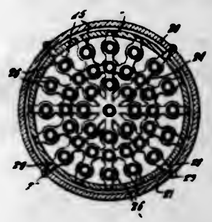
1. In an electric brake structure, the combination of a housing, an electric motor having a worm shaft and worm gear mounted in the said housing, a reciprocating rack with actuating pinion within the housing in a suitable way having connections to operate the brake, a reducing train of gears from the said worm gear to said pinion to actuate the same, a spring pressed disk clutch between the said worm gear and the said train of gears, an electromagnet to throw said clutch out of gear, a slideway parallel with the said rack and beneath the same, the way for the said rack and the said slideway having longitudinal slots in their bottoms, a slide in the said slideway, a rocker switch on said slide having a contact at one end to supply current to the motor and at the other end to supply current to the electromagnet, and having a central notch over the pivot thereof, balancing spring means to hold the switch in central neutral position, a downwardly projecting lug on the said rack having an insulated contact engaging the central notch of said rocker switch, a battery connected to the said switch to supply current to the motor or to the electromagnet, and a control pedal having a return spring and having a connection for actuating the said slide, whereby on depression of said pedal the notch reacts on the downwardly projecting lug on said rack to close the circuit to said motor to apply the brake and on the reverse of said pedal reacts to close the circuit to said magnet to release the brake and control the same according to the movement or position of said slide and switch.

1,903,802. INTERNAL COMBUSTION ENGINE. WILLIAM C. AGRELL, Chicago, Ill. Filed Apr. 18, 1928. Serial No. 269,671. 14 Claims. (Cl. 123—81.)



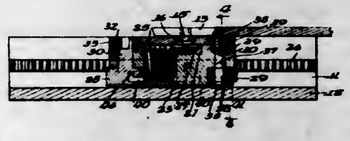
1. In combination in an internal combustion engine having a plurality of cylinders, a plurality of exhaust valves and of inlet valves, a single cam assembly for individually controlling the valves of each set and separate connecting members extending from cam means to the several valves of each set, respectively, whereby the exhaust valves are individually operated from a single cam assembly and the inlet valves are individually operated from a single cam assembly.

1,903,803. CATALYST FOR OXIDIZING CARBON MONOXIDE IN EXHAUST GASES. MAURICE E. BARKER, Edgewood, Md. Original application filed June 4, 1926, Serial No. 113,830, Patent No. 1,855,165. Divided and this application filed Aug. 25, 1931. Serial No. 559,829. 8 Claims. (Cl. 23—283.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



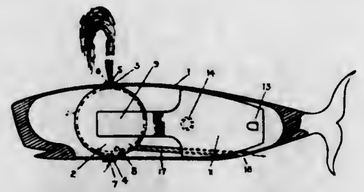
1. A catalyst for promoting the oxidation of carbon monoxide comprising an alloy of lead, manganese and copper having an oxidized surface for exposure to the carbon monoxide.

1,903,804. PRINTER'S REGISTER HOOK. WILLIAM F. BRÜGMANN, Chicago, Ill. Filed Mar. 31, 1930. Serial No. 440,232. 21 Claims. (Cl. 101—388.)



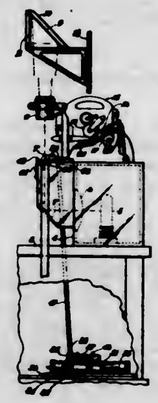
1. A printer's register hook embodying a body portion adapted to be inserted into a groove in a base, separate locking means at the ends of the hook, and means responsive to the operation of one of the first said means for simultaneously actuating the other of said locking means.

1,903,805. TOY. JOHN P. BUCKLEY, Washington, D. C. Filed Mar. 10, 1930. Serial No. 434,714. 10 Claims. (Cl. 46—40.)



1. In a device of the character described, an image, an expansible and collapsible receptacle in said image and having an inlet and an outlet, an inwardly opening valve being provided for the inlet whereby fluid may be drawn into the receptacle as the receptacle expands, and means for applying pressure to said receptacle to collapse the same and force fluid out through the outlet.

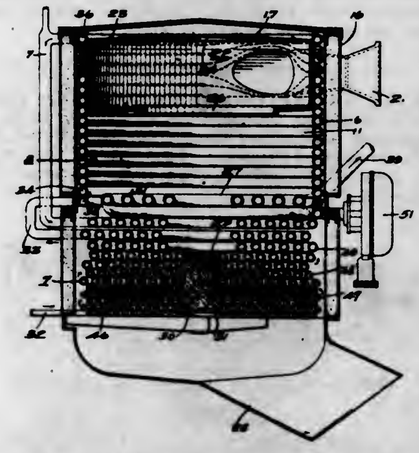
1,903,806. STOCK QUOTATION PROJECTING MACHINE. JAMES W. DECKER, New York, N. Y. Filed Jan. 25, 1928, Serial No. 249,383. Renewed Feb. 16, 1932. 16 Claims. (Cl. 88—24.)



1. The combination with a ticker tape, of a ticker having a printing mechanism for printing positive type impressions on said ticker tape and having a feeding mechanism for imparting a feeding impulse to said tape after a printing impression, a projecting mechanism having a horizontally disposed light aperture, a right angularly bent guide for twisting the tape through a right angular path of movement for inverting the tape and guiding the tape so inverted over said light aperture, a projecting lens above said light aperture for receiving images of the configurations on said tape, a deflector above said lens for receiving images from said lens, and a screen above said lens for receiving images from said deflector.

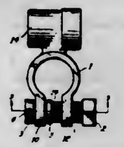
1,903,807. BOILER. WARREN DOBLE, Emeryville, Calif., assignor to Doble Steam Motors Corporation, Wilmington, Del., a Corporation of Delaware. Filed Dec. 28, 1929. Serial No. 415,997. 7 Claims. (Cl. 122—250.)

1. A boiler comprising a cylindrical boiler shell, a fire box in one end of said shell, a fluid tube having a plurality of convolutions through which fluid flows serially in the other end of said shell, the planes of said convolutions lying transversely of said shell, a cylindrical portion of said tube surrounding said fire box and receiving fluid from said convolutions, and an additional convolution



disposed intermediate said fire box and said first named convolutions and receiving fluid from said cylindrical portion.

1,903,808. ELECTRICAL TERMINAL. CORNELIUS W. DORRMUS, Washington, D. C. Filed June 3, 1929. Serial No. 367,956. 1 Claim. (Cl. 173—259.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



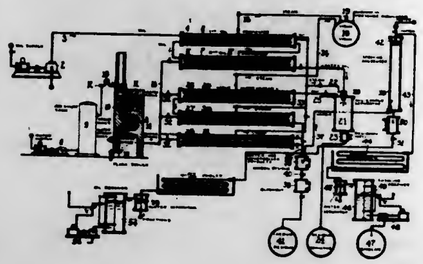
An electric terminal clamp comprising means for establishing connection with an electric cable, a pair of jaws adapted to embrace opposite sides of a terminal post and having arms at their ends formed one with a threaded opening and the other with an unthreaded opening, an adjusting screw threaded through the arm having the threaded opening and having a tool engaging head at one end, the other end portion of said screw being reduced and unthreaded and freely engaged through the unthreaded opening of the other arm, a washer fitting loosely about the inner end of the reduced portion of said screw against a shoulder at the junction of the reduced portion of the screw with the threaded portion thereof, and a collar encircling the outer end of the reduced portion of said screw and a pin extending through the reduced portion of said screw and through said collar at diametrically opposite positions in said collar, said washer being arranged to engage the inner face of the arm formed with the unthreaded opening when the screw is turned to spread the jaws and said collar being adapted to engage the outer face of the last mentioned arm when the screw is turned to draw the jaws towards each other.

1,903,809. METHOD OF MAKING PHENOL-FORMALDEHYDE RESINS CONTAINING AN ALKALINE EARTH METAL BASE. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed June 1, 1923, Serial No. 642,868. Renewed Apr. 2, 1930. 1 Claim. (Cl. 106—22.)

The process of making molding composition which comprises reacting at a temperature of from above 80 to be-

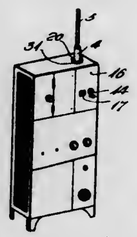
low 90° C. with aqueous formaldehyde on barium, phenate and phenol, said phenol not exceeding three times the amount by weight of combined phenol to form a homogeneous solution of the reaction product, incorporating the solution with a filler and exposing to heat in vacuo to dry and stiffen the reaction product.

1,903,810. APPARATUS FOR REFINING OIL. CHAUNCEY B. FORWARD, Urbana, Ohio, assignor, by mesne assignments, to Forward Process Company, Dover, Del., a Corporation of Delaware. Filed Oct. 13, 1919, Serial No. 330,490. Renewed Nov. 22, 1927. 7 Claims. (Cl. 196—107.)



2. An apparatus for refining oil, comprising a number of oil pre-heaters and a vapor and liquid separating-vessel and a number of vapor heaters connected in series, and a flash-boiler having superheating steam coils connected with both sets of heaters, and said vapor heaters having a steam discharge connection opening into the first of said oil preheaters.

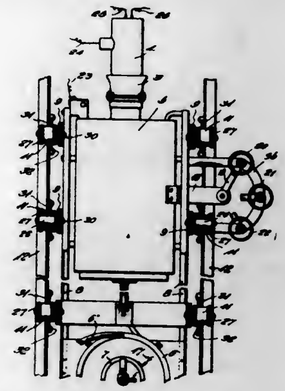
1,903,811. ANTENNA SYSTEM. LOUIS A. GEBHARD and RAYMOND B. MEYER, Washington, D. C. Filed Mar. 11, 1930. Serial No. 434,882. 4 Claims. (Cl. 250—33.)



1. In a high frequency transmission system, a radiating antenna element comprising a multiplicity of tubular sections telescopically disposed one with respect to another and means extending axially through said sections for controlling the projection or collapse of said sections with respect to each other for correspondingly controlling the effective capacity of said antenna element.

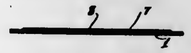
1,903,812. SHOCKPROOF MOUNTING FOR A HIGH POWER HIGH FREQUENCY AMPLIFIER SYSTEM. LOUIS A. GEBHARD and CORBIE F. RUDOLPH, Washington, D. C., assignors to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1930. Serial No. 505,860. 10 Claims. (Cl. 250—17.)

1. A shock proof mounting for parts of a high frequency transmitter comprising an outer frame structure, an inner frame structure, insulated strip members extending laterally of said inner frame structure and projecting beyond the limits thereof, electron tube apparatus supported by said inner frame structure and diametrically opposed resilient suspension members connected between opposite ends of said insulated strip members and said outer frame



structure for insulatingly and flexibly suspending the electron tube apparatus on said inner frame structure within said outer frame structure.

1,903,813. ENGRAVER'S MAT. ARTHUR B. GLENN, Los Angeles, Calif. Filed Dec. 7, 1927. Serial No. 238,410. 3 Claims. (Cl. 154—46.5.)



1. As a new article of manufacture, an engraver's mat capable of being engraved upon, consisting of a backing sheet of paper-board with a coating of shellac, and a facing adhering to the board on the shellacked face and consisting substantially of a composition of magnesium-silicate.

1,903,814. PYROTECHNIC STARTER COMPOSITION. GEORGE U. GRAFF, Washington, D. C. Filed May 18, 1932. Serial No. 612,149. 3 Claims. (Cl. 52—24.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)

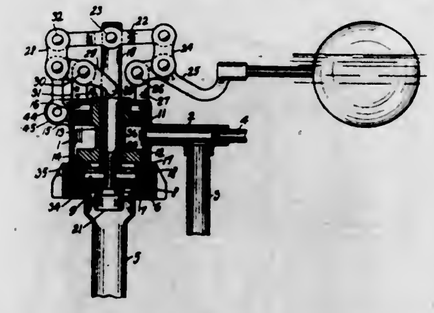
3. A pyrotechnic starter composition having as ingredients calcium silicide, lead peroxide, fused silicon, and copper oxide.

1,903,815. PROCESS FOR THE PRODUCTION OF NITRITES. STANLEY L. HANDFORTH, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed June 29, 1929. Serial No. 374,913. 15 Claims. (Cl. 23—104.)

1. The process of manufacturing a nitrite containing a minimum amount of nitrate which comprises bringing a gas containing appreciable quantities of NO and NO_2 into contact with an alkaline absorbing solution maintained at a pH value between 9.5 and 11.

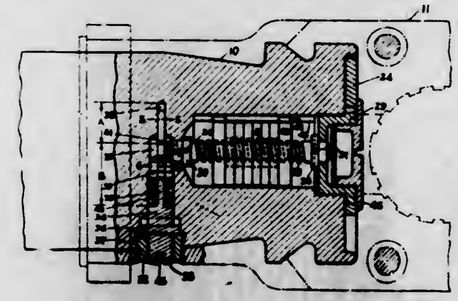
15. The process of producing a nitrite which comprises starting the process with an absorbing solution containing sufficient carbonate to maintain the alkalinity close to a pH value of 11, maintaining this value substantially constant for a time by the gradual addition of soda ash, allowing the alkalinity to gradually decrease as the concentration of the salts in the solution increases until the concentration of salts in the solution has become such that the specific gravity of the solution is greater than 1,200, substantially neutralizing the solution, and continuing the absorption until the alkalinity has decreased to a pH value of 7.5 to 8.

1,903,816. FLOAT VALVE. LARRY A. HANSON and CHARLES F. OSNES, Altoona, Pa. Filed Dec. 28, 1931. Serial No. 583,520. 6 Claims. (Cl. 137—104.)



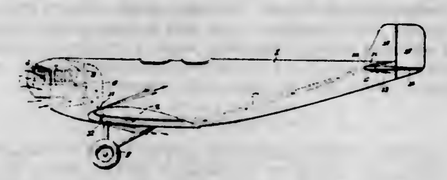
1. In a fluid pressure operated valve mechanism, a casing, a valve controlling the fluid supply to the casing, a valve seat, a float operated by the fluid supply delivered from the casing, a system of actuating levers connecting the float and the fluid controlling valve, a fluid pressure piston on the discharge side of the valve seat, and means for transmitting the movement of the piston to one of the fulcrums of said system of actuating levers.

1,903,817. PROPELLER BALANCE. NELSON V. JOHNSON, Philadelphia, Pa. Filed Apr. 7, 1932. Serial No. 603,825. 8 Claims. (Cl. 170—177.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A propeller comprising a hub, blades detachably secured in said hub, and adjustable means secured to and in the blades for varying the balance of said blades.

1,903,818. WING LIFT SYSTEM FOR AIRCRAFT. BERNHARD G. JUTTING, Jersey City, N. J. Filed Mar. 2, 1932. Serial No. 596,272. 4 Claims. (Cl. 244—18.)



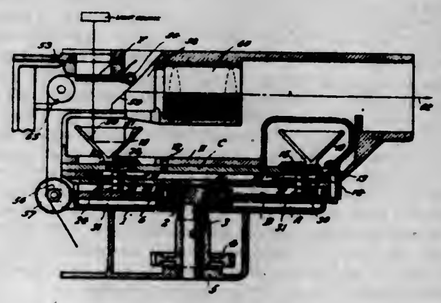
1. In an aeroplane, a fuselage, a motor frame at the forward end thereof, a blower carried by said motor, a wing mounted transversely of said fuselage and having a flat bottom surface and a convex upper surface, an air passage formed along the forward edge of said wing transversely of the direction of travel and nozzles extending rearwardly from said passage at both surfaces, and air intake passages formed in said frame and connected to the first named passage.

1,903,819. PIPE FITTING. EDWARD H. KOCHER, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Filed June 16, 1925. Serial No. 37,435. 15 Claims. (Cl. 285—203.)



1. An unflanged dividing fitting including a plurality of tapped pipe terminal sockets radiating inward from the periphery, said sockets having beveled shoulders of decreasing diameter inwardly at their inner ends for coaction with compression coupling sleeves, bores of smaller diameter beyond said shoulders radiating inward and intersecting at the center of the fitting, said fitting having a bore free from communication with said sockets, serving for mounting said fitting, one side of said fitting being flattened for disposition in face contact with the supporting structure without interference with the pipe terminal sockets and the pipe terminals attached thereto or obstructing the tightening or loosening thereof, said flattened face being traversed by the plane of said pipe terminal sockets.

1,903,820. PRISM CARRIER FOR PROJECTION MACHINES. WILHO A. KOSKEN, New York, N. Y., assignor to Wilbo A. Kosken, Inc., a Corporation of New York. Filed Oct. 30, 1929. Serial No. 403,491. 4 Claims. (Cl. 88—16.8.)

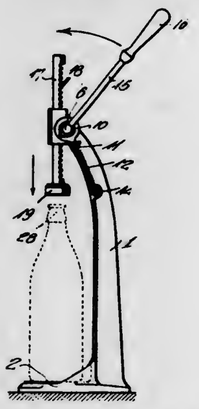


1. In a mechanical movement for transforming part of an angular rotation into a linear translation so that the linear velocity bears a fixed ratio to the angular velocity comprising a part constrained to revolve about a fixed axis; a part constrained to move in a straight line; a cross-slipway fixed to said part constrained to move in a straight line; a driver operatively working in said slipway; a link maintaining said driver at a fixed radial distance from said part constrained to revolve about a fixed axis; and additional guiding means restraining said driver at a fixed radial distance from a center fixed relatively to the axis of revolution of said revolving part and more distant from said part restrained to move in a straight line.

1,903,821. PROCESS OF PROMOTING THE BLOATING OF EARTHY MATERIALS. SHERMAN Q. LEE, Madison, Wis., assignor, by mesne assignments, to American Face Brick Research Corporation, a Corporation of Illinois. Filed July 3, 1930. Serial No. 465,653. 4 Claims. (Cl. 25—156.)

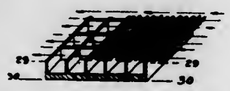
1. The process of promoting bloating which consists in adding to a mass of earthy material a liquid containing molassea and $FeSO_4$ in solution and incorporating the same throughout the mass of earthy material and in subjecting the mass to temperatures adequate to first evaporate the solvent portion of the liquid and thereafter cause bloating by fusing the earthy material and cause a reaction resulting in the liberation of gases throughout the mass.

1,903,822. BOTTLE CAPPER. HARRY J. LEBHERZ, Frederick, Md., assignor to The Everedy Company, Frederick, Md., a Corporation of Maryland. Filed Sept. 5, 1930. Serial No. 480,008. 3 Claims. (Cl. 226—84.)



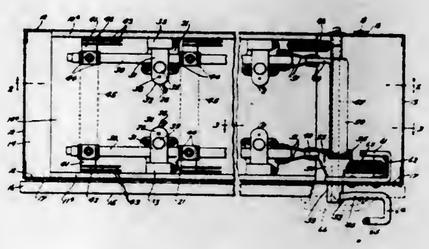
2. A bottle capping tool comprising a frame structure terminating in a vertically disposed head, a ram movable through said head, a bottle capping throat carried by said ram for applying a crown cap to a bottle, said frame having a rearwardly extending portion integrally connected with said head, a shift gear projecting laterally through said rearwardly extending portion, said shift gear having teeth extending throughout a portion of its length adapted to engage teeth formed on said ram, the teeth on said actuating gear being laterally shiftable out of engagement with the teeth on said ram for effecting adjustment in the position of said ram, said actuating gear having opposite limiting stops formed integral therewith for limiting the stroke of said ram when said actuating gear is subjected to angular movement in engagement with the teeth on said ram, a member connected with said actuating gear, and spring means connected between said frame structure and said member for normally maintaining said actuating gear in engagement with said ram and elevating said ram in bottle capping position.

1,903,823. AERODYNAMIC SURFACE. VICTOR LOUGHEED, Washington, D. C. Filed Dec. 28, 1928. Serial No. 328,982. 5 Claims. (Cl. 244—41.)



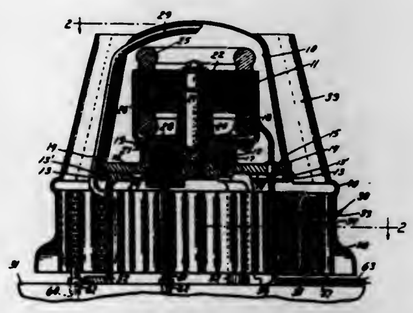
1. In a covering for aircraft, a layer of material having open vesicules or cells therein, and a freely-permeable covering therefor.

1,903,824. ELECTRIC SWITCH. MARTIN P. LUTHER, Chicago, Ill., assignor to Super Safety Switch Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1930. Serial No. 440,992. 10 Claims. (Cl. 200—50.)



1. An electric switch comprising a support, insulating guides mounted thereon, fixed terminals carried by said guides and having contact blades, an apertured insulating housing enclosing each terminal and blade, reciprocable members mounted in said guides, movable contacts carried by said members and coactable with said blades through the apertures in said housing, and means for moving said members simultaneously.

1,903,825. REFRIGERATING APPARATUS. EDWARD B. MALLORY, Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,324. 10 Claims. (Cl. 62—115.)

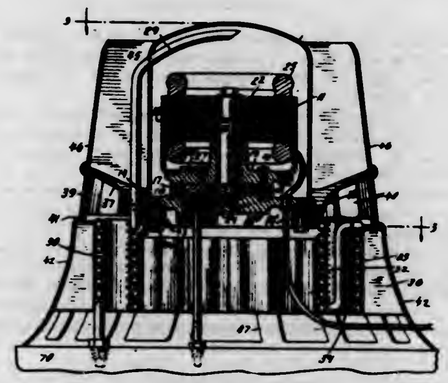


1. In refrigerating apparatus of the character described the combination of a compressor, a casing enclosing said compressor, and means for bringing into heat exchanging relation with said casing near the base thereof a convection current of air at a temperature above atmospheric temperature but below the temperature of said casing, whereby heat is removed from said casing by said current of air, said means comprising solely a condenser located below said casing and communicating therewith and acting to induce said air current by convection.

1,903,826. REFRIGERATING APPARATUS. EDWARD B. MALLORY, Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,325. 15 Claims. (Cl. 62—115.)

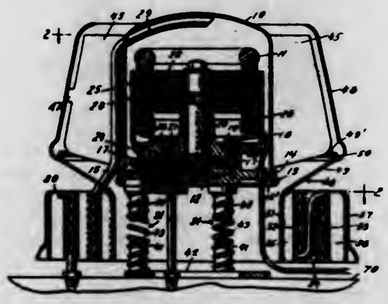
1. A refrigerating unit of the character described having in combination a casing, a compressor in said casing, and means supporting said casing in spaced relation above

a supporting surface, a condenser coil occupying space below said casing and being constructed and arranged to be cooled by convection air currents, and an air deflector



above said condenser constructed and arranged to deflect air rising from said condenser outwardly away from said casing.

1,903,827. REFRIGERATING APPARATUS. EDWARD B. MALLORY, Tenafly, N. J., assignor to The Climax Engineering Company, Clinton, Iowa, a Corporation of Delaware. Filed Feb. 14, 1930. Serial No. 428,326. 27 Claims. (Cl. 62—115.)

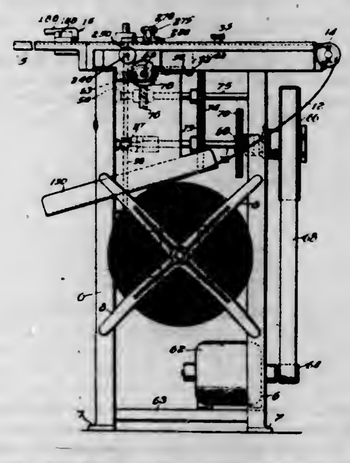


1. A refrigerating apparatus of the character described comprising a motor and compressor in a sealed casing having cooling fins on said casing and a shroud enclosing said cooling fins and a condenser mounted on the exterior of said shroud.

1,903,828. ART OF TREATING VEGETABLE FIBERS. RALPH H. MCKEE, Jersey City, and EARLE H. MORSE, Nutley, N. J. Filed Sept. 26, 1929. Serial No. 395,457. 9 Claims. (Cl. 8—2.)

1. The process of converting vegetable fibers of the jute type to fibers having the appearance of wool or resembling wool which comprises subjecting the fibers to the action of a hot solution containing tri-sodium phosphate, treating the fibers with a dilute solution of sodium bi-sulfite, soaking the fibers in a solution of caustic alkali, boiling the fibers with a solution containing sodium bisulfite and applying a bleaching agent capable of whitening vegetable fibers to said fibers whereby crinkled light-colored fibers resembling wool and having characteristics thereof are produced.

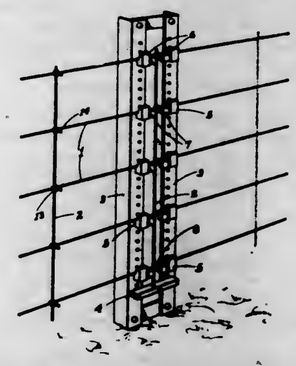
1,903,829. TYPE BAR MACHINE. HARLEY J. MEDLEY, Chicago, Ill. Filed June 24, 1926, Serial No. 118,176. Renewed Feb. 21, 1930. 27 Claims. (Cl. 29—24.)



9. In combination, a table for supporting packing material, means slidably mounted thereon for engaging and moving said material, a feed-bar for said slidable means, a toothed advancing member for said feed-bar, cam means arranged to cause yielding engagement between said toothed member and said feed-bar, during the movement of said toothed member in one direction, mechanism for reciprocating said toothed advancing member, and means for locking said toothed member against engagement with said feed-bar.

12. In a machine for finishing and packing type bars that have been cast with grooves disposed on their sides adjacent the type face and with gates attached to the bar by a reduced portion, the combination of a table for supporting said type bars in vertical position on said gates, means for moving the bars on said table, packing means adjacent to said table, grooved guides for engaging the grooves of said bars and suspending them while they are being transferred from said table to said packing means, means for moving said bars from said table through said guides to said packing means, and means in the path of movement of said bars for severing the gates therefrom.

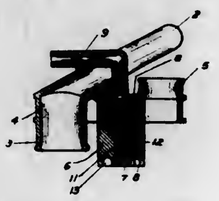
1,903,830. TOOL FOR TYING FENCE WIRES. MARTHA MOFFETT, Fresno, Calif. Filed June 5, 1931. Serial No. 542,246. 16 Claims. (Cl. 140—57.)



1. A tool for twisting staples comprising a turnable member, a support in which said member is turnably

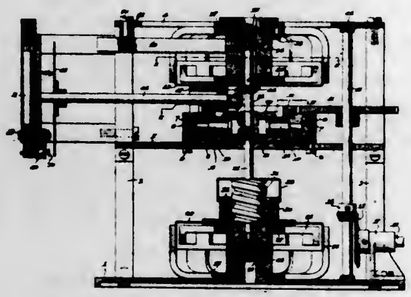
mounted, single pair of opposed jaws mounted in said member for common engagement with the ends of the staple-legs, means to clamp the jaws against the legs, and means to then rotate the jaws and member as a unit.

1,903,831. DRINKING MASK. RANDOLPH MONRO, Edgewood, Md. Filed June 25, 1929. Serial No. 373,640. 16 Claims. (Cl. 128—141.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. A mask comprising means to carry on respiration, means associated with the mask to procure free flowing agents from ordinary containers, and other means to replace the agents removed with air exhausted from the mask.

1,903,832. CONSTANT SPEED MECHANISM. HORACE E. NICHOLS, Redford, Mich., assignor of one-third to Clyde Harrison Chase and one-third to Hugo A. Freund, Detroit, Mich. Filed May 4, 1927. Serial No. 188,839. 18 Claims. (Cl. 172—284.)



1. In a timing device, a driven shaft, a driving shaft, and a governor transmitting power from said driving shaft to said driven shaft, said governor, including a screw and nut drive in which the nut provides a gravitational element.

1,903,833. WALL OUTLET AND FITTING. JOSEPH N. NIELSEN, New York, N. Y. Filed Jan. 15, 1927. Serial No. 161,313. 3 Claims. (Cl. 247—3.)



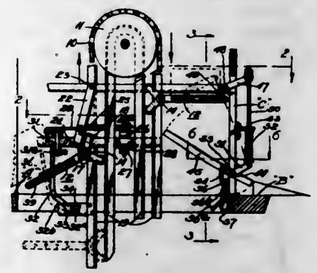
2. A wall outlet comprising a molding including an insulation strip having longitudinal parallel slots in one side, conductors housed within the slots, plates covering the salts, one or more of said plates having perforations to receive terminals for contact with the conductors, and coacting means on the molding and plates providing for manually operable interlocking engagement between the plates and the molding.

1,903,834. PROCESS FOR PRODUCING CARBONACEOUS MATERIAL. ALFRED OBERLE, Kansas City, Mo. Filed Aug. 11, 1928. Serial No. 299,100. 5 Claims. (Cl. 252—3.)

1. A continuous process for producing activated carbon from carbonaceous material of a mineral oil origin, consisting in heating the carbon under super-atmospheric pressure to a temperature in excess of 100° C. in the presence of an aqueous fluid, introducing an extraneous gas and withdrawing the volatile material and moisture and uncombined gases.

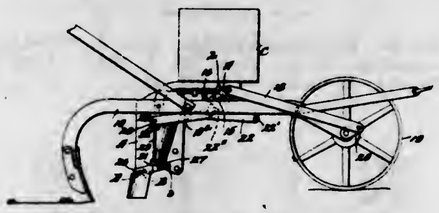
5. A continuous process for producing activated carbon from carbonaceous material of a mineral oil origin, consisting in heating the carbon to a temperature in excess of 100° C., under pressure up to 500 pounds, in the presence of an acidulated aqueous fluid withdrawing the volatile material and moisture.

1,903,835. SELECTIVE UNLOADER MECHANISM FOR ELEVATORS. SAMUEL OLSON, Chicago, Ill., assignor to Samuel Olson & Company, Inc., Chicago, Ill., a Corporation of Illinois. Filed Apr. 11, 1930. Serial No. 443,305. 8 Claims. (Cl. 198—155.)



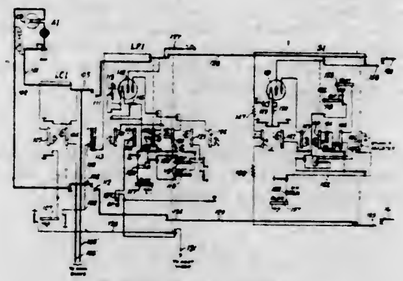
1. In combination with a continuous vertically traveling belt and driving means therefor, a carrier pivotally engaged with the belt and normally extending horizontally and laterally to one side of the pivot axis, two guide rollers rigidly associated with the carrier and mounted in vertically spaced relation extending at the side of the belt in the direction opposite to that in which the carrier projects, a guideway for the rollers for controlling the position of the carrier, said guideway being provided adjacent each of a plurality of load-shifting stations arranged along the path of travel of the belt with a movable section adapted to be shifted for altering the guideway so as to include a laterally offset portion, whereby the leading guide roller may be caused to tilt out of its normal path and cause tilting of the carrier in a downward direction substantially about the axis of the following guide roller for discharging its load; independently operable mechanism disposed adjacent each of said discharge stations, each including linkage for controlling the movement of the guideway sections at the corresponding stations; means for selecting the stations at which the several carriers respectively discharge their loads, consisting of means on each carrier located thereon for rendering operative the mechanism at a predetermined station for causing discharge of the load at said station, said movable guideway sections being pivotally mounted at their upper ends about horizontal axes and arranged to permit swinging of their lower ends laterally outward in the direction of projection of the carrier, said movable guideway sections being arranged to constitute parts of the roll track at all positions within their range of movement.

1,903,836. SEED PLANTER. CHARLES T. RAY, Louisville, Ky., assignor to B. F. Avery & Sons, Louisville, Ky., a Corporation of Kentucky. Filed Feb. 27, 1929. Serial No. 343,217. 12 Claims. (Cl. 275—9.)



1. A seed distributing machine including, in combination, a wheel-supported frame, a seed chute, means for supplying seed to the chute, a valve to control the discharge of seed from the chute, a substantially horizontally tensioned lever pivotally connected at one end to the frame and having a projection intermediate its ends, a connection between the other end of the lever and the valve and a rotative member operated under control of the travel of the machine and having spaced projecting portions in operative relationship with the projection from the lever to operate the latter intermittently.

1,903,837. TELEPHONE SYSTEM. RODNEY G. RICHARDSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 8, 1931. Serial No. 542,759. 52 Claims. (Cl. 179—18.)



1. In combination, an automatic switch, a line extending to said switch, a vacuum tube having its grid controlled over said line, a plate circuit for said tube including a relay, primary and secondary motor magnets controlled by said relay, and means for shifting the control from the primary magnet to the secondary magnet.

1,903,838. IGNITIBLE STICK. FERDINAND RINGER, Vienna Austria. Filed Apr. 26, 1929, Serial No. 358,383, and in Austria May 5, 1928. 9 Claims. (Cl. 52—25.)



5. A combustible composition which when made in stick form may be blown out with a person's breath and then relighted by friction, comprising in the approximate proportions stated, a base mass of the class consisting of nitrocellulose, acetyl cellulose and mixtures of these in the neighborhood of one half of the total composition, oxygen carriers in the neighborhood of one fifth of the total composition, friction substances in the neighborhood of one tenth of the total composition, substances reducing the rate of combustion and improving moldability, in the neighborhood of one seventh of the total composition, a substance sensitive to friction, one sixteenth or less of the total composition.

1,903,839. FASTENING ATTACHMENT FOR PAPER BAGS. THOMAS M. ROYAL, Philadelphia, Pa. Filed Oct. 22, 1929. Serial No. 401,603. 3 Claims. (Cl. 229—65.)



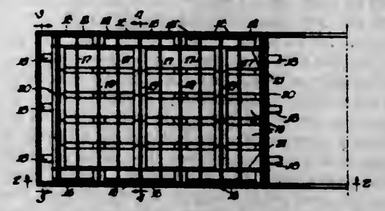
1. A paper bag or other like container having an open end which is adapted to be closed by the folding of the open end portion of the said bag or other container, the said open end portion having means provided thereon for retaining the folds in folded relation to each other to maintain the closure of the bag, the said means comprising an attachment consisting of a multi-ply flexible strip having a plurality of wires held between plies of the said strip, the said wires adapted to be bent upon the folding of the end portion of the said bag to close the same and consisting of inelastic material whereby after having been bent in the folding of the end portion of the said bag they remain bent.

1,903,840. COMBINED INK SETTER AND STATIC ELIMINATOR. JULIUS SIMONS, Philadelphia, Pa., assignor to Simcoe Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1930. Serial No. 424,148. 5 Claims. (Cl. 175—264.)



4. An ink setter, comprising a hollow tubular insulator having an insulating partition, a conductor extending through said insulator upon one side and thence reversely upon the opposite side of said partition, independent condenser elements encircling the respective sections of said conductor upon the opposite sides of said partition and having terminal portions extending through the walls of said insulator.

1,903,841. LOADING OF SEWER PIPE, BUILDING TILE, ETC., FOR RAILWAY SHIPMENT. IVAN H. SPOOR, La Grange, Ill., assignor to The Gerrard Company, Inc., Chicago, Ill., a Corporation of Delaware. Filed June 14, 1930, Serial No. 461,218. Renewed June 6, 1932. 22 Claims. (Cl. 105—367.)



1. A unit load of short elongated objects, such as sewer pipe, building tile and the like, for transportation in a railway car, consisting of several vertical tiers of the

objects positioned crosswise of the car in abutment with each other, vertical end gates positioned against the outer faces of the end tiers, and means for connecting the end gates together.

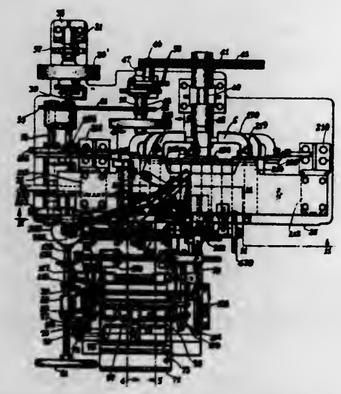
1,903,842. ALUMINUM ALLOY. COURT C. TITUS, New York, N. Y. Filed May 20, 1932. Serial No. 612,651. 4 Claims. (Cl. 75—1.)

1. An alloy consisting principally of aluminum and containing from 0.05 to 2% of boron, from 0.25 to 2.25% of magnesium, and from 0.25 to 3% of at least one metal of the group consisting of vanadium, tungsten, molybdenum and chromium.

1,903,843. ALUMINUM ALLOY. COURT C. TITUS, New York, N. Y. Filed June 20, 1932. Serial No. 618,348. 2 Claims. (Cl. 75—1.)

1. Alloys consisting principally of aluminum and characterized by containing from 0.05 to 2% of boron and from 0.25 to 2.25% of magnesium.

1,903,844. MACHINE FOR MAKING CARTONS. JOHN VAN BUREN, Brooklyn, N. Y. Filed July 9, 1929. Serial No. 376,919. 22 Claims. (Cl. 93—44.)

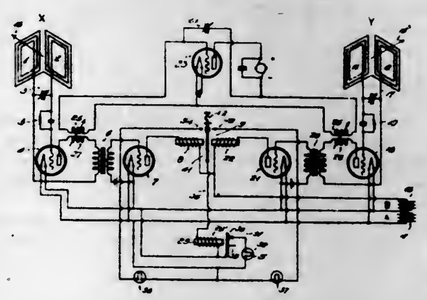


1. A machine for making cartons comprising means for supporting a supply of blanks, a carrier, a plurality of form blocks on said carrier, means for feeding said blanks one at a time to said blocks, means for folding the blanks around said blocks, a guideway, means for transferring the blocks and folded blanks from the carrier to said guideway, means for returning the blocks and folded cartons from the guideway to said carrier, and means for removing the cartons from the form blocks.

1,903,845. PROCESS OF CONVERTING NATURAL GAS AND SIMILAR GASEOUS HYDROCARBONS INTO A MIXTURE OF CARBON MONOXIDE AND HYDROGEN IN CONTROLLED PROPORTIONS. WILLIAM D. WILCOX, Idaho Falls, Idaho. Filed Aug. 29, 1928. Serial No. 302,876. 5 Claims. (Cl. 260—156.)

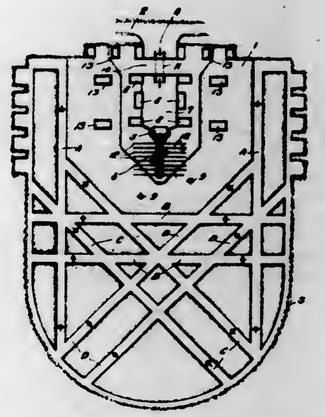
1. The process of obtaining a mixture of carbon monoxide and hydrogen in determined proportions by the dissociation of hydrocarbon gases and vapors, which comprises heating the interior of a conduit having a filling of refractory material to a temperature in excess of 2000° F. by burning combustible gas within the conduit, then admitting to the conduit a mixture of hydrocarbon gases with a controlled volume of steam and passing it through the conduit in a direction counter current to the travel of the combustion gases within the conduit, thence through a regenerator chamber having a filling of refractory material, withdrawing the gases; in the reheating cycle, passing the air which supports combustion through the regenerator in a direction counter current to the travel of the conserved gas.

1,903,846. PILOTING SYSTEM. JOHN A. WILLOUGHBY, Cambridge, Mass. Filed Jan. 8, 1929. Serial No. 331,004. 12 Claims. (Cl. 250—11.)



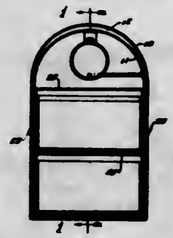
1. In a system for guiding mobile bodies, means for receiving electromagnetic energy on either side of a predetermined course, independent receiving circuits connected to each of said means, mechanism for rendering said receiving circuits alternately effective and ineffective, independent relay devices individual to each of said receiving circuits, a third relay device controlled by the operation of the aforesaid relay devices, a normal course indicator operated under condition of balanced signal in each of said independent receiving circuits, and separate indicator apparatus actuated by said independent relay devices for indicating the preponderance of energy in either of said energy collecting systems.

1,903,847. AIRPORT CONSTRUCTION. JOHN WALTER WOOD, Jr., New York, N. Y. Filed Aug. 30, 1930. Serial No. 478,828. 9 Claims. (Cl. 244—2.)



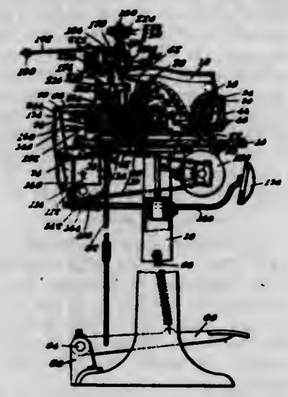
1. An airport construction having one boundary adjacent an approach for vehicles and including a passenger station between said boundary and the center of the field, and spaced from the latter, a roadway for planes extending generally parallel to said boundary and between it and the station, and means to permit vehicles to pass under said roadway.

1,903,848. REFRIGERATING MECHANISM. AUGUST J. ASMUSSEN, Detroit, Mich., assignor, by mesne assignments, to Kelvinator Corporation, Detroit, Mich., a Corporation of Michigan. Filed June 6, 1928. Serial No. 283,194. 8 Claims. (Cl. 62—126.)



1. An expansion element for refrigerating mechanisms comprising a pair of wall members lying in substantially contacting relationship over the greater part of their area when the contacting surfaces are subjected to atmospheric pressure, said members being sealed against leakage between their edges, said walls being sufficiently flexible to separate a slight amount when said contacting surfaces are subjected to a pressure greater than atmospheric pressure, and means for introducing refrigerant to and removing it from between said contacting surfaces.

1,903,849. MACHINE FOR OPERATING ON TENNIS SHOES. ERNEST W. STACEY, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 26, 1929. Serial No. 395,280. 58 Claims. (Cl. 12—1.)

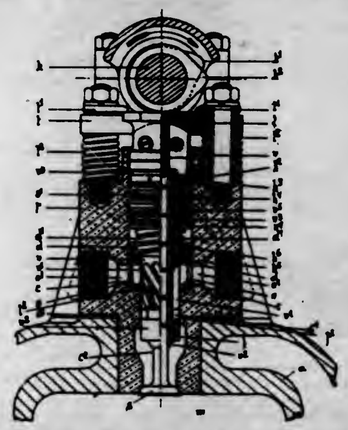


1. In a machine for operating on the sole edge of a rubber-soled shoe, an edge treating tool, a support for holding a lasted shoe in operative relation to said tool, and means for causing a relative motion of said tool and the shoe constructed and arranged to transfer the point of contact of the tool and the work about the sole edge at a substantially constant linear velocity.

1,903,850. METHOD FOR THE REDUCTION OF FURFURAL ACETONE AND FURAN DERIVATIVES. FREDUS N. PETERS, Jr., Evanston, Ill., assignor to Quaker Oats Company, Chicago, Ill., a Corporation of New Jersey. Filed Feb. 28, 1927, Serial No. 171,725. Renewed Jan. 31, 1931. 6 Claims. (Cl. 260—54.)

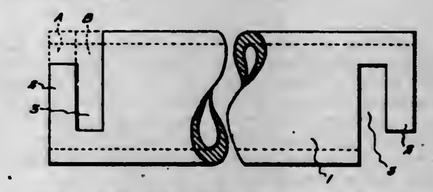
1. A method for the reduction of furfural acetone which comprises dissolving furfural acetone in a solvent therefor, and suspending in such liquid a catalyst comprising nickel while subjecting the mixture to hydrogen, under superatmospheric conditions of temperature and pressure.

1,903,851. FUEL SUPPLY PROCESS FOR INTERNAL COMBUSTION ENGINES. FRANÇOIS ROCHEFORT, Paris, France. Filed Jan. 8, 1929, Serial No. 331,036, and in France May 31, 1928. 3 Claims. (Cl. 123—33.)



1. An internal combustion engine comprising a plurality of cylinders, a piston operating in each of said cylinders, a capacity common to all of said cylinders and adapted to be supplied with a part of the normally carburetted charge from the cylinders about the end of the compression stroke in each of them, a valve chamber arranged on each of the cylinders, passage means constantly connecting the common capacity with each of said valve chambers, passage means adapted to connect each valve chamber with its respective cylinder, means for supplying fuel under pressure to each of said valve chambers, and in each of said valve chambers valve means adapted to ensure a thorough mixing of the said fuel and of the normally carburetted charge, admitted from the common capacity in each of said valve chambers to produce a rich carburetted mixture in the same, means for controlling the passage means between each valve chamber and its respective cylinder to allow the flow of a part of the normally carburetted charge from each cylinder about the end of the compression stroke therein through the respective valve chamber to the common capacity, and inversely, the flow of the rich carburetted mixture from each valve chamber into the respective cylinder at the beginning of the next compression stroke therein.

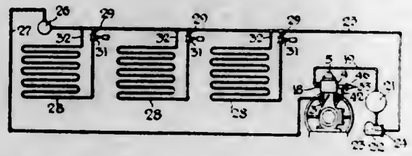
1,903,852. PIPE JOINT. LEVY J. ROLLINS, Beaumont, Tex., assignor of one-half to Pete D. Renfro, Beaumont, Tex. Filed Oct. 5, 1929. Serial No. 397,659. 1 Claim. (Cl. 285—111.)



A welded pipe joint comprising two metal pipe sections having similar but oppositely disposed interlocking means on the end portions thereof and constituting an integral part of the pipe proper, said interlocking means comprising a pair of tongues and grooves cut from the end portions of the pipe proper, the tongues and grooves on one end of the pipe extending in an opposite direction from the tongues and grooves on the other end thereof, the tongues and grooves being of equal size in all dimensions, the tongues extending radially a substantial distance greater than the width of the grooves and lying

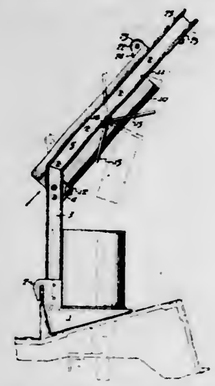
in a cylindrical plane having the same radius as that of the pipe section, whereby the tongues on one pipe section will fit snugly in the grooves on the other pipe section of the same size in interlocking engagement, the abutting edges of said tongues and grooves in interlocking engagement and of said pipe section being beveled and a filling of weld metal in the bevel to form a rigid joint between the abutting edges of the pipe section and of the tongues and grooves of the two adjacent pipe sections.

1,903,853. COMPRESSOR CONTROL. ALONZO W. RUFF, York, Pa., assignor to York Ice Machinery Corporation, York, Pa., a Corporation of Delaware. Filed Aug. 9, 1929. Serial No. 384,639. 12 Claims. (Cl. 230—22.)



1. A suction pressure control device for a compressor, comprising in combination with such compressor, means for partially unloading said compressor; and means responsive to suction pressure and serving upon abnormal reduction thereof to render said unloading means effective.

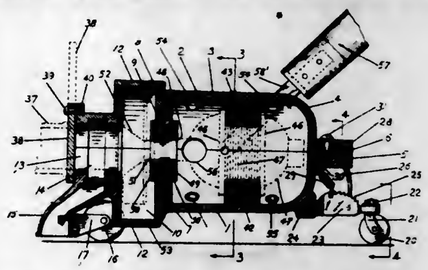
1,903,854. FRUIT CUTTING MACHINE. TADAO TACHI, Honolulu, Territory of Hawaii, assignor to Hawaiian Pineapple Company, Limited, Honolulu, Hawaii, a Corporation of Hawaii. Filed Feb. 15, 1932. Serial No. 593,152. 10 Claims. (Cl. 146—6.)



1. A machine for cutting slices of fruit into half slices, comprising a supporting frame including spaced parallel side members, a trough pivoted at one end to the frame for swinging movement and adapted to receive the fruit slices in edgewise relation, a knife mounted for sliding movement in and longitudinally of said side members and over said trough, and means for releasably holding the opposite end of the trough.

1,903,855. ELECTRICAL VACUUM CLEANER. ARTHUR TOWNSEND, Coogee, Sydney, New South Wales, Australia. Filed Oct. 2, 1929, Serial No. 396,864, and in Australia Feb. 25, 1929. 4 Claims. (Cl. 230—133.)

1. In an electrical vacuum cleaner of the type employing a fan driven by an electric motor, the combination of a motor housing formed in two longitudinal complementary and mutually attachable and detachable sections clamped together, a motor removable as a complete unit from the housing, and means for supporting the motor within the housing comprising compression pillows of insulating material, contacting with the interior of the housing at points removed from the line of juncture of



sections thereof, and compressed against the motor by the closure of the two sections to clamp the motor in place within the housing.

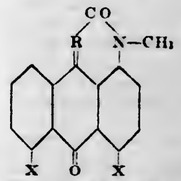
1,903,856. BUCKLE. WILHELM WUNSCHE, Detroit, Mich. Filed June 2, 1932. Serial No. 614,927. 3 Claims. (Cl. 24—163.)



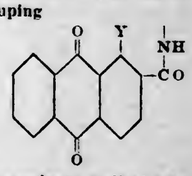
1. A buckle comprising a flat base having opposed sides adjacent its extremities, a top portion connecting the upper ends of said sides at one extremity of the base, thereby forming a tubular guide, a plate pivotally supported between the sides at the other extremity of the base and spaced above the latter, means adapted to hold the outer extremity of the plate on the upper ends of the sides adjacent said top portion, the pivoted extremity of the plate and the base sides on which it is pivoted forming a second tubular guide, prongs extending upwardly from said base, a strap having spaced openings therethrough extending through each tubular guide, any one of said openings in one strap being adapted to be engaged by one prong, and any one of the openings in the other strap being adapted to be engaged by the other prong.

1,903,857. VAT DYESTUFFS OF THE ANTHRAPYRIDONE AND THE ANTHRAPYRIMIDONE SERIES. OTTO BAYER, Frankfort-on-the-Main, and FRITZ BAUMANN, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 5, 1931, Serial No. 506,832, and in Germany Jan. 15, 1930. 5 Claims. (Cl. 260—32.)

1. Vat dyestuffs corresponding probably to the general formula:



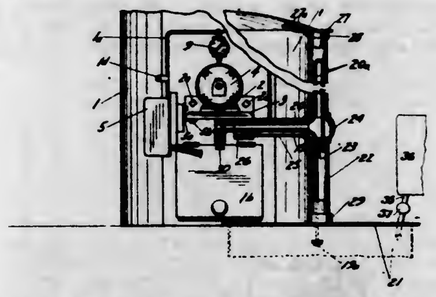
wherein R means CH or N and one X hydrogen and the other X the grouping



in which the anthraquinone radical may contain an amino-group in the position signified by Y, which new dyestuffs

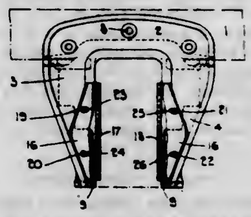
are when dry yellow to bluish red crystalline substances, which are scarcely soluble in organic solvents, and dye the vegetable fiber from a reddish to brownish vat yellow to bluish red shades of a good fastness.

1,903,858. OIL BURNER. BERT A. CLAYTON, Kewanee, Ill. Filed Aug. 12, 1931. Serial No. 556,521. 9 Claims. (Cl. 158—2.)



8. A feeding appliance for oil furnaces comprising an auxiliary tank, a furnace, a hollow vertical column pivotally mounted thereon in spaced relation to the furnace, a supporting base united to the column, the furnace door being united to the base and movable therewith, a burner mounted in the furnace door, a motor and an air compressor mounted upon the base, an air inlet leading to the compressor, an air conduit leading from the compressor having one branch leading to the burner and another branch leading to the auxiliary tank, an oil supply pipe leading from the auxiliary tank to the burner, and an air-tight plug inserted within the column through which plug the oil conduit and the terminal end of the air conduit pass.

1,903,859. ROLLING STOCK. RICHARD THOMSON GLASCODINE, London, England. Filed Mar. 5, 1931, Serial No. 520,405, and in Great Britain Oct. 10, 1930. 4 Claims. (Cl. 105—225.)

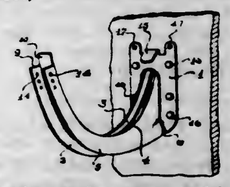


1. In rolling stock the combination of an axle box, an axle guard carried by the stock, horns to said guard, vertically spaced guide members on each of said horns, flanged wear plates floating horizontally on said guide members and engaging vertical faces of said box to permit free vertical movement thereof, and india-rubber pads constrained between such wear plates and said horns to damp vibration of said box.

1,903,860. PREPARATION OF METALLIC COATINGS. HEINRICH GOCKEL, Leverkusen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Apr. 3, 1931, Serial No. 527,621, and in Germany Apr. 24, 1930. 6 Claims. (Cl. 204—1.)

2. In the process of depositing a metal on metallic surfaces from an aqueous solution, the step which comprises effecting the process in the presence of a compound of the group consisting of thiourea and methyl thiourea.

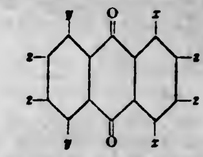
1,903,861. EAVES-TROUGH HANGER. WILLIAM HARRISON GRAY and WILLIAM JOSEPH GRAY, Rochester, N. Y. Filed Apr. 21, 1931. Serial No. 531,744. 5 Claims. (Cl. 108—29.)



1. An eaves-trough hanger comprising a vertically arranged attaching plate provided with a downwardly opening recess which is flared in a downward direction, and an integral curved trough supporting arm having two marginal downwardly extending spaced flanges widening toward their inner ends, and flaring with relation to each other toward their inner ends, which connect with the attaching plate at the edges of the recess.

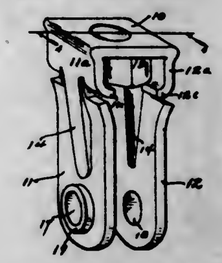
1,903,862. PROCESS FOR ELIMINATING SULPHONIC ACID GROUPS FROM DIHYDROXYDIAMINOANTHRAQUINONEDISULPHONIC ACID. PAUL GROSSMANN, Basel, Switzerland, assignor to the Firm Society of Chemical Industry in Basle, Basel, Switzerland. Filed Feb. 1, 1932, Serial No. 590,312, and in Switzerland Feb. 3, 1931. 4 Claims. (Cl. 260—59.)

1. A process for eliminating sulphonic acid groups from compounds of the general formula



in which one *x* stands for an OH-group and the other *x* for an NHR-group (R meaning H, alkyl or aryl), *y* for hydrogen, OH or an NHR-group (R meaning H, alkyl or aryl), and in which the *x*'s standing in the 2- and 3-position one means an SO_3H-group and the other a hydrogen atom, and of the *x*'s standing in the 6- and 7-position one means a hydrogen atom and the other a hydrogen atom or an SO_3H-group, this SO_3H-group standing in *o*-position to an OH- or an NHR-group, consisting in treating these compounds, so as to form leuco derivatives, in aqueous solutions of alkali metal hydroxides, in the absence of air and at temperatures which do not lie essentially above 0° C., with such quantities of reducing agents which correspond to about 2 hydrogen atoms for each sulphonic acid group to be eliminated, and subsequently feebly heating the resulting product.

1,903,863. CONNECTING ROD END. HOWARD A. HAYDEN, Detroit, Mich. Filed Aug. 12, 1930. Serial No. 474,862. 1 Claim. (Cl. 287—20.)



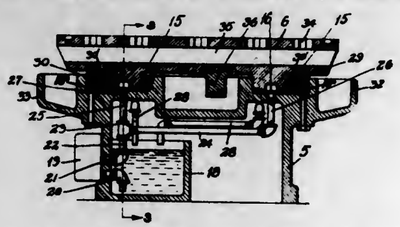
A rod end comprising a U shaped member having a threaded nut firmly secured thereto and located adjacent

the bight portion thereof between the legs of the U, said bight portion having an aperture aligned with the threaded aperture in said nut, said U shaped member having portions of the legs deformed therefrom to grasp and engage the side walls and one face of said nut to firmly secure it in its desired position, and to hold said nut against said bight portion the legs between said deformed portions being ribbed longitudinally.

1,903,864. TEXTILE PEST PROOFING MEDIA. WENFRID HENTRICH and MAX HARDTMANN, Wiesdorf, PETER BACKES, Cologne-Deutz, and HERMANN STÖTTER, Leverkusen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 16, 1930, Serial No. 468,442, and in Germany Aug. 26, 1929. 3 Claims. (Cl. 167—37.)

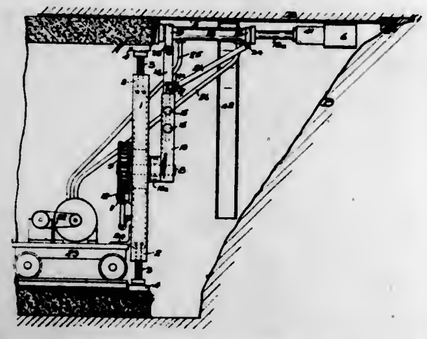
1. A textile pest proofing medium containing a water soluble salt of selenic acid.

1,903,865. MACHINE TOOL SLIDE AND LUBRICATOR THEREFOR. JOHN R. JOHNSON, Rockford, Ill., assignor to The Ingersoll Milling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed Mar. 19, 1931. Serial No. 523,793. 6 Claims. (Cl. 184—6.)



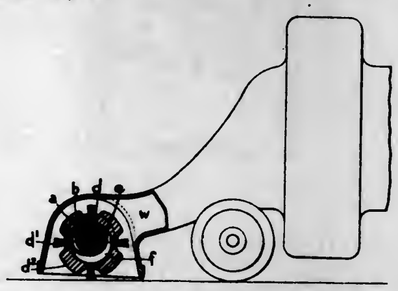
1. A machine tool slide construction and lubricator therefor, comprising a trough-like slide on one machine part having an opening in the thickness thereof in communication with a source of lubricant supply, ways on another machine part mounted to slide in said trough-like slide, a lubricant distributing reservoir in said slidably mounted ways, and a shoe on said slidably mounted ways having openings in its thickness to establish a communication between the reservoir and the ways to be lubricated, said openings also successively establishing a communication between the reservoir and the opening in the trough-like slide when the slidably mounted ways slide in the trough-like ways; whereby the reservoir is intermittently supplied with lubricant.

1,903,866. TUNNELING EQUIPMENT. DONATO LACAPRARA, Dearborn, and KARL E. KETCHUM, Detroit, Mich. Filed Dec. 23, 1931. Serial No. 582,682. 4 Claims. Cl. 61—84.)



1. An equipment of the character described comprising a tunnel lining consisting of a plurality of supporting members arranged side by side and having interlocking marginal portions which permit the movement in a longitudinal direction of any one of said members independently, inward projections on said members, a standard, a jack, and mounting means for said jack so arranged on said standard that the jack may be positioned opposite each of said projections in turn to force it and its supporting member in a longitudinal direction.

1,903,867. VACCUM CLEANER. FRANZ LEHMANN, Zurich, Switzerland. Filed Nov. 17, 1931. Serial No. 575,620, and in Germany Nov. 28, 1930. 5 Claims. (Cl. 15—6.)

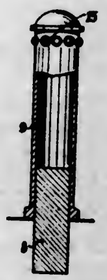


1. In a vacuum cleaner, a rotary driving shaft, a movable beating roller mounted with radial play on said shaft and coupling means on said driving shaft adapted to engage the beating roller so as to carry the beating roller round about by the rotation of the shaft while allowing it to be thrown as a whole outwardly in a radial direction with respect to the shaft.

1,903,868. PROCESS OF PREPARING ALKYL ESTERS OF CARBOXYLIC ACIDS. WILHELM LOMMEL, Leverkusen-Wiesdorf, and RUDOLF ENGELHARDT, Leverkusen-I. G.-Werk, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed June 4, 1931, Serial No. 542,202, and in Germany June 16, 1930. 7 Claims. (Cl. 260—106.)

1. The process which comprises causing an alkyl ester of sulfuric acid containing two to four carbon atoms in the alkyl group and a carboxylic acid to react upon each other with the addition of a neutral salt of an acid of the group consisting of sulfuric acid and phosphoric acid in a quantity sufficient for binding the free sulfuric acid present and formed in the reaction, thereby maintaining an acid reaction in the mixture, and distilling off the alkyl ester of the carboxylic acid.

1,903,869. PILLAR OR POST STANDING IN THE STREET TRAFFIC. FRANZ MEISTER and JOHANN MAUL, Munich, Germany. Filed Mar. 28, 1931, Serial No. 526,068, and in Germany Oct. 1, 1930. 2 Claims. (Cl. 40—145.)

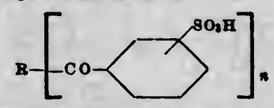


1. A street traffic post comprising a hollow upright standard of highly flexible material whereby said standard

may act as a buffer and flex when hit, an elastic anchorage core fixed in the ground with a portion protruding therefrom and snugly received within the hollow standard for anchoring the same to the surface of the street.

1,903,870. PROCESS FOR DYEING AND PRINTING TEXTILE FIBERS. WALTER MIEG, Opladen, and RUDOLF MARIA HEIDENREICH, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 18, 1930, Serial No. 462,138, and in Germany June 19, 1929. 3 Claims. (Cl. 8—5.)

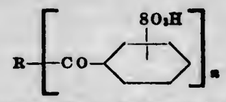
1. Process which comprises impregnating textile fibers with an ester of an indigoid vat dyestuff having in its free form the probable formula:



wherein R represents the radical of an indigoid vat dyestuff containing an indole ring system, *n* stands for one of the numbers 1 or 2 and wherein the CO-group is attached to the nitrogen atom of the indole ring system and treating the impregnated fiber with an alkali.

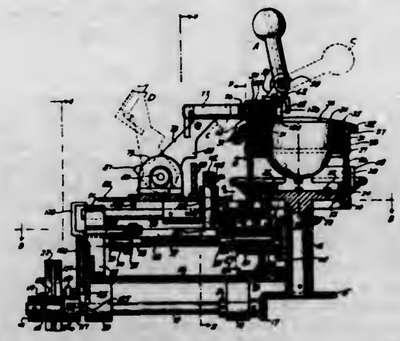
1,903,871. PROCESS FOR DYEING AND PRINTING TEXTILE FIBERS. WALTER MIEG, Opladen, and RUDOLF MARIA HEIDENREICH, Leverkusen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed June 18, 1930, Serial No. 462,139, and in Germany June 19, 1929. 2 Claims. (Cl. 8—5.)

1. Process which comprises impregnating textile fibers with a compound having in its free form the probable formula:



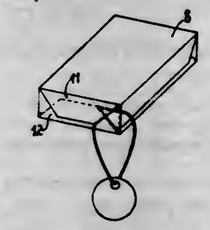
wherein R represents the radical of a leuco derivative of an anthraquinoid vat dyestuff, the CO-group being attached to an oxygen atom, which on its part is linked to a carbon atom standing in meso-position of an anthraquinone nucleus, *n* stands for one of the numbers 1 or 2, and developing the dyestuff on the fibre by treating the latter with an alkali and an oxidising agent.

1,903,872. HAT FLANGING APPARATUS. STEPHEN J. MILLER, Danbury, Conn. Filed May 8, 1929. Serial No. 360,075. 53 Claims. (Cl. 223—22.)



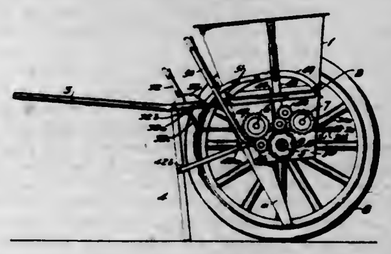
1. In a hat flanging machine, in combination, means adapted to support a hat block, a hat block having a peripheral flange over which the brim of a hat is fitted, means for rotating said block supporting means, and an upper and a lower iron adapted respectively to operate on different portions of the same surface of the hat brim and positioned above and below the peripheral edge of said flange.

1,903,873. PACKAGE FOR CIGARETTES. WALTER EVERETT MOLINS and JOHN WALKER CHALMERS, Deptford, London, England, assignors to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 30, 1929, Serial No. 396,282, and in Great Britain Oct. 31, 1928. 2 Claims. (Cl. 229—51.)



1. A wrapped package including an inner wrapper and an outer wrapper, the inner wrapper having at one side a fold free at its side edges from the adjacent folds, a tearing cord having the intermediate portion thereof lying beneath said free fold and portions at each side of the intermediate portion enclosed between folds of the outer wrapper, the two ends of the cord being free and pendant and connected in the form of a loop.

1,903,874. MACHINE FOR DISTRIBUTING MATERIAL ON LAWNS, ETC. LON A. MILLS, Knoxville, and KYLE H. MYNATT, Fountain City, Tenn. Filed June 20, 1931. Serial No. 545,728. 8 Claims. (Cl. 275—2.)

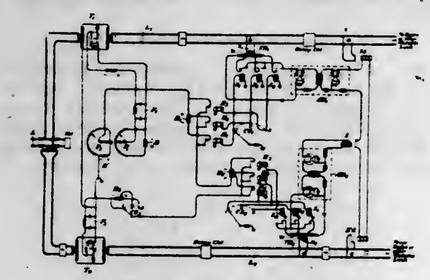


1. The combination with a truck, a receptacle, feed-drums located in the neighborhood of the discharge end of the receptacle, an adjustable partition within the receptacle for regulating the capacity of the chambers formed by the adjustable partition in the receptacle, said partition comprising a pivoted member and a member removably connected therewith and having means for fixing it in different adjustments.

1,903,875. TRANSMISSION CONTROL. DOREN MITCHELL, Martinsville, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 18, 1931. Serial No. 563,646. 5 Claims. (Cl. 178—44.)

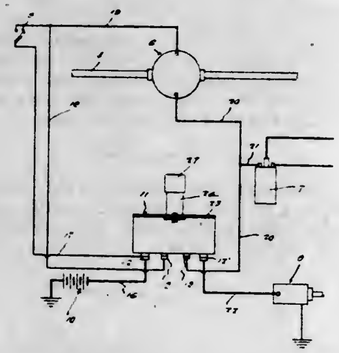
1. In a system for the transmission of energy, a first path adapted for transmission in one direction, a second path adapted for transmission in the opposite direction, means responsive to energy in each of said paths for controlling the transmission over the paths, a three-electrode vacuum tube bridged across one of said paths for introducing a variable loss therein, means for impressing

a voltage on the grid of said tube, means for regulating the voltage impressed on said grid, and a plurality of mutualy contributing means for effecting auxiliary regula-



tion of the voltage impressed on said grid, one of said plurality of means also acting to regulate the sensitivity of each of said transmission controlling means.

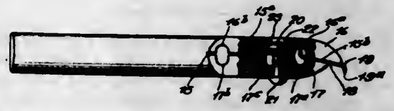
1,903,876. ENGINE CONTROL. TONY PILLA, Trenton, N. J. Filed May 17, 1932. Serial No. 611,910. 1 Claim. (Cl. 290—38.)



In combination, an internal combustion engine, a source of electricity, an ignition system for the engine, a starting motor for the engine, a fluid pressure line responsive to the action of the engine, a switch in said line adapted to be closed by fluid in the line under pressure, a multiple circuit maker and breaker including a primary switch and a secondary switch and a single operating member for controlling said primary and secondary switches, said primary switch being interposed between said source of electricity and the ignition system, said secondary switch being interposed between the source of electricity and the starting motor, said fluid pressure line switch being interposed between the source of electricity and the ignition system, said primary switch being closable by the single operating member before affecting the secondary switch, said secondary switch being closable by continuation in motion of the said operating member.

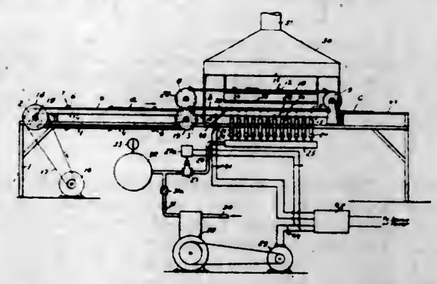
1,903,877. SCRAPER. WILLIAM POTTER, New York, N. Y. Filed Nov. 5, 1931. Serial No. 573,154. 5 Claims. (Cl. 145—47.)

5. A tool of the class described comprising a blade supporting member of unitary construction and comprising a handle portion, a blade supporting body at the free end of the handle portion, said body being split centrally and longitudinally to form relatively movable side jaw members, means for moving said jaw members together to clamp a blade within and between the same and one of said jaw members being longer than the other, one of said jaw members having a transverse groove opening into the split of said body to receive an angularly disposed flange at one end of said blade when mounted between said jaw members, and the longer jaw member having another groove opening into the split of said jaw mem-



bers adjacent the free end of said jaw member and adapted to receive a key element on the blade for supporting the blade against longitudinal movement with respect to the jaw members.

1,903,878. HEATER. FRANK T. POWERS, Douglaston, N. Y. Filed Oct. 20, 1931. Serial No. 570,026. 3 Claims. (Cl. 34—12.)



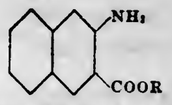
1. An apparatus for heating photo-mechanical printing plates comprising in cooperative combination conveying means for the plates, a source of supply of gaseous fuel, a compressor, means controlled electrically for driving said compressor, a plurality of high pressure gas burners operatively connected by duct to the discharge aperture of said compressor, a storage tank between said compressor and said burners, an electrically operated gas valve in said duct, and electrical controlling means operable by the passage of the plate for starting the said compressor and opening said gas valve.

1,903,879. MANUFACTURE OF EMULSIFYING AND WETTING-OUT AGENTS. ALFRED RHEINER, Basel, Switzerland, assignor to Firm "Chemical Works Formerly Sandoz," Basel, Switzerland. Filed July 8, 1930, Serial No. 466,593, and in Great Britain Dec. 6, 1929. 9 Claims. (Cl. 252—1.)

1. A process for the manufacture of emulsifying and wetting-out agents, consisting in mixing monoarylethers of polyhydric alcohols with hydrotropic compounds of carboxylic or sulphonic acids of the aliphatic, aromatic and hydroaromatic series containing at least six carbon atoms in the molecule.

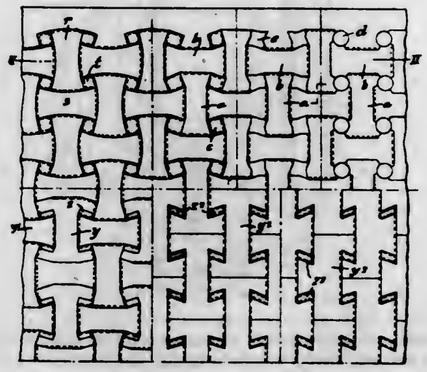
1,903,880. ESTERS OF 2,3-AMINO-NAPHTHOIC ACID AND A PROCESS OF PREPARING THEM. LUDWIG SANDER, Frankfort-on-the-Main-Hochst, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 1, 1929, Serial No. 375,334, and in Germany July 14, 1928. 7 Claims. (Cl. 260—105.)

4. As new products compounds of the following general formula:



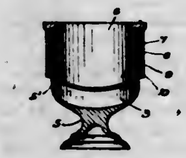
wherein R stands for a substituent of the group consisting of isopropyl, butyl, isobutyl, $CH_2.CH_2.OH$, benzyl and phenyl being yellow compounds, soluble in organic solvents and in dilute mineral acids, insoluble in aqueous alkalies and forming diazonium compounds when treated with nitrite and an acid.

1,903,881. WALL STRUCTURE AND BUILDING BLOCK USED THEREIN. OTTO SANDER and KASPER KÖNIG, Cassel, Germany, assignors to Zeta-Bauweise G. m. b. H., Cassel, Germany, a German Company. Filed Feb. 9, 1931, Serial No. 514,654, and in Germany Feb. 17, 1930. 5 Claims. (Cl. 72—38.)



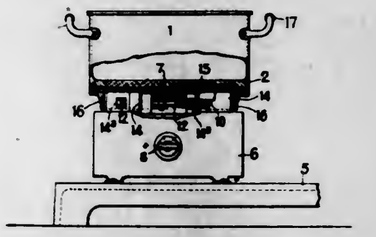
1. A wall structure comprising a plurality of building blocks each having an elongated central portion and an enlarged end portion the sides and ends of the blocks being alternately formed with grooves and ridges adjacent blocks being disposed in said wall in perpendicular relation to each other with an end of one block abutting the central portion of the adjacent block and with the ridges of one block entering the grooves of an adjacent block said disposition of said blocks resulting in a plurality of spaces unoccupied by said blocks, the margins of said spaces being defined by said end portions of said blocks, and a plurality of dowel blocks disposed in said spaces and substantially completely filling said spaces.

1,903,882. SHAVING CUP. HANS SCHNYDER, Biel, Switzerland. Filed Mar. 14, 1932, Serial No. 598,799, and in Switzerland Mar. 27, 1931. 4 Claims. (Cl. 45—136.)



1. In a shaving cup of the type described, in combination a foot member in the form of a goblet, an upper dish-shaped portion provided on said foot member, a cup member in the form of a dish and adapted to confine together with said dish-shaped portion a hollow space for a substance for producing shaving lather therefrom, a passage disposed in the side wall of said cup member in spaced relation to the bottom of said cup for leading liquid substance from said dish-shaped portion of said foot member to said cup member, and a screw thread engagement arranged between said foot member and said cup member and adapting the members to be approached on each other for forcing the substance from said hollow space into said cup member.

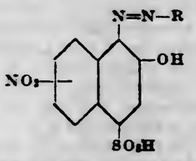
1,903,883. ELECTRIC COOKING. MAX SCHWANDER, Lucerne, Switzerland, assignor to Fabrik Elektro-Thermischer Apparate A. G. Luzern, Lucerne, Switzerland. Filed Feb. 4, 1931, Serial No. 513,425, and in Switzerland Feb. 8, 1930. 1 Claim. (Cl. 219—43.)



Electric cooking apparatus consisting of a cooking vessel with electric heating means and of an electric current supply device, the heating means of the cooking vessel comprising a heating resistance in connection with angularly displaced horizontal knife contact blades, the electric current supply device comprising equally angularly displaced pairs of horizontal knife contact blades, protecting housings being provided for enclosing said pairs of knife contact blades and having slots for the entrance of the cooking vessel knife contact blades, the cooking vessel knife contact blades being so arranged with respect to the current supply pairs of knife contact blades as to establish electric connection between the respective contact blades by a rotary motion of the cooking vessel in the manner of a bayonet junction, the vessel being provided at its bottom with a projecting rim for protecting its contact blades and for ensuring operative cooperation thereof with the respective current supply knife contact blades.

1,903,884. PROCESS FOR DYEING ANIMAL FIBERS FAST TINTS. FRITZ STRAUB, Basel, Switzerland, and HERMANN SCHNEIDER, Riehen near Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 15, 1930, Serial No. 482,155, and in Switzerland Sept. 26, 1929. 6 Claims. (Cl. 8—15.)

1. Process for dyeing animal fibers fast tints, consisting in first dyeing the fiber in a weakly acid bath with the chromium compounds of azo-dyestuffs of the general formula

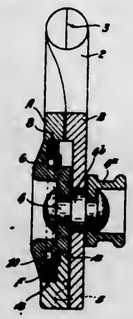


wherein R stands for a naphthol, and then converting the dyestuff absorbed by the fiber into new complexes by developing it in the same bath which is made stronger acid by the addition of an acid.

1,903,885. PERMUTATION PADLOCK. WILLIAM THEWHELLA, Trentham, Victoria, Australia. Filed Oct. 28, 1930, Serial No. 491,778, and in Australia Dec. 24, 1929. 3 Claims. (Cl. 70—19.)

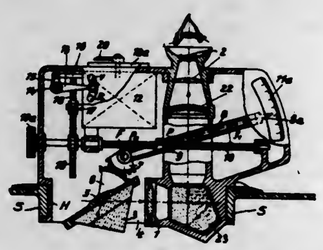
1. A padlock comprising two body members pivotally connected together at their centers and each having a shackle arm, said shackle arms being adapted to form a shackle opened and closed by the pivotal movement of said body members, each of said members having a plurality of abutments, those of each member adapted to engage the abutments on the other body member, one of said body members also having a tongue, a plurality of re-

tatable concentrically arranged locking rings in one of said body members, and each formed with a gap, said tongue being adapted to bear against said rings when in



locked position, and to enter the gaps in said rings when in unlocked position, and means to move said rings to align said gaps with said tongue.

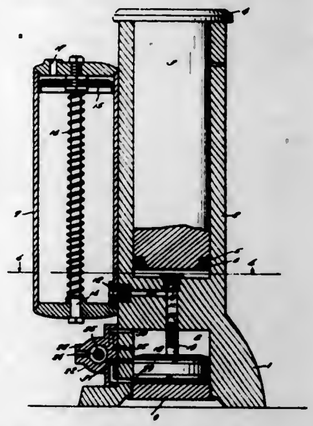
1,903,886. APPARATUS FOR DETERMINING THE SPEED OF FLIGHT OF AIRCRAFT. CHRISTIAN VON HORN, Vienna, Austria, and JOHANN BOYKOW, Berlin-Lichterfelde, Germany, assignors to Czechoslovak Company: Actiengesellschaft C. P. Goerz Optische Anstalt Actiova Spolecnost K. P. Goerz Opticky Ustav, Pressburg, Czechoslovakia. Filed July 8, 1930, Serial No. 466,496, and in Germany July 13, 1929. 3 Claims. (Cl. 88—1.)



1. Apparatus for determining the speed of flight of aircrafts for use with auxiliary targets ahead of, or in the rear of the said aircrafts comprising a sighting telescope; an entering reflector for the said sighting telescope comprising a rotatable pointer, means for rotating the said pointer and for simultaneously rotating the said entering reflector of the telescope, the last named means comprising a clock work, a spindle and a gearing for driving the said spindle by the said clock work, and means for starting, stopping and reversing the direction of movement of the said spindle; and means for turning the apparatus as an entirety around a vertical axis through an angle of at least 180°.

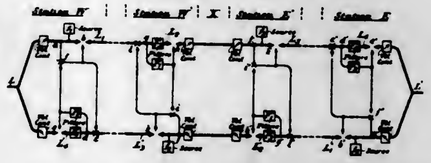
1,903,887. HYDRAULIC JACK. STERLING J. WIDENER, Augusta, Ga. Filed May 11, 1932. Serial No. 610,685. 1 Claim. (Cl. 138—9.)

A device of the class described comprising a cylinder, a piston in the cylinder and passing through the upper end thereof, a reservoir, a motor cylinder located below the first mentioned cylinder and a small cylinder connecting the bottom of the first cylinder with the motor cylinder, a conduit connecting the small cylinder with the reservoir, a downwardly closing check valve in the upper end of the small cylinder above the connection with the conduit, a check valve in the conduit closing toward the reservoir, a motor piston in the motor cylinder having a stem extending into the small cylinder, means, including an automatic valve, for introducing compressed fluid into the motor cylinder to reciprocate the piston and its stem therein, means for placing the fluid in the reservoir under pressure to force some of the fluid into the first cylinder to raise the piston therein against an object to be lifted, after which the motor piston is reciprocated for lifting the main piston and the object, a valve controlled conduit



between the lower end of the main cylinder and the reservoir and permitting the fluid in the main cylinder to flow back into the reservoir when the valve is opened, said means for placing the fluid in the reservoir under pressure comprising a piston in the reservoir, a guide member passing thru the reservoir for guiding the piston, and spring means for normally holding said piston in the reservoir in raised position, and means for forcing air into the upper end of the reservoir to lower the piston.

1,903,888. TWO-WAY TELEPHONE SYSTEM. SUMNER B. WRIGHT, South Orange, and DOREN MITCHELL, Martinsville, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed June 13, 1931. Serial No. 544,194. 11 Claims. (Cl. 178—44.)

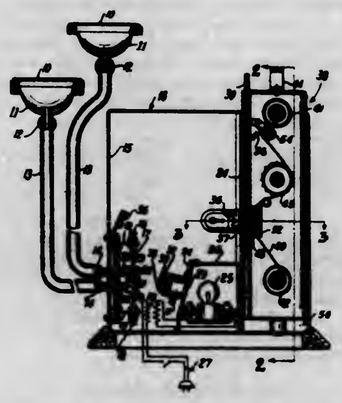


1. In a system for the transmission of energy, including a mutable transmission path and other transmission paths connected in tandem therewith, the method of controlling transmission over the system which consists in causing the energy transmitted thereover for the production of the desired overall effect to apply control energy to the transmitting end of the mutable path, causing the control energy to control the transmission over the receiving end of said path, and excluding the control energy so applied from the system beyond the point where it performs the above-stated function.

1,903,889. PROCESS FOR PURIFYING AND STERILIZING WATER. RUDOLF ADLER, Karlsbad, Czechoslovakia. Filed Feb. 7, 1930, Serial No. 426,774, and in the Netherlands Mar. 28, 1929. 2 Claims. (Cl. 210—28.)

1. Process for periodically purifying carbon serving the purpose of changing the chlorine, which has been utilized in sterilizing water, into chlorine ions, which comprises periodically adding a soluble alkali reacting substance to the chlorine containing water before it passes through the carbon.

1,903,890. OPTICAL POLYGRAPH. EMIL BLUM, Newark, N. J. Filed Mar. 7, 1931. Serial No. 520,787. 4 Claims. (Cl. 234—1.)

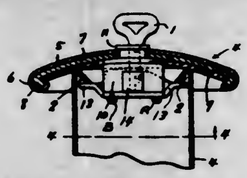


1. In a portable optical polygraph, the combination with a pulsatile element comprising an air tube open at one end and a spring-urged arm for sealing said end and having a mirror fastened thereon and being adapted to be set in vibration by pulsations, a source of light and means for causing a beam of light to impinge on said vibratory mirror, two stationary mirrors facing each other for receiving and redirecting the reflections from said vibratory mirror in the same direction acquired at its point of origination and a concentrating lens for causing said beam of light to concentrate into focus upon a moving photographic film and producing wavy records of arterial pulsations.

1,903,891. HALOGENATED ANTHRAQUINONEACRIDONES AND THE PROCESS OF MAKING SAME. WALTER BRUCK, Mannheim, Germany, assignor to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1929, Serial No. 398,820, and in Germany Oct. 27, 1928. 6 Claims. (Cl. 260—37.)

1. A process of producing anthraquinoneacridones containing chlorine and bromine, which comprises causing an anthraquinoneacridone containing one of the said halogens to react with a halogenating agent selected from the group consisting of one of the said halogens which is different from that already present in the initial material, and agents supplying such halogen.

1,903,892. TANK CAP. EPHRIAM L. CARNEY, Murfreesboro, Tenn. Filed Mar. 21, 1932. Serial No. 600,303. 3 Claims. (Cl. 220—55.)



1. A tank cap comprising an inner disk, an outer disk rotatably mounted on the inner disk, means connecting the disks together in frictional contact with each other, and retaining means on the inner disk engageable with the tank for releasably securing the cap thereon, the first named means including a rounded, peripheral flange on the inner disk, and a rounded peripheral flange on the outer disk enclosing the first named flange.

1,903,893. HOLDER FOR REKNITTING FABRICS. CHARLEY ANN CROWLEY, Nashville, Tenn. Filed Mar. 22, 1932. Serial No. 600,546. 1 Claim. (Cl. 66—1.5.)



A darning last for supporting a fabric having a run therein to be reknitted comprising a substantially elongated cylindrical body provided with a socket opening at one end of said body, said socket adjacent the open end thereof being counterbored to provide an annular shoulder inwardly from the open end thereof, a transparent disk engaging said shoulder, a split ring in the counterbore of said socket and bearing against the outer face of said disk at the marginal edge of the latter, and a lamp within said socket at the inner end of the latter.

1,903,894. PROCESS OF PRODUCING VINYL CHLORIDE. FRIEDRICH KARL FRITSCH, Frankfort-on-the-Main-Griesheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Oct. 22, 1929, Serial No. 401,618, and in Germany Dec. 7, 1928. 4 Claims. (Cl. 260—166.)

1. A process of producing vinyl chloride, which comprises passing hydrochloric acid gas together with acetylene over activated carbon at temperatures between 160 and 200° C.

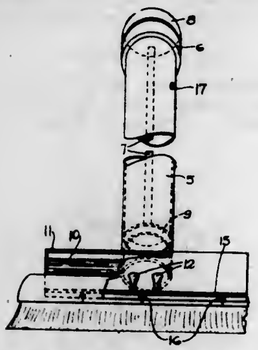
1,903,895. NEW COLLOIDAL MERCURIZED AROMATIC HYDROXY COMPOUNDS. HEINRICH GÜNZLER and OSKAR NEUBERT, Elberfeld near Cologne, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y. Filed Nov. 17, 1925, Serial No. 69,701, and in Germany Nov. 21, 1924. 7 Claims. (Cl. 167—19.)

1. As new products colloidal mercurised nitro-phenol compound preparations being in their dry solid form grayish to yellow powders readily soluble in water and having valuable insecticidal properties.

1,903,896. COMBINATION SPRAYER AND SWEEPER. MANDEL GREENBERG, Brooklyn, N. Y. Filed May 31, 1930. Serial No. 457,923. 1 Claim. (Cl. 15—131.)

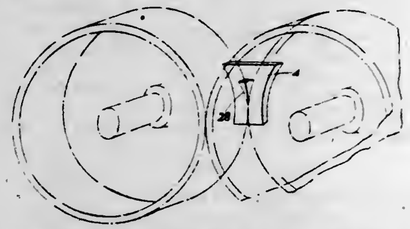
The combination with the elongated, curved back of a sweeping member, of an elongated chamber fitting over said back, conforming to the curvature thereof and constituting a liquid receptacle, extensions on the receptacle engaging said back, nozzles protruding from the chamber and extending beyond said back and through which the liquid is sprayed in the path of the sweeping member, a tubular handle on the receptacle, a piston in the handle

for compressing the liquid in the receptacle and forcing the same through said nozzles, a piston rod, one end of which is substantially the same diameter as and con-



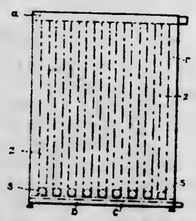
stitutes a continuation of said handle, for operating said piston, and means in said receptacle extension for securing the receptacle to the sweeping member back.

1,903,897. APPARATUS FOR CASTING METALS. HENRY HARRIS, London, England. Filed Aug. 9, 1930, Serial No. 474,166, and in Great Britain Aug. 27, 1929. 2 Claims. (Cl. 207—14.)



1. Apparatus for casting metals or alloys direct from the molten state comprising two rotary drums spaced apart on parallel axes to present at their line of approach an outlet space for metal or alloy, means for regulating the temperature of the said rotary drums, and plates bearing against the end faces of said drums for converting the converging space above the outlet into a receiving trough, a downwardly pointing wedge-shaped projection on the internal face of each end plate, means for supplying molten metal or alloy to said trough and means for maintaining a determined depth of metal or alloy in said trough.

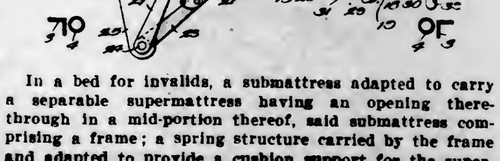
1,903,898. HEAT EXCHANGE DEVICE. GEORG KRÄNZLEIN, Frankfort-on-the-Main-Hoechst, and RICHARD SAMESREUTHER, Butsbach, Germany. Filed Mar. 27, 1929, Serial No. 350,352, and in Germany Apr. 10, 1928. 2 Claims. (Cl. 219—38.)



1. Heat-exchange device comprising two parallel plates, parallel spaced pipes being arranged between the said plates and in intimate contact with these plates, the ends of said spaced pipes being connected with upper and lower headers, the spaces between the pipes being provided with electrical heating bodies.

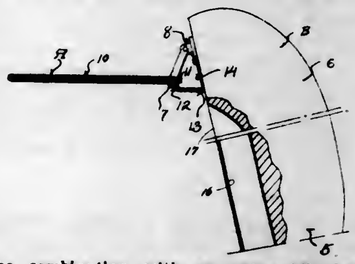
1,903,899. CARBOXYLIC ACID ARYLIDES OF THE BENZENE SERIES AND PROCESS OF MAKING SAME. LEOPOLD LASKA and OSKAR HALLER, Offenbach-on-the-Main, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1929, Serial No. 401,972, and in Germany Oct. 31, 1928. 9 Claims. (Cl. 260—124.)

6. As new products, carboxylic acid arylides of the benzene series, corresponding to the following probable formula:



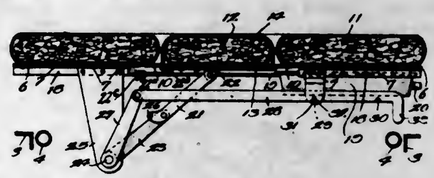
wherein X_1 stands for a hydrogen atom or a nitro or methyl group, X_2 and X_3 stand for a hydrogen atom or a methyl group, and one Y stands for hydrogen and the other Y for a hydroxy group, these products being insoluble in the usual organic solvents and in form of their alkali metal salts soluble in water, and distinguished by their affinity for the vegetable fiber.

1,903,900. TABLE ATTACHMENT FOR AUTOMOBILES. CHARLES W. MARTIN, Chicago, Ill. Filed July 7, 1932. Serial No. 621,157. 3 Claims. (Cl. 45—51.)



1. The combination with an automobile having the front seat provided with a pivoted lap-robe rail on its rear face, of a table attachment for the automobile comprising a flat plate having a substantially U-shaped trough formed on one longitudinal edge, said trough forming an abutment shoulder for receiving the pivoted lap-robe rail, and an abutment flange for engaging the rear face of the seat.

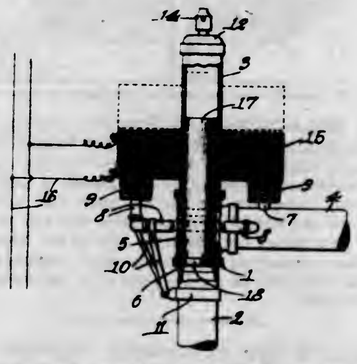
1,903,901. BED. WILLIAM C. MASSLOW, Forest Park, Ill., assignor of one-half to August E. Schultz, Forest Park, Ill. Filed Feb. 6, 1930. Serial No. 426,296. 1 Claim. (Cl. 5—90.)



In a bed for invalids, a submattress adapted to carry a separable supermattress having an opening therethrough in a mid-portion thereof, said submattress comprising a frame; a spring structure carried by the frame and adapted to provide a cushion support for the supermattress; an aperture in the spring structure for registering with the opening in the supermattress; a pair of

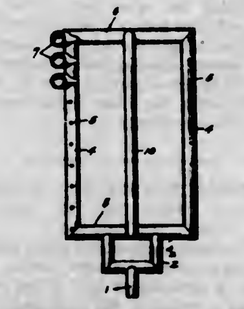
parallel rails carried by the spring structure and extending transversely of the submattress on each side of said aperture; a filler support pivoted on said spring structure transversely of the rails at one side of the aperture; a filler on said filler support for the opening in the supermattress; brackets depending from said rails; a rod journaled in the brackets and extending laterally beyond the rails; a link rigidly secured to the rod mid-way thereof and extending upwardly therefrom; another link pivoted to the first link and to the filler support substantially centrally thereof; a lever rigidly connected to one end of the rod and extending upwardly therefrom; an arm pivoted to the upper end of the lever and extending parallel with said rails toward a margin of the submattress, said arm being movable transversely of the submattress; a bracket carried by the submattress for slidably carrying the outer end of the arm; a handle on the arm between the bracket which carries the arm and the margin of the submattress; and a separable vessel slidably supported by said rails.

1,903,902. MAGNETIC VALVE. WILLIAM W. MCLAREN, Birmingham, Ala. Filed May 7, 1930. Serial No. 450,578. 8 Claims. (Cl. 137—139.)



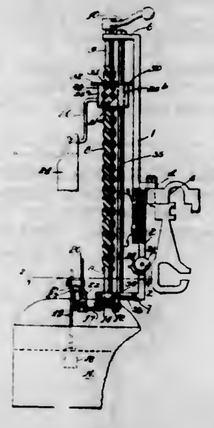
1. In a device of the class described, a conduit, a movable magnet located outside of the conduit, and movable longitudinally of the conduit and a valve movable within the conduit longitudinally of the conduit and controlling the flow of fluid therethrough, the valve being free of mechanical connection with the magnet, but being continuously attracted by the magnet, whereby when the magnet is moved longitudinally of the conduit, the valve will be moved longitudinally of the conduit also, to control the flow of fluid through the conduit.

1,903,903. GAS BURNER. RAYMOND B. MCLAVY and JAMES E. CONNER, Columbine, Wyo. Filed Jan. 31, 1930. Serial No. 424,873. 4 Claims. (Cl. 158—104.)



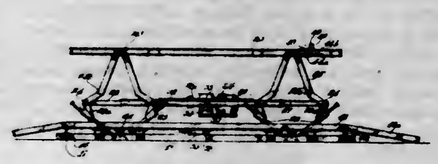
1. A gas burner including an intake pipe, spaced feed lines, one of which is connected to said intake pipe, manifold lines connecting the ends of said feed lines, a U-shaped by-pass connecting said feed lines, and a horizontal draft plate supported by said by-pass.

1,903,904. FEEDING DEVICE FOR TYPE CASTING MACHINES. JAMES LINDSAY EWING and ROBIN RUDOLF TOBIAS, New Orleans, La. Filed Dec. 5, 1929. Serial No. 411,752. 5 Claims. (Cl. 22—80.)



5. A feeding device for type casting machines comprising a frame, a rotatable threaded rod mounted in said frame, a nut connected with said rod, a support for the metal connected with said nut and having an outwardly bent end, the metal being provided with an enlarged opening into which the outwardly bent end is inserted and means for rotating said rod to lower the nut and the metal and a melting pot into which said metal is lowered.

1,903,905. AUTOMOBILE SERVICING MACHINE. WILLIAM T. CARTER, Chicago, Ill. Filed July 21, 1931. Serial No. 552,253. 8 Claims. (Cl. 254—89.)

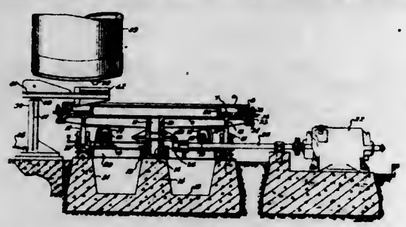


1. A lifting mechanism comprising a horizontal frame made up of telescoping units, a platform above the frame and adapted to receive a load, a base below the frame, connections between the units of the latter and the platform to raise and lower the latter by the telescopic action of the units, and connections between the latter and the base to raise and lower the frame and its superstructure from the base during such telescopic action.

1,903,906. CENTRIFUGAL MOLDING APPARATUS. HARRY M. NAUGLE and ARTHUR J. TOWNSEND, Canton, Ohio, assignors to Naugle & Townsend, Inc., Wilmington, Del., a Corporation of Delaware. Filed Feb. 18, 1930. Serial No. 429,359. 1 Claim. (Cl. 22—65.)

In rotary centrifugal molding apparatus, a bed plate disk rotatable about a vertical axis, an annular mold including upper, lower and outer side metal walls forming

an annular mold cavity, said mold including a ring plate forming the bottom wall of the mold, and an L-shaped



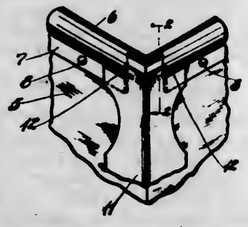
annular rim rabbeted to the ring plate forming the side and top walls of the mold, and means engaging the rim for clamping the rim and ring plate to the bed plate.

1,903,907. METAL POLE WITH REENFORCING PIPES. EDMUND W. RISMENSCHNEIDER, Canton, Ohio, assignor to The Union Metal Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed July 5, 1928. Serial No. 290,366. 1 Claim. (Cl. 189—24.)



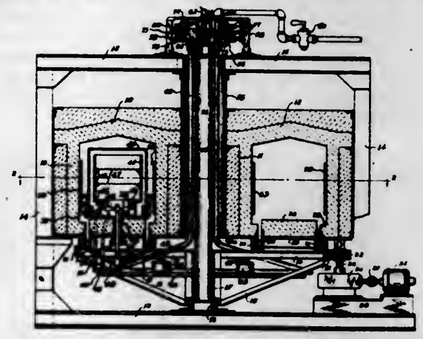
A tubular pole, a reenforcing pipe located therein, a hollow base portion upon the pole, a flange upon the lower portion of the pipe and located within said hollow base portion, means projecting from the base for contact with the upper side of the flange, when the upper ends of the pipe and pole are connected together, means connecting the upper ends of the pipe and pole together whereby they may be erected as a unit, a foundation, and anchor bolts in the foundation arranged to be connected to the flange on the pipe.

1,903,908. WASHTUB. JOHN L. ARLT, Saginaw, Mich., assignor to Fred W. Stork and John L. Arlt, doing business as Ideal Manufacturing Company, Saginaw, Mich. Filed Oct. 19, 1931. Serial No. 569,647. 4 Claims. (Cl. 68—31.)



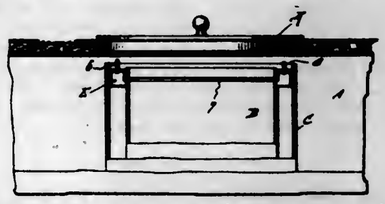
4. A tub structure of the class described and provided with a rolled rim, openings provided in said rim, legs adapted to be detachably inserted in said rim openings, the upper ends of said legs being shouldered and shaped to lock them in the rim when in proper vertical assembled relation, and rods connecting said legs at a point intermediate their length.

1,903,909. ROTARY HEAT TREATING FURNACE. FRANK T. COPE, ARTHUR H. VAUGHAN, and WILBUR S. BOWLING, Salem, Ohio, assignors to The Electric Furnace Company, Salem, Ohio, a Corporation of Ohio. Filed Apr. 30, 1930. Serial No. 448,609. 9 Claims. (Cl. 263—7.)



1. A furnace having a discontinuous, annular chamber, a continuous, annular, rotatable hearth located concentric with said chamber and forming the bottom thereof, a closed container supported by said hearth, a hollow work-supporting receptacle within the container, open at its upper end and spaced from the sides and top of the container, and means for admitting gas to the lower end of said work-supporting receptacle and withdrawing gas from the container at a point outside of the work-supporting receptacle.

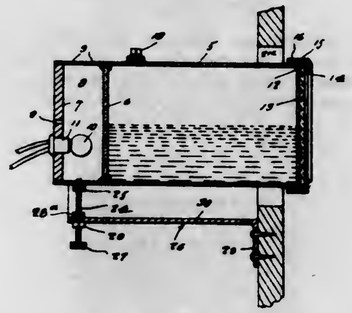
1,903,910. WASTE ELIMINATOR FOR ICE CREAM CABINETS. JOSEPH A. JANSON, Providence, R. I. Filed Jan. 14, 1932. Serial No. 586,681. 1 Claim. (Cl. 220—14.)



In an ice cream cabinet and in combination with an ice cream container and its surrounding member, a closure member for closing the upper part of the space between the container and said member, said closure member being formed of sections hingedly connected together and handle parts on the closure member, said closure member being of channel-shape in cross section with its flanges depending downwardly with the inner flange resting against a bead of the ice cream container.

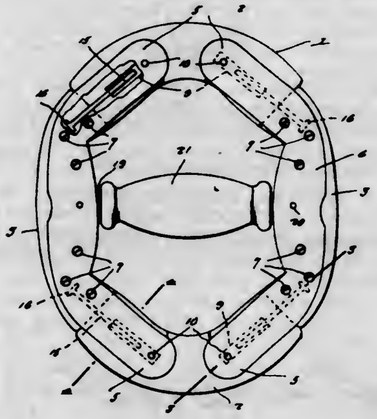
1,903,911. AERIAL NAVIGATOR. WALTER A. MEADOR, Gallatin, Tenn. Filed July 18, 1930. Serial No. 471,564. 3 Claims. (Cl. 33—206.)

3. A combined inclinometer and bank indicator for aircraft comprising a closed cylinder having a diameter of half its length, a dark liquid half filling said cylinder, a translucent dial mounted in the front end of the cylinder, a horizon line on said dial, and a flanged ring engageable with the cylinder for retaining said dial in position on the front end of the cylinder, and means at the rear end of said cylinder for illuminating said dial, said dial having its lower half translucently colored to represent



the earth, and its upper half translucently colored to represent the sky, and adjustable means for mounting said cylinder in an aircraft.

1,903,912. HAT BLOCK. GEORGEBEYS PAULOS PAPADOPOULOS, Detroit, Mich., assignor of sixty-six and two-thirds per cent to A. Victor Bizer, Detroit, Mich. Filed Nov. 12, 1931. Serial No. 574,629. 4 Claims. (Cl. 223—33.)

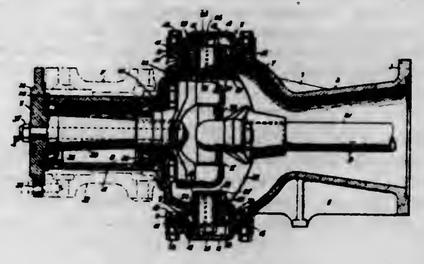


1. A hat block comprising a pair of side sections and a pair of end sections, said end sections having slots therein, means operatively connected with the side sections for shifting said side sections in opposite directions simultaneously, guide arms mounted on the side sections and extending slidably over the end sections, and pins mounted on the guide arms and extending through the slots for shifting the end sections in opposite directions relative to each other upon actuation of the side sections.

1,903,913. AXLE STRUCTURE. DENT PARRETT, St. Joseph, Mich., assignor to Joseph Gossner and Mathias Leupold, New York, N. Y. Filed Sept. 27, 1930. Serial No. 484,918. 6 Claims. (Cl. 180—43.)

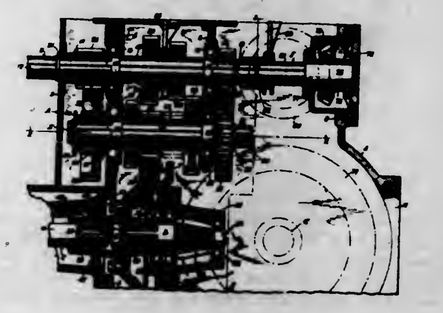
1. An axle structure of the type described comprising, an open ended housing having co-axial ears at its open

end formed with bearing receiving openings, bearings positioned in said openings, a hollow spindle having aligned



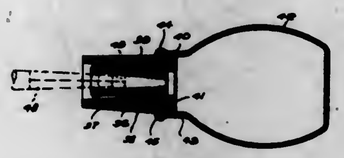
hollow bosses, and tubular bushings detachably received in the bosses of said spindle and in said bearings for pivotally supporting the spindle on said housing.

1,903,914. VARIABLE SPEED TRANSMISSION. DENT PARRETT, St. Joseph, Mich., assignor to Joseph Gossner and Mathias Leupold, New York, N. Y. Filed Oct. 30, 1930. Serial No. 492,251. 16 Claims. (Cl. 74—57.)



16. A transmission of the type described comprising a drive shaft, a countershaft continuously driven from the drive shaft at a constant speed ratio, a second countershaft selectively driven from said drive shaft at a plurality of different speed ratios, a driven shaft assembly including two shaft sections, both of which deliver power from the transmission, and means for selectively driving the driven shaft assembly from the drive shaft through either of said countershafts.

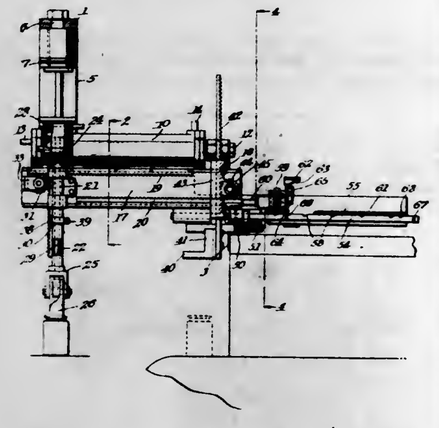
1,903,915. PIPE CLEANING DEVICE. RAMSEY SMITH, Oakridge, Roatan, Honduras. Filed May 27, 1932. Serial No. 613,961. 2 Claims. (Cl. 131—13.)



1. A tobacco pipe cleaning device, comprising a substantially rigid tubular neck having a tapered bore increasing in cross-sectional area forwardly, said neck being provided near the contracted end of the tapered bore with exterior

and interior circumferential grooves, a bulb receiving the rear end of the neck and having a bead for insertion within the exterior groove, and a sealing tube arranged within the bore of the tubular neck, said sealing tube having a tapered bore increasing in cross-sectional area forwardly and formed of compressible rubber, said sealing tube being provided at its rear end with an exterior circumferential flange for insertion within the interior circumferential groove.

1,903,916. LEER LOADER. THOMAS STENHOUSE and DAVID STENHOUSE, Washington, Pa., assignors to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Dec. 28, 1928. Serial No. 328,981. 21 Claims. (Cl. 214—1.)



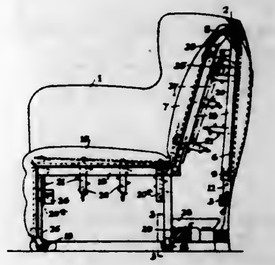
1. A leer loader including means for gripping ware, an adjustable stop associated with said means, a rack associated with said means and arranged vertically with respect thereto, a gear meshing with the rack, and a friction clutch associated with the gear, whereby the gear is rendered inoperative when the stop becomes effective.

1,903,917. ANTIGLARE DEVICE. WILLIAM L. DYSART, Louisville, Ky. Filed Aug. 17, 1931. Serial No. 557,665. 3 Claims. (Cl. 296—97.)



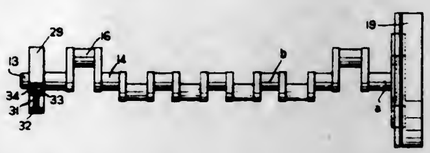
3. The combination of a windshield having a leak proof chambered pane, a tube of expansible colored liquid, and means for heating and expanding the liquid from the tube into the chamber of the pane, comprising, an electric heating coil surrounding the tube, a source of electricity, conductor wires connecting the source of electricity with the coil, and insulating means for mounting the coil and tube stationary adjacent the windshield.

1,903,918. CHAIR OR SETTEE BEDSTEAD. HENRY ARTHUR FRASER and PETER FREDERICK CRIGHTON, London, England. Filed Jan. 29, 1931, Serial No. 512,167, and in Great Britain Feb. 13, 1930. 2 Claims. (Cl. 5—37.)



1. A chair or settee bedstead which comprises in combination a seat section rigidly carried by movable supporting means, a back section hinged at its lower edge to said seat section and at its upper edge to a third section, said third section being hinged to a relatively stationary main frame solely by a fixed pivotal connection, said sections being movable into line to constitute a resilient bed surface, during which movement said pivotal connection constitutes the sole connecting means between the said sections and the frame, and a yielding control operatively connected to at least one section and which tends to move all the sections from the extended into the folded position, and latching mechanism operable to lock the sections in the folded position with the back section arranged at any selected inclination of a range thereof.

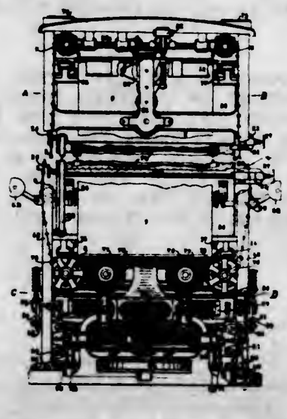
1,903,919. INTERNAL COMBUSTION ENGINE. WALTER R. GRISWOLD, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 24, 1928. Serial No. 264,309. 6 Claims. (Cl. 74—6.)



1. The combination with an internal combustion engine having a crank shaft, of flywheels of different mass fixed to the shaft at the ends thereof, and a damping device adjacent the flywheel of greater mass including inertia means frictionally connected to the shaft.

1,903,920. AUTOMATIC MACHINE FOR THE MANUFACTURE OF SOAP BARS. ALFRED THEODOR HÜNTEN, deceased, Koppern in the Taunus, Germany, by Gertrud Hünten, widow and administratrix, Frankfort-on-the-Main, Germany. Filed July 7, 1931, Serial No. 549,258, and in Germany Nov. 6, 1928. 12 Claims. (Cl. 18—26.)

1. An automatic machine for the manufacture of soap bars, comprising, in combination, four endless bands forming between them a space for the reception of hot liquid soap mass, cooling means arranged between the bands,



guiding members located at the corners of the space formed by the bands and having grooves therein receiving portions of the bands to form labyrinth packings.

1,903,921. LOCK NUT AND METHOD OF MANUFACTURE. ERNEST L. RUPP, West New Brighton, N. Y. Filed Feb. 8, 1932. Serial No. 591,583. 5 Claims. (Cl. 151—21.)



3. A lock nut formed from a standard nut, said lock nut having a portion of a lateral face beveled and a corresponding portion of the metal at the periphery of the hole opposite the bevel pressed longitudinally and laterally of the nut.

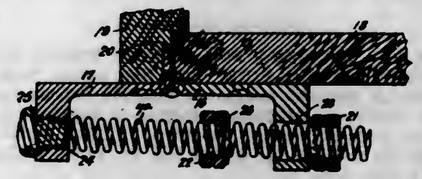
1,903,922. LOCK NUT AND METHOD OF MANUFACTURE. ERNEST L. RUPP, West New Brighton, N. Y. Original application filed Feb. 8, 1932, Serial No. 591,583. Divided and this application filed June 15, 1932. Serial No. 617,276. 6 Claims. (Cl. 10—86.)



1. The method of converting a standard nut into a lock nut which comprises displacing the metal at the periphery of the hole, both inwardly toward the axis of the nut and longitudinally of the nut by pressing a bevel on a side of a lateral face of the nut opposite the portion to be displaced.

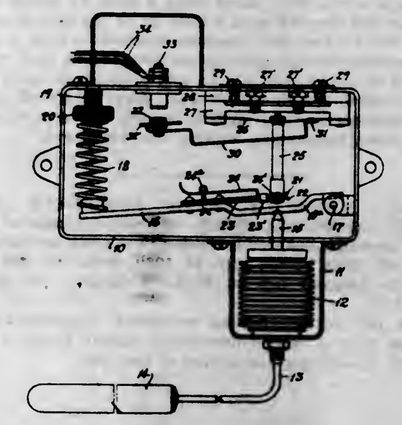
1,903,923. CLOSURE-HOLDING AND RETURN SPRING. WILLIAM JAMES HYDE, London, England. Filed July 7, 1932, Serial No. 621,249, and in Great Britain June 2, 1931. 18 Claims. (Cl. 16—180.)

1. In combination with a member and a member mounted to swing relatively thereto, spring means anchored to one member, guide means on the other member for the spring means, means coacting with the spring means operable to limit movement of the guide member to different positions along the spring means to accordingly limit movement of the second member in one direction,



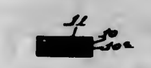
such spring means permitting movement of the second member in the opposite direction notwithstanding the position of the third mentioned means.

1,903,924. AUTOMATIC CONTROL SWITCH. LAWRENCE C. IRWIN, Brooklyn, N. Y., assignor to Charles J. Tagliabue Mfg. Co., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 6, 1930. Serial No. 435,576. 23 Claims. (Cl. 200—140.)



1. In an automatic control switch for controlling an electric circuit in response to variations in the temperature or pressure at a selected point, in combination, an element adapted to expand in response to an increase in the temperature or pressure at such point and to contract in response to a decrease in such temperature or pressure, a snap plate having a concave section adapted to snap rapidly to a reverse concave position when moved for a distance from a position of rest, a resilient connection between said element and plate arranged to absorb a part of the movement of said element and become tensioned thereby, and a switch arm operated by said plate to make or break quickly an electric circuit as said plate snaps into reverse position aided by the stored-up energy of said resilient connection.

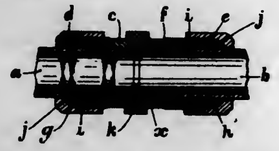
1,903,925. TIRE BEAD REENFORCING ELEMENT. ALFRED H. JOHNSON, Niles, Mich., assignor to National-Standard Company, Niles, Mich., a Corporation of Michigan. Filed Dec. 26, 1930. Serial No. 504,927. 2 Claims. (Cl. 245—1.5.)



1. A tire bead reenforcing element including a plurality of separate parallel tension members each composed of a plurality of wires twisted tightly together throughout

their length, said members being wholly disconnected by cross wires and imbedded in a substance to which rubber will adhere, said substance serving to hold said members in parallel spaced relationship.

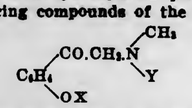
1,903,926. COUPLING FOR JOINING PIPES, RODS, WIRES, AND THE LIKE. BOYD NEIL ROBERT LAMONT, Feltham, England, assignor to Simplifix Patents Limited, Teddington, Middlesex, England, a Registered Company of Great Britain. Filed Oct. 13, 1930, Serial No. 488,496, and in Great Britain Oct. 21, 1929. 3 Claims. (Cl. 285—122.)



1. A coupling comprising in combination a pair of constraining members adapted for surrounding the element to be coupled and hollowed out to receive a straight cylindrical metal sleeve, said sleeve being a close fit within said members but adapted to be a loose fit on the said element, means for drawing said members together axially, a pair of oppositely-bevelled internal surfaces one on each member and arranged such that on said members being drawn axially together each end of said sleeve is forced down the respective bevelled surface to grip the element and at the same time axially shorten the said sleeve.

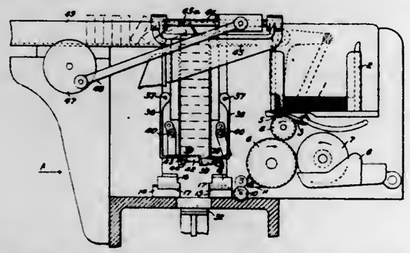
1,903,927. MANUFACTURE OF SECONDARY AROMATIC AMINO-ALCOHOLS. HELMUT LEGERLOTZ, Berlin, Germany, assignor to Frederick Stearns & Company, Detroit, Mich. Filed Mar. 24, 1930, Serial No. 438,642, and in Germany Jan. 16, 1929. 4 Claims. (Cl. 260—128.5.)

1. A method for making secondary aromatic amino alcohols with a monohydroxylated phenyl group which consists in reducing compounds of the type



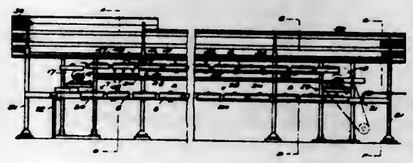
in which the two substituents of the phenyl group are in the para or meta position, X is a benzyl or benzoyl group and Y a benzoyl or toluolene sulfonyl group, saponifying the product obtained by the reduction, and separating the alcohol from the reaction mixture.

1,903,928. MACHINE FOR APPLYING BANDS, STAMPS OR THE LIKE TO PACKETS. JAMES MASON, Deptford, London, England. Filed Oct. 27, 1931, Serial No. 571,480, and in Great Britain Nov. 6, 1930. 10 Claims. (Cl. 216—55.)



1. In a machine for applying bands to packets the combination with a support for bands having spaced band engaging portions, means for delivering a band to said support, said means including a device for bowing the band transversely of the longer dimension thereof to render the band self-supporting, and means for lifting the band from the support and contacting the same with a packet.

1,903,929. PROCESS AND APPARATUS FOR THE MANUFACTURE OF SWEATED PARAFFIN FROM NONSWEATED PARAFFIN AND THE LIKE SUBSTANCES. REINIER MEIJER, The Hague, Netherlands, assignor to Naamloose Vennootschap de Bataafsche Petroleum Maatschappij, The Hague, Netherlands. Filed July 29, 1930, Serial No. 471,530, and in the Netherlands Aug. 13, 1929. 6 Claims. (Cl. 196—20.)



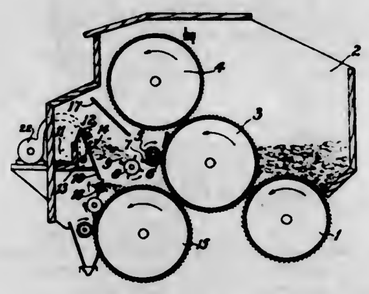
1. A process for obtaining sweated paraffin from a nonsweated paraffinous mass and filling similar substances comprising trays having perforated bottoms with the liquid base material at the entrance of a cooling passage, conducting said trays through said cooling passage with the bottoms of the trays immersed in a stream of water flowing through said cooling passage and then leading said trays through a sweating chamber.

1,903,930. SLED. CHARLES Z. MILLER, Fort Scott, Kans. Filed Jan. 19, 1931. Serial No. 509,792. 6 Claims. (Cl. 280—21.)



1. In a sled, the combination of a frame; two runners extending along and under the side edges thereof; and separate yieldable means connecting the respective runners to the frame and normally maintaining the runners in predetermined spaced relation with respect to the frame, the connections of each runner being yieldable independently of movement of the other runner upon the concentration of weight above said first-named runner to permit relative collapsing movement of the frame and runner to thus effect steering of the sled.

1,903,931. APPARATUS FOR SUPPLYING TOBACCO TO A CIGARETTE MAKING MACHINE. WALTER EVERETT MOLINS and FELIX FREDERIC RUAU, Deptford, London, England. Filed Feb. 25, 1931, Serial No. 518,225, and in Great Britain Mar. 18, 1930. 8 Claims. (Cl. 131—39.)



1. A method of winnowing tobacco for use in a cigarette making machine which comprises the following steps:—

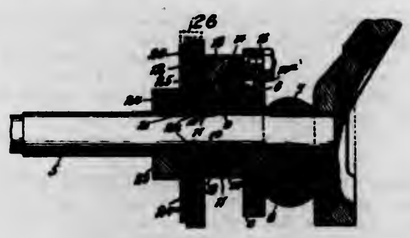
(a) Projecting the tobacco in an upwardly directed shower at an angle to the horizontal.

(b) Subjecting the shower to an air blast to check the motion of the light particles of tobacco.

(c) Separating the stalks from the desired shreds in the shower.

(d) Projecting the desired shreds in a shower to evenly spread the tobacco over the surface of a distributor.

1,903,932. ADJUSTABLE THROW ECCENTRIC. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Nov. 18, 1931. Serial No. 575,880. 7 Claims. (Cl. 74—1.)



1. In an adjustable throw eccentric, the combination with a shaft, of a driving disc fixed to the shaft, an adjusting eccentric rotatable about the shaft and located along side the driving disc, an adjusting disc fixed to the adjusting eccentric and located at the end thereof opposite the driving disc, a driving eccentric surrounding the adjusting eccentric, a driving link connection between the driving disc and the driving eccentric, and means cooperating with the adjusting disc and the driving eccentric for retaining the same against relative movement in different positions of adjustment of the adjusting eccentric.

1,903,933. SEAM. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed May 6, 1932. Serial No. 609,720. 2 Claims. (Cl. 112—268.)

1. A seam for sewed articles, comprising a body fabric having a hem along one edge thereof and folded to lie against the upper face of said body fabric, and a single row of connected stitches entering and emerging from the same side of the fabric comprising a series of equally spaced and connected needle thread loops penetrating upwardly through the hem at points spaced from the inner edge thereof, alternate loops only entering and emerging from the upper face of the body fabric below the hem, the loops being positioned against the upper face of the hem and extending from the points of penetration to the inner edge of the hem and lying in parallel planes diagonal to the general line of the hem.

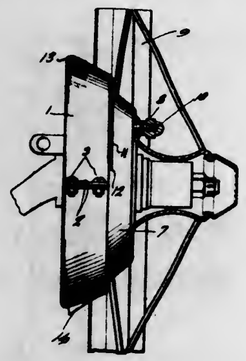


1,903,934. REFRIGERATION. CARL GEORG MUNTERS, Stockholm, Sweden, assignor to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 29, 1929, Serial No. 350,845, and in Germany May 25, 1928. 4 Claims. (Cl. 62—95.)



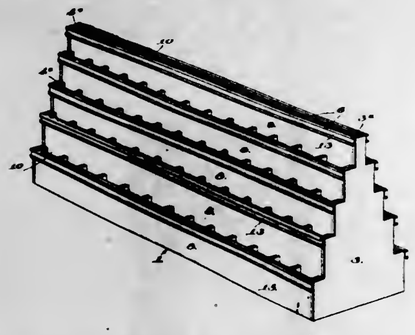
1. In a refrigerator, a cabinet, a horizontally disposed evaporator shell in said cabinet, air cooling means on the rear part of said shell, ice freezing means on the front part of said shell, means for introducing an inert gas into the rear part of said shell, a plurality of vertically spaced horizontally disposed liquid distributing plates within said shell, a transverse rib on the central part of the uppermost of said plates, a conduit for conveying liquid refrigerant to said shell, said conduit entering the rear part of said shell and extending forward of said transverse rib and means for removing refrigerant and inert gas from the rear of said shell.

1,903,935. BRAKE DUST GUARD. HERBERT E. NICHOLS, Santa Ana, Calif. Filed Mar. 3, 1931. Serial No. 519,815. 7 Claims. (Cl. 188—218.)



1. In combination with a brake including a backing plate and a relatively rotatable drum, a band mounted on the backing plate and extending therefrom over the drum, and a flange formed on one edge of the band and overhanging the drum, said flange being formed on an upper portion of the band and having its ends terminating in points spaced from said one edge of the band.

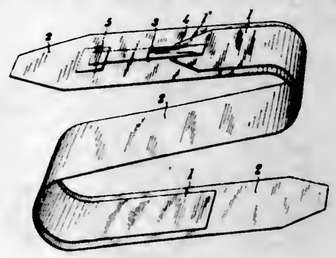
1,903,936. DISPLAY RACK. RAYMOND B. NUNNERY, Chickasha, Okla. Filed Sept. 27, 1930. Serial No. 484,897. 4 Claims. (Cl. 211—69.)



2. A pyramidal display rack for pencils and the like comprising sets of independent transversely and longitudinally arranged partitions intersecting one another, one of said sets of partitions having slots to receive the other partitions and form article receiving pockets, the transverse partitions having step-shaped edges, the steps forming spacers for the longitudinal partitions, said transverse partitions having transversely extending slots, and longitudinal strips extending through said slots in said transverse partitions and forming bottoms for the pockets.

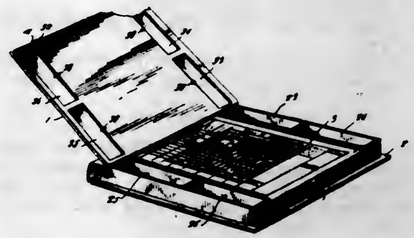
1,903,937. PHOTOGRAPHIC ROLL FILM SPOOL. GERHARD OLLENDORFF, Wolfen near Bitterfeld, Germany, assignor to Agfa Anaco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Nov. 13, 1928, Serial No. 319,171, and in Germany Dec. 8, 1927. 3 Claims. (Cl. 95—9.)

1. A photographic roll film cartridge comprising a flanged spool with a core, a protective paper strip provided on its leading end with a slot, and a strip of light-sensitive photographic film with a tongue-like extension on its leading end, said film lying on the inner surface of the said protective paper strip and wound onto the spool



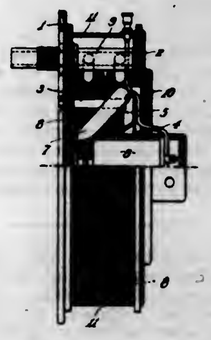
with the latter, the tongue-like extension of said film being passed through said slot in the protective paper strip and fastened on the outer surface of the latter.

1,903,938. INDICATING DEVICE. HARRY H. PARSONS, Missoula, Mont. Filed Feb. 3, 1931. Serial No. 513,199. 4 Claims. (Cl. 129—1.)



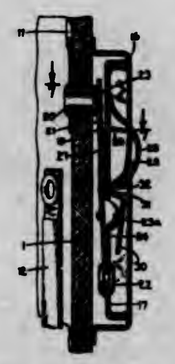
1. A container comprising front and back sections, an end section connecting the rear edges of the front and back sections, side sections forming compartments between the front and back sections, and means in the front section for allowing access to the compartments without opening the front section.

1,903,939. HEATING AND VENTILATING APPARATUS. MATT PAYNE, Surbiton, England. Filed Dec. 30, 1931. Serial No. 588,990, and in Great Britain Jan. 26, 1931. 8 Claims. (Cl. 257—137.)



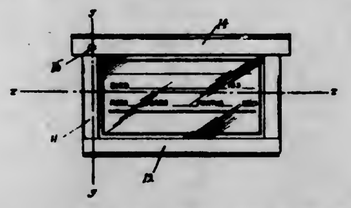
3. An air heater comprising a pair of parallel frame plates arranged to form a flat cylindrical chamber, a sleeve carried by one of the frame plates, a fan disposed within said chamber, a driving motor for the fan mounted in the sleeve, the frame plate which carries the sleeve having an annular air inlet opening surrounding the motor, and annular heating means disposed between said frame plates around said fan.

1,903,940. FLASH LIGHT SAFETY SWITCH. GOODRICH B. PRATT, Jersey City, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,663. 9 Claims. (Cl. 200—60.)



1. A device of the character described comprising a contact box, a resilient contact arm carried thereby, a button on the arm extending through an aperture in the box, a slide on the box, a lever carried by the slide and having a camming extension engaging the button, a recess in the box under the slide, and an extension on the lever within the slide to maintain the button depressed when the slide is moved from a normal locked position.

1,903,941. CARD HOLDER. EDWARD A. RASBRIDGE, Lebanon, Pa. Filed Dec. 28, 1931. Serial No. 583,445. 3 Claims. (Cl. 40—124.5.)

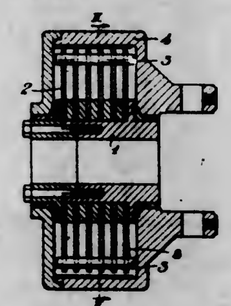


1. A card holder comprising a pair of plates, at least one of which is transparent, a coating of cementitious water-proof material covering the side and bottom edges of the plates and securing the same in spaced relation, the upper edges of the plates being open to receive a card or name plate, a casing for the plates of sheet metal disposed flat against the back of the plates and having its side and bottom edges turned inwardly at the front, said bottom edge being spaced from the bottom of the plates and open at each end to provide a drain channel and a cover fitted over the top of the casing.

1,903,942. PROCESS FOR CONVERTING TOBACCO STEMS INTO PULP. JOHN F. REICHARD, York, Pa., assignor to United States Cigar Company, Inc., York, Pa., a Corporation of Pennsylvania. Filed Apr. 20, 1932. Serial No. 606,527. 9 Claims. (Cl. 92—14.)

1. The process of converting tobacco stems into pulp for the purpose of making tobacco sheet, which consists in separating the foreign material from the stems, crushing the stems, treating the crushed stems in a solution of caustic soda, pressing, washing, and grinding the mass, and subjecting the mass to the action of a beating machine.

1,903,943. CLUTCHING DEVICE. CARL AUGUST RUDQVIST, Stockholm, Sweden, assignor to Pulvis Aktiengesellschaft, Glarus, Switzerland. Filed June 14, 1929, Serial No. 370,930, and in Sweden Mar. 13, 1929. 11 Claims. (Cl. 192—58.)



1. In a clutching device, a hub, a drum shaped casing rotatably surrounding said hub and containing a powdered material, disk-shaped members carried by said hub, and substantially axial bolts carried by said disk shaped members.

1,903,944. CASTING OF ALUMINUM SILICATE REFRACTORIES. FREDERIC WILLIAM SCHROEDER, Louisville, Ky., assignor to Corhart Refractories Company, Louisville, Ky., a Corporation of Delaware. Filed Oct. 9, 1931. Serial No. 567,950. 3 Claims. (Cl. 49—79.)



1. A core for molding cast aluminum silicates formed of grains of aluminum silicate and a suitable bond.

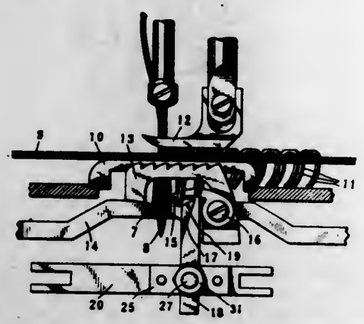
1,903,945. ANODE FOR WATER-COOLED VACUUM TUBES. RINJIRO SHIMIZU, Tokyo, Japan, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1929, Serial No. 416,852, and in Japan Jan. 24, 1929. 1 Claim. (Cl. 250—27.5.)



An electron discharge device comprising an envelope enclosing a plurality of electrodes and including a cup-shaped metallic portion constituting an anode for the de-

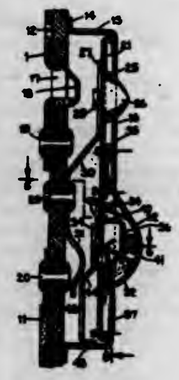
vice, a cylindrical glass portion closing the end of said metallic portion, and a plurality of vanes affixed to said metallic portion at an angle to the longitudinal axis thereof, said vanes extending lengthwise of said metallic portion and being in spaced relation with one another and positioned so that a cooling liquid may pass freely between them and over the outer surface of said metallic portion.

1,903,946. TUFTING MACHINE ATTACHMENT. LOYD A. SMITH, La Grange, Ga., assignor to Truline, Incorporated, La Grange, Ga., a Corporation of Georgia. Filed Aug. 1, 1930. Serial No. 472,299. 28 Claims. (Cl. 112—79.)



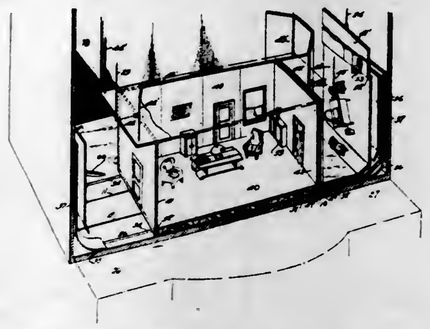
1. A tufting machine comprising a needle, actuating mechanism for the needle, means for feeding the work through the machine, a looper, means for actuating the looper for cooperation with the needle to form a loop, a loop cutting means, and a support for both said feeding means and looper, at least part of said loop cutting means being fixed to said support.

1,903,947. FLASH-LIGHT SAFETY SWITCH. FRANK G. STIMSON, Belleville, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Apr. 16, 1930. Serial No. 444,648. 21 Claims. (Cl. 200—60.)



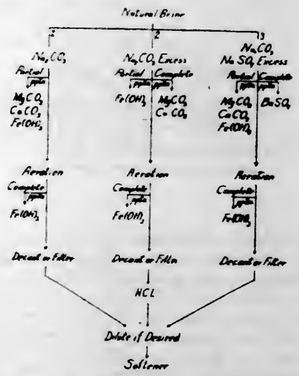
21. A device of the character described comprising a casing, a contact box on the casing, switch contacts within the contact box, an operating slide movable upon the contact box and bringing the contacts into operable position thereby, at least one slot in the contact box adjacent the slide, the slide having a raised portion, an opening in the raised portion at the base thereof forming a relatively narrow opening between the wall of the raised portion and the contact box, a locking lever within the raised portion and engageable in a slot to lock the slide in position, a U-shaped bend in the locking lever receiving the wall of the raised portion of the slide at the opening to pivot the lever thereupon, and a spring between the inner wall of the raised portion and the locking lever.

1,903,948. THEATER. JACK POTTER STOCKTON, Spring Lake, N. J. Filed Sept. 18, 1928. Serial No. 306,641. 36 Claims. (Cl. 272—22.)



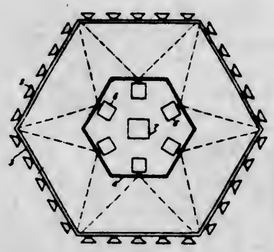
1. The combination with a theater having a permanent stage, proscenium arch in front of the stage, and wings to each side of the stage, of a scene shifting traveler supported on the permanent stage and guided for movement back and forth between the wings, and two preassembled stage settings each coupled to the traveler and movable thereby so that one setting or the other setting or adjacent portions of both settings are visible through the arch.

1,903,949. PROCESS OF REGENERATING BASE-EXCHANGE SUBSTANCES. ORLAND RUSSELL SWEENEY, Ames, Iowa, assignor, by mesne assignments, to The Permutit Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,425. 8 Claims. (Cl. 23—112.)



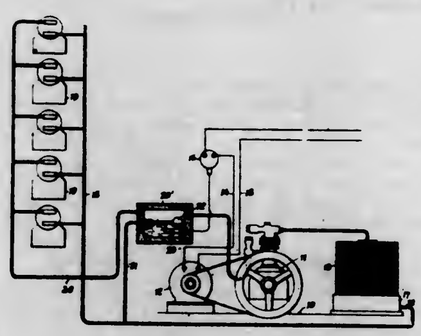
8. The method for economical regeneration of base-exchange material of a water-softening system which comprises supplying regenerating solution by treatment of natural salt brine to remove harmful constituents, including removal of calcium and magnesium by chemical precipitation and separation of the precipitate, while always retaining the sodium chloride of the brine in a state of solution, and passing the treated solution through said material; the brine being withdrawn from an earth source and conditioned for use as regenerating solution by such treatment and passed through said material as successive connected operations.

1,903,950. MOTION PICTURE THEATER AND APPARATUS. JULIUS WEINBERGER, New York, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,445. 3 Claims. (Cl. 88—16.2.)



3. The combination of an enclosure provided with translucent wall sections, a projection room located within said enclosure, a plurality of moving picture projectors arranged in said room simultaneously to project pictures upon said walls, and means operated in synchronism with said projectors for causing sound to be produced in proximity to said wall sections.

1,903,951. TEMPERATURE CONTROL CHAMBER. EDWARD T. WILLIAMS, Pelham Manor, N. Y. Filed May 7, 1930. Serial No. 450,338. 8 Claims. (Cl. 62—3.)

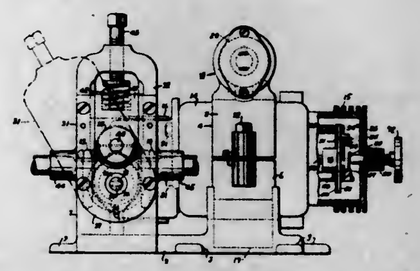


1. In combination with a compression type refrigerator including an evaporator, means forming a control chamber in the suction line separate from the evaporator, means for supplying liquid to said chamber from the pressure line, a float for controlling the quantity of liquid in said chamber, a thermostat in said chamber below the normal liquid level, and a switch operated by the thermostat for controlling the operation of the refrigerator.

1,903,952. WELDING ROD AND PROCESS OF MAKING THE SAME. WILLIAM A. WISSLER, Jackson Heights, N. Y., assignor to Haynes Stellite Company, a Corporation of Indiana. Filed Feb. 20, 1931. Serial No. 517,378. 8 Claims. (Cl. 219—8.)

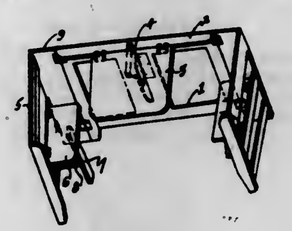
1. A welding rod adapted to give a deposit of sound metal highly resistant to abrasive wear, said welding rod containing cobalt 20% to 65%, chromium 15% to 45%, tungsten 2% to 35%, carbon 0.25% to 3.5%, manganese as an impurity not more than 0.9% and silicon in such quantity, not greater than 2%, that the proportion of the silicon to the manganese is at least 1 to 2.5.

1,903,953. WIRE FEED DEVICE. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial No. 442,701. 15 Claims. (Cl. 140—128.)



1. A wire feed device comprising a base having two clamps, a roll assembly having a neck held in one of said clamps, an electric motor having a case held in the other of said clamps and a reduction gear unit between said motor and said roll assembly, said clamps enabling both said motor and said roll assembly to be adjusted relatively to each other and to the base.

1,903,954. FOLDING TABLE AND CHAIR. LOUIS BLUMENTHAL, Brooklyn, N. Y. Filed July 29, 1932. Serial No. 625,595. 8 Claims. (Cl. 155—124.)

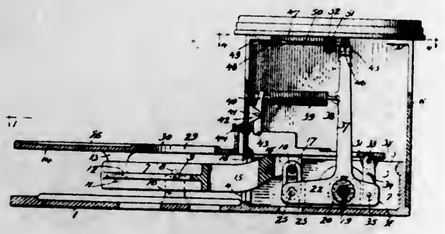


1. In a device of the character described, in combination, a normally upright supporting member, a table swingably connected to the top of said supporting member, a seat assembly and means for swingably connecting said seat assembly to a side edge of said supporting member whereby said seat assembly may be folded in spaced relation to said supporting member.

1,903,955. SCALE. HUGH M. CAMERON, Woodhaven, N. Y., assignor of one-half to Edward A. Judge, New York, N. Y., and one-half to Jacob E. Seederer, Bloomfield, N. J. Filed Aug. 7, 1931. Serial No. 555,712. 9 Claims. (Cl. 265—68.)

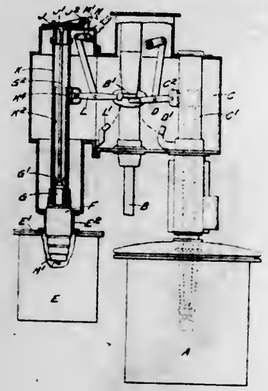
1. In a scale the combination of a platform, a lever of the first class disposed below the plane of the platform, means forming two points of support for said lever below the plane of the platform, means forming points of support for said platform on one arm of said lever, a T lever supported below the plane of the platform, means for

connecting one arm of said first mentioned lever with one arm of said T lever, and means for connecting a portion of the platform with another arm of said T lever



below the plane of said platform, counterbalancing means associated with said T lever and means for indicating the weight of a body resting on said platform.

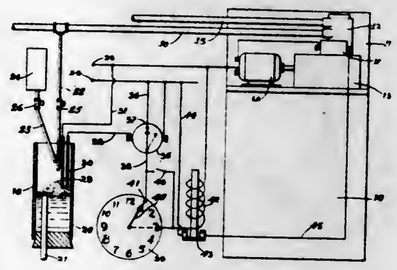
1,903,956. HIGH VOLTAGE ELECTRIC SWITCH GEAR. JOHN CHRISTIE, Sunderland, and DONALD FOSTER AMER, Jarrow, England, assignors to A. Reyrolle & Company Limited, Hebburn-on-Tyne, England, a Registered Company of Great Britain. Filed Mar. 14, 1932, Serial No. 598,836, and in Great Britain Apr. 17, 1931. 19 Claims. (Cl. 175—298.)



1. A potential transformer fuse mounting for high voltage electric switchgear, comprising a potential transformer tank, a condenser-type bushing insulator which supports the fuse mounting in the wall of the tank, a metal tube constituting the innermost layer of the bushing insulator, a potential transformer fuse disposed within the bushing insulator, and an insulating tube surrounding the fuse and surrounded by the metal tube.

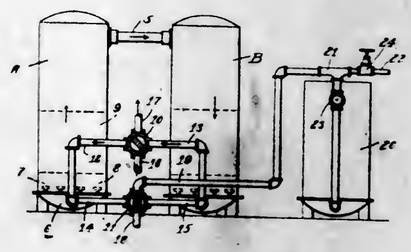
1,903,957. WATER SOFTENING SYSTEM AND MEANS FOR CONTROLLING OPERATION THEREOF. THOMAS B. CLARK, Rockford, Ill., assignor, by mesne assignments, to The Permutit Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 21, 1927. Serial No. 169,827. 16 Claims. (Cl. 210—24.)

1. In a water softening system, the combination with a water softener and means for regenerating the same, of a controller governing the operation of said regenerating means, said controller comprising a receptacle, means for diverting water from the outlet or service side of the water softener into said receptacle in a suitable volume, means for supplying a soap solution to the water in said receptacle to form a lather, and means arranged to



render said regenerating means operative, said means being itself rendered operative upon a failure of lather formation in said receptacle, but being otherwise maintained inoperative in the presence of the lather evidencing the relative softness of the water.

1,903,958. WATER SOFTENER. THOMAS B. CLARK, Rockford, Ill., assignor, by mesne assignments, to The Permutit Company, Wilmington, Del., a Corporation of Delaware. Filed May 7, 1928. Serial No. 275,601. 6 Claims. (Cl. 210—24.)

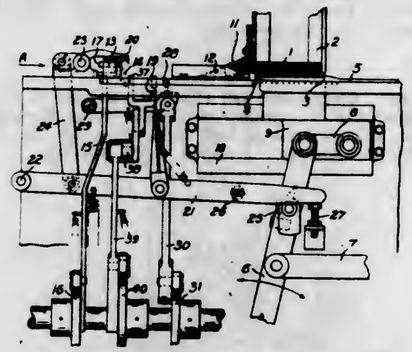


1. A water softener comprising in combination a pair of tanks connected together at the top, each of said tanks containing a bed of water softening material, water distributing means in the bottom of each of said tanks, and a pair of four-way valves, each of which has two ports connected with the bottoms of said tanks, there being a source of hard water supply connected with one of the remaining ports of one of said valves and a pipe leading to a service system connected with the other port thereof, and there being a source of brine and flush water connected with one of the two remaining ports of the other valve and a pipe leading to a drain connected to the other port thereof.

1,903,959. PACKING MACHINERY. RUSSELL CLARKSON, Deptford, London, England. Filed Nov. 4, 1929, Serial No. 405,439, and in Great Britain Nov. 22, 1920. 7 Claims. (Cl. 93—2.)

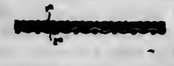
1. In apparatus for opening collapsed shells of cartons of the slide and shell type, the combination with means for engaging and exerting thrust on the outer folded edges

of the shell to urge them toward each other, of means acting simultaneously with said first named means and engaging said shell to impart a double curvature thereto



in the direction of the thrust exerted by said first named means to ensure movement of the flattened folds in the proper direction.

1,903,960. FABRIC AND SHEET MATERIAL AND THE MANUFACTURE THEREOF. CAMILLE DREYFUS, New York, N. Y. Filed Dec. 15, 1925, Serial No. 75,653, and in Great Britain Jan. 23, 1925. 4 Claims. (Cl. 154—2.)



1. A process for the manufacture of composite sheet material which comprises applying to a fabric containing yarns comprising a thermoplastic derivative of cellulose a softening agent in solution in volatile solvents which are non-solvents of said derivative, associating it with another fabric by superposition, and subjecting the fabrics to heat and pressure to soften the cellulose derivative and unite the fabrics to form a sheet material of increased impermeability.

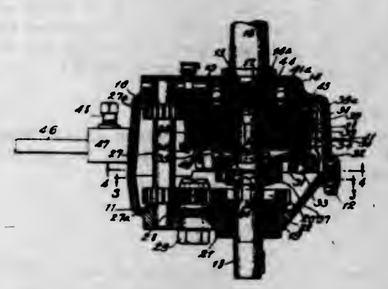
1,903,961. METHOD OF REMOVING COMBINED SULPHUR FROM CELLULOSE ACETATE. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, Montclair, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Apr. 29, 1930. Serial No. 448,414. 6 Claims. (Cl. 260—102.)

1. Method of removing combined sulphur from cellulose acetate comprising subjecting the solid cellulose acetate to an aqueous liquid under super-atmospheric pressures and at temperatures above 100° C.

1,903,962. MANUFACTURE OF CELLULOSE OR CELLULOSIC PRODUCTS. HENRY DREYFUS, London, England. Filed Sept. 5, 1931, Serial No. 561,443, and in Great Britain Nov. 8, 1930. 13 Claims. (Cl. 92—7.)

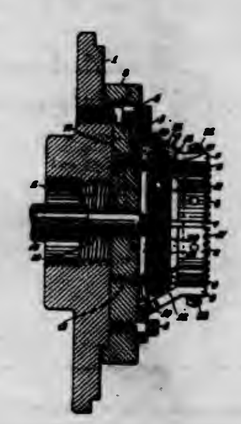
1. Process for the manufacture of cellulose or cellulosic materials from wood, straw, grass or other raw materials by processes in which the materials are subjected to the action of chemical reagents at elevated temperatures and under elevated pressure, characterized in that such pressure is produced at least partially by means of inert gases or vapours which are introduced into the reaction vessel or digester whether directly or by development from materials introduced into said vessel or digester in addition to the normal reaction ingredients.

1,903,963. MULTIPLE DISK CLUTCH. GEORGE W. EMRICK, Brooklyn, N. Y., assignor to Ettco Tool Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Apr. 8, 1930. Serial N. 442,702. 7 Claims. (Cl. 192—69.)



1. In a device of the class described, a drive member and a driven member, the driven member being movable longitudinally with respect to the axis of the drive member, a friction disk clutch arranged on said members at adjacent ends thereof, said clutch involving a series of clutch plate elements and a series of clutch disk elements interposed between said plate elements, one series of elements being keyed to the drive member and the other series of elements keyed to the driven member, tensional means for normally supporting said disks and plates in non-engaging position to permit free and differential rotary movement thereof with respect to each other, means actuated in one directional movement of the driven member for bringing the clutch elements in operative engagement in the direct drive of the driven member through said disk clutch, said means comprising dogs pivotally supported in connection with the drive member and circumferentially spaced with respect to said clutch elements, and an equalizing ring having a swivel mounting on the driven member and cooperating with the free ends of said dogs.

1,903,964. SPRING CHUCK. CLAUS WILHELM FAUST, Elmwood, Conn., assignor, by mesne assignments, to The Hess-Bright Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed May 2, 1932. Serial No. 608,740. 3 Claims. (Cl. 279—16.)



1. A chuck comprising a plate, a jaw member formed of a single piece of sheet metal and having a substantially flat annular base portion secured to the plate and having a tapering or conical part its larger end spring from the

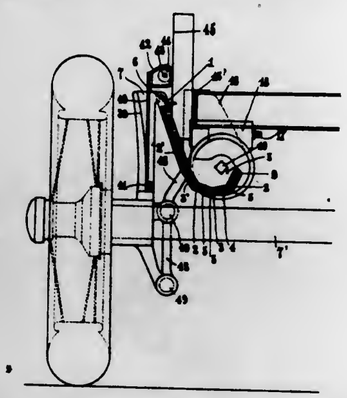
flat annular base portion and continuing at its smaller end in a number of work engaging fingers, the fingers being set off one from the other by means of slots extending from their outer ends well into the conical or tapering portion, a wedge or plunger member mounted within the tapering portion and furnished with a wedge or cam face for engaging the inner faces of the set off members of the slanting portion, and a push rod extending through the plate and having a rounded end for engaging the rear face of the plunger member.

1,903,965. DRAFTING PEN. HENRY FRANK, Brooklyn, N. Y. Filed June 25, 1932. Serial No. 619,246. 3 Claims. (Cl. 120—43.)



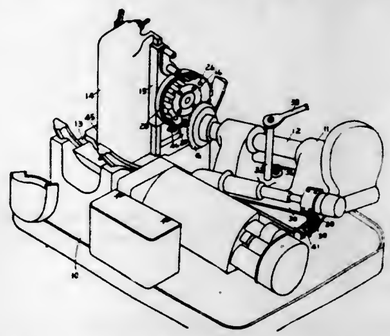
1. A writing pen comprising a vented barrel, a hollow writing head carried by the barrel and having a passage providing communication with the barrel, said head also having a furcated writing end and a plurality of openings in its walls, and a closely fitted cap removably carried by the head having a discharge opening adjacent the furcated end of the head, the walls of the cap cooperating with the head to form recesses at the upper edges of the openings, the lower end of the passage terminating below the recesses to prevent the flow of fluid from the head into the barrel.

1,903,966. VEHICLE SUSPENSION DEVICE. LOUIS GRANGES, Paris, France. Filed Aug. 4, 1930, Serial No. 473,078, and in France May 27, 1930. 5 Claims. (Cl. 280—124.)



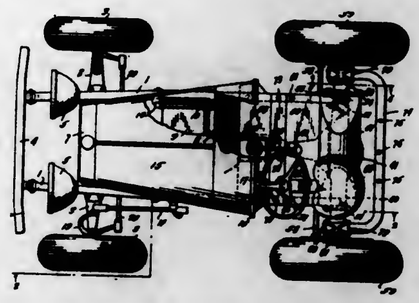
1. A suspension device for a vehicle having a chassis supported on a plurality of axles, comprising flexible connecting means between the chassis and the axles, a yielding power means, a rotatable cam in contact with the flexible means, the cam being contoured to be affected by the flexible means and in turn to affect the yielding power means, and means for controlling the intensity of the initial reaction of the yielding power means from a remote position so that irrespective of the magnitude of the load on the chassis the cam may assume a suitable intermediate position for every possible load condition, the said intermediate position of the cam permitting the elastic reactions to remain substantially proportional to the applied load.

1,903,967. GRINDING APPARATUS. ERNEST C. HEAD, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Apr. 29, 1929. Serial No. 358,937. 4 Claims. (Cl. 51—241.)



1. An attachment for grinding the nose and front face of the cutter spindle of taper gear cutting machines on which the work head is adjustable angularly relative to the axis of the cutter spindle, comprising a rotatable grinding wheel, a slide on which the grinding wheel is mounted, means for driving the wheel comprising a motor housed on said slide and means operatively connecting the armature shaft of the motor to the grinding wheel, a support on which the slide is movable in a direction inclined at an angle to the axis of the grinding wheel equal to the inclination of the front face of the spindle to the side of the nose, and the means for moving the slide on the support, said support having an arm adapted to be detachably mounted in the bore of the work spindle of the machine to carry the support on the work head.

1,903,968. TRACTOR. WARREN S. HOSMER, Bartow, Fla. Filed Nov. 2, 1931. Serial No. 572,689. 4 Claims. (Cl. 180—1.)



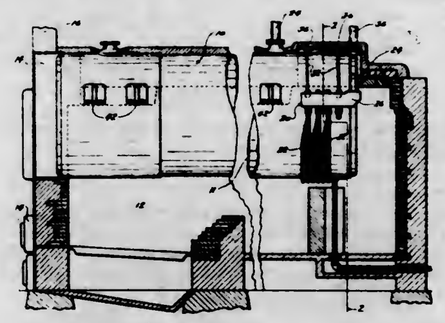
1. A tractor comprising a frame, a transmission and a differential secured thereto, a universal joint positioned between the differential and the transmission adapted to connect them directly to each other so as to shorten the wheel base of the tractor, and a metallic plate having a weighted lug associated therewith to maintain the tractor in a level position when exerting a forward pull, said metallic plate being cut away on its underside to receive the differential.

1,903,969. BORE HOLE SURVEYING APPARATUS. ALEXANDER ANDERSON, Fullerton, Calif. Original application filed May 11, 1927, Serial No. 190,641. Divided and this application filed Mar. 4, 1931. Serial No. 520,096. 18 Claims. (Cl. 234—1.)



1. In combination in a bore surveying instrument, a light-sensitive record member a light source and a plurality of reflecting members adapted to reflect light from such source upon such record member one of such reflecting members being fixed and the other being mounted for movement.

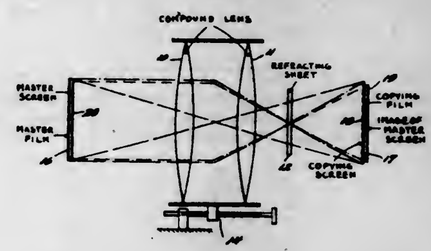
1,903,970. SUPERHEATER ARRANGEMENT FOR CYLINDRICAL SHELL BOILERS. WILBUR H. ARMACOST, New York, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Apr. 25, 1932. Serial No. 607,534. 4 Claims. (Cl. 122—469.)



1. The combination with a boiler having a horizontal cylindrical shell portion, of means for passing heating gases along the lower outer surface of said portion, and a superheater having tubes running beneath said portion from side to side thereof and each substantially parallel to its outer surface.

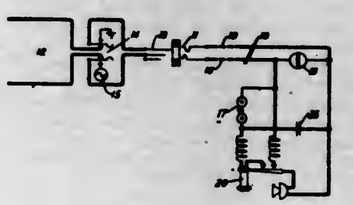
1,903,971. COLOR PHOTOGRAPHY. THOMAS THORNE BAKER, Middlesex, England, assignor to Spicers Limited London, England, a British Company. Filed Nov. 7, 1931, Serial No. 573,690, and in Great Britain Nov. 7, 1930. 7 Claims. (Cl. 88—24.)

1. The method of avoiding the occurrence of interference effects when printing from colored transparencies of the color screen type onto a copying film also bearing a color screen which comprises sharply focussing an image of the picture on a master transparency onto the emulsion of the copying film by means of a lens of large aperture and of such critical focus that the image of the



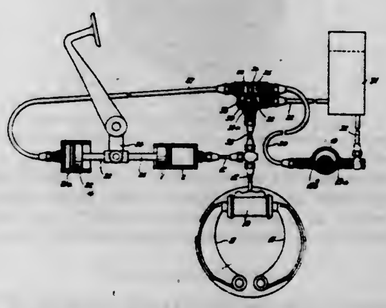
master color screen formed at the same time and in the plane of the copying color screen is sufficiently diffused to avoid the occurrence of interference effects.

1,903,972. TELEPHONE SYSTEM. CHARLES B. BARTLEY, Pittsburgh, Pa., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1930. Serial No. 503,703. 13 Claims. (Cl. 179—81.)



1. A telephone substation including a signal lamp associated with the instruments comprising said substation and arranged in the circuit network of said substation to respond directly and only to incoming signaling current.

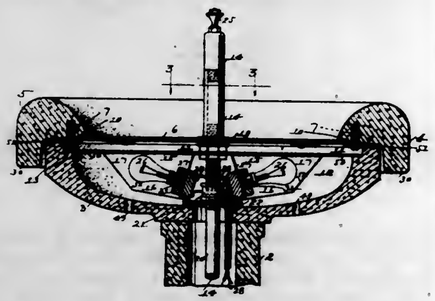
1,903,973. BRAKE FOR USE ON VEHICLES. EDWARD BISHOP BOUGHTON, London, England. Filed May 4, 1931, Serial No. 535,025, and in Great Britain May 17, 1930. 7 Claims. (Cl. 188—152.)



1. A fluid pressure braking system for vehicles of the type including a manually operable master piston, a brake operating piston and a fluid pressure line connecting the pistons, said system including a pressure limiting piston open to the manual pressure in the system and movable

to limit that pressure, means cooperating with the pressure limiting piston to predetermine the manually operable pressure in the system under which the pressure limiting piston will operate, and pressure generating means controlled by and proportional to the movement of the vehicle to provide for a pressure in the system in excess of the manually permissible pressure.

1,903,974. FOUNTAIN STRUCTURE. HENRY A. BRINK, Spring Lake, Mich. Filed July 2, 1931. Serial No. 548,320. 4 Claims. (Cl. 299—4.)



1. In a fountain structure of the character described: a lower member having a chamber in its upper side; an upper member on the lower member, adapted to contain water and comprising an upwardly extending rim portion and a translucent bottom portion above the chamber; a water projecting pipe extending upwardly through the chamber and through said bottom portion in tightly fitting relation therewith; a sash frame on the lower member having openings angularly disposed about the pipe and downwardly extending partitions between the openings forming compartments in the chamber; an electric lamp in each compartment.

1,903,975. SUBMARINE SIGNALING CABLE. OLIVER E. BUCKLEY, Maplewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 13, 1929. Serial No. 392,351. 17 Claims. (Cl. 178—45.)

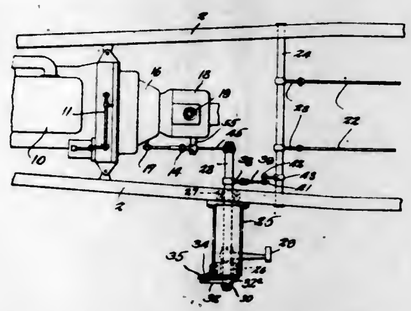


1. A signaling cable comprising an insulated central conductor, a concentric return conductor surrounding said central conductor, means surrounding said return conductor for causing the return current to flow chiefly through the concentric return conductor, said means comprising an envelope of magnetic material having a low magnetic reluctance in a closed path circumferential to said cable.

1,903,976. PROCESS OF MAKING CONCRETE. ROBERT M. BURNS, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1929. Serial No. 347,737. 2 Claims. (Cl. 247—1.)

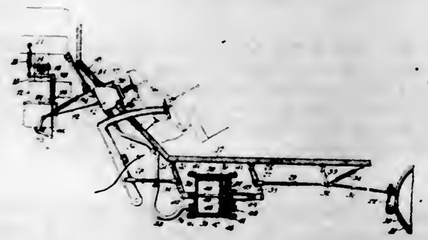
1. The method of preventing the corrosion of lead alloy cable sheath enclosed in concrete ducts which consists in producing a saturated silicate condition adjacent the lead sheath which forms or causes to be formed a coating of an insoluble film on the lead sheath.

1,903,977. DELIVERY TRUCK CONTROL. JAY H. BUTLER, Newark, Ohio. Filed May 25, 1931. Serial No. 539,909. 3 Claims. (Cl. 192—4.)



1. In a motor propelled vehicle having a brake, a clutch, and a transmission, mechanism for setting the brake, throwing out the clutch, and putting the transmission into neutral, said mechanism comprising a shaft, means for supporting the shaft for rotation, means for connecting the shaft with the clutch, means for connecting the shaft with the transmission, means for connecting the shaft with the brake, a pair of operating members, the pair including a pedal and a hand lever, the shaft and an operating member of the pair constituting coacting parts, one of said operating members being secured to the shaft, and means for mounting the other of said operating members for movement with respect to the shaft, a lost motion connection between said other of the operating members and one of said coacting parts, whereby the operating member which is secured to the shaft can be actuated independently of the operating member which is movable with respect to the shaft, the lost motion connection comprising relatively movable parts, the operating member which is movable with respect to the shaft being so movable in order to bring the said parts of the lost motion connection together, thereby restraining the operating member which is fixed to the shaft, and latch mechanism cooperating with the hand lever, to hold the hand lever releasably against movement.

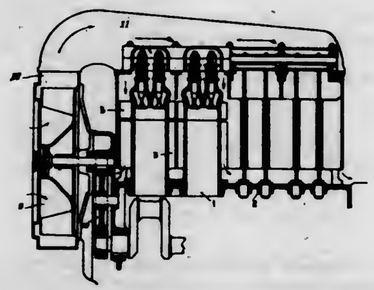
1,903,978. AUTOMOTIVE BRAKE SYSTEM. CHARLES A. CAMPBELL, Watertown, N. Y., assignor to The New York Air Brake Company, a Corporation of New Jersey. Filed Aug. 8, 1928. Serial No. 298,229. 17 Claims. (Cl. 192—3.)



1. In an automotive power plant, the combination of an internal combustion engine having an intake manifold and a throttle valve controlling the supply of fuel to the manifold, the engine when operating maintaining in said manifold a sub-atmospheric pressure which varies under varying conditions of operation; a brake cylinder; a piston

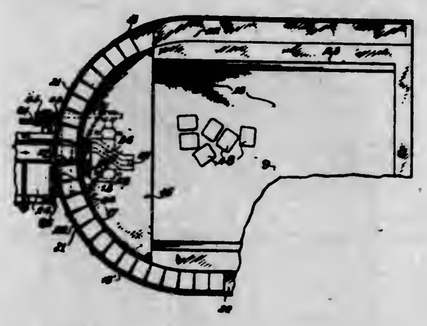
in said cylinder constantly subject on one side to atmospheric pressure; a connection from said cylinder at the other side of said piston; and a valve mechanism connected to said connection and in communication with said manifold, and having an atmospheric port, said valve mechanism including two coacting movable valve members, a loaded motor means responsive to various depressions of pressure in the brake cylinder to move one of said members corresponding distances, and manual means for moving the other of said valve members, said members according to their relative positions serving alternately to connect the brake cylinder connection to the manifold or to the atmospheric port or to disconnect it from both.

1,903,979. AIR-COOLED INTERNAL COMBUSTION ENGINE. GIULIO CESARE CAPPA, Turin, Italy, assignor of one-half to Società Anonima Automobili Ansaldo, Turin, Italy. Filed Aug. 22, 1930, Serial No. 477,102, and in Italy Aug. 29, 1929. 2 Claims. (Cl. 123—171.)



1. In an air-cooled internal combustion engine with overhead valves, a fan, a jacket surrounding the engine cylinders, a horizontal supporting plane at the upper end of said jacket, a hood mounted on said plane and closing the upper part of said jacket, said hood communicating with the outlet of said fan and a support for the valve operating means mounted on said supporting plane within said jacket and hood.

1,903,980. CAPPING TABLE. AUSTIN S. CHANDLER, Fitchburg, Mass., assignor to The Brown Bag Filling Machine Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Mar. 24, 1932. Serial No. 601,032. 5 Claims. (Cl. 198—31.)



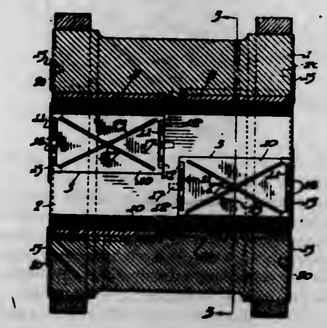
1. A work table of the character described comprising a work supporting surface, fixed concentric outer walls thereon of a common radius with spaced apart proximal ends and an inner replaceable concentric guide element spaced inwardly from the walls to form oppositely extending curved alleys, a work shifter at the proximal ends of the alleys, and terminal rectilinear alley portions leading from the outer parts of the curved alleys and including laterally adjustable bars as inner boundaries, forming a junction with the periphery of said inner guide element.

1,903,981. MOTION PICTURE FILM. JOE W. COFFMAN, Jackson Heights, N. Y., assignor to Bell Telephone Laboratories Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 25, 1928. Serial No. 308,166. 1 Claim. (Cl. 95—9.)



A band of sensitized film having thereon at intervals throughout its length latent images of sensitometric strips, and having a longitudinal series of exactly spaced perforations, each sensitometric strip image varying in exposure longitudinally of the band in an accurate dimensional relation to the perforations.

1,903,982. SHAFT COUPLING. WILLIAM CRAIK, Paauilo, Territory of Hawaii. Filed Jan. 25, 1932. Serial No. 588,790. 3 Claims. (Cl. 64—91.)

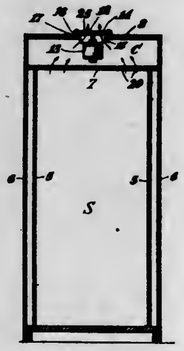


1. A coupling box for shafts having square ends, said box having a square opening provided with arcuate recesses in the walls defining said opening, and wear blocks having the form of cylindrical segments fitting said recesses.

1,903,983. VENTILATING SYSTEM. GEORGE DE BOTHEZAT, New York, N. Y. Filed Oct. 9, 1930. Serial No. 487,892. 3 Claims. (Cl. 98—31.)

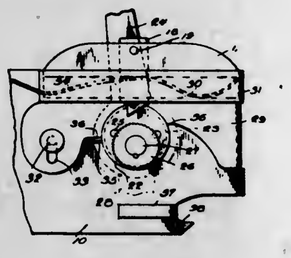
1. A telephone booth comprising inner and outer walls providing a space between them, an inner compartment enclosed by said inner walls, an upper enclosed chamber having an outer discharge opening provided with power driven means for exhausting air from said chamber so as

to lower the pressure therein and an inner opening communicating with said inner compartment and acting to draw air therefrom above the breathing line so as to lower the pressure in said compartment, and means providing a supply of air to the lower portion of said compartment



below the breathing line, said openings in said chamber being arranged in staggered relation so as to be out of register with each other and sized to pass the air at velocities higher than the velocities through said compartment and chamber.

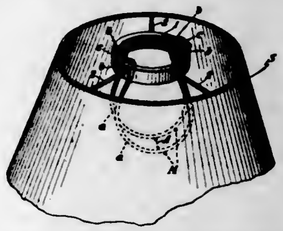
1,903,984. CAN OPENER. OCTAVE F. DEMERS, Bristol, Conn. Filed Jan. 29, 1931. Serial No. 512,141. 6 Claims. (Cl. 30—3.)



1. A can opener comprising a sheet metal arm lying in a vertical plane and having provision to be secured to a stationary support at one end; an offset vertical flange at the upper edge of the arm at the other end; a cutter secured to the flange and projecting downwardly at one side; an eccentrically mounted feeding wheel adjacent to the lower end of the cutter arranged to engage the lower edge of a can bead and force the can upwardly to be punctured by the cutter; means for imparting eccentric movement to the wheel; a yieldable and vertically slidable spring-urged abutment between the cutter and the arm against which the upper edge of the can bead is adapted to be pressed by said wheel at the cutting point; and a crank handle for rotating the wheel after the can top is punctured.

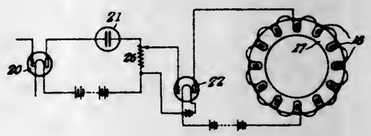
1,903,985. LAMP SHADE SUPPORTING DEVICE. WILLIAM N. DE SHERBININ, Hastings upon Hudson, N. Y. Filed Mar. 9, 1929, Serial No. 345,711. Renewed Aug. 20, 1932. 5 Claims. (Cl. 240—138.)

1. The combination with a shade, and an apertured supporting member secured thereto substantially centrally thereof, of a device adapting said shade for support by a lamp bulb, said device comprising plural-member sections extending through said supporting member and biased



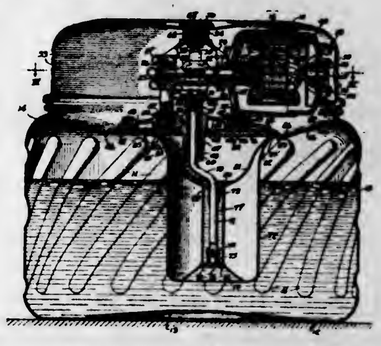
from each other toward and into engagement with said supporting member, the members of the respective sections being joined together.

1,903,986. TELEVISION RECEPTION. HAROLD P. DONLE, Meriden, Conn., assignor to Radio Inventions, Inc., a Corporation of New York. Filed Sept. 17, 1928. Serial No. 306,890. 4 Claims. (Cl. 178—69.5.)



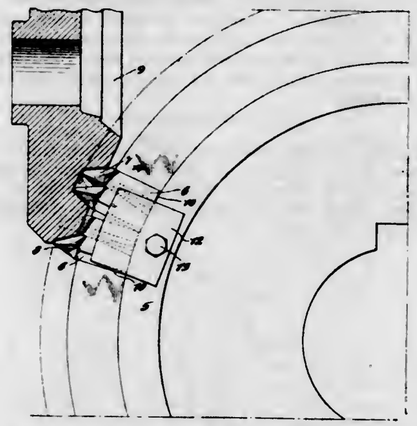
1. In television receiving apparatus, a system for synchronizing the speed of a rotating armature with received signals, including a circuit having an element that passes substantially no current for less than a minimum applied voltage, means for impressing varying currents upon said circuit, means for periodically reducing the voltage applied to said element below said minimum, a resistor in said circuit and means for applying a drop of potential developed across said resistor to the input of a vacuum tube relay whereby for minimum current in said circuit maximum current is delivered by said tube, a magnetic system acting upon said armature, and means for applying said tube current to said system.

1,903,987. WASHING MACHINE. AXEL OLOF ENGBERG and ERIK AHNSTRÖM, Stockholm, Sweden, assignors to Inventia Patent-Verwertungs-Gesellschaft, Schaffhausen, Switzerland, a Corporation of Switzerland. Filed Oct. 13, 1928, Serial No. 312,314, and in Sweden Oct. 15, 1927. 12 Claims. (Cl. 68—24.)



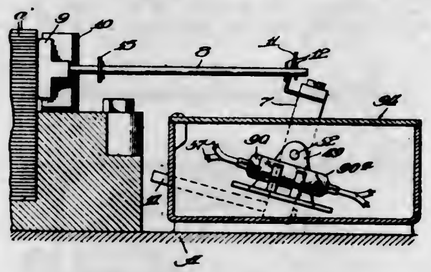
1. In a washing machine, a container, a cover for said container, said cover comprising a cap and a cover plate, crank mechanism depending from said cover, an agitator member mounted on said mechanism, and driving means positioned between said cap and said plate for producing relative planetary movement between said agitator member and said container.

1,903,988. CUTTER FOR CUTTING SPIRAL BEVEL GEARS. ERNEST L. FICKETT, Fitchburg, Mass., assignor to Manning, Maxwell & Moore, Inc., New York, N. Y., a Corporation of New Jersey. Filed Nov. 29, 1929. Serial No. 410,359. 4 Claims. (Cl. 29—105.)



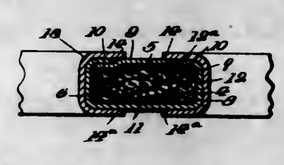
1. A rotatable toothed cutter for cutting spiral bevel gears having cutting teeth both lateral cutting edges of each of which lie in substantially the same plane at an angle to the axis of the cutter and so arranged that the teeth and spaces of a spiral bevel gear cut thereby will be of uniform cross-section throughout their length and will taper substantially equally, substantially as described.

1,903,989. CONTROL MECHANISM FOR CLINCHING MACHINES. HENRY A. FINK, New York, N. Y., and JOHN E. SCHMIDT, Chicago, Ill., assignors to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed May 24, 1930. Serial No. 455,482. 2 Claims. (Cl. 192—125.)



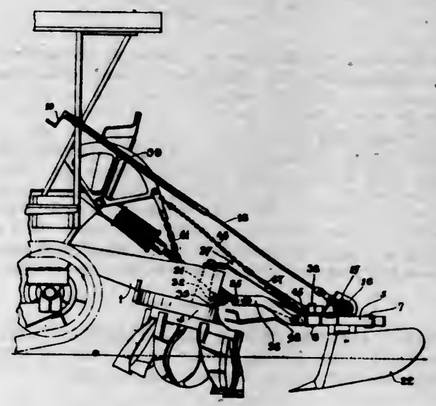
1. A control mechanism for a can machine comprising a clutch throwing mechanism including a magnetic device, a tiltable bracket, an electric switch mounted thereon and adapted to close the circuit for the electric magnetic device when said bracket is tilted in one direction, means attached to the bracket for moving the same to a position for closing the switch, a stack holder, a control rod connected to said bracket, a head carried by said rod and adapted to bear against the can ends in the stack holder, which can ends restrain the movement of the rod and the tilting of the bracket whereby when said can ends give out, the rod will move and permit the tilting of the bracket to stop the machine.

1,903,990. GASKET. MARTIN D. FITZGERALD, Torrington, Conn., assignor to The Fitzgerald Manufacturing Company, Torrington, Conn., a Corporation of Connecticut. Filed Oct. 28, 1932. Serial No. 640,095. 3 Claims. (Cl. 288—1.)



3. A gasket for internal combustion engines comprising a body portion having a plurality of cylinder openings therein and including a sheet of refractory material disposed between top and bottom facing members, a reinforcing unit completely enclosing the body portion of the gasket in the narrow region between the cylinder openings, and a securing ferrule extending around the edge of each of said openings and having the edge portions thereof turned upon the top and bottom faces of the gasket whereby to secure the body portion and reinforcing unit together.

1,903,991. RIDGING IMPLEMENT ON TILLING MACHINES. CHARLES HENRY FOWLER, Leeds, England. Filed Mar. 25, 1930, Serial No. 438,794, and in Great Britain Jan. 28, 1930. Renewed Aug. 11, 1932. 6 Claims. (Cl. 97—43.)



1. In a tilling machine comprising ridging implements adapted to be drawn through the loosened soil, the combination with the tilling machine frame, of a transverse frame attached to the tilling machine frame so as to be immovable laterally in respect thereof, ways in said frame, a carriage movable along said ways transversely of the line of tillage, ridgers attached to said carriage, and means extended to proximity of the driver's seat for traversing said carriage.

1,903,992. SUBMARINE CABLE LOADING COIL. JOHN J. GILBERT, Douglaston, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 23, 1930, Serial No. 477,243, and in Great Britain Oct. 25, 1929. 6 Claims. (Cl. 178—46.)

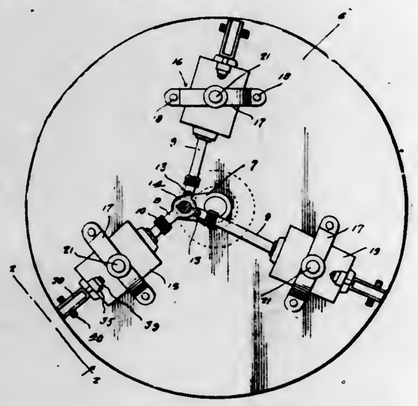


1. A deep sea signaling cable comprising an armor and a plurality of loading coils within said armor, said coils having elongated cores of magnetic material for lump

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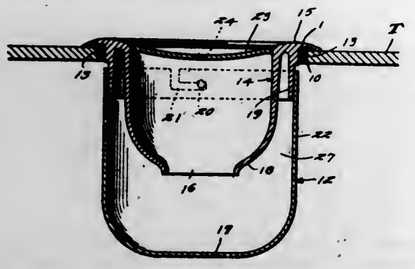
loading said cable and being arranged in at least two groups of which one is located adjacent the ends of the cable and the other is located more remote from the ends of the cable, the coils contained in the first mentioned group being different from those contained in the last mentioned group in that they have longer cores, lower hysteresis losses and lower ohmic or pure resistance losses.

1,903,993. CLUTCH. WILLIAM F. GOEHRING, Baltimore, Md. Filed Jan. 14, 1931. Serial No. 508,763. 4 Claims. (Cl. 192—60.)



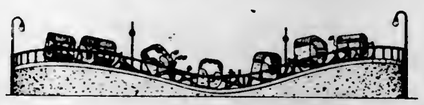
1. A clutch of the character described comprising a driven shaft crank, a fly wheel for the usual drive shaft, a plurality of cylinders swingably mounted on one side of the fly wheel, pistons operative in the cylinders, each of said pistons being divided into a pair of plates, one plate of each piston being connected to the aforementioned driven shaft crank, a shaft projecting from the remaining plate of each piston to a point exteriorly of the corresponding cylinder, a laterally disposed lever operatively connected to the outer end of each piston plate shaft extending in a direction away from the fly wheel, said piston plates being provided with registrable openings therein.

1,903,994. ASH TRAYS FOR CARD TABLES. JACOB S. GOLDMAN, Port Huron, Mich. Filed June 16, 1932. Serial No. 617,666. 2 Claims. (Cl. 45—75.)



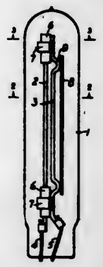
1. In combination, a table top and an ash receiver mounted within the top, said ash receiver comprising a rim fixedly secured to the table top within the marginal edges of the table, a flanged cup-shaped member having an open top and bottom, the flange of the member substantially enclosing the rim, a receptacle, means for suspending the receptacle from the cup-shaped member in a position with the walls of the receptacle spaced outwardly from the walls of the cup-shaped member, and a balanced closure pivotally carried by the cup-shaped member at the top thereof.

1,903,995. AMUSEMENT DEVICE. CLARENCE RAY GRAHAM, North Tonawanda, N. Y. Filed Sept. 8, 1928. Serial No. 304,719. 4 Claims. (Cl. 272—44.)



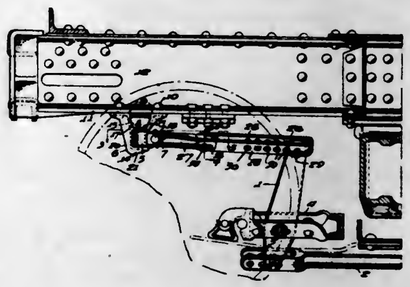
1. In an amusement device, a structure moving in an undulated path, a curved track supported thereon and lying substantially in the same direction as the path of travel of the structure and having its ends upwardly extending, and a passenger car mounted upon the track for free movement apart from the undulating movements of the structure.

1,903,996. PROTECTIVE DEVICE. FRANK GRAY, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1926. Serial No. 105,398. 6 Claims. (Cl. 250—275.)



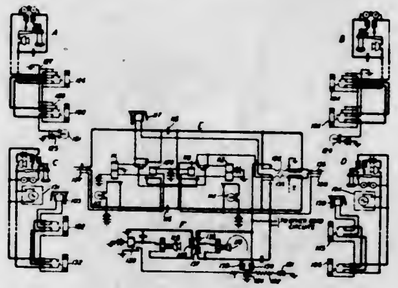
1. A protective device comprising an enclosing vessel, a pair of electrodes at least one of which has loops near the ends thereof, said electrodes being separated by a small unobstructed gap and supported in said vessel, a filling of inert gas therein, and an auxiliary member in direct contact with the loops on one of said electrodes, said member containing an oxide of an alkali metal.

1,903,997. BRAKE RIGGING FOR RAILWAY CARS. CYRUS HANKINS, Washington, D. C. Filed Mar. 25, 1931. Serial No. 525,239. 31 Claims. (Cl. 188—206.)



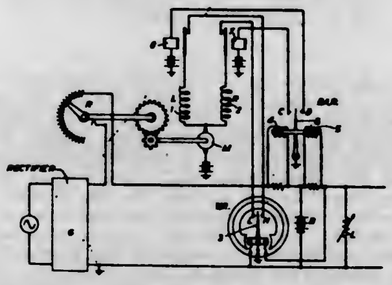
1. In a railway car brake rigging, the combination with the underframe of a car and a truck swiveled thereto, of a dead lever carried by the truck, and means connecting the upper end of the dead lever to the underframe adapted to permit the lever to move angularly with respect to the longitudinal axis of the underframe in substantially all directions to compensate for relative movement between the underframe and truck, said means involving a member having spaced portions rotatably mounted on the underframe, and rigid means having a portion adjacent one end pivotally connected to the lever and a portion adjacent the other end interposed between and pivotally connected to the spaced portions of said first-named member.

1,903,998. TELEPHONE EXCHANGE SYSTEM. ROBERT W. HARPER, West Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1932. Serial No. 608,356. 7 Claims. (Cl. 179—52.)



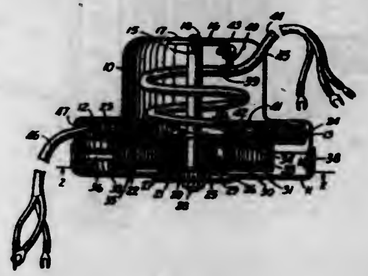
1. In a busy test system, a telephone switchboard, subscribers' common battery lines terminating in multiple jacks at the switchboard, subscribers' local battery lines also terminating in multiple jacks at the same switchboard, universal cord circuits for interconnecting said lines, an operator's telephone circuit associated with said cord circuits, means responsive to the connection of one of said cord circuits to a common battery line to connect the sleeves of the multiple jacks of said line to ground, a source of battery potential, means responsive to the connection of said cord circuit to a local battery line to contact only said potential source to the sleeves of the multiple jacks of that line, a conductor, means for maintaining said conductor at a potential intermediate that of battery and ground, and means for connecting the operator's telephone circuit between said conductor and the tip conductor of a second of said cord circuits.

1,903,999. REGULATING SYSTEM. WILLIAM H. T. HOLDEN, Brooklyn, and ROBERT P. JUTSON, Yonkers, N. Y.; said Holden assignor to American Telephone and Telegraph Company, a Corporation of New York, and said Jutson assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed June 16, 1930. Serial No. 461,415. 3 Claims. (Cl. 171—314.)



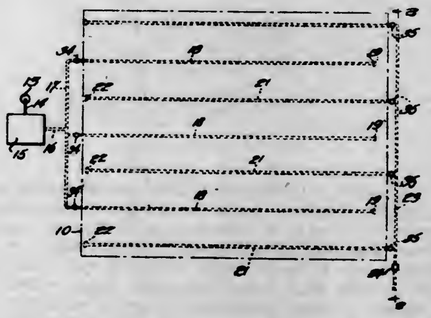
1. In a battery charging system, in combination, a battery, a source of current for charging the battery and associated therewith, a variable resistance in series with said source, a load circuit connected across the terminals of said battery, a reversible motor for varying said resistance means connected with said battery controlled solely by changes in voltage thereof, and a differential ammeter relay having one winding in series with the charging circuit and the other winding in series with the load, said voltage responsive means and differential relay acting jointly to control the motor to prevent more than a predetermined current unbalance between the two windings of said differential relay.

1,904,000. REELING DEVICE. FREDERICK A. HOYT, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 18, 1929. Serial No. 364,146. 15 Claims. (Cl. 242—107.)



13. A reeling device comprising a stationary shaft, a sheave rotatably mounted on said shaft, stop members attached to said shaft and sheave, and means cooperating with said stop members and rotatable by one of said stop members for limiting the rotation of said sheave.

1,904,001. METHOD AND APPARATUS FOR CONTROLLING THE TEMPERATURE OF THE SOIL. JOSEPH G. KIMMEL, Sarasota, Fla. Filed Apr. 11, 1931. Serial No. 529,468. 13 Claims. (Cl. 61—35.)

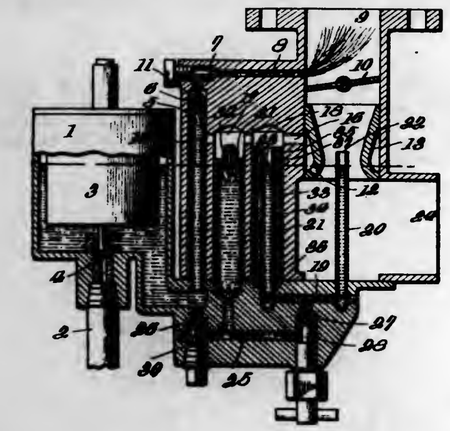


1. The method of elevating and controlling the temperature of the soil to render it favorable to plant growth which comprises continuously supplying a liquid heating medium to the soil beneath the surface thereof, and continuously withdrawing the medium from the soil beneath the surface thereof at a point horizontally spaced from its point of introduction into the soil.

1,904,002. CARBURETOR. CHARLES H. KIRBY, Flint, Mich., assignor to Marvel Carburetor Company, Flint, Mich., a Corporation of Illinois. Filed Aug. 6, 1928. Serial No. 297,696. 9 Claims. (Cl. 261—41.)

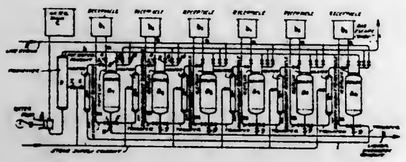
1. In a carburetor, a main mixture passageway, a throttle valve for controlling the passage of the mixture through said passageway, a fuel nozzle extending into the passage-

way, primary and a plurality of reserve supply means for feeding fuel to the nozzle during acceleration, and means communicating with the mixture passageway for



placing sub-atmospheric pressure on the primary and reserve supplies to modify the feeds from the same as the throttle valve is moved.

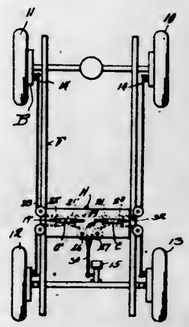
1,904,003. PROCESS AND PLANT FOR EXTRACTING GLUE FROM GLUE-CONTAINING MATERIAL. JULIUS KOHL, Berlin, Germany. Filed Mar. 17, 1931, Serial No. 523,350, and in Germany Apr. 8, 1930. 7 Claims. (Cl. 87—7.)



1. Process of extracting glue from glue-containing material which comprises preparing charges of the material of successive degrees of extraction, subjecting all charges to steam treatment, admitting an individual supply of extracting liquor to each charge, removing and collecting the liquor from each charge separately, again subjecting the charges to steam treatment, thereafter separately returning the collected liquors to the charges, transferring the liquor from each charge to a charge of a lesser degree of extraction, and continuing the sequence whereby a continual countercurrent flow is established of the liquors with the respect to the charges so that each batch of liquor is successively exposed to charges of lesser degrees of extraction and the charges are subjected to steam treatments in periods between the successive exposures.

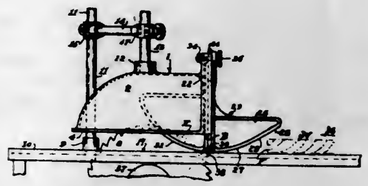
7. An extraction battery comprising a plurality of units each including an extraction vessel, a liquor receptacle, a valved conduit for joining said vessel and receptacle, and a liquor heater, and a valve conduit joining said heater to the extraction vessel; a steam main having valved connections to each of said vessels, means whereby all of said heaters may be warmed, an exhaust main having valved connections to each of said vessels, independent valved transfer conduits between each two said vessels whereby they may be connected in series, and means including a common main with valve connections for forcing fresh liquor into any of said vessels so that the liquor in each unit may be forwarded through said transfer conduits into another unit, and a common discharge main having valved connections to each of said units.

1,904,004. BRAKE EQUALIZER. ORVAL M. LEWIS, Shelton, Wash. Filed Nov. 12, 1931. Serial No. 574,631. 2 Claims. (Cl. 188—204.)



1. A brake equalising means comprising cables connected one to each selected pair of the brakes of a vehicle, a carriage for each cable, a housing within which the carriages are slidable, and a carriage engaging cable connected to the brake pedal of the vehicle, each carriage comprising a pair of shafts, a pulley on each shaft, said housing having slots in opposite sides thereof to slidably receive the ends of said shafts, and connecting bars positioned one on each side of the housing and secured to the shafts for holding the shafts in spaced relation to each other.

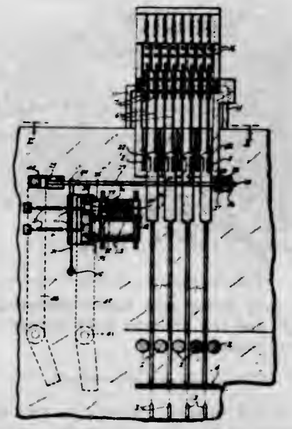
1,904,005. SAW GUARD. EDWARD MASSET, New York, N. Y. Filed Feb. 3, 1932. Serial No. 590,547. 22 Claims. (Cl. 143—159.)



1. A saw guard for a work table comprising in combination a housing having a main section, said section having an open bottom to receive the top of a saw means for supporting said housing to provide a space between said bottom and the table, a relatively movable section having rear spaced walls within said housing and extending therebelow for guarding the saw in said space, cooperating vertically disposed bearings integral with said sections, and an inclined surface extending forwardly from said second section in the path of a work piece, whereby the latter on being fed to the saw in said space may move said second section vertically.

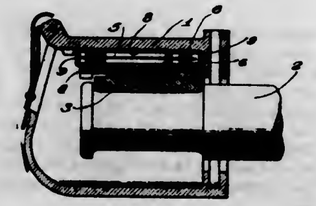
22. In a saw guard, a housing comprising a section having substantially vertically disposed guiding surfaces extending completely from the top to the bottom thereof, and a movable section including a vertically disposed elongated standard having guiding surfaces slidably engaging the first mentioned surfaces.

1,904,006. PATTERN CONTROL MECHANISM. GARDINER C. MEANS, Poughkeepsie, N. Y. Filed Mar. 22, 1929. Serial No. 349,034. 21 Claims. (Cl. 139—55.)



1. In a pattern control mechanism for looms and the like, the combination of a pattern element presenting a pattern defined by light and light and dark portions, means for intermittently advancing said element, a photo-electric cell, and means movable transversely of the pattern element for effectively transmitting to said cell increments of light which vary in cell affecting value according to the light value affecting characteristics of said light and dark portions of the pattern.

1,904,007. JOURNAL CUSHION. RICHARD J. O'BRIEN, Depew, N. Y., assignor to Waugh Equipment Co., Depew, N. Y., a Corporation of Maine. Filed July 25, 1929. Serial No. 380,885. 3 Claims. (Cl. 308—54.)



1. The combination of a journal box, a filler block, a journal bearing supporting said block, and a shock absorbing device between the filler block and the top of the box comprising a retainer having depending flanges, and a resilient cushion comprising a plate having rubber annuli on each face thereof in said retainer.

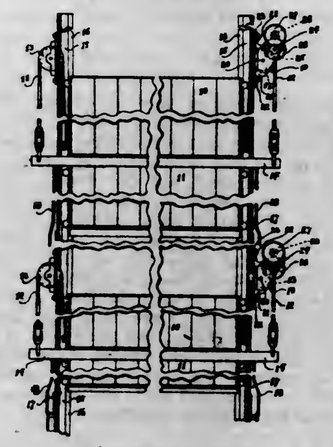
1,904,008. ELECTRICAL INTERLOCK. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 27, 1928, Serial No. 273,351. Renewed Oct. 28, 1932. 10 Claims. (Cl. 187—31.)

1. A device of the character described embodying therein the combination with a vertically slidable door, of a switch mechanism including co-operating movable and fixed contact members, and means acting to normally disengage said contact members, an oscillatory latch member associated with said switch mechanism, and a keeper bar im-



movably secured to and movable with said slidable door adapted to actuate said movable contact member and to be operatively engaged by said latch member.

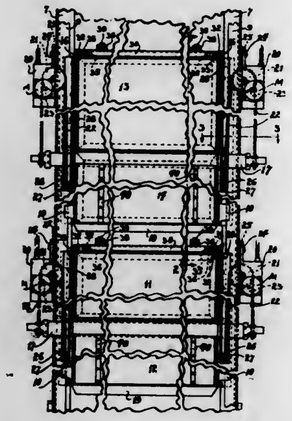
1,904,009. OPERATOR FOR COUNTERBALANCED ELEVATOR DOORS. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 5, 1930. Serial No. 441,918. 3 Claims. (Cl. 187—54.)



1. An operator for counterbalanced elevator doors embodying therein the combination with a guide rail structure within an elevator shaft, a series of elevator doors each having sections vertically and oppositely movable on said structure, connections between said sections on the opposite sides thereof, and sheaves above which said connections pass, of an electric motor secured to said guide rail structure within the shaft, a speed reducing gear train, the first gear of which is connected with the shaft to said motor, and the last gear of which is connected directly with a sheave, a main electric power line

extending adjacent all of said doors, a branch line extending therefrom adjacent each door and connected with the motor adjacent such door, a normally open switch in each of said branch lines adapted to be operated only when a car is positioned adjacent said switch, pole changing switches controlling the circuits to said main power line, electro-magnetic control mechanisms for said pole changing switches, and manually operative switch mechanisms controlling the circuits to the windings of the magnets of said control mechanisms whereby said control mechanisms may be selectively actuated from a remote point.

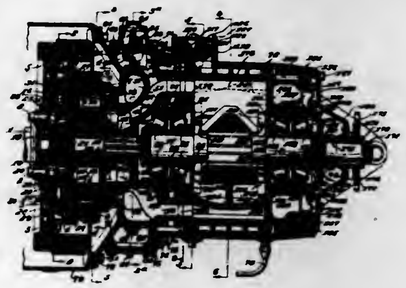
1,904,010. PASS-TYPE ELEVATOR DOOR. ROBERT S. PEELLE, Hollis, N. Y., assignor to The Peelle Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 3, 1931. Serial No. 578,791. 7 Claims. (Cl. 20—19.)



1. A pass-type elevator door embodying therein two sections oppositely movable in parallel planes, guide rail structures upon which said sections have movement, whereby one of said sections is positioned closely adjacent the wall of an elevator shaft, and the other is spaced away from said wall to permit sections of doors at adjacent floors to pass each other when opening a door, sheaves carried by said guide rail structures at opposite sides of the door opening and below the top of the upper door section when the door is closed, legs projected downwardly from the lower edge of the upper door section, hanger fittings adjacent the top of the lower door section, and flexible connections between the lower end of each leg and one of said fittings, and passing about said sheaves, whereby all parts of the door structure, including said sheaves but excluding said guide rail structure, are contained within the height of said door.

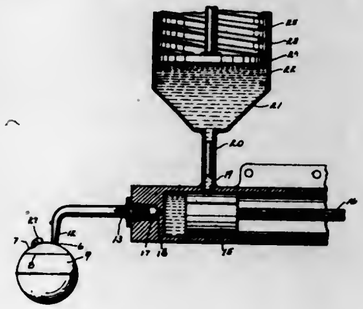
1,904,011. POWER TRANSMISSION. ALDEN G. RAYBURN, Sausalito, Calif., assignor, by mesne assignments, to Automotive Engineering Corporation, a Corporation of Delaware. Filed Apr. 11, 1928. Serial No. 269,135. 17 Claims. (Cl. 60—53.)

1. A hydraulic torque multiplying transmission comprising a driving member; a driven member; a set of coacting rotary pumping elements actuated by said driving member and by said driven member respectively; a rotary hydraulic motor substantially aligned with said pump and actuated by fluid delivered thereto by the difference in rotation of said driving and said driven members, said motor being designed to drive said driven member; and fluid distributing means provided with high and low pressure fluid passages interposed between said pump ele-



ments and said motor said means including stationary annular high and low pressure fluid storage spaces intersected by said passages.

1,904,012. GOLF BALL. WILLIS E. REICHARD, Elyria, Ohio, assignor to The Worthington Ball Company, Elyria, Ohio, a Corporation of Ohio. Filed Nov. 7, 1929. Serial No. 405,508. 20 Claims. (Cl. 154—18.)



10. A center or core for golf balls comprising a hollow spherical shell, a pair of spaced perforations in the wall of the shell and a predetermined area of the exterior surface of the shell and containing the two perforations being distinctively indicated, a filler of fluid material entirely filling the shell and the perforations, and a sealing cap of substantially the size and shape of said area and of the form of a section of a hollow sphere and cemented to the exterior surface of the sphere and sealing the said perforations.

20. The method of producing a core for golf balls which includes producing a pair of hemispherical shells, having flanges at their annular edges, joining the shells along the flanges, introducing a fluid material into the hollow sphere thus formed through a perforation in the wall thereof, and sealing the perforations with a cap cemented to the external surface of the sphere and overlapping the perforation.

1,904,013. METHOD OF PRODUCTION OF ETHANOL AMINES. ERNEST W. REID, Pittsburgh, and DONALD C. LEWIS, Darmont, Pa., assignors to Carbide & Carbon Chemicals Corporation, a Corporation of New York. Filed Aug. 18, 1927. Serial No. 213,890. 3 Claims. (Cl. 260—127.)

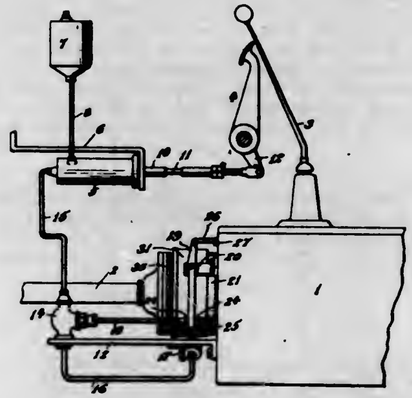
1. In the process of making ethanolamines involving the operations of reacting ethylene oxide with an excess of aqueous ammonia while cooling and agitating the mixture, the improvements which consist in gradually adding the ethylene oxide to the aqueous ammonia by diffusing the former into the latter at such a rate that the concentration of uncombined ethylene oxide in the resulting reaction mixture is at all times low with respect to the concentration of uncombined ammonia whereby to minimise the formation of by-products in said reaction mixture, and continuously abstracting heat from said reaction mixture whereby to maintain the latter at a temperature below 100° C.

1,904,014. FOUNTAIN PEN CAP AND INK GUARD. SOLOMON M. SAGER, Glencoe, Ill. Filed May 4, 1931. Serial No. 534,791. 1 Claim. (Cl. 120—42.)



A fountain pen comprising a barrel, a tubular member removably secured on one end of said barrel, forming a continuation thereof, a partition member in said tubular member, a pin secured on said partition, a closure disk slidable on said pin, spring means between said partition and said disk urging said disk to normally close an end of said tubular member, and a fountain pen cap having an end threadedly entered in the end of said tubular member forcing said disk inwardly against said spring.

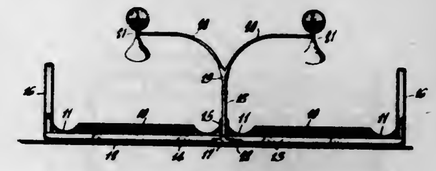
1,904,015. SAFETY DEVICE. BENJAMIN F. SINGER and JOSEPH J. EHRMANN, Lancaster, Pa. Filed Aug. 17, 1931. Serial No. 557,620. 5 Claims. (Cl. 192—4.)



4. In apparatus for the purpose set forth, the combination of a fluid pressure means for permitting or preventing reverse travel, a valve located in said means having an extended stem, a rocking arm having one end engaged with said stem and its opposite end disposed in the path of a reverse gear shifting rod, and yieldable means acting on the stem to hold the valve normally closed.

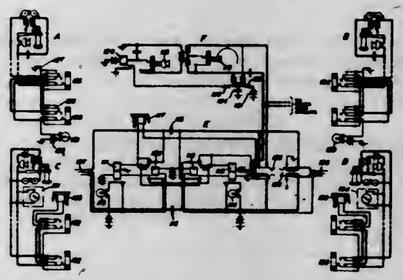
1,904,016. LAMP MOUNTING FOR BOWLING ALLEYS. AKSEL SOLUM, Lancaster, N. Y. Filed Dec. 28, 1931. Serial No. 583,478. 2 Claims. (Cl. 240—3.)

1. In combination with the sub-flooring and division wall of adjoining bowling alleys, of a tubular base member secured to the sub-flooring beneath said division wall, a standard rising from said base member above the division wall, and a lamp-bearing frame mounted on the upper end of said standard for movement about the axis thereof to



assume a position at right angles to the division wall in overhanging relation to the alleys or a position in line with said division wall.

1,904,017. TELEPHONE SYSTEM. HORACE W. ULRICH, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 5, 1932. Serial No. 609,412. 20 Claims. (Cl. 179—52.)

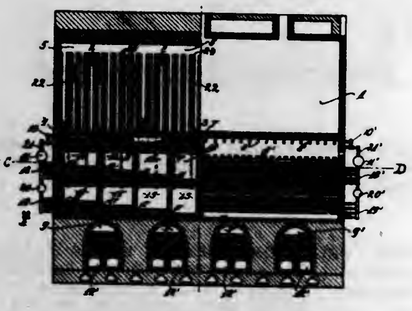


1. In a telephone system comprising lines of two different characters, a universal cord circuit for interconnecting any two of said lines, answering and calling connecting terminals for said cord circuit, tip and ring conductors connecting said terminals, inductive means included in each of said conductors, a supervisory signal for each end of the cord, an individual direct current responsive supervisory relay for controlling each signal normally disconnected from said conductors, an alternating current responsive signal controlling winding normally connected between the tip conductor of one end of the cord and the ring conductor of the other end, and means responsive to the connection of either terminal to a line of one character to connect its associated relay to that end of the cord circuit and to disconnect and transfer the alternating current responsive winding from that end to the opposite end and responsive to the connection of both terminals to lines of said one character to entirely disconnect said winding.

1,904,018. COKE OVEN. PAUL ETIENNE VERPEAUX, Brussels, Belgium, assignor to Union Chimique Belge, Societe Anonyme, Brussels, Belgium. Filed May 3, 1929, Serial No. 360,102, and in Belgium Apr. 3, 1929. 3 Claims. (Cl. 202—135.)

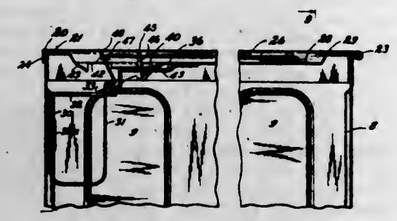
1. A series of alternate horizontal coking chambers and heating walls therefor arranged side by side in a row, each of said heating walls comprising vertical combustion flues separated by partition walls, gas chambers communicably connected with the flues and located under the said combustion flues and partition walls, air expansion chambers located underneath the said gas chambers, regenerators communicating with the combustion flues and alternating with the air expansion chamber, along said series, auxiliary flues positioned in the partition walls

and opening into the combustion flues at different levels, said air expansion chambers being communicably connected with said auxiliary flues extending in the partition



walls, an air supply conduit, and a gas distributor communicably connected with said air supply conduit and said air expansion chambers.

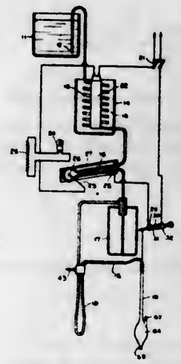
1,904,019. METAL BOTTLE CARRIER. PAUL VIGNOS, Canton, Ohio, assignor to Berger Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Dec. 30, 1932. Serial No. 649,493. 15 Claims. (Cl. 220—72.)



1. A sheet metal container for glass bottles or the like, comprising an enclosure having side, end and bottom walls, a lid hingedly secured to the container, a lock for said lid comprising a spring latch secured to the side wall and a keeper secured to the lid, said lid being formed to provide an aperture therein above the keeper, said latch having a tongue adapted to extend through the aperture to permit release of the latch.

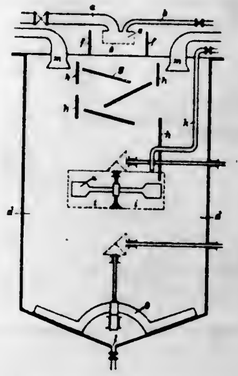
1,904,020. TEMPERATURE CONTROLLING APPARATUS. REINHOLD H. WAPPLER, Yonkers, N. Y. Filed Oct. 26, 1929. Serial No. 402,581. 6 Claims. (Cl. 128—264.)

1. In a device of the character described, a hollow applicator adapted to permit a liquid to flow therethrough, a liquid supply tank, a heating tank having an electric heating unit therein, a bimetallic thermostatic strip in the circuit of said heating unit, and a continuous, relatively fine conduit extending from the supply tank to said applicator and thence to a drain, said conduit having



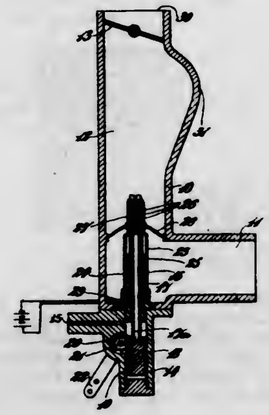
a coiled portion immersed in said heating tank and a doubled-back portion in direct contact with said thermostatic strip.

1,904,021. APPARATUS FOR PRODUCING SOAPS. HERMANN WEBER, Dusseldorf, and WILHELM PAPE, Benrath-on-the-Rhine, Germany, assignors to the Firm Henkel & Cie Gesellschaft mit beschrankter Haftung, Dusseldorf, Germany, a Corporation of Germany. Filed July 16, 1929, Serial No. 378,735, and in Germany Aug. 6, 1928. 3 Claims. (Cl. 87—16.)



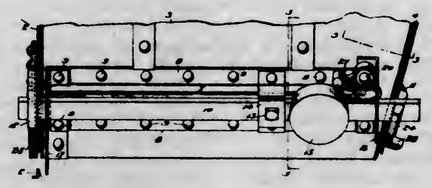
1. An apparatus for continuously converting fatty acids and mixtures of fatty acids and neutral fats into soap, comprising a main container, means above said container to receive and mix the fatty acids with an amount of a solution of alkali metal carbonate necessary to effect the saponification and to deliver such mixture to the main container, means for continually feeding fatty acids or mixtures of fatty acids and neutral fats and a solution of alkali metal carbonate to the said mixing means, heating means in the upper part of the main container below said mixing means by which the unconverted portions of the fatty acids are saponified, the residual carbon dioxid is driven out and the excess of water is evaporated, means in the main container below the heating means for adding caustic alkali lye to the reaction mass, means at the upper part of said container for removing the liberated carbon dioxid and water vapor from the container and means at the lower end of the main container for drawing off the soap continually from the container.

1,904,022. CARBURETOR. JAMES LEIGHTON WHITEMAN, Putney, London, England. Filed Oct. 14, 1931, Serial No. 568,840, and in Great Britain Dec. 24, 1930. 9 Claims. (Cl. 261—50.)



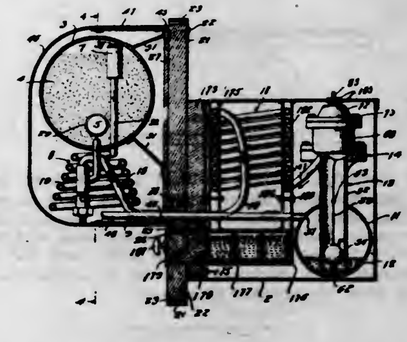
1. A carburetor including a fuel passage having an air inlet, a jet tube controlling the fuel admission to the passage, an air valve controlling tube surrounding the jet tube, a needle valve carried by the air valve controlling tube and cooperating with the upper end of the jet tube, means for operating the jet tube to initially cooperate with the needle valve and thereafter lift the air valve controlling tube, and an air valve controlling the admission of air from the air inlet to the fuel passage and operated in the movement of the air valve controlling tube.

1,904,023. DOOR MECHANISM FOR RAILWAY CARS. WILLIAM E. WINE, Toledo, Ohio, and BYERS W. KADEL, Baltimore, Md. Filed Dec. 10, 1925, Serial No. 74,496. Renewed May 11, 1931. 17 Claims. (Cl. 105—308.)



1. Car door mechanism involving, in combination with a door hinged to the car body so as to swing to open position under the influence of gravity, means for securing said door in closed position, said means including a latch bar pivotally mounted between its ends upon the door and extending beyond the opposite edges of the latter, and brackets secured to the car body on opposite sides of the door for cooperating with the latch bar to maintain the door in closed position, the segments of said latch bar on opposite sides of its pivot being of unequal length and the shorter segment being heavier in proportion to its length.

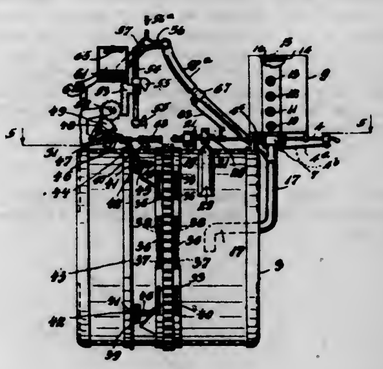
1,904,024. REFRIGERATION APPARATUS. LEONARD KAY WRIGHT, Jackson Heights, N. Y., assignor to Freenidor Syndicate, New York, N. Y. Filed Nov. 5, 1927. Serial No. 231,357. 18 Claims. (Cl. 62—118.)



1. A refrigerating apparatus for installation in an icebox comprising a panel adapted to be substituted for a door of the ice compartment, on the exterior of the panel an adsorber-generator, a condenser connected to the adsorber-generator, on the interior of the panel a refrigerant storage tank connected with the condenser, an evaporator, means to convey a fluid from the storage tank to the evaporator, and means to convey a fluid from the evaporator to the adsorber-generator.

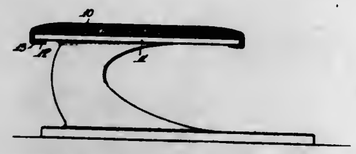
7. In a refrigerating apparatus operating on the adsorption principle, a casing in which are mounted a generator and a condenser and an opening at the base of the casing and another opening at the top for circulation of air therethrough.

1,904,025. CONSISTENCY CONTROLLING MECHANISM FOR CONCRETE MIXERS. PERRY P. YOHE, North Hollywood, Calif., assignor to Koehring Company, Milwaukee, Wis., a Corporation. Continuation of application Serial No. 268,215, filed Apr. 7, 1928. This application filed Mar. 1, 1930. Serial No. 432,484. 15 Claims. (Cl. 83—73.)



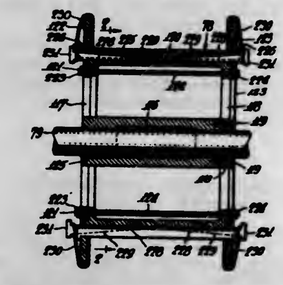
1. The method of predetermining the consistency of a mixture of cement, aggregates and water which consists of placing the said elements in a moving vessel, utilizing the resistance to movement of the vessel offered by the mixture therein to predetermine the quantity of water to bring the mixture to a known consistency, and supplying said quantity of water to the mixture as determined by the said resistance.

1,904,026. MANUFACTURE OF RESILIENT PADS. CROSBY FIELD, Brooklyn, and CLINTON L. CAMPBELL, Scarsdale, N. Y., assignors to Brillo Manufacturing Company, Inc., a Corporation of New York. Filed June 12, 1929. Serial No. 370,218. 3 Claims. (Cl. 29—148.)



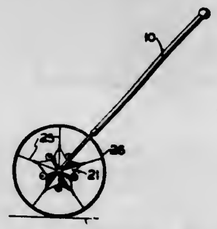
1. A method of making resilient pads of metal wool which includes subjecting a loose matted mass of wool in forming dies to a pressure in excess of one-sixth of a ton per square inch, the quantity of wool being such that the wool is flattened out into a thin sheet under the dies and expands to a thickness of about three-quarters of an inch when the pressure is relieved.

1,904,027. REEL. CROSBY FIELD, Brooklyn, N. Y., assignor to Brillo Manufacturing Company, Inc., a Corporation of New York. Original application filed June 18, 1927, Serial No. 199,692. Now Patent No. 1,886,661, dated Nov. 8, 1932, and in Canada June 11, 1928. Divided and this application filed Apr. 1, 1931. Serial No. 526,837. 4 Claims. (Cl. 242—77.)



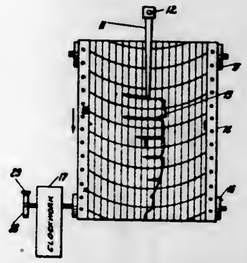
1. A reel for winding wire, including a drum, two flanges, one of said flanges being rigid on said drum, the other flange being detachably secured to said drum so that a coil of wire formed on the drum may be removed therefrom; a set of endwise removable bars extending between said flanges and projecting radially beyond the surface of the drum to form bearing surfaces for the coil; and a set of endwise movable wedge elements for forcing said bars to and locking them in their radially projected positions.

1,904,028. TOY. JACOB KERSTEN, Kalamazoo, Mich. Filed Dec. 15, 1930. Serial No. 502,373. 3 Claims. (Cl. 272—85.)



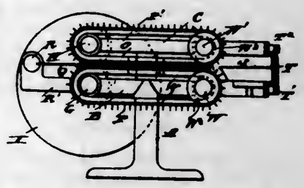
3. In a toy of the class described having an outer rim and an inner rim together with spokes therebetween, the combination of two axially spaced star-shaped members having bendable flaps extending radially at a plurality of points thereon, said flaps being attached to the said spokes, an axle member extending between said shield members and solely supported thereby, a bell unit mounted on said axle intermediate said star-shaped members and a yoke member mounted exteriorly of said star-shaped members upon the said axle.

1,904,029. METHOD AND APPARATUS FOR RECORDING ELECTRICAL QUANTITIES. OTTO A. KNOPF, Oakland, Calif. Filed Sept. 16, 1927. Serial No. 220,052. 7 Claims. (Cl. 234—5.5.)



1. In a system for recording the power consumption of a polyphase network having a pair of meter elements, the method which comprises moving a chart at uniform speed, actuating a common graph drawing implement in accordance with the actuation of the meter elements, and periodically rendering one only of the elements inactive for a short period.

1,904,030. FLUTING MACHINE. CHARLES B. POST, New London, Ohio. Filed Apr. 15, 1931. Serial No. 530,222. 5 Claims. (Cl. 223—42.)

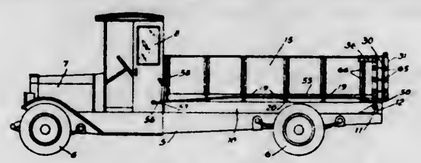


1. An automatically acting fluting machine, comprising a main frame, a pair of longitudinally spaced shafts therein, an upper frame pivoted to said main frame, at one side thereof, a pair of spaced shafts in said upper frame parallel with the shafts in said main frame, pulleys on said shafts, and upper and lower endless flexible toothed fluting members connecting the pulleys on each respective pair of shafts, the teeth on one flexible member intermeshing in turn with the teeth on the other flexible member, a needle support in line with the common pitch center of said flexible fluting members, and needles on said support, the intermeshing teeth of said endless flexible fluting members being provided with marginal guide openings in which said needles are supported throughout the fabric covered portion thereof, to prevent buckling thereof.

1,904,031. VEHICLE BODY. ELWIN H. REEVES, Toledo, Ohio. Filed Nov. 18, 1929. Serial No. 407,998. 4 Claims. (Cl. 296—50.)

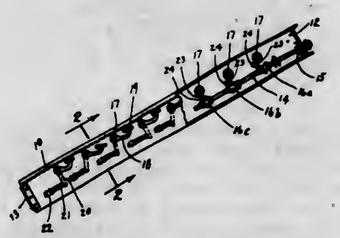
1. In a device of the character disclosed, a vehicle receptacle for transporting materials having an open end; of a closure for said open end formed of sheet metal; a member surrounding the open end of said receptacle and positioned exteriorly of said receptacle; a recess in said

member; a sealing gasket in said recess and means including a beading formed on said closure and engageable with said gasket for forming a fluid tight joint; and means



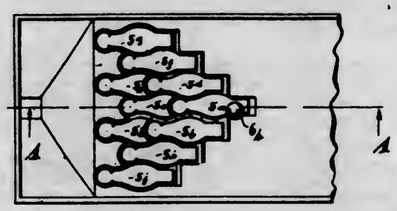
including a plurality of eye-bolts for securing said closure in engagement with said receptacle, said eye-bolts being adapted to be retained in a position out of use.

1,904,032. APPARATUS FOR SCREENING MATERIALS. BENJAMIN F. ROBERTS, Brazil, Ind. Filed Jan. 16, 1931. Serial No. 509,044. 2 Claims. (Cl. 209—347.)



1. In combination with a screen, an agitating striker therefor, a rock shaft upon which said striker is mounted, an arm carried by said shaft, a worm rotatable about an axis in a plane transverse to the axis of said rock shaft, the blade of said worm engaging said arm and moving the same to rock said shaft in one direction when said worm is rotated, and yielding means for resisting the rocking of said shaft and for returning the same to initial position to cause said striker to strike said screen when said arm reaches the end of its engagement with said worm.

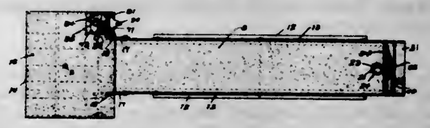
1,904,033. COMBINATION BILLIARD-TABLE AND BOWLING ALLEY. ARNO SCHULZE, Los Angeles, and WILLIAM AMANN, Willowbrook, Calif. Filed Oct. 27, 1930. Serial No. 491,376. 3 Claims. (Cl. 273—41.)



1. In a game of the class described, a structure with a smooth top, tenpins hingedly mounted in the structure and so spaced and arranged relative to each other that a pin in falling may contact with an adjacent pin to knock down the latter.

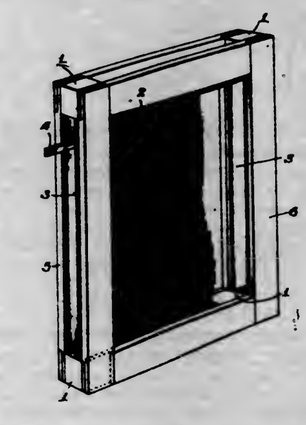
1,904,034. INDOOR GOLF GAME DEVICE. AXEL M. WALSTROM, Minneapolis, Minn. Filed Mar. 30, 1931. Serial No. 526,146. 7 Claims. (Cl. 273—32.)

1. A golf game device, comprising: a normally level runway which is mounted for tilting movement, a ball receiving pocket at the rear end of said runway, a means for returning a ball from said pocket to the top surface



of said runway, and means for tilting said runway so as to cause said ball to roll back to the front end on the surface of said runway.

1,904,035. FLY SCREEN. MARY ELIZA WEBSTER, Duncan, Okla. Filed June 11, 1932. Serial No. 616,616. 2 Claims. (Cl. 156—87.)



1. A fly screen having two frames, opposite one to the other, bolsters between them, one frame to fit the opening to be screened, and to support the outer, or screen bearing frame, at a sufficient distance from the surrounding structure, to leave fly exits between the two frames, so that said exits may be seen by every fly on the inside of the screen, while the exits are behind the frame, and out of sight, to every fly on the outside of the wire screen.

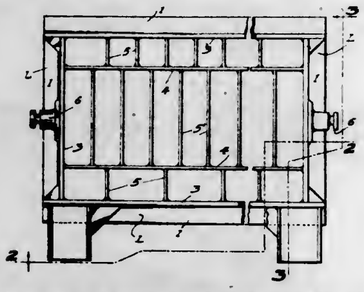
1,904,036. SEAMLESS HOSIERY AND PROCESS OF MAKING SAME. JOHN M. ALLEN, Toronto, Ontario, Canada, assignor to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Apr. 28, 1931. Serial No. 533,557. 5 Claims. (Cl. 66—187.)



1. In a process for manufacturing seamless hosiery having a seamless toe pocket commenced on substantially half the needles and tapered progressively to the tip of the toe the step of knitting individual spaced gussets to the tapering sides forming same with opposed tapered ends, then after completion of the knitting of said gussets knitting an intermediate fabric between the adjacent tapered ends of said gussets forming the latter with op-

posite tapered ends to mate with the opposed tapered ends of said individual spaced gussets, then continuing the knitting of said intermediate fabric to complete the toe pocket increasing the number of needles progressively from the narrow toe end.

1,904,037. MOLDING FLASK. ERNEST A. ANHEUSER and GEORGE S. REMIKER, Milwaukee, Wis. Filed Apr. 30, 1931. Serial No. 534,000. 1 Claim. (Cl. 22—96.)



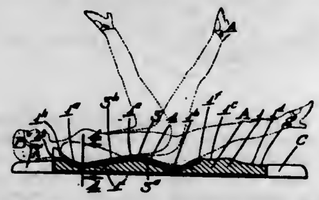
In a flask box the combination, a rectangular inclosure, unitary angle elements of relatively heavy forged product integrally joined together to form the walls of said inclosure, said elements offering outwardly extending webs abuttingly disposed in a plane normal to said walls and coincident to the parting-surface plane of said flask box, and individual embossed plates integrally united as a grating to divide and sub-divide the aforesaid inclosure.

1,904,038. RESILIENT SUPPORT FOR PHOTO-ELECTRIC CELL EXCITER. WILLIAM H. BAUCH, Shelbyville, Ind., assignor to Sono Equipment Corporation, Indianapolis, Ind., a Corporation. Filed June 28, 1930, Serial No. 463,037. Renewed Sept. 16, 1932. 4 Claims. (Cl. 248—30.)



1. A mounting for an exciter bulb including a bulb-supporting member, a flexible support for supporting one end of said bulb-supporting member, a pair of spring members adapted to exert opposing forces upon the opposite end of said bulb-supporting member, and a single adjusting means for simultaneously varying the tension of said springs, said springs being proportioned in size and strength so that movement of said tension-varying means deflects said springs without substantial movement of said bulb-supporting member.

1,904,039. BODY EXERCISING APPARATUS. EMIL A. BRUDER, Los Angeles, Calif. Filed Oct. 27, 1930. Serial No. 491,355. 2 Claims. (Cl. 128—69.)



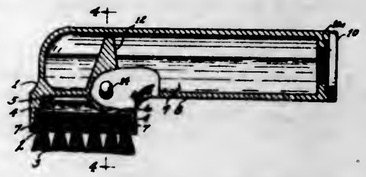
1. In a body exercising apparatus of the class described, a substantially horizontal and substantially rigid supporting means conforming in shape at its upper surface substantially to the longitudinal curvature of the back of the user, and a relatively thin yieldable and resilient rubber pad removably positioned over the curved portion of the supporting means, said pad having spaced apart and upwardly extending yieldable projections.

1,904,040. SHOCK ABSORBER. CHARLES H. CHAPIN, Chicago, Ill. Filed June 17, 1930. Serial No. 461,705. 14 Claims. (Cl. 188—89.)



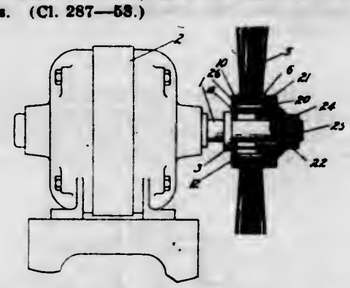
1. In a shock absorber, a housing, a member movably mounted therein, means within the housing for co-operation with the movably mounted member for applying an increasing resistance to the movement of said movable member in one direction, and for maintaining the resistance in the reverse direction at the maximum which it has attained during movement in the initial direction.

1,904,041. CLEANING BRUSH. GEORGE V. EVANS, Cleveland, Ohio, assignor to Brushaway Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed June 20, 1932. Serial No. 618,138. 5 Claims. (Cl. 15—138.)



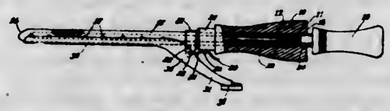
1. A brush for the purpose described, comprising a hollow body, bristles secured therein and extending outwardly thereof, said body having ducts communicating with the interior and discharging exteriorly of the body and onto the bristles, a handle surmounting said body and extending longitudinally therefrom and adapted to be gripped in the hand of an operator, a reservoir within said handle for storing cleaning fluid, a duct communicating the reservoir with the interior of the body, said body extending laterally from said handle and forming an exposed upwardly facing wall at one side of said handle, a valve for controlling the flow of liquid through said duct, a stem for operating said valve, said stem extending exteriorly of the body through said upwardly facing wall and being in position for engagement by the thumb of the operator while the handle is grasped in the operator's hand, said stem being moved for operating the valve and positioned for movement consequent upon normal flexure of the thumb of the operator in the direction when the hand and thumb are flexed for more firmly gripping the handle.

1,904,042. TOOL HOLDER. FLOYD A. EVERTS, Detroit, Mich. Filed Mar. 17, 1932. Serial No. 599,529. 3 Claims. (Cl. 287—53.)



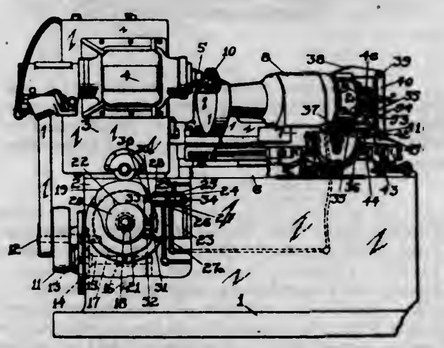
1. A holder for a buffer wheel or the like, comprising a hub-like member provided with a central aperture for disposition over a shaft, said hub-like element having a flange part at one side, segments carried by the flange part, said flange extending radially outward of the segments the free ends of the segments being shaped internally to provide an inverted frustro-conical shape, and a nut element having an internally threaded aperture for being threaded upon the shaft, and having a tapered part for engagement with the inverted conical-shaped formation.

1,904,043. MARCELLING DEVICE. MARY FRANK and JOHN FRANK, New York, N. Y. Filed Sept. 29, 1931. Serial No. 565,760. 4 Claims. (Cl. 132—37.)



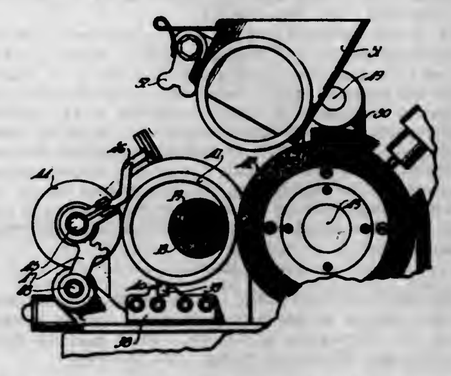
1. A hair curler comprising a hollow iron having a channel passing therethrough and adapted to be dipped into water before using, a handle secured to said iron and having an axial channel communicating with said first-named channel, and a heating pin insertable when heated into said channels through said handle, said iron having a plurality of holes in the walls thereof for the escape of steam formed upon contact of the heated pin with the moistened interior of the iron.

1,904,044. MECHANISM FOR RECIPROCATING GRINDING WHEEL SPINDLES. WALDO J. GUILD, Worcester, Mass., assignor to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 21, 1930. Serial No. 469,499. 8 Claims. (Cl. 51—34.)



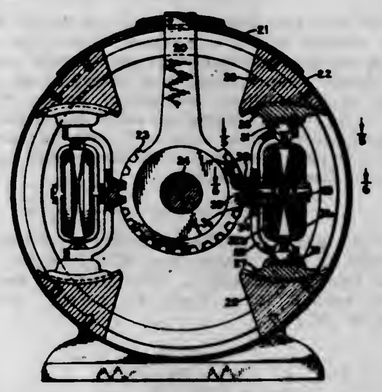
1. A grinding machine comprising a rotatable grinding wheel spindle mounted for axial movement thereon, a griading wheel on said spindle, means to reciprocate said spindle, fluid pressure operated means to actuate said last named means, and means to control the actuation of said fluid pressure means.

1,904,045. GRINDING MACHINE. FREDERICK S. HAAS, Cincinnati, Ohio, assignor, by mesne assignments, to The Heald Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 29, 1930. Serial No. 484,953. 18 Claims. (Cl. 51—105.)



1. In a machine of the character described the combination with a bed and a grinding wheel supported thereby, of a work holding unit for presenting work in opposition to the grinding wheel and means for imparting relative feeding movement to said unit and wheel including an oscillatable cam disposed in non-translatable relation to one of said parts and a cam follower carried by the other of said parts and shiftable therewith on movement of the cam, hydraulic means for oscillating the cam to effect said movement, and means for yieldingly urging the follower into engagement with the cam, said means including a cylinder and a hydraulically actuable piston movable in the cylinder and having a portion engaging the follower bearing member.

1,904,046. VARIABLE SPEED POWER TRANSMISSION MECHANISM. FRANK A. HAYES, Middletown, N. J. Filed Oct. 9, 1930. Serial No. 487,452. 12 Claims. (Cl. 74—26.)



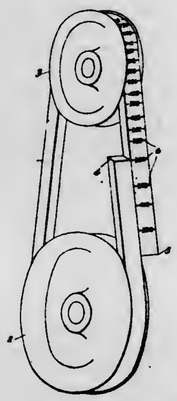
1. In a variable speed power transmission mechanism, in combination, coaxial friction disks having toroidal grooves in their opposed faces, a plurality of pairs of friction rollers between the disks and cooperating with the grooves therein, a pair of carriers for each pair of rollers

adapted to rock on an axis transverse to the axes of rotation of the rollers and enabling the rollers of each pair to rock relatively to each other on said axis, and supports for said carriers in which the carriers of each pair are mounted for relative longitudinal movement.

1,904,047. PROCESS OF REDUCING A NITRO COMPOUND BY MEANS OF A METAL. CLARK C. HERITAGE, Buffalo, N. Y., assignor to National Aniline & Chemical Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 12, 1926. Serial No. 101,399. 18 Claims. (Cl. 260—130.5.)

4. In the process of reducing a nitro compound by means of a metal and an acid, the improvements which comprise passing an acid solution of a nitro compound in contact with the metal so that a portion only of the solution constituting a charge is in contact therewith at any instant, withdrawing the resulting liquor from the metal before reduction is substantially completed, regulating the temperature of the liquor resulting from said contact to compensate for the temperature change produced during the reaction, and returning the liquor for recirculation in contact with the metal until the reduction is substantially completed.

1,904,048. BELT FITTER. MATTHEW E. HILL, Atlanta, Ga., assignor to The Holfast Rubber Company, Atlanta, Ga., a Corporation of Georgia. Filed Aug. 26, 1930. Serial No. 477,865. 1 Claim. (Cl. 33—179.)



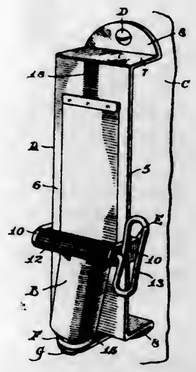
A belt fitter for automobile fan belts or the like comprising a material having a V-shaped cross-section and of such a length as will enable the ends thereof to overlap when trained over a plurality of pulleys of the various makes of automobiles, said pulleys having V-shaped grooves, the portion adjacent one end of said material having markings spaced in accordance with standard automobile belt sizes to cooperate with the opposite end to indicate the size of belt required.

1,904,049. DIAMOND CHARGED CUTTING TOOL BIT. SAMUEL L. HOYT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 5, 1929. Serial No. 390,621. 6 Claims. (Cl. 29—95.)



1. A cutting tool bit consisting of a supporting portion and a cutting portion, said supporting portion being sintered and consisting largely of tungsten carbide but containing an appreciable amount of cobalt, said cutting portion consisting of diamond particles held in a matrix having substantially the composition of the supporting portion of the tool.

1,904,050. HOLDING AND DISPENSING DEVICE FOR COLLAPSIBLE TUBES. HENRY JANDICK, Brooklyn, N. Y. Filed July 23, 1931. Serial No. 552,709. 2 Claims. (Cl. 221—60.)



1. A device for holding a collapsible tube and dispensing the contents thereof including a base adapted for attachment to a support, said base having a supporting surface upon which the tube is arranged, means at one end of the base for supporting the breast of a collapsible tube and for receiving therethrough the threaded outlet neck thereof, a carriage embracing the base and guided thereby for longitudinal movement with reference thereto, a roller journaled in said carriage to roll over the tube from its closed end toward its outlet end to compress the tube and dispense its contents and milled portions of the roller periphery and the base functioning to obtain a traction of the roller on the tube to effect translatory movement of the roller and carriage with respect to the tube and base, and for preventing relative movement of the tube with respect to the base.

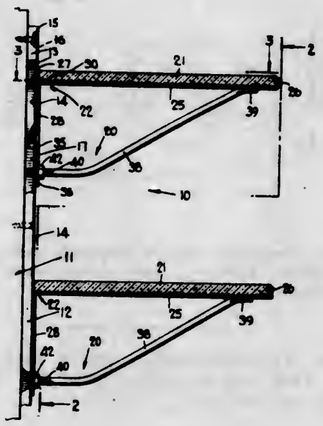
1,904,051. SOLDERING IRON. LESTER L. JONES, Oradell, N. J. Filed Sept. 28, 1929. Serial No. 395,800. 17 Claims. (Cl. 219—26.)



1. A soldering iron comprising a handle and a heat retaining body, a soldering tip heated thereby and movably related thereto, and means located at the handle for controlling the movement of the tip in order to regulate the temperature of the tip.

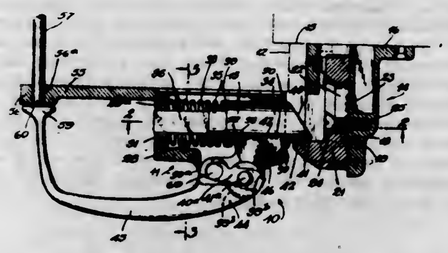
1,904,052. SHELVING CONSTRUCTION. ALEXANDER S. KATZ, Brooklyn, N. Y. Filed July 2, 1930. Serial No. 465,259. 1 Claim. (Cl. 248—19.)

An article of manufacture comprising an angle shaped member comprising a plurality of arms interconnected by a flexible joint, one of said arms having an opening therein, and a member fixed to the other of said arms having a portion slidably extending thru said opening, and a member mounted on said second member adapted to limit angular movement of said arms toward one another, one of said arms being formed with an integral hook portion bent away from the plane of said arm, a portion of said



angle shaped member being folded back on itself, said portion being formed with a pair of slots in opposite edges thereof as and for the purpose described and specified.

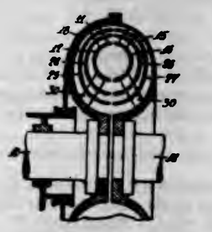
1,904,053. LOCK. ALEXANDER S. KATZ, Brooklyn, N. Y. Filed Dec. 24, 1930. Serial No. 504,571. 3 Claims. (Cl. 292—172.)



1. A latch comprising a casing, a spring-projected bolt movable in said casing, said bolt having a rack, bolt retracting means comprising a handle pivoted for movement toward and away from said casing and a gear segment operated by said handle and meshing with said rack, and a stop on said gear segment adapted to engage said bolt in the projected position of the latter to limit positively the movement of said handle toward the casing when the bolt is in projected position.

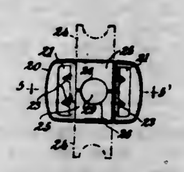
1,904,054. HYDRAULIC COUPLING. JOHANN NIKOLAUS KIEP, Altona-Hochkamp, and WALTER BROSE, Hamburg, Germany. Filed July 11, 1931, Serial No. 550,106, and in Germany Nov. 11, 1930. 13 Claims. (Cl. 60—54.)

1. A hydraulic coupling of the Föttinger type, including a driving member and a driven member, each having an annular outer wall and an annular inner wall, said inner walls forming a core and said outer walls forming a working chamber around said core for the circulation of liquid in a vortex ring, and an annular guide wall carried by one of said members between the outer and inner walls thereof, and forming with said walls separate paths for the liquid flow in the same direction, but at different



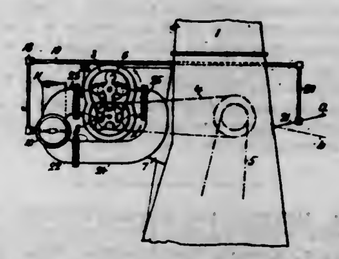
distances from said core, said paths being in open communication with each other in the plane between said members.

1,904,055. DETACHABLE FASTENER. GEORGE A. KING, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Apr. 18, 1932. Serial No. 605,851. 4 Claims. (Cl. 24—77.)



1. A detachable snap fastener comprising a stud element having a socket-engaging head and an underlying neck of a diameter less than that of the head and a socket element having a throat of a diameter less than that of the head of the stud but great enough to receive its neck, one of said fastener elements comprising a single piece of metal having strap-receiving slots disposed along a pair of opposite margins and portions turned and extended inwardly from the intervening margins and provided with closely adjacent terminal portions of forms and dimensions such as to serve as the means of attachment with the attaching portion of the other fastener element and have direct but resilient engagement therewith.

1,904,056. REVERSIBLE ROTARY BLOWER OR PUMP. VIGGO AXEL KJAER, Copenhagen, Denmark. Filed Nov. 13, 1930, Serial No. 495,500, and in Denmark Dec. 2, 1929. 4 Claims. (Cl. 103—117.)



1. In a reversible rotary blower for supplying air to reversible internal combustion engines, a blower housing having ports therein, a valve housing provided with inlet and discharge fittings, two pipes connected with the valve

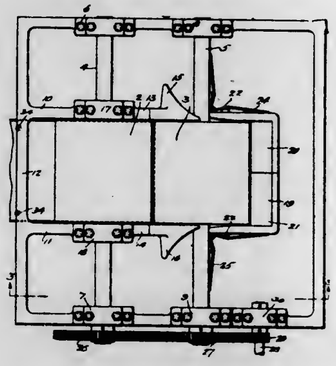
housing at the opposite sides thereof and communicating respectively with the ports of the blower housing, and a rotatable flap valve arranged in the valve housing and closing communication between the inlet and discharge fittings and arranged to be moved between two end positions, in one of which the valve establishes communication between the inlet and the discharge fittings through the ports of the blower housing in one direction, whilst in the other end position the flap valve establishes communication between the inlet and the discharge fittings through the two ports of the blower housing in the opposite direction.

1,904,057. FLASH LAMP. KEISHIRO KOBAYASHI, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed May 9, 1932, Serial No. 610,266, and in Japan May 26, 1931. 2 Claims. (Cl. 67—33.)



1. A flash lamp comprising a bulb hermetically sealed and containing a flashing medium and an ignition means located in said bulb comprising an inflammable substance and a heat conductor in contact therewith extending through said bulb and having a portion thereof extending beyond said bulb.

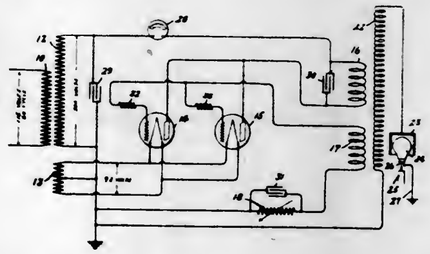
1,904,058. GRINDING APPARATUS. JOHN KOTOUC, Philadelphia, Pa. Filed Nov. 11, 1930. Serial No. 494,937. 4 Claims. (Cl. 83—12.)



1. In a grinding device, a plurality of adjacently disposed movable elements each comprising a grinding roll, a scoop comprising halved parts mounted on one of said elements on opposite sides of the grinding roll thereof for lifting material to be ground and dropping it between said rolls, and means disposed in the path of a portion of said halved parts for moving said parts outward to permit complete rotation of said scoop with the interposed roll.

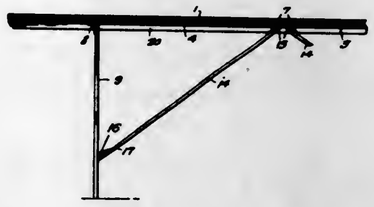
1,904,059. METHOD AND APPARATUS FOR TESTING INCANDESCENT LAMPS AND SIMILAR ARTICLES. WILLIAM L. KUBACH, East Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Apr. 23, 1928. Serial No. 272,175. 4 Claims. (Cl. 175—183.)

1. In an apparatus for testing devices comprising an evacuated or gas-filled enclosure, the combination of a receptacle into which said device may be inserted and a high-frequency electrical discharge circuit including said



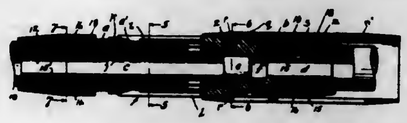
receptacle comprising current indicating means actuated by the current flowing in said circuit while the device is being subjected to said discharge.

1,904,060. BANQUET TABLE. RAY C. KUHN, Warsaw, Ohio. Filed July 31, 1931. Serial No. 554,338. 2 Claims. (Cl. 45—11.)



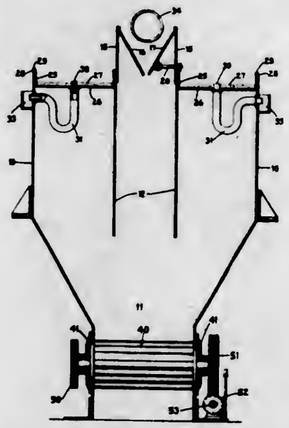
1. A banquet table having a top made up of thin laminated wooden sheets which are glued together, a cross sectionally rightangular rim in which the ends and edges of the sheets are received and to which the sheets are connected, and transverse brace and reinforcing strips having their ends secured to the inwardly directed longitudinal members of the rim, receiving the laminated top thereon and having such top secured thereto, the transverse reinforcing elements being spaced and the outer elements having hinged thereto crossed legs which are swingable against the table top between said outer and the inner transverse elements.

1,904,061. HOSE COUPLING. SIGFRID LARSON, Portland, Oreg. Filed Dec. 3, 1930. Serial No. 499,712. 9 Claims. (Cl. 284—19.)



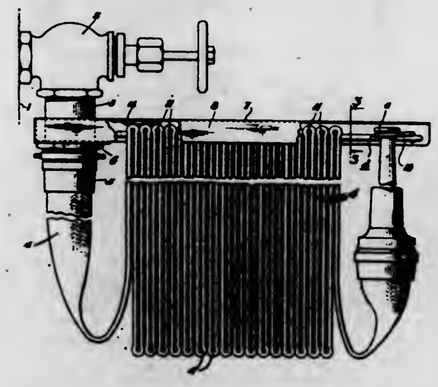
1. A hose coupling comprising male and female members, two collars mounted one behind the other on the end of the male member, the inner of said collars being slidable and of greater exterior diameter than the outer collar, the female member formed with peripherally arranged longitudinally extending resilient fingers, the extremities of which form locking heads, the inner faces of which are beveled, whereby in coupling said members, said fingers ride over and engage with the outer of said collars and the further pushing of said members together causes said fingers to ride onto said inner collar and again spread and disengage said fingers.

1,904,062. DISCHARGE APPARATUS. WILLIAM C. LAUGHLIN, Glendale, Calif., and ABRAHAM B. ASCH, New York, N. Y., assignors to The L. A. B. Company, New York, N. Y., a Corporation of New York. Filed Dec. 13, 1929. Serial No. 413,794. 7 Claims. (Cl. 210—55.)



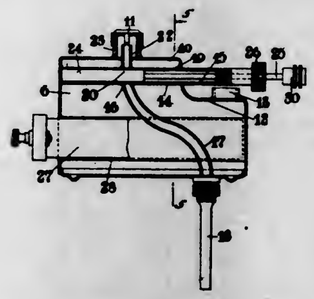
4. In a clarifier tank, a sludge hopper having a discharge opening and closure means for said opening comprising a roller mounted in said opening, members located on each side of said roller, means whereby a permanent closure is effected between said roller and one of said members for preventing passage of material or air therebetween and means whereby material is passed between said roller and the other of said members when said roller is rotated.

1,904,063. FIRE HOSE RACK. RUDOLPH O. LUND, New York, N. Y. Filed Aug. 25, 1931. Serial No. 559,195. 2 Claims. (Cl. 248—28.5.)



1. In a fire hose rack, the sub-combination comprising a longitudinal frame, a pair of skeleton supports secured to opposite sides thereof and being spaced therefrom throughout the greater portion of the length of such supports and said supports each having in-turned ends which are secured to said frame, a plurality of hose supporting pins pivotally connected to one of said supports and of sufficient length to span the intervening space between said supports, said pins having arc-shaped ends of a curvature of less than 90° and insufficient to permit of the extreme ends of said pins projecting below the bottom of the support on which they rest, whereby when such free ends are respectively forcibly projected against the end of one of said supports when resting thereon, the same will ride upwardly and over the end of such support, but said free end of said pin is normally prevented from becoming accidentally disengaged from the support upon which it rests.

1,904,064. APPLIANCE FOR USE IN HAIR WAVING. WILLIAM MACDONALD and HUGH MACDONALD, Inverness, Scotland. Filed Aug. 25, 1931, Serial No. 559,304, and in Great Britain Aug. 30, 1930. 9 Claims. (Cl. 132—36.)

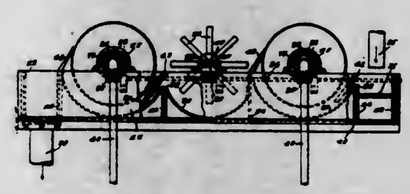


1. Means for supplying steam to a hair-waving appliance, comprising a steam boiler, a tubular seating member projecting through a wall of the boiler, a pair of apertures in the tubular seating permitting steam to enter the tubular member and pass out to atmosphere, a second pair of apertures permitting steam to pass into the tubular member and thence to the hair-waving appliance, and a valve device located in the tubular seating and adapted to cover and uncover the pairs of apertures alternatively.

1,904,065. LUBRICATING OIL. KENNETH G. MACKENZIE, Westport, Conn., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed July 12, 1930. Serial No. 467,628. 8 Claims. (Cl. 87—9.)

1. A lubricating oil for heavy machinery consisting of at least 95% of a hydrocarbon oil having a viscosity considerably lower than that normally used for such purposes and within the range of from 37 seconds to 60 seconds (Saybolt) at 100° F. and from 2% to 5% of oxidised paraffin wax which has been oxidised in such manner as to contain a large proportion of saponifiable material.

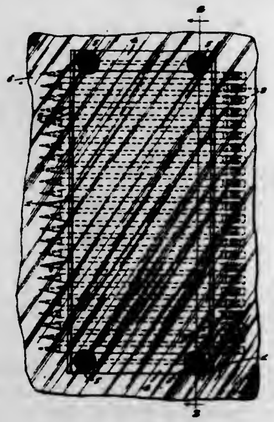
1,904,066. BOOK STOCK WASHER. GEORGE G. MCARTHUR, Niagara Falls, N. Y. Filed May 25, 1931. Serial No. 539,907. 5 Claims. (Cl. 141—12.)



1. In a machine of the class described, a plurality of cylinders having heads and each including a perforated peripheral wall connecting the heads and an annular chamber within said wall, means for rotatably mounting the cylinders, means including low pressure pipes opening into the chambers for producing suction within said chambers, a valve casing rotatable with each cylinder, a non-rotatable

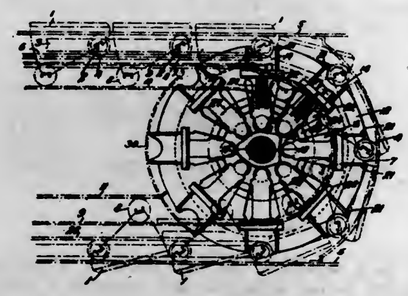
valve member positioned within each casing and including a port, said casings each having ducts in communication respectively with the low pressure pipes and successively in communication with the port of the valve during the rotation of each valve casing and cylinder.

1,904,067. PENCIL DISPLAY RACK. FRED H. MCGEHEE, Okolona, Miss. Filed Aug. 8, 1931. Serial No. 554,855. 1 Claim. (Cl. 211—87.)



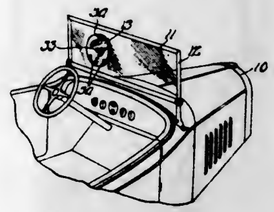
A rack for displaying articles through store windows comprising a substantially rectangular member including side members having one of their edges provided with a plurality of aligned notches, transverse cross sectional T-shape members connecting the side members at the top and bottom thereof and being disposed inwardly of the notched edges of said side members, said transverse members having relatively wide outer faces, vacuum cups secured to the faces and extending beyond the rack to support the latter on the inner face of a display window in a vertical position, and said display window, affording a cover plate for the rack.

1,904,068. CONVEYER, ESCALATOR, AND THE LIKE. JOHN HARPER MEACOCK, Northampton, England. Filed Mar. 15, 1932, Serial No. 598,914, and in Great Britain Mar. 5, 1931. 4 Claims. (Cl. 74—31.)



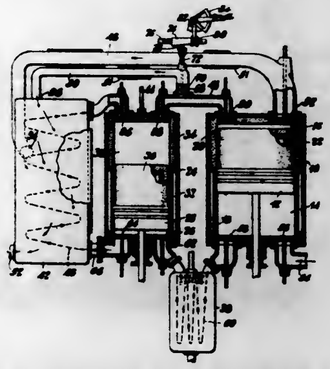
1. Apparatus of the kind specified comprising a chain, a rotatable sprocket wheel for engaging the chain, a plurality of members movably mounted on the sprocket wheel and each provided with a tooth space for engaging joints of the chain and means rendered effective by rotation of the sprocket wheel for moving one of the said members away from the centre of rotation of the wheel during the interval between the engagement of the tooth space of that member with a joint of the chain and the engagement of the next tooth space with the next joint of the chain.

1,904,069. WINDSHIELD VISOR. PETER MILLER, Chicago, Ill. Filed Oct. 4, 1930. Serial No. 486,453. 5 Claims. (Cl. 296—97.)



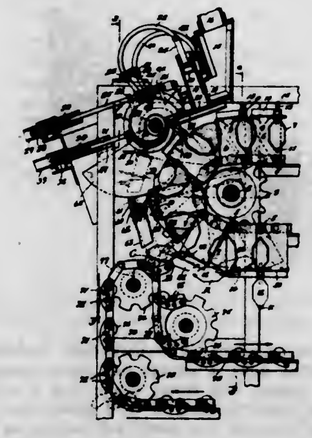
2. An anti-glare visor comprising a transparent colored plate adapted to be positioned in front of a transparent member, and means for detachably securing said plate to said member including a female element carried by said member, and a male element carried by and slidably mounted in said plate for movement transversely therethrough, said male element being adapted to be inserted into and frictionally engaged in said female element to detachably secure said plate to said member.

1,904,070. COMBUSTION ENGINE WITH PREHEATED AIR. JOHN D. MORGAN, Maplewood, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,619. 7 Claims. (Cl. 60—15.)



1. The combination of an internal combustion motor, an air compressor, a recuperator, connections whereby compressed air from said compressor is conducted to said recuperator and from the recuperator to said motor, connections arranged to lead gases exhausted from said motor to said recuperator to heat the air therein, and connections arranged to bleed partially expanded gases from said motor and to lead the bled gases to said recuperator.

1,904,071. SOAP MOLDING MACHINE. LAFAYETTE HENRY NELLES, New York, N. Y. Filed May 2, 1930, Serial No. 449,283, and in Great Britain May 2, 1929. 22 Claims. (Cl. 18—26.)



1. Soap molding machine comprising an endless conveyor, a plurality of molds whose walls will flex as said molds open and close and extending transversely thereon into which the soap is to be poured, and means for cooling the soap during movement of the conveyor.

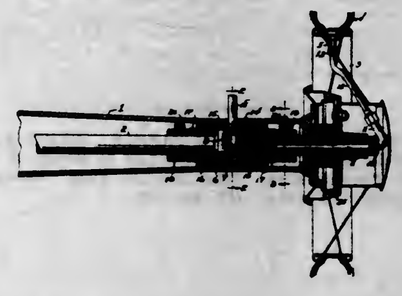
1,904,072. PAPER FLOWER BOX. JOHN F. NELSON, Charleroi, Pa., and LLOYD HODGE, Kent, Ohio. Filed Dec. 7, 1931. Serial No. 579,530. 2 Claims. (Cl. 229—15.)



1. A holding and displaying device for the purpose set forth, comprising a paper box having an open top, said box having its ends extended and the said ends being bent into the box in a line with the open top of the box to provide flanges, a flat apertured partition plate affording a rack arranged in the box to contact with the side walls and with the flanges in the box, and said partition plate having depending side and end flanges to contact with the bottom of the box and certain of said flanges being formed with bendable tongues designed to be bent against the box and to underlie and contact with the flanges in the box.

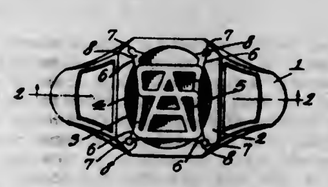
1,904,078. TIRE INFLATING DEVICE. LOUIS R. O'CONNOR and CULLEN G. STARNES, Mount Vernon, Ga. Filed Aug. 28, 1931. Serial No. 560,032. 1 Claim. (Cl. 152—11.)

In combination with an axle housing having an axle and a wheel carried by the axle housing and provided with a pneumatic tire, said axle having a passage, means connecting the passage to the tire, an enlargement formed on the axle and having a groove in communication with the passage, a sleeve engaging the enlargement, a pipe carried by said sleeve and extending through the housing for connection with an air supply means to furnish air pressure to the passage by way of the groove, packing glands mounted on the axle and threaded to the sleeve, packing between the enlargement and the glands, and



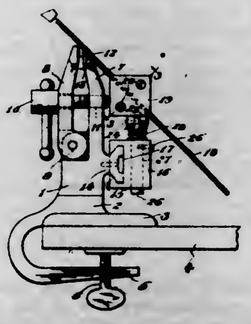
adjusting means for rotating the glands in either direction relative to the sleeve and extending exteriorly of the housing.

1,904,074. FINGER RING OR THE LIKE. HENRY W. PETERS, Boston, Mass. Filed Apr. 4, 1932. Serial No. 603,163. 6 Claims. (Cl. 63—15.)



1. A finger ring or the like including a portion having a recess in one face, there being spaced sockets in said face opening through the wall of the recess, a mounting seated within the recess, and a guard overlying the mounting and having portions filling the sockets and holding the guard against displacement.

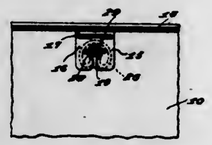
1,904,075. SCISSORS SHARPENER. ANTON J. PETRICH, Milwaukee, Wis. Filed May 1, 1931. Serial No. 534,375. 10 Claims. (Cl. 76—82.2.)



1. A shears sharpening device comprising a blade holder having a body adapted to be secured to a support, jaws carried by said body and one movable towards and away from the other whereby a shears blade may be gripped between the jaws, means spaced transversely from one jaw to slidably support a sharpener for recipro-

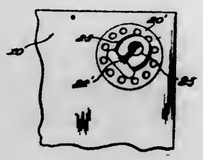
cating motion across a blade held between the jaws, the sharpener supporting element and jaws being movable one with relation to the other transversely of the support, the sharpener supporting element having a vertically disposed stem rotatably mounted whereby a sharpener carried thereby may be swung longitudinally of a blade gripped between the jaws, and a spring about the stem for yieldably resisting depression of the stem and said sharpener supporting element.

1,904,076. SECURING TRIM PANELS. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed July 20, 1928. Serial No. 294,124. 8 Claims. (Cl. 45—138.)



8. A trim panel comprising a body of fibrous material, a sheet metal fastener anchoring tab secured thereto, and a fastener having a head, and a shank extending away from the head and that is wider in one direction than in a direction at right angles thereto, the anchoring tab consisting of an elongated strip attached to said body by bending one end of the strip so as to snugly embrace a portion of said body, the other end of said tab being provided with a slot having a narrow portion and a wider portion, said fastener being interlocked with said tab and body by passing its shank through the narrow portion of said slot into said wider portion and turning the fastener so that the wider dimension of the shank extends across the wider portion of said slot.

1,904,077. SECURING TRIM PANELS. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed July 20, 1928. Serial No. 294,125. 10 Claims. (Cl. 45—138.)



7. The method of preparing a trim panel for attachment to the supporting structure of the interior of an automobile body or the like, which consists in attaching small plate like sheet metallic fastener anchoring elements to the foundation or body at the points at which the fasteners are to be applied, and then interlocking spring fasteners to said elements with their shanks protruding away from the panel so that the fasteners will remain in position for subsequent application of said shanks to openings in said supporting structure.

1,904,078. STRIKER BAR FOR BAG MACHINES. GEORGE W. POPPE, Brooklyn, N. Y. Filed July 30, 1932. Serial No. 626,597. 4 Claims. (Cl. 93—33.)



1. In a bag machine, in combination, sprocket chains having pivoted links, a striker bar frame supported between the chains, said frame comprising a rod passing through the roller bearing in each chain, and a second rod passing through the roller bearing of an adjacent link of each chain.

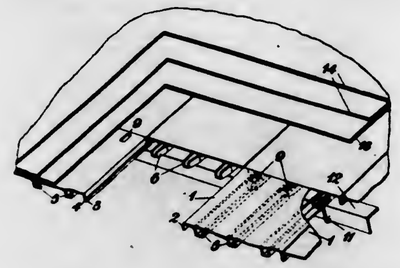
1,904,079. METHOD AND APPARATUS FOR FORMING FOUNDATION COLUMNS. CHARLES L. POWELL, New York, N. Y., assignor to Caisson Contracting Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 16, 1932. Serial No. 599,078. 13 Claims. (Cl. 61—57.)



1. A caisson for sinking a hole in the ground, comprising in combination, a working chamber of substantially the diameter of the hole, a shaft of lesser diameter extending from the top of said chamber and being free of the walls of the hole, and means for preventing entrance of extraneous material into said caisson.

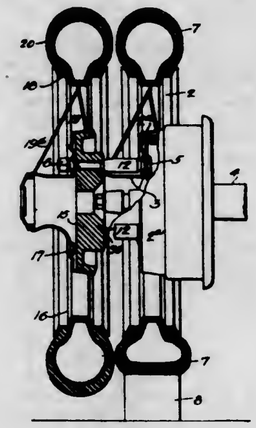
1,904,080. CONSTRUCTION OF ROOFINGS, PARTITIONS, AND THE LIKE. HERBERT LEONARD PLUMMER and DAVIS LAMBERT IRWIN, High Holborn, London, England. Filed May 31, 1930, Serial No. 458,618, and in Great Britain Sept. 5, 1929. 2 Claims. (Cl. 108—18.)

1. A substantially flat panel of rectangular form adapted for use on structural surfaces comprising flanges whereby the sides of the panel may be interengaged with the sides of adjacent similarly formed panels, reinforcing ribs generally parallel with the said flanges extending beyond



one edge of the panel, and apertures in the said ribs adapted to accommodate a fastening member for securing the panel to a structural member.

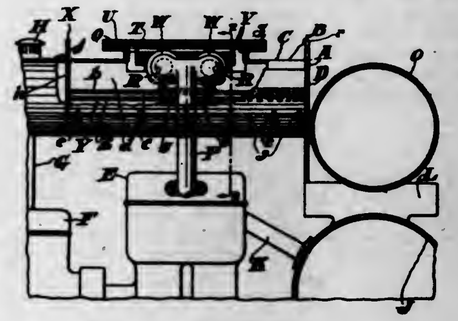
1,904,081. AUXILIARY WHEEL FOR AUTOMOBILES. HOWELL D. PRATT, Chestnut Hill, Pa. Filed Feb. 17, 1931. Serial No. 516,409. 3 Claims. (Cl. 301—38.)



3. The combination in an automobile, of a main wheel having a hub with an extended central portion; a supplemental wheel having a recessed hub; a hub disc mounted in the recess and having an annular groove for receiving the extension of the hub of the main wheel; bolts having their threaded portions projecting from the hub of the main wheel and supplemental bolts screwed onto the projecting portions of the bolts in the main hub and extending through the hub disc and hub of the supplemental wheel; and nuts mounted on the said supplemental bolts for drawing the supplemental wheel and its hub disc firmly against the projecting portions of the hub of the main wheel.

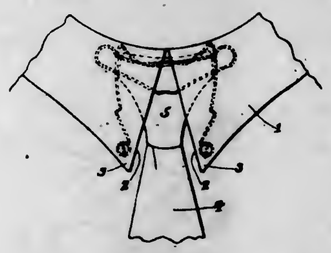
1,904,082. PORTABLE COMPRESSOR. WILLIAM PRELLWITZ, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 2, 1931. Serial No. 566,436. 2 Claims. (Cl. 230—32.)

1. A portable compressor outfit comprising a housing, a compressor in the housing, a motor in the housing to drive the compressor, an air intake device for the compressor having an inlet opening above the compressor and



the motor, and means for preventing the heat radiating from the compressor and the motor from mingling with the air flowing to the intake opening.

1,904,083. NECKTIE AND COLLAR HOLDER. GUSTAVE A. PRIESTSON, Cliffside, N. J. Filed June 28, 1932. Serial No. 618,977. 7 Claims. (Cl. 24—49.)

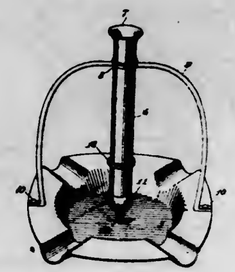


7. A combined necktie and collar holder comprising, a length of resilient wire bent to provide a body part formed of an upper portion of concave curvature, a lower portion having an arcuate central part and a pair of oppositely extending curved upwardly inclined outer parts and a pair of oppositely curved end portions connecting said upper and lower portions together, said upper portion formed of a pair of oppositely disposed overlapping sections, a pair of bends at the inner ends of said sections and spaced from said end portions, the bend at the inner end of one section extending above the other of said sections, and a pair of depending coupling arms connected to said upper portion by said bends and normally extending towards each other, one of said arms seating against the front face of one of said sections and the other against the rear face of the other section, said arms seating against the rear face of said lower portion and having their lower ends provided with means for interengaging in the collar.

1,904,084. SMOKER'S ACCESSORY. CHARLES J. RILEY, East Orange, N. J. Filed Sept. 30, 1930. Serial No. 485,487. 3 Claims. (Cl. 131—51.)

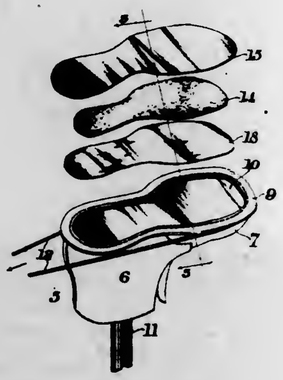
1. The combination with an ash tray having an extinguisher closure element mounted on the tray bottom and elevated above said tray bottom, of a cigarette extinguishing device including a tubular open ended member of a size to snugly receive a cigarette and stationary means

on said tray mounting said member on and over the tray for guided vertical movement in the line of the axis of said member and for gravitational movement to a normal



lowered position in engagement with the closure element whereby the lower end of said member is closed by said closure element.

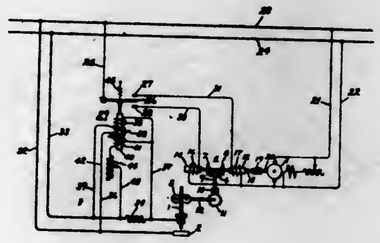
1,904,085. SHOE AND METHOD OF MAKING THE SAME. SAMUEL RIZZO, Rochester, N. Y., assignor to Artisan Shoe Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1930. Serial No. 474,138. 6 Claims. (Cl. 12—142.)



1. The method of manufacturing a shoe which comprises making an upper including a vamp, fastening a welt to the edges of the upper, simultaneously drawing the edges of the vamp with the welt attached thereto toward each other by a uniformly bendable medium engaging a substantial portion of the upper and extending only along the outside of said upper, holding the edges of the upper with the welt attached thereto in fixed relation as drawn, and attaching a sole on said welt.

1,904,086. AUTOMATIC ARC WELDING. SALLY SANDELOWSKY, Hennigsdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 17, 1931, Serial No. 523,333, and in Germany Mar. 26, 1930. 3 Claims. (Cl. 219—8.)

1. An automatic arc welding system, comprising electrode feeding mechanism, a regulator having a plurality of actuating coils, one of which is connected to be responsive to arc voltage and act differentially with respect to another of said coils which is connected to be responsive to arc current, and another of which is connected to



neutralize the maximum effect of one of said first mentioned coils, and means controlled by said regulator for controlling said electrode feeding mechanism.

1,904,087. PAPER MAKING PROCESS. ELMER C. SCHACHT, Troy, N. Y., assignor to Behr-Manning Corporation, Troy, N. Y., a Corporation of Massachusetts. Original applications filed Dec. 16, 1931, Serial No. 581,511, filed Mar. 11, 1932, Serial No. 598,285. Divided and this application filed Apr. 21, 1932. Serial No. 606,725. 7 Claims. (Cl. 92—41.)

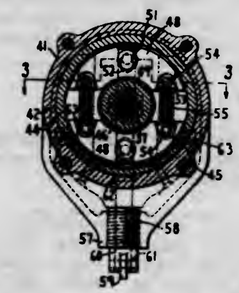
1. The process of making a paper-like material which comprises preparing a mixture of comminuted cork and fibres with sufficient water to form a stock, forming the stock into a web, and including a flexible binder in the web and in amount sufficient to increase the inherent strength and resilience of the web and render it flexible so that it is resistant to creasing and flexing.

1,904,088. FRAME PROVIDED WITH EASEL-STAND. HENRI SCHUTZ, Paris, France. Filed Feb. 4, 1932, Serial No. 590,876, and in France July 17, 1931. 7 Claims. (Cl. 40—146.)



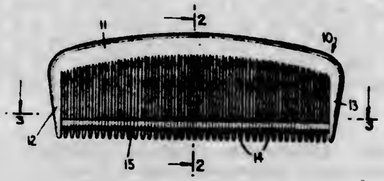
1. Easel-support comprising the combination of a front supporting element, a rod having at its upper part a spherical member, a cross-shaped member having two resilient arms adapted to press against the back of the supporting element, and two arms adapted to be removably secured to the sides of the said supporting element, the central portion of the cross-shaped member being in the form of a cup for receiving the spherical member of the rod, and a resilient blade attached to the said cross-shaped member and adapted to press the said spherical member against the bottom of the said cup-shaped portion.

1,904,089. CENTRIFUGAL BRAKE. FRANK H. SCHWEBIN, Bellevue, Pa., assignor to The Duff-Norton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Dec. 5, 1929, Serial No. 411,770. Divided and this application filed Nov. 9, 1931. Serial No. 573,765. 9 Claims. (Cl. 188—185.)



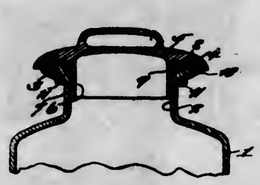
1. In a centrifugal brake, a rotary disc, and a brake segment, one of said members being provided with a groove and the other with a guiding rib slidable in the groove to prevent turning of the segment with respect to the disc, and a pin passing through a slot in the segment for retaining the guiding rib in the groove.

1,904,090. COMB AND ACCESSORIES THEREFOR. MILTON M. SHAW, New York, N. Y., assignor to New York Merchandise Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 6, 1932. Serial No. 591,283. 7 Claims. (Cl. 132—19.)



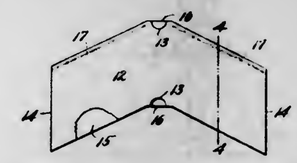
1. In combination with a comb having a plurality of teeth, a protector for said teeth comprising an elongated member having a row of openings receiving and gripping the outer ends of the teeth of said comb.

1,904,091. SEALING DEVICE FOR CLOSED CONTAINERS. FRED M. SHOOP, Burnt Cabins, Pa., assignor of one-fourth to Charles E. Fuller, Burnt Cabins, Pa. Filed Sept. 19, 1932. Serial No. 633,901. 3 Claims. (Cl. 220—46.)



1. In a sealing device for shipping milk cans, the combination with a can body having a neck and including an entrance mouth, the neck merging into a marginal flange, of a closure or cover provided with a depending neck engaging the entrance mouth, a flexible or pliable sealing device having an enlarged bead or flange at one end fitting closely about the depending neck of the cover, said sealing device comprising a pliable or flexible skirt to be stretched back over the cover when the cover is not in use, the other end of the sealing device having a bead or flange, the pliable or flexible skirt adapted to be stretched over the flange of the can neck, whereby the second bead or flange may hug closely against the exterior of the neck of the can.

1,904,092. SHIELD FOR SUSPENDED WEARING APPAREL. MELVIN H. SIDEBOTHAM, West Newton, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed Dec. 15, 1930. Serial No. 502,308. 2 Claims. (Cl. 223—61.)



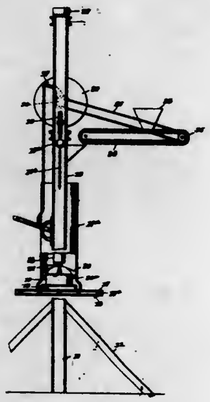
1. A paper garment protector comprising two sections of single thickness throughout and adhesively connected at their upper edges and free from each other at their sides and lower edges, the side edges being parallel and the upper and lower edges being inclined in opposite directions from the mid-width thereof, and one of said sections having a recess at the midwidth of its lower edge.

1,904,093. LICENSE PLATE FOR MOTOR VEHICLES. CONWAY B. SMITH, Portsmouth, Va. Filed Feb. 15, 1932. Serial No. 593,138. 2 Claims. (Cl. 40—125.)



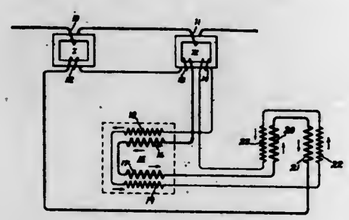
1. A license tag for automotive vehicles comprising, a plate provided with a license number, an exposure opening for a selected yearly indicator and a pair of spaced slots, and an adjustable disc positioned at the rear of and revolubly connected to said plate, said disc being provided with a circular row of spaced radially disposed selectively exposable portions outset with respect to the remaining part of the disc and providing different yearly indicators, each of said portions formed of an outset inner part for extension into said opening and an outset outer part in the form of a digit extended from said inner part, said disc formed with a circular row of radially disposed slots between said portions, an identifiable, yearly license paid indicating element having portions thereof extending through the slots of said plate and a pair of slots of said row and opposing the rear faces of the latter, said disc being formed with a circular row of openings, said plate being formed with an opening for selective registering with an opening of said row, and means extended through the registering openings for locking the disc in its adjusted position.

1,904,094. METHOD AND APPARATUS FOR MOLDING CONCRETE PIPE. CLAY M. SNYDER, Atlanta, Ga., assignor to Centrifugal Machine Company, Atlanta, Ga. Filed May 27, 1929. Serial No. 366,227. 14 Claims. (Cl. 25—36.)



1. In a concrete pipe making apparatus, the combination of a form, means for compacting concrete in said form, said form being movable away from the compacting means by the pressure of concrete placed in the form against said compacting means, and means for gradually increasing the resistance offered the movement of said form as the weight of the concrete placed in the form increases.

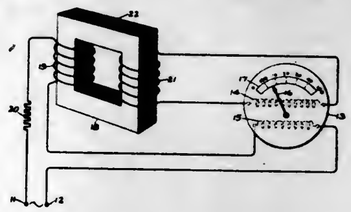
1,904,095. ELECTRICAL MEASURING INSTRUMENT. BYRON W. ST. CLAIR, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 16, 1931. Serial No. 530,604. 1 Claim. (Cl. 171—264.)



A wattmeter including field coils, auxiliary coils interwound therewith, a duplicate set of said coils in circuit therewith located in non-inductive relation to said first coils, the direction of current in said duplicate coils being such that the voltage due to the mutual inductance in said coils is of the same magnitude but of opposite sign to the voltage due to the mutual inductance of said first mentioned coils, whereby the effect of mutual inductance in the circuit is neutralized.

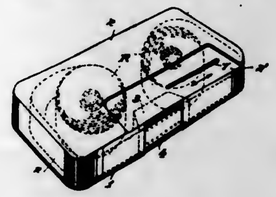
1,904,096. ELECTRICAL INSTRUMENT. BYRON W. ST. CLAIR, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 19, 1932. Serial No. 587,597. 6 Claims. (Cl. 171—95.)

2. In combination with an alternating-current circuit, a transformer having primary and secondary windings, and a voltmeter having a pair of opposing field windings, said transformer primary and one of said field windings



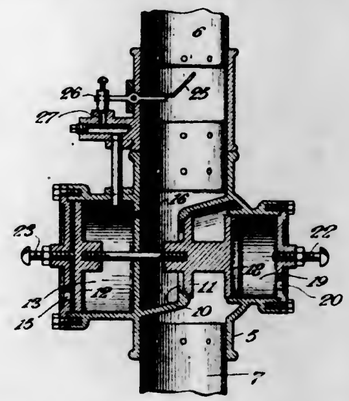
in series being connected to said alternating-current circuit, said transformer secondary being connected to the other of said voltmeter field windings.

1,904,097. FILM HOLDER FOR PHOTOGRAPHIC CAMERAS. OTTO STEINER, Berlin-Spandau, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany, a Corporation of Germany. Filed Apr. 6, 1931, Serial No. 528,037, and in Germany Aug. 18, 1930. 7 Claims. (Cl. 95—34.)



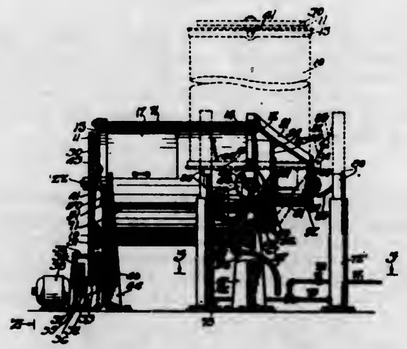
1. A film holder constructed to house the winding-off reel and the take-up reel and composed of two companion members, said holder having an external recess within which a portion of the film is adapted to travel on its way from one reel to the other, exteriorly of the holder, and a guard constructed to embrace said two members and hold them together and adapted to cover said recess.

1,904,098. PNEUMATIC DISPATCH SYSTEM VALVE. JOSEPH JOHN STOMTZEL, Queens Village, N. Y., assignor to G & G Atlas Systems, Inc., New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,629. 4 Claims. (Cl. 243—12.)



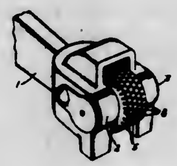
1. A control valve for a minimum flow pneumatic dispatch system comprising a valve casing having a main port, a valve member closing said port and movable in opposition to the flow of air to close said port and pneumatic means subject to pressure within the line and connected to said valve member to actuate it in either direction, said pneumatic means communicating with the line through a restricted opening.

1,904,099. LAUNDRY MACHINE. NICOLA STRAMAGLIA and THOMAS SCHILLACI, Chicago, Ill. Filed Mar. 7, 1931. Serial No. 520,913. 8 Claims. (Cl. 68—18.)



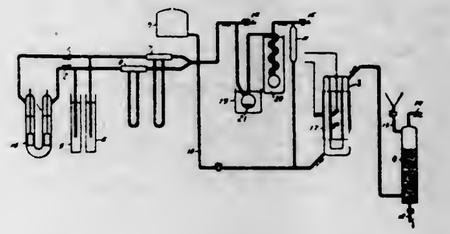
1. In laundry apparatus, a combination washing machine and centrifugal dryer comprising a shell and a perforated drum rotatable in horizontal position therein in a cleansing solution adapted to be contained in the shell, a structure for detachably supporting the shell and drum in horizontal position, motive power operated means for rotating said drum with the shell during the washing operation, means for rotating the shell and drum from horizontal into vertical position at the end of the washing operation, a plurality of flexible members each having one end attached to the shell, and a plurality of fluid pressure operated vertically movable plungers to which the other ends of said flexible members are attached so that the shell and drum may be lifted off said first named supporting structure and suspended from said plungers by said flexible members during rotation of the drum within the shell when both are in vertical position and the machine used as a dryer.

1,904,100. WHEEL DRESSER. GEORGE F. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 1, 1930. Serial No. 440,837. 2 Claims. (Cl. 125—37.)



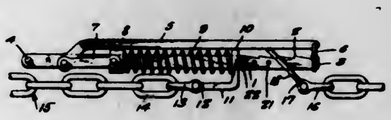
1. A wheel dresser comprising a circular radially corrugated plate having a substantially smooth outer periphery, cemented carbide pieces mounted in the corrugations on both sides of said plate and at the outer edge thereof and rigidly secured thereto, the outer ends of said cemented carbide pieces being flush with the outer periphery of said corrugated plates.

1,904,101. METHOD AND APPARATUS FOR CARRYING OUT CHEMICAL REACTIONS. MAURICE C. TAYLOR and CHESTER N. RICHARDSON, Niagara Falls, N. Y., assignors to The Mathieson Alkali Works, New York, N. Y., a Corporation of Virginia. Filed Sept. 19, 1930. Serial No. 482,944. 2 Claims. (Cl. 204—81.)



1. In the production of hydrogen peroxide, the improvement which comprises subjecting a mixture of hydrogen, oxygen and mercury vapor to the corona discharge.

1,904,102. CHAIN FASTENER. FRANK E. THOMPSON, Winona, Minn. Filed July 22, 1932. Serial No. 624,092. 2 Claims. (Cl. 24—68.)

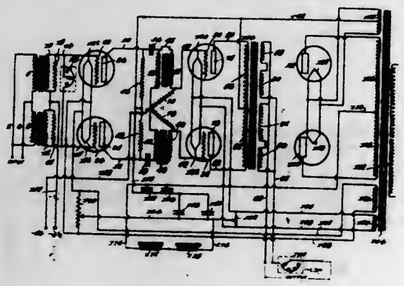


1. In a device for the purpose set forth, a bar having teeth on one of its edges from one of its ends, a swingable lever pivoted to the non-toothed end of the bar, links carried by the lever, a sleeve movable on the bar and to which the links are connected, a spring on the bar having one end contacting with the sleeve, a slide on the bar with which the second end of the spring contacts, said slide having an angle portion, a split chain having one of its edges swingably secured to the angle portion of the slide, a latch plate pivotally secured to the second end link of the chain, said latch plate having a substantially rectangular opening to receive the bar therethrough, and the end wall provided by the opening opposite the teeth of the bar having a tooth to engage with one of the teeth of the bar, and means for latching the lever to the toothed end of the bar when swung thereover, all as and for the purpose set forth.

1,904,103. PUSH-PULL AMPLIFIER CIRCUIT. FLETCHER THORINGTON, Birmingham, Ala. Filed Nov. 15, 1929. Serial No. 407,454. 2 Claims. (Cl. 179—171.)

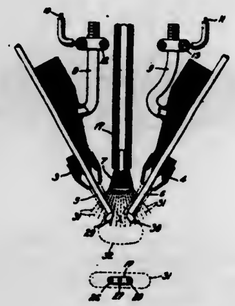
1. In a two stage cascade amplifier circuit, a pair of transformers in said first stage having their primary windings connected in reverse parallel and their secondary windings connected in series, high resistances connected in shunt with each of said secondary windings, a pair of transformers in the second stage having the secondary windings of each transformer connected in series and

the primary windings of each transformer connected in series and to the output circuit of the first stage tubes, a pair of high resistances connected in series and across



the output circuit of said first stage tubes and high resistances connected across the windings of each of said second stage transformers.

1,904,104. WELDING TORCH. HARRY W. TOBEY and HAROLD V. MAY, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Sept. 24, 1931. Serial No. 564,882. 7 Claims. (Cl. 219—8.)



1. Welding apparatus comprising means for holding a plurality of electrodes in converging positions relatively to one another, and means for directing a fan-shaped stream of gas across and about the arcing terminals of said electrodes.

1,904,105. NONSAG HELICAL TUNGSTEN FILAMENT AND METHOD OF MAKING IT. JOHANNES ANTONIUS MARIA VAN LIEMPT and WILLY GEISS, Eindhoven, Netherlands, assignors to General Electric Company, a Corporation of New York. Filed Apr. 27, 1925, Serial No. 26,290, and in the Netherlands May 24, 1924. 3 Claims. (Cl. 176—182.)

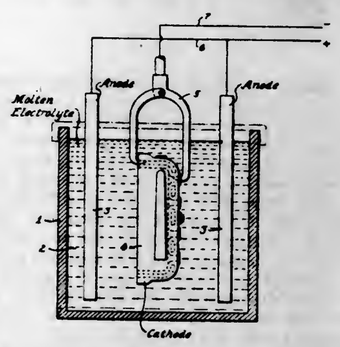
1. The method of producing a helical tungsten filament which is substantially non-sag when mounted and used as a filament in a lamp in the usual way, which consists in winding drawn tungsten wire capable of developing non-sag crystalline structure into a helix on a core which is solid at temperatures above the recrystallising temperature of tungsten, heating the core with the coil on it above the temperature of recrystallisation to develop said non-sag structure, and then chemically removing the core by re-agents inert to tungsten.

1,904,106. CABLE LOCK FOR REVOLVING DOORS. BURNS H. UHRICH, Independence, Kans., assignor to The Atchison Revolving Door Co., Independence, Kans., a Corporation of Delaware. Filed Apr. 11, 1932. Serial No. 604,607. 6 Claims. (Cl. 20—18.)



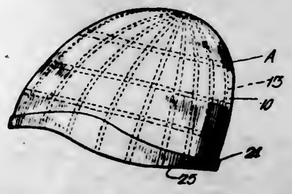
1. In a revolving door wing cable lock which includes a movable cable terminal gripping device normally urged to a position to lock the cable and a casing embodying a guide for said device; a rollable anti-friction bearing unit interposed between the device and the guide and unconnected with said device or guide.

1,904,107. ELECTROPLATING WITH ALUMINUM. ALFRED VON ZEERLEDER, Neuhausen, Switzerland, assignor to Aluminium Industrie Aktiengesellschaft, Neuhausen, Switzerland, a Joint-Stock Company of Switzerland. Filed Aug. 12, 1930, Serial No. 474,741, and in Germany Aug. 24, 1929. 9 Claims. (Cl. 204—20.)



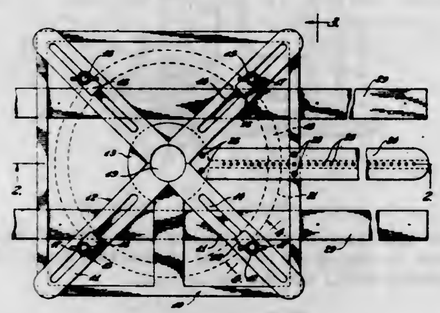
1. The process of electroplating metals, such as iron, light metal alloys, etc., with an adherent dense coating of aluminum, wherein the object to be coated is the cathode and the anode is metallic aluminum, or an alloy or mixture thereof; comprising using an electrolyte composed of a molten salt or salts, having a melting point lower than that of aluminum, and electrolytically causing aluminum together with small quantities of an auxiliary metal, comprising lead, to be deposited from the electrolyte upon the cathode.

1,904,108. CROWN FOR LADIES' HATS. MARY WALSH, New York, N. Y. Filed Aug. 2, 1930, Serial No. 472,611. Renewed Nov. 2, 1932. 1 Claim. (Cl. 2—198.)



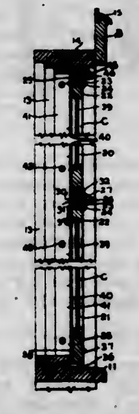
In a hat, a crown-shaped body consisting of a plurality of united layers of material, a plurality of radial reinforcing elements secured to the body on the inside wall thereof, and a plurality of circumferentially extending strengthening elements secured to the interior wall of said body and through said radially extending reinforcing elements, and an inner lining for said hat, the free edge portion of the outer layer of material forming said body being folded into said body slightly in contact with said lining and in overlapping relation to the radiallly extending reinforcing element, the portion of said outer layer between the inwardly folded portion thereof and the portion of the outer layer making up the body of the hat being folded flatly upon the adjacent portion of the body of the hat to form a rim.

1,904,109. ROUTER GAUGE AND GUIDE. ALBERT E. O. WENDORF, Wauwatosa, Wis. Filed Apr. 6, 1932. Serial No. 603,643. 5 Claims. (Cl. 145—129.)



1. A device of the class described, comprising a frame, radially extending arms on said frame each provided with a slot, an element slidable in each of said slots, clamping means on each of said elements, and means associated with said frame for guiding the same relative to the work.

1,904,110. WINDOW CONSTRUCTION. PAUL WILLMANN, Merion, Pa. Filed Feb. 10, 1932. Serial No. 592,115. 6 Claims. (Cl. 20—53.)



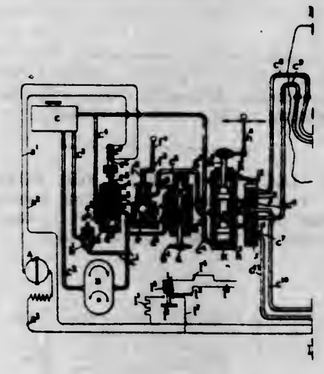
1. In a window construction, a window casing and a pair of independent sash sections pivoted thereto, with the rail of one sash section provided with an arcuate socket, said rail overhanging the rail of the adjacent sash section, said last named rail provided with an arcuate portion co-axial with the pivot of its sash section, accommodated in said socket.

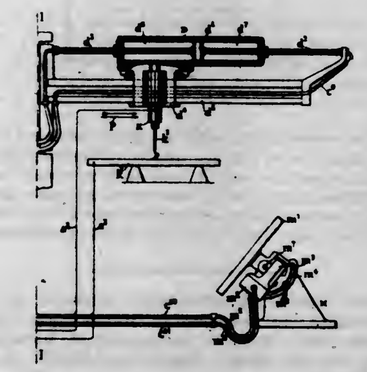
1,904,111. GLASS TANK FURNACE. MOTT WEANT, Greenfield, Ind. Filed July 14, 1930. Serial No. 467,863. 8 Claims. (Cl. 49—54.)



1. In a glass tank furnace, having a melting chamber and a working chamber both of the usual rectangular construction, said chambers having a contracted depressed throat connecting and of considerably less width than that of the same; the floor of the melting chamber having adjacent said throat opposite lateral passages provided each with an inclined floor forming an approach to said throat and leading downwardly from a dead corner part of said melting chamber, whereby the flow of the metal into said throat will be caused to extend the full width of said chamber from the outer lateral parts to the central part thereof.

1,904,112. DEVICE FOR THE CONTROL OF ELECTRIC ARC WELDING MACHINES. JEAN ACHARD, Paris, France. Filed Mar. 18, 1931, Serial No. 522,835, and in France May 14, 1930. 8 Claims. (Cl. 219—8.)

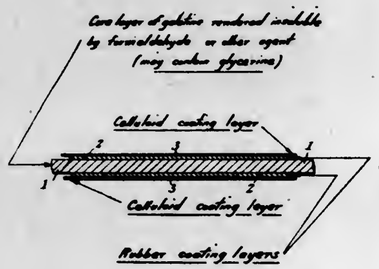




1. An electric arc welding machine of the type described comprising in combination an electrode, means for supporting the piece to be welded, an electric welding circuit including the electrode and the piece to be welded, a driving organ adapted to be operated through a fluid under pressure to produce a relative displacement of said electrode and said piece along the line of welding, means for conveying said fluid under pressure to said driving organ, a valve on said last mentioned means, adapted to normally prevent the flow of fluid to said driving organ,

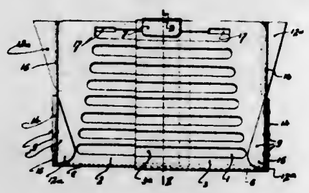
electric means included in the welding circuit for operating said valve, whereby the flow of fluid to the driving organ is allowed only when the arc is formed between the electrode and the piece to be welded.

1,904,113. FILM FOR PHOTOGRAPHIC PURPOSES. ANDREW GEORGE ADAMSON, London, England, assignor to W. M. Still & Sons Limited, London, England, and himself. Filed Sept. 11, 1931, Serial No. 562,411, and in Great Britain Sept. 13, 1930. 7 Claims. (Cl. 91—69.)



1. A non-inflammable photographic film, which consists of a core layer of gelatine, rendered insoluble and coated on each side first with rubber and then with another protecting medium such as celluloid.

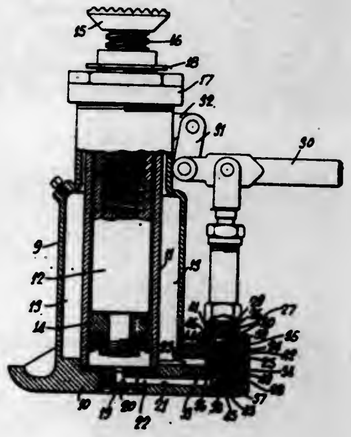
1,904,114. LUGGAGE CARRIER FOR MOTOR VEHICLES. JULIUS RICHARD AMBROSIUS, Mexico, Mexico. Filed Apr. 4, 1932, Serial No. 603,111, and in France May 9, 1931. 3 Claims. (Cl. 224—29.)



1. The combination with a motor vehicle, including front springs, of a luggage carrier comprising two plates of corrugated sheet metal, one of said plates including an additional strip bent over twice at right angles to form with said plate a housing into and out of which the second plate may slide to vary the width of said carried.

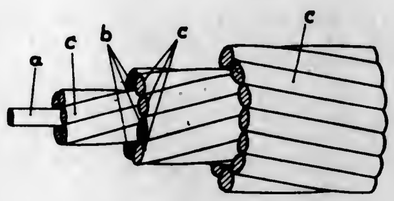
1,904,115. HYDRAULIC JACK. CHARLES F. BACON, Brattleboro, Vt., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Aug. 10, 1929. Serial No. 384,927. 9 Claims. (Cl. 188—9.)

1. In a hydraulic jack, a piston cylinder, a piston therein, a reservoir, a passageway leading from said piston cylinder, a passageway leading from said reservoir, a pump barrel removably secured on said jack and having a pump chamber, said pump chamber being provided with but two openings, a pump plunger permanently closing one of said openings, an independent member extending through the second of said openings and provided with channeling, said channeling comprising a bore, the outer end of which communicates with one of said passageways and the inner end of which communicates with said chamber, the side wall of said pump barrel being formed with a channel communicating with the other of said passageways and



with said channeling, said member being provided with a valve for closing the outer end of said bore and a valve normally closing said channel.

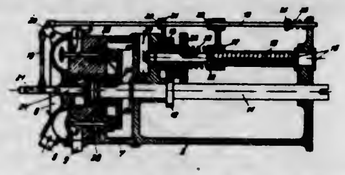
1,904,116. STEEL ALUMINIUM CABLE. REINHOLD BAUM, Cologne-Mulheim, Germany, assignor to Felten & Guilleaume Carlswerk Actiengesellschaft, Cologne-Mulheim, Germany. Filed June 15, 1931, Serial No. 544,579, and in Germany June 21, 1930. 1 Claim. (Cl. 173—13.)



A stranded steel aluminium, electrical cable made free from twist by equalizing the oppositely directed turning moments of the layers of wires with a ratio of cross-section of aluminium to steel of about 6:1 and laying lengths about 11–14 times the diameter of the cable, in which the steel wires are disposed over the whole cross-section of the cable, partly in the middle of the cable and partly in layers together with the aluminium wires.

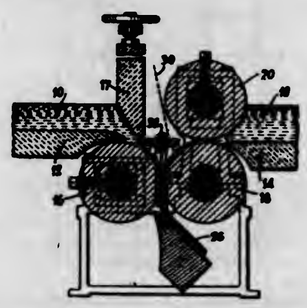
1,904,117. STARTING DEVICE FOR INTERNAL COMBUSTION ENGINES. GABRIEL BECKER, Berlin-Charlottenburg, Germany. Filed Jan. 5, 1932, Serial No. 584,849, and in Germany Nov. 30, 1931. 6 Claims. (Cl. 60—16.)

1. Starting device comprising means for distributing gaseous pressure fluid to the cylinders of an internal combustion engine, said distributing means consisting of a plurality of valves, a driving shaft, a cam plate rotatable by said shaft engageable with said valves for actuating the same in succession, self-locking means for maintaining said cam plate in an operative position for actuating said valves, means for displacing said cam-plate axially on the shaft to an inoperative position,



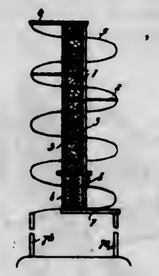
and a release device actuated from the driving shaft for releasing the self locking means to permit of the displacement of the cam plate to the inoperative position.

1,904,118. MANUFACTURE OF WIRE GLASS. MYRON L. BRENNAN, St. Louis, Mo., assignor to Mississippi Glass Company, New York, N. Y., a Corporation of New York. Filed May 14, 1931. Serial No. 537,870. 5 Claims. (Cl. 49—82.)



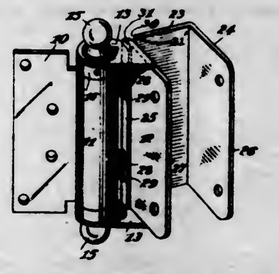
1. In apparatus for making glass, a pair of forming rolls, means for feeding molten metal between said rolls to form a half-sheet, means comprising a roll and a non-rotatable member adjacent thereto and with said roll forming a pass to produce a second half-sheet, and means for welding said half-sheets to form a single sheet.

1,904,119. SUPPORT FOR ELECTRODES IN VACUUM VESSELS. RUDOLF GOTTFRIED BERTHOLD, Berlin-Siemenstadt, and WALTER STOCKMEYER, Finkenkrug near Berlin, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 1, 1931, Serial No. 534,242, and in Germany May 7, 1930. 9 Claims. (Cl. 250—27.5.)



1. A supporting structure for an incandescent filament comprising a column composed of a plurality of individual blocks of insulating material, arms held between said blocks and having means at their outer ends for supporting the filament at several points between its ends, and means for resiliently supporting said blocks.

1,904,120. DOOR HINGE. EMIL BOMMER, Brooklyn, N. Y. Filed Dec. 8, 1930. Serial No. 500,679. 6 Claims. (Cl. 16—167.)



1. In a hinge of the character described, a pair of pivotally connected leaves, one including a hinge barrel and the second including hinge ears between which the barrel is disposed, a reinforcing member adjustably associated with the second leaf and comprising a plate formed along its opposite longitudinal edges with projecting flanges, one of which is disposed between the barrel and the second leaf and between said ears so as to provide bracing means between said ears, with the other flange disposed at the opposite side of said second leaf, both of said flanges being parallel with said second leaf.

1,904,121. BED LAMP. JOSEPH L. STETNER, Brooklyn, N. Y. Filed Feb. 18, 1932. Serial No. 593,721. 1 Claim. (Cl. 240—108.)

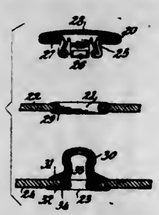


A lamp shade and support therefor comprising a shade frame, a pair of spaced bearing members rigidly carried by the shade frame, said support comprising a member having a body portion, a curved resilient arm projecting from each end of said body portion, and an extension projecting from each of said arms, said extension projecting in opposite directions whereby a flexing of the resilient arms in a direction towards each other will permit of insertion of the extensions in the bearing members of the frame and release of the flexed arms will position the extensions within the bearing members to attach the support to the frame.

1,904,122. DETACHABLE SNAP FASTENER FOR ARTICLES TO BE LAUNDERED. LYMAN B. CHAPMAN, Waterbury, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 20, 1932. Serial No. 629,576. 8 Claims. (Cl. 24—217.)

1. In an article to be laundered, the combination with two parts to be detachably secured together, of a three-part separable snap fastener of the stud-and-socket type comprising a fastener element permanently secured to one part, a fastener element permanently secured to the other part, and a detachable fastener element comprising an ornamental head and an attaching stem, at least one of the three fastener elements having a resilient attaching means and the three elements being of such relative sizes

and forms that the stem of the detachable element may be snapped into a detachable engagement with one of the permanently secured fastening elements and the two elements thus attached, one at least of which is resilient, then snapped into a detachable engagement with

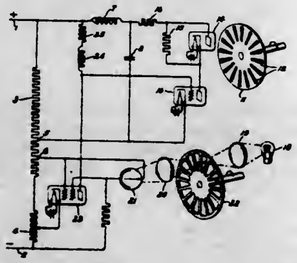


the other permanently attached fastener element, the detachable element having the ornamental head being readily removable from the elements secured to the article when the article is to be laundered and subsequently reattached.

1,904,123. PROCESS OF MANUFACTURING CREPES WITH THREADS OF CELLULOSE ACETATE ARTIFICIAL SILK. CLAUDE CLEMENCON, Caluire-on-the-Rhone, France. Filed Mar. 11, 1932, Serial No. 598,308, and in France Mar. 16, 1931. 3 Claims. (Cl. 28—1.)

1. Process for the treatment of threads of cellulose acetate for use in the manufacture of fabrics with crepe effect consisting in subjecting the threads before twisting to a preliminary shrinkage by first subjecting them to the action of a swelling agent and then eliminating said swelling agent and subsequently subjecting the shrunk threads to a twisting action of the order of 2800 to 3000 turns per metre for a thread of 100 deniers.

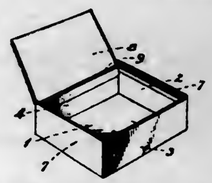
1,904,124. STROBOSCOPE. WILLIAM D. COCKRELL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 27, 1932. Serial No. 630,711. 5 Claims. (Cl. 176—124.)



1. A stroboscope comprising a source of supply of direct current, a reactor and a capacitor arranged in series and connected with said source, a vapor electric discharge device connected to be energized from said capacitor and provided with a control grid and means for controlling the charge on said grid.

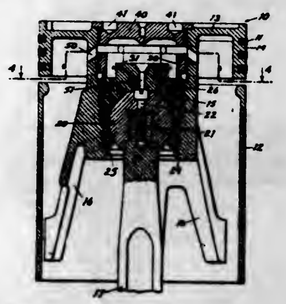
1,904,125. PASTEBOARD BOX. GEORGE D'ANNUNZIO, Jersey City, N. J., assignor to Shoup-Owens, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 30, 1932. Serial No. 589,825. 4 Claims. (Cl. 229—23.)

1. A cigar box formed of two pasteboard blanks, one blank having two side flaps and two end flaps, all four flaps when folded up forming the sides and ends of the box body, means for holding said flaps in said folded up position, the other blank being located on the outside of said body and covering the bottom and ends only and cooperating therewith to increase the relative strength of said parts of the finished box, the second mentioned blank and its end flaps being of a width corresponding substantially to the overall width of the box body, the edges of said second blank forming all four corners, the front and



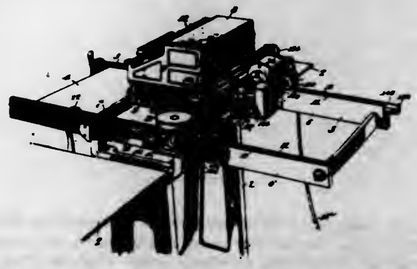
rear lower edges, and the upper end edges, of said box body, and a thin wrapper covering for the corners and edges of said box.

1,904,126. PISTON. JOHN SHEARMAN DONALDSON, St. Albans, N. Y. Filed Aug. 24, 1932. Serial No. 630,215. 8 Claims. (Cl. 309—10.)



1. The combination of a piston and a connecting rod, the piston comprising a ring-carrying head, a central substantially continuous tubular part depending therefrom and open at the top, a removable cap for the top of said tubular part, a skirt portion below and spaced away from the said ring-carrying head, and a plurality of downwardly and outwardly extending spaced legs united at their upper ends with said tubular part and at their lower ends with the lower half of said skirt portion, the connecting rod comprising a spherical head disposed within the bore of said tubular part, and the piston also including upper and lower bearing elements for said spherical head carried by said tubular part, the upper bearing element being removable from the top side of the piston.

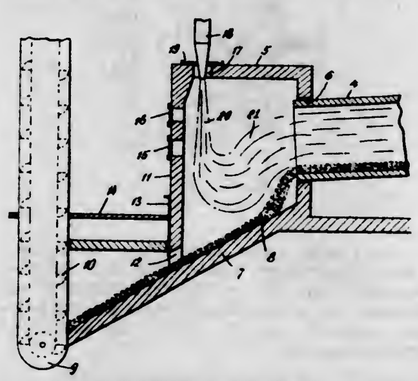
1,904,127. AUTOMATIC ELECTRIC WRITING-COMPUTING MACHINE. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, a Corporation of Delaware. Filed Sept. 13, 1926. Serial No. 135,210. 100 Claims. (Cl. 197—66.)



1. In a machine of the class described, the combination with a platen, a frame movable back and forth, a carriage movable on the frame, separate motors both mounted on

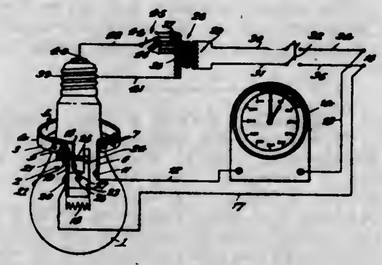
the frame for respectively moving the frame and carriage, the former in either direction, and automatically operated means for rendering the frame moving motor ineffective controlled by movement of the frame in either direction.

1,904,128. METHOD OF BURNING FUEL. JAMES W. FULLER, Catasauqua, Pa., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Mar. 19, 1924, Serial No. 700,199. Renewed Aug. 22, 1931. 10 Claims. (Cl. 222—7.)



1. The method of burning fuel for heating non-combustible material in a kiln having an inlet end for the material to be treated and a discharge end, and a primary combustion chamber in direct communication with the discharge end, which comprises passing the material through the kiln and through the primary combustion chamber and during such movement of the material heating it by the combustion of pulverulent fuel of low volatile content, the combustion taking place partly in the chamber and partly in the kiln as the gases flow from the chamber into the kiln, and confining the zone of highest temperature to a relatively restricted region within and adjacent the discharge end of the kiln by projecting the fuel into the chamber in the form of a jet so directed that the fuel stream passes through the chamber along a circuitous path such that ignition of the fuel particles entering the chamber is brought about and combustion is maintained by radiant heat from the ignited fuel particles and also by radiant heat given off by the hot discharging material.

1,904,129. THERMOSTATIC RADIATION INDICATOR. PETER GARMS, New York, and GEORGE LEWIS DIGGLES, Flushing, N. Y., assignors to Electrical Testing Laboratories, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1932. Serial No. 584,496. 15 Claims. (Cl. 161—15.)



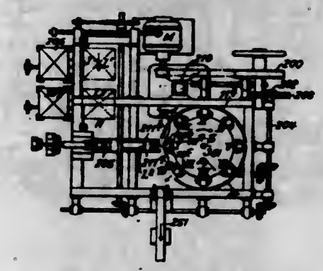
1. In an apparatus for testing electric lamps, the combination with a lamp, and means for supplying current to said lamp; of a temperature-controlled switch comprising an arcuate thermal expansion member disposed adjacent to said lamp, and circuit contacts operated by said member to close under the effect of heat radiated from said lamp upon illumination and to open upon the termination of said illumination; a timing device, and electrical means controlled by said contacts for controlling the operation of the timing device.

1,904,130. THREAD TESTING AND RECORDING DEVICE. PETER GARMS, New York, and GEORGE LEWIS DIGGLES, Flushing, N. Y., assignors to Electrical Testing Laboratories, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1932. Serial No. 595,262. 9 Claims. (Cl. 234—1.)



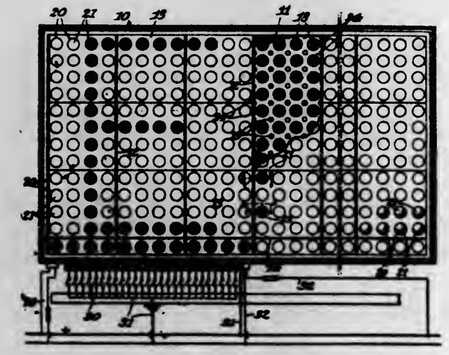
1. A thread testing and recording device comprising means for rotating a threaded body to undergo test and simultaneously proportionately displacing it axially the distance of the theoretical lead of its spiral thread during each complete revolution thereof, a record sheet, a pivoted recording mechanism having a stylus engaging said sheet and an element adapted to be guided by said thread during said movements of said body, and means for moving said record sheet transversely to the axis of rotation of said body simultaneously and proportionately with said movements of said body to cause said stylus to trace a line record of said thread on said sheet.

1,904,131. COMBINED MACHINE FOR MAKING, FILLING, AND CLOSING BAGS. PAUL GANGLER, Esslingen, Germany, assignor to Firm Fr. Hesser, Maschinenfabrik-Aktiengesellschaft, Stuttgart-Cannstatt, Germany. Filed Dec. 18, 1930, Serial No. 502,672, and in Germany Dec. 17, 1929. 13 Claims. (Cl. 93—8.)



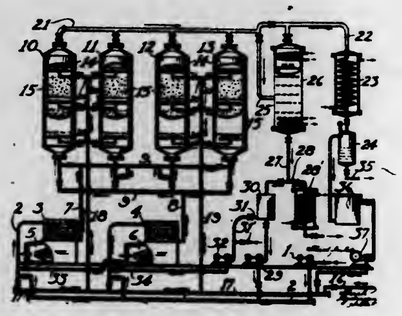
1. In a packing machine of the type specified, comprising a bag filling and closing machine having an intermittently operated conveyor mechanism with a plurality of receptacles having displaceable bottom plates for conveying the bags step by step to the various working stations, means for holding the bottom plates of the receptacles of the conveyor mechanism for vertical displacement and comprising guide rods secured to the bottom plates and automatically acting locking devices cooperating with said guide rods, means for releasing the locking devices comprising bolt-like members arranged to release the self-locking action of said devices, and means adapted to lift up at the desired places of the feed path of the conveyor receptacles said bolt-like members.

1,904,132. CHANGEABLE ILLUMINATED DISPLAY. LOUIS O. GLATZNER, Bristol, Pa. Filed Apr. 22, 1929, Serial No. 356,897. 9 Claims. (Cl. 40—130.)



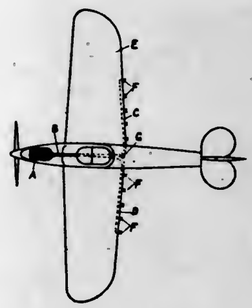
1. A changeable sign embodying a casing divided into character sections, a group of lamps in each section, each group consisting of selective and non-selective species, and means for projecting light rays from said casing, said means comprising lenses in focus with said selective lamps.

1,904,133. PROCESS FOR TREATING HYDROCARBONS. EDWIN J. GOHR, Elizabeth, N. J., assignor to Standard-I. G. Company. Filed Feb. 2, 1931. Serial No. 512,802. 2 Claims. (Cl. 196—53.)



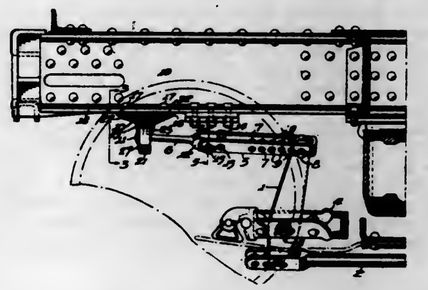
1. An improved method for putting in operation an additional unit in an operating battery of continually recycling destructive hydrogenation units comprising passing a feed stock which consists of a mixture of high boiling fractions obtained from the product of the operating units of the battery with hydrogen under pressure in excess of 20 atmospheres through the additional unit until the temperature of operation within the destructive hydrogenation range from 700 to 925° F. is obtained therein, then gradually substituting fresh oil for a portion of the heavy fractions derived from the other operating units and bringing the ratio of fresh feed to recycled high boiling fractions to substantially the same value in all of the units of the battery.

1,904,134. PROPULSION OF AIRCRAFT. ARCHIBALD HALL-BROWN, London, England. Filed Oct. 27, 1930, Serial No. 491,408, and in Great Britain Nov. 7, 1929. 1 Claim. (Cl. 244—18.)



In an aeroplane, a pipe for collecting the exhaust from the power-plant, branch pipes leading from the rear end of said pipe respectively to the trailing edges of each of the wings, each of said branch pipes being mounted to swivel separately from the others, and each having a plurality of nozzles.

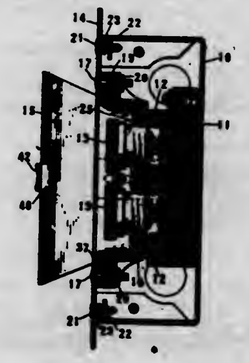
1,904,135. BRAKE RIGGING FOR RAILWAY CARS. CYRUS HANKINS, Washington, D. C. Filed Mar. 26, 1931. Serial No. 525,531. 10 Claims. (Cl. 188—206.)



1. In a railway car brake rigging, the combination with the underframe of a car, of a dead lever, a bracket rigid with the underframe and having a recessed portion, and means movably connecting the upper end of the dead lever to the bracket, said means involving a member having a curved portion movably associated with the bracket, said bracket being provided with means disposed within said recess affording a seat for the curved portion of said member.

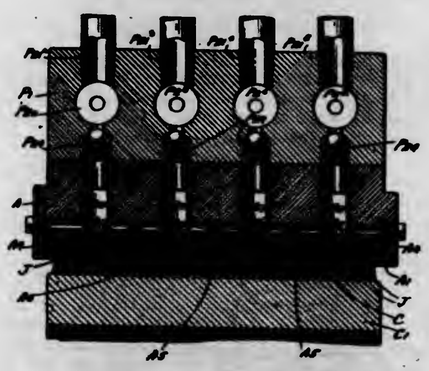
1,904,136. RESIDENCE PANEL BOARD. CHARLES E. HANNY, Unionville, Conn., assignor to Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Apr. 21, 1928. Serial No. 271,859. 8 Claims. (Cl. 247—10.)

1. A residence panel board construction including a box, a fuse block secured in said box and having pertinent terminals and projecting fuse plug shells, a cover for said box having a fuse door hinged thereto and an insulating fuse guard member detachably secured to said cover with securing means operable only from the rear of said cover, said guard member having passages to receive and surround said fuse plug shells and having continuous integral side walls to form a recess for the projecting ends of fuse plugs and said side walls forming an abutment for the said fuse door in its closed position the parts being so



constructed that when the door is open for inspection of the fuses all other conducting parts are covered, and means for detachably securing the cover and guard member to the box.

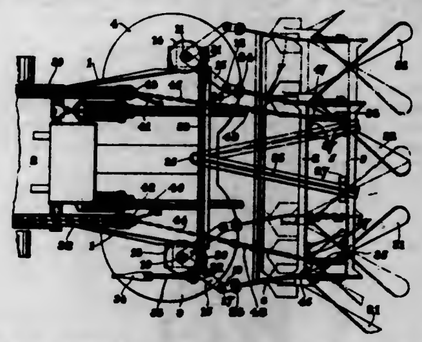
1,904,137. DYEING APPARATUS. LOUIS B. HASBROUCK, Elmira, N. Y., assignor to Eclipse Textile Devices, Inc., Elmira, N. Y., a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,616. 6 Claims. (Cl. 8—17.)



1. Apparatus for dying a wound mass of yarn, comprising a presser having an extended concave surface formed to fit against a circumferential surface of the mass of yarn so as evenly to compress a portion of the mass, and means for injecting dye through the presser into a portion of the yarn compressed by said surface.

1,904,138. RIDGING IMPLEMENT ON ROTARY TILLING MACHINES. PAUL RUDOLPH HASSON and EDWARD DARWENT ELLIS, Leeds, England, assignors to John Fowler & Co., (Leeds) Ltd., Leeds, England. Filed Aug. 13, 1931, Serial No. 556,900, and in Great Britain Mar. 28, 1931. 16 Claims. (Cl. 97—48.)

1. In a tilling machine comprising ground working implements adapted to loosen the soil, the combination of a tilling machine frame, a trailing frame attached to the tilling machine frame, shafts carried on said machine frame, worm wheels mounted on said shafts, arms attached to said shafts and pivotally connected to said trailing frame, ridging implements attached to said trailing frame, and means extended to proximity of the driver's seat to rotate said worm wheels and adjust the trailing



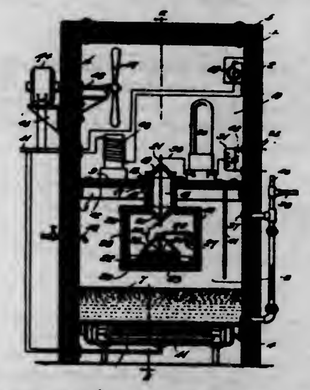
frame to cause the ridging implements to trail in lines having adjustable offset as regards the medial line of travel of the machine.

1,904,139. METHOD OF MAKING SELENIUM CELLS. WILHELM HENKEL and FRANZ MEYER, Jena, Germany, assignors to the Firm Carl Zeiss, Jena, Germany. Filed Dec. 28, 1929, Serial No. 417,218, and in Germany Jan. 7, 1929. 1 Claim. (Cl. 201—63.)



A method of making selenium cells consisting therein that a platinum layer is burnt in on one side of a glass plate, that this platinum layer is covered with an easily fusible substance, that a groove is worked into the said substance and that, then, along the said groove a groove is etched into the platinum and the glass by means of hydrofluoric acid, whereupon the said substance is removed and, finally, the groove filled with selenium.

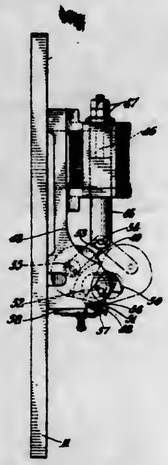
1,904,140. FREQUENCY CONTROL APPARATUS. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 28, 1930. Serial No. 455,130. 10 Claims. (Cl. 250—36.)



1. A frequency control apparatus comprising a cabinet structure divided into a pair of separate compartments, oscillator apparatus disposed in one compartment, a fre-

quency fixing element disposed in the other compartment, said last mentioned compartment being partially filled with fluid and having means for effecting the continuous boiling thereof at constant pressure for subjecting said frequency fixing element to heat of vaporization.

1,904,141. MAGNETIC SWITCH. WILBUR F. HURLBURT, East Orange, N. J., assignor to Automatic Switch Company, New York, N. Y., a Corporation of New York. Filed June 27, 1929. Serial No. 374,044. 1 Claim. (Cl. 200—111.)



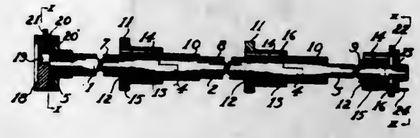
In a magnetic switch, a vertically disposed supporting panel, a contacting member oscillatable about a horizontal axis parallel to said panel, a momentum member also oscillatable about a horizontal axis parallel to said first named axis from one extreme position to another, a solenoid magnet having a vertically moving core adapted when the magnet is excited to move said momentum member from either extreme position toward an intermediate neutral position, means including contact discs rotatable with said momentum member for deenergizing said magnet as the momentum member travels from either extreme position toward the intermediate position, said momentum member having a relatively large mass to carry it to the other extreme position, driving connections between said momentum member and said contacting member whereby the oscillation of the former will oscillate the latter, and a stop on said core determining the extreme positions of said momentum member.

1,904,142. ELECTRON DISCHARGE DEVICE CIRCUIT ARRANGEMENT. LAWRENCE A. HYLAND, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,904. 3 Claims. (Cl. 250—36.)



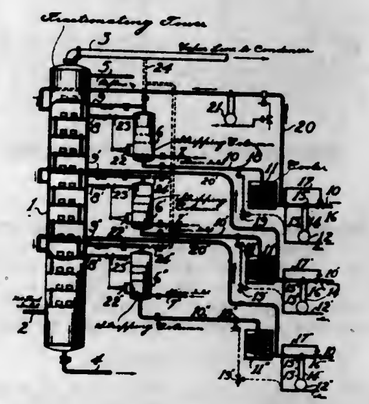
1. In an electron tube system, an electron tube having anode, grid and cathode, a second electron tube having anode, grid, cathode and heater electrode, said heater electrode being in thermal relation with the cathode of said second tube but electrically insulated therefrom, the anode of said first mentioned tube being connected to the cathode of said second mentioned tube, an input circuit connecting the grid of said first mentioned tube to its cathode, a source of anode potential having its negative terminal connected to the cathode of said first mentioned tube and having its positive terminal connected to the anode of said second mentioned tube, an independent source of grid biasing potential, and a voltage divider connected for variably applying a portion of said biasing potentisl between the cathode and grid of said second tube.

1,904,143. GAUGE DEVICE. ARENDT R. KOOS, Elizabeth, N. J. Filed Feb. 8, 1930. Serial No. 426,911. 5 Claims. (Cl. 33—178.)



1. A gauge device for measuring inside diameters, comprising a shaft, an indicator at one end thereof, a tubular member rotatably receiving the shaft, one end of said member having a dial cooperating with the indicator, the opposite end of the shaft being provided with an enlarged face carrying spiral threads, the opposite end of the tubular member enclosing the enlarged face and provided with radial ways facing the threads, and gauge pins slidable in the ways and engaging the threads.

1,904,144. APPARATUS FOR FRACTIONATING LIQUIDS. PAUL E. KUHL, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 25, 1930. Serial No. 423,867. 4 Claims. (Cl. 196—139.)

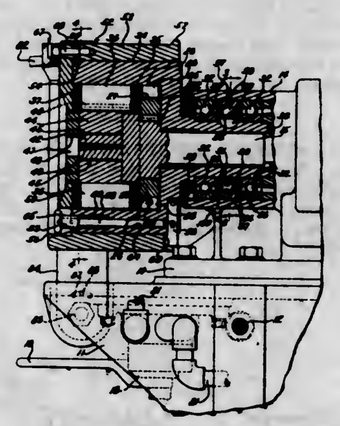


4. In a fractionating system, a fractionating tower, means for taking off liquid product from an intermediary portion of the tower, a container connected with said means and adapted to hold a column of the liquid product, a liquid discharge line connected with the container, a rate of flow control device in said line to regulate the amount of liquid removed from the system, and a liquid level control on the container to regulate the amount of liquid taken out of the fractionating tower.

1,904,145. HALOGENATION OF AROMATIC COMPOUNDS. MAX ALBERT KUNZ, Mannheim, and KARL KOEBERLE and ERICH BERTHOLD, Ludwigshafen-on-the-Rhine, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 9, 1929, Serial No. 345,882, and in Germany Mar. 13, 1928. Renewed Aug. 24, 1932. 1 Claim. (Cl. 260—61.)

As a new article of manufacture tetrabromopyranthrone forming an orange red powder, practically insoluble in 96 per cent sulphuric acid of about 20° C., readily soluble in oleum and chlorosulphonic acid to a blue solution with a greenish tinge, forming a blue violet vat with an alkaline hydrosulphite solution at 60° C., from which the bulk of the leuco compound separates out as the corresponding alkali metal salt which cannot be brought into solution by raising the temperature, cotton being dyed from the said vat faint red brown shades.

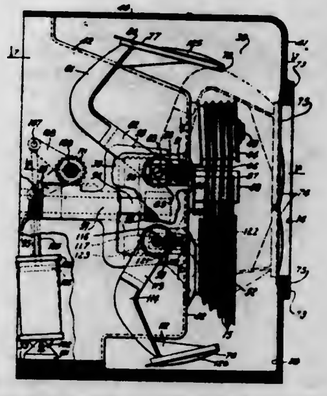
1,904,146. WIRE DRAWING APPARATUS. EINER W. LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1929. Serial No. 391,292. 10 Claims. (Cl. 205—13.)



1. In an apparatus for pointing the end of a wire and stringing dies thereon, a wire pointing device, a wire drawing drum arranged therearound, a common driving means for the pointing device and the drawing drum, means for reversing the direction of motion of the driving means, and means responsive solely to the direction of motion of the driving means for operating the wire pointing device and the drawing drum independently of each other.

1,904,147. WIRE DRAWING MACHINE. EINER W. LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 31, 1929. Serial No. 417,623. 2 Claims. (Cl. 205—19.)

1. In a wire drawing machine, a substantially completely enclosable working chamber having stock entrance and wire exit ports and a vertical doorway, a wire drawing unit housed in the chamber and comprising a horizontally disposed low speed capstan and a horizontally disposed high speed capstan positioned horizontally side by side and laterally spaced from the walls of the chamber, means to form and maintain a bath of lubricant within the chamber and extending above the threshold of the doorway and above the bottoms of the capstans, a pair of pivoted and slidable doors for the doorway, and means to slide the doors linearly and unitedly away from the doorway and then arcuately and oppositely into the

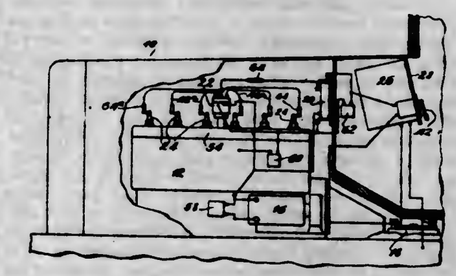


lateral spaces between the capstans and the chamber walls to open the doors and to reverse the action to close the doors.

1,904,148. PROCESS FOR ACCELERATING THE RETTING OF FLAX. WILHELM LENZ, Wiesbaden-Biebrich, and KURT JOCHUM, Frankfort-on-the-Main, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed July 11, 1929, Serial No. 377,603, and in Germany July 16, 1928. 5 Claims. (Cl. 92—5.)

1. Process for accelerating the flax-retting process, which consists in adding to the retting liquid a mixture of bacteria of the mesentericus group and of different bacteria capable of causing fermentation of cane sugar.

1,904,149. MEANS FOR ELIMINATING THE EFFECTS ON RADIO CIRCUITS OF SPARKING IN THE IGNITION SYSTEM OF AN INTERNAL COMBUSTION ENGINE. ANTHON A. LEONARD, Forest Hills, N. Y., assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa., a Corporation of Delaware. Filed Jan. 3, 1929. Serial No. 330,035. 13 Claims. (Cl. 123—148.)



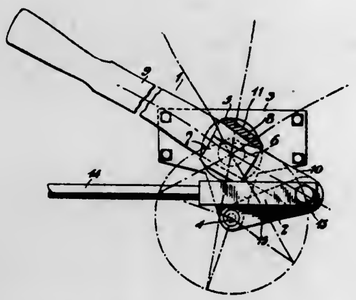
1. In an electric ignition system for an internal combustion engine having spark producing elements normally creating oscillations disturbing to radio apparatus, means for substantially eliminating said disturbing oscillations comprising a substantially non-inductive and substantially non-capacitive lumped resistance unit connected in series with said elements and in close proximity thereto.

1,904,150. HAIR WAVER. ALBERT OGWIN LEWIS, White Hall, Glais, Wales. Filed July 12, 1932, Serial No. 622,023, and in Great Britain May 6, 1932. 9 Claims. (Cl. 132—38.)



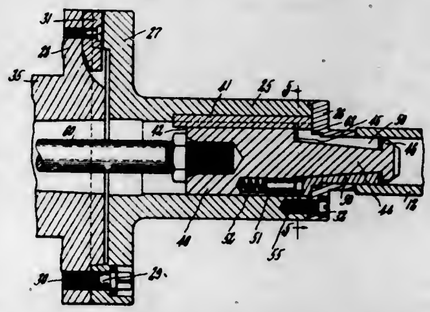
1. A hair waver comprising a mesh work adapted to be extended over the head, a series of hair engaging elements carried thereby, each of said hair engaging elements being provided with a helical groove, the helical groove on the successive hair engaging elements being oppositely inclined.

1,904,151. MECHANICAL MOVEMENT. LOUIS LEVES, City Island, N. Y. Filed Jan. 20, 1930. Serial No. 422,080. 3 Claims. (Cl. 74—39.)



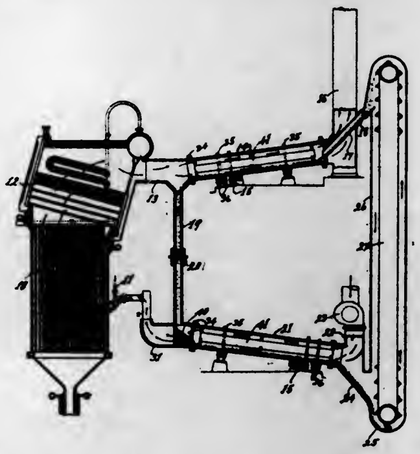
1. A manually operable mechanical movement comprising a manually operable lever of the first class having one free handle end; a rockable follower member; a fulcrum mounting for said manually operable lever adapting it to swing and to shift transversely of its fulcrum to vary its leverage; a pivotal mounting for said follower member supported with its axis fixed with relation thereto and with relation to said fulcrum and laterally offset from the latter; a pivot joint directly and operatively connecting one end of the manually operable lever to the outer shiftable end of the follower member, said pivot joint being constrained to swing around said axis of said pivotal mounting with a fixed radius and cause the shift of the manually operable lever across its fulcrum as it is swung; and a power-transmitting element connected to said pivot joint at the outer end of the follower member, the center of the fulcrum and the center of the fixed axis of the follower member being so related to each other that when the manually operable lever extends across said two points said lever will be in its mid position and its leverage will be gradually increased as it is swung in either direction from said mid position to correspondingly increase the application of power to said power-transmitting element.

1,904,152. WORK HOLDING MECHANISM. JOHN E. LOVELY, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed June 28, 1930. Serial No. 464,471. 9 Claims. (Cl. 82—44.)



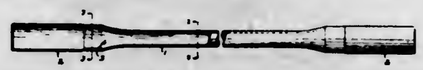
3. A mechanism of the class described comprising oppositely disposed rotatable pilots for supporting and centering tubular work, means for moving said pilots toward and from each other to clamp and release work, a tubular stop for one of said pilots against which the work is held by the other of said pilots and into which said one pilot is retractible, and means actuable when said pilots are moved to work-engaging relation for clamping one of said pilots against the inner face of the work.

1,904,153. HEATING COMBUSTION AIR FOR A FURNACE. CHARLES E. LUCKE, New York, N. Y., assignor, by mesne assignments, to Fuller Lehigh Company, a Corporation of Delaware. Filed Mar. 26, 1927, Serial No. 178,565. Renewed Feb. 1, 1932. 2 Claims. (Cl. 110—56.)



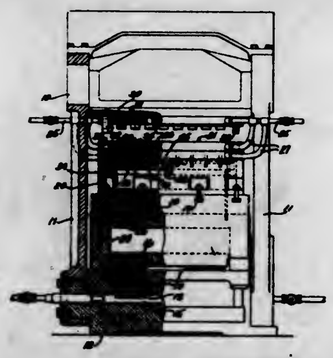
1. The process which comprises introducing a stream of fuel into a furnace, heating a stream of solid particles of refractory material to a temperature in excess of the ignition temperature of said fuel by contacting them directly with hot products of combustion leaving said furnace, continuously heating a stream of air in a sufficient amount and to a temperature sufficiently in excess of the ignition temperature of said fuel to cause a mixture of said air and fuel to be at a temperature in excess of the ignition temperature of said fuel by contacting said stream of air directly with said hot solid particles after removing them from the zone where they were heated, and continuously introducing a stream of said highly heated air together with said stream of fuel into said furnace at a temperature at least as high as the ignition temperature of said fuel.

1,904,154. ELECTRODE FOR DISCHARGE TUBES. JOHN J. MADINE, Cleveland, Ohio, assignor, by mesne assignments, to Flexlume Corporation, Tonawanda, N. Y., a Corporation of New York. Filed Nov. 28, 1927. Serial No. 236,201. 13 Claims. (Cl. 176—126.)



12. A luminous electrical discharge tube comprising a glass tube and a metallic, cup-shaped electrode having its open end disposed toward the electronic stream, and having its edge protected against the electronic stream, the surface of the electrode being coated with a thin, vitreous film which prevents disintegration of the electrode metal.

1,904,155. EJECTING MECHANISM. ANTHONY MALEC, Brookfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 324,872. 4 Claims. (Cl. 18—17.)



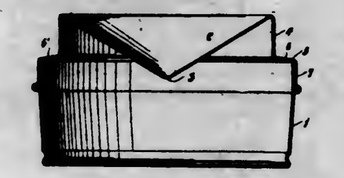
1. In a press, the combination of a vertically reciprocable mold plate, an ejector pin slidably mounted therein, a horizontally slidable plate having an aperture adapted to move into and out of registry with the ejector pin, a vertically movable support for the slidable plate, means for arresting the downward movement of the support during the downward movement of the mold plate, and means operable when the mold plate is at the bottom of its travel to move the sliding plate and thereby bring the aperture in the sliding plate into registry with the ejector pin and allow the ejector pin to drop therein.

1,904,156. PNEUMATIC SOUND REPRODUCER. RUDOLPH F. MALLINA, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 6, 1931. Serial No. 555,413. 20 Claims. (Cl. 179—118.)



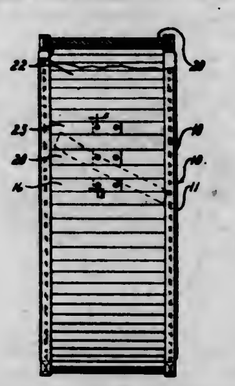
17. A pneumatic sound reproducer comprising a duct for a fluid stream having an increased area at the exit thereof, a valve, electromagnetic means for vibrating said valve in accordance with the sound to be reproduced and means for resiliently supporting said valve centrally in the exit of said duct.

1,904,157. DETERGENT DISPENSING DEVICE. JOSEPH RAYMOND MARTIN, Baltimore, Md., assignor to Frank E. Schwarzkopf, Baltimore, Md. Filed May 13, 1931. Serial No. 537,138. 2 Claims. (Cl. 141—9.)



1. A detergent dispenser comprising a cylindrical container, an inverted conical member having an opening in the central portion thereof, a vertical wall extending downwardly from the outer edge of said conical member, a horizontally extending rim projecting outwardly from the vertical wall and having openings on diametrically opposite sides of the conical member and a flange projecting from the rim to engage the outer side wall of the container.

1,904,158. REEL AND METHOD OF ASSEMBLING REELS. LEE R. MCGUIRE, Newark, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 20, 1930. Serial No. 462,509. 10 Claims. (Cl. 206—59.)



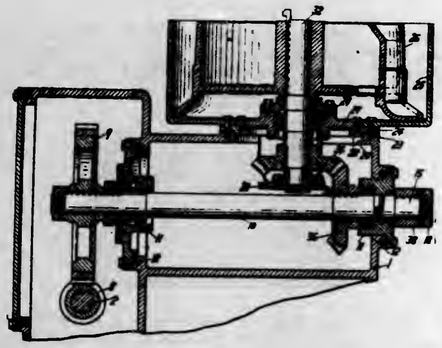
1. In a cable reel, a member for supporting the reel having an unbroken channel and a two part lag engaging the member for protecting the cable.

8. In a reel, a lag having two sections, each section having a portion lapping the corresponding portion of the other section, and means operative at the overlapping portions for securing the sections tightly together.

1,904,159. WIRE DRAWING MACHINE. EDWIN J. MCILVRIED, Cleveland, Ohio, assignor, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 24, 1929. Serial No. 357,754. 5 Claims. (Cl. 205—16.)

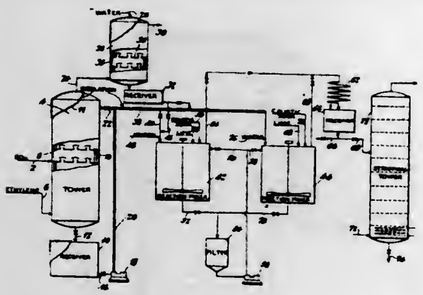
1. In a strand working machine, means to provide interchangeable finished strand delivery means and finished strand take-up means comprising a housing, a drive shaft therein, a capstan adapted to be mounted on the shaft for delivering the finished strand, and a winding unit adapted

to be driven by the shaft and to be removably mounted on the housing as a unit, with the strand receiving point of the winding unit substantially coincident with the



strand receiving point of the capstan and with the plane of rotation of the winding unit substantially perpendicular to the plane of rotation of the capstan.

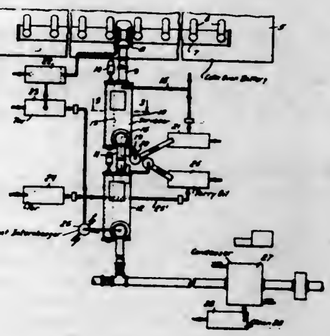
1,904,160. MANUFACTURE OF ACETIC ACID. SYLVAN R. MERLEY, Dover, N. J., and OTTO SPRING, Okmulgee, Okla., assignors to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 31, 1931. Serial No. 512,566. 9 Claims. (Cl. 260—116.)



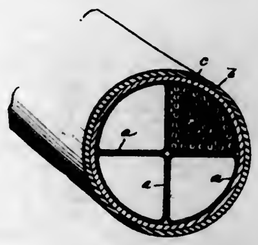
1. The process of making acetic acid, which comprises contacting ethylene with sulfur trioxide in a contact zone, collecting the resultant carbyl sulfate from the bottom of said zone and recycling the same through said zone, cooling and hydrolyzing carbyl sulfate from said zone, neutralizing the hydrolysed solution with caustic soda, crystallizing the sodium sulfate in the neutralized solution, filtering the solution free of precipitated sodium sulfate, heating and concentrating the filtrate, adding lime and an excess of a solution of caustic soda to the mixture while vigorously stirring the same, adding a solution containing a mixture of isethionic and sulfuric acid to the mixture to acidify the same, distilling off the resulting acetic acid and collecting the condensed acetic acid.

1,904,161. BY-PRODUCT COKE OVEN OPERATION. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 18, 1929. Serial No. 356,042. 2 Claims. (Cl. 202—30.)

1. A method of producing tarry oil which comprises, cleaning fresh hot coal distillation gases so as to remove entrained pitch constituents at a temperature at which a substantial proportion of condensable oils is retained in the gases in vapor form, and then bringing tar into contact with the clean hot gases so as to condense clean oils therefrom whereby the clean oils blend with the tar and form tarry oil.



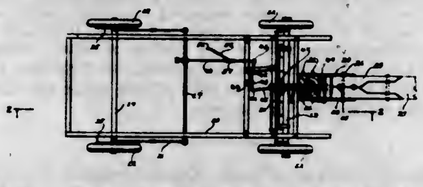
1,904,162. ELECTRICAL CABLE. HUMPHREYS MILLIKEN, Mount Royal, Montreal, Quebec, Canada. Filed Aug. 13, 1930. Serial No. 475,094. 1 Claim. (Cl. 173—81.)



A cable for alternating power currents, composed of a plurality of sectors helically arranged around the axis of said cable, each of said sectors being composed of a plurality of layers of solid wires, each layer being separate and continuous throughout the entire length of the cable, each wire continuing in the same layer throughout the length of the cable and being helically arranged around the axis of its segment, all of said wires and sectors being of the same polarity and connected together electrically at each end of said cable and having sufficient contact-resistance between adjacent wires throughout the length of the cable to tend to prevent current flowing between adjacent wires, for the purposes set forth.

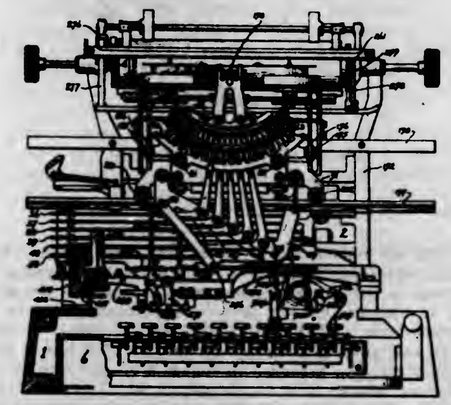
1,904,163. DRAFT DEVICE. ANDERSON F. MORRIS, Weir, Tex. Filed Apr. 30, 1931. Serial No. 534,070. 3 Claims. (Cl. 280—33.44.)

3. In combination with a trailer having brakes, a brake rod connected with the brakes, a lever pivoted to a part of the trailer and having one end connected with said brake rod, a bar connected with the opposite end of said lever, a rod having a ball and socket connection at its rear end with the front end of the last-mentioned bar, said ball and socket connection being arranged adjacent the front axle of the trailer, forwardly extending members connected with the front axle, a tongue supported for sliding and pivoted movement by said forwardly extending members, said tongue having a pair of upwardly extending projections thereon spaced apart, a clip connected to the front end of the rod and having a horizontal part passing through the space between said projections



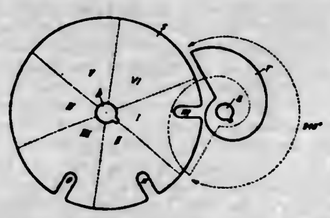
whereby rearward movement of the tongue or forward movement of the trailer with respect to the tongue will cause the forward projection to engage the clip and move the rod and lever to a position to apply the brakes.

1,904,164. SIGNALING SYSTEM AND APPARATUS THEREFOR. STERLING MORTON, HOWARD L. KRUM, and EDWARD E. KLEINSCHMIDT, Chicago, Ill., assignors to Teletype Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 11, 1930. Serial No. 467,352. 81 Claims. (Cl. 178—4.)



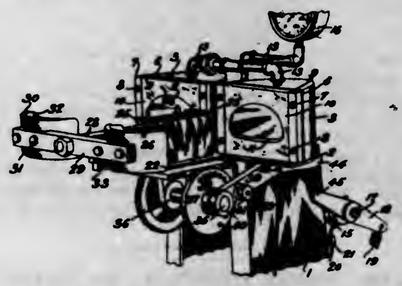
1. In a recorder, a stationary paper carrier, a type carriage movable to form character spaces, permutation code mechanism mounted on said carriage including longitudinally adjustable code members, and means to operate said code mechanism permutably according to the record to be made.

1,904,165. VARIABLE CONDENSER. EDMUND MULLNER, Berlin, Germany, assignor to Telefunken Gesellschaft fur Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 10, 1930, Serial No. 427,111, and in Germany Feb. 18, 1929. 6 Claims. (Cl. 250—40.)



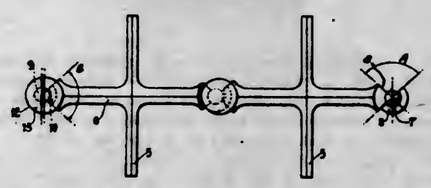
1. A variable condenser, adapted for use in a multi-frequency range oscillation circuit, comprising a plurality of stator groups, one of said groups including a plurality of spaced circular plates, a second of said groups including a plurality of spaced plates, the plate of the second group being segments of the plates of the first group, and at least one stator plate spaced from both said groups having an area different from the plates of both said groups, means for mounting all of said stator plates for rotation about a common axis to effect said multi-range operation, a plurality of rotor plates, of a common area, interleaved with said stator plates, and means for mounting said rotor plates for rotation about a common axis.

1,904,166. SHOE TIP AND HEEL PRESSING MACHINE. HERBERT R. POLLEYS, New Haven, Conn., assignor to National India Rubber Company, Bristol, R. I., a Corporation of Rhode Island. Filed June 2, 1928. Serial No. 282,296. 11 Claims. (Cl. 12—1.)



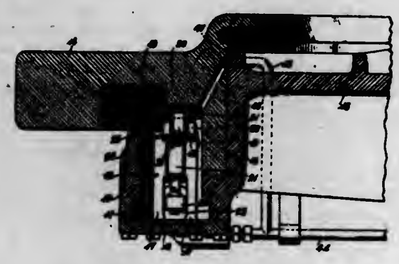
1. A footwear pressing machine having in combination, means arranged to surround a portion of an article of footwear, means for thrusting the surrounded portion into contact with the first mentioned means, and means for causing the first mentioned means to act upon the surrounded portion of the article of footwear with equal pressure at all points, the first mentioned means and the second mentioned means being relatively adjustable.

1,904,167. CONVEYER. ARNOLD REDLER, Gloucester, England, assignor to Redler Conveyor Company, Quincy, Mass., a Corporation of Massachusetts. Filed Oct. 6, 1927, Serial No. 224,484, and in Germany Oct. 9, 1926. 3 Claims. (Cl. 198—171.)



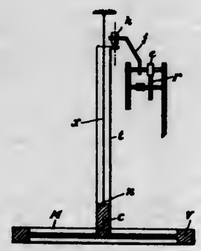
1. A conveyer for transporting comminuted material comprising a conduit formed with a channel having a flat bottom and upstanding sides and a conveyer chain disposed therein consisting of cruciform links having longitudinal webs and rigidly attached cross-arms, said cross-arms extending from intermediate points at each side of said webs and disposed with said webs to lie on said bottom in a plane, articulating means consisting of a pivot pin and receiver therefor formed cooperatively on each pair of web-ends which are adjacently disposed, said pin being arranged to have its axis perpendicular to and extending upwardly from the plane of its web and arms, and interengaging means formed about the respective bases of said pin and receiver and having portions cut away so as to disengage when said webs are swung through a predetermined angle about said pivot out of normal position and to engage and prevent displacement of said pin and receiver when said webs are in normal position.

1,904,168. LUBRICATING SYSTEM AND PUMP. JOHN REID, Oil City, Pa. Filed Nov. 22, 1928. Serial No. 321,236. 6 Claims. (Cl. 184—27.)



1. In a driving mechanism, the combination of a rotatable eccentric, an eccentric ring therefor, an annular lip extending outwardly and upwardly from said eccentric and forming an annular trough adapted to collect oil flowing from the bearing surfaces of said eccentric and ring, and an oil pump arranged wholly within said trough at the point furthest removed from the center of rotation of said eccentric, whereby said pump may be substantially submerged in the oil collected at said point in said trough.

1,904,169. TORSION PENDULUM. JEAN LÉON REUTTER, Paris, France. Filed Nov. 4, 1927, Serial No. 231,042, and in France Nov. 15, 1926. 2 Claims. (Cl. 58—131.)

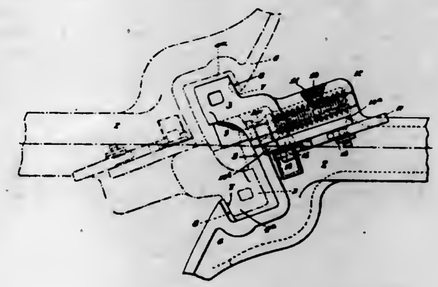


1. A suspended torsion pendulum including the combination, with a flywheel arranged for rotary oscillation about a substantially vertical axis and a suspension wire generally corresponding with said axis of a stem fixed at the center of said flywheel and to the top of which said wire is attached at a relatively great distance from the center of gravity of the flywheel, a tube rigidly secured to said stem and having an open and free upper end, and concentrically disposed about said suspension wire, an eccentrically disposed pin surmounting said tube, and drive means including a driven escapement having a fork associated therewith and arranged to make contact with said pin in order to oscillate said pendulum as a whole, said flywheel being solely supported and guided in movement by said suspension wire and said tube terminating short of the point of suspension of said wire with the upper open end thereof arranged independent of contact with the same.

1,904,170. CYCLIC PROCESS FOR THE PRODUCTION OF SULPHITE PULP. GEORGE A. RICHTER, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed July 14, 1925. Serial No. 43,481. 3 Claims. (Cl. 92—11.)

1. A cyclic process which comprises cooking raw cellulosic material in a sulphurous acid solution of alkali sulphite, smelting the inorganic content of the spent cooking liquor in a reducing atmosphere to produce alkali sulphide and alkali carbonate, dissolving the smelted compounds in water, carbonating the solution to convert the alkali sulphide into alkali carbonate, treating the carbonated solution with a water-soluble oxidising agent to oxidise such residual alkali sulphide as may be present therein to an oxygen-containing salt of the nature of alkali sulphite and alkali sulphate, and acidulating the resulting solution with sulphur dioxide to form a fresh liquor for repeating the cooking step of the cycle.

1,904,171. CAR COUPLER. DAVID ROBINSON, Cleveland, Ohio, assignor to National Malleable and Steel Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 6, 1925, Serial No. 60,733. Renewed Dec. 16, 1930. 1 Claim. (Cl. 213—100.)



In a car coupler of the vertical plane type having a laterally extending buffing face and a plurality of fixed jaws having a pulling engagement with complementary jaws on an opposing coupler head, a horizontally movable T-shaped lock confined within the vertical extent of said jaws and normally projected forwardly of the line of said buffing face and arranged to engage a similar lock on an opposing coupler head of like design, the said lock being capable of movement inwardly of said buffing face to permit the opposing coupler to reach coupling position, and a spring for normally maintaining the said lock in projected position.

1,904,172. PROCESS FOR TREATING LOW BOILING HYDROCARBONS. HELIODOR ROSTIN, Berlin, Germany. Filed Mar. 2, 1929. Serial No. 344,102. 4 Claims. (Cl. 196—44.)

3. A process for treating low boiling hydrocarbons which comprises conducting the same over a porous ore in the pyrophorous state at an elevated temperature.

1,904,173. METHOD OF REMOVING CORROSIVE SULPHUR FROM HYDROCARBON OILS. REGINALD K. STRATFORD and WILLIAM P. DOOHAN, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company, a Corporation of Delaware. Filed May 21, 1928. Serial No. 279,620. 10 Claims. (Cl. 196—32.)

1. The method of removing corrosive sulphur from hydrocarbon oils, consisting of bringing the oil into intimate contact at a temperature between 212° and 300° F. with an alkaline solution containing a substance adapted to promote contact between the oil and treating solution.

9. The method of removing corrosive sulphur from hydrocarbon oils, comprising bringing the oil into intimate contact at a temperature between 212° F. and 300° F. with an alkaline solution containing rosin.

1,904,174. ARRANGEMENT FOR TRANSMITTING WIRELESS SIGNALS. MAXIMILIAAN JULIUS OTTO STRUTT and POPKO REINDER DIJKSTERHUIS, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Sept. 5, 1929, Serial No. 390,526, and in the Netherlands Sept. 1, 1928. 5 Claims. (Cl. 250—33.)



1. An antenna system comprising a transmission line, electrically open ended radiators coupled thereto, an auto-transformer supplied with high frequency current, and feeders coupling each end of the transmission line to the auto-transformer.

1,904,175. CADMIUM-NICKEL ALLOY. CARL E. SWARTZ, Highland Park, and ALBERT J. PHILLIPS, Metuchen, N. J., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed June 30, 1932. Serial No. 620,305. 6 Claims. (Cl. 75—1.)

1. A metal alloy containing from 0.25% to 7% nickel and the balance substantially cadmium.

1,904,176. CADMIUM-NICKEL ALLOY. CARL E. SWARTZ, Highland Park, and ALBERT J. PHILLIPS, Metuchen, N. J., assignors to American Smelting and Refining Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 13, 1932. Serial No. 646,976. 6 Claims. (Cl. 75—1.)

1. A metal alloy containing from 0.25% to 7% nickel, magnesium and zinc in appreciable quantities not exceeding a total of 3% and the balance cadmium.

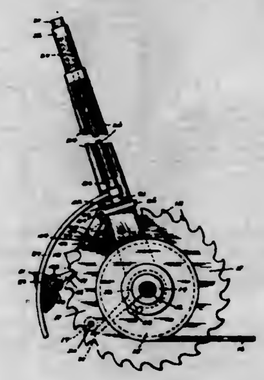
1,904,177. FENCE POST ANCHOR. JOHN F. SWENSON, Duluth, Minn. Filed Sept. 18, 1930. Serial No. 482,810. 5 Claims. (Cl. 189—31.)



1. The combination with a post of an anchoring device connected to the base of the post, said device comprising a lower plate member, an upper plate member rotatably secured to the lower member, an upstanding lug formed on said upper member for attaching the post to said member, and common means rotatably securing said plates and also fixedly securing said post to said upstanding lug.

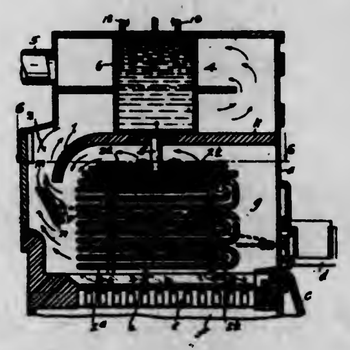
1,904,178. BRAKE DEVICE. FRANK O. VAUGHN, Poughkeepsie, N. Y. Filed Jan. 30, 1932. Serial No. 589,776. 2 Claims. (Cl. 74—54.)

1. A hand operated brake device comprising a cable sheave and a ratchet wheel for rotating the same, a hand lever movably associated therewith for actuating the ratchet wheel, a pawl member pivoted to said hand lever in the path of travel of said ratchet wheel and means mounted on said hand lever for raising said pawl member from said ratchet wheel, said pawl member formed with a closed end and alined orifices in the sides, and a pawl



comprising a roller mounted in a floating manner in said pawl member and adapted to contact both with the tooth of the ratchet wheel and the closed end of the pawl member during the operation of said pawl.

1,904,179. HOT WATER HEATING FURNACE. CARL A. W. VOIGT, Portland, Oreg. Filed June 15, 1931. Serial No. 544,487. 6 Claims. (Cl. 122—356.)

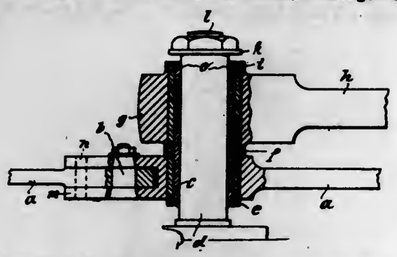


1. In a hot water heating apparatus, a combustion chamber provided with a dome-like roof and a rear wall extending to a point relatively close to the bottom of the combustion chamber, whereby the products of combustion are momentarily retarded and held in said combustion chamber, a flue chamber located over said combustion chamber and a passageway leading from under said rear wall of the combustion chamber to said flue chamber, a series of units of hot water coils arranged along three sides and the roof of the combustion chamber, the return pipes of the apparatus being connected in groups to the coil units, respectively, a hot water drum centrally located in said flue chamber to which said coil units are connected.

1,904,180. CONNECTING ROD CONNECTION. RICHARD P. WAGNER, Berlin, Germany. Filed Jan. 8, 1929, Serial No. 331,072, and in Germany Jan. 12, 1928. 2 Claims. (Cl. 74—17.)

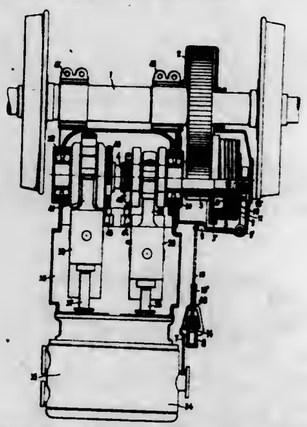
2. The combination of a crank pin, a main connecting rod, a side connecting rod, and means for mounting said

rods on said crank pin for axial movement relative thereto, said means consisting of a sleeve slidably mounted on said crank pin and carrying said rods, a flange on one



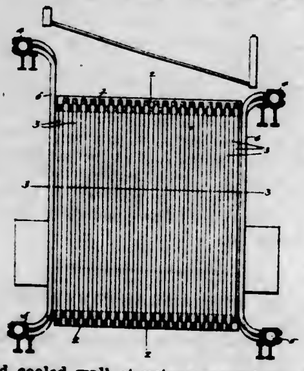
end of said sleeve for preventing movement of said rods in one direction, and means on said sleeve for preventing movement of said rods in the opposite direction.

1,904,181. BOOSTER. RICHARD P. WAGNER, Berlin-Lichterfelde, Germany. Filed Apr. 23, 1929. Serial No. 357,439. 4 Claims. (Cl. 105—48.)



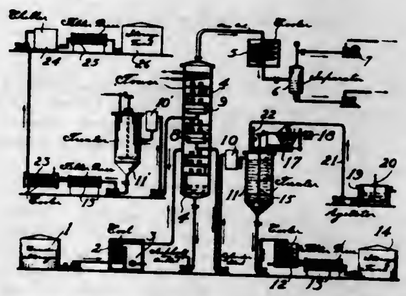
1. A booster comprising an axle, a crank shaft, a permanent-mesh gear operatively connecting said crank shaft and said axle, and a slip clutch in combination with a one-way clutch in said gear.

1,904,182. TUBULAR FLUID-COOLED WALLS. ANTHONY E. WEINGARTNER, Bethlehem, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1930. Serial No. 474,033. 3 Claims. (Cl. 122—235.)



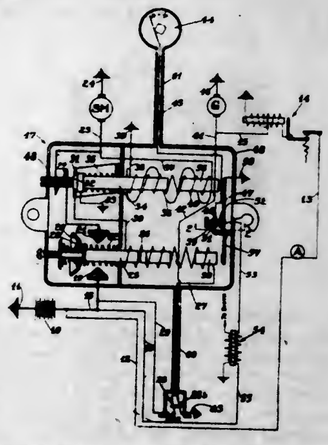
1. A fluid cooled wall structure comprising a plurality of tubes of substantially rectangular exterior cross sectional form, and a header also of substantially rectangular exterior cross sectional form in which said tubes terminate, alternate tubes entering the header at spaced points longitudinally of the tubes to thereby permit contiguous arrangement of the intermediate portions.

1,904,183. PROCESS OF TREATING OILS. ALFRED A WELLS, Roselle Park, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Nov. 22, 1929. Serial No. 408,966. 5 Claims. (Cl. 196—147.)



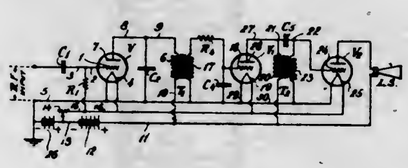
1. Process of treating lubricating oil comprising passing an oil stock containing lubricating oil through a narrow heated passageway into an enlarged fractionation zone to obtain a fraction consisting of the lubricating oil, removing the fraction from the fractionation zone and directly agitating it in an unheated treating zone with a solid absorbent decolorizing agent at a temperature not less than 220° F., and separating the fraction from the decolorizing agent.

1,904,184. AUTOMATIC STARTING MECHANISM FOR INTERNAL COMBUSTION ENGINES. DANIEL L. WERTZ, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed July 26, 1930. Serial No. 471,075. 2 Claims. (Cl. 290—38.)



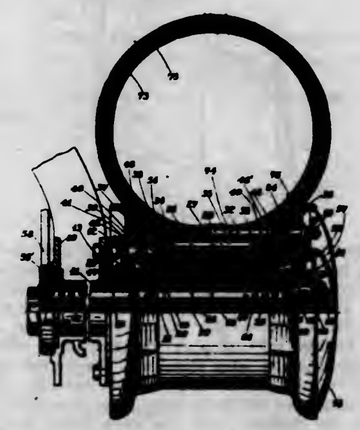
1. In an automatic starting and ignition system for internal combustion engines, a starting circuit including a starting switch, an ignition circuit including an ignition switch, a solenoid for controlling said starting switch, a magnetic relay for opening said solenoid circuit when the engine starts, and means whereby said magnetic relay closes the ignition switch during the starting operation and maintains it closed as long as the engine is in operation.

1,904,185. LOW FREQUENCY AMPLIFIER. HAROLD ALDEN WHEELER, Great Neck, N. Y., assignor to Hazeltine Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Feb. 17, 1927. Serial No. 168,925. 19 Claims. (Cl. 179—171.)



15. In an audio-frequency amplifier, the combination with a pair of thermionic tubes each having anode, cathode and grid, of a transformer having primary and secondary windings, said transformer serving to couple the output section of one said tube with the input section of the other, said transformer having a low ratio of transformation selected to approximately match the plate circuit impedance of the preceding tube with the grid circuit impedance of the succeeding tube when the grid thereof swings considerably positive, whereby the introduction of distortion due to the flow of grid current in said amplifier is minimized.

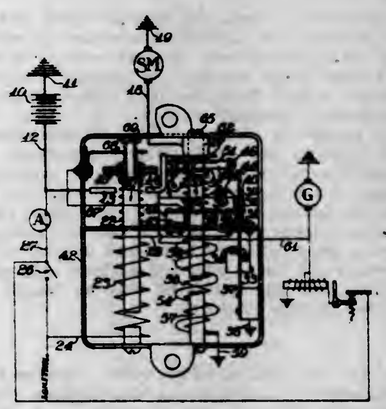
1,904,186. BRAKE MECHANISM. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed June 19, 1930. Serial No. 462,185. 18 Claims. (Cl. 188—18.)



1. Braking mechanism for automotive vehicles including a frame support, an axle mounted thereon, an anchor member mounted on said axle and rigidly coupled to said frame support, a rim journaled on said anchor member adjacent said support, and cooperating brake members connected respectively to said rim and anchor member.

1,904,187. AUTOMATIC STARTING MECHANISM FOR INTERNAL COMBUSTION ENGINES. MAURICE P. WHITNEY, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed May 6, 1931. Serial No. 535,323. 8 Claims. (Cl. 290—38.)

1. In automatic starting mechanism for internal combustion engines, a starting circuit including a source of electrical energy, a starting motor and a starting switch for controlling said motor, a control circuit including said source of energy and electromagnetic means for actuating said starting switch, means for opening said control circuit when the engine starts and for closing the same when the engine stalls, and a thermostatic switch energized by the closing of the starting switch for periodically interrupting said control circuit after a predetermined time.

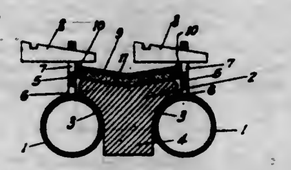


1,904,188. ANIMAL TRAP. JOSEPH D. ZAHM and JOHN U. LEHN, Lititz, Pa. Filed Feb. 9, 1931. Serial No. 514,338. 9 Claims. (Cl. 43—88.)



1. An auxiliary spring for an animal trap, of U-form, and having rounded ends and apertures and a slot leading into each of said apertures, means being provided to prevent rotation of said spring on said trap beyond a limiting position.

1,904,189. MEANS FOR RETAINING FURNACE WALL BLOCKS AGAINST TUBES. ERVIN G. BAILEY, Easton, and RALPH M. HARDGROVE, Bethlehem, Pa., assignors to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Original application filed Oct. 20, 1927, Serial No. 227,456. Divided and this application filed Nov. 17, 1928. Serial No. 320,037. 5 Claims. (Cl. 122—6.)



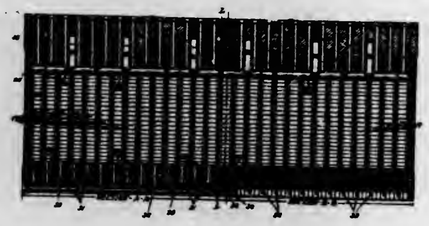
1. In a furnace wall, water tubes, tile between said tubes having shoulders curved to fit the tubes, holding members for said tile attached to said tubes and means cooperating with said holding members, said means comprising a curved plate extending across the rear surface of said tile to press said tile into contact with said tubes.

1,904,190. PROCESS OF MANUFACTURING CHLORINE DIOXIDE. WILLY BECHER, Bussum, Netherlands. Filed Aug. 25, 1930, Serial No. 477,795, and in the Netherlands Aug. 26, 1929. 13 Claims. (Cl. 23—152.)

1. A process for preparing chlorine dioxide from alkali metal chlorates and sulphuric acid comprising mixing the alkali metal chlorate with inorganic substances indifferent to alkali metal chlorates and sulphuric acid to form a mixture in solid lumps and then subjecting said lumps to the action of sulphuric acid.

7. A process for preparing chlorine dioxide from alkali metal chlorates and sulphuric acid comprising mixing the alkali metal chlorate with inorganic substances indifferent to alkali metal chlorates and sulphuric acid to obtain the mixture in the form of solid lumps, then subjecting said lumps to the action of sulphuric acids and introducing gases indifferent to chlorine dioxide during the reaction of said lumps with said sulphuric acid, and then saturating said gas introduced with an organic reduction agent in vapor condition.

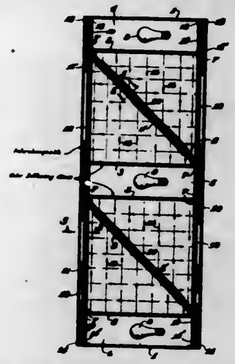
1,904,191. COKING RETORT OVEN. JOSEPH BECKER, Pittsburgh, Pa., assignor to The Koppers Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 10, 1924. Serial No. 705,556. 28 Claims. (Cl. 202—142.)



1. In a coking retort oven, in combination: a plurality of spaced heating walls providing intermediate coking chambers, said heating walls respectively comprising vertical combustion flues; a pair of interior and a pair of side flow ducts in each heating wall respectively communicably connected with interior and side groups of the combustion flues of their respective heating walls, the members of said respective pairs of flow ducts being located on opposite sides of the central portion of the heating wall and the flow ducts constituting the interior pair being substantially equidistant from the center of the heating wall; a pair of mediate flow ducts respectively located between a side flow duct and an interior flow duct; the flow ducts being each of substantially equal length and being also communicably connected individually by duct means extending substantially from the central portion of the flow duct over the top of the coking chamber with substantially the central portion of the corresponding flow duct of an adjacent heating wall; and crosswise regenerators communicably connected with the flues of said heating walls.

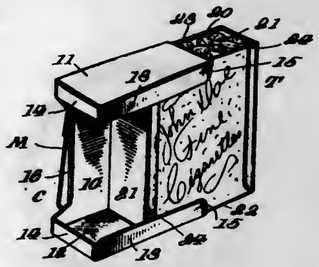
1,904,192. SIGN. MELVIN BERNARD BENSON, New York, N. Y., assignor, by mesne assignments, to Melvin B. Benson Corporation, a Corporation of New York, and Melvin B. Benson. Filed Dec. 14, 1929. Serial No. 414,042. 2 Claims. (Cl. 40—133.)

1. An electric sign including a casing, four light beam diffusing glass plates carried by said casing and forming lighting chambers at the top, middle and bottom portions thereof with reflecting chambers disposed between the lighting chambers, double back to back mirrors carried within said reflecting chambers and inclined to the glass diffusing plates, each double mirror being adapted to



project images of the diffusing glass plates and stenciled plates carried in front and back of said casing directly opposite the reflecting chambers.

1,904,193. PACKAGE HOLDER. CHARLES E. BEAG, Vero Beach, Fla. Filed Aug. 31, 1931. Serial No. 560,423. 10 Claims. (Cl. 206—41.)



3. A package holder of the character described comprising a carrier member formed with a back portion having forwardly bent end portions providing transversely disposed guides, said guides being spaced apart to form an open front portion for the carrier member, a tray member having ends slidably engaging said guides, so as to move laterally with respect to the carrier member, the front of said tray having an open area for exposing a package carried by said tray, said open area being positioned to register with the open front portion of the carrier member, and means limiting sliding movement of the tray member and the carrier member in both directions.

1,904,194. CURTAIN HEADING. EDMOND P. BIXBY, New York, N. Y. Filed Dec. 1, 1932. Serial No. 645,295. 5 Claims. (Cl. 156—10.)



2. A curtain heading including a supporting rod receiving tape positioned longitudinally at the rear of the curtain near the upper end, said tape being spaced

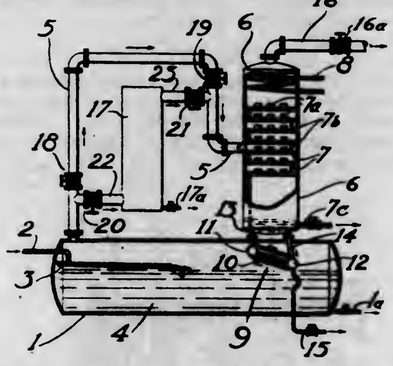
from the upper edge and provided with spaced apertures, said apertures being arranged in groups with a greater distance between certain apertures than others whereby the curtain may be folded to produce evenly spaced gatherings.

1,904,195. ELECTRIC DISCHARGE TUBE. CORNELIS BOL, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed May 27, 1930, Serial No. 456,025, and in the Netherlands Aug. 10, 1929. 8 Claims. (Cl. 250—27.5.)



1. An electron discharge device comprising an envelope having a wall with one portion of glass and another portion of sheet metal, said portions having edges, the edge of the sheet metal portion being hermetically sealed to the edge of said glass portion, a plurality of rigid conductors hermetically sealed by vitreous insulation into said sheet metal portion side by side to project on both sides of said sheet metal portion, said conductors constituting contact pins on the outer side and electrode supports on the inner side of said sheet, an electron emitting cathode and a cooperating anode mounted in said envelope and electrically connected to the inner ends of said conductors.

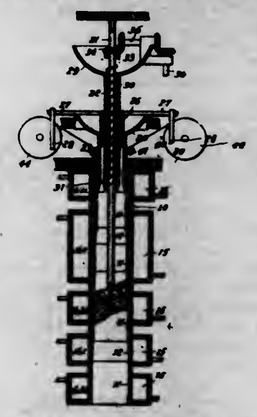
1,904,196. APPARATUS FOR TREATING HYDROCARBONS. SEWARD R. BOLLES, Elizabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 18, 1928. Serial No. 247,517. 5 Claims. (Cl. 196—139.)



1. Apparatus for treating hydrocarbons, comprising a vapor separating chamber, a fractionating column communicating with the vapor space of the chamber and having an outlet for vapors, a thermosiphonic reboiler, and closed conduits connecting spaced portions of the thermosiphonic reboiler with the lower portion of the fractionating column to form with the fractionating means a reservoir for condensate, said reboiler being positioned within said vapor separating chamber.

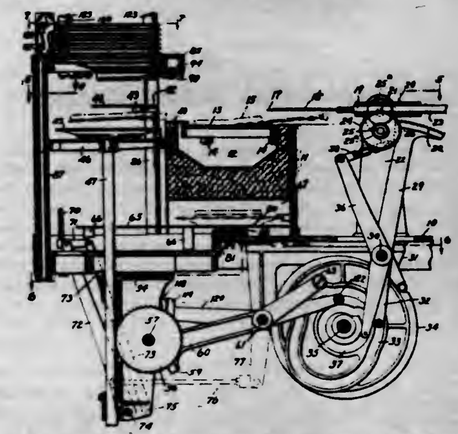
1,904,197. CORK MANUFACTURE. WILLIAM G. BOND, Wilmington, Del. Filed May 20, 1926. Serial No. 110,521. 11 Claims. (Cl. 18—18.)

1. The process of making articles which consists in feeding an annular mass of comminuted particles and a heat coagulating binder thru a forming tube past alternate hot and cold zones and in simultaneously passing thru the center of the mass a plurality of rods of different



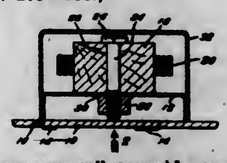
material, allowing the coagulating mass to expand and grip said rods and thereby form the sole translating means for said rods.

1,904,198. DISH HANDLING MECHANISM. HARRY RUSSELL BRAND, New York, N. Y. Filed July 3, 1930. Serial No. 465,755. 12 Claims. (Cl. 53—7.)



1. In combination with a commodity dispensing mechanism, a support for a stack of dishes, means for withdrawing a dish from the bottom of the stack, a vertically reciprocable carrier adapted to convey said dish to a position to receive a commodity from said dispensing mechanism, and means operating thereafter to remove the dish from said carrier.

1,904,199. INDUCTANCE. FRANCIS T. BREWER, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed June 27, 1931, Serial No. 547,218. Renewed Aug. 22, 1932. 11 Claims. (Cl. 175—356.)



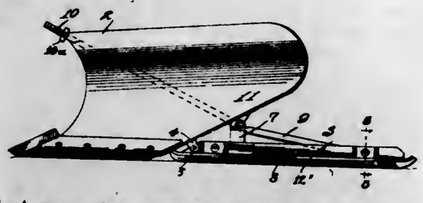
1. A high frequency coil assembly comprising in combination, a multiple layer coil, said coil having a non-

magnetic support core, a non-magnetic conductor extending into and through the entire support core of said coil whereby eddy currents are generated in said conductor, a shield for shielding said coil, said conductor and said shield cooperating to maintain a high ratio of inductance to resistance of the coil.

1,904,200. PROCESS OF PRODUCING AND DISTILLING AQUEOUS SULPHURIC ACID SOLUTIONS OF SECONDARY AND TERTIARY ALCOHOLS. BENJAMIN T. BROOKS, Greenwich, Conn., assignor, by mesne assignments, to Standard Alcohol Company, Wilmington, Del., a Corporation of Delaware. Filed June 30, 1931. Serial No. 547,896. 10 Claims. (Cl. 260—156.)

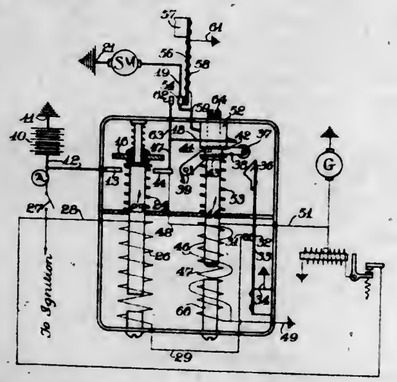
1. Process of selectively distilling a secondary or tertiary alcohol from a solution containing such an alcohol and aqueous sulphuric acid, which comprises distilling the solution while retaining the same by surfaces of a vitreous character and while holding said solution substantially exclusively in contact with surfaces of a vitreous character.

1,904,201. REVERSIBLE AND QUICK-CHANGING RUNNER AND SHOE. WILLIAM JOHN CHAPMAN, Virginia, Minn. Filed Sept. 10, 1930. Serial No. 480,993. 3 Claims. (Cl. 37—44.)



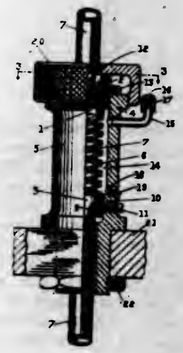
1. A snow plow comprising a pair of wings terminating at their forward edges in an acute angle, each of said wings having a rearwardly extending ear, a runner pivotally mounted to each of said ears, a flexible bar connecting said runners, brace rods connected between said flexible bar and a rear portion of each of said runners, a rod connected between said flexible bar and the forward edges of said wings, and adjustable means upon said rod for raising and lowering said plow.

1,904,202. AUTOMATIC STARTING MECHANISM. FRANK T. CHRISTIAN, Elmira, N. Y., assignor to Eclipse Machine Company, Elmira, N. Y., a Corporation of New York. Filed Apr. 28, 1931. Serial No. 533,378. 8 Claims. (Cl. 290—38.)



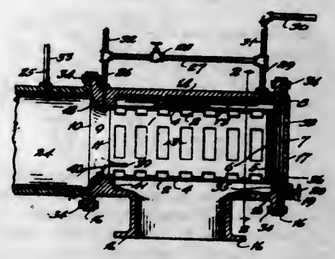
2. In an automatic starting mechanism for internal combustion engines, a starting circuit including a source of energy, a starting motor and a starting switch for controlling said motor, means energized by current traversing the starting circuit for causing said switch to be held closed until the engine starts and means for rendering said holding means inoperative after the starting motor has been energized for a predetermined time.

1,904,203. BEARING AND APPLICATION THEREOF. ERNEST CECIL COPE, Spondon, near Derby, England, assignor to Celanese Corporation of America, a Corporation of Delaware. Filed Mar. 29, 1929, Serial No. 350,920, and in Great Britain Apr. 11, 1928. 6 Claims. (Cl. 308—152.)



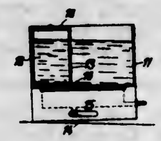
1. A spindle mounting comprising a bearing sleeve, said sleeve having tubular end portions and an intermediate helical bearing portion joining said end portions and integral therewith, and means for adjusting the diameter of the intermediate portion, said adjusting means comprising means to enable torsion to be applied to said intermediate portion and means to maintain the applied torsion on the intermediate portion.

1,904,204. FLUID CONTROL VALVE. EUGENE FRANK DELÉRY, New Orleans, La., assignor by Decree of Distribution to Mrs. Edna Fuselier Deléry. Filed Dec. 5, 1927. Serial No. 237,718. 7 Claims. (Cl. 137—152.)



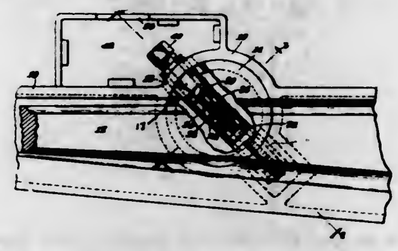
1. In a fluid control valve an interior hollow reciprocating cylinder open at the entrance end, a rigid head at the end of the said cylinder farthest away from the entrance, an aperture in the rigid head and multiple ports in the circumferential wall of the reciprocating cylinder, a cup packing attached to the rear of the partition, an annular washer attaching the cup packing to the head, and means for attaching the annular washer to the partition, means to prevent the rotation of the reciprocating cylinder.

1,904,205. ELECTRIC HEATING AND COOKING APPLIANCE. EDUARDO RICCI DEL RICCIO, Berlin, Germany. Filed Apr. 8, 1931, Serial No. 528,615, and in Germany Apr. 17, 1930. 4 Claims. (Cl. 219—43.)



1. A cooking appliance comprising in combination an electrically heated vessel, a tipping pivot element upon said vessel, an auxiliary vessel closed at the top and open at the bottom located within said main vessel laterally to said tipping pivot element, and means adapted to be actuated by the tipping of the vessel for breaking the heating circuit.

1,904,206. TONGUE SWITCH. ISRAEL K. DIXON, Johnstown, Pa. Filed Nov. 24, 1931. Serial No. 577,069. 9 Claims. (Cl. 246—443.)



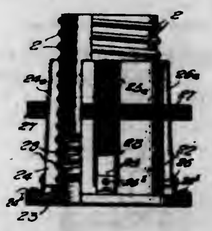
1. A switch comprising a switch body, a tongue having a heel journalled therein and whose lower surface bears on a seat formed in the journal portion of said switch body and a hold down device extending transversely through the tongue and making a bearing contact with spaced portions of the switch body on opposite sides of the axis of oscillation of the tongue heel and pressing against the central axial portion of said heel.

1,904,207. HINGE. RAMON DONADEU, Buenos Aires, Argentina. Filed June 28, 1932. Serial No. 619,676. 2 Claims. (Cl. 16—54.)



1. In a cushioning hinge for doors, and the like, the combination of two superposed tubular members, to be respectively attached to the door and the door jamb, means uniting said members permitting their relative rotation, a hollow piston disposed within said tubular members, and provided with cam grooves arranged to be engaged by pins provided on said tubular members, the closed bottom of said piston containing a bore opening into said piston and adapted to communicate with a duct provided in the lower portion of the lower tubular member having a second duct in its upper portion, and a grooved screw and check valves disposed in the closed bottom of said hollow piston for controlling the flow of a liquid contained in said lower tubular member.

1,904,208. VARIABLE INDUCTANCE SYSTEM. JENNINGS B. DOW, Alexandria, Va. Filed Nov. 14, 1930. Serial No. 495,777. 16 Claims. (Cl. 171—242.)



1. A high frequency inductance system comprising a helical inductance coil, a metallic member, and screw threads formed interiorly of said metallic member and having a pitch corresponding to the pitch of the turns of said inductance coil, said inductance coil being rotatable into position within said metallic member for variably short-circuiting selected turns of said coil.

1,904,209. PROCESS OF MAKING ARTIFICIAL FILAMENTS AND PRODUCT THEREOF. CAMILLE DREYFUS, New York, N. Y., and WILLIAM WHITEHEAD, Cumberland, Md., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 8, 1928. Serial No. 304,805. 8 Claims. (Cl. 18—54.)

1. Process of producing yarns, filaments, bristles and the like having hollow spaces therein comprising forming the same from solutions containing cellulosic material under such conditions that elimination of solvent takes place in two stages, the first stage of solvent elimination being a retarded one under conditions which tend to cause surface coagulation only and the second stage being effected under conditions that tend to cause complete coagulation.

1,904,210. LOCK. JOHN V. EICHEL, Jr., Philadelphia, Pa., assignor to H. S. Getty and Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 25, 1931. Serial No. 559,274. 2 Claims. (Cl. 292—356.)

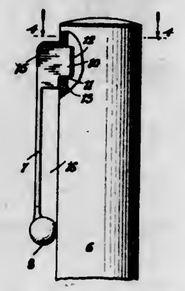


1. In a lock, a spindle of non-circular cross section, an escutcheon providing a bearing for the spindle and having a recess in its inner face concentric with the spindle and provided with inwardly projecting diametrically opposite lugs on its wall, and a plate fitted on the spindle and adapted to fit within said recess and provided with diametrically opposite projecting lugs on its periphery to engage the lugs in the recess and limit the movement of the spindle.

1,904,211. PROCEDURE IN THE PRODUCTION OF A PERFUME OR COSMETIC. HANS EISNER, Berlin-Tempelhof, and HERMANN VOLLMER, Berlin-Halensee, Germany. Filed Apr. 20, 1929, Serial No. 356,872, and in Germany June 11, 1926. 5 Claims. (Cl. 167—94.)

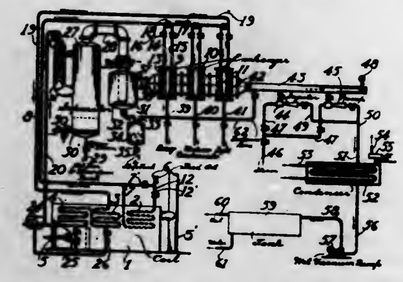
1. As a new product suitable for use as a cosmetic or a perfume, a composition of matter comprising an oil, selected from a group consisting of fatty oils and paraffin oil, admixed with from 5 to 20 per cent by weight of an essential oil; the said oils being mutually dissolved, the composition being free from cloudiness and the liquid mixtures possessing viscosities which follow a substantially hyperbolic curve.

1,904,212. FOUNTAIN PEN CLIP. HARRY ESTEROW, New York, N. Y. Filed May 10, 1932. Serial No. 610,340. 3 Claims. (Cl. 24—11.)



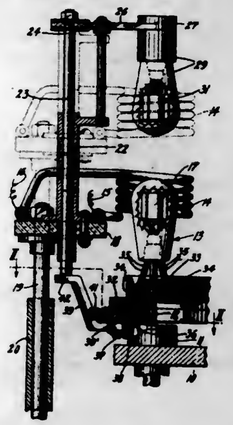
3. In a clip of the character described, wherein a tongue-like body portion is adapted to normally lie parallel with a carrying member, and wherein the free end of the clip carries a ball knob for engagement with the carrying member with the ball knob adapted for point contact with an object to which the clip is attached, the tongue-like body portion being provided on its attached end with laterally extending walls, one of said walls being at the upper terminal end of the clip, two of said walls carrying lip extensions defining shoulders lying in the plane of the edge of the aforesaid end wall and adjacent side of the ball knob, the shoulders and last named wall abutting the carrying member to space the tongue-like body portion parallel with the carrying member and said carrying member having openings therein to receive and retain the lip extensions.

1,904,213. METHOD AND APPARATUS FOR DISTILLING OIL. CHARLES RINGGOLD EWING, Toronto, Ontario, and THOMAS MONTGOMERY, Sarnia, Ontario, Canada, assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Jan. 3, 1929. Serial No. 330,011. 3 Claims. (Cl. 196—77.)



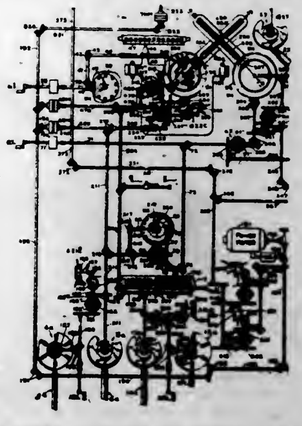
8. Method of running asphalt containing petroleum oils for asphalt and lubricating distillates, comprising passing the oil in a narrow confined stream through a heating zone in which the oil is raised to a temperature at which vaporization tends to occur, discharging the hot oil into a separating zone through an intermediary stage in which the oil is caused to pass over a series of baffles and is then discharged through a large, substantially unobstructed opening into the separating zone, taking off tar from said zone, withdrawing vapors therefrom, removing entrained particles from the vapors and condensing the vapors.

1,904,214. DEVICE FOR HIGH FREQUENCY INDUCTION HEATING. JAMES M. FAGAN, Maplewood, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Jan. 22, 1930. Serial No. 422,533. 6 Claims. (Cl. 219—47.)



1. A machine for inductively heating a body comprising means for supporting a body, a high frequency coil, means for moving the body through a horizontal path adjacent to said coil, a second body movable adjacent to said coil and means in the path of movement of said first mentioned body and engageable therewith to prevent movement of said second mentioned body.

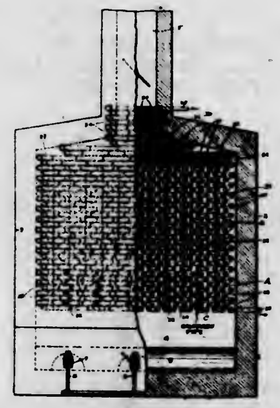
1,904,215. ARTILLERY COMPUTING SYSTEM. HANNIBAL C. FORD, Jamaica, N. Y., assignor to Ford Instrument Company, Inc., Long Island City, N. Y., a Corporation of New York. Filed Oct. 16, 1924. Serial No. 744,052. 76 Claims. (Cl. 235—61.5.)



10. In an artillery computing system, means to generate a target's range and azimuth from a reference point, circuit-closers controlled by said means, a selective control switch having a plurality of circuit-establishing positions, electrical circuits some of which in one position of said switch are closed by said circuit-closers, operating devices in circuit with said circuit-closers and adapted to be energized, elements set by said operating devices to indicate the reference point range and azimuth of a target, other circuit controllers adapted by the actuation of said elements to close others of said circuits and actuating means responsive to the closure of the last named circuits to indicate the range and azimuth of the target from remote observing stations.

48. In an artillery computing system, a mathematical mechanism related to a battery station operable in response to transmissions of a movable target's reference point range and azimuth and comprising means to measure the target's range and azimuth as relocated at the battery station, and means to correct the target's relocated range and azimuth including corrections for the effect on the projectile of a gun of the height of the gun, the atmosphere, the initial velocity of the projectile and the wind.

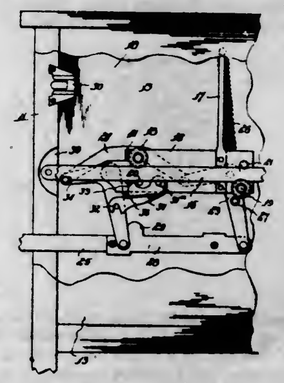
1,904,216. STEAM GENERATOR AND SUPERHEATER AND OPERATION THEREOF. CHAUNCEY B. FORWARD, Urbana, Ohio, assignor, by mesne assignments, to Forward Process Company, Dover, Del., a Corporation of Delaware. Filed Nov. 2, 1922. Serial No. 598,464. 3 Claims. (Cl. 122—258.)



1. A steam generator and superheater comprising a heating chamber, a continuous coil of pipe arranged in said chamber and extending through the side-walls thereof at intervals, means for supplying water to one end of said coil and for discharging superheated steam from the other end thereof, a series of valved branches connecting intermediate parts of said coil extending outside of the heating chamber and communicating with a collecting drum having a level indicator and valved discharge connector.

1,904,217. METAL FIXTURE FOR TYPEWRITER DESKS. MARTIN FOX, Chicago, Ill., assignor to The Seng Company, Chicago, Ill. Filed Apr. 8, 1931. Serial No. 528,669. 1 Claim. (Cl. 312—28.)

In combination with a typewriter desk having a compartment with corner posts at its forward end and recesses at the inner side of said posts, of supporting rails at opposite sides of the compartment with the ends of said rails secured in the bottom of the aforesaid recesses, plates slidable on the rails and having grooved rollers at the front and rear thereof traveling over the upper and lower edges of said rails, stop members bent outwardly from near the forward ends of the plates and formed integrally therewith to provide lips with flat surfaces in advance of the front rollers which engage the corner posts at one side of the recesses for limiting the forward movement of the sliding plates, and bell crank levers pivoted to the plates for swinging movement and to which the platform is pivoted; together with a pawl pivoted to the plate and



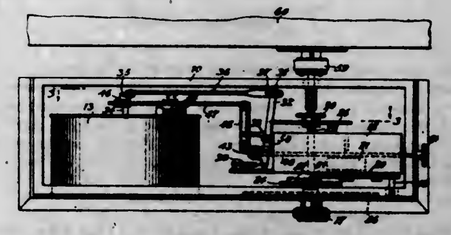
having a tail-piece entering a recess in the rail, a spring for moving the pawl into engagement with the recess, and a lug struck from the plate and with which the pawl engages for limiting the movement of the same in one direction, said pawl cooperating with a pin on one of the bell crank levers in the lowered position of the platform.

1,904,218. PROCESS FOR RESTORING THE ACTIVITY OF HYDROGENATION CATALYSTS. JAMES A. FRANCEWAY, Baton Rouge, La., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed June 23, 1930. Serial No. 463,848. 17 Claims. (Cl. 23—288.)

1. An improved process for reactivation of sulfactive catalysts used in the hydrogenation of carbonaceous material with free hydrogen at a pressure in excess of 20 atmospheres which comprises removing the bulk of the carbonaceous material from the said sulfactive catalyst and etching the surface of the catalyst.

3. Process according to claim 1 in which the etching agent comprises a mixture of steam and ammonia.

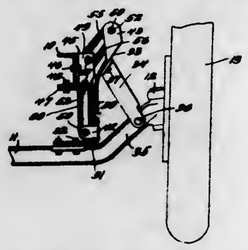
1,904,219. RADIO STATION SELECTOR. HERBERT V. GRIMES, Elizabeth, N. J., assignor to William Taylor, Elizabeth, N. J. Filed June 14, 1929. Serial No. 370,836. 6 Claims. (Cl. 250—20.)



1. A station selector for radio receiving apparatus, including a spring motor, a shaft operable thereby, means for rotating a radio receiving condenser by rotation of said shaft, means for automatically controlling the movement of said motor, said last-mentioned means including a

time-controlled mechanism, an arbor extending therefrom and terminating in a crank, and a cam mounted on said arbor, said crank and cam being jointly operable to control rotation of said motor.

1,904,220. VEHICLE SPRING AND SHOCK ABSORBER. MATT GZUPKAYTIS, Baltimore, Md. Filed June 26, 1931. Serial No. 547,090. 6 Claims. (Cl. 267—30.)



1. In a combined vehicle spring and shock absorber, the combination of an upstanding bracket mounted at its lower end upon one end of an axle of a vehicle, a brace between said bracket and an outer portion of said axle, and an elastic strap connecting the upper end of said bracket with the chassis of the vehicle.

1,904,221. PROTECTIVE LAYER ON PHOTOGRAPHIC FILMS. MAX HAGENDORN, Dessau in Anhalt, Germany, assignor, by mesne assignments, to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Apr. 25, 1927, Serial No. 186,567, and in Germany May 1, 1926. 3 Claims. (Cl. 95—9.)



1. A photographic film with a protective layer on its back surface, said layer comprising a compound of the group consisting of cellulose-ether-stearate, cellulose-ether-phosphate, cellulose-acetate-stearate, and cellulose-acetate-phosphate.

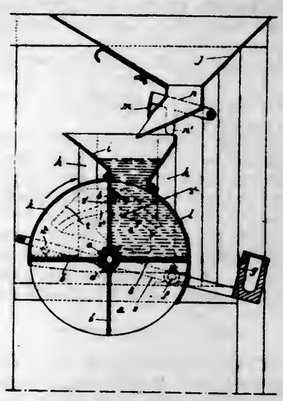
1,904,222. CULTURE BOTTLE. ROBERT McC. HALBACH, Jersey City, N. J. Filed Mar. 9, 1932. Serial No. 597,845. 6 Claims. (Cl. 215—1.)



1. A bacteriological culture bottle including a body having parallel major side walls, a neck offset laterally with respect to one of said side walls whereby said wall, and the adjacent walls of the bottle provide a portion for receiving and retaining a fluid plating media when the bottle is supported horizontally on said side.

1,904,223. MACHINE FOR ASCERTAINING THE VOLUME OF LOADS OF GRANULAR MATERIAL. ALFRED HANIQUE, Paris, France. Filed Aug. 26, 1931, Serial No. 559,565, and in France Mar. 27, 1931. 3 Claims. (Cl. 73—137.)

1. In a distributing machine, the combination of a horizontal rotary drum provided with wide open compartments, a hopper adapted to feed the compartments as they pass in succession underneath it when the drum rotates, a shaft disposed axially of the drum and carrying the hopper, covers secured to the hopper and extending over



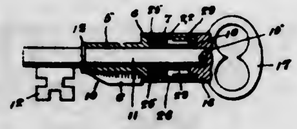
the entire upper half of the periphery of the drum except in front of the discharge opening of the hopper and means for locking the drum against rotation as long as the weight of material in each successive compartment is under a predetermined value.

1,904,224. ELECTROMAGNETIC TOOL. CLARENCE A. HARGROVE, Acton, Ind. Filed May 3, 1932. Serial No. 609,009. 1 Claim. (Cl. 175—367.)



An electro-magnetic tool comprising a tubular casing made from non-magnetic material, end heads fitted in opposite extremities of the casing and made from insulating material, a handle abutting one end head, a fastener countersunk in the handle centrally thereof and secured in the end head adjacent thereto, a magnetic core arranged interiorly of the casing between the end heads and engaged at its inner end by said fastener and having an outer reduced end projected exteriorly of the casing, said handle having passages and likewise the end head next thereto leading to one side of the core between the same and the casing, electric current wires of a normally open circuit trained through the passages and forming a coil about the core next to its reduced outer end and confined by the casing, said core having a channel accommodating one of the current wires, and a push button switch carried by the casing and operated exteriorly thereof and included in the circuit for the closing thereof, said switch being disposed close to the handle.

1,904,225. KEY FOR LOCKS. JOEL H. HENDRIX, New Castle, Pa., assignor of one-half to W. Walter Braham, New Castle, Pa. Filed July 7, 1931. Serial No. 549,249. 12 Claims. (Cl. 70—9.)



9. A key including a shank, a member mounted on the shank, a finger piece secured to the shank, securing means on the finger piece, a complemental securing means carried by the member and cooperating with the securing means on the finger piece to lock the shank and finger piece against movement with respect to the member.

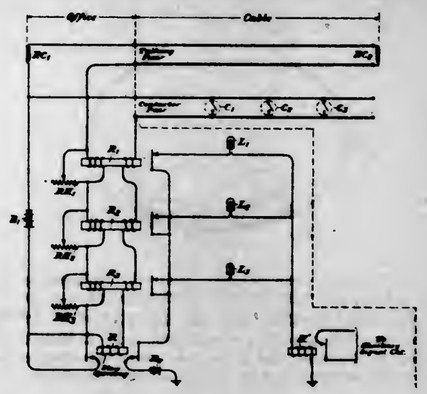
1,904,226. CABLE MAINTENANCE APPARATUS. THOMAS C. HENNEBERGER, Bloomfield, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Jan. 2, 1930. Serial No. 418,144. 3 Claims. (Cl. 177—311.)



1. A cable terminal device, comprising a gas-tight chamber and a plurality of binding posts extending through a wall thereof, means associated with one end of said chamber for connecting the same to a cable sleeve or the like, a low pressure alarm contactor of the Bourdon tube type but having the inside of the pressure responsive element at atmospheric pressure, and a connector between the other end of said chamber and said contactor including means for effecting electrical connections between certain of said binding posts and the contacts of the contactor, said connector being perforated to admit gas from said chamber to the interior of the contactor.

1,904,227. GAS PRESSURE ALARM SYSTEM FOR CABLES. THOMAS C. HENNEBERGER, Caldwell, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 9, 1931. Serial No. 543,232. 1 Claim. (Cl. 177—311.)

In association with a cable including a testing pair of conductors and an auxiliary pair of conductors, said testing pair having a plurality of short-circuiting devices spaced thereafong and designed to operate thereon, apparatus grouped at a single station on the line of said cable, said apparatus comprising a plurality of differential relays corresponding in number to said short-circuiting devices, an auxiliary relay, a plurality of signaling devices each controlled by one of said differential relays, and a source of voltage, each of said differential relays having a first winding in series with the conductors of said testing pair, the winding of said auxiliary relay and said source of voltage and a second winding adapted to be connected in series with the conductors of said auxiliary pair and said source of voltage upon the operation of said auxiliary relay, and means associated with each of said differential relays for adjusting the effective ampere-turns of the windings thereof.



1,904,228. PANTIES. MARY C. HENNESSY, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed June 1, 1932. Serial No. 614,810. 4 Claims. (Cl. 2—224.)

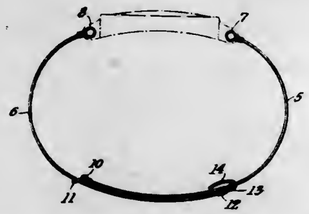


1. Panties including a body having front and rear inelastic sections formed with extensions at the lower ends, said extensions at the point of juncture with the respective front and rear sections being of substantially the same width, said extensions tapering to substantially a point at their respective lower ends, means for disengagably connecting said points together, and elastic netting on each side forming side sections, said side sections being wider at the top and bottom than at the center, and a reinforcing elastic tape connected to each side section at the top.

1,904,229. 2,4-DI-(NITROPHENYL)-6-HALOGEN-1,3,5-TRIAZINES AND METHOD OF MAKING THE SAME. WILHELM HENTRICH, Leverkusen-on-the-Rhine, and JOSEF HILGER, Cologne-Mulheim, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed May 6, 1930, Serial No. 450,307, and in Germany May 7, 1929. 4 Claims. (Cl. 260—27.)

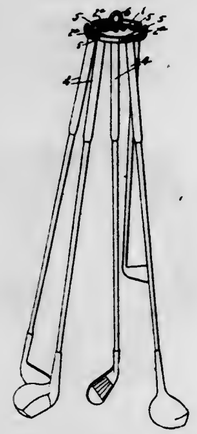
1. The process which comprises heating for several hours at a temperature between about 100 and 150° C. a 2,4-di-(nitrophenyl)-6-hydroxy-1,3,5-triazine with a phosphorus halide.

1,904,230. FASTENER FOR WRIST WATCH STRAPS. EMIL C. HILDEBRAND, Irvington, N. J., assignor to Krements & Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 28, 1931. Serial No. 533,403. 5 Claims. (Cl. 24—206.)



1. A fastener comprising a pair of overlapping strap ends, a loop pivotally secured to the end of one strap for receiving the overstrap, said loop-carrying strap having a central row of spaced perforations, and a hinged hook member on the inner end of the said overstrap adapted to be selectively engaged in any of the said perforations.

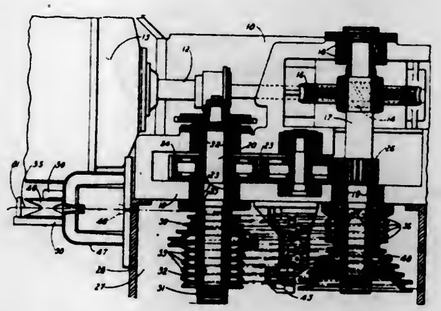
1,904,231. GOLF CLUB ASSEMBLY. FREDERICK A. HODGMAN, Yonkers, N. Y. Filed May 13, 1932. Serial No. 611,071. 3 Claims. (Cl. 150—1.5.)



1. A golf club assembly comprising connector means to be permanently secured to the extremity of the handle ends of a plurality of golf clubs, a carrier plate, and means arranged radially around and adjacent the edges thereof for detachably engaging said connector means to secure said ends of said clubs in assembled relation and to permit the free ends of said clubs to be spread apart to a limited degree without separation from said carrier plate.

1,904,232. WIRE DRAWING APPARATUS. CARL R. HOFFMAN, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1930. Serial No. 432,341. 1 Claim. (Cl. 205—13.)

In a wire drawing apparatus, a pair of spaced shafts, means for rotating said shafts, a multi-step capstan secured to one of said shafts, a multi-step idler sheave rotatably mounted over said other shaft and opposite said multi-step capstan, a second multi-step capstan secured to said other shaft adjacent said idler sheave, and a second idler sheave mounted over said first mentioned shaft adjacent said first mentioned capstan and opposite said second mentioned capstan, each successive step of each of said capstans having a larger diameter than the preceding step, the largest step of said first mentioned capstan substantially opposite the smallest step of said second

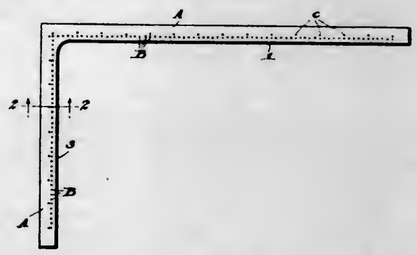


mentioned capstan, and the largest step of said second mentioned capstan more remote from the smallest step of said first mentioned capstan than from any other step of said first mentioned capstan.

1,904,233. PROCESS FOR PRODUCING MAGNETIC BODIES. LOWELL M. HOLLINGSWORTH, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 30, 1932. Serial No. 608,559. 3 Claims. (Cl. 175—21.)

1. The process of making a low loss magnetic body from finely divided magnetic material of the type requiring heat treatment at a high temperature to properly develop its magnetic characteristics, and insulating material, which consists in first applying coatings of said insulating material to the individual particles of the magnetic material, then heat treating the insulated magnetic particles at a high temperature to anneal the magnetic material therein and to remove volatile constituents from the insulating coatings, compressing the resulting insulated particles into the desired form, and then heat treating the compressed body at as high a temperature as the insulating material will withstand without substantial deterioration from an insulating standpoint, to remove the strains produced in the magnetic material in the forming operation.

1,904,234. MEASURING SCALE. HARRIET MORINE HOSKIN and GEORGE CLARENCE HOSKIN, Brookfield, Ill. Filed Aug. 20, 1929. Serial No. 387,179. 4 Claims. (Cl. 33—174.)

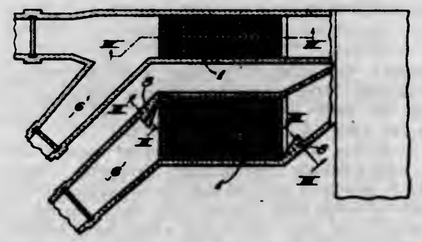


2. A device of the type described comprising an elongated body portion of X-ray permeable substance and a series of pellets of X-ray impermeable material carried by the body portion and disposed in alinement, said pellets being spaced at equal distances apart to form a measuring scale.

1,904,235. METHOD OF IMPROVING CELLULOSE RAW MATERIAL OF ALL KINDS. VALENTIN HOTTENROTH, Mannheim, and OTTO FAUST, Mannheim-Neuostheim, Germany, assignors to Zellstoffabrik Waldhof, Mannheim-Waldhof, Germany. Filed Nov. 12, 1928, Serial No. 319,001, and in Germany Nov. 24, 1927. 2 Claims. (Cl. 92—18.)

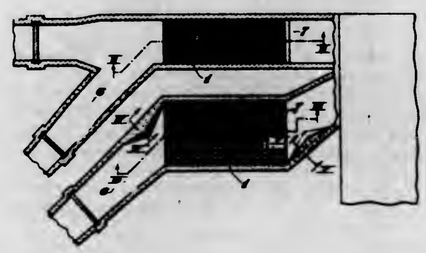
1. The process for improving bleached sulphite cellulose consisting in immersing 100 kgs. of the air-dried sulphite cellulose in 300 litres of 12% soda lye for 2 hours, in pressing off until the material weighs about 300 kgs., in separating the material in fibres and ripening for 5 days at 25° C., and in washing, acidifying and neutralising the material, as set forth.

1,904,236. HEAT REGENERATOR. WILLIAM J. IRWIN, Wilkinsburg, Pa. Filed July 6, 1932. Serial No. 621,118. 5 Claims. (Cl. 263—19.)



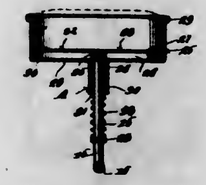
5. The combination of a heat regenerating unit, chambers extending the lengths of the open sides of said unit, and gaseous fluid passageways communicating with one end of each of said chambers at diagonally opposite ends thereof, one or both of said passageways being arranged in a plane parallel to that of the open sides of said unit at an angle to the longitudinal center line thereof and provided with an abrupt obstruction arranged on its side forming an acute angle with said center line and adjacent the unit.

1,904,237. REGENERATIVE CHAMBER. WILLIAM J. IRWIN, Wilkinsburg, Pa. Filed July 6, 1932. Serial No. 621,119. 6 Claims. (Cl. 263—19.)



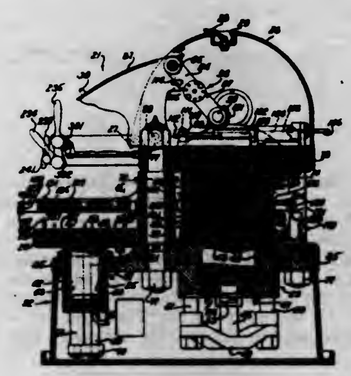
1. The combination of a heat regenerating unit, chambers extending the lengths of the open sides of said unit, and passageways communicating with one end of each of said chambers at opposite ends of said unit, one or more of said passageways being constructed so their surfaces remote from said unit angle theretowards and terminate thereover.

1,904,238. SOAP DISPENSER. WILLIS A. JENNINGS, Chicago, Ill. Filed Oct. 26, 1929. Serial No. 402,665. 2 Claims. (Cl. 45—28.)



1. A soap holder of the character described comprising a standard disposed in a vertical plane, a casing slidably mounted on the standard, a follower plate arranged in the casing and carried by the upper end of the standard, spring means normally urging the casing in one direction on the standard, and means for locking the casing in an adjusted position on the standard.

1,904,239. MOLDING MACHINE. FRED VOLENTINE JOHNSON, Irvington, N. J., ESTYLE DEUCY HANSON, Westmont, Ill., and DANIEL VAUGHN WATERS, Oak Park, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1928. Serial No. 324,812. 13 Claims. (Cl. 18—17.)



1. A molding press comprising a hydraulically movable heating platen, a stationary head associated therewith, a hydraulically movable cooling platen, a tiltable head associated therewith, and a hydraulically operated adjustable toggle connection operable independently of the movable cooling platen for tilting the tiltable head.

1,904,240. MANUFACTURE OF ELECTRIC DETONATORS, PERCUSSION CAPS, AND LIKE ARTICLES. DAVID TREVOR JONES and FREDERICK JOSEPH MOORE, Saltcoats, Scotland, assignors to E. I. du Pont de Nemours and Co., Wilmington, Del., a Corporation of Delaware. Filed Jan. 30, 1929, Serial No. 336,216, and in Great Britain Feb. 2, 1928. 12 Claims. (Cl. 52—4.)



1. Electric detonators, electric fuses, igniters and fuse-heads in which the igniting material includes lead salts of 2-mono-nitro-resorcin of which special cases are the basic, normal and acid salts.

6. Percussion caps and percussion and friction primers containing a mixture of lead salts of 2-mono-nitro-resorcin, these being selected from a group consisting of basic, normal and acid salts.

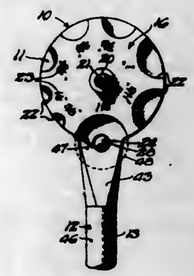
1,904,241. COMPOUND METAL STOCK. ERWIN KAMMERER, Pforzheim, Germany. Filed Aug. 8, 1929, Serial No. 383,271, and in Germany Dec. 31, 1926. 7 Claims. (Cl. 29—181.)



1. A rolled compound metal stock having a layer of an iron-group metal intermediate other adjacent layers respectively of copper-containing metal foundation and silver, to substantially prevent inter-diffusion of such copper-containing metal and silver, when heating the said stock up to enameling and annealing and soldering temperatures, the copper-containing metal constituting a major part of the entire stock, the layer of iron-group metal being resistant to alloying with gold and silver.

1,904,242. CENTER LOCATING DEVICE. HENRY F. KIECKHEAFER, Hammond, Ind. Filed Nov. 4, 1929. Serial No. 404,710. 1 Claim. (Cl. 33—191.)

A center locating device comprising a circular plate, a handle element extending therefrom, a disc rotatably mounted on said plate and having a plurality of recesses of different radii formed therein arranged about its circumferential periphery, said disc having radially arranged indentations on the face thereof contiguous to the plate, a member slidably mounted in said plate and selectively engageable in the indentations to hold the plate and disc relatively immovable with respect to each other, and a punching element slidably mounted in the handle on the



periphery of the disc and adapted to strike the center point in the end of round stock selectively disposed in one of said recesses.

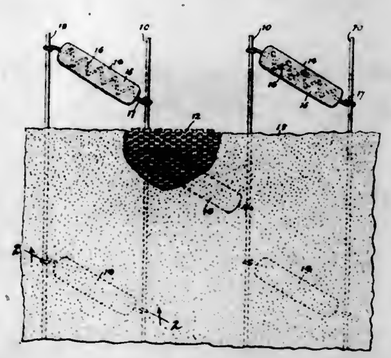
1,904,243. MOLDING POWDER AND METHOD OF MOLDING. MAX LANDECKER, Barmen, Germany. Filed July 11, 1929, Serial No. 377,589, and in Germany May 29, 1928. 6 Claims. (Cl. 18—55.)

1. A process for the manufacture of molded articles from urea-aldehyde condensation products, comprising adding to powdered urea-aldehyde condensation products a quantity of water such that the total water content is not less than about 10%, the water added being insufficient to destroy the powdered character of the mass, and molding the powder under heat and pressure.

1,904,244. PLASTIC MASS AND PROCESS FOR MAKING SAME. MAX LANDECKER, Barmen, Germany. Filed July 11, 1929, Serial No. 377,590, and in Germany June 11, 1928. 8 Claims. (Cl. 260—3.)

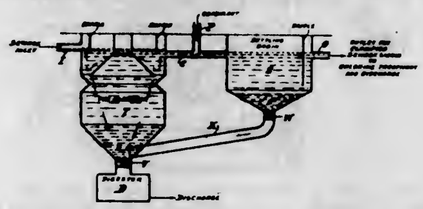
1. A process for preparing plastic masses, comprising reacting urea with the reaction products of an aldehyde and a sulphide capable of liberating hydrogen sulphide or free sulphur upon acidification.

1,904,245. PLASTERING SUPPORT. JAMES OSWALD OLIVER, New York, N. Y. Filed July 30, 1929, Serial No. 382,188. Renewed Aug. 19, 1932. 4 Claims. (Cl. 72—116.)



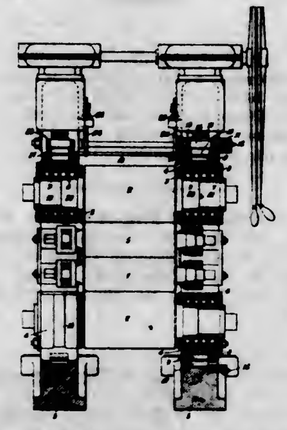
1. The combination with a lath-supporting structure, of a plaster-supporting element supported thereby in abutment with the lath supported by said structure, said element including a plaster-engaging surface to which the plaster may adhere, and reinforcing means extending through said element.

1,904,246. ART OF TREATING SEWAGE. GEORG ORNSTEIN, Berlin, Germany. Filed Dec. 6, 1929, Serial No. 412,093, and in Germany Sept. 10, 1928. 4 Claims. (Cl. 210—2.)



1. The improvement in the art of purification of sewage by coagulants which comprises pre-clarifying the sewage by settling sludge therefrom prior to treatment with a coagulant, combining the aforesaid sludge with chemically precipitated sludge obtained from coagulation treatment and exposing said combined sludges to a common digestion treatment effective upon the intermixed sludges in a state of liquid consistency during the course of the said digestion treatment.

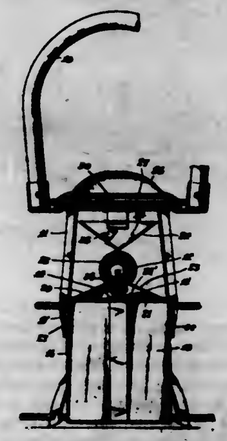
1,904,247. BEARING MOUNTING. PER GUNNAR PALMGREN, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Nov. 26, 1929, Serial No. 409,788, and in Germany May 28, 1929. 4 Claims. (Cl. 308—22.)



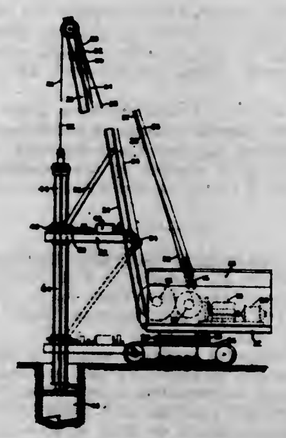
1. A bearing mounting comprising a housing and a support therefor, one of these members being formed with a recess having a bottom face, a hardened member projecting into such recess and having a face engaging such bottom face, one of such faces being plane and the other being convex, the faces being in rolling engagement and adapted to transmit radial load, and the side face of the projecting member engaging the wall of the recess for transmitting thrust loads.

1,904,248. LANTERN. JUDSON S. PIXLEY, New York, N. Y., and MARTIN BENDER, Glen Ridge, N. J., assignors to Armspear Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1929. Serial No. 409,606. 7 Claims. (Cl. 240—10.63.)

1. A lantern provided with a handle, a supporting frame, a lamp within said frame, a circular reflector around said lamp, a battery below said lamp, one terminal of said battery being connected to one lamp terminal, the other lamp terminal being grounded to said reflector and means between the other terminal of said battery and reflector for completing or opening the circuit through said lamp to light the same in response to movement of said battery relative to said reflector, and said means including a container for said battery, a rotatable connection mechanically securing said container to said reflector, a metal portion within said reflector and recessed to be out of contact with both battery terminals in one position of adjustment of said connection between the reflector and container and in electrical contact with one of said battery terminals in another position of adjustment of said mechanical connection, said mechanical connection including a pin and slot on opposite sides of said reflector and container, and yieldable means for retaining said pin within its slot.



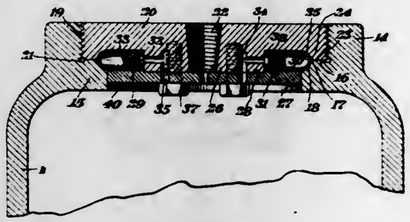
1,904,249. EARTH BORING APPARATUS. CHARLES L. POWELL, New York, and HERMAN R. SMITH, Douglaston, N. Y., assignors to Caisson Contracting Company, New York, N. Y., a Corporation of Delaware. Filed May 6, 1932. Serial No. 609,668. 8 Claims. (Cl. 255—22.)



1. Apparatus for boring into the ground with rotary tools, comprising in combination; a crane having a non-rotatable ground-gripping structure with a rotatable

structure mounted thereon; means for rotating rotary tools; and means on the ground-gripping and rotatable portions of said crane for operatively supporting the rotating means on either at the will of the operator.

1,904,250. AUTOMATIC PRESSURE SEALING MEANS. HARRY H. PURVIS, Port Jefferson, N. Y., assignor to Pure Carbonic Company of America, a Corporation of Delaware. Filed Apr. 27, 1932. Serial No. 607,687. 9 Claims. (Cl. 220—46.)



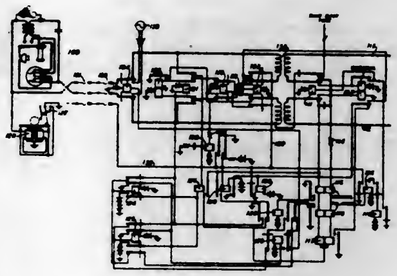
1. In a pressure tank, a mouth therefor, a machined shoulder around the inside of said mouth, a small bevel at the end of said shoulder, a filleted surface leading from said bevel, a screw plug to close said mouth, a shoulder, a bevel and a filleted surface on the underside of said plug to register with the corresponding parts in said mouth, said filleted surfaces completing a semicircle except for a recess produced by the two bevels, a central hub on the underside of said plug, a U-shaped rubber gasket of uniform thickness surrounding said hub, a ring of rectangular cross-section inserted between the sides of said gasket and closely fitting around said hub, a locking plate fitting in the opening in the mouth of the tank and forming a flange running from the edge of the lower filleted surface to the hub, said flange forming a chamber with the underside of the plug and the filleted surfaces which is filled exactly by the gasket, said plate clamping the sides of the gasket in immovable pressure tight position, an opening in said plate communicating with an opening in said plug, an annular recess on the inner side of the ring registering with the aforementioned opening, a radial hole through said ring, and a discharge opening through said plate and said plug.

1,904,251. PAPER MANUFACTURE. HAROLD ROBERT RAFTON, Andover, Mass., assignor to Raffold Process Corporation, a Corporation of Massachusetts. Filed Apr. 29, 1931. Serial No. 533,872. 43 Claims. (Cl. 92—21.)

1. In a method of manufacturing paper filled with alkaline filler wherein material is added to a paper mix under conditions favoring the minimizing of the time and/or intimacy of contact of the constituents of the mix, the step of adding to said mix a non-acid aluminum compound.

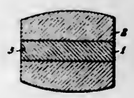
1,904,252. TELEPHONE SYSTEM. THEODORE D. ROBB, Ridgewood, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1932. Serial No. 599,652. 8 Claims. (Cl. 179—6.3.)

1. In a telephone exchange system, a calling line, a coin box thereon, an operator's position, means including a trunk circuit for extending a connection from said line to said operator's position, said trunk circuit being inductively divided into a plurality of sections, a coin box control key at said operator's position, a first relay controlled over the incoming section of said trunk circuit from said key, a second relay in the outgoing section of said trunk circuit, means controlled by said second relay for applying coin box operating current to said coin box, a source of booster current and a source of operating current at the incoming end of said trunk circuit and means



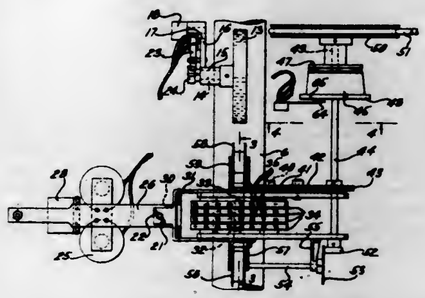
controlled by said first relay for applying said sources of current accumulatively over the outgoing section of said trunk circuit for operating said second relay.

1,904,253. BEARING ROLLER. PATRIK SAMUEL RYDBECK, Gottenborg, Sweden, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed July 10, 1930, Serial No. 467,042, and in Sweden July 11, 1929. 4 Claims. (Cl. 308—215.)



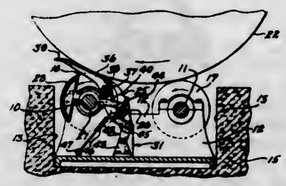
1. As an article of manufacture, a roller for a roller bearing comprising a core formed of steel having a center punch and a surrounding layer formed of steel presenting a sharp division between itself and the core for the purpose of preventing the rise and spread of cracks from the center punch.

1,904,254. APPARATUS FOR MARKING STRAND MATERIAL. DE HART G. SCRANTOM, Maplewood, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1929. Serial No. 396,127. 13 Claims. (Cl. 101—73.)



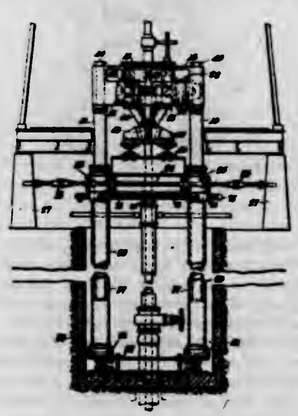
1. A strand measuring apparatus comprising an embossed printing tape, a hammer associated therewith, and means controlled by the strand for causing the hammer to strike the tape for printing a designation on the strand.

1,904,255. DEVICE FOR HANDLING REELS. GEORGE ALLEN SHELBY, Irvington, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 4, 1928. Serial No. 282,729. 8 Claims. (Cl. 242—66.)



8. In an apparatus for handling reels, a roller for peripherally engaging and driving a reel, a rotatable member movable about the center of the roller, a wedge member pivoted to the rotatable member movable about the periphery of the roller, and pivoted means for wedging the wedge member between the peripheries of the reel and the roller to disengage the reel from the roller.

1,904,256. DRILLING MACHINERY. WALDO SHELDON, South Norwalk, Conn. Filed Jan. 8, 1932. Serial No. 585,473. 20 Claims. (Cl. 255—22.)

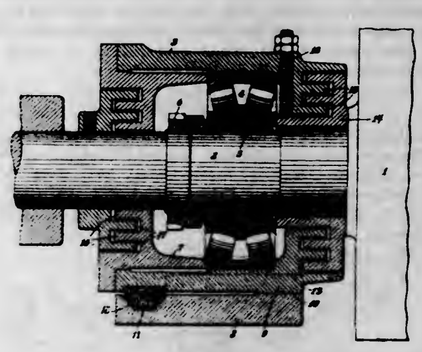


1. In combination, hydraulic power cylinders, a supporting head operated thereby, a rotary drilling machine mounted on said head and set in the head with the rotary table of the same above the top of the head and a drive motor for the table set down in the head below the top of the same and connected in driving relation with the table.

1,904,257. SUPERSATURATED CALCIUM GLUCONATE SOLUTION. ARTHUR STOLL and ERNST ROTHLIN, Basel, Switzerland, assignors to the Firm of "Chemical Works formerly Sandoz," Basel, Switzerland. Filed Oct. 16, 1929, Serial No. 400,157, and in Germany Oct. 29, 1928. 1 Claim. (Cl. 167—68.)

As new composition of matter, clear, stable, sterile and supersaturated aqueous calcium gluconate solutions, containing 4–10% of calcium ginconate and such therapeutically useful compounds, that are heat insensitive and incapable of reacting with calcium gluconate, which solutions possess excellent therapeutical properties and may be used for intramuscular injections free from irritation of the tissues.

1,904,258. BEARING MOUNTING. GUNNAR WISTRAND, Berlin, Germany, assignor to Aktiebolaget Svenska Kullagerfabriken, Gottenborg, Sweden, a Corporation of Sweden. Filed Jan. 20, 1930, Serial No. 422,012, and in Germany Apr. 23, 1929. 4 Claims. (Cl. 308—22.)



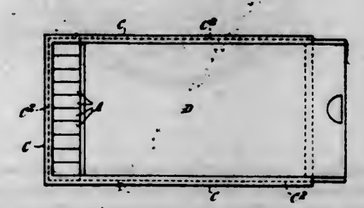
1. A bearing mounting comprising a housing, a bearing in the housing, there being a fulcrum rigidly formed on the housing and disposed transversely of the bearing axis and located at one side of the central radial plane of the bearing, a base plate having rigid parts for supporting the fulcrum on a fixed axis and other rigid parts for engaging and supporting the housing at the other side of said central plane when the arts are in their normal positions.

1,904,259. JEWEL AND SETTING THEREFOR. LUCIAN M. ZELL, Essex County, N. J. Filed Mar. 19, 1931. Serial No. 523,670. 11 Claims. (Cl. 63—26.)



1. As a new article of manufacture, cut precious or semi-precious stones having a faceted surface and mounting means integral with and extended laterally beyond and formed from the body of the stone, said faceted surfaces being extended adjacent said mounting means without interference with the brilliancy of the stones.

1,904,260. BRUSH. SHOZABURO AKI, Mill Hill, London, England. Filed Dec. 7, 1932, Serial No. 646,172, and in Great Britain Nov. 16, 1931. 3 Claims. (Cl. 15—202.)



1. A detachably assembled brush comprising a frame having side walls and a removable top wall, the bottom of said frame being open, the inner lower surface of cer-

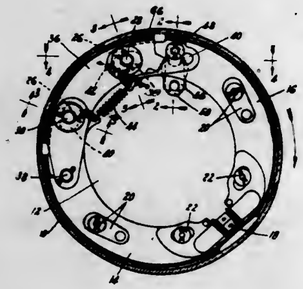
tain of said side walls being provided with inwardly projecting flanges, a plurality of elongated separable bristle-carrying units having their end portions formed to cooperate with the inwardly projecting flanges of the side walls of the frame, said units being positioned in parallel arrangement in said frame with the bristles projecting through the opening in the bottom of said frame, said removable cover and the inwardly projecting flanges of the side walls of the frame cooperating to retain the bristle-carrying units in assembled relation.

1,904,261. INDIRECTLY HEATED CATHODE. LESLIE HERBERT BEDFORD, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 16, 1931, Serial No. 522,841, and in Great Britain Aug. 1, 1930. 8 Claims. (Cl. 250—27.5.)



3. An indirectly heated cathode for an electron discharge device comprising a twin bore insulating tube, a hairpin heater element having crimp portions exerting expansional force on the inner walls of said twin bore tube, and a metallic electron emitting sleeve exerting compressional force on the outer wall of said insulating tube.

1,904,262. BRAKE. VINCENT BENDIX, Chicago, Ill., and LUDGER E. LA BRIE, South Bend, Ind.; said Bendix assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Oct. 5, 1927. Serial No. 224,085. 16 Claims. (Cl. 188—78.)



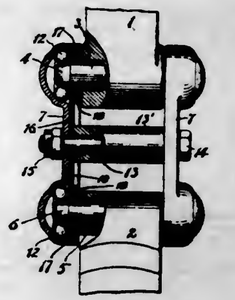
1. A brake comprising, in combination, a drum, friction means including at least three shoes engageable with the drum and shiftable to anchor at one end when the drum is turning in one direction and at a point intermediately arranged between its ends when the drum is turning in the other direction, and applying means engaging said ends.

1,904,263. NUT AND WASHER ASSEMBLY. JOSEPH BENDA, Montclair, N. J., assignor to The National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed July 13, 1931. Serial No. 550,426. 4 Claims. (Cl. 151—37.)



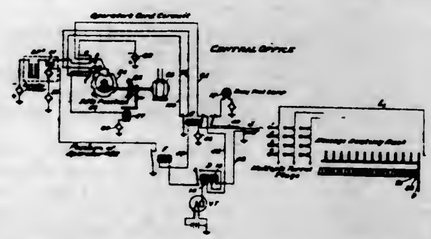
1. In combination, a bolt nut, a crown nut within which said bolt nut is fixed, a washer disposed within the crown nut adjacent said bolt nut, and means on the crown nut engaging said washer and holding it against removal from the crown nut.

1,904,264. SPRING SHACKLE. WILLIAM C. BETZ, New Britain, Conn., assignor to The Fafnir Bearing Company, New Britain, Conn., a Corporation of Connecticut. Original application filed Oct. 28, 1924, Serial No. 746,328. Divided and this application filed Sept. 11, 1930. Serial No. 481,084. 21 Claims. (Cl. 267—54.)



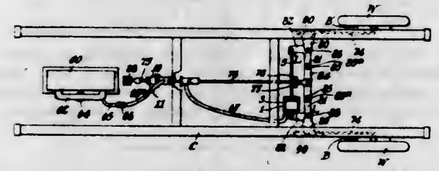
1. In an anti-friction spring shackle, a pair of shackle links each having spaced apart bearing raceways formed directly thereon, anti-friction bearing members on said raceways, means to be carried by a frame and spring and having raceways complementary to said first mentioned raceways and engaging said anti-friction bearing members thereon, and a plate for each of said shackle links and having parts extending over said anti-friction bearing members of each of said raceways on said link.

1,904,265. AUTOMATIC OPERATOR INDICATOR FOR BUSY LINES AT CENTRAL OFFICES. WILLIAM B. BLANTON, Merrick, N. Y., assignor to The Western Union Telegraph Company, New York, N. Y., a Corporation of New York. Filed Sept. 30, 1931. Serial No. 566,096. 7 Claims. (Cl. 178—2.)



1. In an intercommunication system embodying a central office and a plurality of branch offices, a line from each branch office terminating at said central office, multiplied jacks or plugs for each line located at a number of turrets or operators' positions, a message routing or distributing center, indicating devices at said center corresponding to each line, and means operating automatically in response to the seizure of a line to cause the corresponding indicator to display a signal designating the particular operator seizing the line.

1,904,266. BRAKE MECHANISM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,444. 7 Claims. (Cl. 188—152.)



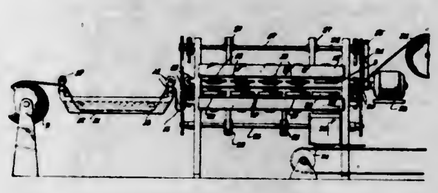
5. In a brake system for automotive vehicles, the combination with brake mechanisms for a pair of wheels disposed oppositely to each other transversely of the vehicle, of a power actuator comprising a cylinder and piston, both movable with respect to each other and with respect to the vehicle, connections from the cylinder to brake mechanism for one of said wheels, connections from the piston to brake mechanism for the other of said wheels, controlling valve mechanism for the actuator, provided with relatively movable parts having a limited movement with respect to each other, means for establishing differential fluid pressures on opposite faces of said piston and said cylinder under the control of said valve mechanism, an operator operated part, connected with one of said relatively movable valve parts, connections from the other of said relatively movable valve part to said brake mechanisms, including equalizing means, and a single adjusting device in said last mentioned connections interposed between said equalizing means and the valve part connected therewith.

1,904,267. BRAKE SYSTEM FOR AUTOMOTIVE VEHICLES. CALEB S. BRAGG, Palm Beach, Fla., and VICTOR W. KLIESRATH, Port Washington, N. Y., assignors to Bragg-Kliesrath Corporation, Long Island City, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 350,744. 24 Claims. (Cl. 188—152.)



1. In a brake system for automotive vehicles provided with an internal combustion engine having a throttle controlled suction passage, the combination with main and at least one auxiliary power actuator, each comprising a cylinder and piston, means for connecting said pistons with brake mechanisms, a separate suction line for each cylinder for connecting it with the said suction passage, a main controlling valve mechanism for controlling the operation of said main and auxiliary actuators for joint operation, separate valve mechanism for controlling the auxiliary actuator, and independent physically operable parts for operating said valve mechanisms.

1,904,268. METHOD FOR THE MANUFACTURE OF FORMED ARTICLES. FRED L. BRONSON, New York, N. Y. Filed Mar. 8, 1932. Serial No. 597,585. 18 Claims. (Cl. 18—56.)



1. The method of forming an article which comprises moistening sheet material, heating and pressing the moist sheet to form the article in substantially its final shape, permitting the escape of the vapor formed thereby, and again heating and pressing the article to more completely shape and dry same.

1,904,269. MANUFACTURE OF LOW BOILING TAR ACIDS. SOLOMON CAPLAN, Brooklyn, N. Y., assignor to Combustion Utilities Corporation, New York, N. Y., a Corporation of Maine. Filed Sept. 29, 1926. Serial No. 138,571. 8 Claims. (Cl. 260—154.)

1. The process for converting high boiling tar acids into tar acids of lower boiling point, which comprises contacting vapors of the former with a large molar excess of steam at an elevated temperature ranging from 600° C. to 800° C., adapted to facilitate the said conversion reactions, in the absence of solid materials reacting with steam to generate hydrogen, and collecting the reaction products.

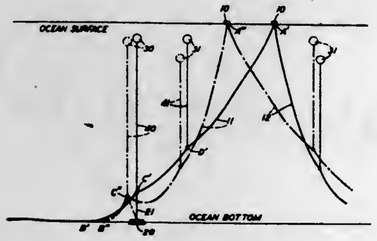
1,904,270. ICE SKATE. ODILON CHARETTE, Fitchburg, Mass. Filed Apr. 29, 1932. Serial No. 608,278. 4 Claims. (Cl. 208—167.)



1. In a skate, a blade holder having parallel longitudinal blade-straddling flanges and a longitudinal plane straight horizontal abutment face between the upper portions of said flanges, a skate blade snugly received between said flanges and having a straight plane upper edge contacting with said abutment face, and bolts passing through

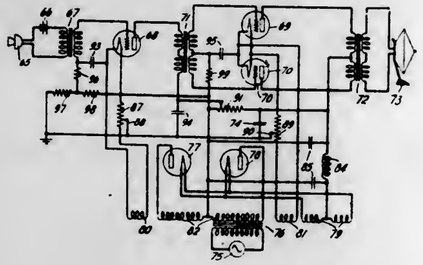
said flanges, said blade being provided with slots opening through its upper edge and receiving said bolts, said slots being directed upwardly and forwardly and provided with rearwardly inclined walls lying on the upper sides of said bolts, whereby the opposing forces acting on said blade holder and said blade during skating, tend to wedge said blade into tight engagement with said abutment face.

1,904,271. SUBMARINE CABLE ANCHORAGE. CHARLES A. CHASE, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1931. Serial No. 583,221. 4 Claims. (Cl. 178—1.)



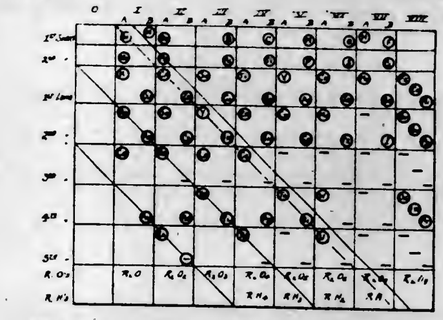
1. A signaling cable on the ocean bottom having a portion thereof raised from the ocean bottom, a float connected to said portion near the ocean bottom at a point which is always off the bottom and anchoring means on the ocean bottom connected to a point on the cable near the connection of said float to reduce the movement of said cable with respect to the ocean bottom.

1,904,272. VACUUM TUBE AMPLIFIER CIRCUIT. VAN METER COUSINS, Lyndhurst, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1928. Serial No. 259,845. 4 Claims. (Cl. 250—27.)



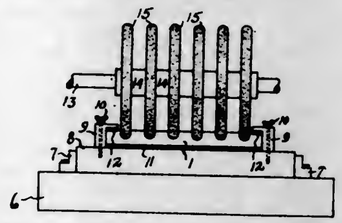
1. In a tandem stage amplifier, each stage including a space discharge tube having a cathode, an anode and a grid or the equivalent, means for energizing the cathodes by alternating current, a common source of space current for said stages, separate means in the respective stages for deriving from the cathode energizing means and applying to the respective cathode-anode circuits alternating voltages sufficient to compensate the effect on the anode current of the alternating cathode-energizing current, and means in each cathode-anode circuit permitting space current voltage to be supplied to the several stages from said common source but preventing the alternating current that is applied to one cathode-anode circuit from affecting other stages.

1,904,273. METHOD OF PRODUCING AN ARTICLE OF MANUFACTURE. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Co., Inc., East Orange, N. J., a Corporation of New Jersey. Filed Jan. 14, 1929. Serial No. 332,555. 2 Claims. (Cl. 25—156.)



1. The method which consists in reducing a metal to powder, subjecting the powdered metal to a heat below the fusion point of the metal, then extruding the powder to solidify the same and finally baking the solidified mass.

1,904,274. GRINDING APPARATUS. HENRY L. CROWLEY, East Orange, N. J., assignor to Henry L. Crowley & Company, Inc., West Orange, N. J., a Corporation of New Jersey. Filed Apr. 9, 1931. Serial No. 528,729. 3 Claims. (Cl. 51—74.)



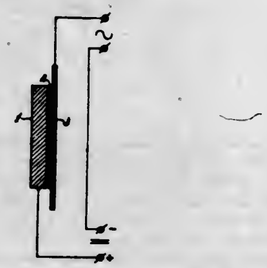
1. A jig of the type described comprising a plate, a pair of parallel L-shaped bars releasably secured along the edges of said plate, a resilient cushion on said plate between said bars, and resilient cushions on the flanges of said bars.

1,904,275. BRIDGING BLOCK FOR WELLS. BERNARD H. DAVIS, Fullerton, Calif. Filed Nov. 28, 1932. Serial No. 644,734. 7 Claims. (Cl. 166—13.)



1. In a bridging block for wells, a body comprising two sections movable to occupy expanded and contracted positions, a wedge between the sections with its apex disposed upwardly to force said sections to expanded position and lock them within a well casing, means on the wedge to normally engage the walls of the well casing and prevent downward movement of the wedge with respect to the casing, and means to hold said first mentioned means out of engagement with the walls of the casing during the positioning of the bridging block.

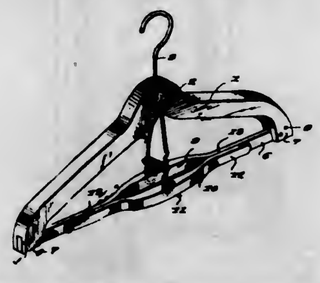
1,904,276. DRY RECTIFIER. JAN HENDRIK DE BOER, WILLEM CHRISTIAAN VAN GEEL, and HENDRIK EMMENS, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabriken, Eindhoven, Netherlands. Filed Jan. 22, 1931, Serial No. 510,581, and in the Netherlands Mar. 7, 1930. 6 Claims. (Cl. 175—366.)



1. A dry rectifier having a cathode and an anode, in which the anode consists substantially in part of phosphorus and the cathode consists of a film-forming material having a higher conductivity and greater emissive power than phosphorus.

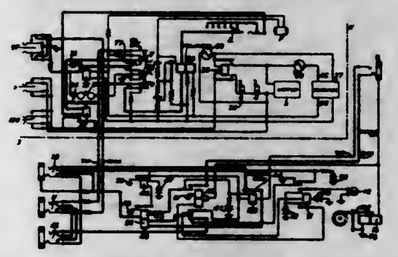
4. A dry rectifier having a cathode and an anode, in which the anode consists substantially in part of red phosphorus and the cathode consists of a film-forming material having a higher conductivity and greater emissive power than red phosphorus.

1,904,277. COAT AND TROUSER HANGER. ROMEO A. DE BUCCI, Providence, R. I. Filed Apr. 11, 1932. Serial No. 604,541. 1 Claim. (Cl. 223—68.)



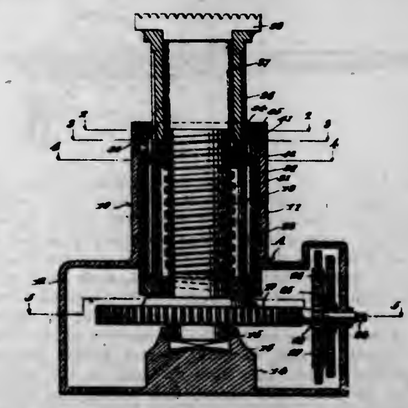
A hanger of the class described comprising a coat hanger member, a stationary clamping jaw extended between the ends of said coat hanger member, an adjustable clamping jaw provided with laterally extending substantially aligned arms adapted to be brought into clamping engagement with said stationary clamping jaw, a supporting spring member, said coat hanger member provided with a socket, a loop portion formed upon said spring member snugly fitting in said socket, said spring member provided with a stationary leg having a loop formed at the end thereof extending at right-angles to said first mentioned loop, and engaging said stationary jaw whereby the spring member will be firmly clamped between the stationary jaw and the coat hanger, said spring member provided with a spring adjustable arm having corrugations formed upon the length thereof, the terminals of said spring adjustable arm being provided with a loop extending at right angles to said first-mentioned loop, said adjustable jaw provided with a socket for receiving said loop formed on the terminal of said adjustable arm, and a clamping link slidable over said stationary and adjustable arms of said spring member.

1,904,278. MESSAGE REGISTER CIRCUIT FOR TELEGRAPH EXCHANGES. ALLAN B. DICKINSON, Brooklyn, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 27, 1932. Serial No. 589,196. 16 Claims. (Cl. 178—2.)



1. A telegraph exchange system comprising a central office and a plurality of subscribers' telegraph printer stations any two of which stations may be connected through said central office as desired, and including means, under control of the central office attendant, whereby apparatus at an unattended subscriber's station may be set into operation in order to record a message transmitted through said central office by a second subscriber, characterized in this, that means individual to said second subscriber's station are provided for registering each connection completed from his station to an unattended station.

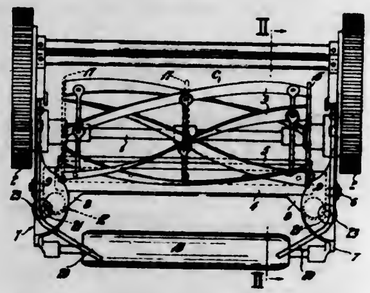
1,904,279. LIFTING JACK. JOSEPH F. DONNELLY, South Bellingham, Wash. Filed Mar. 7, 1931. Serial No. 520,901. 1 Claim. (Cl. 254—102.)



A lifting jack comprising a jack body, a ram including inner and outer telescoping sections, mounted within the body, means for preventing turning movement of the outer section in the body, means for preventing turning movement of the inner section relative to the outer section, a single jack screw, means for rotating the jack screw, a feed nut threaded on the jack screw engaging the inner section, the feed nut and outer section having a bayonet slot and pin connection, with the lateral end of the bayonet slot disposed uppermost, whereby the pin of the feed nut will ride into said lateral section of the bayonet slot when

the inner section has been raised to an extreme position relative to the outer section, and a feed nut carried by the outer section for engagement with the feed screw upon the raising of the outer section by the first mentioned feed nut.

1,904,280. LAWN MOWER. THOMAS JUTSON EDWARDS, Hawthorn, Victoria, Australia. Filed Mar. 6, 1930, Serial No. 433,771, and in Australia July 17, 1929. 4 Claims. (Cl. 56—294.)



1. A lawn mower comprising a frame, a rotary cutter mounted on said frame, a knife pivotally mounted on said frame adapted to cooperate with said rotary cutter to produce a cutting action, a bearing surface on said frame, a telescopic casing having one portion rigidly fixed to and movable with said pivoted knife, a second portion telescopically engaging the first portion, and a spring in the casing for urging the second portion of the telescopic casing into contact with the bearing surface and for urging the pivoted knife into contact with the rotary cutter.

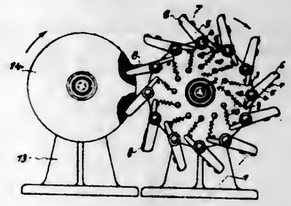
1,904,281. AIRCRAFT. CORNWALLIS D. ELLINGSTON, Great Falls, Mont., assignor of one-half to Albert E. Schwingel and William H. Bertsche, Great Falls, Mont. Filed Mar. 22, 1932. Serial No. 600,507. 3 Claims. (Cl. 244—12.)



1. In an aircraft, a fuselage, a main plane thereon having a stationary intermediate section and outer movable sections, feed screws rotatably supported in the fuselage transversely thereof and having reversely threaded end portions, telescopic fittings arranged in the intermediate and outer sections of the main plane, nuts fixed to the outer sections at their inner ends and threaded on the end portions of one feed screw, hangers carried at opposite sides of the fuselage below the intermediate section, wheel forks hinged to said hangers, ground wheels journaled in said wheel forks, feed nuts threaded on the end portions of the other feed screw, link connections between the last mentioned feed nuts and the forks, and connections between the feed screws for simultaneous operation thereof.

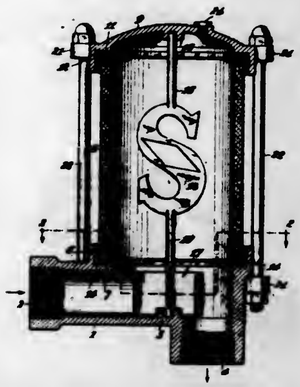
1,904,282. POLISHING APPARATUS, SPECIALLY FOR KNIVES, FORKS, AND SPOONS. ROBERT EAU, Solingen, Germany. Filed May 29, 1930, Serial No. 457,457, and in Germany June 3, 1929. 2 Claims. (Cl. 51—106.)

1. An apparatus for polishing articles, such as knives, forks, spoons or the like, comprising in combination a rotating flexible laminated polishing wheel, a turret like article carrying disc disposed adjacent said wheel and adapted to rotate at a slower speed than said wheel and to present said articles to said wheel, oscillatable levers pivoted to said disc and adapted to project beyond the rim thereof, article carrying members pivoted to said levers for movement in planes perpendicular to the plane of said disc, spring means connecting said disc with said levers and adapted to urge said levers toward their initial extended positions, stops on said disc for holding said



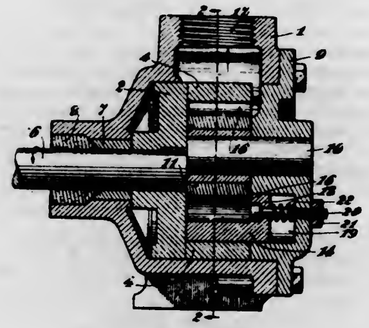
levers in said extended positions, resilient means for urging said article carrying members toward positions transverse to the plane of said disc, said disc and said wheel being so closely disposed with relation to each other that said articles are adapted to be embedded to some extent within the surface of said wheel, whereby the frictional contact will cause said levers and said members to yield so as to present said articles to said wheel at varying angles both within the plane of said disc and perpendicularly thereto, thus effecting the gradual transformation of transverse polishing to longitudinal polishing.

1,904,283. FLOW INDICATOR. CHARLES D. FAGAN, Sharon, and REHL W. SWANK, Sharpsville, Pa., assignors to Sharpsville Boiler Works Co., Sharpsville, Pa., a Corporation of Pennsylvania. Filed June 2, 1931. Serial No. 541,628. 2 Claims. (Cl. 116—117.)



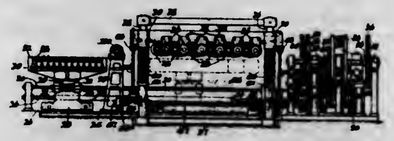
1. A flow indicator comprising a transparent walled chamber, a shaft extending into said chamber, a substantially flat advertising symbol visually mounted on said shaft with the axis of said shaft extending through the axis of said symbol, a bladed rotor mounted on said shaft, an inlet conduit to direct liquid against the blades of said rotor in a direction substantially at right angles to the axis of the rotor to cause said rotor to rotate when liquid is flowing from said inlet conduit, and an outlet conduit having an axis substantially parallel to the axis of rotation of the rotor and with the blades of said rotor moving in a path directly over the mouth of said outlet conduit so that an increased flow of liquid into said outlet conduit increases the resistance to the rotation of said rotor to compensate for the tendency of said rotor to speed up under increased flow of liquid through said device, said transparent walled chamber being in free communication with said inlet and outlet conduits.

1,904,284. PUMP. CHARLES D. FAGAN, Sharon, and REHL W. SWANK, Sharpsville, Pa., assignors to Sharpsville Boiler Works Co., Sharpsville, Pa., a Corporation of Pennsylvania. Filed Aug. 26, 1931. Serial No. 559,882. 4 Claims. (Cl. 103—126.)



1. A liquid pump of the eccentric type comprising a casing provided with an inlet port and an outlet port, a pair of eccentrically mounted pump elements adapted to intermesh for pumping action, a crescent shaped partition between said pair of eccentrically mounted pump elements, and pressure operated means to move said partition endwise to relieve the pumping action of both of said elements when the pressure in the outlet port exceeds a predetermined amount.

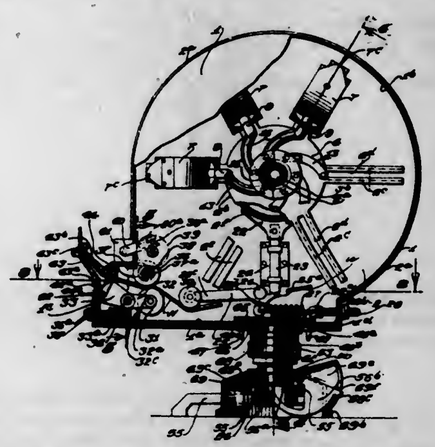
1,904,285. METHOD AND MACHINERY FOR THE MANUFACTURE OF ACOUSTICAL BOARD AND THE LIKE. FRANCIS S. FARLEY, Trenton, N. J., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 7, 1929. Serial No. 391,088. 12 Claims. (Cl. 164—62.)



11. The method of fabricating acoustical material having its surface broken by sets of parallel channels, the sets being angularly disposed with respect to each other so as to form a recurrent pattern, which comprises moving the material transversely relative to a plurality of channel-cutting means so as to cut a plurality of channels comprised in one of said sets, automatically changing the angular position of the board to a predetermined position in the transverse plane to correspond with the angular relationship between parallel sets of channels, and cutting a plurality of channels comprised in another of said sets.

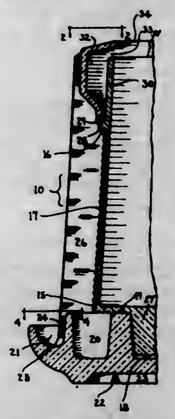
1,904,286. WIRE REEL. EDWARD M. HARRIS, San Diego, Calif. Filed May 9, 1930. Serial No. 451,011. 10 Claims. (Cl. 242—118.)

1. In a device of the class described, a reel mechanism for receiving a previously wound coil of wire, a brake means normally engaging said reel mechanism, guide means for receiving an end of said coil of wire, a release means for said brake means disposed between said guide means and said coil of wire, said guide means adapted to cause said wire to pass said release means, whereby said wire upon the application of tension thereon, actuates



said release means, said reel mechanism comprising a plurality of radially disposed wire receiving cages substantially encircling spaced apart portions of the annulus formed by said coil of wire, means for shifting said cages radially, and means for opening said cages.

1,904,287. SUPPORT FOR PARASITIC GROWTHS. PAUL W. LEFFLAND, Arlington, Tex. Filed Dec. 26, 1930. Serial No. 504,837. 7 Claims. (Cl. 47—38.)

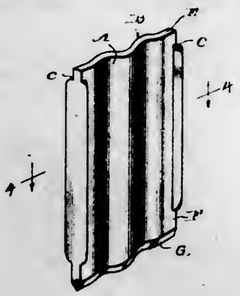


1. A flower vase comprising a waterproof base provided with a recess, a center part formed of porous material provided with an integral projection to fit said recess and with a corrugated outer surface, and an integral upper glazed portion, the lower part of said glazed portion being provided with an annular outwardly projecting flange.

1,904,288. FLANGED CORRUGATED FASTENER. JOHN SHERMAN MCCHESNEY, Chicago, Ill. Filed Apr. 26, 1929. Serial No. 358,297. 1 Claim. (Cl. 85—11.)

A fastener comprising a central relatively thin web longitudinally corrugated throughout its entire length and having a sharpened penetrating edge extending entirely across one end and a driving surface perpendicular to

the axis of the web extending entirely across the other end, sharp thin smooth holding flanges projecting laterally from both sides of the web along the opposed longi-



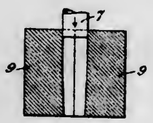
tudinal edges thereof, the outer edges of the flanges being parallel with each other and in line with the edges of the web and terminating intermediate the ends of the web.

1,904,289. METHOD OF MANUFACTURING ARTICLES FROM CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, and WILLIAM MENDEL, Beverly, N. J. Filed Mar. 13, 1929. Serial No. 346,786. 1 Claim. (Cl. 18—51.)



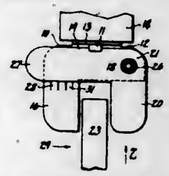
The method of forming an article of cellulosic material presenting a mosaic pattern at its outer surface, which consists in selecting a piece of said material of a uniform color desired for some elements of the mosaic pattern; masking, with a coating insoluble in any solvent of said material, selected areas in spaced relation on said surface which are to remain of that color; subjecting the unmasked areas of said surface to the action of a solvent of said material, having a high boiling point and low volatility; and subjecting unmasked areas in spaced relation on said surface to the action of a dye to which said material is normally resistant, but is rendered quickly permeable by the action of said solvent; wherein the solvent is mixed with carbon tetrachloride.

1,904,290. MANUFACTURE OF TAPERED TUBES OF CELLULOID AND THE LIKE. SAMUEL A. NEIDICH, Edgewater Park, N. J. Original application filed Jan. 18, 1929, Serial No. 333,353. Divided and this application filed Apr. 17, 1930. Serial No. 444,951. 2 Claims. (Cl. 18—51.)



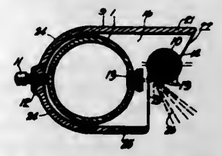
1. The method of making a tapered tube of celluloid and the like, open at both ends, which includes moistening a sheet of such material with a solvent thereof; rolling such sheet to a cylindrical tubular form of uniform diameter and thickness of wall; distorting an end portion of the cylindrical wall of said tube to conical form, by constricting it, while it is in a softened state, but without increasing the length of said primarily formed tube; whereby the thickness of the wall of said conical portion is increased by said constricting operation.

1,904,291. LATCH FOR GATES AND THE LIKE. VIVIAN W. NEILSON and CLARENCE C. NEILSON, Trout Creek, Utah. Filed Jan. 21, 1930. Serial No. 422,311. 7 Claims. (Cl. 292—67.)



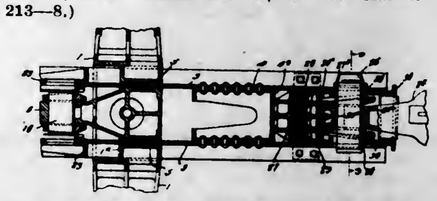
2. A gate latch, including in combination, a bracket having a shelf, a stop abutment projecting from said shelf, a latch member having a gate-engaging bar spaced apart from and positioned in opposition to said stop abutment, a stem substantially integral with said gate-engaging bar, a pivot member associated with said shelf and said latch member, a spring operative to press said latch member and said shelf together, and a retaining lug projecting from said shelf, said retaining lug being normally in front of said stem.

1,904,292. SPRINKLING DEVICE. LEE NORMAN DUNCAN, Oklahoma City, Okla. Filed Sept. 8, 1931. Serial No. 561,663. 4 Claims. (Cl. 299—126.)



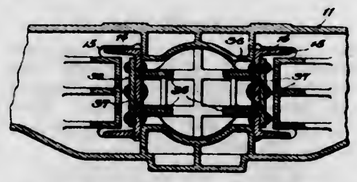
2. In a sprinkling device the combination of, a shield and housing for a roller, a cylindrical, rotating, eccentric roller journaled in said housing, renewable axle and sleeve means for holding and positioning said roller within said housing, supply pipe and nozzle means for discharging water upon said roller, a set screw on said shield for alining said roller and said nozzle whereby a jet of water from said nozzle is deflected in successive waves uniformly over a desired area by said eccentric roller.

1,904,293. CAR CONSTRUCTION. OTHO C. DURYEA, Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 5, 1926. Serial No. 79,449. 19 Claims. (Cl. 213—8.)



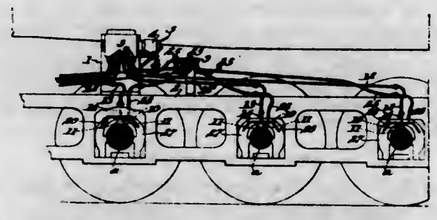
14. In a railway car, a body structure including a bolster, a long travel draft member extending substantially the length of the structure and mounted for longitudinal movement relative thereto, said draft member extending through said bolster, means for yieldingly resisting said relative movement whereby excessive forces imparted to the center member are gradually resisted without damage to the car structure, and means including a coupler operatively connected to said draft member for securing train slack, said coupler being adapted to movement in both directions from a normal position relative to said center member, and means for yieldingly resisting movement of the coupler relative to the center member, the movement of the draft member relative to the car structure being greater than the movement of the coupler relative to said draft member.

1,904,294. CAR CONSTRUCTION. OTHO C. DURYEA, Waterbury, Conn., assignor to O. C. Duryea Corporation, Wilmington, Del., a Corporation of Delaware. Filed Jan. 29, 1926. Serial No. 84,787. 29 Claims. (Cl. 213—8.)



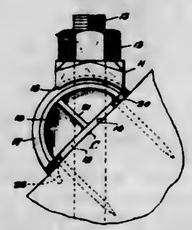
2. A railway car comprising a plurality of transverse members including a bolster, a long travel center member extending substantially the length of the car and mounted for longitudinal movement relative to said bolster, coupler means operatively connected to said center member, and means including a plurality of resilient members extending from a point adjacent the inner end of the coupler shank of said coupler means to said bolster for resisting said relative movement.

1,904,295. LUBRICATION ASSEMBLY. FRANK W. EDWARDS, Chicago, Ill., assignor to The Ohio Injector Company of Illinois, Chicago, Ill., a Corporation of Illinois. Filed June 6, 1930. Serial No. 459,573. 3 Claims. (Cl. 184—7.)



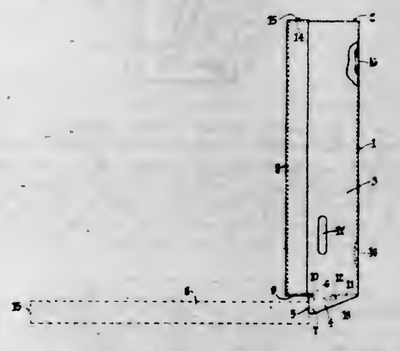
1. In a lubrication assembly, a lubricator, a plurality of members to be lubricated each having a radial bearing and a thrust bearing, a plurality of lubricant feeds provided by said lubricator, one of such feeds connected with each of said radial bearings, a distributor, one of such feeds connected to said distributor, and a plurality of conduits connected with said distributor, one of said conduits connected with each of said thrust bearings, whereby lubricant may be supplied in adequate different quantities to a plurality of bearings in excess of the number of feeds provided by said lubricator.

1,904,296. ADJUSTABLE WASHER. GROVER C. ROYAR, Sacramento, Calif. Filed Dec. 31, 1928. Serial No. 329,402. 4 Claims. (Cl. 85—50.)



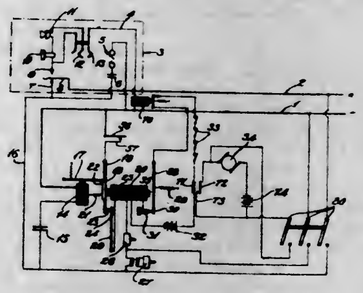
1. A washer of the kind described comprising a flat member seatable against a flat surface and having a slot for a bolt or rod and outstanding integral curved portions at opposite sides of said slot, and a washer plate having an aperture for said bolt or rod and adapted to seat against said curved portions, said member having an abutment adjacent to one end of said slot to enter a slot in an object and abut against said object.

1,904,297. PAPER CABINET. ALEC LAURENCE SAUNDERS, Ottawa, Ontario, Canada, assignor to E. B. Eddy Company, Limited, Hull, Quebec, Canada. Filed Nov. 27, 1931, Serial No. 577,600, and in Canada Nov. 16, 1931. 1 Claim. (Cl. 312—50.)



A cabinet for dispensing towels and the like comprising a box-like body portion adapted to be fastened to a wall surface, and a tray-like rectangular cover portion, the bottom walls of said portions forming a flat bearing surface for the towels, a slot-like opening in said surface, a lug on the lower end of each side wall of the body portion, each lug having pivot means for the cover portion and a vertical shoulder to hold the latter in horizontal position when open, the bottom wall of the cover portion being wider than the side walls thereof and having an eye engaging said pivot, means for rotary movement of the cover portion whereby the latter when open rests on said vertical shoulders in a horizontal position.

1,904,298. DEVICE FOR TRANSMITTING AND RECORDING TELEPHONE MESSAGES. KENNETH HARTLEY SAYER, New York, N. Y., assignor of forty-five per cent to John C. Thorne, New York, N. Y. Filed May 21, 1931. Serial No. 539,081. 20 Claims. (Cl. 179—6.)



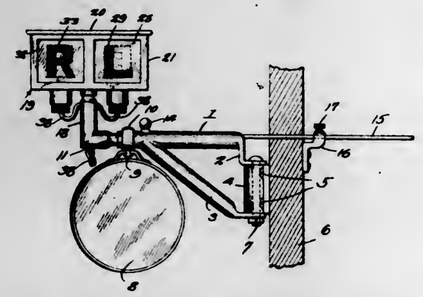
1. In a device of the character described, an arrangement of conductors leading from a central station, a normally open telephone transmitter and receiver circuit, adapted to be manually closed, a telephone ringing device circuit, and an auxiliary recorder circuit, said three circuits being connected to said conductors at all times, said ringing circuit and said auxiliary circuit being energised substantially simultaneously and automatic means to delay operation of said auxiliary recorder for a substantial period after said energization.

1,904,299. PYROPHORIC LIGHTER. ADOLF WEISSENBURGER, Evillard, Switzerland, assignor to the Firm, Hermann Thorens, S. A., Ste.-Croix, Switzerland. Filed Mar. 16, 1931, Serial No. 523,097, and in Germany Apr. 14, 1930. 6 Claims. (Cl. 67—7.1.)



1. In a pyrophoric pocket lighter comprising a casing forming a fuel reservoir, wick igniting means mounted on the casing, a longitudinally movable wick tube slidably mounted in the casing, manually operated means for raising or lowering said wick tube relative to the casing, and means for operating said wick ignition means when the wick tube is in its lowered position.

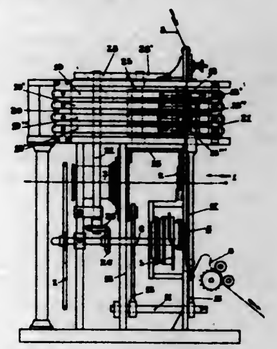
1,904,300. SIGNAL AND TROUBLE-FINDER. HARRY B. CANNON, Bradford, Pa. Filed Oct. 21, 1930. Serial No. 490,300. 2 Claims. (Cl. 177—329.)



1. In a device of the class described, an auto having a wall provided with a hole, a bracket on the inner surface of the wall and provided with a holding device, an outstanding guide, means for mounting the guide on the outside of the wall, a slide mounted removably and for reciprocation in the guide and having an inner end portion slidable in the hole and in the bracket and extended into the auto, the inner end portion being engageable by the holding means, the inner end portion constituting means whereby an operator, within the car, may reciprocate the slide, and a light box carried by the outer end of the slide and forming a signal which can be moved in and out by means of said end portion of the slide; the said inner end portion of the slide being in the form of a rod of materially less cross-sectional area than the slide, thereby reducing the size of said hole, and making said inner end portion of the slide readily insertible into the ground, when the slide is removed from the guide, whereby the light box may be used as a trouble-finding lamp, for which the slide and its aforesaid inner end constitute a ground-supported standard.

2. In a device of the class described, an auto having a wall provided with a hole, an outstanding guide, means for hinging the guide to the wall on the outside thereof, whereby the guide may be swung into parallelism with the wall when the guide is not in use, a slide mounted to reciprocate in the guide, and a signal on the outer end of the slide; the inner end of the slide extending through the hole and into the auto, to enable the slide and the signal to be reciprocated by an operator within the auto, the engagement of the slide in the hole serving to hold the guide in outstanding relation to the wall, the slide being removable from the guide and from the hole, thereby enabling the guide to be swung into parallelism with the wall, as aforesaid.

1,904,301. MACHINE FOR PERFORATING SLOW EMULSION FILMS WHILE THEY ARE BEING SHOWN ON THE SCREEN. JEAN MAURICE JACQUES DELAFON, Samoreau-sur-Seine, France. Filed Nov. 27, 1931, Serial No. 577,670, and in France Dec. 16, 1930. 10 Claims. (Cl. 164—87.)



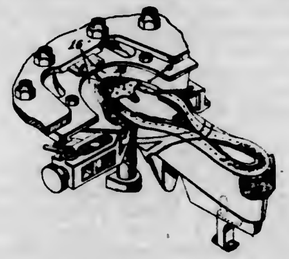
1. In a moving picture machine provided with a window adapted to frame individual pictures,—means for manually displacing said window, a film perforator adapted to perforate a film traversing said machine, means operative to reciprocate said perforator and means operative by displacement of said window to change the position of said perforator.

1,904,302. LIQUID DISPENSING SYSTEM. WARREN H. DE LANCEY, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 1, 1930. Serial No. 432,469. 7 Claims. (Cl. 221—95.)



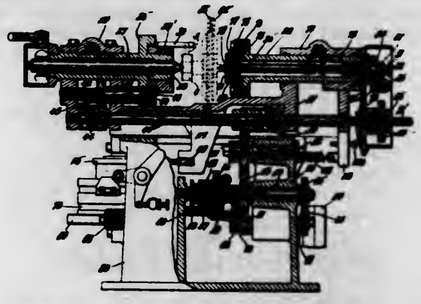
1. In a liquid dispensing system, a liquid delivery line terminating in a flexible hose, a control element remote from the discharge end of said hose, an actuating element for the control element adjacent said end of the hose, a flexible power transmission wire extending from the actuating element to the control element, a flexible casing for said wire attached near one end to the hose and near the other end anchored at a point adjacent the control element and subject to extension and contraction under movement of the hose, and means for compensating for such extensions and contractions of said casing.

1,904,303. MEANS FOR HOLDING SHOE UPPERS IN LASTED POSITION. JOSEPH FAUSSE, Melrose, Mass., assignor to The Littleway Process Company, Lynn, Mass., a Corporation of Massachusetts. Filed Apr. 25, 1932. Serial No. 607,281. 30 Claims. (Cl. 12—107.)



1. A device for holding an end portion of an upper in lasted relation to a sole on a last, said device comprising an upper-holding member formed to extend around an end of the shoe bottom over the margin of the sole and having arms spaced from each other laterally of the shoe to hold the upper at the sides of the shoe bottom, and another member constructed to extend over the shoe bottom and to act on said arms to press the upper-holding member toward the bottom of the last, said other member being so formed as to leave visible the greater portion of the shoe bottom located near the margin of the sole along the upper-holding member.

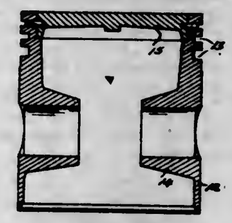
1,904,304. METHOD AND MACHINE FOR GRINDING CHASERS. RALPH E. FLANDERS, Springfield, Vt., assignor to Jones & Lamson Machine Company, Springfield, Vt., a Corporation of Vermont. Filed June 15, 1923, Serial No. 645,516. Renewed Nov. 18, 1930. 15 Claims. (Cl. 51—94.)



1. A machine of the class described comprising a grinding wheel, a carriage, means on said carriage for rotatably supporting a mandrel constructed to support a plurality of chasers having their work engaging faces presented outwardly from the axis of rotation of said mandrel, means for rotating said mandrel to present said chasers successively toward said wheel, and means acting to effect approach between said wheel and mandrel whenever a chaser is presented toward said wheel to cause said wheel to grind said face, and then to effect a retraction between said wheel and mandrel after a time of grinding so short relative to the speed of rotation of said mandrel that the face of each chaser is ground concave circumferentially relative to said mandrel.

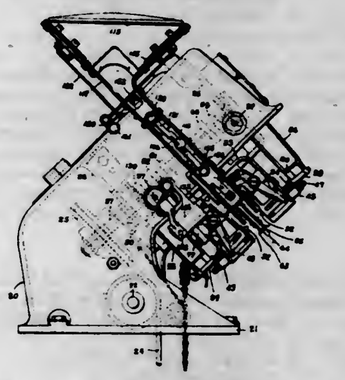
1,904,305. PISTON. PHELPS M. FRENS, Detroit, Mich. Filed Mar. 30, 1931. Serial No. 526,481. 4 Claims. (Cl. 74—108.)

1. A piston comprising an annular member having its upper face in and exposed to the combustion chamber, said member including an integral ring groove portion and bosses for the wrist pin and being also fashioned to provide draft for withdrawal through its upper end of a



corresponding single piece core and an inner member secured within said annular member and completing the head.

1,904,306. FASTENER INSERTING MACHINE. SYLVESTER LEO. GOOKIN, Quincy, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 21, 1930. Serial No. 469,432. 36 Claims. (Cl. 218—15.2.)



5. A fastener-inserting machine comprising a work-punching device and a fastener-inserting device arranged side by side, a hammer having an operating surface arranged to act on said devices alternately, movable means by which said devices are shifted to place them alternately in register with a common area of said operating surface, and mechanism arranged to operate said hammer with strokes having a common terminal limit but different starting points.

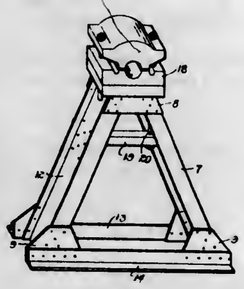
12. A duplex fastener-inserting machine comprising a pair of opposed fastener-inserting devices, two opposed members arranged to operate said devices respectively, a double-acting toggle arranged between and connecting said members, and mechanism arranged to operate said toggle.

17. A duplex fastener-inserting machine comprising a pair of opposed punching devices, a pair of opposed fastener-inserting devices arranged beside the punching devices respectively, two opposed hammers arranged to operate the punching devices and the fastener-inserting devices alternately, movable means by which said devices are shifted to place said pairs alternately at a common operating locality, a double-acting toggle arranged between and connecting said hammers, and mechanism arranged to operate said toggle by moving it back and forth across its dead-center position to points unequally distant from said position.

32. A machine comprising fastener-inserting mechanism, a jointed raceway having an upper section and a lower section arranged to supply fasteners to said mechanism, means by which said upper section of the raceway is supported in a certain relation to said mechanism and

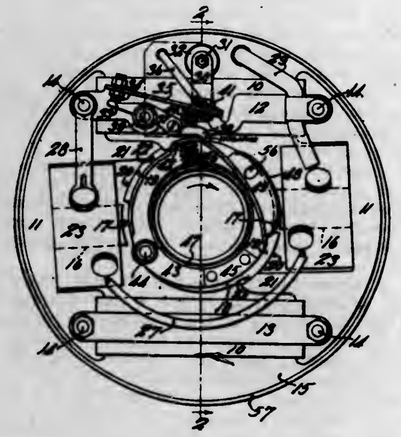
from which the raceway may be detached, and mechanism for operating said lower section of the raceway to present the fasteners, said operating mechanism and said lower section having cooperative coupling elements formed and arranged to be coupled by mounting the upper section of the raceway on said supporting means.

1,904,307. JACK POST. REX G. HAMAKER, Houston, Tex., assignor of one-half to A. M. Bowman, Houston, Tex. Filed Jan. 10, 1929. Serial No. 331,625. 1 Claim. (Cl. 308—25.)



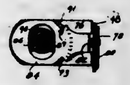
A jack post adapted to be subjected to either upward or downward stresses, comprising a pair of leg members, means to space the lower ends of said legs and adapted to absorb the horizontal component of either of said stresses, said means comprising a pair of spaced angle bars, a bearing on said post, a transverse brace on said legs, and anchor rods on said bearings tying said bearings to said post.

1,904,308. MAGNETO. KENNETH A. HARMON, Springfield, Mass., assignor to Wico Electric Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Oct. 6, 1931, Serial No. 567,171. Renewed May 27, 1932. 21 Claims. (Cl. 171—209.)



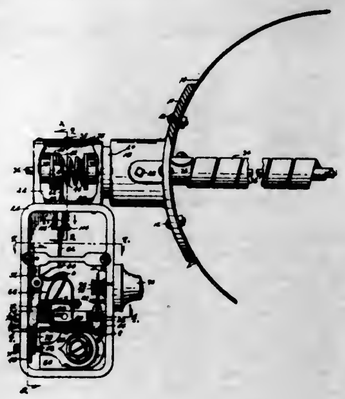
1. In a rotary magneto, a source of magnetic flux, pole pieces connected one to each polar extremity of said source, a rotor having projections thereon movable in close proximity to said pole pieces and adapted during each revolution of the rotor to make and subsequently break a magnetic circuit from said source through said pole pieces and rotor, primary and secondary windings associated with said magnetic circuit, normally engaged but relatively-movable breaker points, an electrical circuit including said primary winding and breaker points and arranged to be opened and closed by the separation and engagement respectively of said breaker points, and means movable with the rotor for opening the breaker points when the rotor moves into position relatively to said pole pieces to make said magnetic circuit and for closing them prior to the breaking of said magnetic circuit and again opening said points when the rotor moves into position to break said magnetic circuit and again closing them after said last named break.

1,904,309. CONTROL SWITCH STRUCTURE. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Jan. 27, 1930. Serial No. 423,677. 9 Claims. (Cl. 200—166.)



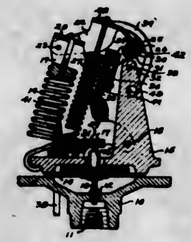
1. For use in a control structure having a movable element and a magnet with the element having a portion located in the magnetic field of said magnet, a stop for said element and means for varying the differential of operation of the element comprising mechanism for changing the location of said stop with respect to said magnet, said mechanism including a cam and a spring retaining it against said magnet.

1,904,310. STACK TEMPERATURE ACTUATED CONTROL DEVICE. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Apr. 14, 1930. Serial No. 444,202. 8 Claims. (Cl. 200—122.)



1. In a stack temperature actuated control device, a thermostatic power unit, an auxiliary switch operatively connected therewith, a main switch in series with said auxiliary switch, a heating coil shunting said auxiliary switch, a thermostatic bar adjacent said heating coil and operatively connected with said main switch for opening the same upon the thermostatic bar being moved by a predetermined rise of the temperature of said heating coil and means to open said auxiliary switch if said power unit becomes inoperative.

1,904,311. FLUID PRESSURE SWITCH. FRANKLIN G. HOBART, Beloit, Wis., assignor to Fairbanks, Morse & Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 17, 1930. Serial No. 429,065. 11 Claims. (Cl. 200—83.)



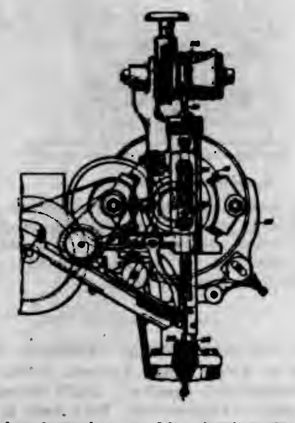
1. In a switch, an actuating member, a lever actuated thereby, a rotary thrust element operatively connecting the lever to said member, and means constituting a fibrous, oil retaining bearing surface for the thrust element.

1,904,312. DOBBY PATTERN CHAIN. ELBRIDGE R. HOLMES and OSCAR V. PAYNE, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 10, 1931. Serial No. 549,960. 13 Claims. (Cl. 139—334.)



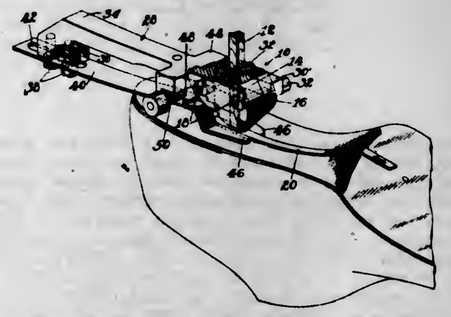
1. In a dobby pattern chain operating with pattern pegs, a chain bar having transverse holes for the pegs, and a sheet metal clip secured to the bar to attach the same to adjacent bars and having perforations aligned with certain of the peg holes of the bar.

1,904,313. FASTENING INSERTING MACHINE. CHARLES FREDERICK REGINALD JEAVONS, Leicester, England, assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 5, 1930, Serial No. 473,150, and in Great Britain Sept. 19, 1929. 17 Claims. (Cl. 1—18.)



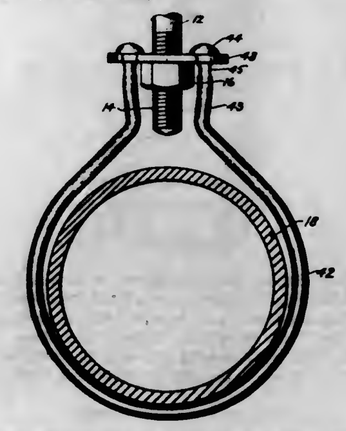
1. A fastening inserting machine having, in combination, means constructed and arranged to enter a fastening receiving recess in a work piece to position said recess in the line of drive of the fastenings, means operating to clamp the work, and means for thereafter operating the first-named means to insert a fastening into the work.

1,904,314. FASTENING INSERTING MACHINE. ARTHUR S. JOHNSON, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 6, 1931. Serial No. 548,786. 11 Claims. (Cl. 1—18.2.)



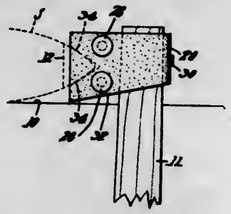
1. In a fastening-inserting machine, fastening-inserting means, an adjustable resilient member adapted to position a work piece longitudinally relatively to the inserting means and located below the plane in which fastenings are to be inserted in the work piece, and means located substantially in the plane in which the fastenings are to be inserted in the work constructed and arranged to position the work piece transversely relatively to the fastening-inserting means, whereby fastening-receiving apertures in the work piece are brought into alinement with the fastening-inserting means.

1,904,315. PIPE HANGER. PERCY N. KENWAY, Newton, Mass. Filed Dec. 6, 1930. Serial No. 500,520. 2 Claims. (Cl. 248—31.)



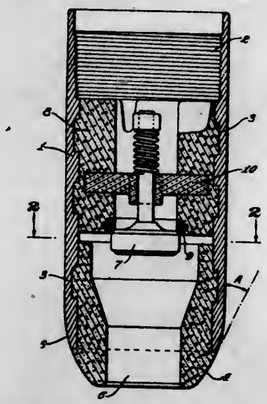
2. A pipe hanger for use with a lag screw or machine bolt, comprising a flat sheet metal yoke arranged to swivel upon the screw or bolt and having laterally extending slots with restricted openings near its ends which are accessible from the external edge of the yoke, and a pipe-encircling member of heavy wire having upstanding ends yieldingly spaced apart a distance greater than the distance between the slots and adapted to be sprung into said slots, said upstanding ends being swaged into heads substantially circular in contour and symmetrically disposed with respect to the line of stress in said upstanding ends.

1,904,316. PICKER FOR FLY SHUTTLE LOOMS. ALFRED KULLMAN, Worcester, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 26, 1929. Serial No. 358,349. 1 Claim. (Cl. 139—159.)



A picker for use with a shuttle in a loom, said picker being formed of a plurality of strips of leather placed side by side and an elongated piece of leather wound about said strips and firmly secured thereto, said picker having an accurately formed conical recess in its shuttle engaging face of predetermined size, and completely surrounded by the solid material of the picker, and having its side walls at such an angle as to be tangent to the shuttle point at a portion substantially spaced from the extreme end of said shuttle point, and said extreme end being free from the sides of said conical recess at the deepest part of said recess when the shuttle point is fully seated in said recess.

1,904,317. WELL CASING SHOE. JOHN J. LARKIN, St. Louis, Mo. Filed Sept. 28, 1932. Serial No. 635,207. 8 Claims. (Cl. 166—9.)



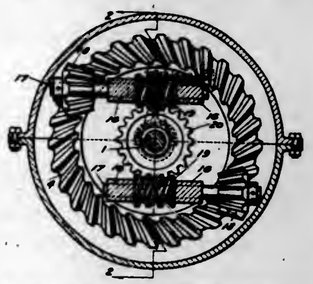
1. A shoe adapted for attachment to a casing and free of obstruction against passage of a drill therethrough, said shoe having its lower end tapered, and a part of disintegrable material extending beyond the lower end of said shoe, said part having a taper in continuation of the taper of the shoe to provide therewith a guide.

1,904,318. FRAME. HENRY H. LEHERR, Akron, Ohio. Filed July 6, 1931. Serial No. 548,780. 2 Claims. (Cl. 40—154.)



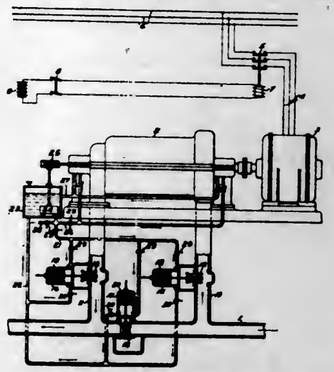
1. In a frame of the class described, a frame body composed of one piece of hard rubber, said body having an opening therein for exposing to view the article to be framed, and soft rubber flaps on the rear side of said frame, sad flaps projecting inwardly beyond the edge of said opening.

1,904,319. VARIABLE SPEED TRANSMISSION. ALBERT E. MAROLF, Davenport, Iowa. Filed Aug. 11, 1928, Serial No. 298,924. Renewed Oct. 15, 1932. 19 Claims. (Cl. 74—34.)



1. In a structure of the character described, a pair of aligned shafts, one carrying a worm wheel and the other a carrier for a worm, a worm carried by the carrier and capable of rotational displacement about its axis, a pinion mounted about the axis of the worm for unitary movement therewith, the worm and worm wheel being connected in driving relation such that rotation of the shaft carrying the worm wheel may cause rotation of the carrier and the shaft to which the carrier is connected, a gear on the first shaft meshing with said pinion and capable of oscillatory motion with relation to the shaft, and means for controlling the functioning of the last mentioned gear.

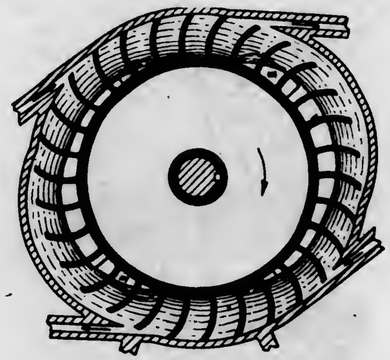
1,904,320. PIPELINE BOOSTER SYSTEM. DEREK B. MARPLES, Bella Vista, Wettingen, Switzerland, assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Oct. 5, 1931. Serial No. 567,061. 3 Claims. (Cl. 137—78.)



1. In a booster system, the combination of a pipeline, a pump in said pipeline, a bypass around said pump and automatic valve means for closing off the pump inlet and discharge and for opening said bypass when said pump is stopped, and vice versa.

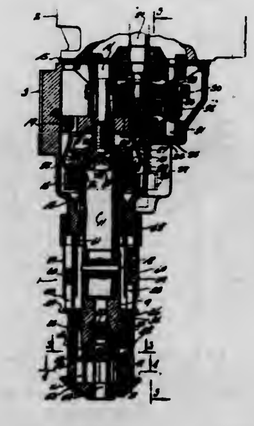
1,904,321. HYDROTURBINE PUMPING APPARATUS. HAROLD L. NASH, South Norwalk, Conn., assignor to Nash Engineering Company, South Norwalk, Conn., a Corporation of Connecticut. Filed June 1, 1931. Serial No. 541,194. 2 Claims. (Cl. 230—79.)

1. Pumping apparatus comprising a hydro-turbine pump having a pumping chamber of non-circular cross section and provided with inlet and discharge ports, said chamber being peripherally enlarged from a point adjacent the inlet port and being thereafter peripherally contracted toward the discharge port and a rotor mounted in said chamber and having a plurality of displacement chambers, said pump using a liquid for its pumping action, which liquid is rendered effective to partially compress charges of air or gas in said displacement chambers by the velocity of



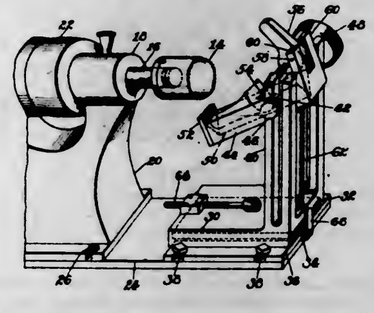
said liquid and the peripheral contraction of the pumping chamber, means providing a discharge passage for a portion of said pumping liquid from the periphery of said pumping chamber at one point in the cycle of pumping operations, and means to restore a similar amount of liquid directly to the periphery of said pumping chamber at a later point in the pumping cycle and at a pressure substantially higher than the normal pressure of the liquid as removed from the pumping chamber.

1,904,322. STUD SETTING TOOL. REINHOLD A. NORLING, Aurora, Ill., assignor to Independent Pneumatic Tool Co., Chicago, Ill., a Corporation of Delaware. Filed Mar. 26, 1932. Serial No. 601,442. 8 Claims. (Cl. 81—57.)



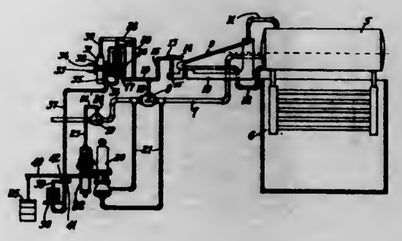
8. In a tool for setting studs by power, a chuck, jaws carried thereby, means operable through the power furnished by the tool for moving the jaws into and out of stud engaging positions, and a brake device operable on said means to retard the rotation of the same with the chuck to effect actuation of the jaws, said brake device including a disc of friction material supported by the chuck and spring pressed plungers carried by the tool for applying pressure against the disc.

1,904,323. MACHINE FOR SLOTTING HEELS. WILLIAM H. NUTT, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Feb. 5, 1929, Serial No. 337,696. Divided and this application filed July 30, 1931. Serial No. 554,011. 15 Claims. (Cl. 12—42.)



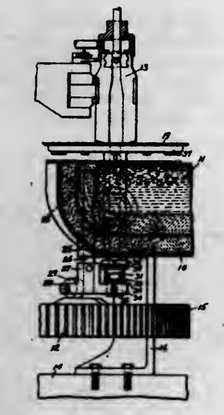
1. A machine for operating upon heels having, in combination, a cutter and heel-supporting means constructed and arranged for relative movement to form in the breast of a heel a laterally curved heel cover receiving slot, and guide means constructed and arranged to define the path of relative movement of the cutter and the heel-supporting means.

1,904,324. WATER CONTROL APPARATUS. THOMAS A. PEEBLES, Mount Lebanon, Pa., assignor to John M. Hopwood, Dormont, Pa. Filed July 7, 1928. Serial No. 291,090. 2 Claims. (Cl. 122—451.1.)



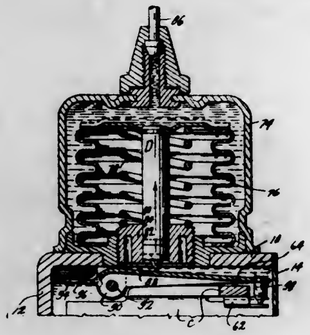
1. In combination with a boiler having a feed water line, a feed water control valve in said line, means for operating said valve in response to demand for feed water by said boiler, pressure control means for varying the water pressure in said line on the inlet side of said valve, and an additional mechanism responsive in operation to the drop in pressure across said valve and the position of said valve controlling said pressure control means for increasing the pressure differential across said valve as said valve opens and for decreasing such pressure differential as the valve closes.

1,904,325. ROTARY KNIFE FOR SEVERING MOLTEN GLASS. KARL E. PEILER, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Dec. 10, 1929. Serial No. 413,005. 13 Claims. (Cl. 49—5.)



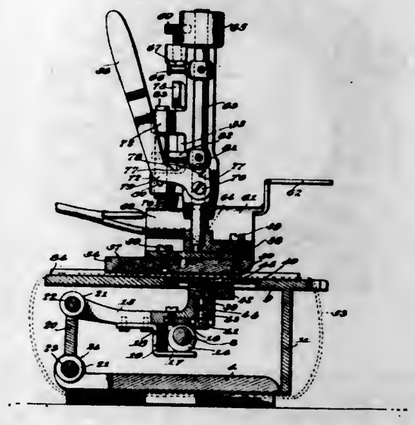
6. Mechanism for severing molten glass comprising a rotary knife, means for rotating said knife about its axis, means for intermittently reciprocating said knife axially, and resilient means for permitting axial movement of said knife independently of said reciprocating means.

1,904,326. AUTOMATIC CONTROLLING DEVICE. RALPH PENN, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Dec. 19, 1927. Serial No. 241,076. 2 Claims. (Cl. 200—83.)



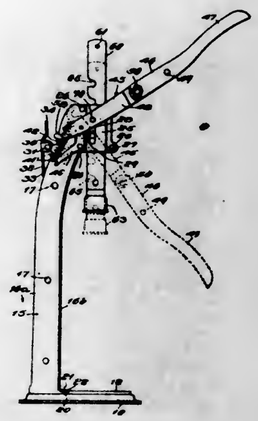
1. For use with an actuating member, an electric switch and a resilient connection between said actuating member and said switch, a safety device of the class described comprising a pivoted lever adapted to be moved to a position engaging said resilient connection for opening said switch, means normally constraining said lever to remain spaced from said resilient connection and pressure responsive means adapted upon abnormal pressure conditions to move said lever to cause engagement thereof with said resilient connection and move said connection against the action of said means normally constraining it to remain spaced therefrom and to thereby open said switch.

1,904,327. APPARATUS FOR AND METHOD OF ATTACHING SHOE LININGS. ADAM H. PREUSEL, Halifax, Pa., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 18, 1929. Serial No. 347,960. 33 Claims. (Cl. 154—1.)



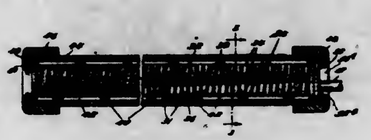
1. Apparatus of the character described comprising means defining a restricted channel a part of which means is heated, and separate means for moving a tongue and an article of work through the channel to be subjected to the heat and pressure.

1,904,328. BOTTLE CAPPER. HAROLD G. RICE, Chicago, Ill., assignor to Indestro Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1930. Serial No. 432,337. 16 Claims. (Cl. 226—84.)



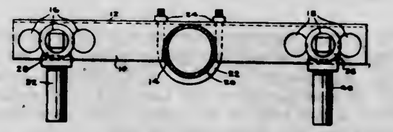
1. In a device of the class described, a standard, a capping member carried by said standard so as to be vertically reciprocable, and a pivoted handle for actuating said capping member, the pivot of said handle being floatingly carried by and translatable with respect to said standard so that said handle may be brought into and out of operative relation to said capping member, and means resiliently urging said handle into engagement with said capping member and toward an elevated position.

1,904,329. STOCK GUIDE MEANS FOR MACHINE TOOLS. CHARLES A. RICH, Providence, R. I., assignor to Brown & Sharpe Mfg. Co., Providence, R. I., a Corporation of Rhode Island. Filed July 1, 1931. Serial No. 548,170. 14 Claims. (Cl. 82—38.)



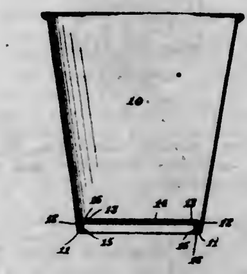
1. Guide means for feeding bars of stock to machine tools, including a tube, a helically wound bar supporting resilient strip within said tube having spaced coils, a flat helically wound sheath strip interposed between said supporting strip and the inner wall of said tube having coils spaced apart a greater distance than those of the resilient supporting strip whereby the coils of said supporting strip contacting said bar may freely resiliently flex outwardly within said tube between the more widely spaced coils of said sheath strip, and cap members secured to the ends of said tube having end walls abutting the ends of said strips to secure them against longitudinal vibration having central holes therein extending exterior of the inner periphery of said bar supporting and sheath strips of a size to permit insertion of different sized bars of stock.

1,904,330. TEMPLATE FOR USE IN INSTALLING PLUMBING. DE WITT C. RUFF, St. Paul, Minn. Filed May 21, 1931. Serial No. 539,028. 5 Claims. (Cl. 72—128.)



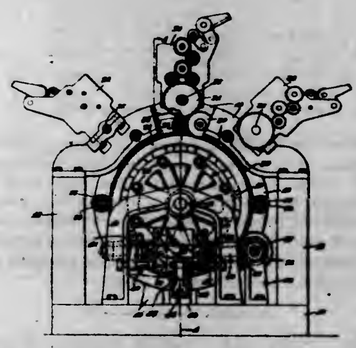
1. A template for use in installing plumbing comprising a support, means for securing said support rigidly in place for subsequent enclosure within a wall structure, means for securing the loose end of a pipe to said support, and a stub adapted to be removably attached to said pipe end so as to extend out through the wall structure as the latter is built, said stub when removed being replacable by a pipe connection through the hole formed in the wall by the stub.

1,904,331. DRINKING CUP. MELVIN H. SIDEBOTHAM, West Newton, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed May 7, 1931. Serial No. 535,699. 4 Claims. (Cl. 229—21.)



1. A paper cup comprising a body and a single-thick bottom closure therefor, said body and closure having two adhesively-united annular areas at an angle to each other.

1,904,332. MACHINE FOR PRINTING ROUND CANS IN MULTIPLE COLORS. MELVIN H. SIDEBOTHAM, West Newton, Mass., assignor to Specialty Automatic Machine Company, Chelsea, Mass., a Corporation of Massachusetts. Filed July 13, 1931. Serial No. 550,401. 10 Claims. (Cl. 101—38.)

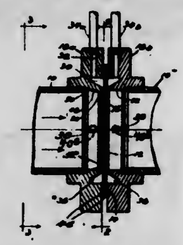


1. A printing machine having a rotatable plurality of supports for sound articles, and means for directly printing registered colors successively on articles carried by said supports.

1,904,333. ORIFICE METER. ED S. SMITH, Jr., Providence, R. I., assignor to Builders Iron Foundry, Providence, R. I., a Corporation of Rhode Island. Filed July 27, 1929. Serial No. 381,475. 5 Claims. (Cl. 73—167.)

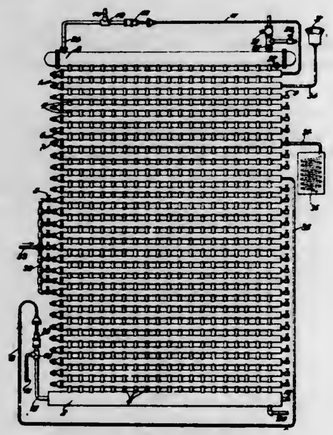
2. A metering device, comprising an orifice plate and a pair of orifice flanges adapted to support said orifice

plate between them, each flange having adjacent to said orifice plate a single point pressure connection and a



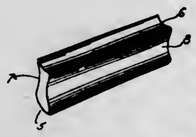
second independent annular connection completely circular except for said point connection and in the same plane as said point connection.

1,904,334. RECTIFIER. SYDNEY S. SMITH, Tulsa, Okla., assignor to Shell Petroleum Corporation, a Corporation of Virginia. Filed Mar. 29, 1930. Serial No. 439,883. 12 Claims. (Cl. 196—94.)



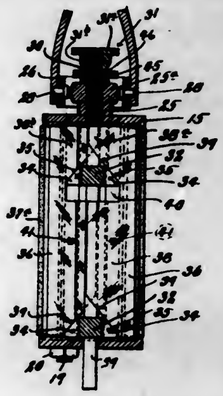
1. A rectifier including a series of vertical tubes in lateral alignment, a series of superimposed horizontal tubes each of which is in communication with said vertical tubes, means for maintaining a temperature gradient in said horizontal tubes, a connection for introducing input into one or more horizontal tubes adjacent a vertical tube, and connections for withdrawing the end products adjacent a vertical tube remote from the input.

1,904,335. TONE BAR. GEORGE STEVENS, Chicago, Ill. Filed Apr. 25, 1932. Serial No. 607,301. 3 Claims. (Cl. 84—319.)



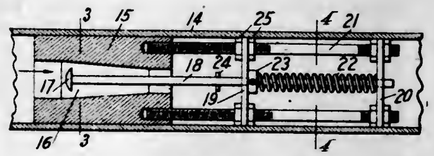
1. A tone bar comprising an elongated bar having in general an oblong cross section, but with one edge convex and the opposite edge concave, and with the concave surface extending substantially uniformly across the full length of the bar, the radius of curvature of the concave surface being comparable to the radius of the opposite convex surface.

1,904,336. HONING DEVICE. JOSEPH SUNNEN, Kirkwood, Mo. Filed Sept. 2, 1930. Serial No. 479,188. 13 Claims. (Cl. 51—184.3.)



1. A honing device comprising a revoluble carrier provided in its periphery with a plurality of spaced radially and vertically disposed pockets intersecting each other to form a central chamber, a rod extending axially through said chamber, a block fixed on said rod and provided with a plurality of radial projections extending into said pockets, each of said projections having an upwardly and inwardly inclined face, a mount movably arranged in each pocket, the forward end of each mount being provided with a longitudinally and vertically disposed channel for receiving a cylinder engaging element, the rear end of each mount having a pair of spaced parallel walls slidably engaging the walls of the respective pocket, the walls of said mount being provided with inclined portions for engaging corresponding faces of said projections whereby said mounts can be moved radially into expanded positions when said rod and block are moved longitudinally in one direction.

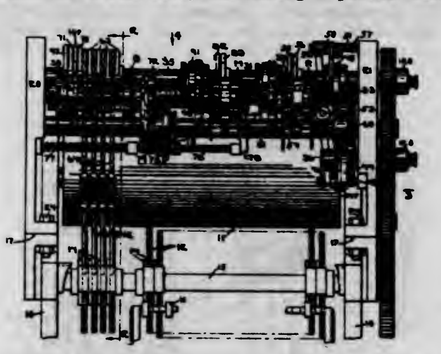
1,904,337. FLOW REGULATOR. EDWARD T. TURNER, Dayton, Ohio. Filed July 5, 1927. Serial No. 203,375. 5 Claims. (Cl. 137—152.)



1. In a flow regulating device, a tubular housing, a partition arranged within said housing and having a tapered passageway for fluid, a supporting structure carried by said partition and having a part forming a guideway, a rod slidably mounted in said guideway and extending into the passageway of said partition, a head carried by said rod and arranged to partially obstruct the flow of fluid through said passageway, and a spring acting on said rod to resist the movement of said head by fluid pressure.

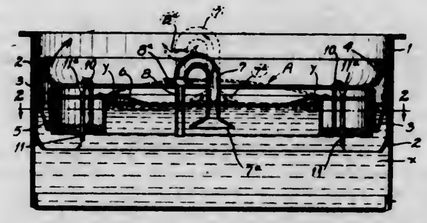
1,904,338. REVERSING MULTIPLIER. WILLIAM M. WATTIE, Worcester, and KARL S. WHITTEN, Auburn, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 8, 1931. Serial No. 554,665. 12 Claims. (Cl. 139—326.)

1. In a drop box loom having a plurality of harnesses and a dobby having a pattern chain controlling said harnesses, in combination, a multiplying mechanism mounted on and above said dobby and having a pattern chain



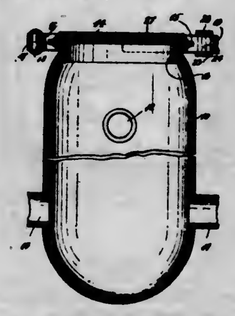
controlling said drop boxes, and means to intermittently feed said chain in timed relation to the movements of the harnesses.

1,904,339. FLOATING DECK FOR LIQUID STORAGE TANKS. JOHN H. WIGGINS, Tulsa, Okla. Filed Feb. 15, 1928. Serial No. 254,517. 10 Claims. (Cl. 220—26.)



1. A breather roof having a confined gas space and provided with a flexible sheet metal portion; and buoyant means attached thereto, the buoyant means being so located that, and the relative vertical forces accomplished through the flexible roof due to gas pressure and by the buoyant means and the relative loads found in the flexible sheet metal portion and the buoyant means being so proportioned with respect to each other that, under varying pressures in the gas space the flexible sheet metal portion will change its shape so as to vary the volume of said gas space.

1,904,340. PIPE-TRAP COVER. HARRY SUMNER WRIGHT, Reading, Mass. Filed Dec. 5, 1931. Serial No. 579,182. 1 Claim. (Cl. 220—61.)



A clamping member comprising a pair of hinged arms having their free ends terminating in oppositely-disposed laterally-extending projections provided with oppositely-directed curvilinear surfaces, a locking member independent of said arms and arranged to receive said projections, and a locking lever pivotally connected to one end of said member and having a cam surface on the free end thereof arranged for co-operation with the curvilinear surface of one of said projections to draw the other end of said member against the other of said projections.

1,904,341. ANTISTICK COATING MATERIAL. JAMES HOWARD YOUNG, Pittsburgh, Pa., assignor to H. H. Robertson Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 19, 1929. Serial No. 348,358. 5 Claims. (Cl. 134—1.)

1. An antistick coating material, comprising an alginate base, soap, glycerine, and glue substantially in the proportions specified.

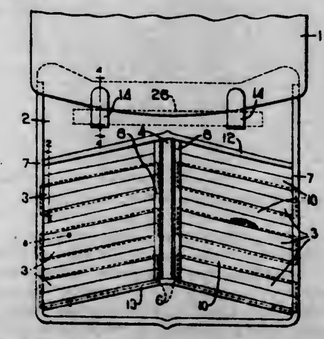
1,904,342. SPLASH FLAP FOR AUTOMOBILES. MAX ZAIGER, Swampscott, and LOUIS ZAIGER, Lynn, Mass. Filed Feb. 18, 1931. Serial No. 516,601. 4 Claims. (Cl. 280—152.)



1. A splash flap construction for the front fenders of automobiles comprising a flap member, means for securing said flap member to the front edge of the front fender, and a downwardly-extended arm in the rear of the flap to hold the flap separated from the front wheel when the automobile is in motion.

2. A splash flap construction for the fenders of automobiles comprising a flap member, two one-piece U-shaped clips having substantially parallel legs and adapted to embrace the rear edge of an automobile fender, the outer face of the inner leg of each clip engaging the outer face of the flap member, a headed clamping screw for each clip, each clamping screw extending through the flap member and through the inner leg of the corresponding clip and having screw-threaded engagement with said leg and having such a length that when the screw is tightened it serves to clamp the flap member to the clip and the clip to the rear edge of the fender.

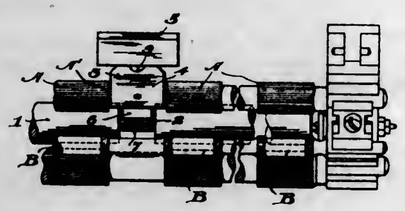
1,904,343. SPLASH FLAP FOR AUTOMOBILES. MAX ZAIGER, Swampscott, and LOUIS ZAIGER, Lynn, Mass. Filed June 15, 1932. Serial No. 617,358. 7 Claims. (Cl. 280—152.)



7. A splash flap for automobiles comprising a body portion of moldable material having two series of metal strips exposed on its rear face, the strips of each series extend-

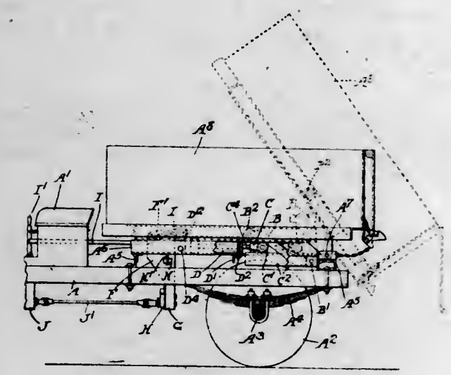
ing from an outside edge of the flap nearly to the center and being inclined with reference to said ontside edge, the central portion of the body being free from strips, whereby said body can be flexed transversely.

1,904,344. SUPPORT FOR CLEARER ROLLS. JAMES A. ANDREWS, Augusta, Me. Filed Mar. 4, 1931. Serial No. 519,978. 5 Claims. (Cl. 19—140.)



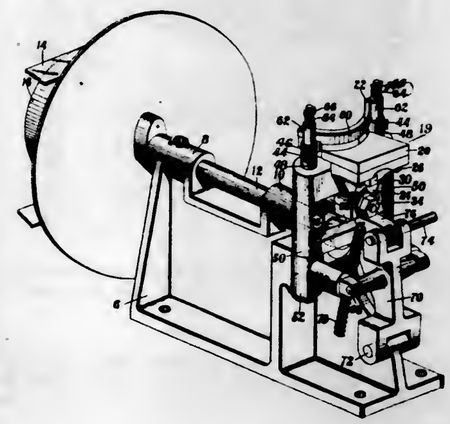
2. In combination with a shaft having spaced drawing-in rolls, and the intermediate rolls of a spinning machine, a clearer roll underlying and contacting the drawing-in and intermediate rolls and having a reduced part and a clip member having a part mounted on the shaft of and in the space between the drawing-in rolls so as to be solely supported by and for swinging movements on said shaft, a seat carried by said member and of greater length than and receiving said reduced part of the clearer roll to support the latter for movement lengthwise of the seat, and counterbalancing means connected to the member.

1,904,345. HYDRAULIC HOIST DUMPING BODY. WILLIAM C. ANTHONY and LESTER WACHTER, Streator, Ill., assignors to The Anthony Company, Streator, Ill., a Corporation of Illinois. Filed Nov. 19, 1930. Serial No. 496,632. 5 Claims. (Cl. 298—22.)



1. In combination with an automotive vehicle having a frame, a dumping receptacle pivotally supported therefrom, means for dumping the receptacle, said means including a hydraulic assembly, said assembly being mounted on the frame with a three-point suspension, a portion of the assembly being laterally bent from the longitudinal axis of the assembly, and shock absorbing means for supporting its weight.

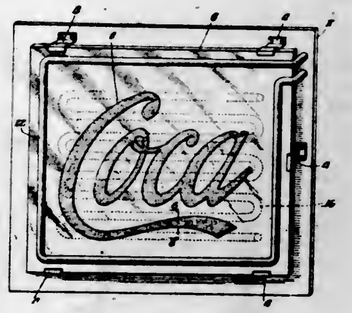
1,904,346. HEEL BREASTING MACHINE. FRED ASHWORTH, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 6, 1930. Serial No. 493,859. 13 Claims. (Cl. 12—47.)



1. In a heel breasting machine, the combination of a permanent frame, permanent driving mechanism supported in the frame, and a detachable breasting unit mounted upon the frame in cooperative relation to the driving mechanism, said breasting unit comprising a relatively movable breasting knife and work support.

11. In a heel breasting machine, a frame, driving mechanism supported on the frame, and a detachable breasting unit comprising a breasting knife, a work support, and means on the work support cooperating with the driving mechanism for moving the work support relatively to the breasting knife.

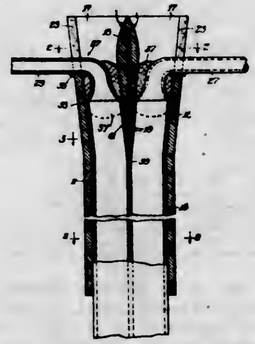
1,904,347. SIGN. ROBERT E. BARCLAY, Chicago, Ill., assignor to Federal Electric Company, Chicago, Ill., a Corporation of New York. Filed Sept. 16, 1930. Serial No. 482,241. 33 Claims. (Cl. 40—130.)



19. A display device comprising a panel, luminescent light refracting means for displaying characters on said panel and means to illuminate the luminescent light refracting means with stroboscopic light.

33. A display device comprising luminescent light refracting means forming display characters and means to illuminate the luminescent light refracting means.

1,904,348. METHOD OF MAKING MULTIBORE TUBES. ROBERT E. BARCLAY, Chicago, Ill., assignor to Federal Electric Company, Chicago, Ill., a Corporation of New York. Filed Aug. 5, 1931. Serial No. 555,244. 10 Claims. (Cl. 49—17.1.)



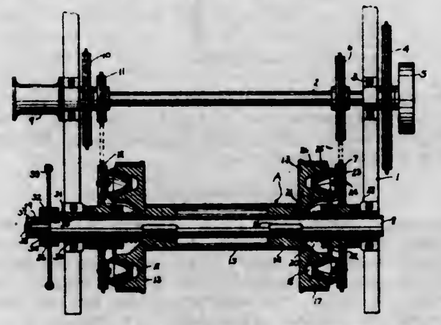
1. The method of making multi-bore tubing which comprises forming a plurality of tubes, feeding the tubes so formed together at a common point while in fluid condition whereby the contacting surfaces of the tubes fuse together.

1,904,349. VISIBLE RECORD CARD HOLDER. SAMUEL BARLOW, Sydney, New South Wales, Australia. Filed Nov. 5, 1931, Serial No. 573,279, and in Australia Nov. 8, 1930. 8 Claims. (Cl. 129—16.7.)



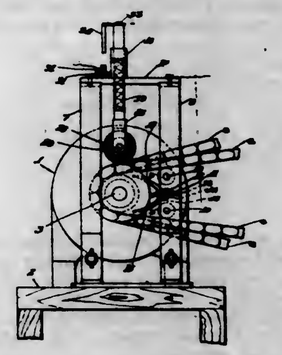
1. In and for visible record card holders of the kind set forth, a metal plate having one side rectangularly flanged and an integral acutely angled front portion shorter at one end than the plate, said plate having strengthening grooves adjacent said shortened end and having end abutments and having the plate end folded to constitute stubs each with a revolvable carrier thereon, substantially as herein described and explained.

1,904,350. CLUTCH FOR HOISTING DRUMS. ARTHUR C. BENSON, Houston, Tex., assignor to James S. Abercrombie, Houston, Tex. Filed May 26, 1928. Serial No. 280,873. 2 Claims. (Cl. 192—94.)



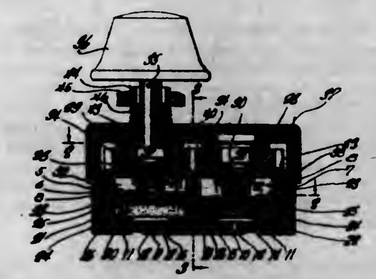
1. A friction clutch control means including a shaft, a bearing therefor, a cap member threaded to said bearing, and means on said cap and said shaft whereby said shaft may be moved longitudinally with respect to said bearing by movement of said cap.

1,904,351. BROKEN BELT DETECTOR AND SAFETY DEVICE. ALFRED A. BIANCHI, Worcester, Mass. Filed Oct. 5, 1927. Serial No. 224,154. 4 Claims. (Cl. 74—51.)



1. In apparatus of the class described, a pair of grooved pulleys, a belt connecting and passing around said pulleys, said belt being made of leather links, and means to prevent said belt from whipping around said pulleys or either of them upon breakage of said belt, said means including a roller located between the courses of said belt and a finger located in the groove of the pulley between said roller and the pulley, said finger being arranged to direct the belt out of the groove in the pulley upon breakage of said belt.

1,904,352. ELECTRICAL RESISTOR. LYNDE BRADLEY, Milwaukee, Wis., assignor, by mesne assignments, to Allen-Bradley Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 28, 1928. Serial No. 321,386. 5 Claims. (Cl. 201—50.)



5. A potentiometer comprising a supporting member having spaced pockets, spaced terminals each having a portion extending into one pocket, a variable resistance element in each pocket in electrical connection with the terminal part therein, a cover to close the pockets, means carried by the cover to simultaneously and oppositely vary the individual resistance of said resistance elements and connect the resistance elements in series across the terminals so that the sum of both is always constant, and a fixed resistor mounted on the outside of the supporting member and electrically bridging the spaced terminals to define the effective resistance across the terminals, the value of said fixed resistor being chosen to adapt the potentiometer to a particular circuit requirement.

1,904,353. FLEXIBLE POCKET RECEPTACLE. WARREN R. BUXTON, Longmeadow, Mass. Filed June 18, 1929. Serial No. 371,934. 2 Claims. (Cl. 150—33.)

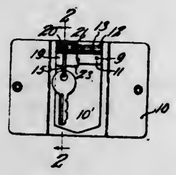
2. A flexible pocket receptacle, comprising, an outer wall, longitudinally spaced end sections mounted thereon

at least one of which consists of two plies, a member extending from one section across the gap between said end sections and slidably received between said plies of the other section, the outer ply of the latter section connected along one side edge and one end edge to a side edge and an end edge respectively of the outer wall and the



inner ply of such section connected along one side edge to the opposite side edge of such outer ply and otherwise unsecured to the latter or to said outer wall, and means wholly independent of said member and much more readily flexible than said member or end sections for interconnecting the end sections and limiting the degree of separation thereof.

1,904,354. KEY CASE. WARNER R. BUXTON, Longmeadow, Mass., assignor to Buxton, Incorporated, Springfield, Mass., a Corporation of Massachusetts. Filed Sept. 8, 1930. Serial No. 480,391. 13 Claims. (Cl. 150—40.)



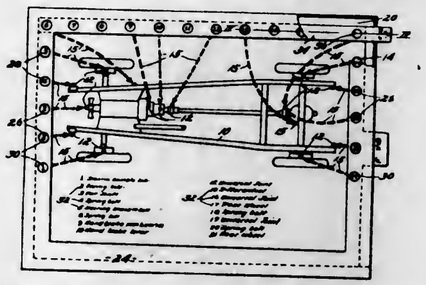
1. A device for removably securing a key hook, having an enlarged head, in a key case which comprises tubular members positioned in telescopic relation, registering slots formed in said members, adapted to receive the shank of the key hook and of a width to permit free swivel movement and travel of the hook in the slots, enlarged openings communicating with said slots and positioned to be brought into registration for the introduction of the enlarged head of the key hook, by relative movement of the tubular members, and to be thereafter moved out of registration to lock the hooks in the slots.

1,904,355. POWER LOADER. JOHN L. CLARKSON, Nashville, Ill. Filed July 28, 1930. Serial No. 470,031. 15 Claims. (Cl. 198—8.)



1. A loading machine of the character described, comprising, an elevating conveyor at the front of the machine extending upwardly and rearwardly, a gathering head overlapping said conveyor, and means on said head for gathering the material thereon and for moving the same therealong and onto said conveyor, said head being spaced above said conveyor at the point of delivery a distance sufficient to permit the material lumps to drop out of the path of said gathering means.

1,904,356. DISPLAY GREASE CHART. DAVID L. CONKLIN, Independence, Mo., assignor of one-third to Fred O. True, Kansas City, Mo. Filed June 9, 1932. Serial No. 616,179. 9 Claims. (Cl. 35—12.)



1. A chart for use in servicing vehicles comprising in combination, a perforated panel; a support for the panel, a diagrammatic representation of a particular kind of vehicle on the panel having a portion overlying a part of said panel; windows formed through said overlying portion; and lead lines, comprising a series of holes formed through the panel, joining certain of the perforations formed through the underlying part of said panel and the exposed portion, a predetermined number of said windows being in register with some of the perforations in the underlying part of said panel.

1,904,357. SMOKE DISPOSAL AND DRAFT INDUCING APPARATUS. FRANS H. C. COPPUS, Worcester, Mass., assignor to Anna M. C. Wechsberg, Vera L. Wood, and Frans H. C. Coppus, as trustees, Worcester, Mass. Filed Dec. 31, 1929. Serial No. 417,774. 29 Claims. (Cl. 104—52.)



1. As an article of manufacture, a smoke jack suspended to swing, having the part above the point of suspension made to substantially counterbalance the part below the point of suspension.

1,904,358. FOUNTAIN PEN. ARTHUR O. DAHLBERG, Lake Worth, Fla., assignor to The Parker Pen Company, Janesville, Wis., a Corporation of Wisconsin. Continuation of application Serial No. 306,009, filed Sept. 14, 1928. This application filed Jan. 24, 1933. Serial No. 653,846. 57 Claims. (Cl. 120—47.)

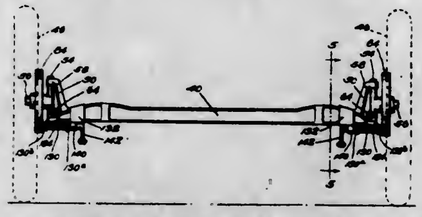
1. In a fountain pen having a barrel, a feed bar secured to one end of said barrel and having ink and air passageways formed therein, an air tube connected with said air passageway and extending a substantial distance into said barrel, and filling means located in the other

end of said barrel comprising a reciprocable plunger, a spring tending to urge said plunger outwardly, and a pliable sealing member having its peripheral edge fixed



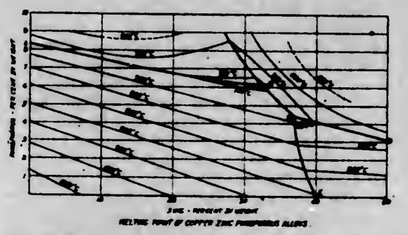
relative to said barrel and having its central portion engaged by said plunger and adapted to be reciprocated thereby.

1,904,359. CONTROLLING MEANS FOR VEHICLE WHEEL BRAKES. JOHN B. DES ROSIERS, Providence, R. I. Filed May 2, 1928. Serial No. 274,609. 6 Claims. (Cl. 188—194.)



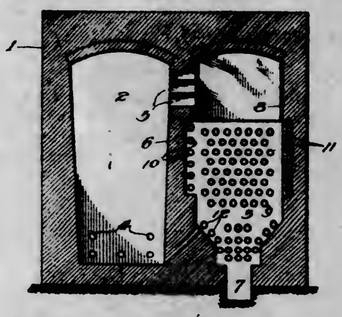
1. Brake-operating mechanism for a brake on a swivelled wheel comprising, in combination, swivelling and non-swivelling shaft sections approximately in alinement with each other when the wheel is directed straight ahead and a spring connecting said sections approximately at the swivelling axis of the wheel and permitting the swivelling of the wheel and serving as a torque-transmitting element between said sections in all positions of the wheel.

1,904,360. BRAZING SOLDER. AUGUST M. DINKLER, Waterbury, and CYRIL STANLEY SMITH, Cheshire, Conn., assignors to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 9, 1932. Serial No. 628,006. 4 Claims. (Cl. 75—1.)



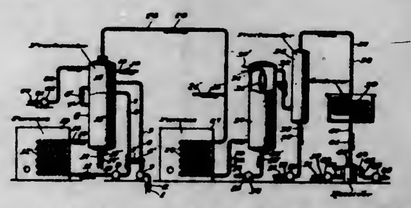
1. An alloy composed of a substantial amount of phosphorus above 2.50 and up to 10 percent, from 5 to 50 percent zinc, the balance being principally copper.

1,904,361. METHOD AND APPARATUS FOR UTILIZING RADIANT HEAT ENERGY. GUSTAV EGLOFF and LEV A. MEKLER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed June 21, 1928. Serial No. 287,303. 2 Claims. (Cl. 122—4.)



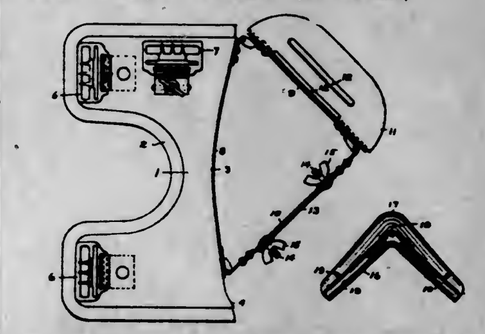
2. In combination with an element to be heated and an original source of radiant heat, of heating reflecting surfaces in proximity to said original source and adapted to distribute radiant heat from said original source to said element, and cooling means for said heat reflecting surfaces.

1,904,362. CONVERSION OF HYDROCARBON GASES. GUSTAV EGLOFF, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 8, 1931. Serial No. 528,530. 3 Claims. (Cl. 196—10.)



1. A process for treating normally incondensible hydrocarbon gases which comprises heating the same under superatmospheric pressure to a temperature of between 1200° F. and 1850° F., then substantially lowering the pressure on the heated gases and subjecting the same under the lower pressure to the action of ultra violet light.

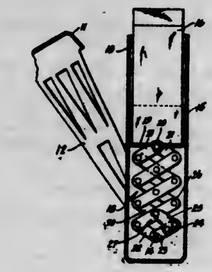
1,904,363. SURGICAL SPLINT. JOE J. ETTINGER, Warsaw, Ind., assignor to Zimmer Manufacturing Company, Warsaw, Ind., a Corporation. Filed Feb. 27, 1930. Serial No. 431,930. 2 Claims. (Cl. 128—88.)



1. A surgical splint comprising a laterally convex base member having its middle portion concaved longitudinally

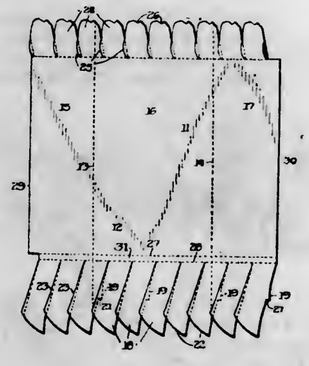
and adapted to be engaged upon either side of the human trunk the lower part of said middle portion being longitudinally convex to engage on either human hip, a support hinged to the base, and an angular arm rest adjustably carried by the base and being reversible end to end on the support, the rest being concaved transversely and being widest and convex longitudinally at the apex of the angle thereof.

1,904,364. HOLDER FOR COSMETICS AND THE LIKE. GILES C. FULLMER, Bridgeport, Conn., assignor to The Bridgeport Metal Goods Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed May 7, 1931. Serial No. 535,627. 7 Claims. (Cl. 206—56.)



2. In a cosmetic holder, a receptacle having an open end, a carrier in the receptacle and adapted to receive a cosmetic, a lazy tong manually operable means outside the receptacle within the receptacle and beneath the carrier, and means to operate the lazy tong means to shift the carrier toward the open end of the receptacle to expose the cosmetic for use and after use to shift the carrier to withdrawn the cosmetic into the receptacle, said last means including a cover for the open end of the receptacle.

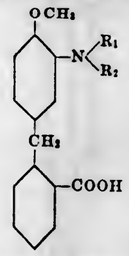
1,904,365. COLLAPSIBLE RECEPTACLE. WILLIAM J. GEIST, Lockport, Ill. Filed Feb. 6, 1931. Serial No. 513,897. 9 Claims. (Cl. 229—21.)



1. A foldable flat container blank having a main body-portion and a series of overlapping flaps extended at an oblique angle from an edge thereof.

1,904,366. ORGANIC ACID OF THE DIPHENYL-METHANE SERIES AND A PROCESS OF PREPARING THE SAME. IVAN GUBELMANN, HENRY J. WEILAND, and OTTO STALLMANN, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed July 2, 1928. Serial No. 290,028. 9 Claims. (Cl. 260—64.)

5. As new articles of manufacture, compounds having the following probable general formula:

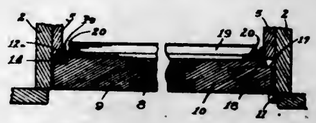


in which R_1 and R_2 are H atoms or acidyl groups.

1,904,367. 7.7'-DICHLORO FLAVANTHRONE AND THE PROCESS OF MAKING SAME. IVAN GUBELMANN, South Milwaukee, Wis., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Sept. 4, 1928. Serial No. 303,961. 5 Claims. (Cl. 260—42.)

1. The process of preparing 7,7'-dichloro flavanthrone, which comprises treating 2-amino-7-chloro anthraquinone with antimony pentachloride in nitrobenzene at a temperature of about 200 to 210° C.

1,904,368. WEATHER-PROOFING STRUCTURE FOR DOORS. DAVID H. HARNLY, Chicago, Ill. Filed May 29, 1930. Serial No. 456,887. 6 Claims. (Cl. 20—69.)

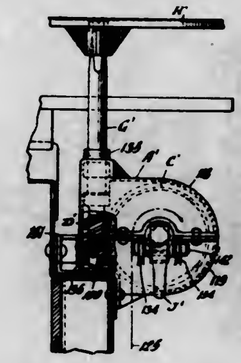


1. The combination with a door frame, of a continuous weather-strip along the sides and one end thereof, and a door hingedly mounted on said frame having a marginal groove on the rear face of the door for receiving said weather-strip, said groove having a sloping wall for guiding and deflecting said weather-strip thereinto.

1,904,369. HAND BRAKE. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 9, 1931. Serial No. 514,464. 3 Claims. (Cl. 74—112.)

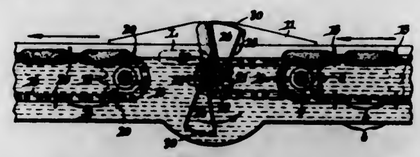
1. In a hand brake mechanism for railway cars adapted to be mounted on the end wall of the car, which end wall has an offset section, the combination with a vertically disposed operating shaft disposed adjacent to the end wall of the car above said offset section and inwardly of the plane of said offset section, said shaft extending above the top of the car and having an operating hand wheel secured to the upper end thereof, said shaft having a worm member fixed thereto having right hand threads thereon; of a chain winding drum rotatable about a horizontal axis parallel to the end wall of the car and disposed outwardly beyond said operating shaft and outwardly of said offset section of the wall; a worm wheel fixed to said drum and rotatable about the same axis, said worm wheel being operatively engaged with said worm member; and means secured to

the car wall above said offset section and inwardly thereof for supporting said drum, worm wheel, worm, and operating shaft with the shaft and worm disposed in-



wardly of the axis of rotation of said drum and between the same and the end wall section to which the supporting means is secured.

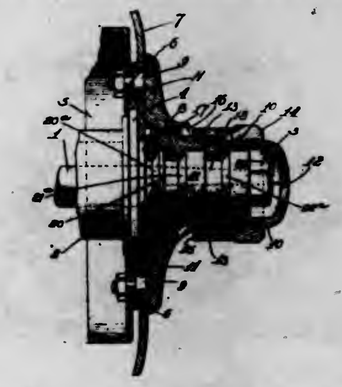
1,904,370. AUTOMATIC COOKING APPARATUS. HERBERT T. HUNTER, Baltimore, Md., assignor to Doughnut Machine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 15, 1930. Serial No. 495,896. 10 Claims. (Cl. 53—7.)



1. In apparatus for cooking doughnuts and the like in hot liquor, an elongated receptacle for the cooking liquor; a progressing means with individual cells to maintain the doughnuts definitely separated in the liquor while conveying them along a portion of the receptacle; a second and similar progressing means with cells for conveying the doughnuts in definite separation in the liquor along the remaining portion of the receptacle; and a synchronized rotary turnover for engaging the doughnuts individually from beneath to invert them incident to transfer from the cells of the first progressing means to the cells of the second progressing means, each said vane embodying a broad curved tip effective to prevent backing of the inverted doughnuts.

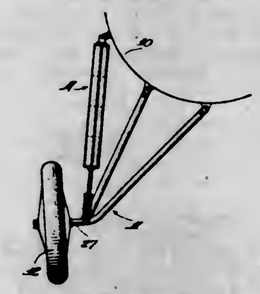
1,904,371. DEMOUNTABLE WHEEL LOCK. ARTHUR C. HYNAN, Chicago, Ill., assignor to Robert N. Burton, Chicago, Ill. Filed Aug. 18, 1930. Serial No. 475,871. 3 Claims. (Cl. 301—9.)

2. The combination of a wheel and a separable hub therefor having a transaxial flange against the outer face of which the body of the wheel is normally disposed, and a reduced portion extending through a central aperture in the wheel, said reduced portion having a transaxial circumferential encompassing groove having its inwardly facing wall sloping radially toward the axis of the hub and thereby inclined outwardly with respect to the outer face of the first mentioned flange and with respect to the wheel body and having its opposite wall substantially directly transaxial, a locking member formed to be disposed between said inclined and directly transaxial walls, dimensioned for clearance therebetween at least equal to the radial divergence of said inclined and transaxial walls of the groove, and means operating independently of said wheel for forcing said locking member



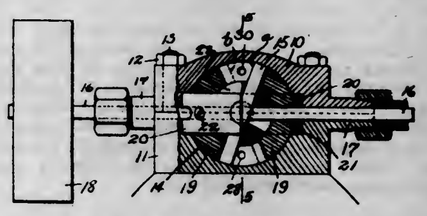
transaxially for wedging it in an axial direction relative to said wheel body and the first mentioned flange of the hub.

1,904,372. PNEUMATIC SHOCK ABSORBER. PETER W. KANE, Buffalo, N. Y. Filed Apr. 3, 1931. Serial No. 527,499. 11 Claims. (Cl. 188—88.)



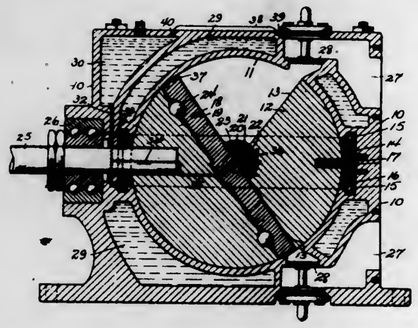
1. A shock absorber comprising a casing formed of a single length of tubing, partition members in said casing for forming a plurality of compression chambers, means extending between each of said partitions and said casing for sealing the compression chambers, a piston in each chamber, and a piston rod connecting said pistons for unitary movement.

1,904,373. ENGINE. JAMES L. KEMPTHORNE, Montclair, N. J. Filed Aug. 20, 1930, Serial No. 476,492. Renewed Aug. 26, 1932. 8 Claims. (Cl. 104—142.)



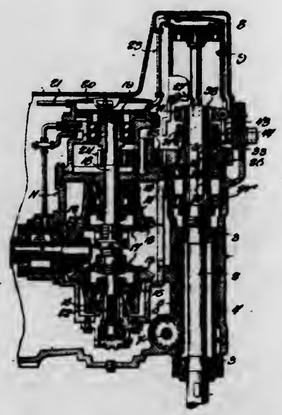
1. A machine of the kind described comprising a casing with a spherical opening therein, a wobble-plate in the opening, and elements, including end pieces opposite the wobble-plate, movable by the wobble-plate and conforming to its oscillation to form chambers for the intake and exhaust of fluids.

1,904,374. ENGINE. JAMES L. KEMPTHORNE, Montclair, N. J. Filed Nov. 25, 1930, Serial No. 497,980. Renewed Aug. 26, 1932. 10 Claims. (Cl. 103—142.)



1. An engine comprising a casing having a spherical chamber therein, a segmental abutment mounted to oscillate in the chamber, and a semi-spherical member rotatable in the chamber opposite the abutment and in contact therewith across the centre whereby the abutment is caused to oscillate when the member rotates.

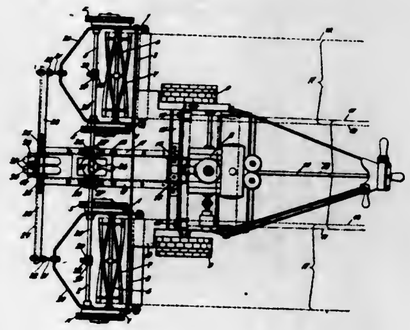
1,904,375. TAPPING AND DRILLING MACHINE. FREDERICK H. KIND, Manitowoc, Wis., assignor to W. Gaterman Mfg. Co., Manitowoc, Wis. Filed Nov. 18, 1929. Serial No. 408,040. 3 Claims. (Cl. 10—135.)



1. In a machine of the character described, a tool carrying spindle, driving means for rotating the spindle comprising an annular member carried by said spindle and provided with a semi-spherical pocket in its periphery, a driven sleeve surrounding said annular member and provided with an opening for alignment with said pocket, a ball normally positioned within said opening and pocket, and a spring-urged sleeve having an internally tapered face for engagement with said ball.

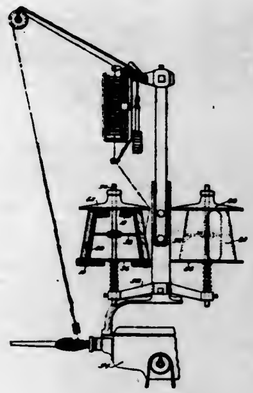
1,904,376. GANG-MOWER. CHARLES G. KRUCKEMEYER, Jennings, Mo. Filed June 9, 1930. Serial No. 460,039. 12 Claims. (Cl. 56—7.)

1. A device of the character described comprising a frame of rigid construction, a rock shaft supported by said frame, sliding rods in connection with the ends of said rock shaft, means connecting the lower ends of said rods with lawn mowers, means connecting the forward



end of said frame with said lawn mowers, and means for connecting the rear end of said frame with a motor vehicle.

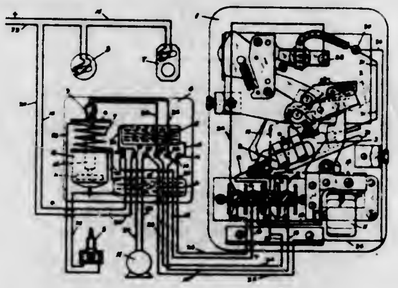
1,904,377. MANUFACTURE OF RAYON. GEORGE R. LOCKHART, Providence, R. I., assignor to Manville Jenckes Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Mar. 24, 1930. Serial No. 438,370. 6 Claims. (Cl. 18—54.)



5. The method of producing rayon threads which comprises forming a cake, placing a porous wrapping through and around the cake, processing the cake, placing the cake on a supporting spool for winding, removing the wrapping from the outside of the cake while leaving the wrapping in contact with the inner wall of the cake, and thereafter winding the thread from the cake.

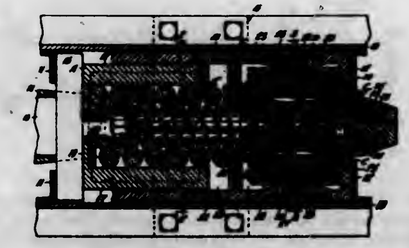
1,904,378. CONSTANT CURRENT IGNITION DEVICE. IRA E. MCCABE, Chicago, Ill. Filed May 9, 1930. Serial No. 451,187. 5 Claims. (Cl. 175—115.)

2. In an electrically controlled fluid fuel burner mechanism, a hot wire ignition system including an electrical resistance igniting element, a constant current transformer, means for energising the primary coil of the transformer, means connecting the igniting element in circuit with the secondary coil, an electro-magnetic means interposed in the secondary circuit, and means actuated thereby a constant predetermined time after each energization of the



primary coil to supply fluid fuel to the igniting device, thereby insuring a constant pre-heating period of the igniting device.

1,904,379. FRICTION SHOCK ABSORBING MECHANISM. WILLIAM H. MINER, Chazy, N. Y., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed July 16, 1928. Serial No. 293,155. 5 Claims. (Cl. 213—30.)

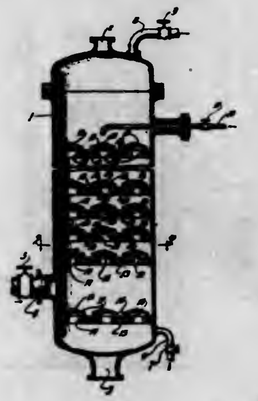


2. In a shock absorbing mechanism, the combination with relatively movable followers, one of said followers having spaced side walls provided with opposed interior bearing surfaces; of two groups of spring plates disposed at opposite sides of the mechanism, said spring plates being interposed between the follower bearing surfaces; a pair of carriers for said plates engaged and actuated by means on said follower to effect relative approach of said carriers and the other follower upon compression of the mechanism; wedge means having wedge faces adjacent opposite ends thereof, having wedging engagement with opposite ends of said carriers for spreading said carriers apart; and a main spring resistance opposing relative movement of the wedge member and the last named follower.

1,904,380. APPARATUS FOR VAPOR FRACTIONATION. JACQUE C. MORRELL and JOSEPH G. ALTHER, Chicago, Ill., assignors to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Apr. 25, 1927. Serial No. 186,219. 3 Claims. (Cl. 261—114.)

1. A dephlegmator comprising in combination a shell having vapor and liquid inlet and outlet, spaced superimposed decks mounted within said shell forming a plurality of chambers, relatively short upstanding open end risers

projecting above the general plane of each deck through which vapors pass from a lower to a higher chamber, a cap mounted above each riser, each cap comprising a



flange extending below and surrounding the upper limits of said riser having perforations therein above the upper end of said riser, and a top wall.

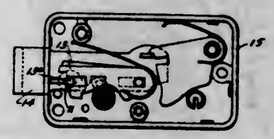
1,904,381. REFINING OF HYDROCARBON OILS. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 11, 1929. Serial No. 406,528. 2 Claims. (Cl. 196—36.)

1. A process of refining cracked hydrocarbon distillates containing highly unsaturated hydrocarbons which comprises passing the same in vapor form thru adsorbent earthy material containing soda lime.

1,904,382. PROCESS FOR SWEETENING HYDROCARBON DISTILLATES CONTAINING MERCAPTANS. JACQUE C. MORRELL, Chicago, Ill., assignor to Universal Oil Products Company, Chicago, Ill., a Corporation of South Dakota. Filed Nov. 15, 1929. Serial No. 407,372. 1 Claim. (Cl. 196—38.)

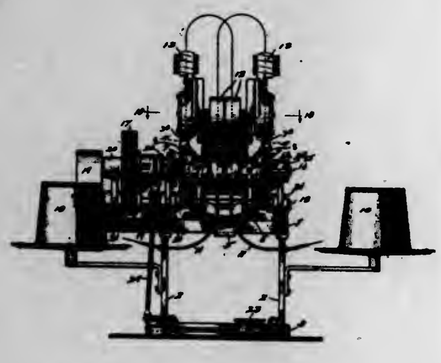
A process for sweetening hydrocarbon distillate containing mercaptans which comprises converting the mercaptans to mercaptides by treating the distillate with plumbite solution, and then precipitating the mercaptides by exposing the distillate to ultraviolet light.

1,904,383. SAFE DEPOSIT LOCK. WILLIAM P. MOSELY, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed July 28, 1928. Serial No. 296,048. 10 Claims. (Cl. 70—14.)



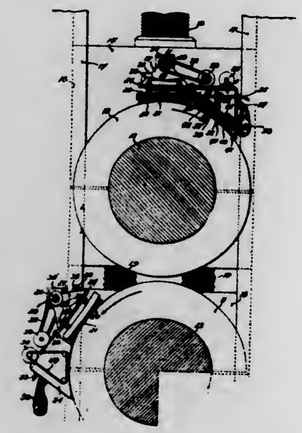
1. In a lock, a plurality of tumblers, a key guide in said lock whereby said tumblers may be operated, means leading into said lock independently of said keyway, and adapted to hold said tumblers in inoperative position, and a key designating character carried by said tumbler holding means.

1,904,384. MACHINE FOR MAKING AND INSERTING WIRE FASTENERS FOR BASKET COVERS. WALTER F. NEWHOUSE, Benton Harbor, Mich. Filed Nov. 9, 1931. Serial No. 573,784. 42 Claims. (Cl. 140—93.)



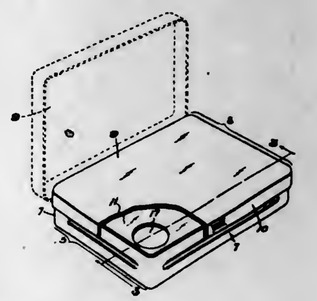
1. In a machine for making and inserting wire devices, the combination of a movable former, a stationary forming plate adapted and disposed in fixed position to cooperate with the movable former to form the wire device, by bending a length of wire into bail-shaped form, driving mechanism operable at right angles to said movable former to strip the bail-shaped wire device from said forming plate, by lateral movement thereof, and to bend the end portions of said wire device at right angles, operative to insert said wire end portions through the work, and clinching mechanism to clinch the wire ends upon the work.

1,904,385. GRINDING AND POLISHING ATTACHMENT FOR ROLLING MILLS. HARRY A. POLING, Kenosha, Wis., assignor of one-fourth to Frank S. Symmonds, Kenosha, Wis. Filed May 3, 1928, Serial No. 274,953. Renewed Mar. 3, 1932. 12 Claims. (Cl. 51—252.)



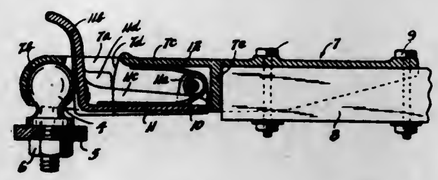
1. A roll dressing attachment for rolling mills having an adjustable roll, said attachment comprising an abrasive element for contact with the roll, means for reciprocating said element along the roll during operation of the mill, and means for maintaining a definite relation between said element and roll during adjustment of the roll.

1,904,386. DISPENSING CONTAINER FOR TABLETS AND THE LIKE. CHARLES E. RAYMOND, Boston, Mass. Filed Nov. 29, 1930, Serial No. 499,028. Renewed July 2, 1932. 7 Claims. (Cl. 206—42.)



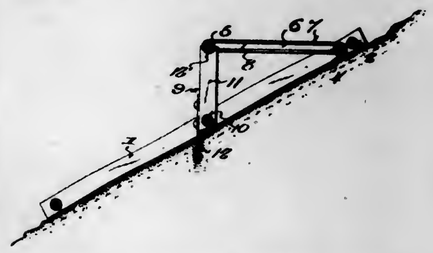
3. In a dispensing container for tablets and the like, the combination of a box comprising a body, an imperforate outer cover, and an inner cover spaced from the bottom of said box body to provide a single storage space for the tablets, said inner cover being provided with an opening through which the tablets may be dispensed.

1,904,387. COUPLING. LEON LE ROY RHODES, Minneapolis, Minn. Filed Mar. 30, 1932. Serial No. 601,987. 5 Claims. (Cl. 280—33.15.)



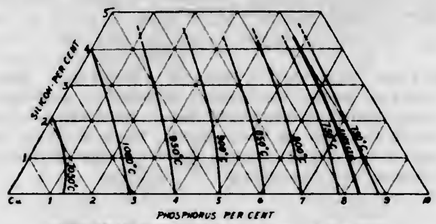
1. In a coupler, the combination with a ball, of an approximately U-shaped socket member having a socket engaging one side of said ball, a ball clamping dog located between the prongs of said socket member and pivoted thereto for engagement with the opposite side of said ball, the prongs of said socket member having shoulders integrally formed thereon and said dog having integral wings at its sides closely adjacent said shoulders for engagement therewith.

1,904,388. COLLAPSIBLE TERRACE CHAIR. GEORGE A. RIDDELL, Sheboygan, Wis. Filed July 18, 1932. Serial No. 623,045. 2 Claims. (Cl. 155—1.)



1. A chair of the character described comprising a pair of longitudinal runners, a cross brace connecting the said runners adjacent their upper and lower ends, a seat section pivotally connected at one of its ends to said runners, a pair of pivotal uprights for engaging the forward end of said seat section in raised position, said uprights being pivotally connected between said runners ahead of the forward end of said seat section when the latter is collapsed, and a pair of prongs carried by said uprights for engagement in the ground when said uprights are in vertical, supporting position.

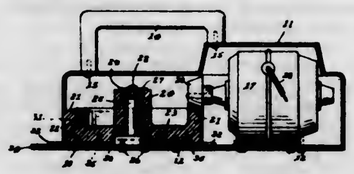
1,904,389. BRAZING SOLDER. CYRIL STANLEY SMITH, Cheshire, Conn., assignor to The American Brass Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 30, 1932. Serial No. 626,524. 3 Claims. (Cl. 75—1.)



MELTING POINTS OF THE COPPER-PHOSPHORUS-SILICON ALLOYS.

1. An alloy containing approximately 2 to 10 percent of phosphorus, 0.1 to 5 percent of silicon, the balance being substantially all copper.

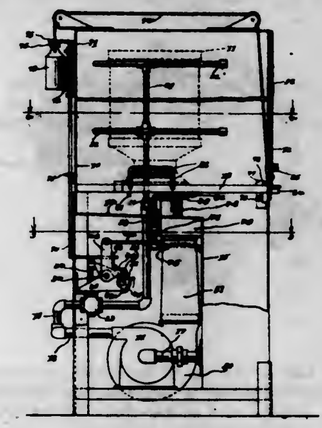
1,904,390. HEDGE TRIMMER. CARL SOHN, Stratford, Conn. Filed Nov. 21, 1932. Serial No. 643,602. 2 Claims. (Cl. 30—11.)



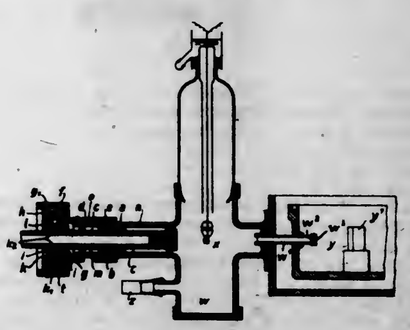
1. A hedge trimmer of the class described, the same comprising a base plate having projected teeth, a bearing post secured to the top side of said base plate, a cutter wheel mounted on the post including a hub portion, and a relatively heavy rim portion having a bevelled driving surface, cutters secured to the underside of the wheel between it and the base plate and projecting from the periphery of the wheel, a motor secured to the base plate having a conical driving pulley in engagement with the bevelled surface of the cutter wheel for operating the latter, a housing enclosing the wheel and motor, means for detachably securing the same to the base plate and having an opening around its forward end portion to permit the cutters to pass therethrough.

1,904,391. CAN WASHING MACHINE. HAROLD L. SOLIE and NELS J. HEDLUND, Minneapolis, Minn. Filed July 26, 1930. Serial No. 470,781. 5 Claims. (Cl. 141—7.)

3. A can washing machine comprising a plurality of chambers each adapted to enclose a can to be washed, means for directing washing fluid, steam and air against the cans in said chambers, valves for severally controlling the supplies of said fluid, steam and air to each of said chambers, means, including a shaft, for actuating said valves for each chamber, a common power-driven shaft and clutches for severally connecting said power-driven shaft to said first mentioned shafts.



1,904,392. JOINT FOR MEMBERS PROVIDED IN A WALL SEPARATING SPACES OF DIFFERENT PRESSURES. HUGO STINTZING, Giessen, and EUGEN HUBER, Frankfort-on-the-Main, Germany. Filed June 10, 1929, Serial No. 369,783, and in Germany Dec. 24, 1927. 11 Claims. (Cl. 286—9.)

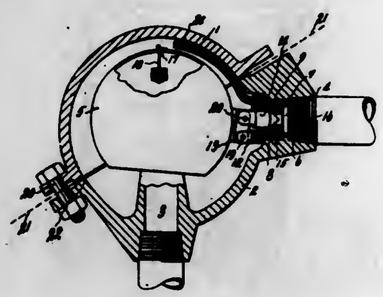


7. The herein described joint for members provided in a wall separating spaces of different pressures, comprising a wall separating the said spaces and formed with a hole providing a spherical seat, a spherical member in loose and rocking engagement with said spherical seat, a spherical bearing disposed concentrically of said seat and providing a support for said member permitting rocking movement thereof and adapted to hold the same away from its seat, and a packing medium filling the gap thus produced between said member and seat.

1,904,393. STEAM TRAP. ALBERT CHESTER TRAVIS, JR., Jackson Heights, N. Y., assignor to A. W. Holbrook & Sons, Inc., Palmer, Mass., a Corporation of Massachusetts. Filed June 12, 1931. Serial No. 543,827. 3 Claims. (Cl. 137—103.)

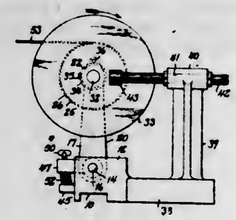
1. A steam trap comprising in combination a casing having a side outlet, a valve stem movable to and from a seat in the outlet opening, an inverted bucket pivoted at a point adjacent the outlet and in position to overlie

an inlet opening in the bottom of the casing, said bucket being connected to operate said valve stem by a rocking motion of the bucket, and a weighted wire hung loosely



in a vent hole at the top of the bucket whereby the vent hole is kept cleaned by a pendulum-like swinging motion induced whenever the bucket rocks on its pivot.

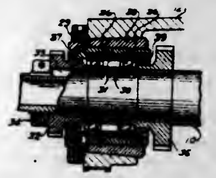
1,904,394. AUTOMATIC TENSION MECHANISM FOR STRANDS, ETC. JOHN VACHER, Waterbury, Conn., assignor to The American Mills Company, Waterbury, Conn., a Corporation. Filed Aug. 4, 1931. Serial No. 555,024. 7 Claims. (Cl. 242—55.)



1. In a mechanism of the class described, the combination with a revoluble reel mounted for bodily movement; of a pair of complementary interengaging rotary friction-members, one of which is adapted for connection to a source of power for being driven at a substantially constant speed and the other of which is operatively associated with the said reel and bodily movable therewith relatively with respect to its complementary friction-member to effect a speed-changing relationship between the two said members in direct response to a change in the tension of the material being handled by the said reel; the said parts being organised and related with respect to each other in such manner as to move the said reel and simultaneously slide the face of the movable friction-member across the periphery of its complementary friction-member to automatically effect a positive and proportional change in the speed of the said reel as the said tension is changed.

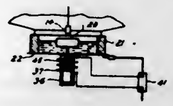
1,904,395. SPINDLE BEARING. ALEXANDER G. WHITEHEAD, Hartford, Conn., assignor to Pratt & Whitney Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 17, 1930. Serial No. 482,536. 2 Claims. (Cl. 308—189.)

1. A spindle supporting and mounting construction comprising in combination, a supporting member, aligned conical openings therein, housing members fitting said openings, spaced anti-friction bearings within said housing members, and a sleeve slidably mounted within one of the housing members and having one of the bearing members mounted therein and a spindle supported within



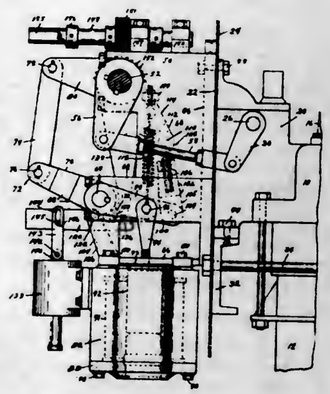
said bearings in said housing members whereby said spindle and the bearings within one of said conical openings are free to move axially therein.

1,904,396. ELECTRIC CURRENT RECTIFIER. STEFAN WIDMER, Baden, Switzerland, assignor to Aktiengesellschaft Brown Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Mar. 31, 1931, Serial No. 526,644, and in Germany Apr. 14, 1930. 8 Claims. (Cl. 175—363.)



7. In an electric power rectifier structure of the metallic vapor arc type comprising a tank, anodes extending into the tank, and a fluid metallic cathode, the tank having a well formed therein to receive the cathode material; a cylinder fastened on and in communication with the cathode well, a solenoid core movable within said cylinder, a solenoid coil arranged about said cylinder, and a plate of difficultly fusible material connected with said core and movable thereby to permit attachment of the arc thereon when said coil is deenergized.

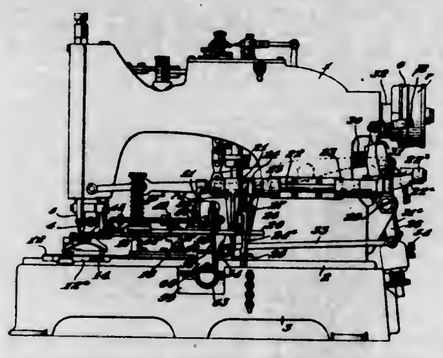
1,904,397. ELECTRIC SWITCH. CHESTER D. AINSWORTH, Wollaston, Mass., assignor to Condit Electrical Manufacturing Corporation, South Boston, Mass., a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 458,872. 12 Claims. (Cl. 200—106.)



1. Electric switch operating mechanism including the combination of a switch operating member, a pivoted actuating member having a rigid link pivotally connecting said

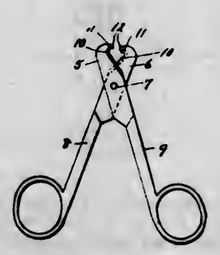
actuating and operating members, a locking toggle having one end thereof pivotally connected with said actuating member and having its other end pivotally connected to a fixed support, a latch arm carried by one of said toggle members, a latch for engaging said latch arm whereby to hold said toggle releasably in an underset position, means to trip said latch electrically, and manual means for operating said actuating member to close the switch including a manually operable shaft, a pinion carried by said shaft, and cooperating gear teeth carried by one of said toggle members.

1,904,398. METHOD OF AND APPARATUS FOR SEWING SEAMS. LESTER L. ALMOND, North Troy, ROLLAND HERRINGTON, Troy, N. Y., and FRANCIS A. MATTHEWS, Kitchener, Ontario, Canada, assignors to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Dec. 26, 1930. Serial No. 504,804. 31 Claims. (Cl. 112—252.)



1. Apparatus for making a sewed seam comprising an eye-pointed needle, means for advancing the needle through the work while holding the free end of the thread at a point above the work, means for releasing said free end before the completion of the first stitch cycle to permit it to be drawn down to the under side of the work, and means for temporarily holding said end at a point below the work until the completion of at least one stitch cycle.

1,904,399. SURGICAL CLAW SCISSORS. HARRY B. BALTHASER, Philadelphia, Pa. Filed Sept. 22, 1930. Serial No. 483,433. 2 Claims. (Cl. 128—318.)



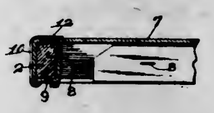
1. In surgical scissors, a pair of blades pivotally connected to one another and each having a cutting edge projecting in a substantially straight line from the inner edge of the blade toward the outer edge and toward the outer end of said blade and then extending in a curved line still toward the outer end of the blade back toward the inner edge thereof with a short straight portion between the curved part and said inner edge contiguous to the outer end of the blade and with said outer end forming a claw having a blunt terminal.

1,904,400. BOX. RALPH L. BANGS, Wakefield, and WILLIAM A. HERMANSON, Brighton, Mass. Filed July 24, 1931. Serial No. 552,943. 3 Claims. (Cl. 229—14.)



1. A box adapted to contain articles and keep them in a warm or cold state, comprising a casing of insulated walls composed of corrugated cardboard with an insulating batting between and removable insulating liner having a layer of insulating batting.

1,904,401. TABLE. WILLIAM H. BRESSENBRUGGE, Whitefish Bay, Wis. Filed July 11, 1930. Serial No. 467,242. 1 Claim. (Cl. 45—81.)



In a table, an open rectangular rigid table top frame including side rails secured together at their meeting ends, a relatively stiff table top cover having a finished exterior face and of a predetermined pliability, the edges of the cover being folded down and under the side rails and provided with extensions for engaging the inner faces of the rails, and fastening elements securing the edges of the cover to the bottom and inner faces of the rails.

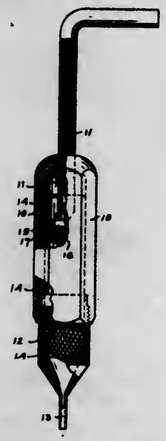
1,904,402. TREATMENT OF HYDROCARBON OILS. EDWIN R. BIRKHIMER, Philadelphia, Pa., assignor to The Atlantic Refining Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 15, 1931. Serial No. 537,753. 18 Claims. (Cl. 196—13.)

1. In the art of refining mineral oils, the process which comprises separating an oil containing paraffinic and naphthenic hydrocarbons into fractions respectively richer in paraffinic and naphthenic compounds by extracting said oil with an aromatic aldehyde.

1,904,403. METHOD AND MEANS FOR FILLING TIRE CASING CUTS. ROBERT M. BOWES and CHARLES E. BOWES, Indianapolis, Ind. Filed Aug. 19, 1931. Serial No. 558,180. 3 Claims. (Cl. 221—79.)

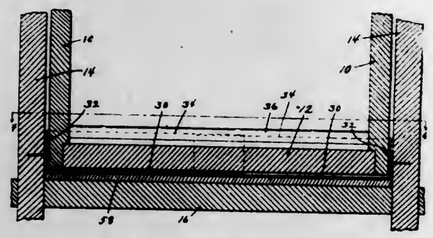
1. A gun cylinder closed at one end having a threaded hole through the closed end, an extension at the other end removably secured to and having substantially the same bore as the cylinder and terminating with a reduced nozzle, a cartridge seated in the bore of the cylinder and far enough in the cylinder extension to provide a hand hold for the withdrawal of the cartridge shell when the extension is removed, a plug in the bore of the cartridge initially in the end opposite the hand hold portion, said

plug having a countersunk outer side, means to prevent the passing of the plug through said end opposite the hand hold portion and a threaded shaft screwed through the



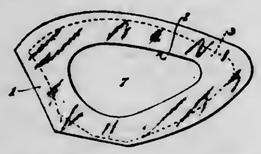
threaded hole in the end of the gun cylinder said shaft having a formed end which enters the countersink in the plug.

1,904,404. BUILDING CONSTRUCTION. MICHAEL F. BURK, Swampscott, Mass., assignor to T. T. Greenwood, Boston, Mass. Filed Apr. 25, 1930. Serial No. 447,211. 13 Claims. (Cl. 20—11.)



1. A building wall having spaced vertical studs, a weather pan located between said studs having a bottom wall which is inclined downwardly and outwardly toward the outer surface of the wall and also having upstanding end and inner walls, and a window frame having uprights and a window sill therebetween which are seated in said pan upon said bottom wall and between said upstanding walls said uprights being located against the ends of said sill and the joints between said uprights and sill communicating with said pan.

1,904,405. TEMPLATE FOR SPLITTING LEATHER SOLES. ANTHONY CAGGIANO, Springfield, Mass. Filed June 6, 1931. Serial No. 542,660. 1 Claim. (Cl. 69—20.)

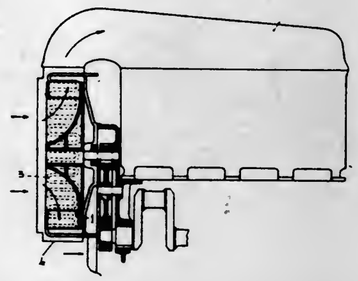


As an article of manufacture, a template for shoe soles comprising a sheet of thin transparent material, as celluloid, of a shape and size corresponding to the shape and size of a leather sole and formed with a centrally disposed opening whose periphery is approximately parallel to the outer edge or periphery of said template.

1,904,406. METHOD OF REDUCING THE SOLUTION VISCOSITY OF CELLULOSE. MICHAEL J. CALLAHAN, Parlin, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed July 2, 1930. Serial No. 465,454. 4 Claims. (Cl. 260—146.)

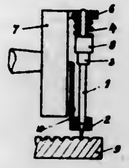
1. A method of reducing the solution viscosity of cellulose which comprises treating the cellulose with a gas containing a hydrogen halide as its sole reactive ingredient to reduce the solution viscosity of the cellulose, and discontinuing the treatment before the fibrous structure of the cellulose is substantially impaired.

1,904,407. OIL COOLING ARRANGEMENT FOR AIR-COOLED INTERNAL COMBUSTION ENGINES. GIULIO CESARE CAPPA, Turin, Italy, assignor of one-half to Società Anonima Automobili Ansaldo, Turin, Italy. Filed Aug. 22, 1930, Serial No. 477,101, and in Italy Aug. 29, 1929. 1 Claim. (Cl. 123—171.)



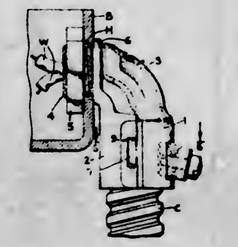
In combination with an internal combustion engine, a fan supplying cooling air to said engine, a coil arranged in the fan outlet chamber and adapted to be put in the engine oil circulation and a by-pass for short-circuiting said coil.

1,904,408. NEEDLE SECURING DEVICE FOR TALKING MACHINES. ANDRÉ MARIE BERNARD CHARLIN, Paris, France. Filed May 29, 1930, Serial No. 457,008, and in France Aug. 14, 1929. 4 Claims. (Cl. 274—37.)



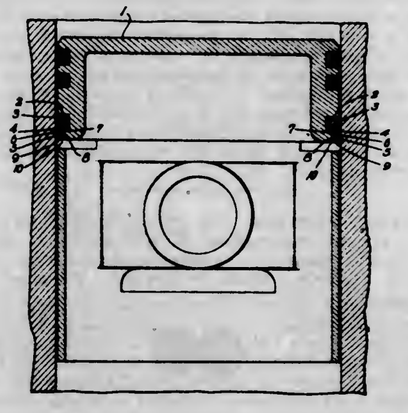
1. In a stylus holding device of a sound reproducing apparatus including a part to be vibrated, the combination of a member secured to said part and provided with a hole, a rigid stylus having a sharp tapering end and a maximum diameter greater than the inner diameter of said hole, means for applying the tapering end of said stylus against the edge of said hole so that it is wedged therein with its point projecting from said member, and damping means interposed between the last mentioned means and said stylus.

1,904,409. CABLE CONNECTER. LEWIS H. CHURCH, Roselle, N. J., assignor to The Thomas & Betts Co., Elizabeth, N. J., a Corporation of New Jersey. Filed Oct. 19, 1929. Serial No. 400,808. 19 Claims. (Cl. 247—25.)



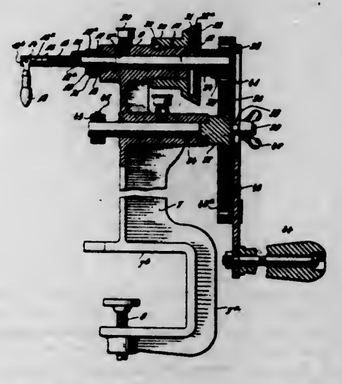
1. An elbow connecter comprising two separable portions forming a complete connecter with the interior of each portion exposed when separated, a box hole anchorage means upon one of said portions extending at an angle to the axis of the connecter, the portions being separable around the bend of the elbow to form a straight passage through the box hole anchorage means which is unobstructed by the portion carrying the same, interengaging means upon said portions engageable and completely disengageable upon relative axial movement therebetween for retaining the portions together and permitting complete separation thereof, and clamping means upon at least one of said portions for clamping a cable within the connecter and for locking said interengaging means against separation of the portions.

1,904,410. PISTON RING. CARL W. CLARK, Bethesda, Ohio, assignor of one-fourth to Cecil L. Ayers, St. Clairsville, Ohio, and one-fourth to S. T. Vaughn, Bethesda, Ohio. Filed Nov. 11, 1932. Serial No. 642,293. 2 Claims. (Cl. 74—109.)



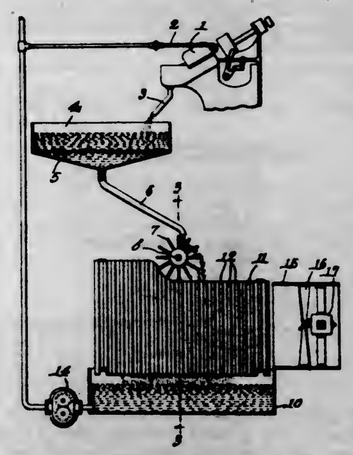
1. The combination with a piston having a ring groove and an oil drain slot and a ring land of reduced diameter located intermediately of said groove and said slot, of a piston ring located in said groove and having an axially extending flange located intermediately of the inner and outer faces of said ring and extending downwardly over said ring land to said oil drain slot, whereby oil is prevented from passing behind said ring.

1,904,411. WINDING MECHANISM. JOSEPH CLAYTON, New York, N. Y. Filed Mar. 28, 1931. Serial No. 525,894. 5 Claims. (Cl. 242—55.)



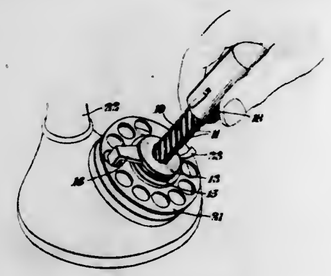
1. A device for winding material upon a suitable carrier, embodying a supporting standard, a shaft journalled in a bearing on said standard, a clutch member fixed to said shaft, a cooperating clutch member mounted on said shaft bearing, a pinion keyed to said shaft, driving means including a ring gear mounted on said standard for movement relative thereto, into and out of mesh with said pinion, and means on said shaft cooperating with one end of the bearing therefor to render said shaft capable of longitudinal movement relative to its bearing, in response to variations in the load transmitted to said shaft transversely of its axis.

1,904,412. LUBRICANT COOLER. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Company, Tiffin, Ohio. Filed Nov. 10, 1930. Serial No. 494,788. 4 Claims. (Cl. 184—6.)



1. An apparatus of the class described including a receiver for lubricant, spaced cooling plates upstanding thereabove, means for directing air currents between the plates, means for distributing lubricant over the plates and downwardly across and in direct contact with the air currents in the spaces between the plates, and means, including mechanism to be lubricated, for elevating lubricant from the receiver and directing it onto the distributing means.

1,904,413. TELEPHONE DIAL ACTUATOR. JULIUS P. COLLYER, Old Greenwich, Conn. Filed May 19, 1932. Serial No. 612,279. 8 Claims. (Cl. 179—90.)

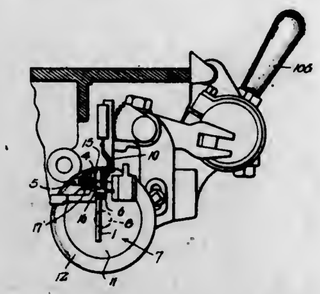


1. A telephone dial-operating instrument comprising a dial-engaging member, a stem connected to said member, a manually operated actuator mounted on said stem, and inter-engaging means on said stem and actuator for effecting rotation of said stem upon movement of the actuator axially of said stem.

1,904,414. PRODUCTION OF AROMATIC ALDEHYDES. AUGUSTUS E. CRAVER, Brooklyn, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Original application filed Nov. 18, 1921, Serial No. 516,124. Divided and this application filed July 23, 1927. Serial No. 208,063. 5 Claims. (Cl. 260—136.)

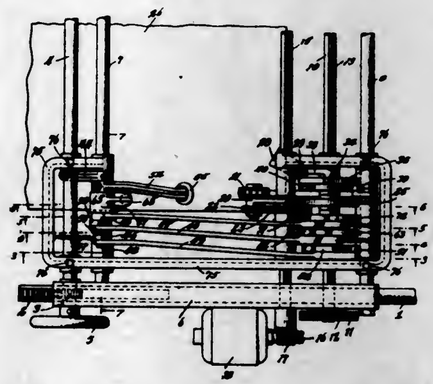
1. The process of producing an aldehyde which comprises passing, in the vapor phase, ortho-chlortoluene and an oxygen-containing gas into contact with tantalum oxide, at a temperature of approximately 500° C.

1,904,415. CHANNELING MACHINE. ALPHONSE U. CROCE, Brockton, Mass., assignor to Leo V. Clancy, Brockton, Mass. Filed Dec. 4, 1930. Serial No. 500,110. 3 Claims. (Cl. 12—27.)



1. In a channeling machine, provided with an edge slitting knife having a shank provided with a lower cutting edge and a blade extending laterally of the shank at both sides thereof and provided with a longitudinal cutting edge also at both sides of the shank, said shank having its lower portion for a distance about equal to the breadth of said blade provided with opposite curved diversely beveled surfaces leading away from the shank cutting edge and intersecting the upper surface of said blade at about right angles, to thereby gradually turn the outside lip of the insole to about forty five degrees upwardly and at the same time resist any downward and inward reverse movement of said lip.

1,904,416. SHEET SEPARATOR FOR PAPER FEEDING MACHINES. FRANK L. CROSS, Port Washington, N. Y., assignor to Cross Paper Feeder Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 21, 1931. Serial No. 570,125. 8 Claims. (Cl. 271—21.)



1. The combination with means for imparting a combing separating action to a pile of sheets, and a sheet moving separator element to engage and move the top sheet of said combed pile, of means engaging the combed portion of the pile to hold the combed sheets in combed condition for the action of said sheet moving separator element.

1,904,417. FINISHING PROCESS. FRANK M. CHYSTLER, Lansing, Mich., assignor to Jones-Dabney Co., a Corporation of Delaware. Filed Oct. 21, 1931. Serial No. 570,265. 10 Claims. (Cl. 91—70.)

1. The method of finishing a surface of an article of manufacture which comprises applying to the surface a film of a liquid coating composition comprising a synthetic resin, subjecting the outer surface of the film to an abrasive treatment, and heating the resulting film to obliterate abrasive marks.

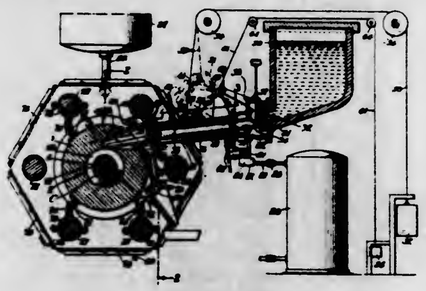
9. The method of finishing a surface of an article of manufacture which comprises applying to the surface a film of liquid coating composition comprising nitrocellulose and a synthetic resin of the phthalic anhydride glycerine type, treating the film to increase its hardness, subjecting the outer surface of the hardened film to the action of an abrasive to produce a relatively smooth surface, and heating the resulting film to a temperature of about 160° F. to 250° F. to modify the physical condition of the material thereof and effect the substantial elimination of abrasive marks.

1,904,418. METHOD OF INSULATION. CHRISTIAN DANTSIZEN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 11, 1929. Serial No. 399,063. 7 Claims. (Cl. 204—1.)



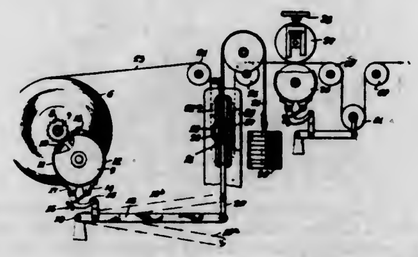
1. The process of insulating a metallic conductor shaped into any desired final form in which the abutting parts of the shaped conductor are in electrical contact, which consists in making the shaped conductor the anode in an electrolyte which on electrolysis deposits an insulating coating throughout the entire surface of the shaped conductor, including the parts thereof originally in electrical contact, and passing an electric current through the electrolyte for a time sufficient to effect such insulation of the entire shaped conductor.

1,904,419. LEAD EXTRUSION APPARATUS. FRANK L. DAVIS, Jr., Kenilworth, N. J., assignor to The Watson-Stillman Co., Roselle, N. J., a Corporation of New Jersey. Filed June 4, 1932. Serial No. 615,382. 15 Claims. (Cl. 207—4.)



1. In a metal extrusion apparatus including an extrusion chamber having an airtight charging and cleaning out passage, an extrusion ram mounted to reciprocate in the extrusion chamber and a supply container for molten metal having a discharge port, an airtight delivery conduit leading from said supply discharge port to said discharging passage and comprising telescoping tubular sections; means excluding air from said discharge port and the adjacent end of said conduit; an airtight releasable juncture between said conduit and said charging passage, the conduit being retractible from the passage by telescoping; a hinge mounting for the conduit adapting it to be swung out of alinement with the charging passage; and means to automatically swing the conduit out of alinement with the charging passage when it is freed from the latter.

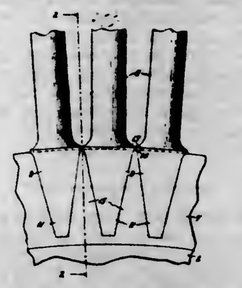
1,904,420. WEB TENSIONING MEANS. CHARLES A. DICKHAUT, New York, N. Y., assignor to John Waldron Corporation, New Brunswick, N. J. Original application filed Apr. 3, 1928, Serial No. 266,906. Divided and this application filed Aug. 12, 1931. Serial No. 556,544. 8 Claims. (Cl. 242—75.)



4. A device for controlling web tension comprising a shaft, a roll of material to be unwound positioned thereon, means for applying a braking effect to said shaft controlled by the tension in the web leaving the roll, and means for applying further tension to said web also controlled in accordance with the tension of the web leaving the roll.

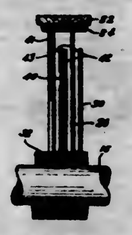
1,904,421. BUCKET WHEEL. JOHN H. DORAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1931. Serial No. 566,291. 4 Claims. (Cl. 253—77.)

1. A bucket wheel having a rim and row of buckets secured to the rim, the buckets being provided with base portions having projections straddling the rim of the wheel, said projections having portions engaging each other and other portions defining overhung recesses between the other portions of adjacent buckets, and means



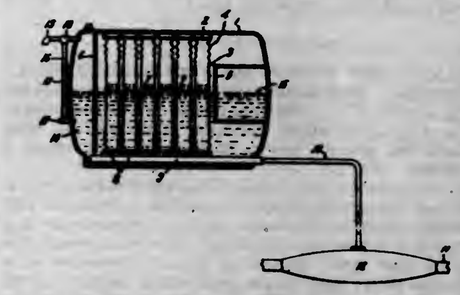
for integrally uniting adjacent base portions to each other and to the rim comprising welding material filling said overhung recesses.

1,904,422. ELECTRICAL APPARATUS. HENRY G. DYBVIG, Dayton, Ohio, assignor to General Motors Radio Corporation, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,929. 12 Claims. (Cl. 175—41.5.)



1. In an electrical condenser, a plurality of separate condenser units, means for simultaneously adjusting the units, and means for adjusting the capacities of the several units to cause simultaneous adjustments to result in equal increments of change of capacities of the units, said second means including a plate having an insulated core coated with a removable conductive coat so that the capacity of the units may be equalized by removing portions of the coating.

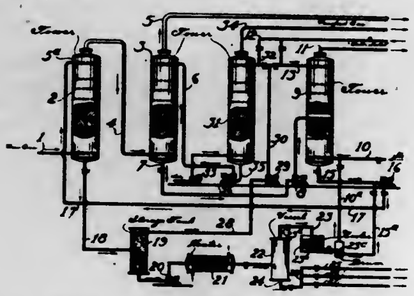
1,904,423. INDICATOR FOR RESERVOIRS FOR LIQUID FILLED CABLES. EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 26, 1931. Serial No. 571,155. 1 Claim. (Cl. 73—54.)



A reservoir comprising a rigid walled tank the interior of which is exposed to atmospheric pressure and is closed against internal inspection, individual cellular elements

sealed against the admission of air located in the tank and arranged side by side, each of said elements having flexible side walls and a chamber, a manifold located within the tank and connected to the chambers in parallel to deliver liquid thereto and receive it therefrom, a body of liquid in the tank in which the elements are partly submerged, the liquid in the chambers of the elements and the submerging liquid being separately maintained, and a sight indicator external to the tank and connected thereto and from which the submerging liquid is free to flow, said indicator being calibrated in terms of movements of the walls of the elements.

1,904,424. PROCESS FOR THE REMOVAL OF HYDROGEN SULPHIDE FROM GAS MIXTURES AND FOR THE RECOVERY OF ELEMENTAL SULPHUR. WILLIAM J. EDMONDS and OLIVER H. DAWSON, Baytown, Tex., assignors to Standard Oil Development Company. Filed Jan. 21, 1930. Serial No. 422,287. 6 Claims. (Cl. 23—225.)



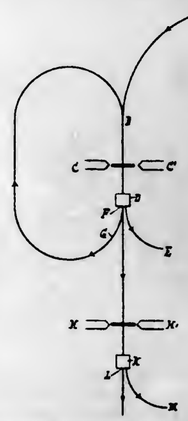
1. An improved process for the recovery and purification of the sulphur which results from the desulphurization of gas by sulphur dioxide, comprising withdrawing a liquid suspension of elemental sulphur formed by such desulphurization, heating it to an elevated temperature above the melting point of sulphur for a prolonged period, removing water and sulphur dioxide and separately removing from the three layers formed, separate fractions of sulphur one of which is substantially pure sulphur.

1,904,425. NITRIDING FERROUS ALLOYS. JOHN J. EGAN, Brooklyn, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Mar. 14, 1930. Serial No. 435,971. 12 Claims. (Cl. 148—16.)

3. The method of producing a nitrided case on a ferrous alloy object containing a nitride promoting agent which comprises closely associating with the object, a subdivided material comprising a pre-nitrided ferrous alloy containing at least one nitride promoting agent, and heating in the presence of a nitriding agent.

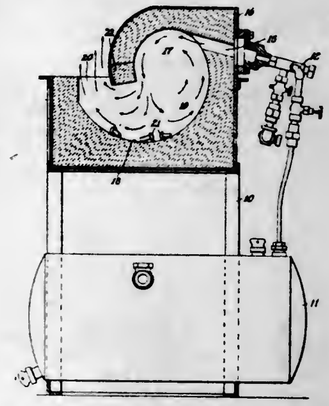
1,904,426. PRODUCTION OF ACETYLENE AND HYDROGEN. OTTO EISENHUT, Heidelberg, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Jan. 8, 1930, Serial No. 419,364, and in Germany Jan. 12. 1929. 8 Claims. (Cl. 204—31.)

1. A process for the production of acetylene and hydrogen from gases comprising hydrocarbons in which a substantially complete conversion of said hydrocarbons into hydrogen and acetylene is effected, which comprises passing the said gases through a system of electric arcs, branching off at least at one spot within the said system a part of the gases, which have been subjected to the treatment of at least one electric arc wherein only a partial conversion to acetylene and hydrogen was effected, mixing the branched-off portion with the gases which have not yet passed at least the last of the arcs with which the said part has been treated, and subjecting the other part of the said gases to a further electric arc



treatment to effect a substantially complete conversion of the hydrocarbons contained therein into acetylene and hydrogen.

1,904,427. FORGE. WALTER C. ELZE, Forest Hills, N. Y., assignor to Hauck Manufacturing Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 7, 1931. Serial No. 528,295. 2 Claims. (Cl. 263—9.)

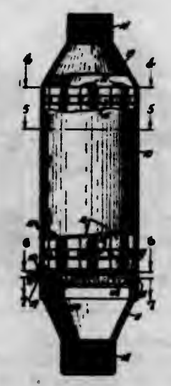


1. A forge comprising a casing of refractory material affording a heating chamber, said chamber in cross-section being substantially semi-circular over its upper half and substantially semi-circular over its lower half, the radius of curvature of the latter half being greater than that of the former with the rear walls of the two halves merging, whereby the lower half is caused to project beyond the upper half to afford a mouth opening at the top, an inlet duct located at the upper portion of the casing and directed into the semi-circular upper half portion thereof and substantially tangentially thereto, and a burner discharging into said duct.

1,904,428. SPRAYING DEVICE. HANS J. P. ENEMARK, Stapleton, N. Y. Filed Aug. 22, 1931. Serial No. 558,790. 4 Claims. (Cl. 299—83.)

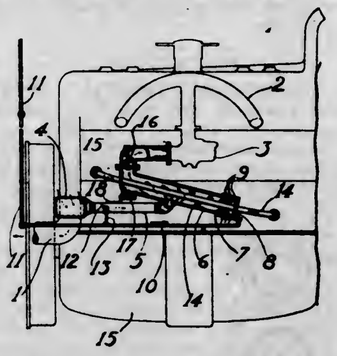
1. A spray device of the character described, comprising a cylindrical casing open at both ends and provided with means of connection to a water supply and to a spray

nozzle; a circular series of tubular members supported within and longitudinally of said casing, a plurality of said members having perforated end closures, a rotary disk valve mounted within said casing adjacent the inner ends of said members, and transversely of the axes thereof, said valve being formed with an opening located at the same distance as said members from the center of



the casing and adapted to register axially with each or any of said members according to the position of the valve, means externally of the casing for rotating said valve, the latter being constructed and arranged to form a closure for all the tubular members when the valve is in closed position and the casing therein out of registry with the said members.

1,904,429. TEMPERATURE CONTROL IN LUBRICATING OIL SYSTEMS. EARLE W. EVANS, Linden, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Oct. 30, 1928. Serial No. 316,093. 8 Claims. (Cl. 123—196.)



1. In a temperature controlling means for lubricating systems, the improvement which comprises an oil circulation line, a jacket surrounding a portion of said line and opening upon a source of unheated air, a source of heated air, regulable means for connecting said sources to the jacket, and means for circulating air from the sources through the jacket.

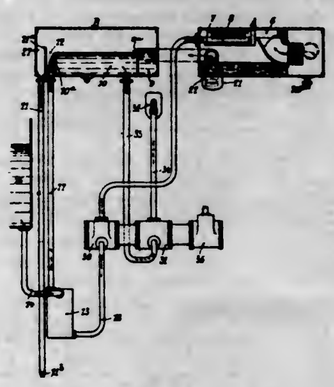
1,904,430. METHOD OF MAKING VALVES FOR EXPLOSION ENGINES. AMEDEO FERRANDO and ALBINO ZANSI, Ivrea, Italy, assignors to Ditta Giovanni Zansi, Ivrea, Italy. Filed Mar. 2, 1929, Serial No. 343,929, and in Italy Apr. 4, 1928. 1 Claim. (Cl. 29—156.7.)

A process for manufacturing valves more particularly for internal combustion engines, consisting in forming in a cylinder of high grade metal serving to form the valve head an axial bore having on its bottom a conical projection, in fitting in said bore a cylindrical stem of lower grade metal having in its end surface a conical cavity corresponding to the conical projection of the bottom of



the cylinder bore, in heating said cylinder and said stem and upsetting simultaneously said cylinder and the end of said stem to expand the stem material radially in the form of a flange of substantial thickness enclosed in a casing of uniform thickness constituting the valve head.

1,904,431. FEED WATER HEATING PLANT. SÉBASTIEN OTTO ALFRED FIEDLER, Paris, France, assignor to l'Auxiliaire des Chemins de Fer et de l'Industrie, Paris, France. Filed May 4, 1928, Serial No. 275,091, and in France May 16, 1927. 18 Claims. (Cl. 261—35.)

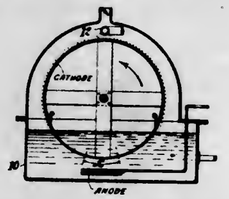


1. In a feed water heater, a mixing chamber, a hot water container having an orifice of small section in communication with the atmosphere, a water seal between said mixing chamber and said container, means for supplying said mixing chamber with exhaust steam from a discontinuously steam operated apparatus, and throttling means on said steam supplying means responsive to the pressure in said container.

1,904,432. METHOD OF ELECTRODEPOSITING CHROMIUM. COLIN G. FINK, New York, N. Y., assignor to Chemical Treatment Company, Inc., a Corporation of New York. Filed July 27, 1926. Serial No. 125,174. 7 Claims. (Cl. 204—1.)

1. A method of chromium plating large objects and other objects where the conditions limit the current to a lesser amount than will furnish the required current-density for plating over the entire surface to be plated, comprising bringing such object into contact with a chromium plating bath for which a relatively large minimum current-density is required to effect deposition of the chromium, and passing a current from an anode to a portion of the surface of said object (cathode) at a current-density at or above the aforementioned minimum current-density to thereby plate chromium on said portion, maintaining the portion of the surface not being

plated at the time, wet, and successively passing a current at or above the aforesaid minimum current-density to effect plating of chromium on successive unplated

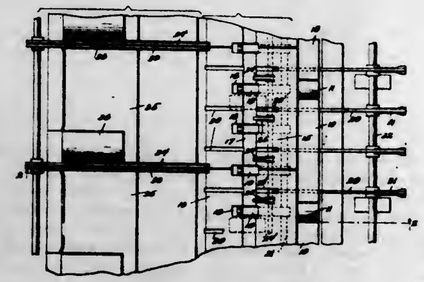


wetted portions of said object, while maintaining the portions of the surface of said object on which the plating is incomplete, wet.

1,904,433. HYDROCARBON OIL AND METHOD OF MAKING THE SAME. HERBERT G. M. FISCHER, Westfield, and CLIFFORD E. GUSTAFSON, Elizabeth, N. J., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Sept. 21, 1928. Serial No. 307,546. 6 Claims. (Cl. 44—9.)

1. As a composition of matter a low boiling hydrocarbon oil normally tending to form gum and an addition agent comprising a mixture of a hydrocarbon with condensed nuclei of the naphthalene, anthracene and phenanthrene types, and a naphthalene compound having in the alpha position a group selected from the class consisting of hydroxyl and amino groups, such addition agent being present in gum inhibiting proportions only.

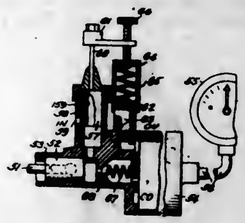
1,904,434. COOLING BED. GUSTAV LEONARD FISK, Pittsburgh, Pa., assignor to Mesta Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1929. Serial No. 414,752. 21 Claims. (Cl. 80—42.)



1. A cooling bed comprising a skid section and a table section and having an elongated depressed portion, or pocket between said sections for the reception and temporary storage of a plurality of bars sliding successively down said skid section, a plurality of arms extending across said pocket adapted to support bars therein, means for raising and lowering said arms, and pusher bars adapted to propel bars over said table section.

1,904,435. INDICATOR DEVICE. HOWARD A. FLAMMER, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1930. Serial No. 480,651. 2 Claims. (Cl. 264—14.)

1. In an indicator for a machine for mechanically inducing artificial respiration, said indicator comprising a cylinder, a piston movable in said cylinder and actuated by said machine, an air inlet valve connecting with said cylinder and actuated upon a movement of said piston in said cylinder, a pressure chamber, a valve operable under the action of said piston upon both movements of the latter for admitting and retaining the air in said



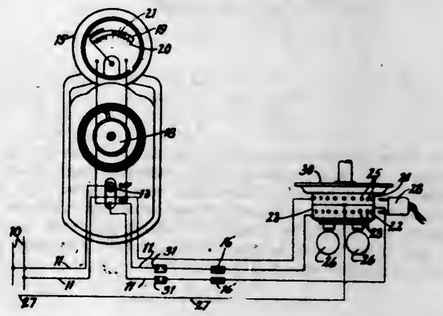
chamber, a two-way movable valve actuated one way by the first mentioned valve for closing it and the other way automatically for controlling the pressure in said chamber and a gauge for indicating such a pressure.

1,904,436. THERMIONIC TUBE. CHARLES SAMUEL FRANKLIN, London, England, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 26, 1929, Serial No. 402,689, and in Great Britain Nov. 2, 1928. 3 Claims. (Cl. 250—27.5.)



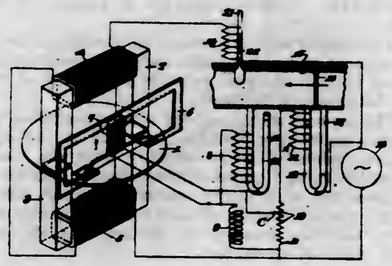
1. A thermionic tube comprising a disc-shaped anode, a disc-shaped grid electrode adjacent and parallel to said anode, the grid electrode being provided with grooves, an electron emitting electrode positioned within the said grooves and a cylindrical member open at each end, interposed between and having its ends joined to said anode and grid electrodes.

1,904,437. ELECTRICAL TREATING APPARATUS. ERNEST O. FREDERICS, New York, N. Y., assignor to E. Frederics, Inc., New York, N. Y., a Corporation of New York. Original application filed Oct. 27, 1927, Serial No. 229,141. Divided and this application filed Mar. 28, 1930. Serial No. 439,613. 10 Claims. (Cl. 161—1.)



1. In combination, an electrical treating apparatus, an adjustable time-control switch controlling the same, and a voltmeter connected across the leads between the switch and the apparatus, said voltmeter having a scale thereon indicating the time of treatment necessary for a definite dosage under varying voltage conditions.

1,904,438. INTEGRATING METER. BENNET H. FREEMAN, Wilmette, Ill., assignor to Republic Flow Meters Co., Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 13, 1922, Serial No. 587,942. Divided and this application filed Aug. 12, 1927. Serial No. 212,407. 9 Claims. (Cl. 171—264.)



2. An integrating meter of the induction type in which the accelerating torque is supplied by electro-magnetic means energized from an alternating current supply, and means in circuit with said electro-magnetic means for rendering the changes in frequency ineffective to affect the registration of the meter.

1,904,439. PRODUCTION OF HYDROGEN FROM HYDROCARBON GASES. GEORGE H. FREYERMUTH, Elisabeth, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 5, 1930. Serial No. 433,822. 10 Claims. (Cl. 23—212.)

1. In a process for production of hydrogen by the catalytic reaction of hydrocarbon gas and steam, the improvement which comprises selectively removing heavier constituents from the hydrocarbon gas prior to reaction.

9. In a process for production of hydrogen from refinery gas by the action of steam in presence of a nickel containing catalyst, the steps of scrubbing the gas with oil under pressure sufficient to effect a substantially complete removal of normally liquid hydrocarbons and then with an aqueous alkaline agent prior to reaction with steam.

1,904,440. REACTIVATION OF CATALYST USED IN THE PREPARATION OF HYDROGEN. GEORGE H. FREYERMUTH, Elisabeth, N. J., and WILLIAM V. HANKS, Baton Rouge, La., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 6, 1930. Serial No. 433,805. 7 Claims. (Cl. 23—288.)

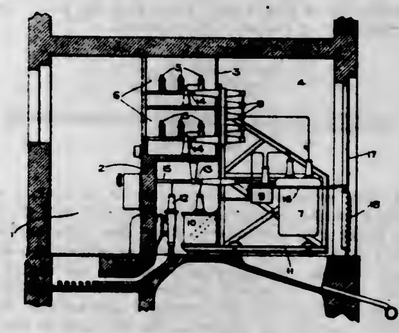
1. In a process for reactivation of a catalyst used in the manufacture of hydrogen by reaction of hydrocarbon gas and steam, the improvement comprising passing steam and hydrogen over the spent catalyst at an elevated temperature.

1,904,441. PROCESS FOR THE PRODUCTION OF HYDROGEN FROM REFINERY AND OTHER HYDROCARBON GASES. GEORGE H. FREYERMUTH, Elisabeth, N. J., and JAMES K. SMALL and WILLIAM V. HANKS, Baton Rouge, La., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 434,096. 11 Claims. (Cl. 23—212.)

1. An improved process for obtaining gas rich in free hydrogen or hydrocarbons which comprises continuously passing hydrocarbon in admixture with steam, over a suitable catalyst, which is incapable of absorbing appreciable amounts of carbon dioxide, while at a temperature in excess of about 1200° F. for a prolonged period until there is evidence of loss of catalytic activity, then passing steam, free of hydrocarbons, over the catalyst for a period of several hours whereby the catalytic activity is regained.

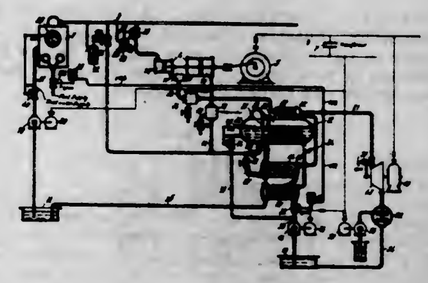
9. In a process for the production of hydrogen by reaction of hydrocarbon gas and steam over an active nickel-containing catalyst under conditions at which the catalyst shows a decrease in activity with time, an improved method of operation comprising passing steam free of hydrocarbons over the said catalyst at substantially the same temperature as that used for the hydrocarbon steam reaction for a period of several hours whereby the catalyst activity is regained.

1,904,442. HIGH TENSION SWITCH PLANT. ERNST GASIOROWSKI, Berlin-Hermsdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 9, 1930, Serial No. 419,706, and in Germany Apr. 25, 1929. 3 Claims. (Cl. 175—298.)



1. A high tension switching station comprising a bus-bar compartment, a switching compartment extending in part beneath said bus-bar compartment, an isolating partition between said bus-bar and switching compartments, and a movable switch-gear unit mounted within said switching compartment having detachable connections extending beneath said bus-bar compartment and through said isolating partition into said bus-bar compartment.

1,904,443. STEAM PLANT. HANS GLEICHMANN, Falkenhain near Spandau, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Original application filed Aug. 15, 1928, Serial No. 299,801, and in Germany June 27, 1928. Divided and this application filed Jan. 4, 1930. Serial No. 416,511. 1 Claim. (Cl. 60—94.)



A high and low pressure vapor power plant having a high pressure circuit for the operating medium including a high pressure vapor generator, a high pressure prime

mover supplied with vapor from the generator, a vapor transformer of the indirect heating type connected at its primary side to the exhaust side of said high pressure prime mover, and means for returning the condensate from the primary side of the vapor transformer to said generator, the low pressure medium circuit including the secondary side of said vapor transformer and a low pressure vapor consumer, the high pressure medium circuit including a vapor washer of the direct vapor regeneration type containing a washing liquid of the same kind as the liquid from which the high pressure vapor is generated, said washer being interposed between said prime mover exhaust and the primary side of said transformer, whereby through the regeneration of vapor from said washing liquid purified vapor is delivered to said transformer and purified condensate is returned to said generator.

1,904,444. HAIR WAVER. ABRAHAM GOODMAN, Brooklyn, N. Y., assignor to Emeth Financial Corporation, a Corporation of New York. Filed Feb. 19, 1932. Serial No. 593,964. 4 Claims. (Cl. 132—41.)



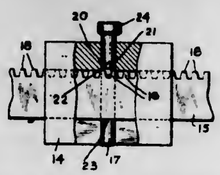
1. A hair waver comprising a tubular member, a member fitting on the tubular member, both of said members having finger grip portions at their rear ends and being pivotally connected together adjacent to said ends, a spring disposed between the finger grip portions for urging said members closed, an elastic clamping cord extending normally rearwardly from the rear end and secured at one end to the spring, and means on the free end of the cord for detachably securing said end to the front end of the tubular member.

1,904,445. PLASTIC COMPOSITION. DANIEL M. GRAY, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 7, 1930. Serial No. 442,475. 2 Claims. (Cl. 134—12.)

1. A sealing composition comprising approximately

	Parts
High grade glue	75
Casein	175
Talc	75
Titanium oxide	75
Diethylene glycol	400
Paraformaldehyde	10
Water	900
Aqua ammonia (28% NH_3)	18

1,904,446. POSITIONING MEANS FOR POISE WEIGHTS. WILLIAM GUMPRICH, Brooklyn, N. Y., assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Feb. 15, 1929. Serial No. 340,154. 14 Claims. (Cl. 265—49.)



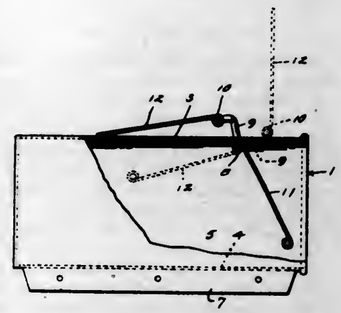
1. A scale beam having a toothed portion, a poise weight slidably mounted upon said scale beam, an element carried by said poise weight, said element having a recess accommodating said beam and for guiding movement of said element transversely of the beam, and a tooth to coact with said toothed portion to position said poise weight upon said beam.

1,904,447. RECTIFIER. CARL HAMBUECHEN, Belleville, Ill., assignor to The B-L Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 2, 1931. Serial No. 506,318. 5 Claims. (Cl. 175—336.)

2. A rectifying unit comprising an electro positive electrode element of a film forming metal, an electro negative electrode element of copper sulphide, and a layer of copper iodide between said elements.

3. The method of making dry current rectifiers which comprises applying a solution of iodine to the surface of copper sulphide electro negative electrode elements and assembling said copper sulphide electro negative electrode elements with electr positive electrode elements with the treated surface of said copper sulphide electro negative electrode elements in contact with the electro positive electrode elements.

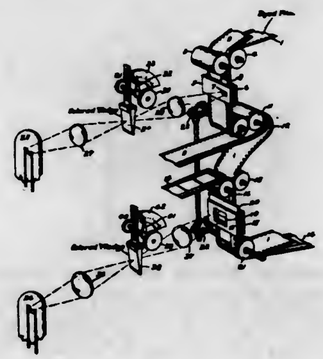
1,904,448. NEWSPAPER BOX. WELLESLEY R. HAMPDEN, Reedville, and GEORGE W. HAGLE, Hillsboro, Oreg. Filed Sept. 30, 1930. Serial No. 485,516. 3 Claims. (Cl. 232—35.)



1. An article collection receptacle, comprising a casing having an opening for the insertion of articles thereinto, a shaft disposed transversely of the casing adjacent the top thereof and adjacent the opening, a plate secured to said shaft and normally closing said opening, a crank having a pair of substantially right angularly related arms, one of said arms being attached at one end to said shaft to extend substantially at right angles therefrom, a bar attached at one end to the free end of the other arm of said crank and extending transversely across the top of the receptacle, and a signal plate carried by said bar, said signal plate being disposed to extend in substantially the same direction as the said other arm to which the supporting bar is connected, the said other arm and signal plate being directed longitudinally of the casing in non-signaling position when the first mentioned plate covers the receptacle opening.

1,904,449. SOUND RECORD FILM AND FILM PRINTING APPARATUS. ARTHUR C. HARDY, Wellesley, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 20, 1927. Serial No. 193,017. 7 Claims. (Cl. 95—75.)

1. The method of making a film print from a plurality of separate sound and picture record films which comprises exposing separate portions of a print film containing a light restraining dye to separate light beams, forming sharp images thereon, controlling the beams by the respective record films and independently adjustably coloring the respective beams whereby the products of the gamma

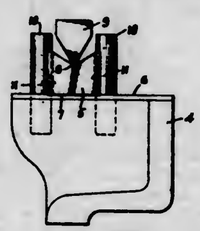


of each record film and the gamma of the print film shall have predetermined values when the print film is developed to the limit.

1,904,450. STABILIZATION OF HALOGENATED HYDROCARBONS. CHARLES ROBERTS HARRIS, Niagara Falls, N. Y., assignor to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 3, 1931. Serial No. 519,894. 9 Claims. (Cl. 23—250.)

1. A composition of matter comprising a chlorinated hydrocarbon and stabilizing amounts of amylene.

1,904,451. BEARING. CLIFFORD B. HASKINS, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed May 16, 1930. Serial No. 452,948. 1 Claim. (Cl. 308—2.)

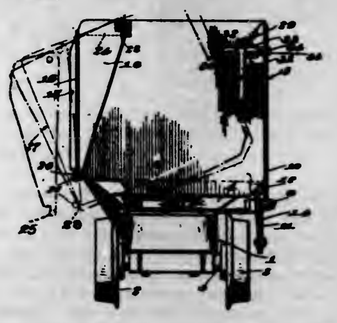


In a scale, the combination of a bearing block adapted to support a scale pivot member, said bearing block being provided with grooves on opposite sides thereof and a flat surface extending transversely of said grooves, a support for said block provided with a curved surface upon which bears the flat surface of the block, and a plurality of guiding pins mounted in the latter and loosely co-acting with the grooves in the bearing block, said pins and the co-acting grooves being co-ordinated with the curved surface of the support to permit limited universal aligning movement of the block relative to the support.

1,904,452. FATTY ACIDS AND PROCESS FOR PREPARING SAME. ROBERT T. HASLAM, Westfield, N. J., assignor to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 14, 1930. Serial No. 475,895. 7 Claims. (Cl. 260—116.)

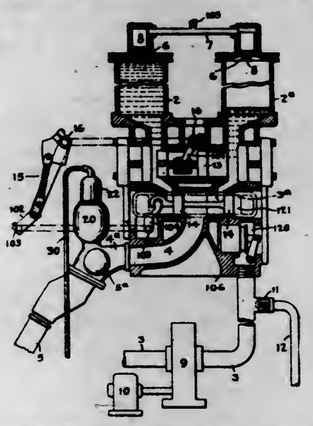
1. Improved process for producing oxidation products of paraffin which comprises adding a substantial quantity of waxy constituents to a hydrocarbon oil, maintaining the mixture in a reaction zone under a high pressure of hydrogen and at temperature adjusted to substantially saturate the oil, removing a hydrogenated product from said reaction zone, reducing pressure on said product, and blowing oxygen-containing gas therethrough while maintained at a temperature of about 350° F.

1,904,453. DUMP CAR. EDWARD HAUGEN, Wallace, Idaho, assignor to Coeur d'Alene Hardware & Foundry Company, Wallace, Idaho, a Corporation of Idaho. Filed Aug. 24, 1931. Serial No. 559,088. 4 Claims. (Cl. 105—244.)



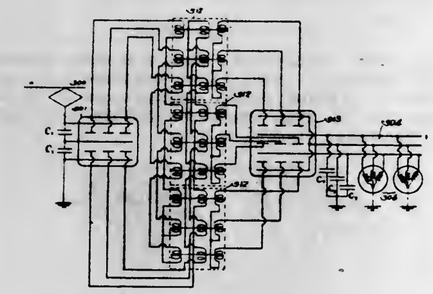
1. A dump car comprising a truck, a body tiltably mounted on the truck, an unfettered door movably carried by the body, said door tending to open immediately after an initial tilt of the body toward a dumping position, a lug on the door, and a hook on the truck engaged by the lug to lock the door from which hook the lug is displaced by the door after said initial tilt of the body.

1,904,454. DISPENSER OF THE TWIN CHAMBER TYPE. WALTER H. HAUFF, Ludlow, Ky., assignor to Augustine Davis, jr., Cincinnati, Ohio. Filed Apr. 2, 1931. Serial No. 527,155. 4 Claims. (Cl. 221—100.)



1. In a dispenser of the type having twin measuring chambers and automatic reversing mechanism causing each chamber to empty in turn while the other is being filled, a discharge conduit into which the measured quantities are emptied, an air-pocket in free communication with said conduit, an air exit from said pocket, and valve means in position to evacuate the air bodies through the air-pocket while liquid is flowing through the discharge conduit, said valve means being operated by a rise in the liquid level in the air-pocket to prevent egress of the liquid through said air exit.

1,904,455. METHOD AND APPARATUS FOR CONVERTING ELECTRIC POWER. LOUIS A. HAZELTINE, Hoboken, N. J., assignor to General Electric Company, a Corporation of New York. Filed July 5, 1928. Serial No. 649,536. 24 Claims. (Cl. 175—363.)

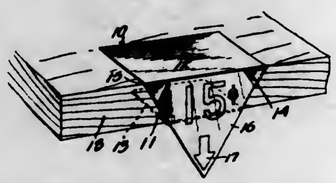


5. Apparatus for converting electric energy of a given form into low frequency alternating current comprising means including an inductive winding and a plurality of electric valves for converting said energy into high frequency alternating current, and means including a plurality of other electric valves for converting said high frequency alternating current into low frequency alternating current, said inductive winding being provided with substantial leakage reactance for limiting the low frequency short circuit current.

13. Apparatus for transmitting energy between an input circuit and an *n*-phase-polyphase alternating current circuit comprising a pair of magnetically insulated inductive windings for each phase, an electric valve associated with each winding for interconnecting said circuits, means for coupling said windings into two groups, each group including a single winding of each phase, and means for rendering each valve nonconductive for only 1/*n*th of a cycle.

16. The method of converting alternating-current power of one frequency into alternating-current power of another frequency by electrostatically controlled valves, which comprises varying the control electrode potentials of said valves at a frequency equal to the sum or difference of the first mentioned frequencies.

1,904,456. PRICE TAG AND HOLDER. JOHN F. HEALY, Cincinnati, Ohio, assignor to Piggly Wiggly Corporation, Cincinnati, Ohio, a Corporation of Delaware. Filed Apr. 22, 1932. Serial No. 606,959. 2 Claims. (Cl. 40—16.)



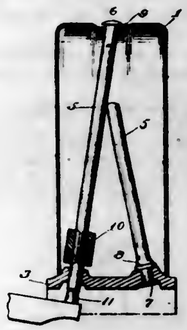
1. A device of the kind described comprising a plate bent to provide two portions lying in two parallel planes and having a third portion perpendicular to said first named portions, the sides of which slope inwardly from top to bottom, ears formed on the sides thereof bent to provide pockets adapted to receive and support a tag therein, the lower portion of which projects downward below the plane formed by the lower of said first named portions, substantially as set forth.

1,904,457. PRICE TAG AND HOLDER. JOHN F. HEALY, Cincinnati, Ohio, assignor to Piggly Wiggly Corporation, Cincinnati, Ohio, a Corporation of Delaware. Filed Apr. 22, 1932. Serial No. 606,960. 3 Claims. (Cl. 40—16.)



1. A device of the kind described comprising a strip having opposed grooves in the face thereof, and a price tag positioned in said grooves having a triangular portion on one edge cut back into the tag and projecting outside thereof to indicate the location of the merchandise to which said tag applies, substantially as set forth.

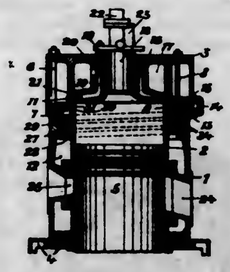
1,904,458. METHOD OF MAKING TENSION WHEELS. JOSEPH L. HECHT, Davenport, Iowa, assignor to French & Hecht, Incorporated, a Corporation of Iowa. Filed Nov. 18, 1931. Serial No. 574,687. 3 Claims. (Cl. 29—159.02.)



1. In the method of making tension wheels, assembling a hub member provided with spoke holes, concentrically within a closed rim member provided with corresponding spoke holes, provided spokes having a head at one of their ends, inserting the headless end of a spoke through corresponding holes in said members, positioning said spoke with its head spaced a short distance from the adjacent surface of the adjacent wheel member, and acting on the opposite end of the spoke to fasten it rigidly to the wheel member at that end while causing said spoke in the fastening operation to shorten and the head on the other end of the spoke to move up to and seat tightly against the surface of the wheel member at that end and thereby tension the spoke.

1,904,459. CYLINDER FOR INTERNAL COMBUSTION EUGINES. WILHELM HEPTI, Winterthur, Switzerland, assignor to the Firm of Sulzer Freres Societe Anonyme, Winterthur, Switzerland. Filed July 15, 1930, Serial No. 468,056, and in Switzerland Aug. 21, 1929. 4 Claims. (Cl. 123—173.)

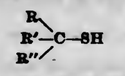
1. A cylinder for internal combustion engines with inserted liner, comprising in combination a cylinder head, means for securing said head to said cylinder, separate means for securing the head to the liner, an intermediate member engaging the liner, means for drawing the liner towards the cylinder head independently of said cylinder and helically arranged fins on said intermediate



member adapted to cause a cooling medium to follow a relatively long path through the parts adjacent to the combustion chamber.

1,904,460. CONCENTRATION OF ORES BY FLOTATION. FREDERICK G. MOORS, New York, RAYMOND W. HESS, Buffalo, and ROBERT L. PERKINS, East Aurora, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1927. Serial No. 168,464. 11 Claims. (Cl. 209—166.)

1. A method of effecting the concentration of minerals by flotation, which comprises subjecting a mineral pulp to a froth flotation operation in the presence of a thioalcohol which corresponds with the following formula:



wherein R denotes an aromatic hydrocarbon radical, and R′ and R″ each denote a hydrogen atom or a hydrocarbon radical.

1,904,461. CONCENTRATION OF MINERALS BY FLOTATION. RAYMOND W. HESS, Buffalo, N. Y., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 252,045. 11 Claims. (Cl. 209—166.)

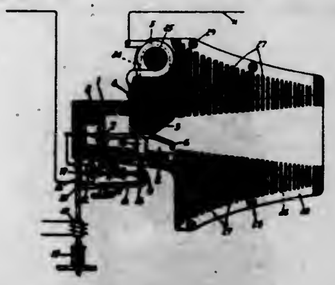
1. In effecting the concentration of minerals, the process which comprises incorporating with a mineral pulp a composition comprising an aralkyl mercaptan and a diaralkyl monosulfide, and subjecting the resulting mixture to a froth-flotation operation.

1,904,462. FLOTATION OF MINERALS. RAYMOND W. HESS and JOSEPH M. F. LEAPER, Buffalo, N. Y., assignors to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed May 20, 1927. Serial No. 193,052. 14 Claims. (Cl. 209—166.)

1. In effecting the concentration of minerals, the process which comprises adding to the mineral pulp a flotation agent comprising the product relatively insoluble in water obtainable by the decomposition of a metal salt of benzyl thiosulfuric acid in the presence of water and an acid, and subjecting the mixture to a froth flotation operation.

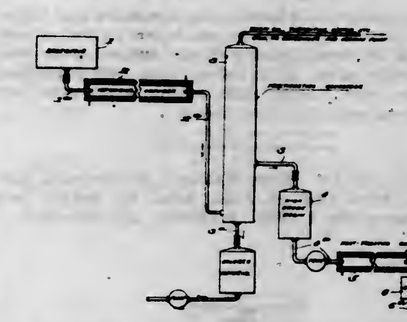
1,904,463. CIRCUIT INTERRUPTING APPARATUS. JOHN D. HILLIARD, Glens Falls, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 27, 1929. Serial No. 410,198. 3 Claims. (Cl. 200—144.)

1. In a circuit interrupting device, an arc-cooling structure comprising a passage through which an arc may be forced, switch contacts separable at one end of said passage, and a plurality of spaced plates of conducting material forming one side of the passage whereby a portion of the arc is blown between said plates during movement thereof through the passage, said plates being graded in



thickness and heat radiating surface so that the heat generated during the initial movement of the arc may be readily dissipated.

1,904,464. PROCESS OF PRODUCING HIGH GRADE ROSIN. ARTHUR R. HITCH, Brunswick, Ga., assignor, by mesne assignments, to Gillican-Chipley Company, a Corporation of Delaware. Filed Dec. 14, 1929. Serial No. 414,140. 6 Claims. (Cl. 201—61.)



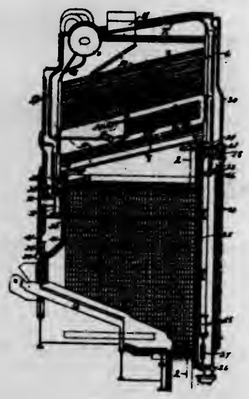
1. The process of producing a high grade distilled rosin which process comprises treating rosin materials with solvents, spraying the resultant mixture into a zone heated to approximately 340° C. and subjecting all of the material therein to vaporization, fractionally condensing color containing impurities at a relatively high temperature, and fractionally condensing a relatively high grade rosin at a lower temperature.

1,904,465. ELECTRICAL REGULATOR. EUGEN HOROWITZ, Halensee, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 15, 1931, Serial No. 508,958, and in Germany Feb. 11, 1930. 4 Claims. (Cl. 171—119.)



1. In combination, a dynamo electric machine, an excitation controlling circuit for said dynamo electric machine, a resistance element whose electrical resistance changes instantaneously with the voltage which is applied to it connected in said circuit, and means for varying the voltage applied to said resistance in accordance with variations in an electrical condition of said machine.

1,904,466. FURNACE AND BOILER. WILLIAM A. JONES, Westerleigh, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 21, 1929. Serial No. 408,746. 6 Claims. (Cl. 122—235.)



1. In combination, a boiler, a furnace below said boiler, metallic supporting means at the lower portion of said boiler and the upper portion of said furnace walls, said boiler having metal parts resting upon said supporting means and said furnace walls having metal parts suspended from said supporting means.

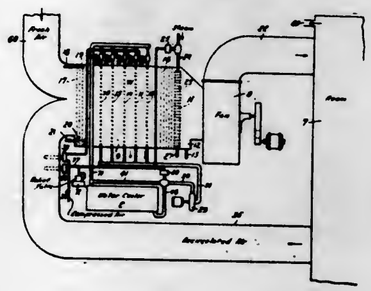
1,904,467. VALVE. KURT KARNATH, Zweibrucken, Germany. Filed Sept. 21, 1929, Serial No. 394,174, and in Germany Oct. 2, 1928. 9 Claims. (Cl. 251—91.)



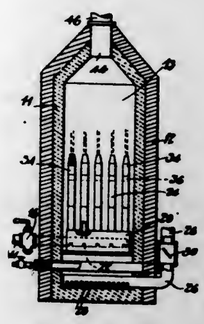
1. A valve, comprising a valve casing, a valve closing member, a stem connected with said closing member for moving the same into and out of closing position and mounted in said valve casing for being rotatable and non-shiftable, operating means for said stem including a reducing gearing, and means operative when closing the valve for throwing said reducing gearing out of operation.

1,904,468. METHOD AND APPARATUS FOR CONDITIONING AIR. ALFRED D. KARR, Newark, N. J., and KARL D. PERKINS, New York, N. Y., assignors to Audiffren Refrigerating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 7, 1931. Serial No. 528,340. 8 Claims. (Cl. 62—176.)

6. In an air conditioning system, in combination with an enclosure in which conditioned air is used, a cooler chamber, means for passing air to be supplied to the enclosure in a single stream through said chamber, a plurality of cooled surfaces extending across the cross section of said cooler chamber in the path of said air stream, means for selectively cooling said surfaces to a temperature below the dew-point of the air entering said chamber whereby a quantity of moisture is condensed from the air, and means for selectively reducing the total cooled surface area exposed to said air-stream while maintaining a sufficient temperature difference between the cooled surfaces and the entering air stream to condense a substantially unchanged quantity of moisture from the air in said stream, whereby the amount of sensible heat abstracted from the air stream may be reduced while the amount of heat abstracted from the air stream as latent heat of condensation is maintained substantially unchanged.

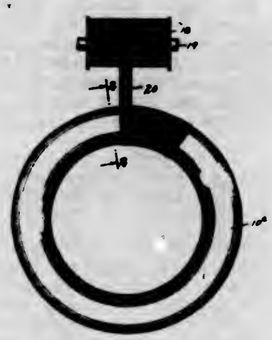


1,904,469. PRODUCTION OF CARBON BLACK. THEODORE P. KELLER, Elizabeth, N. J., assignor to General Atlas Carbon Company, Dover, Del., a Corporation of Delaware. Filed Feb. 19, 1931. Serial No. 516,980. 18 Claims. (Cl. 134—60.)



1. Apparatus for making carbon black comprising an unobstructed heat-insulated furnace chamber, a plurality of spaced narrow gas ducts mounted in parallel vertical planes in the lower portion of the chamber and adapted to discharge gas upwardly thereinto, and means for introducing a determinate amount of air at a controlled velocity into the chamber adjacent the lower end of the gas ducts, each of the gas ducts being provided with a beveled marginal portion adjacent its outlet end and having its inner and outer wall surfaces gradually sloping toward each other at the said outlet end for facilitating streamline flow of fluids respectively moving upwardly within and around each of the said gas ducts.

1,904,470. WREATH AND METHOD OF MAKING SAME. DAVID J. KELMAN, Brooklyn, N. Y. Filed Nov. 18, 1931. Serial No. 575,704. 4 Claims. (Cl. 41—12.)



1. The method of making a wreath consisting in bunching a plurality of strands and winding the same onto a single spool, and then unwinding said bunched strands from said spool and winding the same around an annular core to completely cover the same.

2. A wreath comprising a core and a covering therefor comprising a strand made of elongated and untwisted rayon fibers.

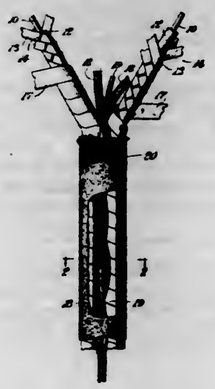
1,904,471. DECORATIVE MATERIAL. DAVID J. KELMAN, Brooklyn, N. Y. Filed Mar. 8, 1932. Serial No. 597,474. 6 Claims. (Cl. 41—10.)



5. A decorative material comprising an elongated flexible core and a plurality of narrow strips of cellophane extending therefrom and disposed along the length of the core, said strips extending in various angular positions with respect to the core.

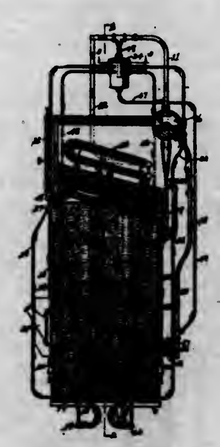
6. An elongated decorative material comprising a string made of textile material and a thin flexible, pliant metal wire disposed alongside said string and twisted about another string made of textile material, and a plurality of narrow, transparent, flexible strips having reflecting surfaces, gripped at intermediate portions thereof by said twisted strings and wire.

1,904,472. ELECTRICAL CABLE. MOSS A. KENT, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Sept. 29, 1928. Serial No. 309,145. 3 Claims. (Cl. 173—264.)



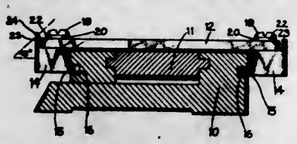
1. An electric cable comprising a plurality of insulated conductors, filling strands in the valleys between said conductors, one of said filling strands including a bare wire twisted with a paper trand to form convolutions in the wire and the paper strand, and a wrapper enclosing the whole.

1,904,473. STEAM BOILER. HOWARD J. KERR, Westfield, N. J., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Aug. 23, 1928. Serial No. 301,455. 13 Claims. (Cl. 122—235.)



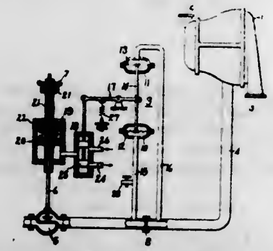
1. A steam boiler having furnace wall tubes, a steam and water drum connected to said tubes, and a separator located outside of said drum at an elevation at least as high as the normal water level in said boiler and connected to said tubes, the water space of said separator being connected to the lower portion of said tubes.

1,904,474. SLIDE RULE. ADOLF W. KEUFFEL, Montclair, N. J., assignor to Keuffel & Esser Co., Hoboken, N. J., a Corporation of New Jersey. Filed Oct. 29, 1930. Serial No. 491,855. 16 Claims. (Cl. 235—70.)



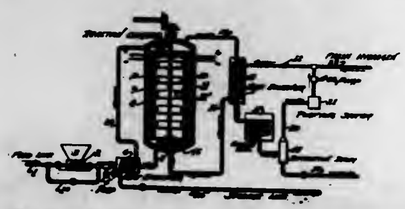
1. A slide rule runner comprising spaced guide devices for slidably engaging opposite edges of a rule, a transverse transparent panel extending across the space between the guide devices, means securing the margins of the panel directly to the guide devices, said panel constituting a connection between the guide devices that hold them in position and yielding means to protect the plate.

1,904,475. VALVE CONTROL MECHANISM. FRIEDRICH KISSING, Berlin-Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 23, 1931, Serial No. 564,617, and in Germany Oct. 14, 1930. 5 Claims. (Cl. 137—152.5.)



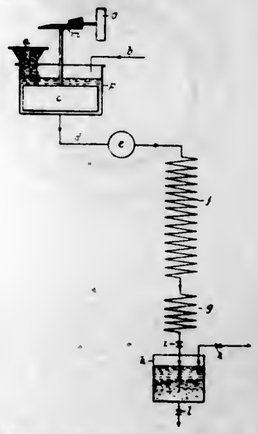
1. The combination with a conduit for conveying a fluid, and a valve in the conduit, of means for automatically closing the valve when the flow of fluid in the conduit reaches a predetermined minimum value comprising a restriction in the conduit, a differential pressure responsive device connected to the restriction on opposite sides thereof, and means actuated by the pressure responsive device for completely closing the valve to prevent backflow of fluid in the conduit.

1,904,476. CONVERSION OF SOLID FUELS AND PRODUCTS DERIVED THEREFROM OR OTHER MATERIALS INTO VALUABLE LIQUIDS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, and MATHIAS PIER, Heidelberg, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Original application filed Feb. 6, 1926, Serial No. 86,646, and in Germany Nov. 7, 1925. Divided and this application filed Apr. 7, 1927. Serial No. 181,887. 4 Claims. (Cl. 196—53.)



1. The process of converting carbonaceous substances, such as solid and liquid fuels, distillation and extraction products thereof, into valuable liquids, which comprises subjecting such substances to destructive hydrogenation by means of an added hydrogenating gas and heat at a temperature of between about 300° and 500° C. and at a pressure of at least 20 atmospheres in a reaction vessel, the inner surface of which consists of an alloy of aluminium solid under the conditions of working.

1,904,477. PRODUCTION OF VALUABLE ORGANIC PRODUCTS. CARL KRAUCH, Ludwigshafen-on-the-Rhine, MATHIAS PIER, Heidelberg, and EUGEN ANTHES, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Jan. 5, 1928, Serial No. 244,769, and in Germany Jan. 13, 1927. 3 Claims. (Cl. 196—14.)



3. The process of extracting oils of about the viscosity of lubricating oils from solid, non-asphaltic, pyro-bituminous materials by passing said solid materials through a reaction zone while treating them with a hydrocarbon liquid, the major constituents of which boil between 100° and 300° C., at a temperature of from 300° to 400° C. and under a pressure of at least 75 atmospheres, until at least 50% of the oil contained in said initial material is extracted therefrom but for only so long that substantially no low boiling hydrocarbons are produced, said hydrocarbon liquid being maintained in the liquid state throughout the process, and then separating the liquid extraction from the residual solid materials.

1,904,478. APPARATUS FOR MAKING BLEACHING POWDER. EDWARD THORNDIKE LADD, Lewiston, N. Y., assignor to Isco Chemical Company, Inc., Niagara Falls, N. Y., a Corporation of New York. Filed Oct. 26, 1929. Serial No. 402,614. 8 Claims. (Cl. 23—283.)



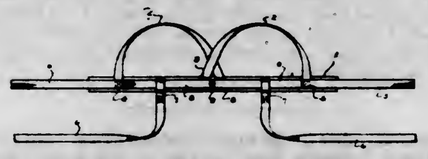
6. An apparatus for making bleaching powder, comprising a relatively high chlorinating tower, means for creating a chlorinated atmosphere within the tower, a shaker element located near the top of the tower for distributing particles of solid material into the tower, the walls of the tower being so formed that such particles will fall freely by gravity from its top to its bottom through the chlorinated atmosphere, and a plow for discharging such product from the apparatus.

1,904,479. REENFORCED CHAIN AND METHOD OF MAKING THE SAME. WALTER B. LASHAR, Fairfield, Conn., assignor to American Chain Company, Inc., a Corporation of New York. Filed Dec. 19, 1930. Serial No. 503,401. 14 Claims. (Cl. 59—35.)



1. The method of forming a reenforced link for a cross chain of an anti-skid tire chain, said method comprising the steps of forming shoulders upon a stock wire, severing from said stock wire a part including one or more shouldered portions, bending said part to form a link and applying separately formed substantially annular reenforcement members to said wire stock between adjacent shoulders.

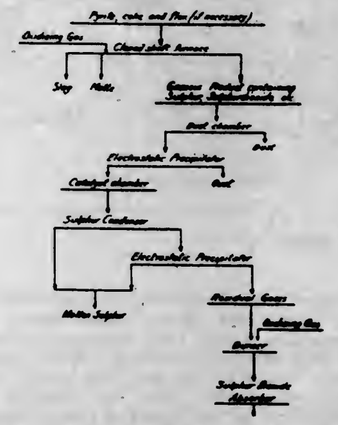
1,904,480. TETHER FOR CHILDREN. SOL C. LEIFERT, Brighton, N. Y. Filed Apr. 22, 1931. Serial No. 531,959. 1 Claim. (Cl. 128—134.)



A device of the class described comprising a waistband, two shoulder straps secured to the waistband in crossed relation on opposite sides of and near the center of the waistband and also near the ends of the waistband, a guide strap of less width and of slightly less length than the waistband secured to the waistband near its ends at the points where the shoulder straps are secured and also secured to the waistband near the center between the adjacent ends of the two crossed shoulder straps, said guide strap being free from the waistband intermediate the points where secured to the waistband, tie tapes having their inner ends superimposed on the ends of the guide strap and the ends of the crossed shoulder straps near the ends of the waistband, the said ends of the tie tapes, the ends of the guide strap and the ends of the crossed shoulder straps adjacent the ends of the waistband all being secured in their said relationship by stitching passing through these said parts and the waistband, and restraining straps having their ends looped around the guide strap for sliding movement thereon.

1,904,481. PROCESS OF RECOVERING SULPHUR FROM SULPHIDE MINERALS. NILS ERIK LENANDER, Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex., a Corporation of Texas. Filed May 18, 1930, Serial No. 452,139 and in Great Britain Apr. 5, 1930. 2 Claims. (Cl. 23—227.)

2. A process of smelting pyrites with the recovery as elemental sulphur of a large part of the pyrite sulphur which comprises smelting the pyrites with coke and flux (if necessary) in a closed shaft furnace provided with means for the introduction of an oxidising gas approximate the bottom thereof and thereby producing molten slag and matte and a gaseous product containing elemental sulphur vapour, sulphur dioxide and other sulphur compounds, withdrawing said gaseous product from the furnace and passing it at a temperature of about 400° C. through a chamber containing an appropriate catalysts for promoting the interaction of the sulphur dioxide and other sulphur compounds therein to form elemental sulphur, cooling the so treated gaseous product to condense



and recover the elemental sulphur therein, and removing such traces of sulphur and compounds thereof as remain in the residual gases by heating said gases in the presence of an oxidising gas at a sufficiently high temperature to convert the sulphur and compounds thereof to sulphur dioxide and passing the resulting gases through an appropriate medium for absorbing the sulphur dioxide therein.

1,904,482. PRODUCTION OF ELEMENTAL SULPHUR. NILS ERIK LENANDER, Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex., a Corporation of Texas. Filed July 26, 1930, Serial No. 471,099, and in Sweden June 18, 1930. 8 Claims. (Cl. 23—226.)

1. The method of producing elemental sulphur by the reaction of sulphur dioxide and carbon disulphide gases which comprises, subjecting said gases at an elevated temperature to the action of a catalyst of the group consisting of bauxite, aluminum hydrate, and oxide of aluminum containing some proportion of combined water to promote the reaction between said gases with the liberation of elemental sulphur.

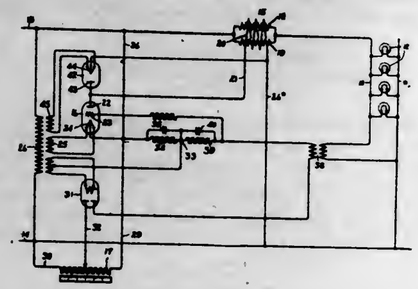
1,904,483. PRODUCTION OF ELEMENTAL SULPHUR FROM GASEOUS SULPHUR COMPOUNDS. NILS ERIK LENANDER, Lokken Verk, Norway, assignor, by mesne assignments, to Texas Gulf Sulphur Company, Houston, Tex., a Corporation of Texas. Filed July 26, 1930. Serial No. 471,100. 8 Claims. (Cl. 23—226.)

1. In the production of elemental sulphur by the reaction between a gaseous sulphur compound and another gas, subjecting the reacting gases at an elevated temperature to the catalytic action of aluminum hydrate embodied in a porous cement-like product.

1,904,484. METHOD OF REMOVING ARSENIC AND CHLORINE FROM SULPHUR. STANLEY ISAAC LEVY, Kingston Hill, England. Filed Jan. 22, 1931, Serial No. 510,590, and in Great Britain Mar. 15, 1930. 19 Claims. (Cl. 23—220.)

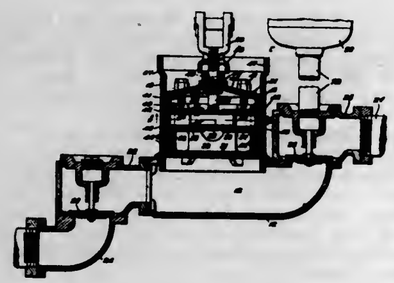
1. A process of removing impurities such as arsenic, antimony, selenium, etc., from sulphur consisting in adding a medium serving to form volatile chlorides with the impurities and removing the volatile chlorides formed.

1,904,485. CONTROL SYSTEM. ORRIN W. LIVINGSTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 11, 1931. Serial No. 562,359. 19 Claims. (Cl. 171—119.)



1. A control system comprising in combination an alternating current load circuit, control means for said circuit comprising electric valve apparatus provided with a control grid, means for supplying a variable direct current control voltage to said grid, and means from said alternating current load circuit for supplying to said grid a regulating voltage having a direct current component of opposite polarity with respect to said control voltage.

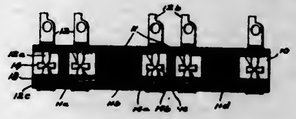
1,904,486. PLUNGER PUMP. CHARLES I. LONGENECKER, Wauwatosa, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed June 19, 1930. Serial No. 462,281. 3 Claims. (Cl. 184—18.)



2. A self-lubricating plunger for pumps and the like, comprising a hollow piston member having a working head and a skirt of reduced diameter, said skirt being provided with piston pin bearings having passages adapted to conduct lubricant to the bores thereof; an inverted hollow follower telescoping over said skirt to provide a substantially closed hollow plunger adapted to contain lubricant, said follower having lubricant passages affording communication between said piston pin bores and the exterior of the plunger; yieldable packing interposed between the follower wall and the head of said piston member; and means for adjustably securing said follower to said piston member.

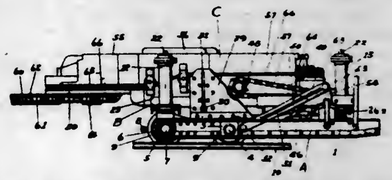
1,904,487. RESISTANCE UNIT. CLINTON L. LYON, Scotia, and CLAUDE A. JAGGER, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed May 1, 1929. Serial No. 359,650. 7 Claims. (Cl. 201—63.)

1. A resistance unit or the like comprising a substantially cylindrical support provided with a longitudinal recess and a terminal for said unit comprising a portion embracing said cylindrical support so that it is secured



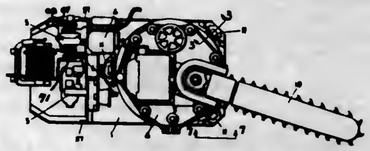
thereon and a portion projecting into said recess whereby the terminal is secured against rotation on said support but can be readily adjusted longitudinally thereof.

1,904,488. COAL CUTTING MACHINE. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 15, 1929, Serial No. 386,138. Renewed Nov. 20, 1931. 16 Claims. (Cl. 262—28.)



7. In a mining apparatus, a movable base, a plurality of vertical pedestals pivoted to the base at their lower ends, and a frame loosely engaging the pedestals above their pivotal axes, the pivoting axis of one of the pedestals being at an angle to the pivoting axis of another of the pedestals whereby the pivoting movements of the pedestals are mutually limited.

1,904,489. COAL MINING APPARATUS. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 16, 1929. Serial No. 400,063. 37 Claims. (Cl. 262—28.)



1. The combination with a mining machine, a coal cutting device vertically and horizontally adjustable thereon; of self-contained power means for vertically adjusting said device and being subject to lateral thrusts imposed by the cutting device, and a longitudinally extensible pedestal associated with said power means to brace the latter against said lateral thrusts.

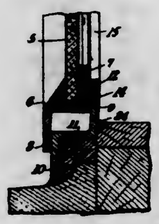
1,904,490. TURNTABLE FOR PHONOGRAPHS. RUDOLPH F. MALLINA, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 19, 1931. Serial No. 576,002. 7 Claims. (Cl. 274—39.)



2. The combination with a thin, disc type phonograph record having a tendency to warp and a turntable for supporting the record, of means for clamping the periphery

of the record to the turntable, and a ring of resilient material in contact with the record and shaped to exert a radial tension on the record when compressed by the clamping means whereby irregularities in the surface of the record may be removed.

1,904,491. WEATHER STRIP. JOHN MANHAN, New York, N. Y., assignor to A. B. C. Metal Corp., New York, N. Y., a Corporation of New York. Filed June 12, 1931. Serial No. 543,853. 8 Claims. (Cl. 189—65.)



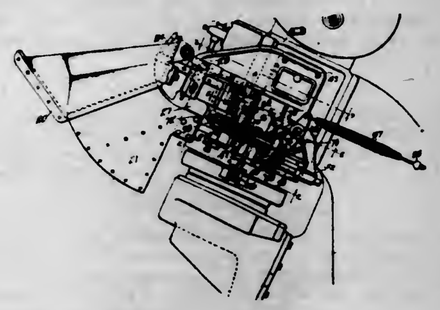
1. Weatherstripping comprising a continuous section of sheet material transversely bent in the form of a channel to fit over a stop flange of a casement window, a spring supporting arm reflexed from the inner wall of said channel and an outwardly facing open trough portion at the end of said spring arm over and free of the back of the mounting channel and thereby freely yieldable inwardly away from the channel and a resilient weathering strip seated in said outwardly faced inwardly yieldable trough.

1,904,492. BOURDON LEVER TYPE OF PRESSURE GAUGE. CHARLES J. MANUEL, La Crosse, Wis., assignor, by mesne assignments, to Moto Meter Gauge & Equipment Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed July 10, 1928. Serial No. 291,552. 4 Claims. (Cl. 73—109.)



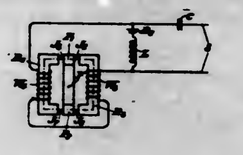
4. A pressure gauge comprising a casing, a post projecting through said casing and detachably secured thereto, said post being provided with a socket and an integral externally threaded nipple, there being an aperture in one side of said post in communication with the bore of said nipple, a tubular spring sector having an open end secured to said post in communication with said aperture and a closed free end, an index hand provided with a hub, means whereby said hub is pivotally mounted in the socket in said post, a unitary connection between said closed free end and said index hand, said index hand comprising a pair of parallel relatively offset portions, a dial, means whereby said dial is secured to said post so as to be adapted to contact with an element of said hand-pivoting means to maintain the pivot thereof in said socket.

1,904,493. TRANSFER MECHANISM. SAMUEL W. MATHIAS, Waynesboro, Pa., assignor to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Original application filed Nov. 28, 1927, Serial No. 236,258. Divided and this application filed July 13, 1929. Serial No. 378,055. 18 Claims. (Cl. 10—166.)



2. In a machine for pointing and threading work, the combination of a chute to receive the work, and a transfer mechanism for moving the work, from the chute to work holding means, the said transfer mechanism comprising an arm having work engaging fingers thereon, a shaft supporting said arm, means for rotating said shaft on its axis through an arc of 180° and for swinging it in a plane through another arc of 180° the plane of one of these movements being parallel with the top of the chute and the plane of the other movement being at right angles to the top of the chute, substantially as set forth.

1,904,494. TUNING FORK GENERATOR. ANDREW L. MATTE, Summit, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Original application filed June 16, 1928, Serial No. 286,042. Divided and this application filed May 15, 1930. Serial No. 452,642. 10 Claims. (Cl. 171—209.)



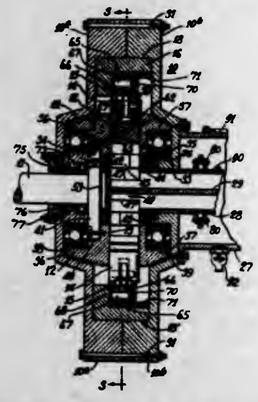
1. The combination of two U-shaped cores of iron, the ends of which face each other, a tuning fork placed so that each prong will be between the adjacent ends of both of said U-shaped cores, each prong of the tuning fork being spaced by equal gaps from the adjacent ends of both said U-shaped cores, two coils of wire wound on said U-shaped cores and arranged in series relationship so that their magnetic effects which produce alternating currents will be additive, and means for producing a driving flux for said tuning fork which threads said U-shaped cores equally in order that the effect of said flux will be negligible.

1,904,495. PROCESS FOR THE DIRECT MANUFACTURE OF KETONES FROM IMPURE VOLATILE ACIDS. JACQUES GEORGES MAUGER, Paris, France, assignor to Société dite: Maison Camus-Duchemin Société Anonyme, Paris, France, a Corporation of France. Filed May 10, 1930, Serial No. 451,288, and in France May 13, 1929. 6 Claims. (Cl. 260—122.)

1. The process of purifying volatile acids contaminated by impurities which consists of vaporizing the acid, pass-

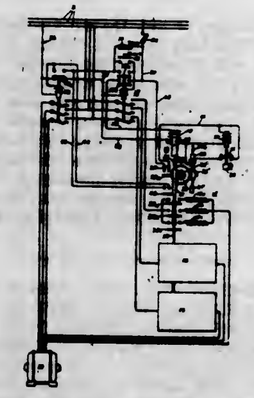
ing it over absorbent charcoal heated to a temperature of approximately 425° C., which absorbent charcoal in part physically stops the impurities and in part transforms them chemically into products which are not injurious for further treatment of the acids.

1,904,496. HYDRAULIC TRANSMISSION SYSTEM. ROBERT MAW, Montreal, Quebec, Canada. Filed Mar. 30, 1929. Serial No. 351,329. 5 Claims. (Cl. 60—53.)



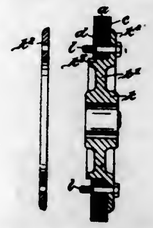
1. In a hydraulic transmission system, the combination with mechanically driven and driving engines having casings provided with rotatable members formed with cylinders and cooperating pistons, of a passage member secured in said engine casings having ported ends disposed as hubs for said reciprocable members, means associated with said passage member dividing the same into discharge and return conduits, valve members associated with said reciprocable members about said ported hubs and cooperating with the same to effect continuity of fluid movement through said engines, lateral discharge ports communicating with said discharge and return conduits, and a rigid auxiliary member disposed about said passage member communicating with said lateral discharge ports and secured to said engine casings.

1,904,497. MOTOR STARTER. CARLISLE N. MCDAVITT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1931. Serial No. 569,012. 12 Claims. (Cl. 172—289.)



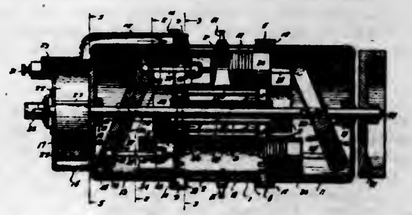
1. A motor starter comprising means for varying the motor current from zero value to a starting value for said motor in a series of steps, means for arresting the action of said current varying means after the current has been increased to said starting value to provide for acceleration of said motor from rest to an intermediate speed, and means for subsequently activating said current varying means to accelerate said motor to full speed.

1,904,498. ROLLER PARTICULARLY FOR USE IN TEXTILE MACHINERY. HENRY MCGHEE, Rushcutters Bay, near Sydney, New South Wales, Australia. Filed Nov. 8, 1930, Serial No. 494,423, and in Great Britain Nov. 26, 1929. 6 Claims. (Cl. 19—142.)



1. A roller for textile machinery comprising a continuous stitchless leather rim, an inner sleeve of soft rubber, and a lining of hard rubber, said parts being united by vulcanizing under heat and pressure.

1,904,499. INTERNAL COMBUSTION ENGINE. CHESTER MCLAREN, El Centro, Calif. Filed July 22, 1929. Serial No. 379,940. 6 Claims. (Cl. 123—58.)

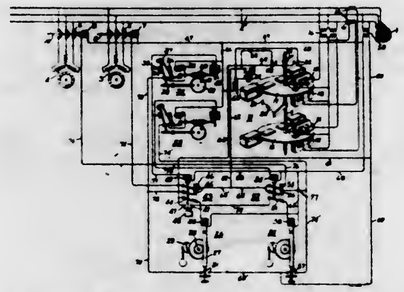


2. An internal combustion engine comprising a rotary shaft, a plurality of cylinders spaced about said shaft and arranged with the axes of said cylinders parallel to said shaft, a pair of balanced pistons in each cylinder, means for imparting rotary motion to the shaft from the pistons, an inlet port adjacent one end of the cylinder at a point approximating that of the end of travel of one of said pistons and an exhaust port adjacent the other end of the cylinder at a point approximating that of the end of travel of the other piston and means for supplying fuel under pressure to said cylinder, said last mentioned means comprising a rotary pump associated with said shaft and a sleeve having openings associated with the inlet ports of said cylinders for controlling the supply of fuel admitted to said cylinders and means associated with the sleeve for simultaneously controlling the supply of fuel to all of said cylinders.

1,904,500. ELECTRICAL REGULATING SYSTEM. DAVID W. MCLENNAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 21, 1930. Serial No. 497,211. 16 Claims. (Cl. 171—97.)

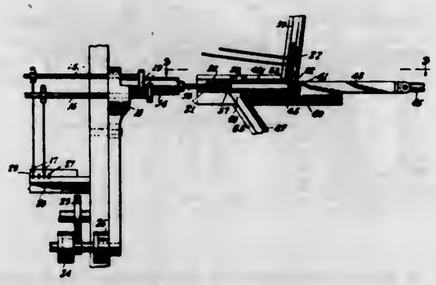
1. In combination, an electric circuit, a variable load connected to said circuit, said load including a plurality of load increments, and time delayed acting means responsive to the load on said circuit for removing one of said load increments a predetermined time after the load on said circuit exceeds a predetermined high value.

16. A load regulating system comprising a power supply circuit, a variable load connected to said circuit, an overpower relay connected to said circuit, a relay having normally closed and normally open contacts and time delayed closing contacts, a normally open time delayed closing relay, a circuit controlled by said overpower relay including the normally closed contacts of said second mentioned relay and the operating means of said time delayed closing relay, a normally closed time delayed opening relay, a circuit including the contacts of said time delayed opening and closing relays, and the operating means of said time delayed opening relay and said second mentioned relay, a circuit including means for reducing the load on said power



supply circuit controlled by the normally open contacts of said second mentioned relay, a second circuit controlled by the normally open contacts of said second mentioned relay for short circuiting the contacts of said normally closed time delayed opening relay, a third circuit under the joint control of said overpower relay and the time delayed closing contacts of said second mentioned relay, and means including a second normally open time delayed closing relay and a second normally closed time delayed opening relay energized by said third circuit for further reducing the load on said power supply circuit.

1,904,501. KNITTING MACHINE. JOSEPH F. MEYER, Orange, N. J. Filed Feb. 27, 1930. Serial No. 431,700. 11 Claims. (Cl. 66—85.)



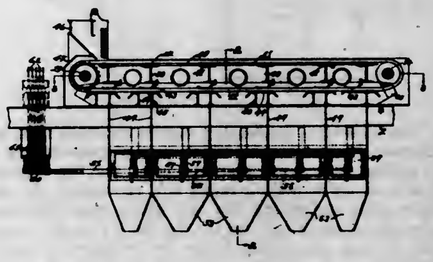
1. In a knitting machine, the combination of reciprocating thread guide bars arranged in rows, one row above the other, pattern links carrying actuating pins disposed in superposed rows to cooperate with the superposed row of bars, means for effecting operating engagement of the links with the bars and means for circulating said pattern links to and away from said operating means, said links being unconnected and said circulating means being constructed to handle said unconnected links in serial order.

1,904,502. PROCESS FOR APPLYING RUBBER TO METAL AND OTHER HARD MATERIALS. ANDRÉ JULES MICHELIN, Paris, France, assignor to Michelin et Cie, Clermont-Ferrand, France, a Corporation of France. Filed May 19, 1930, Serial No. 453,844, and in France May 28, 1929. 8 Claims. (Cl. 154—53.)



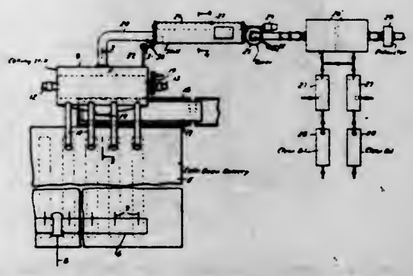
1. As a new article of manufacture, a structure comprising a metallic core, a strong metal wire provided with a textile wrapper tightly wound around said core, and a rubber coating applied over said wire.

1,904,503. CHAIN GRATE STOKER. BENJAMIN H. MILLER, Wadsworth, Ohio, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 28, 1928. Serial No. 281,023. 8 Claims. (Cl. 110—40.)



1. In a chain grate stoker, a longitudinal air duct beneath said stoker, and means for admitting air from said duct through the lower run of the chain grate and thence through the upper run thereof, said means comprising a duct located along side of said air duct and divided into compartments.

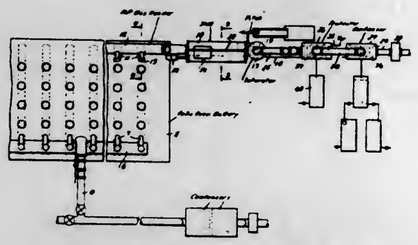
1,904,504. DISTILLATION OF TAR OR PITCH TO COKE AND APPARATUS THEREFOR. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 9, 1929. Serial No. 384,667. 2 Claims. (Cl. 202—80.)



1. The method of distilling tar to coke which comprises passing hot coal distillation gases through one still and then through a second still, adding tar to the second still,

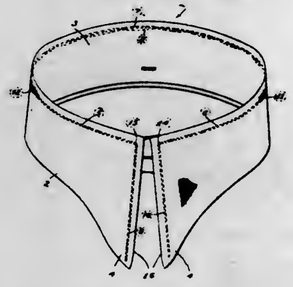
spraying it in the form of an intense spray into direct and intimate contact with the hot gases in the second still, whereby the gases are cleaned and the tar is distilled, drawing off the residue resulting from this distillation of the tar and adding it to the first still, exposing a film of this distilled tar to the action of the hot coal distillation gases within this first still while simultaneously applying additional heat to the film, whereby the film of partly distilled tar is converted to coke, discharging the coke from the first still, collecting the hot clean enriched gases leaving the second still and cooling them to separate oils therefrom.

1,904,505. DISTILLATION OF TAR OR PITCH. STUART PARMELEE MILLER, Englewood, N. J., assignor to The Barrett Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 11, 1929. Serial No. 413,254. 2 Claims. (Cl. 202—30.)



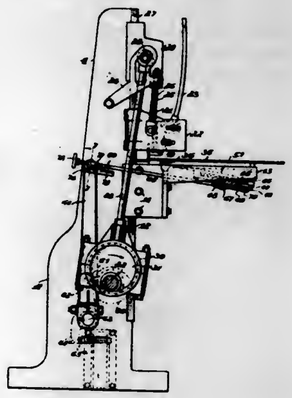
1. The method of condensing vapors resulting from the distillation of coal tar in which greasy constituents of high boiling points are distilled from the tar together with oils of lower boiling range and recovering the condensate while preheating the tar, which comprises passing the vapors resulting from the distillation up thru a condenser, cooling the vapors below the dewpoint of greasy constituents in the lower part of the condenser by bringing them into indirect heat interchange relation with the tar to be distilled thereby separating greasy constituents from the vapors in the lower part of the condenser, further cooling the vapors and separating oils from the vapor in the upper part of the same condenser, allowing the oils to flow down from the upper part of the condenser thru the lower part of the condenser, and thus dissolving the greasy constituents in the oils.

1,904,506. COLLAR SUPPORT. STEPHEN R. MORDEN, San Francisco, Calif. Filed Aug. 24, 1931. Serial No. 559,062. 2 Claims. (Cl. 2—132.)



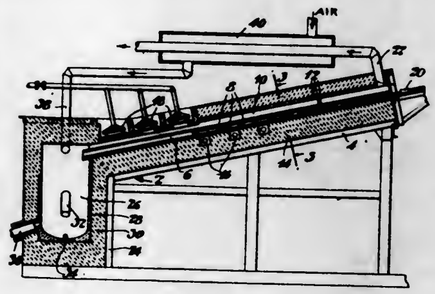
1. A collar support comprising two flexible wires having arcuate neck encircling portions, the end of each of said portions being slidably secured to the other one and the free end of each wire extending at an angle with respect to the arcuate portion and designed to support a collar point.

1,904,507. NAILING MACHINE. HENRY W. MORGAN, Brighton, N. Y., assignor to Morgan Machine Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 17, 1930. Serial No. 489,421. 10 Claims. (Cl. 1—15.)



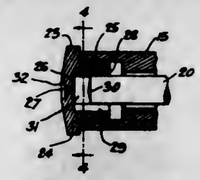
1. In a nailing machine, the combination with a work supporting table provided with a slot having an inclined end, of nailing mechanism for driving nails into work held on said table, and work positioning means including a part lying at one time substantially within said slot and shiftable from such position to ride up said inclined end of said slot to a position projecting above said table for engaging a piece of work to position it accurately with respect to said nailing mechanism.

1,904,508. REDUCTION FURNACE. JOHN D. MORGAN, South Orange, N. J., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 17, 1931. Serial No. 530,796. 2 Claims. (Cl. 13—2.)



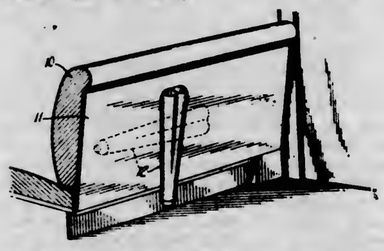
1. A furnace comprising in combination a stationary sloping heating hearth, electrical resistance heating units for heating a charge being fed through said hearth, means for feeding a charge through said hearth in a uniform, relatively thin and wide ribbon, means for breaking said charge as it leaves said hearth, means at the inlet of said feeding means adapted to allow the feeding of said charge without allowing the escape of gases, means directly connected to the discharge end of said hearth for receiving spent material therefrom, means for regenerating the heat of said spent material, means for heating said charge by the heat thus regenerated, and means for heating said charge by the heat of combustion of the gases developed.

1,904,509. NEBULIZER OF LIQUIDS. ALBERT W. MORSE, Forest Hills, N. Y. Filed Oct. 10, 1930. Serial No. 487,793. 3 Claims. (Cl. 299—118.)



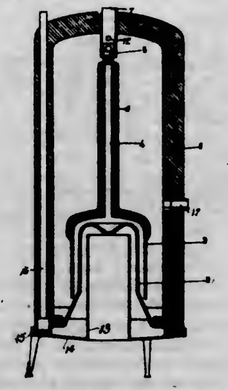
1. A nebulizer of liquids comprising a structure having a recess at one end with a central outlet through to its other end, a cylindrical bushing pressed into the said recess having a slot through its entire length tangential to the center of the bushing, and a regulating stem slidingly engaging the center of the said bushing.

1,904,510. UMBRELLA HOLDER. HARRIET J. MOTT, Hollis, N. Y. Filed Sept. 30, 1931. Serial No. 566,079. 4 Claims. (Cl. 211—63.)



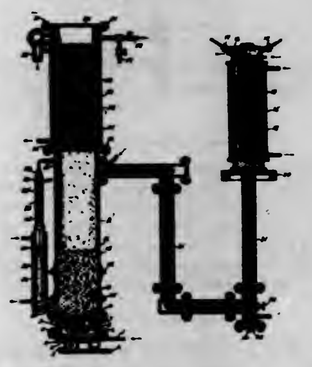
4. An umbrella holder of the class described comprising an elongated tubular body of rigid material, the walls of which are contracted at the lower closed end thereof and flared to the upper open end of said body, a drainwater receptacle at the lower end of said tubular body, and means involving a fixed pivot disposed below the open end of said body for supporting said tubular body normally in upright position and for permitting the swinging movement of the open end portion of said body on the pivot in each of at least two directions through an arc of at least 90° to permit the swinging movement of the open end of said body in either of at least two directions in the insertion and removal of an umbrella with respect to the holder.

1,904,511. LIQUID HEATER. MARCEL MUTRUX and ROBERT CAILLET, Vevey, Switzerland. Filed Sept. 17, 1930, Serial No. 482,606, and in Switzerland June 18, 1930. 8 Claims. (Cl. 122—13.)



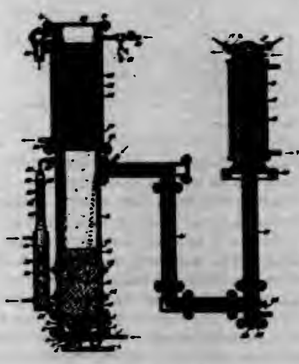
8. In a liquid heater, the combination of heating means, a water heating and conducting pipe leading from the heating means, an accessible water conducting pipe in communication with the first pipe, and a plug having a relatively small aperture as compared with the diameters of the water conducting pipes removably seated on the first pipe at its point of communication with the second pipe, and said plug being removable through said second pipe for cleaning purposes.

1,904,512. METHOD AND APPARATUS FOR PREPARING SULPHUR DIOXIDE. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1929. Serial No. 372,868. 3 Claims. (Cl. 23—179.)



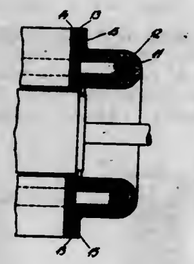
1. The process of preparing sulphur dioxide substantially free from sulphur trioxide, which comprises reacting oxygen gas within an excess of liquid sulphur in an enclosed space by passing said gas through the liquid sulphur at a rate such that substantially no free oxygen emerges therefrom.

1,904,513. APPARATUS FOR PREPARING SULPHUR DIOXIDE. BIRGER W. NORDLANDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed June 22, 1929, Serial No. 372,868. Divided and this application filed Mar. 13, 1931. Serial No. 522,477. 1 Claim. (Cl. 23—278.)



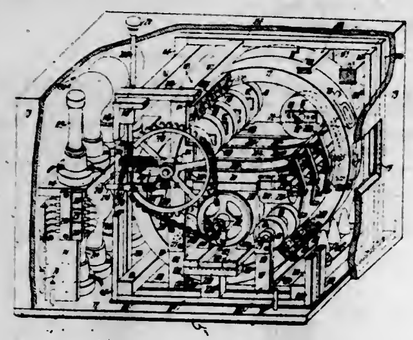
In an apparatus for preparing sulphur dioxide substantially free from sulphur trioxide, a reaction chamber, means for feeding liquid sulphur to the reaction chamber, means for discharging gas into the liquid sulphur in the form of fine bubbles, said means consisting of a porous element of resistant material.

1,904,514. PROTECTION FOR ARMATURE WINDINGS. ALFRED OLDENBURG, Berlin-Charlottenburg, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 1, 1931, Serial No. 534,174, and in Germany May 17, 1930. 4 Claims. (Cl. 172—36.)



1. In an electric motor in combination with a magnetic armature carrier having a winding protruding at the carrier ends and a cap of suitable insulating material at each carrier end completely surrounding the protruding winding ends, of a layer of elastic material disposed between each cap and the pertaining carrier end and being joined firmly to the carrier and the cap for the purpose set forth.

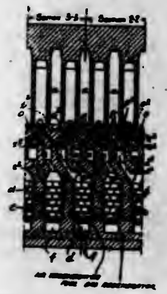
1,904,515. WORD COUNTING REGISTER FOR TYPEWRITERS. ALFRED E. OSWALD, Hackensack, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 30, 1929. Serial No. 351,213. 18 Claims. (Cl. 235—102.)



1. In a counter for adding the number of key-strokes of an alphabetical keyboard machine, the combination of a series of indicating dials arranged in a decimal series including a units-dial, all rotatably mounted in denominational order, a series of driving devices to rotate said dials, means including electromagnets, one for each dial to control said devices to rotate the dials to indicate the number of key-strokes, circuits for the electromagnets, and a device, interpolated in the circuit of the electromagnet for the units-dial including means to delay the operation of said units electromagnet until after a predetermined number of key-strokes of the keyboard.

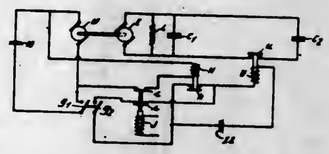
15. A counter comprising denominational annuli and a flywheel annulus, means for continuously operating the flywheel annulus, said flywheel annulus being in frictional relation with the units annulus of the counter to constantly urge the rotation of the same and means to periodically release and then arrest the units annulus.

1,904,516. REGENERATIVE COKE OVEN. CARL OTTO, Essen-Ruhr, Germany. Filed Dec. 10, 1927, Serial No. 239,046, and in Germany Dec. 17, 1926. 5 Claims. (Cl. 202—142.)



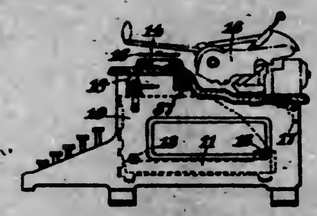
1. A coke oven battery comprising a series of alternate horizontally elongated coking chambers and heating walls therefor arranged side by side in a row, each of said heating walls comprising a row of vertical combustion flues, two parallel rows of cross-regenerators arranged below said chambers, each of said rows of regenerators being adapted to operate alternately for inflow and outflow, some regenerators of each row being adapted to preheat fuel gas and the other regenerators of each row being adapted to preheat air, when operating for inflow, horizontal distributing channels above and parallel with the regenerators, ducts communicably connecting each regenerator with one of said channels, and ducts communicably connecting one of said channels with some of the flues in one of the heating walls and another of said channels with the remaining flues in the same heating wall, each channel communicably connected with a regenerator adapted to preheat fuel gas being arranged between a pair of channels, the latter being each communicably connected with a regenerator adapted to preheat air, the distributing channels communicably connected to one of the rows of regenerators being communicably connected to alternate flues in the heating walls and the distributing channels communicably connected to the other row of regenerators being communicably connected to the intermediate flues in the heating walls.

1,904,517. DUPLEX SYSTEM OF TELEPHONY. HANS PAESLER, Berlin, Germany, assignor to Telefunken Gesellschaft für Drahtlose Telegraphie m. b. H., Berlin, Germany, a Corporation of Germany. Filed Feb. 8, 1927, Serial No. 166,671, and in Germany Feb. 26, 1926. 4 Claims. (Cl. 179—15.)



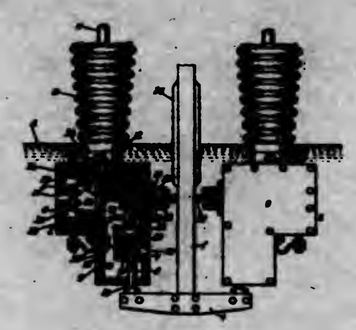
1. In radio frequency communication systems including an oscillation generator having a frequency determining circuit and means for changing the tune of said circuit, switching means for putting said oscillation generator into operation, means associated with said switching means and with the frequency determining means in the circuit of said oscillation generator for insuring that the change in the tune of said circuit is completed before said generator develops oscillations in said circuit of appreciable amplitude, and means for preventing change in said frequency determining circuit from being made when said generator is stopped until said generator stops producing oscillations in said circuit.

1,904,518. TYPEWRITER. ARTHUR PATERSON, Leicester, England, assignor to Imperial Typewriter Company Limited, Leicester, England, a British Company. Filed May 17, 1932, Serial No. 611,894, and in Great Britain Sept. 18, 1931. 1 Claim. (Cl. 197—186.)



In a typewriter the combination of a framework, bearing members within said framework, type mechanism removably mounted within said framework and supported on said bearing members, a top member at least partially covering said type mechanism, a hinge connection between said top member and said framework, locking means for retaining the top member in the closed position and bearing members on said top member and engaging the type mechanism in the closed position of the top member to retain the type mechanism firmly in place.

1,904,519. ELECTRIC CIRCUIT INTERRUPTER. WILLIAM E. PAUL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 24, 1931. Serial No. 564,889. 10 Claims. (Cl. 200—150.)



1. A circuit interrupter of the fluid-break type comprising a pair of contacts separable in an arc extinguishing liquid to form a pressure generating break connected in series with a pair of independent and separately movable current interrupting contacts, and means for directing pressure generated by arcing at said break so as to cause separation of said independent current interrupting contacts and force a blast of insulating liquid between the same extinguishing arcing.

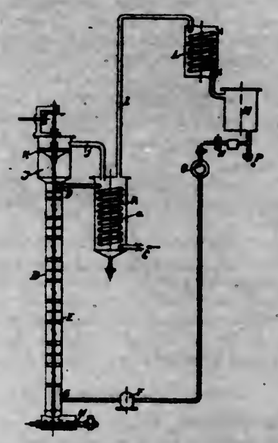
1,904,520. STOKER. FRANK C. PICKARD, Erie, Pa., assignor to The Standard Stoker Company, Incorporated, a Corporation of Delaware. Filed July 23, 1929. Serial No. 380,433. 7 Claims. (Cl. 110—101.)

6. As an article of manufacture, a distributor head for stokers comprising a body portion, said body portion including a front wall, a rear wall and side walls connecting said front and rear walls, and a plurality of passages in said body portion for receiving a pressure fluid, the front wall being provided with jet openings in communication with said passages, each of said passages at an end remote



from said jet openings, having an admission opening, said admission openings all being directed toward the same side wall of said head.

1,904,521. SEPARATION OF OILS FROM SOLID RESIDUES. MATHIAS PIER, Heidelberg, and KARL WINKLER, Ludwigshafen-on-the-Rhine, Germany, assignors, by mesne assignments, to Standard-I. G. Company, Linden, N. J., a Corporation of Delaware. Filed Sept. 15, 1928, Serial No. 306,277, and in Germany Oct. 27, 1927. 9 Claims. (Cl. 196—13.)



1. An apparatus for continuously separating oils from solid residues, comprising a tall cylindrical extraction vessel fitted with means for imparting a continuous rotary movement to the material under treatment, means for introducing the solvent into the said vessel and for passing it in a countercurrent to said material, means for continuously removing the extracted residue, an extension at the top of said tall cylindrical vessel in the form of a vertical cylinder of a larger diameter than said extraction vessel, means for continuously removing the extraction product arranged at the top of said extension and a filter arranged in said extension.

2. In the treatment of the entire residue obtained by the destructive hydrogenation of solid carbonaceous materials to separate the oils from the solids insoluble in said oils and contained in said residue, by extraction with an organic solvent containing at least some aromatic constituents, the step of continuously introducing the solvent and the mixture to be separated to and continuously removing the extraction product and the extracted residue from the vessel in which the treatment is carried out.

1,904,522. APPARATUS FOR DRILLING WELLS. HASKEL A. PIPPIN, Okmulgee, Okla. Filed Nov. 11, 1931. Serial No. 574,417. 13 Claims. (Cl. 255—4.)

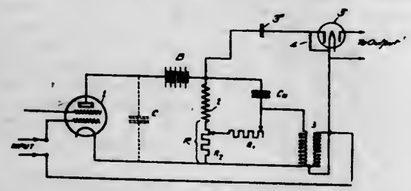


1. A well drilling apparatus comprising a casing, two axially alined motors within the casing having armatures rotatable in opposite directions, shafts connected to said armatures respectively, and located in the axis of the casing, a pair of drilling elements, means for supporting said elements from the lower end of the casing for rotation on a common axis transversely of said shafts, and connections between the shafts and the drilling elements for effecting rotation of the latter in opposite directions.

1,904,523. METHOD OF FINE GRINDING OF CEMENT MATERIAL. CARL PONTOPPIDAN, Holte, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Mar. 13, 1930, Serial No. 435,653, and in Great Britain Mar. 21, 1929. 2 Claims. (Cl. 83—94.)

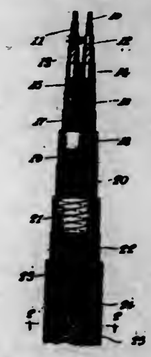
1. The improvement in the method of fine grinding of dry cement material with grinding bodies which consists in adding to the material a carbonaceous substance whereby the electrical potential of the grinding bodies is altered and the attraction of the particles of material to the grinding bodies is diminished and the coating of the grinding bodies with such particles is prevented.

1,904,524. AMPLIFIER. KLAAS POSTHUMUS, Eindhoven, Netherlands, assignor to Radio Corporation of America, a Corporation of Delaware. Filed Feb. 18, 1931, Serial No. 516,573, and in the Netherlands Mar. 26, 1930. 4 Claims. (Cl. 179—171.)



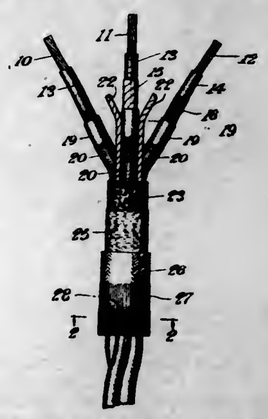
1. In combination, in an amplifier, an electron discharge tube provided with an input and output circuit, a succeeding tube, a coupling path between the output circuit of the first tube and the input circuit of the second tube, said path including an impedance in series with a resistor, a second path in shunt with said impedance and including a condenser in series with a second resistor, and means for transmitting the drop of potential across a predetermined portion of said first resistor to the input circuit of the first tube.

1,904,525. CABLE. FRANK M. POTTER, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,765. 30 Claims. (Cl. 178—264.)



29. An article of manufacture comprising in combination an insulated metallic electrical conductor, and a protective covering therefor, said covering including a sheath of non-wicking fibrous material, and a protective layer of an oxidation- and moisture-resistant plastic compound adjacent to and impregnating said sheath, said compound tending to seal automatically such openings as may occur in said covering.

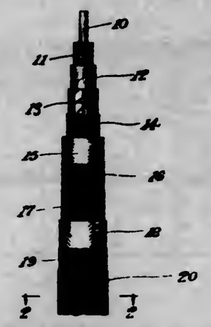
1,904,526. CABLE. FRANK M. POTTER, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,766. 22 Claims. (Cl. 178—264.)



22. An article of manufacture comprising in combination, an insulated metallic conductor, a self-healing oxidation and moisture-resistant plastic compound around said conductor, a fibrous jacket over said compound, and a metallic oxide paint over said jacket.

1,904,527. CABLE. FRANK M. POTTER, Rome, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Feb. 4, 1928. Serial No. 251,767. 5 Claims. (Cl. 178—264.)

2. An article of manufacture comprising, in combination, a metallic conductor, and a covering therefor including a fabric jacket, different wax substances applied to said fabric jacket, an outer fabric jacket, a soft wax substance



applied to said outer jacket, and a tough waterproofing paint over the whole.

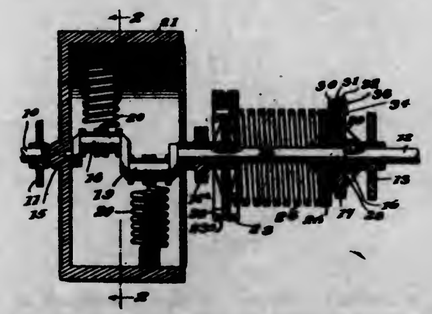
1,904,528. LACQUERS, FILMS, ARTIFICIAL MASSES, AND THE LIKE. WILHELM PUNGS and KARL EISENMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Apr. 19, 1928, Serial No. 271,401, and in Germany May 21, 1927. 6 Claims. (Cl. 134—26.)

1. As new compositions artificial masses comprising nitro-cellulose, a condensation product of urea and formaldehyde, and castor oil which has been pretreated with an oxidising gas at an elevated temperature.

1,904,529. MANUFACTURE OF ARTIFICIAL MASSES. WILHELM PUNGS and KARL EISENMANN, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 14, 1929, Serial No. 340,014, and in Germany Feb. 14, 1928. 5 Claims. (Cl. 134—26.)

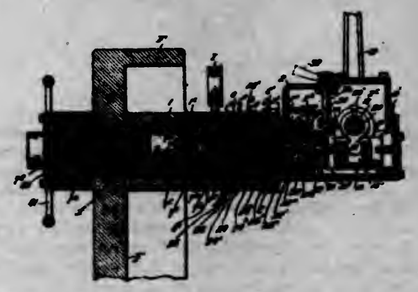
1. A composition comprising nitrocellulose, a condensation product of urea-formaldehyde, an animal oil selected from the class consisting of cod oil, shark oil, whale oil, seal oil and sardine oil which has been pretreated with an oxidising gas at an elevated temperature, and an organic solvent for the ingredients including a substance selected from the class consisting of lower aliphatic alcohols and the acetic esters thereof.

1,904,530. POWER TRANSMISSION. SHERRILL S. RATHBUN, Rockville Center, N. Y. Filed Apr. 3, 1930. Serial No. 441,271. 10 Claims. (Cl. 74—14.)



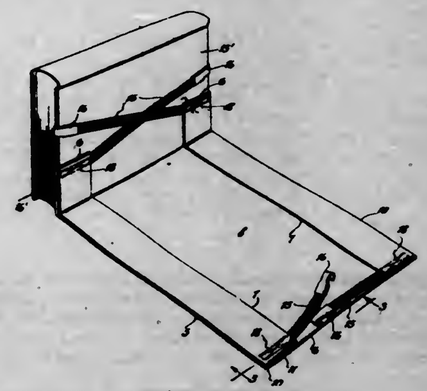
1. Power transmission comprising a driving shaft having a fly wheel, a driven shaft, an intermediate shaft, an intermittently operable connection carried within said fly wheel and secured to said intermediate shaft, an intermittently operable reversing ratchet means for the intermediate shaft and an intermittently operable resilient connection between the intermediate shaft and the driven shaft.

1,904,531. HYDRAULIC DEVICE FOR OPENING AND CLOSING FILTER PRESSES AND OTHER PRESSURE-APPLYING MECHANISMS. THOMAS H. RAYMOND, Zanesville, Ohio, assignor to Simplex Engineering Company, a Corporation of Ohio. Filed July 9, 1927. Serial No. 204,583. 2 Claims. (Cl. 138—17.)



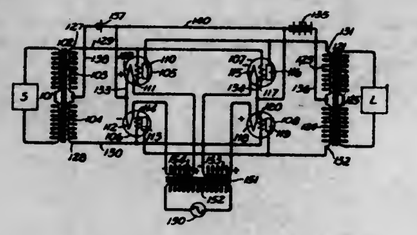
1. Hydraulic devices for closing and opening filter presses and other pressure-applying mechanisms embodying, in combination, a ram and a ram-cylinder, a hydraulic pump including piston mechanism, a dual system of valves, one part of said dual system for causing the projection of the ram, and the other part for exhausting the liquid to retract the ram, said retracting part having a valve which is free to seat in opposite directions during the operation of the projecting system part, and means for restraining said valve to cause it to pass liquid in one direction only and simultaneously restraining valves of the ram-projecting part of the dual system to cause a reverse movement of the liquid by the piston mechanism and a retraction of the ram.

1,904,532. BOOK COVER. MAX REISS, New York, N. Y. Filed June 22, 1932. Serial No. 618,628. 5 Claims. (Cl. 281—34.)



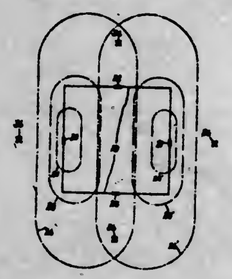
1. A protective cover for books comprising a rectangular sheet of suitable material adapted to be folded to receive the covers of a book, and means carried by each side of said sheet for engagement with a book cover for holding the protective cover in position upon a book.

1,904,533. CIRCUIT FOR ELECTRIC DISCHARGE DEVICES. JOHN L. REYNOLDS, Jackson Heights, N. Y., assignor to Electrical Research Products Inc., New York, N. Y., a Corporation of Delaware. Filed Dec. 31, 1929. Serial No. 417,640. 5 Claims. (Cl. 179—171.)



1. In an electric wave amplifying system comprising divided input and divided output circuits employing a plurality of electron discharge devices, each having an anode, a cathode and a control electrode, the cathode of each of said discharge devices connected in series with the cathode of another of said discharge devices, two of said discharge devices having their control electrodes connected in parallel to one side of said divided input circuit and their anodes connected in parallel to one side of said divided output circuit, two other of said discharge devices having their control electrodes connected in parallel to the other side of said divided input circuit and their anodes connected in parallel to the other side of said divided output circuit, a source of alternating current for heating the cathodes of said devices, and means comprising a transformer having two separate secondary windings between said source and said cathodes, each of said secondary windings being included in the series circuit of the cathodes of two of said discharge devices.

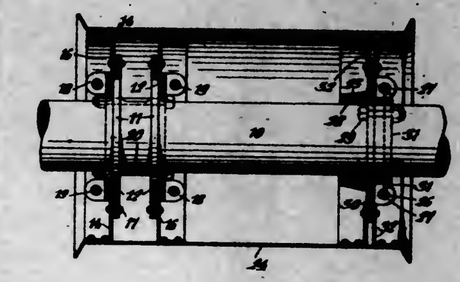
1,904,534. SOUND WAVE SYSTEM. CHESTER W. RICE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 16, 1932. Serial No. 599,162. 14 Claims. (Cl. 116—19.)



1. The method of marking out a landing field to aircraft which includes transmitting sound waves upward into the space above a boundary of said landing field and so directing said waves that a sheet of sound waves is produced in space above and along said boundary.

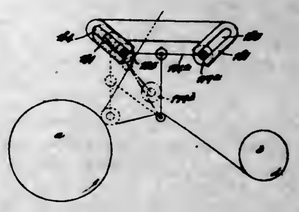
1,904,535. PULLEY AND MOUNTING THEREFOR. WILLARD F. RICHARDS, Depew, N. Y. Filed Apr. 19, 1929. Serial No. 356,343. 3 Claims. (Cl. 287—52.03.)

1. A drive member, comprising a hub-ring, a driving rim, and a web connecting said parts, said hub-ring having an annular groove in one side thereof and an external flange off-set laterally and outwardly relatively to the



grooved portion of said ring and in the plane of its groove for connecting the inner portion of the web thereto.

1,904,536. WEB SUPPLYING AND CONTROLLING MECHANISM. CHARLES J. RICHTER, Berwyn, Ill., assignor to Goss Printing Press Company, a Corporation of Illinois. Original application filed Mar. 22, 1928, Serial No. 263,624. Divided and this application filed July 26, 1930. Serial No. 470,820. 6 Claims. (Cl. 242—58.)



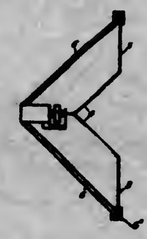
1. A web attaching mechanism including in combination means for rotatively supporting a plurality of web rolls, a roller journaled at either side of a running web, a movable support for both said rollers, a movable support for said movable support and additional means for guiding one of said rollers out of contact with the fresh web roll.

1,904,537. LOUD SPEAKER. HENRY JOSEPH ROUND, Muswell Hill, London, and JOHN GLOVER ROBB, Hendon, London, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Nov. 19, 1925, Serial No. 69,980, and in Great Britain Nov. 26, 1924. 4 Claims. (Cl. 187—31.)



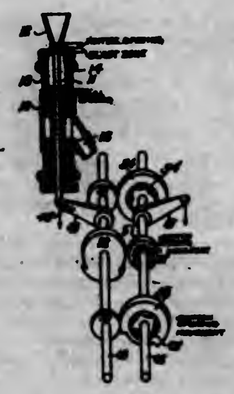
1. A diaphragm adapted to vibrate composed of an outer coating of paper, an outer coating of silk and an intermediate portion of adhesive material adapted to bind the silk and paper together as a unit.

1,904,538. LOUD SPEAKER. HENRY JOSEPH ROUND, Muswell Hill, London, and JOHN GLOVER ROBB, Hendon, London, England, assignors to Radio Corporation of America, a Corporation of Delaware. Original application filed Nov. 19, 1925, Serial No. 69,980, and in Great Britain Nov. 26, 1924. Divided and this application filed Apr. 1, 1930. Serial No. 440,068. 4 Claims. (Cl. 181—32.)



1. A diaphragm comprising a central conical portion, an outer annular portion and a portion having the shape of a frustum of a cone interposed between said conical portion and said annular portion.

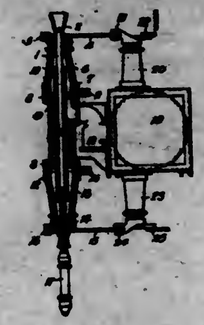
1,904,539. METHOD OF AND APPARATUS FOR GAS BLAST CIRCUIT INTERRUPTION. SIGWART RUPPEL, Frankfort-on-the-Main, Germany. Filed Sept. 24, 1929, Serial No. 394,648, and in Germany Oct. 2, 1928. 5 Claims. (Cl. 200—82.)



1. The method of operating a circuit interrupter of the fluid-blast type which comprises effecting opening movement of the circuit interrupter at an initially high rate and reducing the rate of contact separation through the range within which the interrupting action of the blast is most effective.

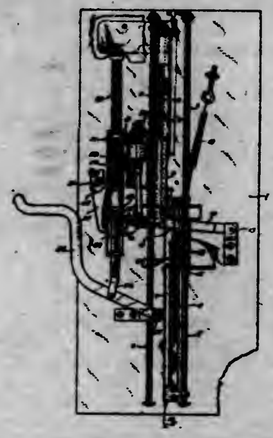
1,904,540. SWITCH. SIGWART RUPPEL, Frankfort-on-the-Main, Germany. Filed Sept. 22, 1930, Serial No. 482,634, and in Germany Sept. 26, 1929. 7 Claims. (Cl. 200—5.)

1. A switching device of the gas-blast type comprising a casing, relatively movable contacts cooperating within said casing, said casing providing a passage for a gas blast between said contacts upon separation thereof, line terminal structure at opposite ends of said casing arranged to connect with said contacts respectively, and



isolating switch members coacting with said terminals and movable into and out of circuit controlling engagement.

1,904,541. ARC LAMP MECHANISM. ALBERT G. SAURWEIN, Cleveland, Ohio, assignor to National Carbon Company, Inc., a Corporation of New York. Filed Dec. 26, 1929. Serial No. 416,722. 6 Claims. (Cl. 176—55.)

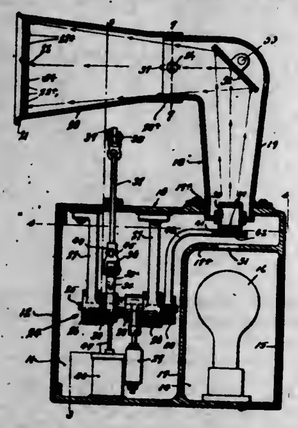


1. In an arc lamp, a pair of vertical electrodes, an upper and lower electrode holder, a rack carried by each electrode holder, a pinion engaging said racks, an arm connected with the upper holder and rack and extending vertically downward therefrom, a clutch engaging said arm adapted to normally hold the electrodes in spaced relation, and manually controlled means operative only to release said clutch for a time sufficient to permit the electrodes to contact and strike an arc whereby short circuiting of the electrodes is prevented.

1,904,542. AUTOMATIC WEIGHT INDICATING SCALE. HARRY C. SCHAPPE, Columbus, Ohio, assignor to International Scale Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 28, 1930. Serial No. 477,206. 20 Claims. (Cl. 265—62.)

1. An automatic weight indicating scale comprising in combination a weighing mechanism, a stationary chart provided on its face with a plurality of weight indicia arranged in progressive groups whereby all of said weight indicia are readable directly from said chart, said chart being provided with a plurality of translucent portions arranged adjacent to and coextensive with said groups, an index plate movably mounted and operatively connected

to said weighting mechanism for movement in accordance with the actuation of said weighing mechanism, and projecting means including a source of light for projecting said index plate in an enlarged form onto said translucent portions, said index plate being formed with a plu-



rality of offsets corresponding to the groups of weight indicia whereby the most advanced offset projected onto the corresponding translucent portion points out the weight indicia denoting the weight of the load used to actuate said weighing mechanism.

1,904,543. FINISHING WELT. ROBERT C. SCHEMMEL, Union City, Ind. Filed Oct. 28, 1930. Serial No. 491,771. 1 Claim. (Cl. 155—184.)

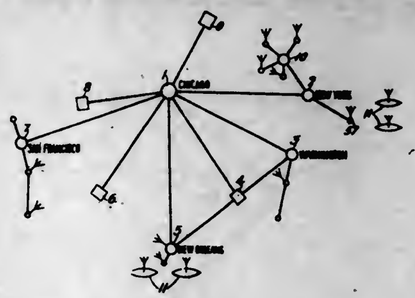


A finishing welt including a flap filler, a strip of wire fabric and a strip of fibrous thread fabric united by a line of stitching to provide at least one ply of the base portion of the welt, said strips extending in opposite directions from the line of stitching, the fibrous thread strip being folded back on itself and secured to the base to form an additional ply thereof, and the wire fabric strip being folded around the flap filler and secured thereto to provide a flap hinged to the base and adapted to be folded down thereupon.

1,904,544. CARRIER WAVE SIGNALING SYSTEM. JAMES W. SCHMIED, West Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1924. Serial No. 689,627. 26 Claims. (Cl. 250—2.)

1. In a communicating arrangement embodying line carrier systems and one or more radio systems, the method of operating the arrangement which comprises supplying a wave of given frequency, controlling the frequencies of the carrier waves for the line systems and a radio control wave by said wave of given frequency, and controlling the frequencies of the radio carrier waves by said wave of radio control frequency.

25. In combination, a plurality of radio transmitting stations spaced at distances that are independent of the wave length of transmission therefrom, an antenna system at each of said stations, said antenna system being capable of radiating electromagnetic waves with substantially equal effectiveness in many horizontal directions, means for fixing the radiation frequency of all of the stations at the same value at any instant, said means comprising a frequency control station and a control frequency channel linking said frequency control station directly with a plurality of said radio transmitting stations, means for generating a control frequency associated with said control frequency channel, means at each



transmitting station for deriving a radiation frequency from said control frequency, and a modulation control system comprising a signal generating apparatus and means for linking the same wtih each of said radio transmitting stations whereby the waves transmitted therefrom are simultaneously modulated by the same signal.

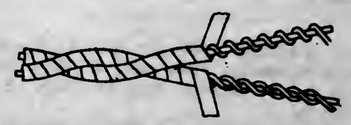
1,904,545. PROCESS FOR PREPARING PURE OPTICALLY INACTIVE MENTHOL. KARL SCHÖLLKOPF, Dusseldorf-Oberkassel, and ARTHUR SMEINI, Dusseldorf-Heerdt, Germany, assignors to Rheinische Kampfer-Fabrik Gesellschaft mit beschränkter Haftung, Dusseldorf-Oberkassel, Germany. Filed Jan. 8, 1930, Serial No. 418,432, and in Germany Jan. 28, 1929. 8 Claims. (Cl. 260—158.)

1. A process for preparing pure optically inactive menthol by subjecting a mixture of inactive menthol with its isomers to a partial i. e. selective esterification by treating such mixture with materials for esterifying in an amount insufficient for complete esterification of the mixture, purifying the resulting menthol esters by recrystallisation and finally saponifying the pure esters.

1,904,546. METHOD OF PRODUCING STEARINE. WALTHER SCHRAUTH, Berlin-Dahlem, Germany. Filed Feb. 26, 1931, Serial No. 519,700, and in Germany Feb. 25, 1930. 7 Claims. (Cl. 87—4.)

1. The process of manufacturing technical stearine which comprises melting substantially completely hydrogenated sperm whale oil with twice as large a quantity of solid alkali of the group consisting of caustic soda, caustic potassium and caustic calcium as would be theoretically required to saponify said oil as calculated according to the saponification number and reacting the resulting soaps with mineral acids.

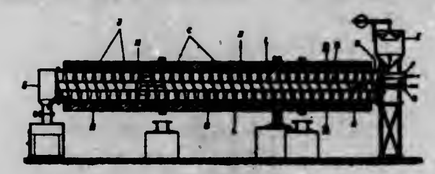
1,904,547. CORES FOR CABLES FOR COMMUNICATION CIRCUITS. KARL SCHUMANN, Potsdam, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed Nov. 25, 1930, Serial No. 498,017, and in Germany Nov. 28, 1929. 6 Claims. (Cl. 173—265.)



1. A telephone cable having a plurality of insulated strands, each strand consisting of a core conductor, paper

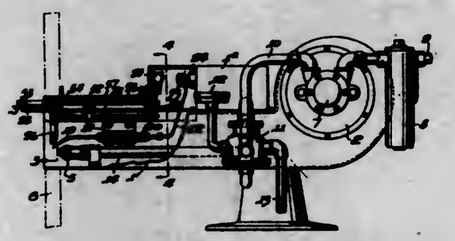
cord wound upon said conductor and paper tape spirally wound over the cord winding, adjacently located cord winding turns of adjacent cable strands having the same winding direction but different total pitch.

1,904,548. REVOLVING TUBE FURNACE. HERMANN SCHULTZE, Frankfort-on-the-Main-Griesheim, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed June 13, 1929, Serial No. 370,567, and in Germany May 2, 1927. 1 Claim. (Cl. 23—279.)



In a revolving furnace, in combination, a revolving cylinder, a stationary hollow shaft located in the cylinder and provided with an outer helix attached to the shaft along its total length having a diameter nearly equal to that of the revolving cylinder, an inlet at one end of said shaft for introducing reaction gases into the latter, an outlet for gas in said shaft at a distance from said inlet of more than half the length of said shaft, and an outlet for gas on said revolving cylinder at the same end where the gas inlet is provided on the shaft.

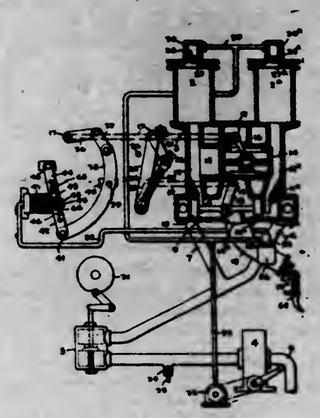
1,904,549. OIL BURNER. SALVATORE SCOGNAMILLO and DAVID SHLAIFER, Bronx, N. Y. Filed Aug. 6, 1931. Serial No. 555,577. 4 Claims. (Cl. 158—28.)



1. In an oil burner having an oil discharge nozzle, ignition electrodes spaced to form an igniting spark gap between them in igniting relation with the nozzle, and electrically operated means for supplying oil to the nozzle and a current of air past the nozzle, a thermostat element located adjacent the gap between said electrodes and adjacent to said electrodes to form secondary spark gaps therewith in the path of said current of air, said thermostat being expansible by the heating thereof by sparking at the secondary gaps between it and said electrodes, and means including an electric switch operative by the expansion of the thermostat element to energize the electrically operated means to supply oil to the nozzle and the current of air past the nozzle and electrodes.

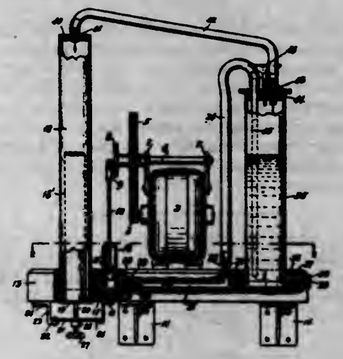
1,904,550. AIR CONTROLLED LOCK FOR DISPENSERS. PAUL S. SHIELD, Cincinnati, Ohio, and WALTER H. HAUPT, Ludlow, Ky., assignors to Augustine Davis, Jr., Cincinnati, Ohio. Filed Jan. 10, 1930. Serial No. 419,802. 20 Claims. (Cl. 221—100.)

1. In a liquid dispenser, the combination with two measuring chambers, means for supplying liquid thereto, a discharge space or conduit, and automatic reversing valve mechanism for causing each chamber in turn to be supplied with liquid while the other is emptying, of a releasable lock outside of the discharge space for preventing



operation of said reversing valve mechanism, and means responsive to a change in the liquid in said discharge conduit for controlling said lock.

1,904,551. APPARATUS FOR DEVELOPING SENSITIZED PAPER. BERNARD P. SMITH, Rahway, N. J., assignor to The Regina Corporation, Rahway, N. J., a Corporation of New Jersey. Filed July 8, 1931. Serial No. 549,389. 3 Claims. (Cl. 95—89.)

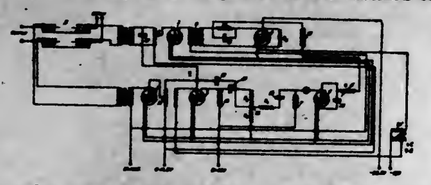


1. In an apparatus for developing sensitised paper, the combination of a motor, a plunger pump, a glass tube for retaining the paper to be developed, a container having therein a liquid charged with a developing medium, and conduits between said glass tube, plunger pump and liquid container for circulating air charged with the developing medium in a continuous path.

1,904,552. AUTOMATIC GAIN CONTROL. THEODORE A. SMITH, Ridgewood, N. J., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Oct. 29, 1929. Serial No. 403,281. 20 Claims. (Cl. 179—171.)

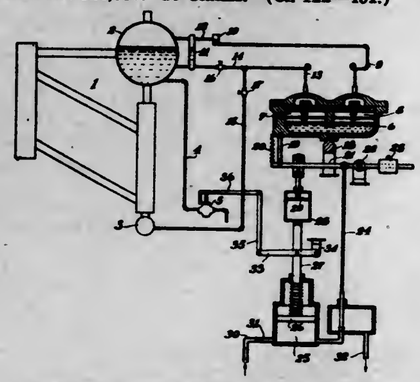
1. In an amplifying system, an electron discharge tube comprising an anode, a cathode and a control electrode, means to apply alternating current energy variations to said tube, means for rectifying a portion of the alternating

current energy to be amplified by said tube, means including a control tube to vary the effective anode load of said first tube according to the amplitude of the rectified cur-



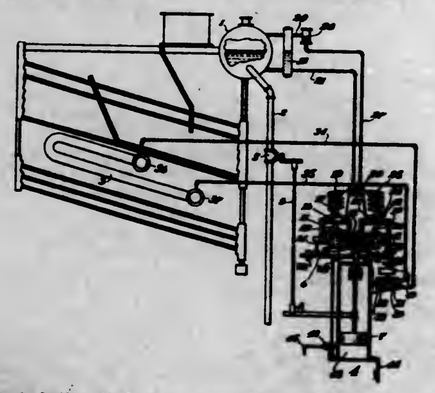
rent, and a common path, including a pair of inductances, for applying a positive potential to the anodes of the first tube and the control tube.

1,904,553. **FEED WATER REGULATOR.** CHARLES H. SMOOT, Maplewood, N. J.; Katherine Smoot executrix of said Charles H. Smoot, deceased. Filed Nov. 2, 1928. Serial No. 316,757. 10 Claims. (Cl. 122—451.)



1. A boiler feed water regulator comprising water level responsive means adapted to control the supply of feed water to maintain a constant water level, means responsive to the circulation of the water through the boiler and adapted to modify the action of said first mentioned means whereby increasingly higher water levels are maintained as the water circulation increases and correspondingly lower water levels are maintained at lower rates of water circulation.

1,904,554. **FEED WATER REGULATOR.** CHARLES H. SMOOT, Maplewood, N. J.; Katherine Smoot executrix of said Charles H. Smoot, deceased. Filed July 24, 1929. Serial No. 380,513. 7 Claims. (Cl. 122—451.)



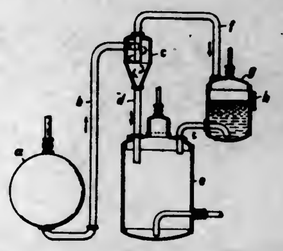
1. A boiler feed water regulator comprising in combination a balancing device, means for acting on said device with a force varying inversely with the water level within the boiler, means for acting on said device with a force varying inversely with the square of the boiler rating, feed water supply means, means for controlling said supply means by said device, and means for removing said last mentioned force from said balance when the boiler rating exceeds a predetermined value.

1,904,555. **RADIATOR.** JOHN D. SOMMER, St. Albans, N. Y., assignor, by mesne assignments, to Metropolitan Engineering Company, a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,689. 7 Claims. (Cl. 257—149.)



2. A radiator including in combination a heating element and an extended area structure applied thereto comprising pieces of sheet metal at opposite sides embracing the heating element and having edge portions which are recessed to embrace the heating element and are crimped together.

1,904,556. **DECOMPOSITION AND SEPARATION APPARATUS.** AUGUST SOMMERMEYER, Berlin-Rudow, Germany. Filed May 9, 1929, Serial No. 361,749, and in Germany Sept. 24, 1926. Renewed Mar. 31, 1931. 7 Claims. (Cl. 87—4.)

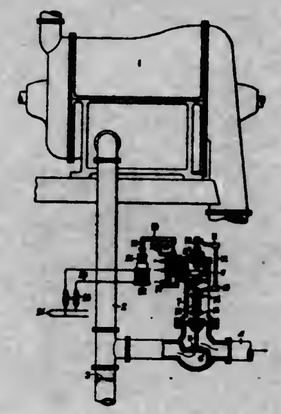


1. Apparatus adapted for the vapor treatment of organic material such as animal carcasses and the like under pressure, comprising, in combination, a decomposition vessel, a separation vessel on substantially the same level as said decomposition vessel, a pipe connecting said vessels for conducting the decomposed material, said pipe communicating with the decomposition vessel adjacent the bottom thereof, an enlarged portion in said pipe, a vapor draw-off pipe extending into said enlarged portion and connected to a vapor collecting vessel.

1,904,557. **ELASTIC FLUID TURBINE.** REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1929. Serial No. 389,051. 8 Claims. (Cl. 60—67.)

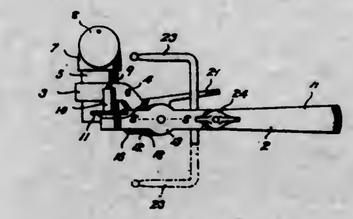
1. The combination with an elastic fluid turbine, a conduit connected to a stage of the turbine for tapping steam therefrom, a non-return valve in said conduit, and a branch conduit connected to said first-named conduit in advance of said non-return valve, of a combined dumping and pressure relief valve in said branch conduit comprising a valve

casing having a seat, an unbalanced valve adapted to engage the seat, a yieldable spring for holding the valve on its seat, means for adjusting the spring, a movable arm for holding said spring under compression, a fluid actuated



motor to which said arm is connected, a pilot valve for said motor, and means for moving said pilot valve to control the admission of actuating fluid to said motor for modifying the action of the spring adjusting means.

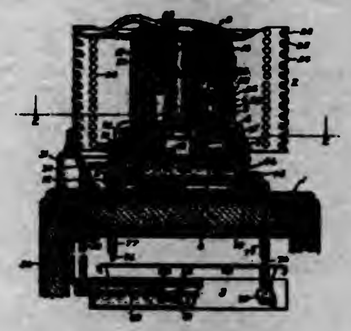
1,904,558. **STRIPING DEVICE.** BENJAMIN S. STARCH, La Crosse, Wis., assignor of one-half to August W. Zerataky, La Crosse, Wis. Filed Feb. 28, 1930. Serial No. 432,151. 12 Claims. (Cl. 91—62.6.)



1. In a striping device, the combination with a handle provided with two relatively movable arms, of a slotted reservoir upon one of said arms, a roller upon the other operating in the slot in the reservoir, a spring acting on said arms in a direction to press said roller into said slot, and a manually operable lever provided with an arm spreading means opposing said spring, and adapted for the regulation of clearance between said roller and said reservoir.

1,904,559. **REFRIGERATING MACHINE.** CHRISTIAN STRENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 18, 1926, Serial No. 109,960. Renewed Feb. 6, 1931. 18 Claims. (Cl. 62—115.)

1. A refrigerating machine comprising a casing, a compressor therein, a condenser coil surrounding the casing and connected with the compressor, and a series of heat radiating fins on the casing for supporting the condenser coil.



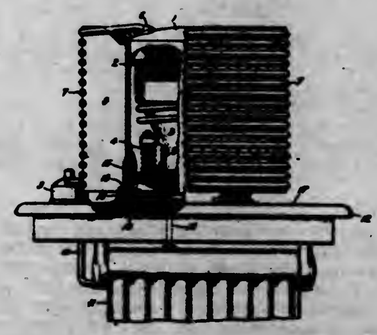
14. A refrigerating machine having a plate evaporator comprising a casing having partitions therein forming separate chambers containing refrigerant and heat storage liquid, and a cover having a brazed connection with the walls of the casing and with the partitions.

1,904,560. **REFRIGERATOR EVAPORATOR.** CHRISTIAN STRENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 28, 1929, Serial No. 389,049. Renewed Aug. 31, 1932. 12 Claims. (Cl. 62—95.)



1. An evaporator for refrigerating machines including a top plate for supporting articles to be frozen, another plate joined to said top plate to form a refrigerant chamber, said top plate having a recess therein to constitute a header for the refrigerant chamber, and a baffle extending between said plates from said header adjacent the opposite edge thereof.

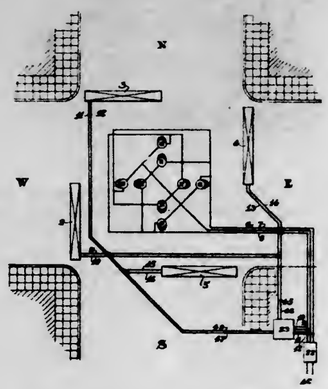
1,904,561. **REFRIGERATING MACHINE.** CHRISTIAN STRENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 10, 1931. Serial No. 543,406. 11 Claims. (Cl. 62—115.)



1. A refrigerating machine including a compressor and an enclosing compression casing, said casing containing a

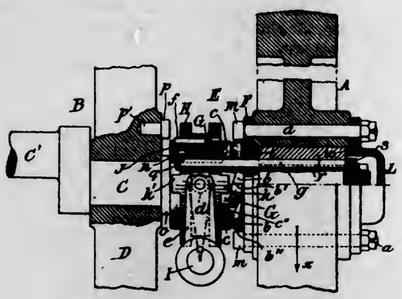
body of lubricant to provide for lubricating the compressor, and means conductively isolated from the portion of said casing containing the body of lubricant for supporting said casing.

1,904,562. RECORDER FOR TRAFFIC SIGNAL SYSTEMS. EUGENE D. STIRLEN, New Haven, Conn., assignor to The Stirlen Engineering & Research Corporation, a Corporation of Connecticut. Filed Aug. 20, 1928. Serial No. 300,935. 5 Claims. (Cl. 234—27.5.)



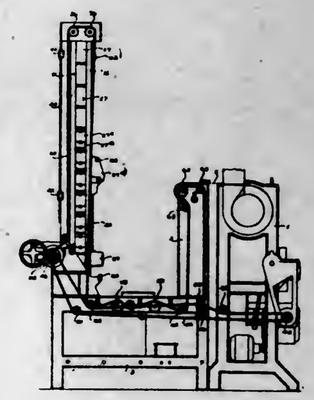
1. In an apparatus of the character described and to be installed at the point of intersection of two vehicle lanes, said apparatus including signalling means, and means for operating said signalling means to accord right of way over said vehicle lanes, recording means connected to said operating means, and means associated with said lanes and responsive to the passage of a vehicle over the same, said last named means being connected to said recording means to operate the latter when said signalling means is in a predetermined condition.

1,904,563. POSITIVE-ACTION CLUTCH. ROBERT W. STROUT, Brooklyn, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of Delaware. Filed Nov. 4, 1930. Serial No. 493,253. 7 Claims. (Cl. 192—35.)



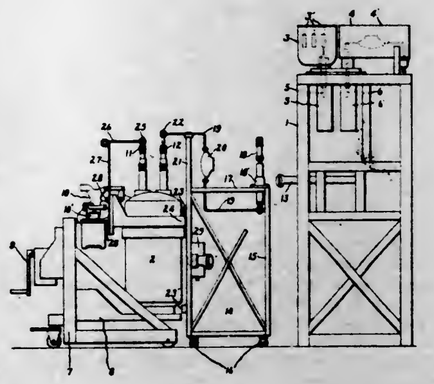
1. A clutch comprising driving and driven members having reciprocally engaging teeth, one of them being movable to engage or disengage said teeth, an operating member having a spiral engagement with the movable clutch member, means for driving the operating member from the driving member for engaging the clutch members, and means for stopping the operating member to disengage the clutch members, the parts being in synchronized relation to bring the clutch teeth into full locking engagement.

1,904,564. PRINT DRIER. HARRY HEWES SULLIVAN, Rochester, N. Y., assignor to Paragon Revolute Corporation, Rochester, N. Y., a Corporation of New York. Filed Dec. 3, 1930. Serial No. 499,788. 7 Claims. (Cl. 34—48.)



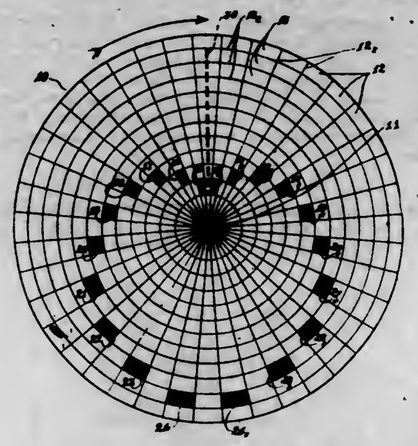
4. A drier for print washers comprising a vertically arranged interior heating chamber, means guiding the sheet material upwardly on one side of the chamber exterior thereof, thence over the chamber and downwardly on the opposite side of the chamber, and a drier chamber on the latter side of the heating chamber open at its bottom and its top so that a draft of air is created to travel upwardly through the drier chamber, the front side of the drier being open to expose the sheet material.

1,904,565. ELECTRICAL APPARATUS. ERNEST G. SWANSON, Upper Darby, Pa., assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1930. Serial No. 485,684. 9 Claims. (Cl. 175—183.)



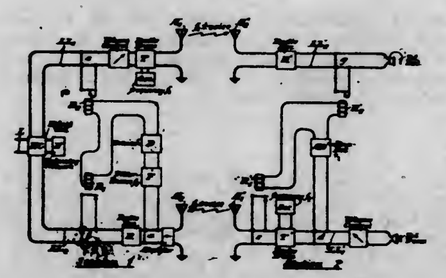
1. Electrical apparatus for metal clad switchgear including a stationary structure upon which buses and feeder connections are mounted and a circuit breaker bodily movable with respect to said stationary structure to connected and disconnected positions, said stationary structure and circuit breaker being provided with coacting disconnecting contacts, comprising a movable testing unit having testing contacts for engagement with said stationary and movable disconnecting contacts respectively, and means for mounting said unit on said circuit breaker for bodily movement.

1,904,566. APPARATUS FOR TREATING LIGHT AND SIMILAR RAYS. ALFRED ORDE TATE, Toronto, Ontario, Canada. Filed Oct. 8, 1928. Serial No. 311,118. 7 Claims. (Cl. 88—1.)



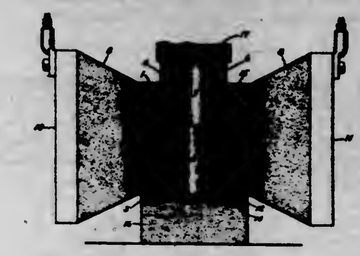
1. In a rotary disc for treating light and similar rays, apertures formed therein and spaced circumferentially of each other by radial sectors and at varying distances from the axis about which said disc rotates, and arranged in series commencing adjacent said axis and proceeding to a point adjacent the periphery of said disc and thence back to a point adjacent to said center axis, said apertures being formed to permit of equal exposure throughout the disc.

1,904,567. TWO-WAY TELEPHONE SYSTEM. EDMUND R. TAYLOR, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 16, 1931. Serial No. 544,890. 8 Claims. (Cl. 250—9.)



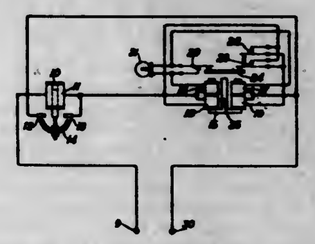
1. In a two-way system for the transmission of energy, a first path adapted for transmission in one direction and a second path adapted for transmission in the opposite direction, each of said paths comprising two terminal sections and an intermediate transmission link, the terminal sections of said second path being normally disabled, means near the transmitting end of said first path for applying carrier energy continuously thereto, means near the transmitting end of said second path for removing the disability from the transmitting section thereof and applying control energy thereto, and means responsive substantially only to said control energy for removing the disability from the receiving section of said second path and disabling the transmitting section of said first path.

1,904,568. DISK-LIKE CUTTING TOOL. GEORGE F. TAYLOR, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 14, 1929. Serial No. 363,079. 6 Claims. (Cl. 51—279.)



1. An article of manufacture comprising a pair of metal disks and an intermediate sintered disk consisting largely of a hard metal carbide and a binder material therefor, said intermediate disk being welded to said outer disks.

1,904,569. PROTECTIVE DEVICE. JULIAN D. TEBO, East Orange, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 26, 1932. Serial No. 601,443. 10 Claims. (Cl. 171—97.)



10. In a system for preventing electrolysis of metallic structures, means for providing and maintaining a closed path of low resistance for current flowing from said structure to a negative return, means for closing an additional path of lower resistance from said structure to said negative return when the potential of said structure increases to a predetermined value, and to open said path of lower resistance when the potential decreases to a predetermined value, said first means being responsive to current flowing in a reverse direction from said negative return to said structure to open said first path of low resistance and to establish a path of relatively high resistance.

1,904,570. APPARATUS FOR THE VENTILATION OF COOLING PLANTS. ARTHUR LINDSAY THOMSON, Milan, Italy, assignor to Altek Compagnie d'Etude et d'Exploitation d'Appareils Frigorifiques pour le Transport, Antwerp, Belgium, a Belgian Company. Filed Mar. 15, 1929. Serial No. 347,259, and in Belgium Nov. 3, 1928 5 Claims. (Cl. 62—129.)

1. In a cooling plant, the combination of a cold storage room, a compartment in said room, refrigerating pipes

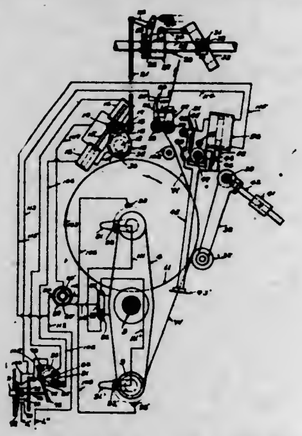
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in said compartment, an air supply conduit adjacent said compartment, a series of passageways between said conduit and said compartment, a series of passageways between



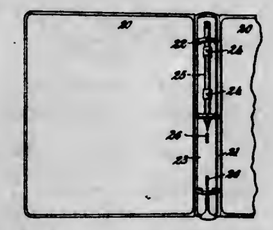
said compartment and said room, means for controlling the passageways of one of said series, and means for blowing air into said supply pipe at a controllable rate.

1,904,571. WEB RENEWING MECHANISM FOR PRINTING MACHINES. JOHN R. TOMLIN, Brooklyn, N. Y., assignor to R. Hoe & Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 2, 1931, Serial No. 512,871. Renewed May 3, 1932. 35 Claims. (Cl. 242—58.)



1. The method of replacing a web running to a printing machine, which comprises, rotating a replacement web roll at a peripheral speed substantially equal to the speed of a web being drawn from an exhausting web roll, depositing an adhesive material on the peripheral surface of the replacement roll while it is being rotated, pressing the web running from the exhausting roll against the adhesive material to cause the end of the web of the replacement roll to adhere to the running web, and severing the web of the exhausting roll.

1,904,572. LOOSE LEAF BINDER AND HOLDER FOR WRITING IMPLEMENTS. CLARENCE D. TRUSSELL, Poughkeepsie, N. Y., assignor to Trussell Manufacturing Company, Poughkeepsie, N. Y., a Corporation of New York. Filed Feb. 5, 1931. Serial No. 513,506. 11 Claims. (Cl. 129—24.)

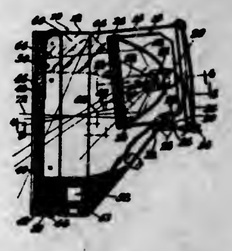


1. The combination, with a loose-leaf binder of which the ring mechanism has a cover-plate provided with an opening, of a holder for a writing implement, having a readily detachable, resilient attaching means adapted to be inserted in said opening and held clipped to the adjacent part of said plate by its elasticity.

1,904,573. VULCANIZATION OF RUBBER. WILLIAM F. TULEY, Nutley, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Dec. 19, 1930, Serial No. 503,521. Renewed June 8, 1932. 26 Claims. (Cl. 8—53.)

1. A process of producing vulcanised rubber which comprises mixing a rubber composition containing sulphur and a metallic oxide with an organic accelerator in the presence of a substantially neutral nitrogenous organic compound devoid of acid material which compound has the ability to decompose at vulcanising temperatures to yield an aliphatic amine or ammonia, and vulcanising the rubber.

1,904,574. AUTOMOBILE HEADLIGHT. SIMON W. H. TURNER, New York, N. Y. Filed May 29, 1931. Serial No. 540,870. 2 Claims. (Cl. 240—41.3.)



1. In combination, a casing for a headlight having a substantial part of the upper front portion thereof covered by a shield adapted largely to interrupt the passage of light rays, a second casing within the first casing so positioned as to be substantially covered by said shield when viewed from a point horisontally in front of the first casing, a downwardly tilted reflector and a light source in said second casing, and a plate mounted at the front of said second casing a substantial distance in front of said light source provided with prisms adapted to bend a substantial proportion of the light rays from said light source either upwardly or downwardly.

1,904,575. EYELASH CURLER. WILLIAM R. TUTTLE and CHARLES W. STICKEL, Rochester, N. Y., assignors to The Kurlash Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Jan. 11, 1932. Serial No. 586,012. 8 Claims. (Cl. 132—32.)



1. In an eyelash curler comprising two relatively and vertically movable jaws curved to fit about an eyelid and to receive eyelashes between them and wherein one of said jaws has an upwardly opening channel along the axis of which the operative edge of the other jaw is parallel, an elastic strip as a projecting facing for said channel and secured therein, the said elastic strip being provided with a central and longitudinal groove on the upper surface thereof for engagement with the operative edge of the abovementioned jaw.

1,904,576. WATERPROOFING COMPOSITION. DOUGLAS FRANK TWISS, Wylde Green, and WALTER GEORGE GORHAM, Erdington, Birmingham, England, assignors to Dunlop Rubber Company, Limited, a British Company. Filed May 19, 1930, Serial No. 453,856, and in Great Britain June 26, 1929. 2 Claims. (Cl. 134—17.)

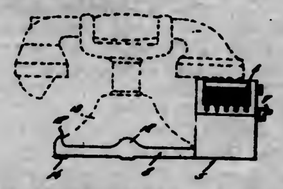
1. A composition for coating cellulosic or fibrous materials which consists of an aqueous dispersion of rubber material admixed with an aqueous dispersion of wax in substantially equal proportions of wax and rubber.

1,904,577. GAS BLAST CIRCUIT INTERRUPTER. WERNER UEBERMUTH, Berlin-Oberschoneweide, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 30, 1931, Serial No. 572,177, and in Germany Apr. 3, 1930. 9 Claims. (Cl. 200—148.)



1. A circuit interrupter of the gas-blast type comprising a source of gas pressure, arcing contacts separable to form an arc gap of lighted length through which gas is directed at high velocity from said source, disconnecting switch contacts in series with said arcing contacts, and means opening said disconnecting switch contacts subsequent to opening of said arcing contacts and in response to decrease of the gas blast pressure.

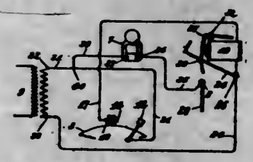
1,904,578. ATTACHMENT FOR TELEPHONES. FRANK EDWARD VANDERHOOF, Greenwich, Conn. Filed May 7, 1931. Serial No. 535,727. 1 Claim. (Cl. 24—10.)



An attaching clamp for telephones of the upwardly tapering base type comprising a transversely split ring, adjustable fastening means between the ends of the ring, whereby the ring can be clamped to the base, said ring being provided at its upper edge portion with inwardly and upwardly extending portions defining projections for engaging against a reduced portion of the said base and at its lower edge with inwardly disposed lugs for engaging the bottom of the base.

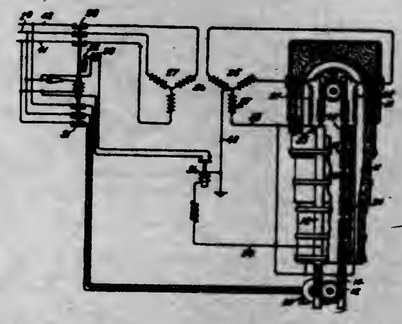
1,904,579. CONTINUOUS ALARM CLOCK. PAUL V. VANDEVELDE, New York, N. Y. Filed Oct. 21, 1930. Serial No. 490,304. 2 Claims. (Cl. 58—19.)

1. In a continuous alarm, an electric switch circuit, an electric alarm circuit, a clock provided with an alarm mechanism, said mechanism being connected in series with said switch circuit whereby when said mechanism functions said switch circuit will be closed, a switch in said alarm circuit, said switch including an electro-magnet, a pivotally mounted catch acting as an armature of the magnet, a pivotally mounted arm formed with an aperture through which said catch normally extends, and a swinging stop for said arm, said stop and said arm being in



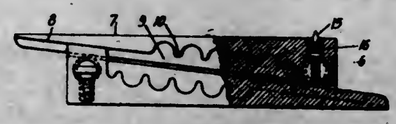
series in said alarm circuit, said stop when engaging said arm acting to close said alarm circuit, an electrically operated bell operatively connected to said alarm circuit, said bell being adapted to function when said alarm circuit is closed, said stop having a swingable plate adapted to move said arm to a position in engagement with said catch whereby said alarm circuit is opened, and means for manually actuating said plate.

1,904,580. PROTECTIVE CIRCUIT FOR ENAMELING FURNACES. ROBERT D. VAN NORDSTRAND, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 24, 1931. Serial No. 553,016. 8 Claims. (Cl. 219—20.)



1. In a protective system for furnaces, the combination of heating means for said furnace, motor driven means for conducting work through said furnace along a restricted path, and means responsive to a predetermined departure of said motor driven means from said restricted path at any point thereof for rendering said heating means ineffective and for stopping said motor driven means.

1,904,581. PRINTER'S QUOIN. CAMILLE JOSEPH VION, Jersey City, N. J. Filed Jan. 15, 1931. Serial No. 508,928. 4 Claims. (Cl. 254—42.)



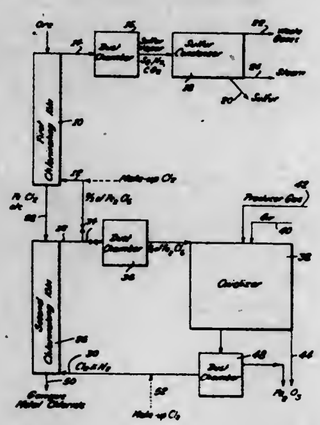
4. A printer's quoin composed of two relatively movable co-operating members, means for locking the same in a

chase, a furniture engaging member in each of said quoin members and means for operating said furniture engaging members into and out of locking engagement with the adjacent furniture in said chase.

1,904,582. METHOD FOR RECOVERING VALUABLE MATERIALS FROM SPENT CATALYSTS. REBA N. WATTS, Baton Rouge, La., assignor to Standard-I. G. Company. Filed Apr. 11, 1931. Serial No. 529,553. 6 Claims. (Cl. 23—288.)

1. Method for recovering sulfides of metals of the VI group of the periodic system in a catalyticaly active form from spent catalytic material containing these sulfides and the sulfides of metals of the II and IV groups of the periodic system and other hydrochloric acid soluble materials, which comprises digesting the spent catalyst with strong hydrochloric acid, whereby all but the sulfides of the VI group metals are dissolved, separating the undissolved residue from the solution, and washing the residue.

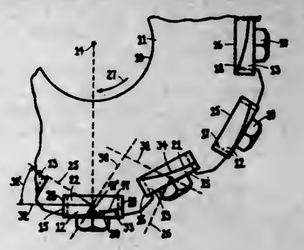
1,904,583. PROCESS OF TREATING IRON ORES. ERNEST W. WESCOTT, Niagara Falls, N. Y., assignor, by mesne assignments, to Sulphide Corporation, a Corporation of Delaware. Filed Oct. 24, 1929. Serial No. 402,010. 6 Claims. (Cl. 23—200.)



1. A cyclic process for treating materials containing iron for the recovery therefrom of contained values which comprises treating such a material in a first step with dilute ferric chlorid vapors to convert the iron to ferrous chlorid, the temperature in said first step being maintained above that temperature at which ferric chlorid will condense from the dilute vapor mixture brought to said step and at the same time sufficient to insure volatilization of any sulfur freed in said first step; voiding the inert gas accompanying the ferric chlorid used in this first step of conversion from the cycle; then treating the ferrous chlorid in a second step of conversion with dilute chlorin to form ferric chlorid vapors, and burning part of the ferric chlorid vapors so formed with air to convert the iron to ferric oxid and to form dilute chlorin for use in such second step while directing the remainder of said vapors to the first step of conversion.

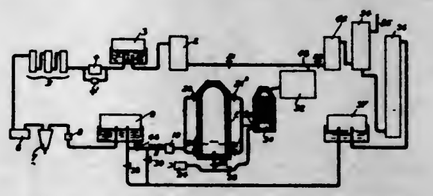
1,904,584. TOOL FOR CUTTING GEARS. ERNEST WILDHABER, Brooklyn, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Oct. 28, 1929. Serial No. 402,988. 21 Claims. (Cl. 29—105.)

1. A rotary gear cutting tool, containing a tool body, a cutting portion projecting from said tool body, a cutting face forming a cutting edge on said cutting portion, said cutting edge extending from a lower part of said cutting



portion upwardly and rearwardly towards the top of said cutting portion, and said cutting face having a general inclination so as to face forwardly and upwardly.

1,904,585. PROCESS FOR THE MANUFACTURE OF CARBON BY DISSOCIATION OF CARBON MONOXIDE STARTING FROM A COMBUSTIBLE TREATED IN A GAS PRODUCER. JACOBUS JOANNES CORNELIUS WILLEKENS, Brussels, Belgium, assignor to The General Carbonalpha Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 26, 1931, Serial No. 525,410, and in France Apr. 1, 1930. 10 Claims. (Cl. 134—60.)

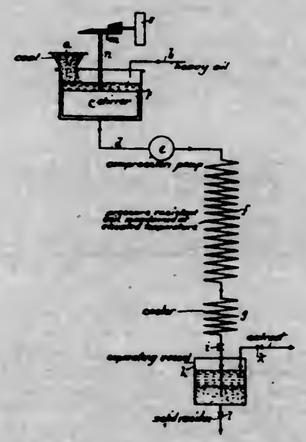


1. Process for the manufacture of carbon by the dissociation of carbon monoxide which, in a combined group of steps consists in making, in a period of reduction, gases rich in carbon monoxide in a gas producer, causing these gases to pass over a catalyzer which decomposes the carbon monoxide with the deposit of carbon and the formation of carbonic acid gas, heating in a blowing period a charge of combustible in the gas producer by blowing air and producing combustion of this combustible, causing the gases impoverished in carbon monoxide and coming from the catalysis, to pass into the charge of combustible thus heated up in order to commence a fresh period of reduction, recuperating, on the other hand, the carbonic acid and gas mixture contained in the air gas made during the blowing period, and introducing this carbonic acid gas as a compensator into the principal gaseous circuit before the gas producer.

1,904,586. CONVERSION OF CARBONACEOUS SOLIDS INTO VALUABLE LIQUID PRODUCTS. KARL WINKLER and KURT WISSEL, Ludwigshafen-on-the-Rhine, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany, a Corporation of Germany. Filed Dec. 15, 1927, Serial No. 240,333, and in Germany Dec. 22, 1926. 7 Claims. (Cl. 196—56.)

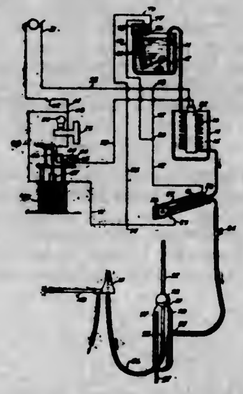
1. The process for recovering valuable liquid products from solid bituminous materials which comprises treating said solid materials, in the absence of substantial amounts of hydrogen, with liquid hydrocarbon materials containing substantially no constituents boiling below 300° C. while operating in a system under a pressure of at least 10 atmospheres and a temperature exceeding 250° C. but below the coking temperature of said liquid hydrocarbon materials by continuously passing at least one of said liquid and solid materials through said system

and in contact with the other material, contact being effected between said materials until at least 55% of the weight of said solid materials is extracted, introducing



additional amounts of said solid and liquid materials into said system and continuously withdrawing the extract from said system.

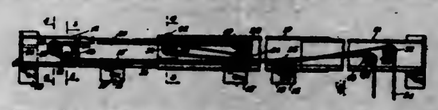
1,904,587. TEMPERATURE CONTROLLING APPARATUS. ERNHOLD H. WAFFLER, Yonkers, N. Y. Filed Aug. 2, 1930. Serial No. 472,738. 5 Claims. (Cl. 128—254.)



1. In an apparatus of the character described, a liquid supply tank, a heating unit, an electric circuit for said unit, a thermostat in said circuit and including a bimetallic temperature-responsive strip, a hollow applicator, a conduit extending from said tank successively to said heating unit, said thermostat, and said applicator, said conduit having a conductive portion mounted on said strip, and an enlarged temperature-leveling chamber in series with said conduit between the thermostat and the applicator, said chamber having an overflow outlet, whereby the liquid may be permitted to flow continuously past the heating unit and thermostat regardless of its flow through the applicator.

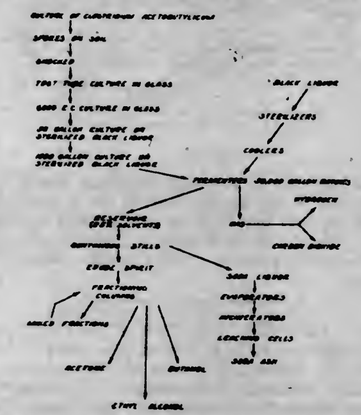
1,904,588. CURTAIN ROD. ISIDOR WEINBERG, Brooklyn, N. Y. Filed Nov. 6, 1931. Serial No. 573,476. 9 Claims. (Cl. 156—20.)

1. A curtain rod, comprising a hollow central member and a pair of hollow end members telescoping endwise into said central member, a sheave mounted at each end within one of said end members, a pair of sheaves mounted at the outer end within the other of said end members, a sheave mounted at one end within said central member,



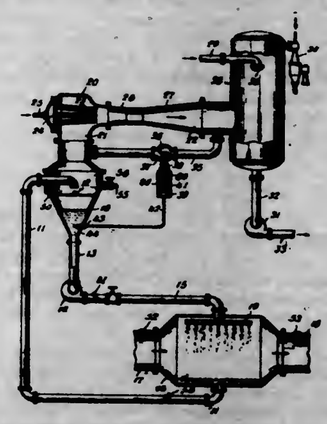
a pull cord extending through said rod and guided over said sheaves, curtain hanger slides mounted to slide within said rod members, and means for connecting said pull cord to the innermost two slides.

1,904,589. PROCESS OF MANUFACTURING DISTILLABLE SPIRITS BY FERMENTATION. SIDNEY D. WELLS, Port Edwards, Wis. Filed June 17, 1931. Serial No. 545,125. 12 Claims. (Cl. 195—44.)



10. The process of manufacturing alcohol by fermentation which process comprises fermenting a mash comprising the liquor resultant from the cooking of fibrous plant material with a solution of a caustic alkali, and thereby recovering distillable spirits.

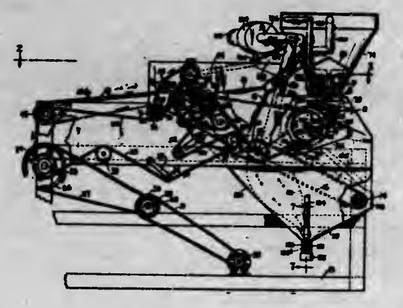
1,904,590. REFRIGERATION. MAYER WEXLER, Carteret, N. J., assignor to Foster Wheeler Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 7, 1932. Serial No. 597,161. 21 Claims. (Cl. 62—152.)



1. The method of refrigeration which comprises introducing liquid into a closed vessel, withdrawing vaporous

fluid from said vessel to maintain a vacuum therein, and reintroducing a portion of said vaporous fluid into said vessel to regulate the degree of vacuum maintained therein.

1,904,591. POWDER DISTRIBUTING MACHINE. LOUIS WILSON, Brooklyn, N. Y., assignor to B. L. Nicholes & Company, Inc., New York, N. Y., a Corporation of New York. Filed Nov. 21, 1928. Serial No. 320,825. 16 Claims. (Cl. 91—59.)



1. In a machine of the class described, means for applying powder to wet printed matter, and a conveyor having means to grip and advance said printed matter, said gripping means also successively tapping said printed matter during its forward travel to shake surplus powder therefrom.

1,904,592. PROCESS FOR THE MANUFACTURE OF HYDROGEN. PHILIP L. YOUNG, New York, N. Y., and WILLIAM V. HANKS and GEORGE H. FREYERMUTH, Baton Rouge, La., assignors to Standard Oil Development Company, a Corporation of Delaware. Filed Aug. 30, 1929. Serial No. 389,340. 17 Claims. (Cl. 23—212.)

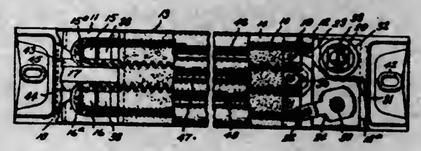
1. An improved process for the production of a gas rich in free hydrogen under pressure in excess of atmospheric, which comprises continuously passing a hydrocarbon under pressure in excess of atmospheric pressure with steam through a catalytic zone containing a fixed catalyst incapable of absorbing carbon dioxide maintained at a temperature in excess of about 1000° F. using an increased excess of steam above that required at atmospheric pressure whereby the retarding effect of pressure on the reaction is minimized.

7. An improved process for producing a gas rich in free hydrogen under pressure substantially in excess of atmospheric pressure, comprising passing a hydrocarbon in gaseous phase and admixed with steam in sufficient excess to offset the adverse effect of pressure over a suitable catalyst incapable of absorbing carbon dioxide maintained at a temperature in excess of 1000° F., and at pressure in substantial excess of atmospheric pressure, passing the gas mixture so produced over a second catalyst at a lower temperature, and cooling the gas mixture.

1,904,593. PROCESS FOR THE MANUFACTURE OF GAS RICH IN FREE HYDROGEN. PHILIP L. YOUNG, Elizabeth, N. J., and WILLIAM V. HANKS, Baton Rouge, La., assignors to Standard Oil Development Company. Refiled for application Serial No. 389,742, filed Aug. 31, 1929. This application filed Sept. 17, 1932. Serial No. 633,693. 16 Claims. (Cl. 23—212.)

1. An improved process for the production of gas rich in free hydrogen under high pressure, comprising passing a gaseous hydrocarbon through a catalytic zone admixed with steam at temperature in excess of about 1000° F. and at pressure in excess of atmospheric pressure, scrubbing the gas with oil under pressure, removing the hydrogen, then removing the oil and releasing pressure thereon, whereby the absorbed gas is liberated, and returning the absorbed gas to the catalytic zone.

1,904,594. ELECTRIC HEATER. CHARLES C. ABBOTT, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 15, 1930. Serial No. 452,750. 8 Claims. (Cl. 201—67.)



1. An electric heater comprising an elongated metallic sheath, a pair of insulators in said sheath adjacent the ends thereof, a resistance conductor extending in a plurality of lengths between said insulators, one of said insulators being provided with recesses and the other of said insulators being provided with a protuberance around which the resistance conductor is looped, terminal members seated in said recesses, said terminal members being provided with tapped apertures, connections between said resistance conductor and said members, and threaded terminal pins extending through said sheath into said apertures whereby said members and said terminal pins are clamped securely to said sheath and granular insulating material in said sheath compacted around said resistance conductor.

1,904,595. RESINOUS COMPOSITION. LESTER V. ADAMS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 27, 1928. Serial No. 315,591. 8 Claims. (Cl. 260—8.)

1. A resinous composition comprising the composition formed by the simultaneous condensation of glycerine, phthalic anhydride and a terpene containing hydroxyl groups.

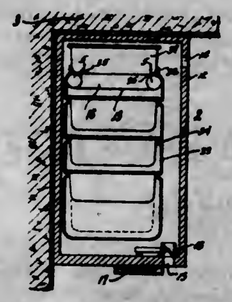
1,904,596. ARCH, PARTICULARLY FOR USE IN METALLURGICAL FURNACES. WALTER ALBERTS, Duisburg-Ruhrort, Germany, assignor to the Firm Vereinigte Stahlwerke Aktiengesellschaft, Dusseldorf, Germany. Filed Dec. 7, 1929, Serial No. 412,873, and in Germany July 4, 1929. 3 Claims. (Cl. 110—99.)



1. In a furnace of the class indicated, an arch which is built up of bricks individually having profiles of a plurality of types of curved configuration on the surface of the arch which is out of contact with the fire and exposed to the air, the bricks being arranged in such manner that the outer surface of the arch presents an undulated surface comprising a series of peaks and depressions while the inner surface of the arch is generally smooth.

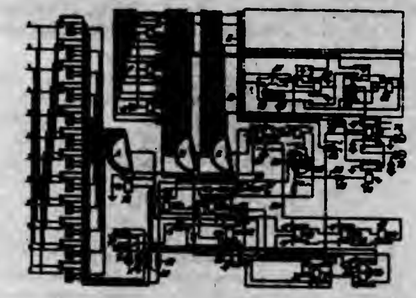
1,904,597. REFRIGERATING APPARATUS. EDMUND B. ALLYNE, Lantana, Fla. Filed Mar. 6, 1931. Serial No. 520,536. 10 Claims. (Cl. 62—95.)

1. Refrigerating apparatus, comprising a cabinet having a refrigerating compartment, an vaporator member therein having parallel conduit members in substantially the same horizontal plane, tray supporting means carried by said conduit members and comprising a sheet metal casing having parallel vertical side walls provided with tray supporting means and at their upper portions with laterally extending members removably resting upon



and in thermal contact with said conduit members, whereby said casing is adapted both to support a tray and to conduct heat to said conduit members.

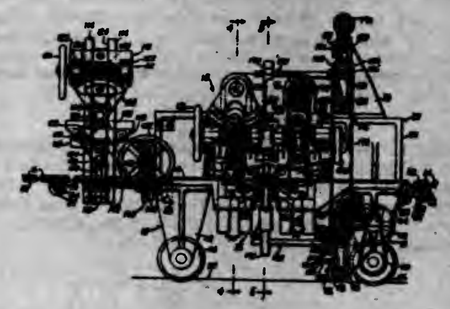
1,904,598. TESTING SYSTEM. FRITHIOF B. ANDERSON, Rutherford, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 28, 1929. Serial No. 349,285. 12 Claims. (Cl. 175—183.)



1. The method of testing the insulation of a conductor which comprises charging the conductor to a definite potential, permitting the conductor to discharge for a definite period, determining the potential of said conductor at the end of said period, determining whether the potential at the end of said period is above or below a definite value, and indicating the result of said determination.

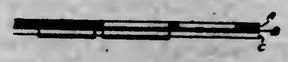
1,904,599. METHOD OF WELDING AND APPARATUS THEREFOR. JAMES L. ANDERSON, Tenafly, N. J., assignor to Air Reduction Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Oct. 29, 1930. Serial No. 491,868. 19 Claims. (Cl. 113—59.)

1. Apparatus for welding mechanically which includes: a pair of carriages constructed for feeding thereacross a traveling sheet, one of said carriages being mounted on the other carriage both of said carriages being mounted for movement with said sheet, means on each of said carriages for securing a metallic sheet thereto, mechanism for varying the position of the carriages relative to each other to bring the end edge of one sheet into welding relation with the other sheet, means for clamping the adjusted sheet in position to be welded to the other sheet, and means supported relatively to said carriages for welding together the two sheets to form a continuous member therefrom, said welding means including a torch carriage supporting torches positioned above and below said end edges and arranged for movement across the



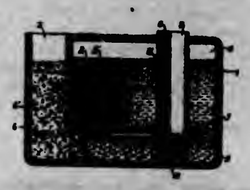
positioned sheets, the carriage at the welding position being formed to present air conduits to assist the combustion of gases around said torches.

1,904,600. PROCESS FOR EXPOSURE AND COPYING OF PHOTOGRAPHS AND CINEMATOGRAPHIC RECORDS IN NATURAL COLORS. POUL SMITH RASTRUP ANDERSEN, Copenhagen, Denmark. Filed Sept. 12, 1931, Serial No. 562,508, and in Germany Oct. 17, 1930. 8 Claims. (Cl. 95—2.)



1. The process for producing multi-color photographs which comprises forming a negative plate having an orthochromatic coating on the front face and a panchromatic coating on the back face thereof, exposing said negative to form image values in both of said coatings, developing the exposed negative, applying a film of a transparent fatty substance to the image values of the panchromatic coating, impressing the sensitized face of a positive against said film covered surface of the negative plate so as to transfer the fatty substance to the corresponding parts of the positive, exposing the positive through the negative plate, developing the uncovered area of the positive, and differentially coloring the positive.

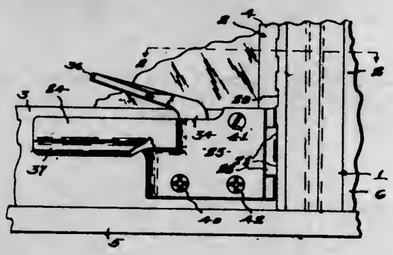
1,904,601. CONSTANT LEVEL LUBRICATING DEVICE. KOICHI AOKI, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed Apr. 8, 1931, Serial No. 528,694, and in Japan May 21, 1930. 1 Claim. (Cl. 308—122.)



A lubricating device for a bearing comprising a storage reservoir containing oil below atmospheric pressure, a supply chamber disposed beneath said reservoir for feeding oil to said bearing, and a plug-like member mounted within said reservoir and chamber, said member being provided with a longitudinal bore normally communicat-

ing with atmosphere at one end and through communicating passages with both the storage reservoir and the supply chamber at the other end arranged so that said reservoir may be refilled directly through said bore, and, during normal operation oil may feed from said reservoir into said supply chamber, said member likewise being provided with a vent interconnecting said reservoir and supply chamber causing feed of oil into said chamber only in response to predetermined lowering of the oil level therein.

1,904,602. WINDOW SASH HOLDER AND WINDOW CONSTRUCTION. ROY T. AXE, Syracuse, N. Y., assignor, by mesne assignments, to The Syracuse Trust Company, Syracuse, N. Y., a Corporation of New York, trustee. Filed Feb. 26, 1930. Serial No. 431,579. 4 Claims. (Cl. 292—173.)



1. The combination with a window sash and guide therefor, of a sash holder comprising a housing mounted on the rail of the sash and having a hollow lengthwise extension constituting a rigid lift handle, a latch member movable in the housing and having a longthwise stem extending into the hollow lift portion, an operating lever pivoted in the housing and extending to the outside thereof and coacting with the latch member to operate the same and a spring surrounding said stem and thrusting against the latch member, the portion of the latch operating lever located outside of the housing, extending lengthwise of the lift handle and arranged in pinch handle relation thereto.

1,904,603. RECOVERY OF SULPHUR. RAYMOND F. BACON, Bronxville, and ISAAC BENCOWITZ, New York, N. Y.; said Bencowitz assignor to said Bacon. Filed Mar. 5, 1930. Serial No. 433,501. 14 Claims. (Cl. 23—226.)

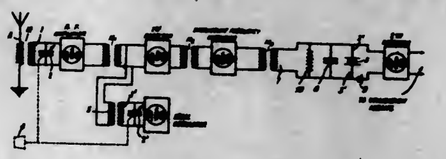
1. In a process for treating pyrites-bearing material to recover sulphur, the improvement which comprises subjecting the pyrites-bearing material to the action of hydrogen chloride in the presence of an agent of the group air, oxygen, carbon dioxide, carbon monoxide, flue gases and the like which reacts with sulphur to form a volatile sulphur compound.

14. The method of recovering sulphur from pyrites-bearing material which comprises subjecting the material at an elevated temperature to the action of hydrogen chloride, air and one or more oxides of carbon to produce hydrogen sulphide, carbonyl sulphide and sulphur dioxide, and passing the sulphur compounds thus produced in contact with water to hydrolyse the carbonyl sulphide and cause a reaction between sulphur dioxide and hydrogen sulphide to produce elemental sulphur.

1,904,604. PROCESS OF PRODUCING AMMONIUM SULPHATE. HANS BAHR, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed July 14, 1930, Serial No. 467,968, and in Germany July 29, 1929. 4 Claims. (Cl. 23—119.)

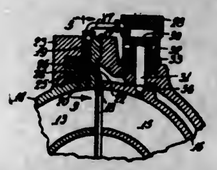
1. The process of producing ammonium sulphate which comprises heating an aqueous solution of ammonium sulphite ranging from weakly acid to alkaline in the absence of substantial amounts of acid ammonium sulphite under pressure.

1,904,605. CRYSTAL REJECTOR CIRCUIT. WILLIAM S. BARDEN, Stapleton, N. Y., assignor to Radio Corporation of America, a Corporation of Delaware. Filed Jan. 10, 1931. Serial No. 507,876. 6 Claims. (Cl. 250—20.)



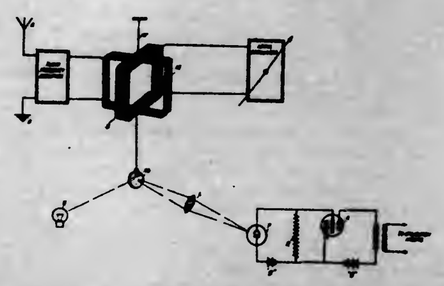
1. In a signal receiving system, means for producing local oscillations, a signal circuit tunable to a desired carrier frequency, means for heterodyning the desired frequency and local oscillations to produce a beat frequency, means for detecting the beat frequency and a piezo-electric rejector path between said heterodyning means and said detecting means resonant to said beat frequency, and means for tuning said signal circuit to an undesired interfering carrier frequency slightly different from the desired carrier frequency when heterodyning occurs between the desired carrier frequency and said undesired carrier frequency.

1,904,606. HYDRAULIC POWER TRANSMITTER. GUSTAV BAUER, Hamburg, and JOHANN NIKOLAUS KIEP, Altona-Hochkamp, Germany. Filed June 18, 1930, Serial No. 461,933, and in Germany Oct. 15, 1928. 10 Claims. (Cl. 60—54.)



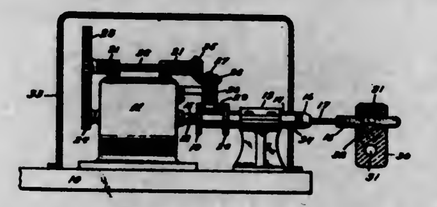
2. A hydraulic power transmitter of the Föttinger type including driving and driven rotors, a discharge control ring carried by one of said rotors for permitting or preventing escape of liquid therefrom, a locking member for preventing relative rotation of said rotors, and hydraulic means controlled by said ring for actuating said locking member.

1,904,607. STRAY AND ATMOSPHERICS ELIMINATING SYSTEM. JOSEPH BETHENOD, Paris, France. Filed Apr. 22, 1929, Serial No. 357,037, and in France May 2, 1928. 4 Claims. (Cl. 250—20.)



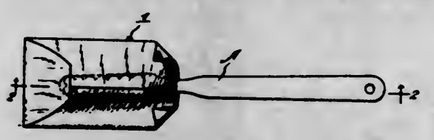
3. A receiving system comprising an antenna, a radio frequency amplifier coupled thereto, a resonant galvanometer including a pair of coils, one of said coils being movable and connected to the amplifier output, a source of local oscillations connected to the other coil, and means, responsive to relative movement between both coils for producing electrical variations corresponding to variations in the collected signal energy.

1,904,608. INSULATOR FINISHING BRUSHING MACHINE. DAVID BERTINI, Baltimore, Md., assignor to Locke Insulator Corporation, Baltimore, Md., a Corporation of Maryland. Filed Dec. 20, 1930. Serial No. 503,849. 2 Claims. (Cl. 15—21.)



1. In an insulator finishing machine, a stationary support, a motor mounted thereon and having a shaft, bearing means on the support, a tubular member slidable and rotatable within the bearing means and having a splined telescopic connection with said shaft, an abrading element carried by said tubular member, means driven by the motor for reciprocating said tubular member simultaneously with rotation thereof, comprising collars carried by said tubular member and an eccentric driven by the motor shaft and located between and cooperating with said collars.

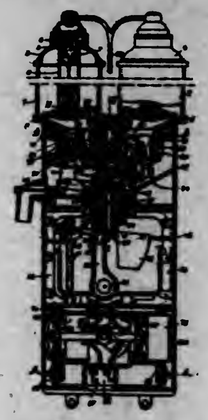
1,904,609. CONTAINER FOR TOOTHBRUSHES. SAMUEL B. BLEADON, San Francisco, Calif. Filed Feb. 18, 1930. Serial No. 429,343. 1 Claim. (Cl. 206—15.1.)



A tooth brush container comprising a normally flat bag-like receptacle of uniform width throughout and open at one end to receive the head of the brush, an envelope-like lining of absorbent material within the receptacle and open at both ends, said lining being formed from a blank of material folded to provide overlapping folds having their corresponding upper corners connected together and free for the remaining portions of their length, and the corners of the open end of the receptacle and the adjacent corners of said lining being folded on one side of the receptacle to snugly close the latter about the handle of the brush.

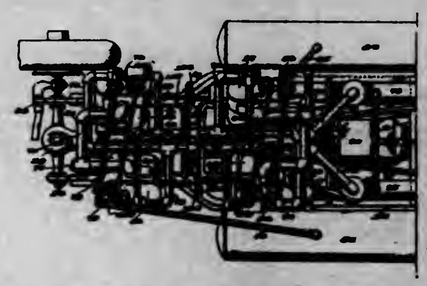
1,904,610. AUTOMATIC LIQUID MEASURING AND DELIVERING APPARATUS. HENRI BOUTILLON, Suresnes, France. Filed Dec. 26, 1929, Serial No. 416,875, and in France July 16, 1929. 3 Claims. (Cl. 221—100.)

1. In a liquid measuring and delivering apparatus of the type described which includes two measuring vessels, each having an outlet and an inlet opening, a liquid supplying conduit, means for forcing liquid into said supplying conduit, a liquid delivering conduit and control means responsive to an increase in the pressure of the supplied liquid arising upon filling up of a vessel to alternately connect the outlet of the filled vessel with the liquid delivering conduit and the inlet of the other vessel with the liquid supplying conduit, control means forming an aggregated unit adapted to be put in place and removed as a whole, securing means for said removable aggregated unit comprising two lever-like members arranged to press said unit in place and a single clamp with a single bolt adapted to



be screwed to a fixed portion of the apparatus to press both levers onto said unit, thereby securing the latter in place.

1,904,611. AUTOMOTIVE VEHICLE. WILLIAM B. BOYETTE, Jacksonville, Fla., assignor to Boyette Air Electric Car, Inc., a Corporation of Florida. Filed Sept. 28, 1932. Serial No. 634,607. 17 Claims. (Cl. 180—54.)

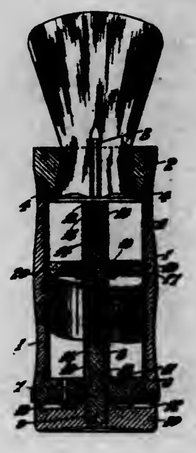


1. In an automotive vehicle, a propelling mechanism therefor, compressed air actuated mechanism for operating the propelling mechanism to provide for the travel of the vehicle, air compressing means, an electric motor for operating the latter, an air compressing means driven from the vehicle on the travel of the latter, each of said air compressing means including high and low compression cylinders, a pair of after coolers, each communicating with the low and high compression cylinders of one of the air compressing means, compressed air storage tanks communicating with each other, means for conducting compressed air from the high compression cylinders of said pair of air compressing means to said tanks, and controllable means common to said tanks for controlling a supply of compressed air to said compressed air actuated mechanism for controlling the operation of said propelling mechanism.

1,904,612. SHAVING BRUSH AND LIKE BRUSH. MOSENS LOUIS BRAMSON, London, England. Filed Oct. 25, 1929, Serial No. 402,237, and in Great Britain Apr. 24, 1929. 2 Claims. (Cl. 15—187.)

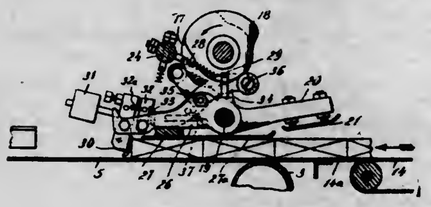
1. A reservoir brush comprising a casing, a cartridge containing shaving soap or cream in the casing, a bristle carrying end member secured on one end of the casing, a cream supplying tube extending from the inside of the cas-

ing to the inside of the bristles, an end closing cap operating to clamp the cartridge in the casing, a screw located centrally within the cartridge, means for rotating the screw, a binding disc operated by the screw, and a piston disc the periphery of which bears on the inner surface of



the cartridge, a concave recess being formed by a flange provided on the under side of the piston disc, the inner side of which frictionally engages the edge of the binding disc so that the latter will drive the former in one direction only when the screw is rotated.

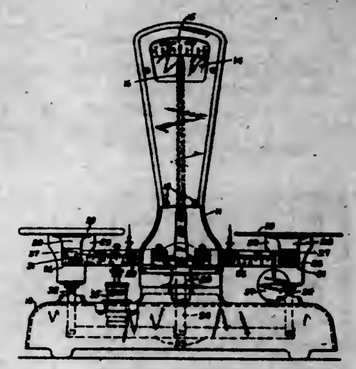
1,904,613. ARTICLE COLLECTING MACHINE. CORNELIUS T. BRAREN, Jamaica, N. Y., assignor, by mesne assignments, to Standard-Knapp Corporation, New York. Filed Dec. 11, 1930. Serial No. 501,512. 9 Claims. (Cl. 198—34.)



1. In an article collecting machine, the combination of means for advancing a succession of articles, a stop extending into the path of said articles, means controlled by articles and operating when a predetermined number of articles are held by said stop to release said stop and allow the accumulated articles to advance as a group, and a second stop adapted to engage the article following said group until said first mentioned stop is returned to position to intercept the articles.

1,904,614. WEIGHING SCALE. CARROLL E. BERADEN, Dayton, Ohio, assignor to Dayton Scale Company, Dayton, Ohio, a Corporation of New Jersey. Filed Apr. 18, 1930. Serial No. 445,334. 11 Claims. (Cl. 265—59.)

1. A scale comprising a beam, a frame relative to which the beam is pivoted, and a counterbalancing spring connected to the frame and to the beam to extend substantially in the same plane as the pivotal axis of the beam and in a direction substantially longitudinal of the beam,



and horisontally movable means for adjusting the connection of the beam and spring longitudinally of the latter.

1,904,615. FITTING FOR MEASURING ELEMENTS. CARLTON W. BRISTOL and ALPHONSO NOBLE, Naugatuck, Conn., assignors to The Bristol Company, Waterbury, Conn., a Corporation of Connecticut. Filed Oct. 1, 1931. Serial No. 566,246. 11 Claims. (Cl. 73—52.)

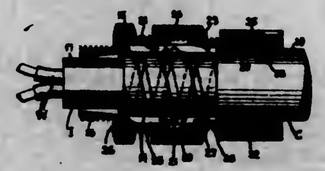


9. The combination with an anchoring support, of a flexible armor tubing adapted for attachment thereto, a capillary tube passing through the tubing, said capillary tube being helically coiled over a length proximate the attached portion of the tubing, and a tapered sleeve of elastic material fitted over the flexible tubing portion substantially the length of the retained coiled capillary tube portion, with the larger end of the sleeve adapted for fixed attachment to the portion of the flexible armor tubing adapted for attachment to the anchoring support.

1,904,616. METHOD OF SOLDERING. GEORG BRUNNÜNER, Pforzheim, Germany, assignor to Ernst Gideon Bek, Pforzheim, Germany. Filed Jan. 13, 1930, Serial No. 420,696, and in Germany Mar. 17, 1927. 15 Claims. (Cl. 113—112.)

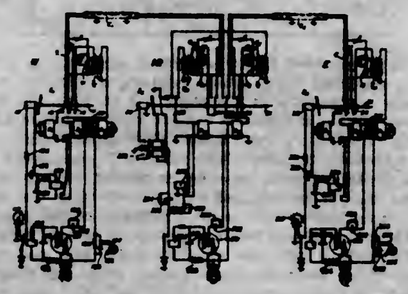
1. The method of soldering the ends of links which consists in applying to the links coated with a liquid solder paste of a character containing finely divided solder producing material of a character to be held in suspension by said liquid, subjecting the links to a rubbing agitation and flexing while in contact with a dry solder material so as to mix said dry solder material with the paste and to reduce the adhesiveness of the latter, whereby any voids in the link gaps left through incomplete filling of the link gaps by the solder paste will be filled by the dry powder material while all the solder material except that in the link gaps will be removed by the agitation and flexion, applying to the chain links a dry non-solder substance acting to protect the solder material from oxidation and the link surfaces from spreading of the solder material, and then subjecting the links to the action of heat to a degree to fuse the solder and to eliminate the suspension liquid without residue.

1,904,617. CABLE CONNECTER. STEPHEN N. BUCHANAN, Elizabeth, N. J. Filed Mar. 18, 1932. Serial No. 599,622. 2 Claims. (Cl. 247—25.)



1. A cable connecter comprising a connecter member having a passage therethrough to receive a cable, means carried by the connecter member to anchor the latter in a wall opening, a sleeve having longitudinal slots therein forming flexible arms, the sleeve being carried within the connecter member with the ends of the arms projecting beyond the end thereof, operating means carried upon the exterior of the connector member, the operating means engaging the projecting ends of the flexible arms to contract the same, an extension upon the operating means having a passage therethrough for the cable, and packing means carried by the extension to seal the space between the latter and the cable.

1,904,618. TELEGRAPH SYSTEM. EVERETT T. BURTON, Millburn, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 23, 1931. Serial No. 582,696. 15 Claims. (Cl. 178—69.)

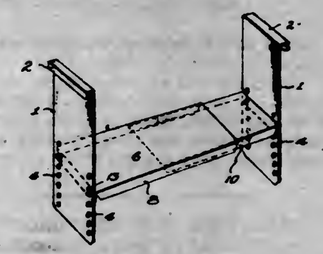


1. A long signaling line, a simplex telegraph station connected to said line and comprising sending and receiving equipments, relay means for alternately conditioning said equipments for operative relation with the line, frequency discriminating means for said relay means to differentiate between impulses of high and low frequencies to change the operative relation of said equipment at the cessation of impulses of one of said frequencies in the line.

1,904,619. ADHESIVE AND PROCESS OF MAKING SAME. GEORGE V. CABSAR, New York, N. Y., assignor to Stein, Hall & Company, Inc., a Corporation of New York. Filed Dec. 21, 1928. Serial No. 329,673. 8 Claims. (Cl. 87—17.)

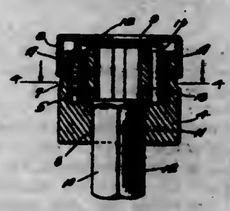
8. A composition for use in making adhesives which comprises 100 parts non-protein poly-saccharide carbohydrate having the characteristics of starch, ¼ to 2% by weight of potassium dichromate, and approximately 1 part of calcium peroxide.

1,904,620. BATTERY SUPPORT. RAYMOND J. KNISINGER, Fort Myers, Fla. Filed Jan. 22, 1932. Serial No. 588,182. 4 Claims. (Cl. 180—68.5.)



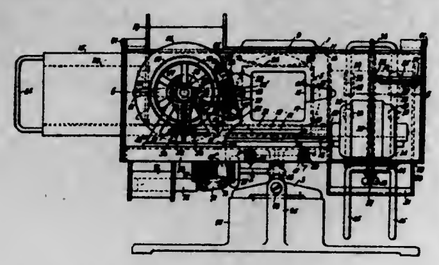
1. A battery support comprising two upright end portions having hooks at their upper ends adapted to hook over a portion of a vehicle and a plurality of rows of holes near the vertical edges of the two uprights, an extensible base support for the battery having telescoping meeting ends between the uprights and bolts adjustable in the rows of holes to incline the extensible base at different horizontal angles whereby the extensible base portions may be kept horisontal when the support on the vehicle cooperating with the hooks is inclined.

1,904,621. RATCHET DEVICE. ALBERT J. KOUNOVSKY, Stanton, Nebr. Filed Mar. 29, 1932. Serial No. 601,842. 3 Claims. (Cl. 81—60.)



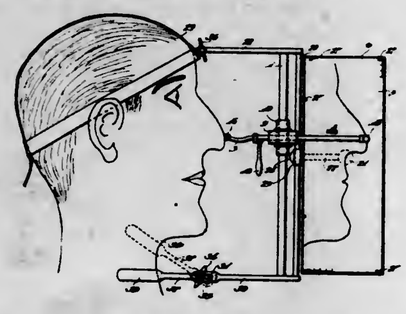
1. A ratchet tool, comprising a body having a circular chamber opening through one wall thereof, a body in the chamber having joined cam surfaces in its sides which face the circular wall of the chamber, said surfaces being farthest from said wall at their points of joinder, a wedge roller lying between said surfaces and said wall, said second body having therein a passage of polygonal cross section coaxial with the chamber, an elongated member formed at one end to removably engage in said polygonal passage, a member positioned against one face of the second body having a pair of fingers extending across said cam surfaces with said roller therebetween, said last member being shiftable to place a selected one of said fingers in a position to limit the movement of the roller in one direction, and means whereby said finger carrying member will be held in either of two adjusted positions by the elongated member when the latter has the said end thereof engaged in said polygonal passage.

1,904,622. STEREOPTICON OPERATING DEVICE. FRED G. KRUSCHE, Norwood, and FRED H. HUDEPOHL, St. Bernard, Ohio. Filed Dec. 16, 1929. Serial No. 414,413. 7 Claims. (Cl. 88—28.)



1. In a device of the character described, view-element shifting means comprising a carrier, a crank, a pitman connecting said crank and carrier, a motor-driven shaft, a clutch to connect said shaft with said crank, a lever to retentively engage said crank, and an operative connection from said lever to said clutch whereby said clutch and lever are alternatively engaged with said crank.

1,904,623. APPARATUS FOR REPRODUCING CONTOURS OF SURFACES. JAMES A. MALCOLM, Sheraden, and THOMAS W. WOOTTON, Bellevue, Pa.; said Wootton assignor to said Malcolm. Filed Jan. 9, 1930. Serial No. 419,569. 3 Claims. (Cl. 33—23.)



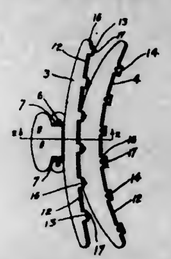
1. Apparatus comprising a rod, means for supporting the rod in a substantially vertical position adjacent the human face, a carrier member mounted on and movable along the said rod and also movable toward or away from the face, means extending from the said carrier member the end of which latter means is adapted to be drawn horizontally or vertically across the skin surface, a tablet mounted on the means for supporting the said rod, means for maintaining the said tablet in adjusted horizontal or vertical position, and a marking means adjustably mounted on the said carrier member whereby the said marking means may be brought into contact with the said tablet when the latter is in a horizontal or vertical position.

1,904,624. FLIER CONSTRUCTION. MICHAEL J. MCHALM, Scranton, Pa. Original application filed May 31, 1930, Serial No. 458,212. Divided and this application filed Jan. 9, 1931. Serial No. 507,676. 5 Claims. (Cl. 117—23.)



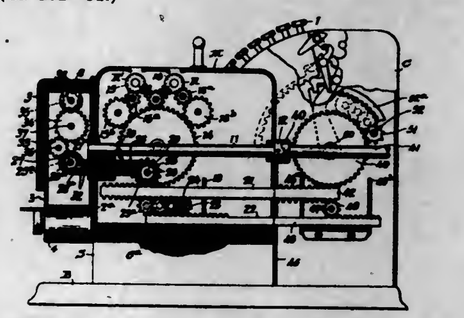
1. A flier including an apertured body portion having an annular wire-receiving groove, a movable spring member in the aperture adapted to grip a spindle, a fixed bushing in the body adapted to support the spring and a mushroom bushing opposite to said first bushing and cooperating therewith.

1,904,625. HAIR WAVER. TOMLINSON I. MOSELEY, San Francisco, Calif. Filed June 17, 1931. Serial No. 544,986. 4 Claims. (Cl. 132—38.)



1. In a hair waving device, a pair of spring-pressed pivotally connected hair-clamping members each having a bottom edge, teeth extending from said edge and having a portion substantially coplanar to the members and a portion substantially at right angles thereto spaced from said edge and extending in the general direction of the opposed member.

1,904,626. SETTING AND LOCKING MECHANISM FOR PRINTING DEVICES OF POSTAGE METERS. JACOB W. OGDEN, Springdale, and BERTHOLD KNAUER, East Norwalk, Conn., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn., a Corporation of Delaware. Filed Jan. 20, 1931. Serial No. 510,026. 28 Claims. (Cl. 101—91.)



1. In a machine of the character specified; a rotary drum containing value printing means, a rotatable member and connections in the drum for shifting the value printing means; a rotatable member exterior to the drum, key-controlled means for variably shifting the latter member; a raceway including both said rotary members; and means in the raceway whereby movement of one rotary member may be transmitted to the other when the drum is in normal rest position; the continuity of the raceway being broken when the drum moves out of normal position, thereby locking both the said members, and such continuity being automatically restored when the drum is returned to normal position thereby unlocking said members.

1,904,627. THREADLESS FITTING CONDUIT. ADOLPH OLSEVIN, Bronx, N. Y. Filed Nov. 24, 1931. Serial No. 577,051. 2 Claims. (Cl. 285—169.)

1. A threadless fitting for the conduit of cable connections, as described, comprising a threadless sleeve, a neck part formed with said sleeve having an opening allowing the introduction of a cable, and having a chamber formed therein wider at one end than at the other, a threadless pipe-stem adapted to be entered through the opening in said neck part into said chamber, means in said chamber to snugly engage the end of said pipe stem and when drawn into the narrower part of said chamber



to firmly hold the same in said chamber, a sleeve engaging said neck means for the engagement by tools to disengage said sleeve, means for said neck to disconnect stem and sleeve, and a fluid tight closure at the lower end of said chamber.

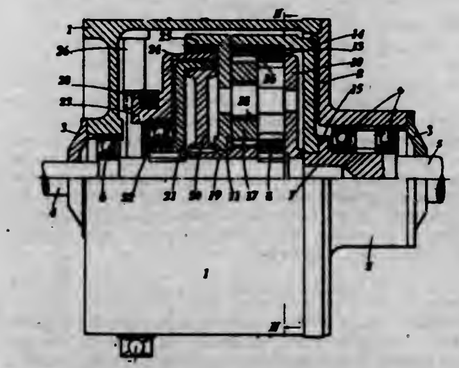
1,904,628. INK TRANSFER MEMBER AND METHOD OF MAKING THE SAME. GEORGE B. PELTON, Los Angeles, Calif., assignor to The George B. Pelton Company, a Corporation of Delaware. Filed May 5, 1927. Serial No. 189,180. 39 Claims. (Cl. 197—172.)



16. An inking ribbon comprising a strip of fabric having an absorbent body portion carrying ink, and a coating of a cellulose ester on one face, said coating being fastened to the uninked body portion without the use of any adhesive or liquid cement or other material between said coating and said body portion, said ribbon having the edges impregnated with a cellulose ester impervious to ink.

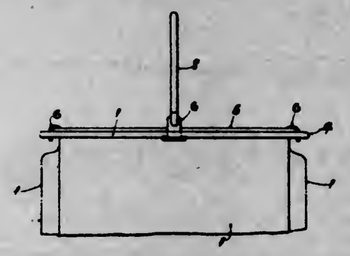
21. A typewriter ribbon comprising an absorbent combination of silk and cotton and having a face of the fabric coated with a wear resisting material pervious to ink without impairing the ink absorbing capacity of the remainder of the ribbon, and an ink supply absorbed by the fabric.

1,904,629. VARIABLE SPEED GEARING. CHARLES SCOTT PRENDERGAST and RICHARD SAMUEL PRENDERGAST, London, England. Filed Dec. 22, 1931, Serial No. 582,578, and in Great Britain Dec. 24, 1930. 20 Claims. (Cl. 74—34.)



1. A differential epicycle variable speed gear comprising, in combination, coaxial driving and driven members, two epicyclic gear trains of different ratios including two internally toothed rings fixed to one of the said members, two sun wheels mounted on the other of the said members, one at least of the sun wheels being fixed to its member, and planetary cage members supporting planet wheels engaging the said rings and sun wheels, and means for variably and directly interconnecting homologous parts of the said two gear trains to vary the speed of the said driven member relative to the speed of the said driving member.

1,904,630. TINS, IRON KEGS, AND LIKE METAL CONTAINERS. GILBERT ALAN ROBINSON, Hull, England, assignor to F. Robinson and Company, Limited, Hull, England. Filed Jan. 28, 1930, Serial No. 424,012, and in Great Britain Jan. 31, 1929. 2 Claims. (Cl. 220—55.)



1. In combination a container open at the top and having adjacent its upper edge a laterally projecting flange through which are formed a plurality of circumferentially spaced apertures, said flange being of concave shape in radial cross section, a lid the diameter of which is substantially the same as the diameter of the circle in which the circumferentially spaced apertures are located, and fastenings extending through the apertures in said flange and having their upper ends bent over the adjacent edge of the lid and their other ends directly engaging the flange to prevent bodily upward movement through said apertures.

1,904,631. STUFFING BOX. FORREST C. ROYS, Burkburnett, Tex. Filed Nov. 1, 1930. Serial No. 492,839. 1 Claim. (Cl. 286—27.)



A stuffing box for a polish rod comprising a casing, a cylinder connected to the lower end of the casing, a closure member passing through the top of the casing and having its lower face flat, a follower located in the casing with its lower end fitting in the top of the cylinder, said follower tapering upwardly and having a flange at its upper end the periphery of which contacts the inner wall of the casing with the top part of the follower of

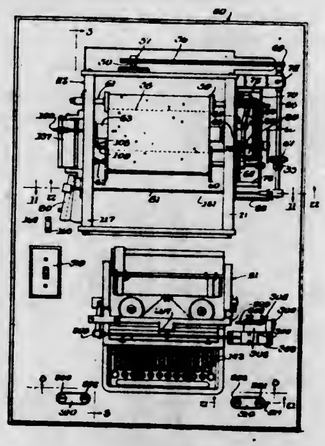
concaved shape, a packing located between the concave face of the follower and the flat lower face of the closure member, a polish rod passing thru the closure member, the follower and through the cylinder, packing means in the cylinder, a spring in the cylinder for pressing the packing means against the lower end of the follower and said follower having ports therein for leading lubricant in the casing to that part of the rod which passes through the follower.

1,904,632. ROTARY CUTTER. LEWIS SKEEL, Meadville, Pa. Filed Sept. 17, 1930. Serial No. 482,568. 14 Claims. (Cl. 29—105.)



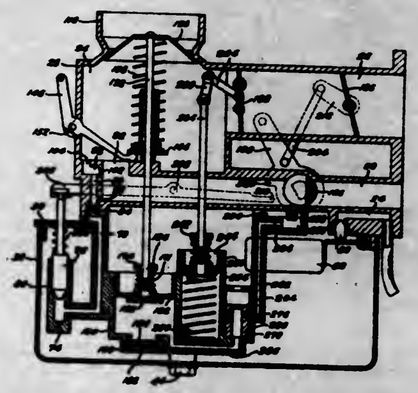
1. In a rotary cutter, a carrier having a slot formed in one side wall thereof with a recess, one side of the recess being formed with a cam surface, a blade in said slot, and a wedge of segmental formation adjustable arcuately in said recess between said cam surface and said blade and having the outer edge portion thereof constantly exposed for striking engagement by a tool.

1,904,633. REPRODUCING PNEUMATIC OPERATOR FOR TYPEWRITERS. SELVITOR A. SWANSON, Chicago, Ill. Filed Oct. 26, 1928. Serial No. 315,250. 13 Claims. (Cl. 197—20.)



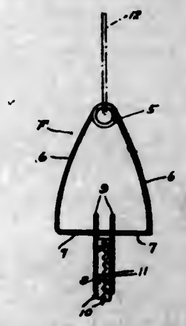
5. In a device of the class described, an automatic operator for typewriters comprising type key actuating means, a stencil sheet for controlling the operation of the key actuating means, a bellows pneumatic operable upon collapse to actuate the line shift and to return the typewriter carriage upon the completion of a line, a pair of vertical rods forming guides for the pneumatic, resilient means operable to gradually extend the pneumatic following its collapse, means operable to stop operation of the type key actuators while the carriage is being returned, and means operable by the carriage upon the completion of its return to again start the operation of the type key actuators.

1,904,634. CHARGE FORMING DEVICE. WILFORD H. TRIPPEL, Dayton, Ohio, assignor, by mesne assignments, to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed June 27, 1928. Serial No. 288,685. 16 Claims. (Cl. 261—41.)



1. A charge forming device for internal combustion engines comprising a mixing chamber, through which air is adapted to pass at high velocity, a fuel passage, fuel inlet means connecting said fuel passage and the mixing chamber, an air chamber for supplying air to said mixing chamber, and means for making the static suction of the air chamber the dominant factor controlling the flow of fuel into the mixing chamber, comprising a passage connecting the air chamber and fuel passage which is of greater size than said fuel inlet means.

1,904,635. COW TAIL HANGER. IRA A. TROWBRIDGE, Wallace, Idaho. Filed Sept. 22, 1932. Serial No. 634,394. 2 Claims. (Cl. 119—105.)



1. A device of the class described comprising a frame formed from a single strand of resilient material bent over upon itself intermediate its ends at its center to provide a coil from which merges arms, the arms being curved and diverging outwardly from each other and terminating in inwardly directed extensions which in turn merge into U-shaped extensions disposed in planes at right angles to the general plane of the frame.

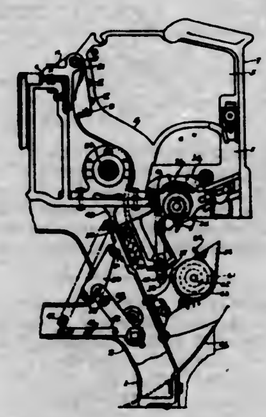
1,904,636. KEY OPERATED WARM AIR REGISTER. WILLIAM THOMAS TRUAX, Battle Creek, Mich., assignor to United States Register Co., Battle Creek, Mich., a Corporation of Michigan. Filed Dec. 31, 1930. Serial No. 505,896. 2 Claims. (Cl. 98—110.)

1. In a register, the combination with a frame having pivoted slats, of a slide, said slats and slide having mutually engaging devices whereby the movement of the slide opens and closes said slats, a movable crank member having a projecting pin, said slide having a projection engaging the pin of the crank, a shaft secured to the crank to operate the same, a ratchet wheel constructed to be



turned by the shaft, a member having teeth engaging the ratchet wheel, said wheel and member being relatively movable one towards the other, a spring arranged to hold said wheel and member yieldingly together, and a stationary support for the shaft.

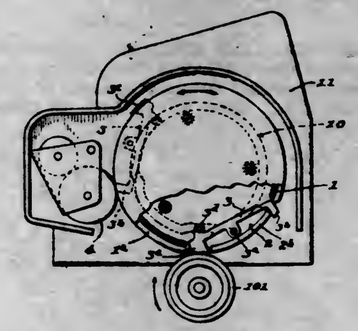
1,904,637. BREAST LIFT. JEFFREY JOHN WALLACE, Amite, La., assignor to Gullett Gin Company, Amite, La. Original application filed May 6, 1931, Serial No. 535,523. Divided and this application filed May 20, 1932. Serial No. 612,604. 2 Claims. (Cl. 19—55.)



1. In a cotton gin, a frame having a cotton box pivoted thereto and normally held by gravity in operative position, arms projecting downwardly from said box, a cross bar connecting said arms, a shaft rotatable on said frame, a bell crank fixed to said shaft, a link pivoted at one end to an arm of said bell crank and at its other end to said cross bar, said link and arm being provided with cooperating stop elements to limit the swing of said link in one direction around said arm, and a spring connecting the other end of said bell crank to said frame for substantially counterbalancing said box.

1,904,638. MEANS FOR PREVENTING TAKING OF FRAUDULENT IMPRESSIONS FROM POSTAGE METER MACHINES. WALTER H. WHEELER, Jr., and JACOB W. OSBORN, Stamford, Conn., assignors to Pitney-Bowes Postage Meter Co., Stamford, Conn., a Corporation of Delaware. Filed Nov. 6, 1930. Serial No. 493,896. 15 Claims. (Cl. 199—91.)

1. In combination with a rotatable printing die; spaced devices adapted to be alternately projected beyond the printing surface of the die to permit taking a progressive impression from the surface of the die, but preventing the taking of a simultaneous impression from all portions



of such surface; and means for retracting one device and simultaneously projecting the other while the die is exposed for printing.

1,904,639. MANUFACTURE OF CEMENT. ROBERT ERWIN WINDECKER, Painesville, Ohio. Filed Sept. 25, 1930. Serial No. 484,469. 3 Claims. (Cl. 106—25.)

1. In the manufacture of hydraulic cement, the improvement comprising clinkering a mixture containing calcium carbonate, alumina, silica, iron and a fluoride flux, and incorporating a chloride selected from the group consisting of calcium and magnesium chlorides in the cement produced by grinding the clinker.

1,904,640. MANUFACTURE OF CEMENT. ROBERT ERWIN WINDECKER, Painesville, Ohio. Filed June 10, 1931. Serial No. 543,883. 8 Claims. (Cl. 106—25.)

1. In the manufacture of high early strength hydraulic cement, the improvement comprising clinkering a cement mixture including a fluoride flux the lime modulus of which exceeds 2.20 and incorporating a water soluble salt selected from the group consisting of sodium sulphate, sodium carbonate and magnesium sulphate in the cement produced by grinding the clinker.

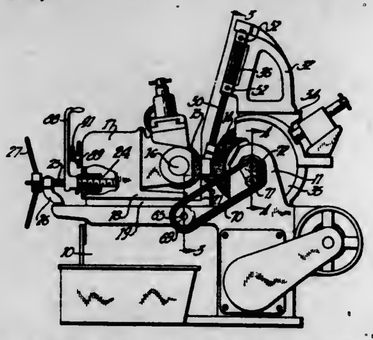
1,904,641. MILLING MACHINE COLLET. WALTER D. ARCHEA, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 26, 1931. Serial No. 539,671. 7 Claims. (Cl. 90—11.)



1. In a spindle structure for a milling machine comprising a rotatable spindle, an annular cutter and standard keys for coupling the cutter to the spindle for rotation thereby, the combination of means for quickly detachably connecting a second cutter to the spindle for rotation thereby comprising an adapter, means to secure the adapter to the end face of the spindle in driving engagement

with said keys and centrally of the annular cutter, and a locking member carried by the adapter having means thereon for inter-engaging similar means on a second cutter upon partial rotation of the member for securing the last named cutter to the spindle.

1,904,642. GRINDING MACHINE. CHARLES G. HUNT, Cincinnati, Ohio, assignor to Cincinnati, Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed May 25, 1931. Serial No. 539,667. 13 Claims. (Cl. 51—103.)



1. In a grinding machine the combination of a head, a spindle rotatably journaled and axially shiftable therein, a grinding wheel carried by the spindle, a screw on the end of the spindle adapted to axially shift and shift with the spindle but held against rotation, means operable on the screw for effecting the axial shifting thereof, said means comprising a rotatable nut fixed against axial movement, and means for rotating the nut including a sprocket having trained thereabout a sprocket chain, and means for actuating the sprocket chain.

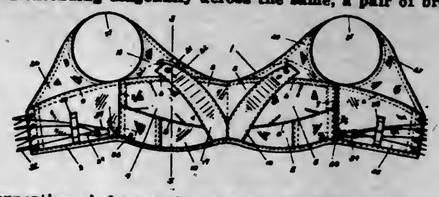
1,904,643. LIGHTING UNIT. RALPH L. HUSE, Boston, Mass., assignor to Albert & J. M. Anderson Manufacturing Company, South Boston, Mass., a Corporation of Massachusetts. Filed June 5, 1930. Serial No. 459,284. 3 Claims. (Cl. 240—73.)



1. A lighting unit comprising a casing having a rearwardly extended portion and a forwardly extended rim and provided with means for anchoring said casing in a recess in a wall, a lamp socket and lamp within said rearwardly extended portion, a face plate within said rim and secured to said casing, a cover member hinged to said face plate and provided with a removable glass member, and means within said rim for securing said cover member in its closed position.

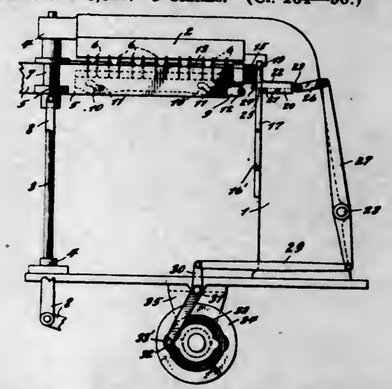
1,904,644. BUST UPLIFT. ARIEL M. LE MAY, Chicago, Ill., assignor, by mesne assignments, to S. H. Camp & Company, Jackson, Mich., a Corporation of Michigan. Filed Jan. 18, 1932. Serial No. 587,822. 5 Claims. (Cl. 2—42.)

1. A bust uplift garment comprising rear portions, shoulder straps, breast covering portions, supporting straps secured to the lower edge of said breast covering portions and extending diagonally across the same, a pair of breast



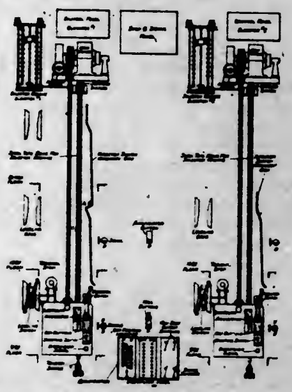
supporting shelves each suspended in said garment, said supporting straps cooperating with said supporting shelves to produce a sling-like breast supporting structure.

1,904,645. BOOKMAKING MACHINE ATTACHMENT. BERNHARD LEVINE, Bronx, N. Y. Filed June 6, 1932. Serial No. 615,521. 6 Claims. (Cl. 164—90.)



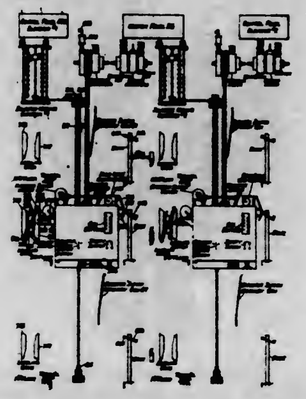
1. In a book making machine having a supporting frame and a laterally movable arm supported at one end for book signatures and carrying punches for making holes for needles through the signatures, a support on said frame for the free end of said arm, and means to move said support into position prior to the operation of said punches.

1,904,646. ELEVATOR SYSTEM. DAVID L. LINDQUIST, Hartsdale, N. Y., and EDWARD L. DUNN, East Orange, N. J., and DAVID C. LARSON, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 8, 1925. Serial No. 6,561. 323 Claims. (Cl. 187—29.)



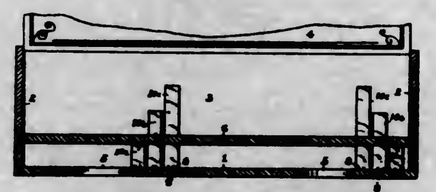
1. A control system for a plurality of elevator cars comprising means for stopping any car at a predetermined point, said means comprising controlling means common to all the cars.

1,904,647. ELEVATOR SYSTEM. DAVID L. LINDQUIST, Hartsdale, N. Y., and EDWARD L. DUNN, East Orange, N. J., and DAVID C. LARSON, Yonkers, N. Y., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 21, 1925. Serial No. 31,953. 85 Claims. (Cl. 187—29.)



1. A control system for an elevator car comprising, car actuating and stopping mechanism, control means for each of a plurality of floors, means responsive to the operation of any one of the control means for causing the operation of said mechanism to start the car, and means responsive to all the control means operated for causing the operation of said mechanism to stop the car only when it is traveling in a certain direction, at the floors corresponding to the control means operated, in the natural order of floors, regardless of the order in which the control means are operated.

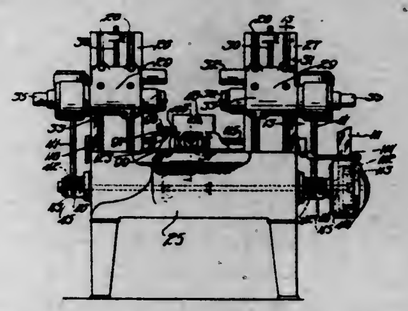
1,904,648. DISPLAY CONTAINER. HARRY MATTHEWS, Tarentum, Pa., distributed by Decree of Court to Alice C. Matthews, widow of said Harry Matthews, deceased. Filed May 12, 1931. Serial No. 536,703. 3 Claims. (Cl. 217—64.)



1. The combination with a cigar box or the like having side walls and a bottom provided with finger holes; of a false bottom in said box substantially filling the space between the side walls and accessible through the finger holes whereby the false bottom may be vertically adjusted by fingers inserted through said holes, and spring metal plates secured against certain of said side walls and each provided with spring fingers of graduated lengths adapted to spring inwardly from the respective wall, said fingers being normally held against the respective wall by an edge of said false bottom.

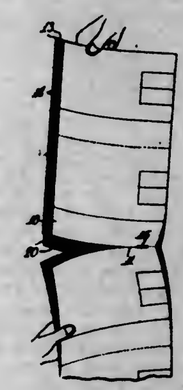
1,904,649. MILLING MACHINERY. LESTER F. NENNINGER, Cincinnati, Ohio, assignor to the Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 4, 1926. Serial No. 139,314. 25 Claims. (Cl. 90—21.)

1. In a machine tool, the combination with a support, of a table movable on the support, power means for imparting movement to the table, including a main drive shaft, a transmission extending from the drive shaft to the table, a supplemental branch transmission, a clutch for selectively coupling the said transmissions with the table



to actuate the latter, a common clutch mechanism for disconnecting all power actuation of the table, and additional gravity actuated mechanism for returning the table when said last mentioned clutch is in inoperative position.

1,904,650. MANIFOLDING MATERIAL. LOUIS M. SNYDER, Brooklyn, N. Y., assignor, by mesne assignments, to James W. Anderson, New York, N. Y. Filed July 16, 1930, Serial No. 468,261. Renewed Mar. 1, 1933. 15 Claims. (Cl. 282—12.)

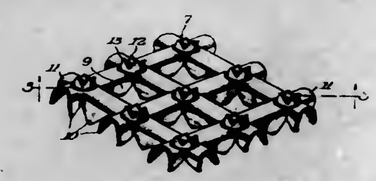


1. A manifolding packet of the class described, including a pair of runner recordstrips and transfer material interposed between them, the composite web defined by said record strips and said transfer material being zig-zag folded and securing devices passing through the web at the fold lines to secure all of the laminations of the web together, the runner record strips having transverse, weakened tearing lines coincident with the lines of fold, the transfer material being devoid of weakened portions at the fold lines.

1,904,651. GASKET. JOHN H. VICTOR, Evanston, Ill., assignor to Victor Manufacturing & Gasket Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1930, Serial No. 464,813. Renewed Feb. 27, 1933. 5 Claims. (Cl. 288—1.)

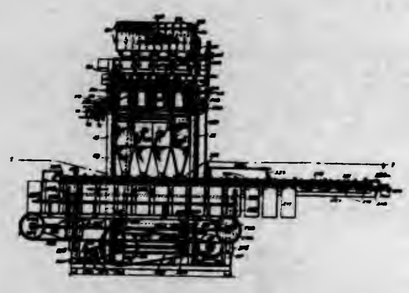
1. A gasket comprising a metal core having perforations punched therein and crossed channel bars smaller than the perforations and separating said perforations and other perforations punched in the intersections of said bars, the metal punched in forming the first-mentioned perfora-

tions forming prongs on one side of the core and extensions of the sides of said channel bars, and the metal punched in forming the perforations in the intersections



of the bars forming prongs on the other side of said core, and gasket material applied to the sides of the core and filling said perforations and embedding said prongs.

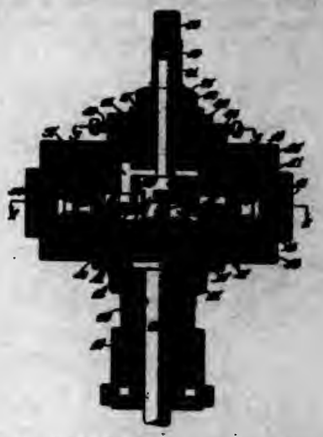
1,904,652. WEIGHING AND FILLING MACHINE. ROBERT N. CUNDALL, East Hamburg, N. Y., assignor to Consolidated Packaging Machinery Corp., Buffalo, N. Y., a Corporation of New York. Filed Aug. 7, 1930. Serial No. 473,535. 38 Claims. (Cl. 249—18.)



1. In an automatic weighing machine, a scale (124), a receptacle (120) on said scale, means (95) for discharging a stream of the material to be weighed into said receptacle, a cut off gate (155) pivotally mounted to cut off said stream of material, a catch pin (158) on said cut off gate, a counterweighted bar (160) pivotally mounted adjacent said cut off gate and having a notch adapted to catch said catch pin and hold said cut off gate in an inoperative position, an abutment (163) operatively connected with said scale and adapted to engage said counterweighted bar and effect a release of said catch pin when a definite weight of powder has flowed into said receptacle whereby said cut off gate is moved to cut off said stream, and means (54) for resetting said cut off gate in its latched inoperative position.

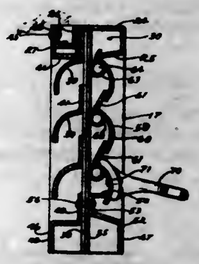
1,904,653. OIL PUMP. EUGENE H. DAVIS and WILLIAM F. JOHNSTON, Philadelphia, Pa., assignors of one-fourth to Noah Walker, Somerton, Pa., and one-fourth to James Harry Thompson, Trenton, N. J. Filed July 9, 1930. Serial No. 466,662. 2 Claims. (Cl. 103—161.)

1. In a device of the character indicated, a shaft axially hollowed at one end and radially bored at circumferentially spaced intervals into the hollow, a plunger in each bore, a pin having an axis parallel to and laterally offset from the shaft axis, transverse inwardly directed abutments on the plungers continuously engaging and rotating the pin, said abutments pressing the plungers outwardly during their discharge strokes, means for retracting the plungers inwardly during the suction strokes, and a stationary casing around the end of the shaft having relatively sealed inlet and outlet connections open into the bores during the inward and outward strokes of the plungers within the respective bores, said casing including a cover plate across the end of the shaft and having a perforation extending radial of the shaft axis, a support for the pin in the perforation and a screw adjustment between the plate and support adapted to adjust the posi-



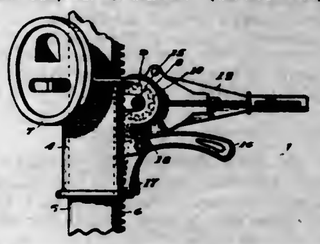
tion of the pin along the perforation in a direction radial of the said shaft axis and substantially along the line connecting the mid points of said sealing connections.

1,904,654. VENTILATOR. EDWARD H. ELLISON, Jamestown, N. Y., assignor to Ellison Bronze Company, Inc., Falconer, N. Y., a Corporation of New York. Filed Sept. 18, 1930. Serial No. 482,764. 5 Claims. (Cl. 98—121.)



1. A ventilator unit of the class described comprising stiles, oppositely disposed fixed and movable louvers mounted between said stiles, axial pins formed integral with the ends of said movable louvers and projecting through said stiles, links fixed to said pins, and a plate connecting said links whereby manipulation of one louver causes all of said movable louvers to be actuated.

1,904,655. MINING DRILL MOUNTING. LOUIS J. FELLAY, Peoria, Ill., assignor to Dooley Bros., Peoria, Ill., a Corporation of Illinois. Filed Sept. 14, 1931. Serial No. 562,631. 2 Claims. (Cl. 255—53.)



1. In a mining drill mounting the combination of a post, a rack carried thereby, a slide provided with means for mounting drilling mechanism thereon and arranged for adjustable movement lengthwise of the post, a pinion carried by the slide and movable into and out of engagement with the rack, means for rotating the pinion, and releasable holding means carried by the slide and co-operating with the rack whereby to secure the slide in its adjustable position on the post.

1,904,656. MINING DRILL POST. LOUIS J. FELLAY, Peoria, Ill., assignor to Dooley Bros., Peoria, Ill., a Corporation of Illinois. Filed Sept. 14, 1931. Serial No. 562,632. 5 Claims. (Cl. 255—53.)



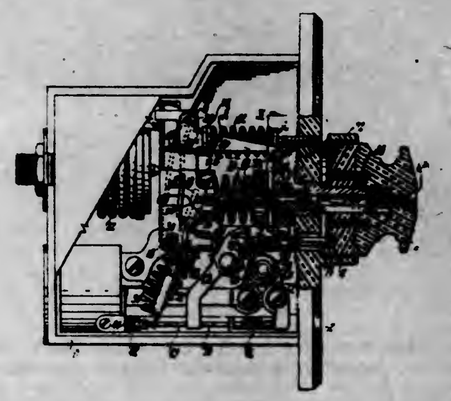
1. In a mining drill post the combination of a post section, an extensible member cooperating with the post section, a dog cooperating between the post section and the extensible member, a lever for moving the dog, a pawl co-operating between the post section and the extensible member for holding the latter in extended position, and a releasing member co-operating between the lever and the dog and pawl for releasing both of the latter to permit retraction of the extensible member.

1,904,657. MINING DRILL. LOUIS J. FELLAY, Peoria, Ill., assignor to Dooley Brothers, Peoria, Ill., a Corporation of Illinois. Filed Feb. 12, 1932. Serial No. 592,472. 1 Claim. (Cl. 255—46.)



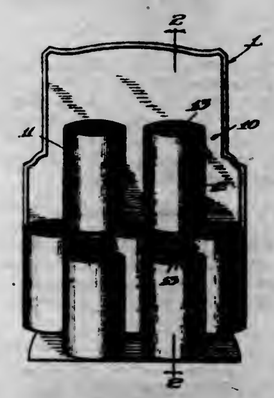
In a mining drill, the combination of a housing, a threaded tool operatively arranged in said housing for longitudinal movement in one direction through the housing and for retractible movement in the opposite direction through said housing, a driving means, a train of gearing including clutch means adapted to be actuated by said driving means for imparting rotative and reciprocal movement to said tool, a controllable means for such clutch means, said controllable means including a manually movable member, movable into selective positions whereby the clutch may be alternatively actuated to impart reciprocal movement to said tool when such member is in one position, in another position to retain the tool neutral and rotative and in another position to impart to the tool reciprocal movement in the opposite direction.

1,904,658. DEFROSTER. MALCOLM E. HENNING, Des Moines, Iowa, assignor to Penn Electric Switch Co., Des Moines, Iowa, a Corporation of Iowa. Filed Oct. 27, 1932. Serial No. 639,908. 15 Claims. (Cl. 62—4.)



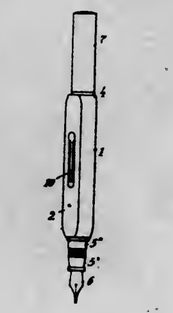
1. A control mechanism for refrigerators comprising means for starting and stopping operation of the refrigerator to obtain normal cycles of operation, means for securing temporary modification of the normal cycles of operation of the refrigerator with the temperature limits between starting and stopping remaining the same, means for obtaining non-normal cycles of operation of the refrigerator with the temperature limits between starting and stopping being changed and common means manually settable for securing either said temporary modification of the normal cycles of operation or said non-normal cycles of operation.

1,904,659. DISPLAY CARD. JULIUS HORWATH, Chicago, Ill., assignor to Arvey Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 12, 1930. Serial No. 460,588. 1 Claim. (Cl. 40—126.)



A display card comprising in combination, a flat sheet of relatively stiff fibrous material provided with a plurality of elliptical shaped apertures, a representation of a plurality of cylindrical, metallic cans piled in pyramidal form inscribed upon the front face of said card, the apertures registering with the tops of said inscribed cans, a strip of flat material having a metallic appearance mounted upon the rear face of said sheet immediately behind said apertures, said material being observed through said apertures and simulating the foreshortened tops of said inscribed pile of cans.

1,904,660. FOUNTAIN PEN. ALBERT JAHN, Berlin-Lichterfelde, Germany. Filed Sept. 22, 1928. Serial No. 307,627, and in Germany Apr. 28, 1928. 6 Claims. (Cl. 120—42.)



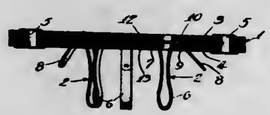
1. In a fountain pen with a body of non-circular cross section, formed by a longitudinal flat face serving as support for the index finger, and by a curved face symmetrically arranged with regard to the longitudinal bore and with extensions of circular cross section at the ends for the accommodation of the nib and cap respectively, the combination of said body with the feeder symmetrically arranged to the nib and positioned in the front tube in such a manner, that the symmetry plane of the feeder divides the handle into two unequal parts.

1,904,661. DEVICE FOR DRYING RAZOR BLADES. WALTER H. LÖWENSTEIN, Cologne-Kalk, Germany. Filed Feb. 12, 1930, Serial No. 427,821, and in Germany Feb. 14, 1929. 5 Claims. (Cl. 206—46.)



1. A device for drying and storing razor blades, comprising a back portion folded over at one end to form a pocket extending over a portion of the entire length of the device and a pack of sheets of absorbent material in said pocket adapted to receive razor blades and to be bent over the front edge of said pocket to always expose the uppermost blade inserted in said pack.

1,904,662. SOCKET FOR VACUUM TUBES. REUBEN B. BENJAMIN, Chicago, Ill., assignor, by mesne assignments, to Hugh H. Eby, Philadelphia, Pa. Filed Nov. 30, 1928. Serial No. 322,687. 4 Claims. (Cl. 173—328.)



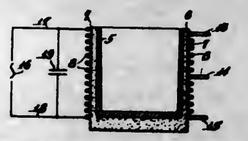
1. A tube socket construction comprising an insulating base plate having an aperture therethrough, a second apertured plate and a U-shaped spring contact between the arms of which the contact pin enters, and having its connecting portion at the inner end, said U-shaped spring contact being insertable through the aperture in the base plate from the front side thereof and each arm of said U-shaped spring contact having a securing tip overlying the base plate adjacent said aperture, and clamped between the plates, said base plate having a second aperture adjacent said first aperture and one of the overlying portions of the contact having a wiring terminal extension extending through said second opening to the rear of the base plate, the arms of said U-shaped spring contact being bowed toward each other whereby the intermediate portions of the opposed arms are closer together than the inner and outer portions and thus exert a spring pressure on the inserted contact pin.

4. In a socket receptacle, two plates of insulation, one having a plurality of apertures for plug passage and for the insertion of contact clips, a plurality of contact clips, one in each aperture, having anchoring parts turned in opposite directions on diametrally opposite sides of the apertures to lie between the plates and be clamped between them, one of them having a projection directed laterally from the plane between the plates to enter one plate and to lock against withdrawal parallel to the plates and the other having a terminal soldering connection extending beyond the clamped portion and through one plate.

1,904,663. IMPROVED ABRASIVE COATED MATERIAL. HERBERT NEWALL MORRIS, Broxbourne, England, assignor to Rucel Limited, London, England, a British Company. Filed July 27, 1929, Serial No. 381,669, and in Great Britain May 30, 1928. 2 Claims. (Cl. 51—280.)

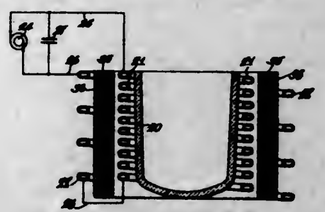
1. An abrasive coated material comprising a backing sheet and a powdered abrasive material secured thereto by a homogeneous film containing rubber and cellulose in intimate association, at the same time attaching the abrasive, and filling and waterproofing the backing sheet.

1,904,664. LINING A FURNACE BY FREEZING. HEINRICH NEUHAUSS, Dusseldorf, Germany. Filed Sept. 14, 1929. Serial No. 392,669. 12 Claims. (Cl. 13—26.)



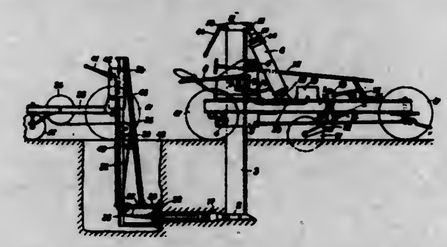
1. The method of forming and maintaining a lining in a pool surrounding induction furnace having a container and a surrounding refractory, while operating the furnace which consists in chilling a molten content against the wall of the furnace and in maintaining it in solid form by continuously artificially cooling the content from the exterior of the furnace through the container while inducing current in a charge within the lining.

1,904,665. MAGNETIC RETURN CIRCUIT. EDWIN FITCH NORTHRUP, Princeton, N. J., assignor to Ajax Electrothermic Corporation, Ajax Park, N. J., a Corporation of New Jersey. Filed Oct. 22, 1930. Serial No. 490,514. 30 Claims. (Cl. 13—26.)



1. In a stray field eliminator for inductor coils, a compensator coil surrounding the inductor coil and instantaneously carrying current in the opposite direction from that of the current in the inductor coil and finely divided magnetic particles forming a mass between the compensator and inductor coils occupying continuously a considerable circumferential extent about the inductor.

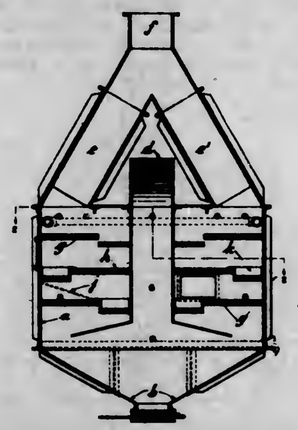
1,904,666. APPARATUS FOR LAYING DRAIN PIPES OR CABLES. HANS SACK, Leipzig, Germany. Filed Nov. 17, 1930, Serial No. 496,223, and in Germany Apr. 9, 1930. 12 Claims. (Cl. 111—5.)



5. A machine for laying pipes comprising a mole plow for cutting a mole passage, means operatively connected to said plow for drawing into said passage a flat strip of flexible material, a chuck adapted to receive the end of said strip, a clutch for connecting said chuck to said plow, and means for throwing out said clutch.

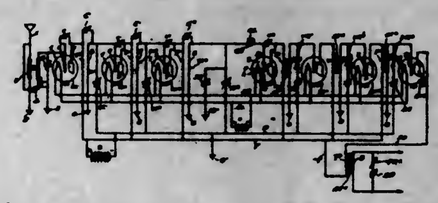
12. A machine for laying pipes comprising a mole plow for cutting a mole passage, means operatively connected to said plow for drawing into said passage a flat strip of flexible material, means arranged at the level of said passage for molding said strip into a pipe, and means for drawing a cable through said pipe.

1,904,667. AIR WASHING AND THE LIKE. WILLIAM ALLEN SMITH, London, England. Filed Nov. 30, 1929, Serial No. 410,852, and in Great Britain Dec. 3, 1928. 3 Claims. (Cl. 261—123.)



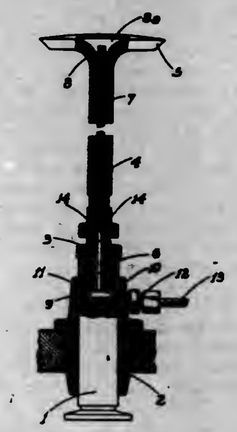
1. An improved air washer comprising a closed rectangular tank, a depending inlet, for admitting the air, extending the full width of the tank and to the bottom thereof, a series of overlapping longitudinal baffles on each side of and above the inlet, louvered baffles providing relatively close parallel submerged upwardly directed surfaces, each larger in area than the space between them in a transverse plane at the overlapping edges of the longitudinal baffles, an outlet for the air at the top of the tank and a collecting place and sludge outlet at the bottom of the tank, as set forth.

1,904,668. RADIO APPARATUS. HOMER A. ANDERSON, Brooklyn, N. Y. Filed Mar. 10, 1930. Serial No. 434,649. 10 Claims. (Cl. 250—20.)



1. A tuned antenna circuit comprising an aerial, an inductive coupling having its primary winding interposed between the input end of the aerial and the ground, a fixed capacitance interposed between the input end of the aerial and the lower side of the secondary winding of the inductive coupling whereby to function in shunted relation with respect to the said primary winding and a ground connection leading from the connected adjacent sides of said condenser and the said secondary winding.

1,904,669. VALVE COOLING DEVICE. WILLIAM BADEN, Stockton, Calif. Filed Sept. 29, 1931. Serial No. 565,721. 5 Claims. (Cl. 123—177.)



1. In combination, a valve having a stem, a valve actuating member engaging the outer end of the stem, said stem being bored from its outer end to adjacent the valve head, a spray nozzle tube secured in said member and projecting into the stem bore in clearance relation thereto, and means to supply a liquid to the member to communicate with the adjacent end of the tube.

1,904,670. SOCKET FOR TUBES. WILFORD C. MACFADDEN, Fox Chase, Pa., assignor to Hugh H. Eby, Philadelphia, Pa. Original application filed Feb. 21, 1929, Serial No. 341,695. Divided and this application filed Nov. 1, 1930. Serial No. 492,817. 8 Claims. (Cl. 173—328.)

1. In a socket receptacle, a plate of insulation material having a group of passages to receive the prongs of a plug-in device, contact structure for said prongs depending from said plate adjacent said passages extending thru said plate and having fastenings, a second plate of insulation material perforated to correspond with the passages of the first, superimposed, on the first plate on the side opposite the contact terminals and engaging the plurality of said fastenings, a disc of insulation material

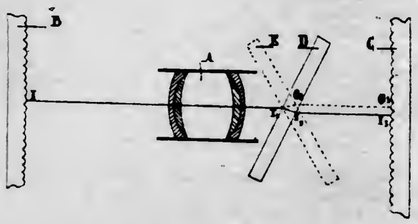
overlying said second plate and a plurality of the fastenings, said disc being centrally disposed with respect to said passages, and means for securing said plates and said disc together in assembled relation.



4. In a socket receptacle, a plurality of clips, a pair of plates of insulation material, one plate having spaced openings for contact devices and the other perforated in line with the openings, contact structure connected with said clips, each comprising a U-shaped contact carrying member extending through one of the openings and having the ends of the U spread away from each other, one inwardly and the other outwardly, one end comprising an intermediate portion of that clip and both ends clamped between the two plates, and a central fastening for the plates bringing substantially equal pressure upon the inwardly directed U-ends about the fastening.

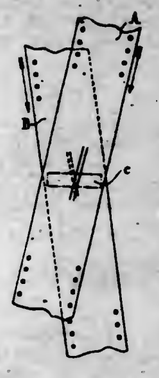
8. In a socket receptacle, a plate of insulation material having a group of passages to receive the prongs of a vacuum tube, contact structure for said prongs depending from said plate, extending through said plate and having metallic fastenings, one set of fastenings having portions extending outwardly outside said group of passages and including intermediate portions and terminal soldering portions, and another set having portions extending inwardly inside said group, a second plate of insulation material superimposed on and secured to said first plate, covering and clamping said outside and inside fastening portions and apertured in line with the passages of the first plate, projections upon the inwardly extending portions each fitting into a space in one of said plates to lock these portions against withdrawal parallel to the planes of the plates, a disc adjoining and supporting the second plate to additionally clamp the inwardly extending fastening portions and means for holding the disc and plates together.

1,904,671. COPYING GOFFERED FILMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Mar. 29, 1928, Serial No. 265,667, and in France Apr. 4, 1927. 2 Claims. (Cl. 88—24.)



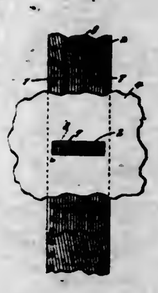
1. The method of eliminating moire in photographic reproduction from an original film on to a copy film, each of which has thereon a multiplicity of parallel minute lenticular elements, which comprises arranging the films with the elements on one parallel to those on the other, and projecting images from the original film on to the copy film while causing a continuous movement of the projected image transversely of said elements during substantially the entire time of exposure, said movement having an extent of the order of the width of one of said elements.

1,904,672. PROCESS AND DEVICE FOR REPRODUCING GOFFERED FILMS. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed June 21, 1929, Serial No. 372,715, and in France Apr. 17, 1929. 9 Claims. (Cl. 95—75.)



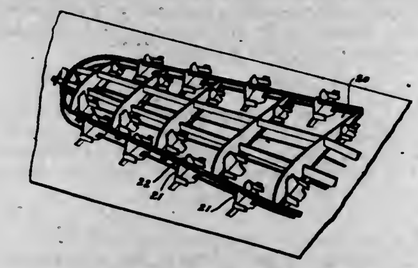
1. The method of photographic reproduction which consists in continuously moving an original film having longitudinally arranged lenticular elements thereon past an exposure aperture and transferring the images on said film to a copy film having similarly arranged elements, by passing said copy film continuously past the same aperture at the same speed as the original, while continuously displacing the elements on the copy film with respect to those on the first film to an extent of the order of the width of one of said elements.

1,904,673. PRINTING OF FILMS FOR COLOR CINEMATOGRAPHY. RODOLPHE BERTHON, Neuilly, France, assignor, by mesne assignments, to Kislyn Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1929, Serial No. 383,160, and in France Aug. 9, 1928. 8 Claims. (Cl. 95—75.)



1. The method of transferring an image from one film to the other, which comprises moving past an exposure aperture an original film having longitudinally arranged cylindrical lenticular elements thereon and at the same time moving past said aperture a copy film having longitudinally arranged cylindrical lenticular elements thereon, the elements on the copy film making an angle with respect to those on the original film of the order of 1° or 2°, but the longitudinal axes of the films being parallel.

1,904,674. COMBINED GRAPHIC OUTLINE AND WORK LOCATING TEMPLATE FOR BUILDING MODELS. ABRAHAM S. BLUMENTHAL, Amityville, N. Y. Filed Feb. 29, 1932. Serial No. 595,840. 11 Claims. (Cl. 29—89.)



1. A device of the class described, comprising a combination of a graphic outline and a work locating template made of a material suitable for permitting work locating and holding tabs completing the template to be cut out of the graphic outline while still forming an integral part of the latter and comprising outlines defining said tabs.

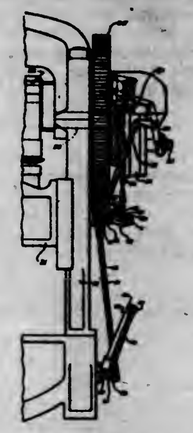
1,904,675. PIPE. EDWIN S. BOYER, Plainfield, N. J., assignor to American Hard Rubber Company, New York, N. Y., a Corporation of New York. Filed Apr. 13, 1931. Serial No. 529,706. 1 Claim. (Cl. 285—75.)



In the art of pipes for use in mining and the like formed of plastic compound and of cylindrical form, each pipe having smooth interior and exterior surfaces, means for repairing a broken pipe comprising a coupling internally spirally grooved for the reception of the pipe ends and a spiral ridge on the outer smooth surface of each pipe extending the full length thereof whereby a coupling may be applied to a pipe at any point over the length thereof.

1,904,676. POWER PRESS CONTROL. ARTHUR A. BERLEIN, Detroit, Mich., assignor to General Machinery Corporation, Hamilton, Ohio, a Corporation of Delaware. Filed Aug. 20, 1930. Serial No. 476,623. 8 Claims. (Cl. 192—139.)

1. In a power press, a slide member mounted for reciprocatory movement therein, a driving member, a driving connection including a clutch means operable when engaged to operatively connect said members and releasable to disengage said members, control means including a control hand lever manually movable to a starting position to cause engagement of said clutch means and consequent operation of the press, means responsive to the operation of the slide member for automatically disengaging said clutch means and returning said hand lever to its initial position, an unlatching lever on said hand lever operable to temporarily disconnect said automatic disengaging means

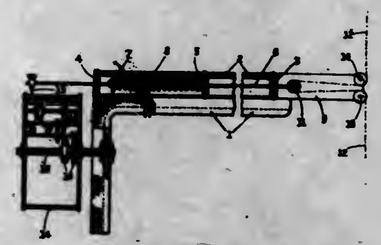


to render it ineffective, the said means which is responsive to the operation of the slide member having provision for disengaging the clutch means at the completion of a cycle of operations of the slide member regardless of the position of the unlatching lever.

1,904,677. PREPARATION OF CHLORHYDRINS. LEON W. COOK, Roselle, N. J., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 25, 1928. Serial No. 308,332. 4 Claims. (Cl. 260—157.)

1. The process of preparing substantially water insoluble chlorhydrins of liquid olefines which comprises alternately contacting the olefines with a weak hypochlorous acid solution of not more than 0.75% strength and regenerating it to about that strength while out of contact with the liquid olefines and the chlorhydrins so produced, whereby substantially complete conversion into chlorhydrins is obtained without the formation of substantial amounts of dichlor hydrocarbons.

1,904,678. DYNAMOMETER. HENRY EWING and ROBERT PIERCE ROBERTS, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 30, 1929, Serial No. 382,115, and in Great Britain Aug. 11, 1928. 1 Claim. (Cl. 265—2.)



A dynamometer for determining the tension at a given time in yarns, threads, fildments and the like running under rapidly fluctuating tension, comprising a portable frame, a spring loaded stylus bar movably mounted on said frame, a pair of fixed pulleys mounted on said frame, a third pulley mounted on said stylus bar, the three pulleys

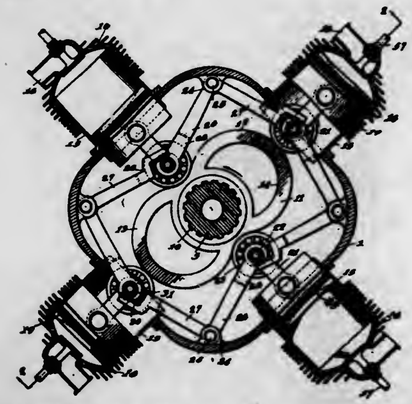
being adapted to engage running yarns, threads, filaments and the like, a clockwork driven drum mounted on said frame, a record sheet mounted on said drum and cooperating with the stylus on said stylus bar to make records of the tension of yarns, threads, filaments and the like engaged by the said pulleys, and an eccentrically loaded governing device associated with said drum and adapted to set up vibrations in the dynamometer so as to decrease the friction between the record sheet and the stylus to ensure that the rapid fluctuations in tension are accurately recorded on the record sheet.

1,904,679. PUSH DRILL. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's M'f'g Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 14, 1932. Serial No. 586,654. 2 Claims. (Cl. 145—53.)



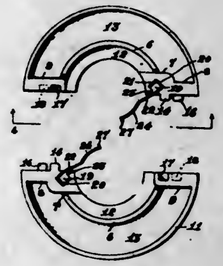
2. The combination in a push drill, of a handle made of heat hardened synthetic resin and having longitudinal pockets therein for drill bits; and a barrel having internal screw threads and having ribs on its outer face and having a cap closing its inner end, the said handle being cast around the barrel.

1,904,680. RADIAL CAM TYPE INTERNAL COMBUSTION ENGINE. WILLIAM JEWELL FERRY, Oakland, Calif., assignor, by direct and mesne assignments, to Ferry's Incorporated, Oakland, Calif., a Corporation of Nevada. Filed Apr. 18, 1930. Serial No. 445,440. 8 Claims. (Cl. 74—14.)



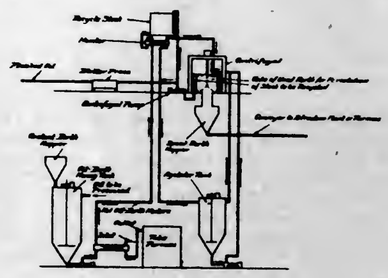
1. An engine comprising a shaft, a cam mounted thereon, a plurality of cylinders, a piston mounted in each, a connecting rod for each piston, a connecting rod pin for each rod, a roller mounted on each pin and contacting with the cam, rigid arms pivotally mounted, each arm having one end connected to a connecting rod pin so as to be moved during both reciprocative movements of the piston, and having its other end bearing against one side of the adjacent pin for holding its associate roller in contact with said cam whereby there will be a continuous linkage of arms entirely surrounding the cam.

1,904,681. SPRING CONNECTION. GROVER C. FRANTZ, Harrisburg, Pa., assignor, by mesne assignments, to J. A. Sexauer Mfg. Co., Inc., New York, N. Y., a Corporation of New York. Filed Oct. 6, 1930. Serial No. 486,691. 5 Claims. (Cl. 267—1.)



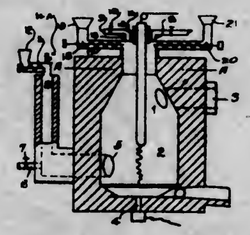
1. The combination of a spring having one end bent to produce an open resilient multi-angular part and a member having a portion with a multi-angular recess therein continued by a relatively narrow slot substantially at one corner thereof, said resilient multi-angular part being adapted to slidably and separably fit into said recess with a portion of said spring extending through said slot.

1,904,682. PROCESS FOR DECOLORIZING OILS. IRA K. FULLER, Olean, N. Y., assignor, by mesne assignments, to Contact Filtration Company, a Corporation of California. Filed Sept. 28, 1929. Serial No. 395,788. 1 Claim. (Cl. 196—147.)



A process for decolorizing oil, which comprises contacting the oil with adsorbent clay, separating the clay from the oil in a bed, while passing the oil through the bed of clay as the said bed forms, thereby progressively decolorizing the oil from dark to substantially lighter color, collecting the said oil in a plurality of superposed layers, progressively darkening in color from the lightest color on the bottom to the darkest on top, and recirculating the said oil through the bed of clay, progressively from the lightest colored oil to the darkest, thereby further decolorizing the oil and producing a uniform product of desired color.

1,904,683. COMBUSTION-ARC PROCESS AND APPARATUS. ALBERT E. GREENE, Medina, Wash. Filed Jan. 7, 1927, Serial No. 159,728, and in Canada. 11 Claims. (Cl. 13—2.)



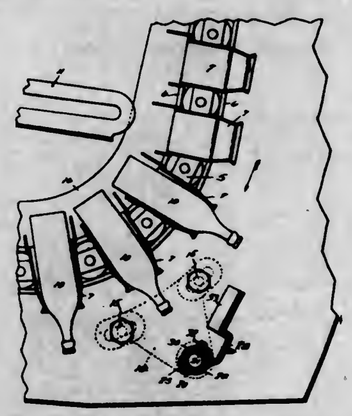
1. In heating by a combustion flame and an electric arc superposed on and extending longitudinally of the flame, the process which consists in establishing the stream of the flame and the arc from independent sources, and in directing the arc to and along the flame stream by a gaseous blast which is passed over the arcing portion of the electrode.

1,904,684. METHOD OF MELTING. ALBERT E. GREENE, Medina, Wash. Filed July 16, 1931. Serial No. 551,179. 7 Claims. (Cl. 13—34.)



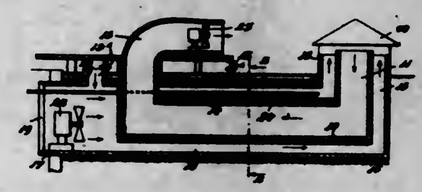
1. The method of continuously melting cold metal which consists in providing a relatively large bath of molten metal in a melting chamber heated electrically near its tapping end, charging cold metal at the other end, heating the cold metal on the molten bath by combustion heat and subsequently by electric heat, and, while maintaining a supply of molten metal, tapping metal at a regular rate at the tapping end.

1,904,685. BOTTLE RINSING MECHANISM. JOHN R. GRUETTER, Cleveland, Ohio, assignor to The Liquid Carbonic Corporation, Chicago, Ill., a Corporation of Delaware. Filed Jan. 6, 1932. Serial No. 585,082. 22 Claims. (Cl. 141—7.)



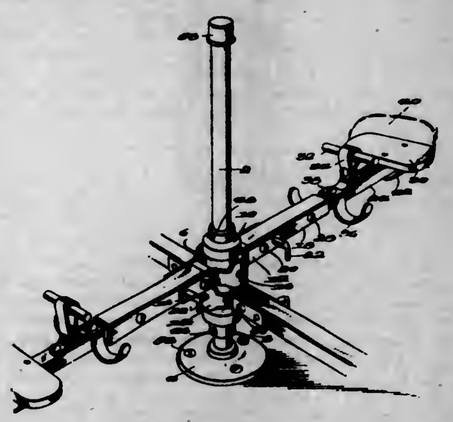
1. In bottle rinsing mechanism, the combination of a holder by which a bottle is adapted to be loosely supported, a supply conduit for rinsing liquid disposed in operative relation thereto and extending substantially at right angles to the axis of the holder, the conduit having a liquid emitting opening in its side in alignment with which the bottle is adapted to be disposed, a device pivotally supported on substantially the axis of the conduit and swingable into engagement with a bottle in the holder for aligning the bottle with said opening, and means for actuating said device.

1,904,686. COOLING SYSTEM. HOXIE H. HUMPHREYS, Phoenix, Ariz. Filed Mar. 19, 1928. Serial No. 262,808. 10 Claims. (Cl. 62—89.)



1. A multi-stage refrigerating system comprising the combination with an intake conduit, of a cooling conduit substantially surrounding the intake conduit, and spaced therefrom, a porous absorbent wrapping for the intake conduit, liquid spraying means between the conduits, means in each conduit for circulating air therethrough in counter-currents, means for continuing the intake conduit unbrokenly into each succeeding unit of the system, and means for circulating the refrigerating fluid in a continuous closed cycle through each unit.

1,904,687. COMBINED SEESAW AND MERRY-GO-ROUND. FRANCIS M. JACOB, Columbus, Miss. Filed June 12, 1930. Serial No. 460,709. 9 Claims. (Cl. 272—30.)



1. A device of the character described including an upright column, a revolvable sleeve mounted thereon, laterally extended arms pivotally supported by said sleeve, extensions hingedly supported by said arms, and adjustable arms supported by said extensions.

1,904,688. TESTING DEVICE FOR WATER SYSTEMS. EDWARD KENNEDY, New York, N. Y. Filed Sept. 20, 1930. Serial No. 488,362. 1 Claim. (Cl. 137—77.)

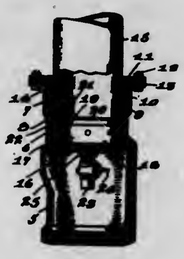
In a testing device for water systems, a joint member having an intermediate section of diametrically reduced

diameter internally threaded at one end, the other end of said joint member being adapted to receive the end of a pipe projecting into the joint member beyond a packing gland between said pipe section and the wall of the joint member, said projecting end of the pipe section being spaced from the wall of said reduced section of the joint member, and a testing device of cup shaped form having



external threads at one of its ends removably engaged with the threads of said reduced section of the joint member, and the unthreaded annular wall of said testing device being spaced from the wall of said reduced section of the joint member and adapted to abut against the end of said pipe section to support the latter during packing of the joint.

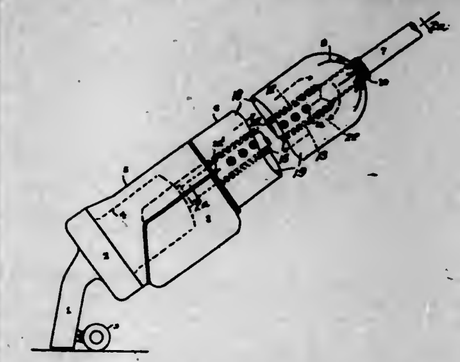
1,904,689. TESTING DEVICE FOR WATER SYSTEMS. EDWARD KENNEDY, New York, N. Y. Filed Sept. 20, 1930. Serial No. 483,363. 2 Claims. (Cl. 137—77.)



1. In combination with a pipe joint member within one end of which a pipe is adapted to be fitted and secured by suitable packing, a hollow testing plug and means for adjustably and removably mounting the same within the joint member, a drain pipe connection to said plug, and said plug adapted to be adjustably positioned within the joint member to support the pipe end therein while the joint is being packed, and a wall of said hollow plug being provided with an opening affording communication in one position of the plug between the interior of the pipe and said drain connection.

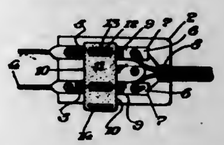
1,904,690. DOUBLE FILTER FOR VACUUM CLEANERS. WARD LEATHERS, Haworth, N. J., assignor to The Quadrex Corporation, a Corporation of Connecticut. Filed Dec. 12, 1930. Serial No. 501,877. 2 Claims. (Cl. 183—51.)

1. In a vacuum-cleaner, in combination, a motor-blower, a handle with no functional air passage therein, said handle surrounded by a filter sleeve, with two porous partitions in said filter sleeve joined to the sides thereof, dividing it into three chambers with the handle passing through the middle chamber, the outer chambers communicating at the top of said filter, air-discharge openings



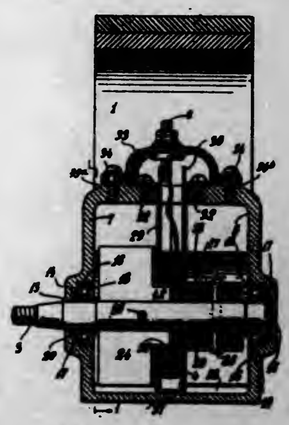
along the side of the middle chamber, and a dirt receptacle in communication with one of the outer chambers at the lower end thereof.

1,904,691. ATTACHMENT PLUG. JAMES B. MAGEE, Nyack, N. Y. Filed Mar. 13, 1930. Serial No. 435,415. 16 Claims. (Cl. 200—115.5.)



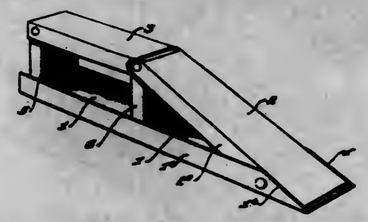
1. An attachment plug having two pairs of spaced terminals and a flat detachable member carrying a pair of fuses for maintaining electric connection between said pairs of terminals.

1,904,692. LIGHTING GENERATOR. JOHN F. MARTIN, Springfield, Mass., assignor to United American Bosch Corporation, Springfield, Mass., a Corporation of New York. Filed Apr. 6, 1932. Serial No. 603,483. 8 Claims. (Cl. 171—209.)



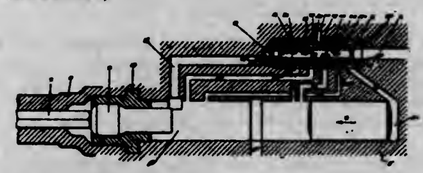
8. A generator comprising a housing, magnets and polepieces supported by the upper portion of the housing, a shaft mounted in the housing, a rotor on the shaft, a coil in the housing surrounding the shaft and a portion of the rotor, the top of said housing having an opening for the leads to the coil, a hollow insulator hood secured to the top of the generator over said opening, and terminals forming binding posts carried by said insulator hood.

1,904,693. VEHICLE LIFTING DEVICE. LA FAYETTE MYERS and CLARENCE S. PRESTON, San Diego, Calif. Filed Aug. 10, 1928. Serial No. 298,676. 2 Claims. (Cl. 254—88.)



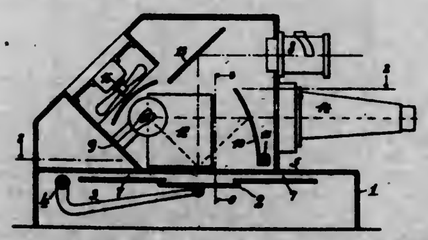
1. In a vehicle lifting device, a base member, an incline member pivotally secured near one of its ends to said base member, a vehicle support member hinged to the other end of said incline member and collapsible props for supporting the ends of said vehicle support member without subjecting said inclined member to strain, said incline member and vehicle support member adapted to telescope within said base member.

1,904,694. FLUID PRESSURE TOOL. GUSTAVE M. NELL, Detroit, Mich., assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed July 10, 1930. Serial No. 466,929. 24 Claims. (Cl. 121—19.)



1. A motive fluid operated motor having a cylinder, a piston reciprocable therein and forming two cylinder chambers, and two pressure thrown valves each controlling admission of motive fluid to both of said chambers, one of said valves being tubular to provide a motive fluid passage axially therethrough for conducting the main motive fluid supply to one of said chambers.

1,904,695. EPIDIASCOPE. HEINRICH PLIMS, Wetzlar, Germany, assignor to Ernst Leitz Optische Werke, Wetzlar, Thuringia, Germany, a Corporation of Germany. Filed Jan. 18, 1930, Serial No. 421,785, and in Germany Jan. 31, 1929. 1 Claim. (Cl. 88—24.)



In an epidiascope a housing having an exposure opening in the bottom thereof, means for supporting an object to be exposed through said opening from below the same, a lamp mounted above said opening to one side thereof, a plurality of projection devices mounted in said housing opposite said lamp, means for reflecting the light from the lamp to one of said projection devices comprising a concave light reflector mounted on each side of said exposure opening and facing the same, a third pivotally mounted concave light reflector facing said lamp and exposure opening, and a fourth angularly disposed reflector mounted above the said exposure opening for the purposes set forth.

1,904,696. PREPARATION OF STABLE SOLUTIONS OF HALOGENATED ACETYLCHOLIN SALTS. GUSTAVE ROY, Bellevue (Seine et Oise), France. Filed Dec. 2, 1930, Serial No. 499,589, and in Great Britain Jan. 18, 1930. 8 Claims. (Cl. 167—65.)

1. A process for stabilising and preserving halogenated acetylcholin salts without any alteration of their physiological properties, consisting in dissolving the halogenated acetylcholin salts in a polyalcohol incompletely esterified with acetic acid.

1,904,697. SAFETY DRAW-OFF APPARATUS FOR HOT WATER SYSTEMS. EDWARD H. RUPPERT, Brooklyn, N. Y. Filed May 21, 1929. Serial No. 364,716. 1 Claim. (Cl. 137—79.)



Safety draw-off apparatus for hot water systems comprising in combination with a heater having a water chamber, a storage pressure tank with a cold water inlet and a conduit connecting the heater and tank, of a draw-off valve in the conduit having three passages, two conduit passages and one discharge passage independent of the conduit passages and adapted to discharge water from either the heater or the tank, and means whereby either conduit passage may be closed and closing said conduit passage is dependent upon opening the discharge passage.

1,904,698. METHOD OF MAKING DRAWING DIES. AARON SIMONS, Bronx, N. Y., assignor to Morris Simons, New York, N. Y. Filed Feb. 26, 1931. Serial No. 518,310. 7 Claims. (Cl. 76—107.)



1. The method of forming a drawing die, including the steps of positioning a nib in a hollow plug, disposing said plug in a die holder, and applying compression force to said plug in wire drawing direction to thereby increase the thickness of the wall of the plug and firmly secure the parts together.

1,904,699. PRODUCTION OF CEMENT. JAMES A. SINGMASTER, Bronxville, N. Y. Filed May 24, 1929. Serial No. 365,787. 11 Claims. (Cl. 106—35.)

1. A process for manufacturing cement comprising, mixing a slurry of pulverised raw cement-materials with sufficient finely divided solid fuel to produce, upon combustion, sintering of the cement mixture, filtering said mixture,

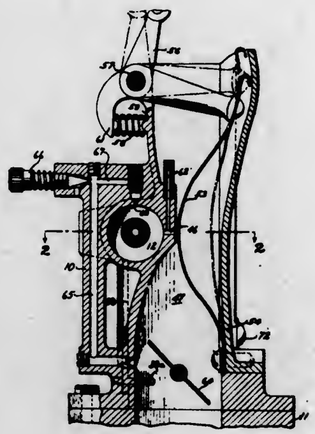
igniting the fuel in the filter-cake, drawing air through the mixture to support and promote the combustion of the fuel, and subjecting the sintered mass to further heat to complete the burning of the cement.

1,904,700. PROTECTOR FOR PLANTS. ZESTON STARKS, Malvern, Ohio. Filed July 20, 1931. Serial No. 552,084. 18 Claims. (Cl. 47—28.)



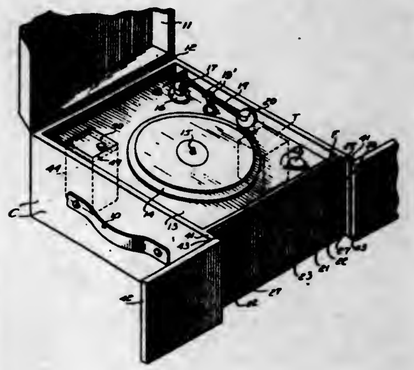
1. In a plant protector the combination of a support, a spring clip carried by said support, a ridge pole removably carried by said clip, and a plant protector covering supported by said support and ridge pole.

1,904,701. CHARGE FORMING DEVICE. NICHOLAS STRAUSSLER, London, England, assignor to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed July 24, 1930. Serial No. 470,452. 23 Claims. (Cl. 261—69.)



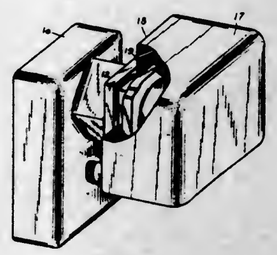
1. In a carburetor, a carburising chamber, a fuel orifice entering said chamber, a flexible member for varying the cross-sectional area of said chamber and having one end thereof secured to the wall of said chamber, and manually operable means secured to the other end of the member for adjusting the position of said member.

1,904,702. SOUND REPRODUCING APPARATUS. ADOLPH A. THOMAS, New York, N. Y. Filed Dec. 16, 1926. Serial No. 155,116. 18 Claims. (Cl. 181—31.)



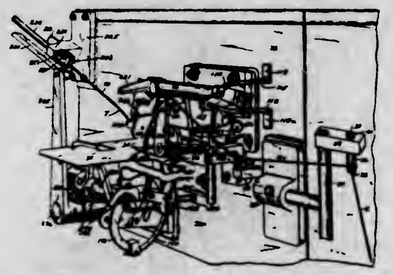
1. In sound-reproducing apparatus, a cabinet having an opening in an outer wall, a loudspeaking diaphragm consisting of a one-piece tensioned elastic sheet of metal stretched across said opening and forming in effect a continuation of said wall and a cover for said opening, said tensioned sheet being substantially flat at the center, and a driving unit in said cabinet for operating said diaphragm.

1,904,703. ELECTRIC LIGHTING FIXTURE. WALTER VON NESSEN, New York, N. Y., assignor to Efcolite Corporation, Trenton, N. J. Filed Nov. 7, 1930. Serial No. 493,987. 2 Claims. (Cl. 240—73.)



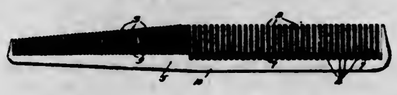
1. A lighting fixture of the character described comprising a wall bracket provided with a forwardly projecting angular neck portion terminating in an upright flanged head, the flanges being spaced from each other about the top and sides of the head to form a groove, and a shade comprising a hollow member having an open bottom and a rectangularly shaped cut out portion in the back wall corresponding approximately in dimensions with those of the bottom of the groove, whereby the latter will accommodate the sides and closed end of the cut out portion to removably support the shade with respect to the bracket.

1,904,704. KNOTTING MECHANISM. MERRITT R. WELLS, Cleveland Heights, and FOSTER F. HILLIX, Lakewood, Ohio, assignors to The Gibson Art Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 8, 1930. Serial No. 441,284. 31 Claims. (Cl. 98—91.)



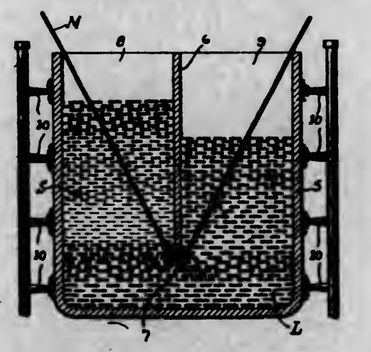
1. The combination with a knotting mechanism of means to feed a cord to such mechanism, and means to feed a second cord to such mechanism, said mechanism being adapted to knot the two cords together.

1,904,705. COMB. EDWIN F. ALLIN, Oklahoma City, Okla., assignor to American Hard Rubber Company, New York, N. Y., a Corporation of New York. Filed July 19, 1932. Serial No. 623,324. 2 Claims. (Cl. 132—11.)



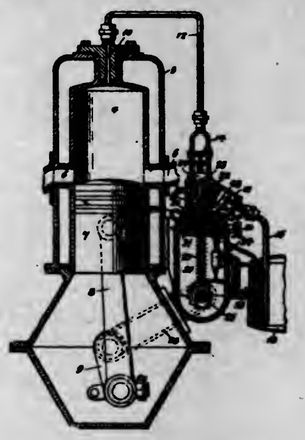
1. A hair comb having a body portion provided with a group of spaced coarse teeth and a group of spaced fine teeth, the parts of the body portion located between the teeth each being in the form of a single flat inclined surface, the inclination of the surfaces between the coarse teeth being opposite to that of the surfaces located between the fine teeth.

1,904,706. PROCESS OF HEAT TREATING METALS. ARTHUR E. BELLIS, Branford, Conn. Filed June 19, 1929. Serial No. 372,075. 3 Claims. (Cl. 148—15.)



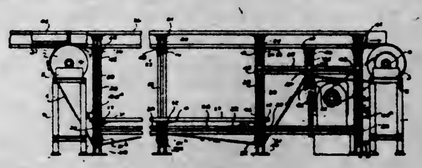
1. A process of heat treating metals which consists in providing a low temperature lead bath, superimposing upon part of said lead bath a fused salt bath of relatively low specific gravity and maintaining said fused salt bath at a comparatively high temperature, and then passing the metal to be treated downwardly through said fused salt bath directly into and upwardly through the lead bath before exposing the metal to the atmosphere.

1,904,707. HYDRAULIC PUMP. FREDERICK GEORGE HERR, Hempstead, N. Y., assignor to Aerol Engine Corporation, New York, N. Y., a Corporation of New York. Filed Feb. 27, 1930. Serial No. 431,687. 9 Claims. (Cl. 184—27.)



1. In an internal combustion engine, a housing formed with a bearing portion, a fuel pump comprising a reciprocable plunger supported within the bearing portion of said housing, said housing including a circular recess formed in the bearing portion thereof, and a lubricant pump for supplying lubricating material under pressure to said circular recess said pump operating to advance and retract a limited quantity of oil through said recess on each operation thereof.

1,904,708. WORKBENCH. WALTER A. ADAMS, Rochester, N. Y. Filed Apr. 15, 1931. Serial No. 530,240. 28 Claims. (Cl. 198—19.)

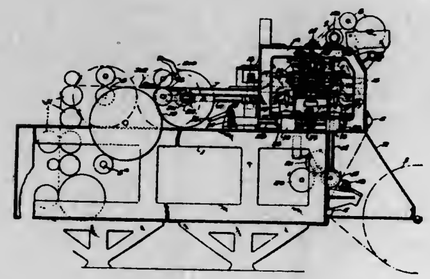


1. A work conveyor comprising transversely extending frames having recesses in opposite sides, a conveyor belt guided on said frames above and below said recesses, and a work support arranged between the laps of said belt at the lower sides of the recesses, the recesses permitting unobstructed access to the work support.

1,904,709. PRINTING ATTACHMENT FOR BAG MAKING MACHINES. THOS M. AVERY, Glens Falls, N. Y., and WILLIAM M. SHEPHERDS, Chicago, Ill., assignors to Union Bag and Paper Corporation, Hudson Falls, N. Y., a Corporation of New Jersey. Filed May 26, 1930. Serial No. 455,919. 12 Claims. (Cl. 101—181.)

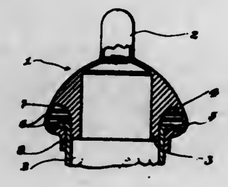
1. A printing attachment of the class described comprising a main frame, means for guiding a strip to move longitudinally therein, printing mechanism including ink-

ing means and a cooperative printing roll to operate on said strip, a base plate supporting the inking means and printing roll of said printing mechanism as a unit thereon,



and means contained substantially within the width of the main frame for supporting said base plate to move laterally into and out of said frame.

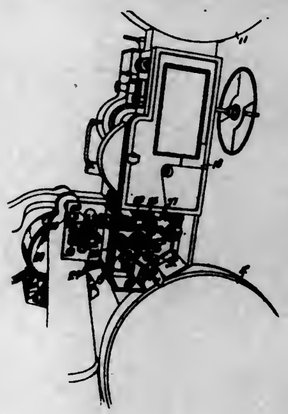
1,904,710. NIPPLE. IRVING BARKAN, Philadelphia, Pa. Filed Aug. 19, 1931. Serial No. 558,125. 1 Claim. (Cl. 128—252.)



In a nipple of the class described, the combination of a body member having a relatively thin upper portion and a thick lower portion divided into an inner stopper portion and a relatively thin outer wall member, a circular chamber between said stopper member and said thin outer wall member, the inside face of said thin outer wall member forming the chamber provided with a plurality of parallel corrugations horizontally disposed dividing said wall member into thin and thick wall sections, each of said corrugated wall sections adapted to take up a portion of the bending strain when the nipple is put on and taken off a bottle, the lower end of said thin outer wall member being sharply restricted forming a shoulder portion which is adapted to abut against the underside of a bottle flange.

1,904,711. METHOD AND APPARATUS FOR REPRODUCING SOUND. WILLIAM H. BAUCH, Shelbyville, Ind., assignor of one-half to Orval R. Platter, North Vernon, Ind., and one-half to Sono Equipment Corporation, Indianapolis, Ind., a Corporation of Indiana. Filed Sept. 20, 1929. Serial No. 394,110. 3 Claims. (Cl. 179—100.3.)

3. The combination with a picture projecting machine of a sound reproducing device comprising means for projecting a beam of light through that portion of the film on which sound has been previously recorded in terms of light and shadow, electric pickup instrumentalities for transforming light variations into sound waves, a light sensitive cell for varying electric current passing through it in said instrumentalities, a bracket adapted to receive said cell, a cam on said bracket, a manually operable lever having a cam thereon engageable with the first-named cam, resilient means biased to move said bracket away

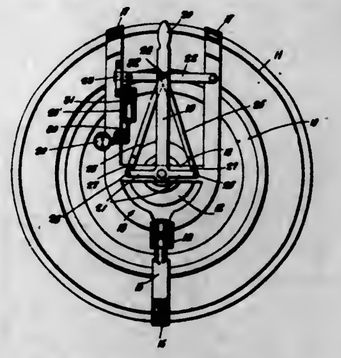


from the path of said film, said manually operable means serving to adjust said cell and secure it in adjusted position with relation to said film, substantially as set forth.

1,904,712. STAIN RESISTING COBALT ALLOY. FREDERICK M. BECKET, New York, N. Y., assignor to Electro Metallurgical Company, a Corporation of West Virginia. Filed Apr. 29, 1930. Serial No. 448,429. 5 Claims. (Cl. 75—1.)

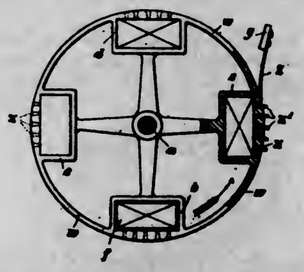
1. A ferrous alloy containing chromium not less than about sixteen per cent nor more than about twenty-two per cent, manganese not less than about six per cent nor more than about sixteen per cent and cobalt not less than about one per cent nor more than about ten per cent, and carbon, the carbon content being, not more than three tenths of one per cent; the remainder being chiefly iron.

1,904,713. BRAKE TESTER. FRANKLIN S. BELKNAP, Kansas City, Mo. Filed Dec. 13, 1929. Serial No. 413,896. 4 Claims. (Cl. 265—1.)



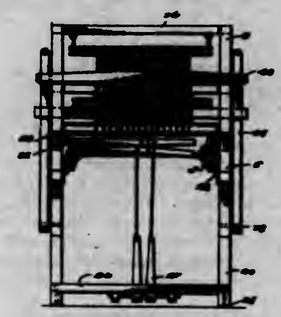
1. A brake testing device comprising a frame adapted to be clamped to a wheel, a gauge mounted on the frame, a lever pivoted on the frame, an arm pivotally carried by the frame, yieldable resisting means operatively connected with said arm and gauge, and links connected with said lever and said arm and separately operable by the lever when the latter is rocked in opposite directions.

1,904,714. BUTTER AND LIKE MOLDING DEVICE. JOHANNES BENZ, Dusseldorf, Germany. Filed Nov. 4, 1931. Serial No. 572,960. 1 Claim. (Cl. 31—42.)



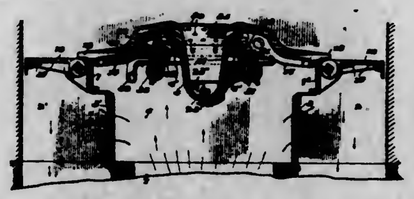
A butter and like molding device comprising a wheel having a smooth rim, and a plurality of open-ended molds arranged within the rim of said wheel, said rim having apertures through which material can be extruded from the molds.

1,904,715. LOOM. JOHN BERGMAN and MARGARET BERGMAN, Poulsbo, Wash. Filed May 21, 1932. Serial No. 612,802. 4 Claims. (Cl. 139—29.)



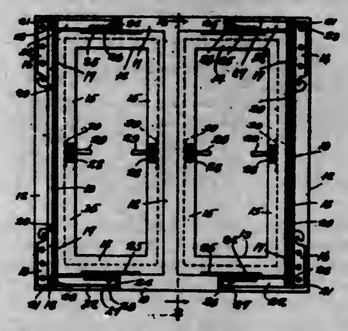
1. In a loom, a frame having side members, legs horizontally hinged at the upper ends thereof to the lower edges of the frame, treadles having a supporting member detachably secured at the end portions thereof to the legs, said supporting member being provided with means to normally hold the legs in spaced parallel relation.

1,904,716. UNDERFEED STOKER. WILLIAM B. BIGGS, Knoxville, Tenn. Filed Apr. 30, 1928. Serial No. 274,059. 7 Claims. (Cl. 110—47.)



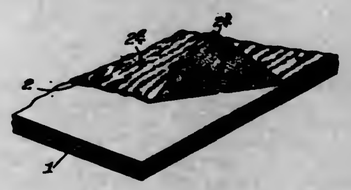
6. In an underfeed stoker, the combination of a retort and plunger means for feeding fuel thereto of two series of grate bars, one on either side of said retort, means restraining the inner or retort ends of said bars from vertical movement, means restraining said bars from movement longitudinally of the retort, and means supporting the outer ends of said bars while leaving said ends free for upward movement.

1,904,717. REVERSIBLE WINDOW HINGE. STANLEY H. BREWER, Dundalk, Md. Filed July 28, 1931. Serial No. 552,608. 1 Claim. (Cl. 16—163.)



A hinge for use with swinging sashes, comprising upper and lower hinge plates to be secured adjacent to a window opening, a vertical barrel forming a part of each plate, a pintle extending through the barrels, the ends of the pintle being extended beyond the ends of the barrels, a spacer sleeve contacting with the adjacent ends of the barrels, and positioned on the pintle, means for securing the spacer sleeve to the pintle, sash engaging arms, barrels at the inner ends of the arms and fitted over the extended ends of the pintle, means for securing the arms to the pintle and pivoted members at the free ends of the arms for securing the hinge to a window sash.

1,904,718. DECORATED LAMINATED PRODUCT AND METHOD OF PRODUCING SAME. JOHN D. COCHRANE, Jr., Cincinnati, Ohio, assignor to The Formica Insulation Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 18, 1932. Serial No. 599,780. 11 Claims. (Cl. 41—22.)

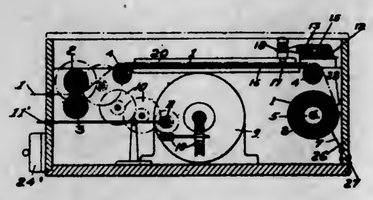


1. In the manufacture of laminated products having decorative surfaces, the method which comprises: consolidating under heat and pressure body-sheets impregnated with a binder, a surface-sheet of transparent character impregnated with a clear binder and having a printed design on its outer surface, and an opaque pigment-layer between the body-sheets and the surface-sheet and localised color-zones associated therewith, forming a special background for said printed design.

1,904,719. RECORDING APPARATUS. CHARLES DE BEAUMARCHAIS, Paris, France, assignor to Le Materiel Electrique S. W., Paris, France, a Corporation of France. Filed Dec. 11, 1930, Serial No. 501,692, and in France Jan. 15, 1930. 4 Claims. (Cl. 164—87.)

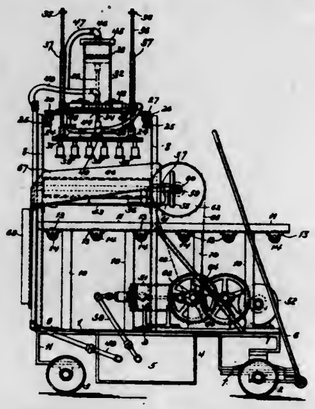
1. In a recording device of the type including a moving chart, a device for perforating said chart comprising a plate rigidly mounted beneath said moving chart, a graduated rule supported by said plate in a position thereabove transverse to the direction of movement of said chart, whereby the chart may pass freely between said rule and said plate, a movable runner slidably mounted with respect to said rule, an elongated channel in said plate

transverse to the direction of motion of said chart, a needle carried by said movable runner and normally positioned above said chart, means enabling depression of



said needle for perforating said chart, the point of said needle entering said channel when in depressed position, and means for returning said needle to its initial position.

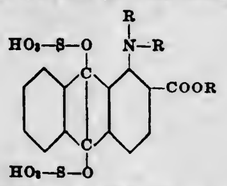
1,904,720. CAN UNLOADER. ROYAL DOUGLASS, South Bellingham, Wash. Filed Dec. 13, 1928. Serial No. 325,804. 3 Claims. (Cl. 214—1.)



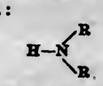
1. Apparatus for the purpose set forth comprising a truck, a container-support on the truck, a conveyer transverse to said support, a chute receiving articles from the conveyer, a reciprocating carriage above the conveyer, suction cups on the carriage adapted to engage articles in a container on the container-support and release them onto the conveyer, a suction pump on the truck connected with the suction cups, a motor on the truck, and connections whereby the motor will operate the pump and the conveyer.

1,904,721. MANUFACTURE OF SULPHURIC ESTERS OF ANTHRAHYDROQUINONES. DAVID ALEXANDER WHYTE FAIRWEATHER, Falkirk, and JOHN THOMAS, Polmont, Scotland, assignors to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed Mar. 23, 1931, Serial No. 524,763, and in Great Britain Mar. 25, 1930. 17 Claims. (Cl. 260—98.)

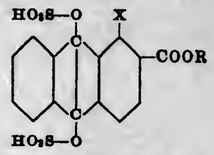
1. In the manufacture of disulphuric esters having in the form of the free acid the probable formula:



wherein R represents hydrogen or an alkyl group, the step which comprises reacting an amino compound having the probable formula:

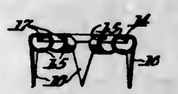


wherein R represents hydrogen or an alkyl group, with a disulphuric ester having in the form of the free acid the probable formula:



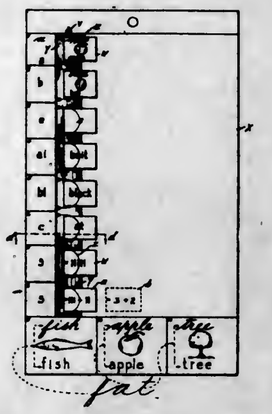
wherein X represents a halogen and R represents hydrogen or an alkyl group.

1,904,722. SEPARABLE FASTENER. PAUL E. FENTON, Thomaston, Conn., assignor to Scovill Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed July 12, 1930. Serial No. 467,569. 2 Claims. (Cl. 24—216.)



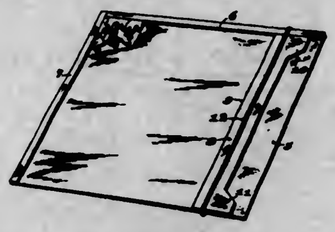
2. A socket member for separable fasteners, including a body provided with an off-standing exterior flange and having an inwardly extending face portion provided with an interior opening for the reception of a stud member, the edge of said flange remote from said face portion being provided with a plurality of wings curled inwardly throughout their entire lengths and arranged substantially radially of said socket member and forming curvilinear radially yieldable resilient stud-engaging members terminating short of the edge surrounding the opening and contacting therewith only when said wings are approaching their elastic limit and thereby preserving their elastic limit.

1,904,723. EDUCATIONAL DEVICE. FRANCES E. FISHER, Twin Falls, Idaho. Filed Dec. 16, 1930. Serial No. 502,836. 3 Claims. (Cl. 35—9.)



1. An educational device comprising a chart body having an indicia column subdivided into sections and provided with indicia in the respective sections, a replaceable strip or bar detachably positioned upon the chart body in parallelism with the indicia column, said strip or bar being provided with a series of spring clips, one for each section of the indicia column, said clips adapted to hold cards bearing indicia having relation to the indicia in the corresponding section of the indicia column of the chart body.

1,904,724. JIG-SAW PUZZLE HOLDER. MICHAEL J. GARTLAND, Washington, D. C. Filed Feb. 10, 1933. Serial No. 656,161. 2 Claims. (Cl. 273—136.)



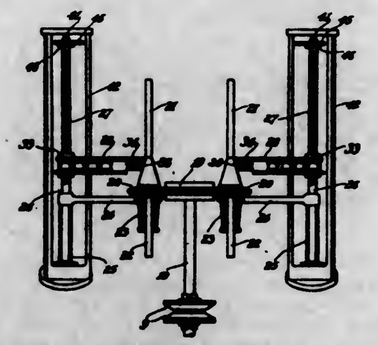
1. A jig-saw puzzle holder comprising a base-board on which the pieces of the puzzle are assembled, upper and side strips in raised relation to the board, a traveling strip having an upper elongated edge contacting with the edge of the longitudinal strip and guided and stabilised thereby, and an elastic band passing about the board and said traveling strip.

1,904,725. STAND FOR PLATES AND THE LIKE. ALFRED GERHOLD, London, England. Filed Sept. 17, 1930, Serial No. 482,595, and in Great Britain Oct. 17, 1929. 4 Claims. (Cl. 211—41.)



1. A plate holder comprising an arm to form a support having its inner end bent upwardly and outwardly then rebent inwardly, upwardly and downwardly in contact with the rebent portion to form therewith a clamp.

1,904,726. WINDING MACHINE. NICOLAI GRIBOJEDOFF, Putney, London, England. Filed Nov. 18, 1929, Serial No. 408,084, and in Great Britain May 23, 1929. 7 Claims. (Cl. 242—151.)



1. A thread winding machine, including a thread tensioning device comprising two pivotally mounted elements, a series of conical rollers disposed on each of said elements, the rollers of one series being disposed in opposition to the rollers of the other series, a roller carried by one of said elements remote from the pivot of the latter, said roller having a peripheral groove through which the thread passes when leaving said device.

1,904,727. KITE. JOHN HAHN, Decatur, Ill., assignor to H & W Kite Co., Decatur, Ill., a Corporation of Illinois. Filed Oct. 1, 1931. Serial No. 566,861. 13 Claims. (Cl. 244—22.)



1. A clamp for use with the frame members of a kite of substantially closed configuration, a portion of which presents an undulating contour to prevent slippage of the frame members relative to each other when substantially in assembled positions and allow slippage of the frame members relative to each other when substantially in unassembled positions.

1,904,728. KITE. JOHN HAHN, Decatur, Ill., assignor to H & W Kite Co., Decatur, Ill., a Corporation of Illinois. Filed Oct. 1, 1931. Serial No. 566,862. 14 Claims. (Cl. 244—22.)



1. In a kite, a face, a main frame member, a cross frame member, and a clamp comprising lower loop members and an upper loop member to bind said frame members in assembled position to prevent slippage thereof and to allow the cross frame member to be aligned with the main frame member when dismantled.

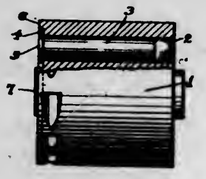
1,904,729. ICE DELIVERY BAG. RALPH JAMES HANCOCK, Marietta, and JOHN LEEK LOGAN GARRISON, Atlanta, Ga.; said Garrison assignor to Fulton Bag & Cotton Mills, Atlanta, Ga., a Corporation of Georgia, and said Hancock assignor to Southern Ice Supply Company, Marietta, Ga., a Corporation of Georgia. Filed Dec. 22, 1928. Serial No. 327,964. 3 Claims. (Cl. 224—45.)



1. A waterproof ice container comprising a bottom, and two sides of equal height, the remaining sides being of greater height than the first mentioned sides, one of said higher sides terminating in an extension flap of uniform width and having an upstanding ridge on its inner surface surrounding its outer edge, said flap when disposed upon a support constituting an auxiliary tray for temporary usage and a strap forming supporting loops above said container on opposite sides and extending beneath and

secured to said bottom, whereby when the container is being carried, the extension flap is adapted to extend over the contents and when the container is in supported position, the extended flap constitutes an auxiliary tray and is adapted for returning its contents to the container upon elevation thereof, the said strap constituting a reinforcing and supporting means.

1,904,730. CYLINDER CONSTRUCTION FOR FIREARMS. JOHN W. HARRINGTON, Worcester, Mass., assignor to Harrington & Richardson Arms Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 7, 1932. Serial No. 585,252. 3 Claims. (Cl. 42—59).



1. In a cylinder for revolvers and the like, said cylinder having a plurality of longitudinal bores therein for the reception of shells, a rearwardly projecting annular flange adjacent the periphery of the cylinder and beyond the bores in said cylinder, said flange being substantially as deep as the thickness of the heads of the shells, to provide, within said flange, a recess for the reception of said heads, whereby said heads shall be substantially flush with the outer end surface of said flange.

1,904,731. GOLF BAG. GEORGE HASTINGS HARRIS, Auckland, New Zealand. Filed Jan. 7, 1931, Serial No. 507,254, and in New Zealand Oct. 24, 1930. 3 Claims. (Cl. 150—1.5.)

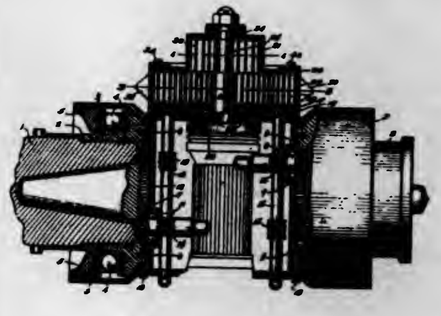


1. A golf bag having therein a guide member, the bag bottom having guide openings therein, a guide rod slidable in the guide member, legs slidable in the guide openings, and a ball and socket joint connecting the legs and rod.

1,904,732. ALLOY PLATED IRON AND STEEL AND PROCESS OF MAKING THE SAME. BATIST R. HAUBIGEN and JAMES C. PATTEN, Indianapolis, Ind.; said Haubigen assignor to said Patten; Margaret Lucile Patten executrix of said James C. Patten, deceased. Filed Mar. 5, 1930. Serial No. 433,500. 4 Claims. (Cl. 204—2.)

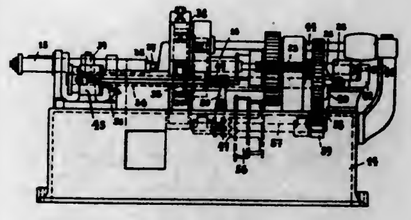
1. An iron or steel article carrying an electrodeposited coating of an alloy consisting of zinc and tin, the zinc and tin being in the ratio of about 75 : 25.

1,904,733. PROPELLER. SPENCER HEATH, Elkridge, Md., assignor to The American Propeller Company, Baltimore, Md., a Corporation of Maryland. Filed June 28, 1929. Serial No. 374,462. 16 Claims. (Cl. 170—162.)



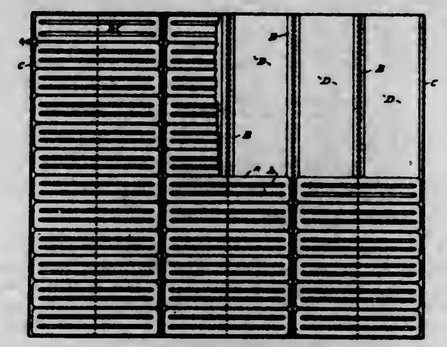
1. Control mechanism comprising in combination, a shaft adapted for rotation, a housing rotatably mounted thereon and two flexible spiral members wound oppositely about said shaft and attached thereto at one end and to the housing at their other end, each of said spiral members consisting of two similar parts symmetrically arranged to form a double spiral around said shaft, said mechanism being actuated by the differential of centrifugal force between the oppositely wound spiral members.

1,904,734. MACHINE FOR ROLLING RINGS. FRIEDRICH IM SCHLAA, Iserlohn, Germany. Filed June 29, 1932, Serial No. 619,973, and in Germany Oct. 10, 1930. 14 Claims. (Cl. 80—5.)



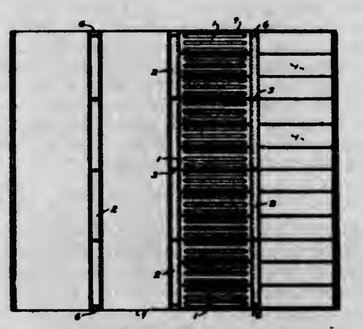
1. An apparatus for making ball bearing rings of radial fibrous structure comprising a rotating roll mandrel provided with a conical working surface and a shoulder adapted to prevent the material of the work from escaping, means for bringing the work into working position, rotatable means for holding the work during the rolling and means for ejecting the rolled ring.

1,904,735. HATCH COVER. JOSEPH WILLIAM ISHERWOOD and WILLIAM ISHERWOOD, Raggles Wood, Chislehurst, England. Filed Dec. 11, 1931, Serial No. 580,448, and in Great Britain Jan. 15, 1931. 31 Claims. (Cl. 114—201.)



1. In a hatch provided with framing the combination of a cover comprising a plurality of small sections two of which constitute closing sections; and cooperating wedging means carried by the sections and the hatch framing for holding the sections in place, one of said means slidable and provided with a transversely operable latch for locking all of said sections.

1,904,736. COVER FOR HATCHES. JOSEPH WILLIAM ISHERWOOD and WILLIAM ISHERWOOD, Raggles Wood, Chislehurst, England. Filed Dec. 11, 1931, Serial No. 580,449, and in Great Britain May 29, 1931. 8 Claims. (Cl. 114—201.)



1. In a hatch the combination of a cover comprising a plurality of small sections; a bar wedgingly engaging the end surfaces of a plurality of said sections, said bar having a recessed end adapted to coact with a similarly recessed end of an adjoining bar; and means to move said bar and the adjoining bar into the plane of said sections to lock the latter, said means lying within said recessed ends.

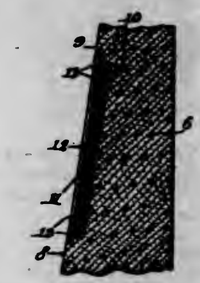
1,904,737. HOLDER FOR YARN PACKAGES. FRANK B. JAVERY, Worcester, Mass., assignor to Warp Compressing Machine Company, Worcester, Mass., a Corporation of Massachusetts. Filed May 6, 1931. Serial No. 535,501. 2 Claims. (Cl. 242—130.)

1. In a device for holding yarn packages wound on conical shells, a spindle carrying a frusto-conical holder providing a series of longitudinally extending slots for receiving compressible strips projecting radially from said holder, with the thickness of said strips substantially less than the length which said trips project radially beyond said holder,



whereby said strips frictionally engage the inside of a shell and yield peripherally of the holder in response to turning of the shell on the holder.

1,904,738. GRAVE MARKER. HENRY JOHNSON, Beatrice, Nebr. Filed Jan. 11, 1933. Serial No. 651,215. 5 Claims. (Cl. 40—124.5.)



2. A marker of the class described, comprising a body portion including a wide head and a tapered portion, the head having a cut out portion, a rubber backing strip positioned in the cut out portion, the edges of the strip extending outwardly lining the walls of the cut out portion, a card having indicia thereon, positioned against the backing strip and between the outwardly extended edges of the backing strip, a translucent cover on the card, and the adjacent edges of the translucent cover and backing strip being cemented together.

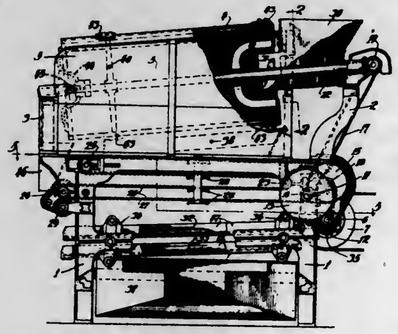
1,904,739. CLOSURE FOR CONTAINERS. AUGUST F. KROHN, Beaver Falls, Pa. Filed July 8, 1932. Serial No. 621,444. 4 Claims. (Cl. 221—60.)



1. In a closure for containers, a container having an annular neck, a closure having a tubular portion fitting on the neck, the said closure having an annular channel into which the upper end of the neck projects, a horizontally disposed partition having apertures below the upper end of the neck, the said closure having an opening for the escape of the contents of the container, a cone-like plug on the partition extending into the aperture of the closure, the diameter of the plug being greater than the diameter of the opening whereby when the closure is moved

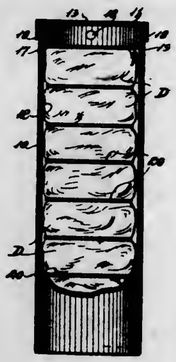
downwardly the wall of the opening engages the plug for closing the opening, a shoulder on the plug embraced by the annular channel adapted to engage the partition and close the openings therethrough, and means for communicating reciprocatory motion to the closure during its rotation.

1,904,740. CORN SILKER. HAROLD R. LEWIS, Hoopeston, Ill., assignor to Sprague-Sells Corporation, Hoopeston, Ill. Filed Aug. 14, 1929. Serial No. 385,890. 10 Claims. (Cl. 209—12.)



1. A machine for removing refuse matter from a mass of cut green corn comprising a preliminary screening means for effecting a rough separation of refuse matter from a mass of corn and discharging the corn so it will fall vertically, a second separating means comprising a series of parallel arranged rods, means for supporting and moving said rods in permanently spaced relation through a plurality of superposed paths wherein the rods move in reverse direction in traversing each path, the rods thereby continually intercepting the falling corn and collecting the residue of débris falling with the corn and moving it laterally away from the path of the falling corn with means along the path of said moving rods for removing the collected débris therefrom.

1,904,741. METHOD AND MEANS FOR PACKETING DOUGH. CHARLES LORBER, Louisville, Ky. Filed Sept. 9, 1931. Serial No. 561,944. 18 Claims. (Cl. 99—8.)



1. A method of packeting raw dough preservatively for commercial purposes which consists in applying the dough within a closed container having a vent opening, causing the dough to expand within the container, and restraining the expanded dough from closing the vent opening to provide space for the accumulation of generated gases.

1,904,742. ICING BISCUITS AND THE LIKE. ROBERT FRENCH MACFARLANE, Fulham, London, and WILLIAM EDWARD PRESCOTT, Willesden, London, England, assignors to Baker Perkins Company Inc., Saginaw, Mich. Filed Dec. 11, 1928, Serial No. 325,194, and in Great Britain Dec. 30, 1927. 19 Claims. (Cl. 107—1.)



1. In combination a stenciling machine comprising biscuit platforms adapted for continuous travel in an endless train the runs of which lie substantially in one horizontal plane and travel in a path defined by a pair of rectilinear portions joined at each of the adjacent ends by a substantially semicircular portion, and a co-operating rotary stencil plate mounted over a semicircular portion.

1,904,743. STEAM DEFLECTOR AND GUARD FOR DAIRY SINKS. JOB FORDYCE MALSBARY, Fresno, Calif. Filed Jan. 3, 1931. Serial No. 506,449. 3 Claims. (Cl. 141—7.)



1. The combination with a dairy sink having the open end of a steam conveying pipe terminating slightly above the plane of the sink, of a steam guard slidable on the sink and comprising an inverted cup-shaped member with an opening in its side wall for receiving the end of the pipe, a handle secured to the member and lying in the plane of the sink, and guides slidably securing the handle to the sink, said handle having a hand grip portion extending beyond the edge of the sink.

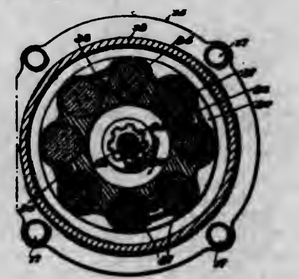
1,904,744. ALARM FOR TYPEWRITERS. WILLIAM F. H. MANN, New York, N. Y. Filed July 7, 1930. Serial No. 466,827. 2 Claims. (Cl. 197—189.)



1. A typewriter attachment including a rotatably mounted gear wheel provided on one face thereof with a series of rack teeth, additional gear wheels for driving the first named gear wheel from the platen of the typewriter, an audible signal including a tapper and a resilient support therefor, and actuating means for the tapper comprising an arm arranged to rotate on an axis coincident with the axis of the first named gear wheel, and being also adapted

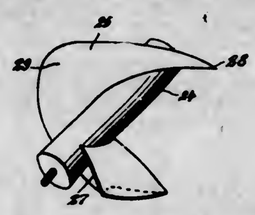
to engage said rack teeth to thereby rotate with said first named gear wheel, and a spring return trigger pivotally mounted on said arm and arranged to engage said resilient tapper support and thereby actuate said signal.

1,904,745. YIELDING COUPLING. EDWARD B. NOWOSIELSKI, Bloomfield, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Nov. 21, 1929. Serial No. 408,902. 7 Claims. (Cl. 64—96.)



1. A yielding coupling comprising a disk having a plurality of elements extending from the lateral face thereof and rotatable therewith, a plurality of yielding elements arranged in pairs, each pair of the latter having engagement with one of said first named elements, and means for mounting said yielding elements, said mounting means operating to prevent expansion of said yielding elements in any direction other than toward said first named elements.

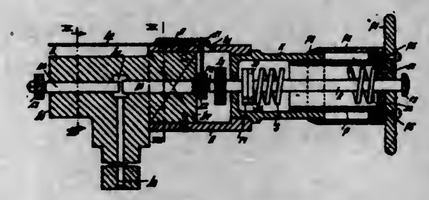
1,904,746. ROTARY WING AIRCRAFT PROPELLER. CHARLES R. OHNSORG, New York, N. Y., assignor of one-half to Josie Ohnsorg, New York, N. Y. Filed Nov. 23, 1929. Serial No. 409,214. 1 Claim. (Cl. 170—156.)



In an aircraft, means for propelling the same comprising a cylindrical drum adapted to be rotated, a helical annular wing mounted on the surface of the drum, said wing extending around said surface, the front edge of said wing being substantially straight and extending a distance from the drum, the width of said wing being increasingly greater rearward of said edge and attaining its maximum width at a point intermediate said edge and the opposite end of the wing, said wing tapering to a point from the point of maximum width, said tapered point lying beyond the surface of the drum, the edge of said wing lying nearest said drum contacting with said surface the greater part of its length and departing from said surface at a point intermediate the length of the drum and continuing convergently therefrom to said tapered point.

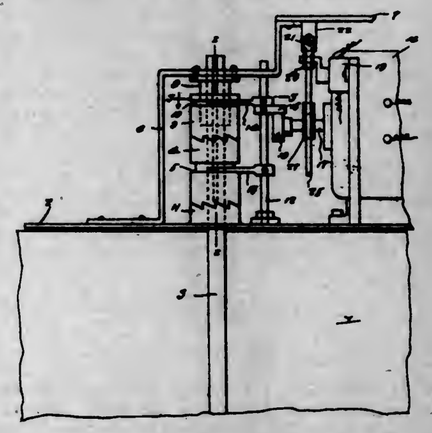
1,904,747. DEVICE FOR MEASURING AND INDICATING FLUID PRESSURES. JOHN OKILL, Birkenhead, England. Filed Mar. 12, 1931, Serial No. 522,088, and in Great Britain Mar. 15, 1930. 11 Claims. (Cl. 73—111.)

1. In apparatus for measuring fluid pressure, in combination;—a casing having two cylindrical surfaces of different diameters, the space between the surfaces being provided with a passageway adapted to be connected to the pressure to be measured; a pressure actuated device having two cylindrical surfaces adapted respectively to make a fluid-tight sliding fit with the said two respective cylindrical surfaces; two stops limiting the movement of the said device, against one of which stops the latter is pressed when subject only to the pressure to be measured;



a regulable balancing spring adapted to transmit a measurable pressure to the pressure-actuated device tending to move it away from the said stop; a measuring device for indicating the pressure transmitted by the spring to the said device; and balance indicating means comprising a lever actuated by the pressure-actuated device adapted to indicate the movement of the said device, in respect to its stops.

1,904,748. DOORLOCK. WILLIAM V. PARR, CHARLES A. LOVE, and JOHN J. BARNES, Minneapolis, Minn. Filed July 14, 1932. Serial No. 622,556. 8 Claims. (Cl. 70—50.)

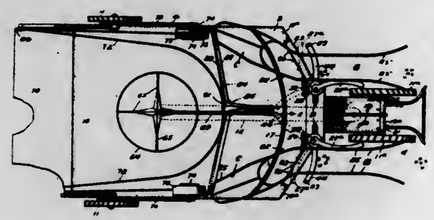


1. A door lock comprising a shaft fixed to the door for rotation therewith, a clutch mounted on the shaft for rotation with said shaft, a clutch engageable with the first named clutch for retaining said first named clutch against rotation, an electric motor, and means operatively connecting one of the clutches to the electric motor for actuation thereby, said means including a cam mounted on the motor shaft, a slidably mounted shaft, an arm fixed on the slidable shaft and engageable by the cam for actuation thereby, and a yoke operatively connecting said one clutch to the slidable shaft for actuation thereby.

1,904,749. CORN HARVESTER. RICHARD B. PERKINS, Everett, Mass. Filed July 2, 1931. Serial No. 548,401. 24 Claims. (Cl. 56—71.)

1. A corn harvester including a wheel-supported platform, a knife carried by said platform to sever the stalks near their base, a gathering means supported by the plat-

form including a member movable to a position in back of the stalks being presented to the knife for bracing the stalks during the cutting operation, an operable means



for actuating said brace member into and out of said bracing position, and trip means for setting said brace arm in operation.

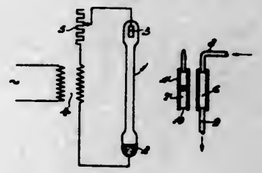
1,904,750. TWO-PIECE METAL SHAFT FOR GOLF CLUBS. MILTON B. REACH, Springeld, Mass., assignor to A. G. Spalding & Bros, New York, N. Y., a Corporation of New Jersey. Filed Nov. 20, 1930. Serial No. 496,962. 8 Claims. (Cl. 273—80.)



1. In a golf club, a two piece metal shaft consisting of short lengths of tapered tubular metal shafting arranged end to end with overlapping end portions to jointly form the permanent shaft of required length, comprising a lower piece of said shafting for connection to the club head, and an upper piece of said shafting, a sleeve of rubber or similar shock absorbing material vulcanized to the lapping end portion of one of said pieces, said end of said piece and its vulcanized sleeve being inserted into the end of the other piece with a driving fit, to firmly connect the said ends of said upper and lower pieces of shafting against separation longitudinally and to provide torsional resiliency between said shaft sections.

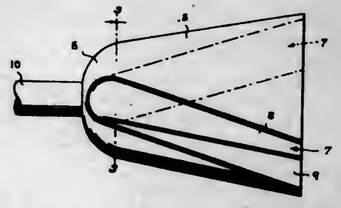
1,904,751. PROCESS OF PREPARING VITAMIN D. ENGBERT HARMEN REERINK and AART VAN WIJK, Eindhoven, Netherlands, assignors to N. V. Philips' Gloeilampenfabrieken, Eindhoven, Netherlands. Filed June 9, 1930, Serial No. 460,066, and in the Netherlands July 20, 1929. 5 Claims. (Cl. 167—81.)

3. In a process of preparing a material containing vitamin D, the steps comprising subjecting ergosterol to radiation by artificially produced ultraviolet light while filtering out light of wave lengths of the order of 270 $m\mu$, or less and substantially all of the light of wave lengths



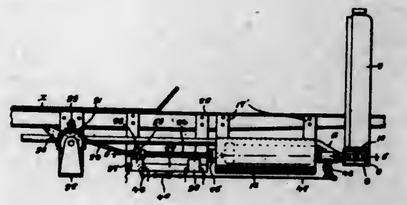
greater than 300 $m\mu$, and discontinuing such radiation before more than approximately 60% of the ergosterol has been transformed.

1,904,752. PROPELLER. JUAN PEDRO RODRIGUEZ, Lake Worth, Fla., assignor of one-half to George W. Krick, Lake Worth, Fla. Filed Aug. 13, 1930. Serial No. 475,111. 6 Claims. (Cl. 170—156.)



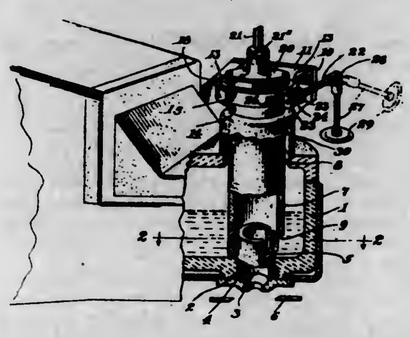
1. A propeller comprising a frusto-conical body, said body dished out to form straight diagonal channels of uniform width and depth extending from end to end of said body, relatively extensive portions between the channels for providing smooth action of the propeller in the water, and each of said channels having an abrupt inwardly extending wall and a wall extending substantially at a right angle to the first mentioned wall.

1,904,753. RADIATOR FILLING AND DRAINING DEVICE. WILLIAM JEROME SMITH, West Palm Beach, Fla. Filed Oct. 9, 1931. Serial No. 567,973. 1 Claim. (Cl. 123—174.)



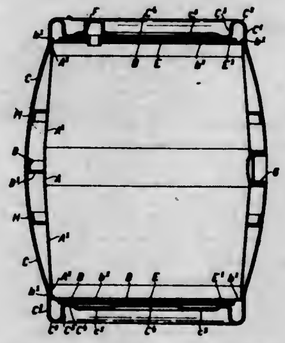
A device for filling and draining radiators comprising a cylinder insulated against heat or cold, a support for said cylinder, means connecting said cylinder to a radiator, a piston in said cylinder, a slidable cross head connected to the piston, a support for the cross head, electrical means for actuating the cross head and manually set in operation and automatically stopped by the cross head reaching the limit of its movement in each direction, a self-closing drain means between the cylinder and the radiator, and means between said drain means and the cross head for opening the drain means when said cross head reaches the limit of its movement in one direction.

1,904,754. GLASS FEEDER. DAVID STENHOUSE, Washington, Pa., assignor to Hasel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Apr. 25, 1930. Serial No. 447,387. 9 Claims. (Cl. 49—55.)



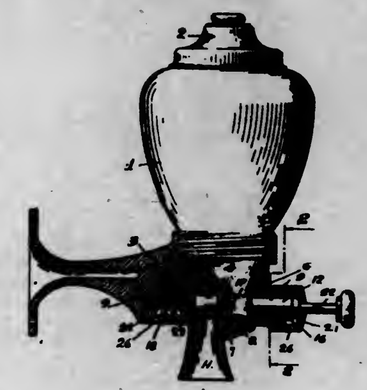
1. A pneumatic glass feeder, including a flow spout having a flow orifice, a rotatably adjustable vacuum and pressure tube projecting into the flow spout in alignment with the flow orifice, and means associated with the lower portion of the tube to vary the volume of glass flowing through the flow orifice as the tube is rotatably adjusted.

1,904,755. METAL DRUM. PETER WOLF, Essen, Germany, assignor to Fried Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Sept. 28, 1929, Serial No. 395,952, and in Germany Oct. 27, 1928. 2 Claims. (Cl. 220—10.)



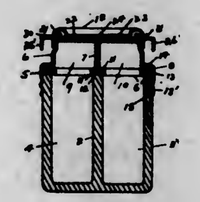
1. A metal drum consisting of a drum proper having end walls and a substantially cylindrical shell, and of a jacket having end walls too and a barreled shell, the jacket consisting of two pot-shaped halves, with the shell portion of each of said pot-shaped halves subsiding into the respective end wall by a substantially U-shaped rim of abundant curvature, the drum proper being constructed as a unit independent of said jacket and firmly held within said jacket solely by the extremities of the shell of said drum proper abutting on the extremities of the shell of said jacket and the end walls of the drum proper abutting on the end walls of the jacket whereby the end walls of the drum proper are substantially protected from being bellied

1,904,756. DISPENSING DEVICE. PHILIP A. WOOSTER, San Francisco, Calif. Filed Sept. 30, 1931. Serial No. 566,057. 7 Claims. (Cl. 221—104.)



1. A dispensing device comprising a receptacle having a vertically disposed discharge passage intersected by a valve casing and an outlet extending downwardly from said casing and offset from said discharge passage; detachable means for closing the bottom of said discharge passage below the valve casing whereby said passage may be rendered accessible for cleaning by removal of said closing means; a reciprocable valve mounted within said casing and having a vertically disposed aperture registerable with either the discharge passage or the outlet; resilient means for normally urging said valve to register with the discharge passage; and adjustable means for limiting the movement of said valve when urged by said resilient means whereby said aperture within said valve may normally register with the discharge passage to receive a charge of the contents of said dispensing means.

1,904,757. SALT AND PEPPER SHAKER. CLAUDE G. WATSON, Pasadena, Calif., assignor of one-half to John Byers and George D. Gottschick, Pasadena, Calif. Filed Mar. 7, 1932. Serial No. 597,307. 3 Claims. (Cl. 65—45.)

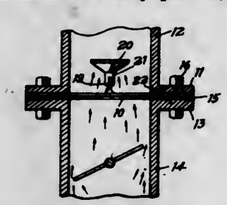


1. A device of the class described, comprising a container having separate compartments, a partition within said container, the upper edge of which is preferably flush with the edge of the container, an enclosing cover, a cap upon said enclosing cover, means for securing the enclosing cover upon said container, means for securing the cap upon said enclosing cover, perforated shutters disposed between said enclosing cover and said cap and adapted to move against the resistance of a U-shaped spring disposed in an annular channel formed in said cap.

1,904,758. MIXING DEVICE. GEORGE E. COOK, New York, N. Y. Filed Aug. 10, 1931. Serial No. 556,179. 1 Claim. (Cl. 48—180.)

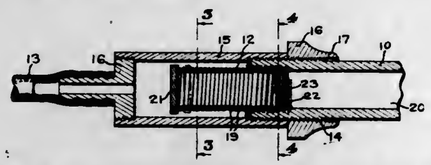
A device as characterized comprising a substantially flat body portion adapted to be positioned between the flanges

of an intake manifold and a carburetor, said body portion having a middle opening, grooves in the body portion extending from the outer edge to the said middle opening to permit entry of air therethrough, an upwardly projecting support extending from and integral thereto and centrally position from said body portion, and a deflector



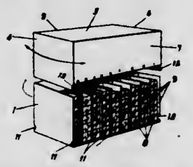
having a downwardly extending stem adapted to be mounted on said support, and said deflector at its underside sloping upwardly outward so that fuel from the said manifold and air from the grooves will deflect the fuel from the middle of the manifold towards the side wall thereof.

1,904,759. FLUID PRESSURE HORN. HENRY HUBBER, Buffalo, N. Y., assignor to Trico Products Corporation, Buffalo, N. Y. Filed May 25, 1931. Serial No. 539,924. 15 Claims. (Cl. 116—138.)



1. In a fluid pressure operable horn, a casing having a fluid inlet passage and a fluid outlet passage, and a sound creating member comprising a resilient member normally closing one of said passages and having a plurality of convolutions normally abutting, said convolutions separating to allow fluid to pass through said casing.

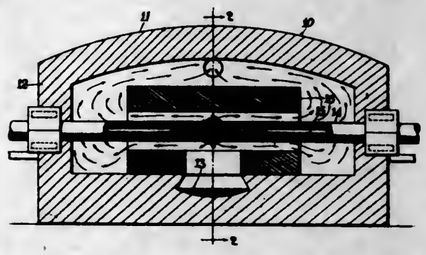
1,904,760. MERCHANDISING AND DISPLAY RECEPTACLE. AVERY A. MATHESON, Binghamton, N. Y., assignor to Agfa Ansco Corporation, Binghamton, N. Y., a Corporation of New York. Filed Mar. 16, 1931. Serial No. 522,824. 2 Claims. (Cl. 312—42.)



1. A receptacle comprising a box having open front and rear sides, partition members in said box forming a plurality of compartments opening on both sides of the box, and a removable cover member adapted to close either side of said box entirely, the lower edge of one side only of said cover terminating slightly above the bottom of said box, permitting access to the compartments at the lower edge of one side of said box.

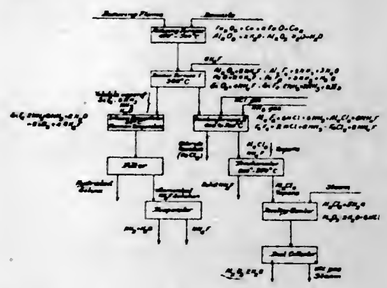
1,904,761. PRODUCTION OF ALLOYS. DONALD M. SCOTT, Buffalo, N. Y., assignor to Buffalo Electric Furnace Corporation, Buffalo, N. Y. Filed Aug. 14, 1931. Serial No. 557,146. 4 Claims. (Cl. 75—22.5.)

1. A method of producing multi-constituent alloy which comprises finely dividing and admixing solid ingredients for reducing one metal constituent of the alloy, feeding a charge of the finely divided solid ingredients through a conduit formed in an energized electrode, controlling the rate of movement of the charge through the electrode, finely dividing and mixing solid ingredients for reducing a sec-



ond metallic constituent of the alloy, feeding a charge of the finely divided solid ingredients of the second metallic constituent through a second electrode, and discharging the reduced metallic ingredients from both electrodes into a common hearth.

1,904,762. PRODUCTION OF ALUMINUM CHLORIDE AND ALUMINA. SVEND S. SVENDSEN, Chicago, Ill., assignor to Clay Reduction Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1927, Serial No. 191,267, and in Norway Oct. 25, 1926. 21 Claims. (Cl. 23—93.)



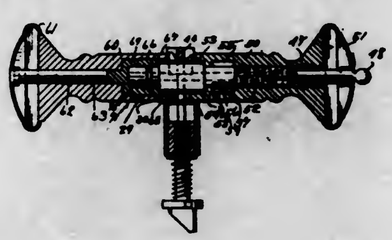
1. The method of producing anhydrous aluminum chloride which consists in treating aluminum fluoride with hydrogen chloride and ammonia gas.

21. The method of producing aluminum chloride from material containing aluminum oxide, silica and iron impurities, which consists in reacting on said material with ammonium fluoride to form ammonia-silicon-fluorine compounds and aluminum fluoride, heating the mixture to volatilize the ammonia-silicon-fluorine compounds, heating the residual fluorine compounds in a reducing atmosphere to reduce the ferric iron content thereof, and treating the residual compounds with hydrogen chloride and ammonia at a temperature of at least about 400° C., thereby converting the aluminum fluoride into aluminum chloride.

1,904,763. LOCK. EDWALL JAMES BAUMÉ, Long Beach, Calif. Filed July 6, 1932. Serial No. 621,009. 12 Claims. (Cl. 292—169.)

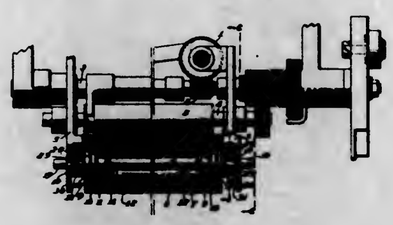
1. In a lock of the character described a bolt adapted to be reciprocated to and from extended position, a latch bolt carrier to which said bolt is adjustably connected, said carrier being substantially rectangular in side elevation and having a rectangular slot therethrough, a non-rotatable spindle arranged axially perpendicular to said carrier and being provided centrally of its length with a rectangular portion adapted to fit within said carrier slot, a substantially key shaped locking member slidably mounted

within said spindle slidable lengthwise, the rectangular portion of the spindle being slitted to permit the passage therethrough of the locking plate of said locking member, a pair of tubular sleeves surrounding said spindle, one for each end thereof, and independently rotatable therearound, the inner ends of said sleeves terminating in segmental portions adapted to cooperate with said latch bolt carrier to retract the same upon the rotation of said sleeves, a slit in the inner end of one of said sleeves adapted to register



with the slot of the spindle and receive a portion of the locking plate to lock said spindle and sleeve against rotative movement relatively, means to rotate said sleeves, a spring support supported by said carrier and bolt, slidable longitudinally thereof and having its inner end bearing against said sleeves and its outer end extending across the outer end of said carrier, and a coil spring surrounding said latch bolt between the outer end of said spring support and the nose of said bolt.

1,904,764. INK ROLL FOR PRINTING PRESSES. OSCAR H. BANKER, Philadelphia, Pa. Filed Mar. 20, 1931. Serial No. 524,018. 5 Claims. (Cl. 101—348.)

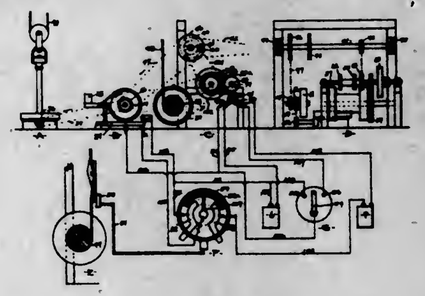


1. In a printing press, a stationary shaft, antifriction bearings thereon, resilient means to maintain alignment of said bearings, a roll mounted on said bearings, and adjustable supporting means to secure said shaft in locked position and releasable at either end of said shaft.

2. In a printing press, a supporting shaft, a roll free to revolve thereon, roller sockets in which said shaft is eccentrically fixed, and spring pressed plungers to lock said sockets in their locked position and also in position for the removal of said roll from said sockets.

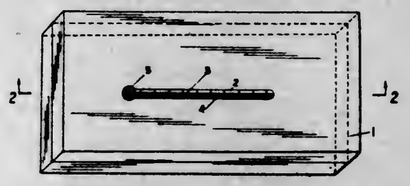
1,904,765. MEANS FOR TORQUE CONTROL AND AUTOMATIC DRILL CONTROL. WATSON L. HAWK, Long Beach, Calif. Filed Nov. 28, 1930. Serial No. 498,557. 15 Claims. (Cl. 255—19.)

1. In a well drilling apparatus, the combination of a draw works, a cable, a tool string suspended from said cable, a weighing device carried by said cable adapted to indicate the weight of said tool string and means set in motion by said weighing device to cause the tool string to be raised or lowered for maintaining a predetermined portion of the weight of the tool string upon the drill bit, a torque control device adapted to divert from the drill the excess torque or driving force over and above the resistance set for said drill and means set in motion by said



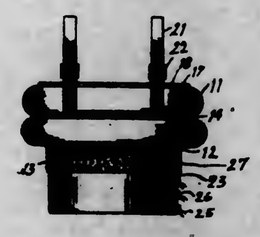
torque control device to raise said tool string until resistance to rotation is lessened and normal rotation is resumed by said drill.

1,904,766. DENTIST'S MIXING PLATE. CHARLES J. MCCANN, Bay City, Mich. Filed Dec. 26, 1930. Serial No. 504,725. 1 Claim. (Cl. 73—52.)



A dental mixing plate comprising a body of glass having one side substantially plane with a depression therein, another body of glass similar to the first and having one side substantially plane with a depression therein similar to that of the first, said glass bodies being placed together with said plane sides against each other and with the surfaces of the said sides substantially coplanar and with the depressions cooperating to form a confined space, said confined space having a shape such as to receive a thermometer with a bulb and stem with the depressions providing an enlarged portion of the confined space for receiving the bulb, a thermometer disposed in said space and substantially fitting the same, and said glass bodies being sealed together around their edges.

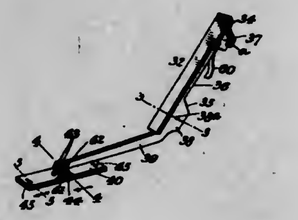
1,904,767. LIFE-SAVING DEVICE. TOSHICHI NAKAMURA, Los Angeles, Calif. Filed June 14, 1932. Serial No. 617,088. 4 Claims. (Cl. 9—17.)



2. In a life-saving device, a fabric receptacle, inflatable rubber tubes mounted in the receptacle, a cork fibre sup-

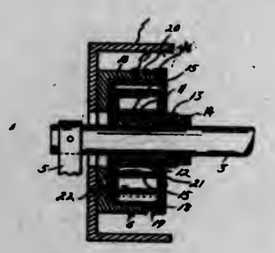
porting band depending from the receptacle, an elastic belt mounted on the outer face of the supporting band, and a plurality of waterproof fibre elements mounted on the inner face of the supporting band.

1,904,768. ALL METAL KEY FOR PIANO-ACCORDIONS. REINHOLD RIBSCHICK, New York, N. Y. Filed Mar. 11, 1932. Serial No. 598,147. 10 Claims. (Cl. 84—376.)



4. In combination with a piano-accordion having a ported panel; a plurality of keys comprising wholly metallic structures having integral horizontal head and web portions, the web portions being extended to form shanks; valves having pivotal joints with their respective shanks; and yielding and retarding packings in said joints for the purpose described.

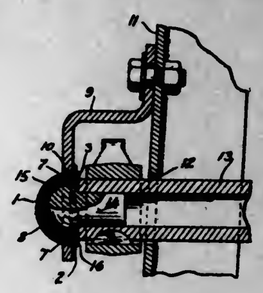
1,904,769. SHAFT MOUNTING. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed Oct. 18, 1926. Serial No. 142,430. 8 Claims. (Cl. 308—72.)



1. The combination with a rotary cross shaft for vehicle frames, of a mounting for each end of said shaft comprising a cylindrical housing radially spaced from the shaft, and resilient means upon said shaft and serving as the sole means for carrying said shaft, said resilient means being connected at one end to the inside of said housing and providing for rotative and universal movements through relatively great ranges of said shaft relative to said housing and normally retaining said shaft in a predetermined lateral and rotative position relative to said housing.

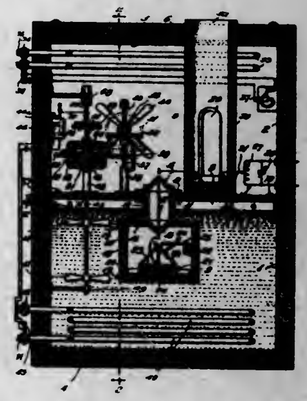
1,904,770. COMBINED END THRUST AND SELF-ALIGNING SUPPORTING BEARING. NEWTON SKILLMAN, Highland Park, Mich., assignor to O. & S. Bearing Co., Detroit, Mich., a Corporation of Michigan. Filed May 16, 1928. Serial No. 278,179. 5 Claims. (Cl. 308—168.)

1. In combination with a hollow oscillatable shaft, of plugs having substantially hemispherical heads within the ends of said shaft, hemi-spherical bearing members formed of stamped sheet metal linings in said bearings of preformed, compressed, lubricant impregnated fibrous



material for directly engaging the spherical heads of said plugs whereby to provide end thrust as well as bearing supports for each end of said shaft.

1,904,771. CONSTANT FREQUENCY CONTROL APPARATUS. ERNEST R. HENTSCHEL, Washington, D. C.; John Olson, administrator of said Ernest R. Hentschel, deceased, assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 23, 1930. Serial No. 455,131. 13 Claims. (Cl. 250—36.)

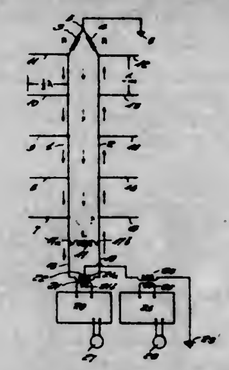


1. In a constant frequency control apparatus, a heat insulated chamber divided into a pair of sections, a frequency determining element mounted within one of said sections, an oscillator circuit having parts thereof disposed in another of said sections and means in said last mentioned section controllable by temperature conditions in said first mentioned section for governing the temperature in said last mentioned section around said frequency determining element.

1,904,772. RADIO SIGNALING SYSTEM. ALBERT H. TAYLOR, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 23, 1930. Serial No. 490,729. 6 Claims. (Cl. 250—20.)

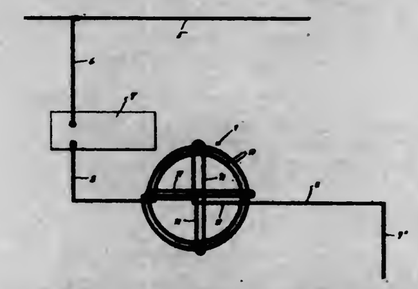
1. In a signal receiving system, a radio frequency energy collecting system comprising a pair of longitudinally extending conductors, a plurality of laterally extending conductors connected to each of said longitudinal conductors at spaced intervals along the length thereof

and projecting normal thereto, said laterally projecting conductors being spaced a distance apart equal to substantially one-half of the received wave length, a primary inductance disposed in series with said longitudinally extending conductors, a receiving circuit coupled with said primary inductance, a connection between a nodal point



in said primary inductance and through an independent primary inductance to ground, a separate receiving circuit coupled with said independent primary inductance, and means connected with each of said receiving circuits for integrating the effects of the received signaling energy of said conductors in shifting planes of polarisation.

1,904,773. RADIO GROUND. CHRIST J. AANENSON, Magnolia, Minn. Filed Mar. 10, 1931. Serial No. 521,539. 1 Claim. (Cl. 173—31.)



In a ground terminal for radios, a single length of wire having an intermediate portion formed with a plurality of convolutions and diametrical elongated loops, said loops being at right angles to each other and having the intermediate portions thereof located approximately at the axis of said convolutions and being interlocked, said convolutions being extended through and being restrained by the outer portions of said elongated loops.

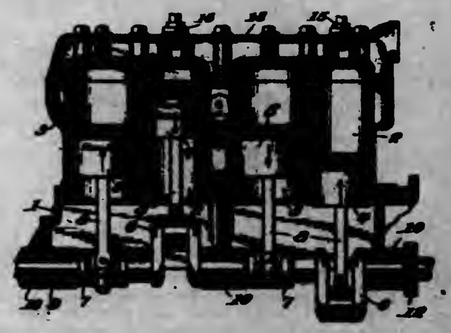
1,904,774. FLOOR AND WALL BRUSH. ALBERT E. BAKER, Mount Vernon, Ohio, assignor of one-third to Paul J. Scott and one-third to Bittie A. Hileman, Richmond, Va. Filed May 16, 1931. Serial No. 537,925. 1 Claim. (Cl. 15—244.)

A cleaner including a cleaning element in sheet form, a holder therefor comprising a tubular member provided with a slot extending longitudinally thereof whereby said sheet may be wrapped about said member and opposite edges thereof tucked into the slot, an elongated clamping plate for substantially closing said slot and having side flanges engaging the sheet at the sides of the slot exteriorly of said member, said plate being also provided with a socket on the opposite side of said plate from said slot, a handle member having one end fitted into said socket, and a screw having a headed end anchored within said tubular member and a threaded tapered end adapted to extend through an opening in said plate communicating



with said socket and to be screwed into said end of said handle for securing said end of the handle within said socket, and also for securing said tubular member and said plate in assembled relation on said handle.

1,904,775. ENGINE. GILBERT A. BARTHOLOMEW, Cleveland, Ohio. Filed Nov. 16, 1931. Serial No. 575,423. 1 Claim. (Cl. 60—15.)



An internal combustion engine comprising a base, an explosion cylinder on said base, a compressor cylinder on said base, a crank shaft carried by said base, pistons in said cylinders, means for connecting the pistons to the crank shaft so that the piston of the explosion cylinder travels in advance of the piston of the compressor cylinder, said explosion cylinder having a fuel intake port, said compressor cylinder having intake and exhaust ports, valve means for said ports, a conduit between the cylinders, a control valve for said conduit and adapted to establish communication between said cylinders during the explosion of fuel within the explosion cylinder, means actuated by the crank shaft for operating the valve means of the ports for the explosion cylinder, a fuel manifold connected to the intake port of the compressor cylinder and the fuel port of the explosion cylinder, and means whereby fuel may be admitted to the cylinders from the manifold or whereby a portion of the manifold may be closed to prevent the admission of fuel to the compressor cylinder and establish communication between the latter and the atmosphere so that air may be drawn into the compressor cylinder instead of fuel.

1,904,776. COMBINATION THERMOMETER CASING. WILLIAM C. BAILEY, Los Angeles, Calif. Filed Oct. 16, 1931. Serial No. 569,299. 5 Claims. (Cl. 73—52.)



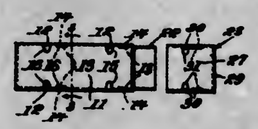
5. In a device of the character described, a casing provided with two compartments, one of which is adapted to contain a thermometer and the other of which is adapted to contain a rotatable shaft, a shaft in the latter compartment equipped with means for engaging the thermometer to retain the latter at an angle to the shaft, and means for rotating the shaft for subjecting the thermometer to centrifugal force for the purpose of restoring the original low reading of the thermometer.

1,904,777. COMBINED TOBACCO BOX AND CIGARETTE PAPER HOLDER. JOHN K. BARSZICKI, Moon Run, Pa., assignor of one-half to Martin Herbert, Moon Run, Pa. Filed July 16, 1932. Serial No. 622,973. 5 Claims. (Cl. 206—38.)



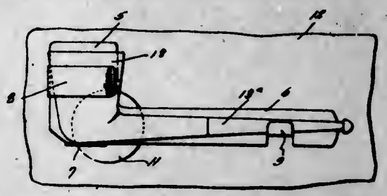
1. In a combined tobacco box and cigarette paper holder, the combination with a box having a slotted bottom wall, of a pack of interfolded cigarette papers in the box overlying the bottom wall slot with the side edge of each paper positioned for projection through the slot, a follower plate on the cigarette paper pack having depending end fingers to confine the separate papers of the pack in a compact condition, and a pull cord attached to the lowermost paper of the pack to facilitate feeding of the papers through the bottom wall slot.

1,904,778. METHOD OF MAKING METAL BOXES. RALPH V. BURDICK, Albany, N. Y. Filed Oct. 28, 1929. Serial No. 403,085. 1 Claim. (Cl. 113—120.)



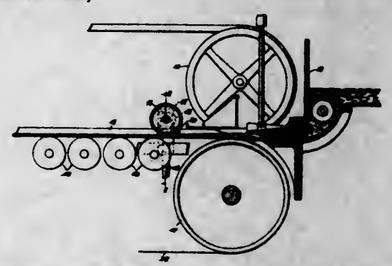
The method of forming a sheet metal box, comprising, stamping a blank with two parts, each having securing ears thereon and receiving depressions therein along corresponding edges, bending a substantial portion of one part of the blank at either side at right angles thereto to form three sides of the box, bending the blank medially upon two parallel lines to form the bottom and the remaining side of the box from the other part of the blank, and finally securing the bent side portions of the first-named part and the side-forming portion of the second-named part together by bending the securing ears of each part of the blank into the receiving depressions of the other part thereof.

1,904,779. PIPE HOLDER. AUGUSTUS BURR, Oaklynne, N. J. Filed May 20, 1932. Serial No. 612,595. 8 Claims. (Cl. 131—51.)



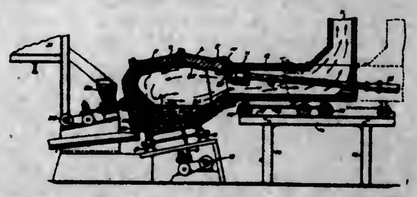
1. A pipe holder comprising a plate provided on the back side thereof with means for detachably securing it to a support, and on the front side thereof with a seat for the pipe bowl and also with a pair of relatively spaced spring clips one of which is disposed above the bowl seat for resiliently engaging the bowl, and the other of which is removed from said seat and arranged to resiliently engage the stem of the pipe.

1,904,780. METHOD OF SMOOTHING STOCK ON FOURDRINIER WIRE. AUSTIN B. COPPIN, Green Bay, Wis. Filed Mar. 25, 1931. Serial No. 525,271. 2 Claims. (Cl. 92—44.)



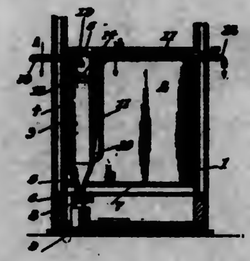
1. The process of smoothing the surface of stock upon a Fourdrinier wire which comprises placing a smooth surfaced roll to dip into the layer of stock and causing the roll to revolve in a direction and at a speed to provide relative motion between the surface of the roll and the layer of stock.

1,904,781. FURNACE. JOHN F. CRAWFORD, Racine, Wis., assignor to J. I. Case Company, Racine, Wis., a Corporation. Filed Dec. 27, 1932. Serial No. 648,914. 5 Claims. (Cl. 266—38.)



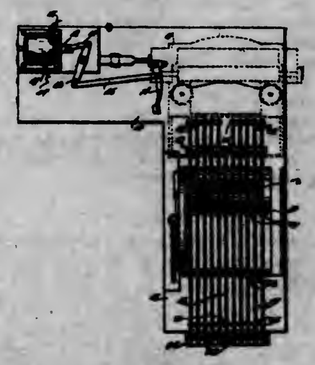
5. A furnace for melting metal, comprising a chamber rotatable about an inclined axis substantially coincident with the axis of the chamber, said chamber having a fuel receiving inlet in one end and a metal receiving inlet in its opposite end, means for supplying metal to the chamber through the latter inlet, means for rotating the chamber, a non-rotatable flue normally abutting the fuel receiving end of the chamber, means associated with the flue for conveying fuel into the chamber, and means for engaging and disengaging the flue in relation to the chamber.

1,904,782. REFRIGERATOR WATER COOLER. SAMUEL H. FLANNAGAN, Richmond, Va. Filed Dec. 29, 1931. Serial No. 583,761. 5 Claims. (Cl. 62—41.)



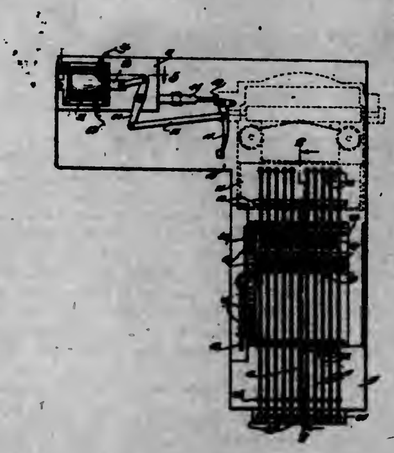
1. In combination with a household type refrigerator, a combined water storage and cooling receptacle placed within the main food compartment so as to interfere to a minimum with its normal use, comprising a tall, narrow, closed vertical tank constructed of good heat conductive material and having an inwardly sloping bottom pitched to substantially prevent the accumulation of sediment thereon, a sediment receptacle directly below the lowermost part of the tank and passage means therebetween, a water inlet to the tank, and a water outlet permitting the intermittent withdrawal of cooled water as desired, said tank permitting the cooling and quiescence of the water so as to precipitate out solids.

1,904,783. ELECTRIC AUTOMATIC RECORDING APPARATUS. JOHN G. GARRITY and EDWARD L. MCCARTHY, Pittsburgh, Pa. Filed Dec. 22, 1931. Serial No. 582,669. 8 Claims. (Cl. 234—1.5.)



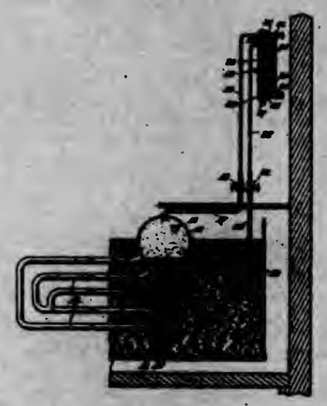
1. Apparatus to record car numbers by effecting actuation of a typewriter having keys, a spacer bar, a carriage and platen, and a platen shift lever, said apparatus including a series of electro-magnetic means arranged when energized to actuate respective keys of a typewriter, and means carried by a car and operable to successively close circuits through selected electro-magnetic means.

1,904,784. ELECTRIC AUTOMATIC RECORDING SCALE. JOHN G. GARRITY and EDWARD L. MCCARTHY, Pittsburgh, Pa. Filed Dec. 22, 1931. Serial No. 582,670. 16 Claims. (Cl. 234—5.4.)



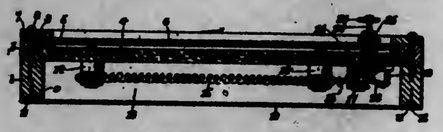
1. Apparatus to record car scale weights by a typewriter having number keys, a spacer bar, a carriage and platen roll, and means for actuating the latter, said apparatus including an electro-magnetic key actuating means for each number key, a series of circuit closing contacts each associated in circuit with a respective one of said electro-magnetic means, and means controlled by the weight on a scale for closing a circuit through a corresponding contact and its associated electro-magnetic means.

1,904,785. LIQUID LEVEL GAUGE FOR VOLATILE LIQUIDS. NORMAN H. GAY, Los Angeles, Calif. Filed Mar. 29, 1932. Serial No. 601,827. 8 Claims. (Cl. 73—54.)



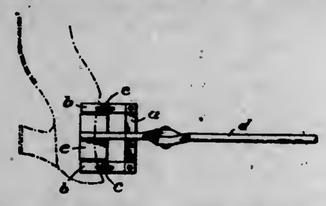
1. A liquid level indicator for a vessel containing a volatile liquid, comprising a U-tube containing an indicating liquid, a balancing conduit for connecting the top of one leg of the U-tube to the top of the vessel, and a pressure conduit for connecting the top of the other leg of the U-tube to the vessel at a point not higher than the minimum level to be indicated, said pressure conduit being exposed for at least a part of its length to a temperature above the vaporizing point of said volatile liquid.

1,904,786. HEATING DEVICE. LUTY HAWKINS, Mount Vernon, Ill. Filed Sept. 11, 1931. Serial No. 562,376. 1 Claim. (Cl. 219—34.)



A heating device comprising, a pair of superposed horizontal frames, the upper of said frames having its lower and inner peripheral faces formed with a recess, a heat insulating plate having marginal portions disposed within said recess, said upper frame having its upper and inner peripheral faces formed with a recess, a cover having marginal portions disposed within the recess in the upper and inner peripheral faces of the upper frame, a retaining frame secured to said upper frame for maintaining said cover in position, a flexible bottom member secured to the lower face of the lower of said frames, and electrical heating means disposed between said plate and bottom member.

1,904,787. DEVICE FOR SHRINKING LEATHER. JOSEF HITZLER, Frankfort-on-the-Main, and FRIEDRICH CARL JULIUS MERZ, Frankfort-on-the-Main-Rudelheim, Germany. Filed Nov. 4, 1930, Serial No. 493,876, and in Germany Nov. 6, 1929. 1 Claim. (Cl. 12—142.)



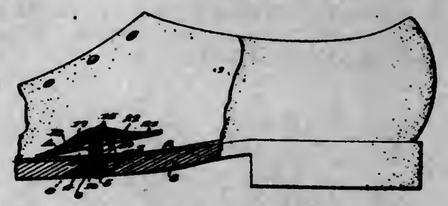
A method of shrinking or contracting leather and especially of reshaping the widened upper leather of shoes and the like, comprising the steps of clamping the piece of leather to be contracted in wrinkled state and applying heat and pressure to said clamped piece in order to bring forth the shrinkage of the same.

1,904,788. DISPLAY OF CUT FLOWERS. JESSE H. HOLMES, Bound Brook, N. J., assignor to Thomas Young Nurseries, Inc., Bound Brook, N. J., a Corporation of New Jersey. Filed June 8, 1932. Serial No. 616,131. 10 Claims. (Cl. 47—41.)



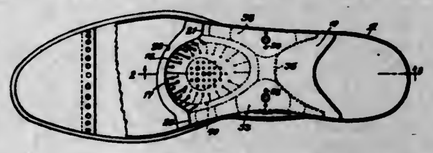
1. A composite flower plant display comprising at least a portion of a growing plant of the type having main stems or pseudo-bulbs, and a flower emerging from a sheath-like jointure with said stem or pseudo-bulb, an artificial sheath in the simulation of said sheath-like structure, and attached to said main stem adjacent the jointure, and a cut flower having its stem inserted in said artificial sheath.

1,904,789. ADJUSTABLE ARCH SUPPORT. JOSEPH C. HOWELL, Fort Lee, N. J. Filed Oct. 26, 1931. Serial No. 571,236. 8 Claims. (Cl. 36—71.)



1. The combination with a shoe or similar article, of an arch support comprising a pair of spaced-apart plates, means for securing said spaced-apart plates to the sole of the shoe, a screw extending through one of said plates, and a disk of ovate shape having a threaded cylindrical portion arranged to be engaged by the threads of the screw for moving the disk relatively to said plates.

1,904,790. ARCH SUPPORT FOR SHOES. JOSEPH C. HOWELL, Fort Lee, N. J. Filed June 24, 1932. Serial No. 619,142. 11 Claims. (Cl. 36—71.)

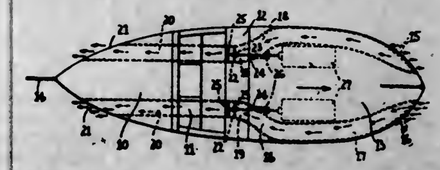


1. The combination of a shoe and a plate for supporting the arch of the wearer, spring leaf plates arranged on the insole of the shoe, and means secured to the arch plate and connected to the spring leaf plates supporting said arch plate in spaced relation above the said spring leaf plates.

1,904,791. PROCESS FOR MAKING SULPHONATED PRODUCTS. HANS KANTOROWICZ, Berlin-Wilmersdorf, and ARNOLD KÖHLER, Spandau near Berlin, Germany, assignors to Fettsaure- und Glycerin-Fabrik G. m. b. H., Mannheim, Germany. Filed Apr. 9, 1932, Serial No. 604,350, and in Germany Apr. 14, 1931. 4 Claims. (Cl. 87—12.)

1. A process for making sulphonated commercial oleic acids or oliens consisting in sulphonating commercial oleic acids or oleins which have been destearinised with a sulphonating agent at low temperature.

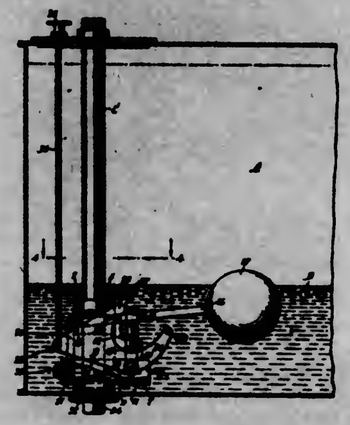
1,904,792. BOAT PROPELLING SYSTEM. JOHANNES KESSLER, Long Island City, N. Y. Filed Aug. 31, 1932. Serial No. 631,213. 3 Claims. (Cl. 115—16.)



1. A boat having tubes extending longitudinally throughout the lengths of its hull in spaced relation and below the water line, a screen at the bow entrance to said tubes,

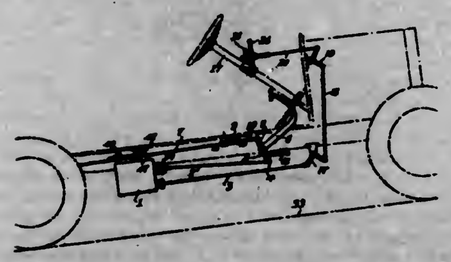
propellers rotatably mounted substantially centrally in the length of said tubes, and independent motors coupled to each propeller, said motors being inset from the forward portions of said tubes.

1,904,793. OUTLET CONTROL FOR LIQUID CONTAINERS. LOUIS LAVOIE, Quebec, Quebec, Canada. Filed Apr. 2, 1932. Serial No. 602,801. 9 Claims. (Cl. 158—46.5.)



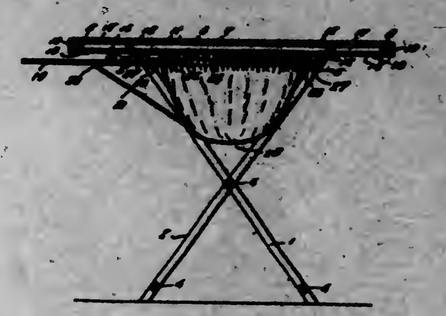
1. The combination with a liquid container having an outlet adjacent its bottom, of a device for controlling said outlet, including a valve normally closed by the buoyancy of the liquid to reserve a portion of the contents at a predetermined emergency level in the container, manually operable means for opening said valve to render said reserved liquid available, means operable by the buoyancy of the liquid to initially lock the valve open, to subsequently gravitationally release the lock and to retain the valve open gravitationally.

1,904,794. PERMANENT AND TEMPORARY BRAKE LOCK. HENRY LIVA, Scranton, Pa., assignor of one-half to Angelo Sebastianelli, Scranton, Pa. Filed Oct. 28, 1931. Serial No. 571,629. 16 Claims. (Cl. 188—265.)



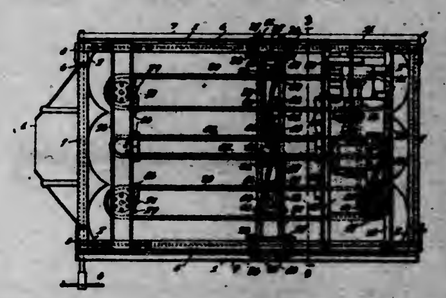
1. The combination of an automobile provided with a brake mechanism having a brake pedal, of a rod connected with said pedal and adapted to be moved longitudinally in one direction when the brake pedal has been moved to braking position, a mechanism associated with said rod for permitting a slow return of said rod and thereby a slow releasing of said braking mechanism, and hand operated means for setting the first mentioned means into functioning position, said hand operated means including a plurality of rods and levers extending to near the steering column of said automobile, a hand member for reciprocating said rod and means detecting with the hand member for locking the hand member in an operative position.

1,904,795. COMBINATION TABLE. ERNEST L. MCFARLAND, Strasburg, Va. Filed July 21, 1931. Serial No. 554,812. 2 Claims. (Cl. 46—21.)



1. A table comprising pairs of pivotally connected, crossed supporting legs, rods extending between the upper ends of each pair of legs, a top, a frame secured to the marginal portions of the lower side of the top and including end members and side members, spaced, parallel bars secured to the lower side of the top and extending between the end members of the frame, oppositely disposed hooks secured to the longitudinal bars and engageable with the rods for limiting the swinging movement of the legs in one direction relative to each other and for removably mounting the top in position on said legs.

1,904,796. AGITATING APPARATUS. EARL DANIEL MCCADDAM, San Francisco, Calif. Filed Aug. 13, 1931. Serial No. 556,653. 8 Claims. (Cl. 33—73.)

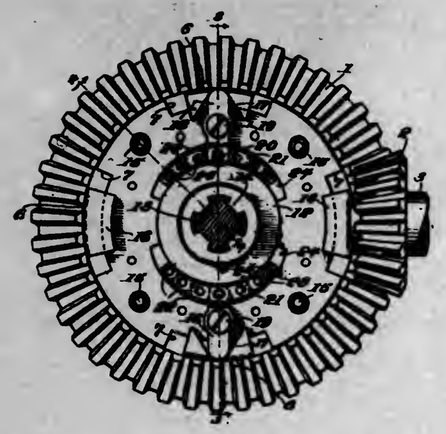


1. In apparatus of the class described, a rectangular receptacle body, a frame mounted over said body and including a pair of longitudinal tracks located adjacent the sides of said body, a trolley running on each track, spaced cross bars connecting said trolleys to move in unison and constituting therewith a trolley car, endless chains taking over sprockets and extending one adjacent each side of said body parallel thereto, a slide mounted on said cross bars for movement transversely of said body, driving connections between said chains and said slide, means to drive said chains for moving said slide, said cross bars and said trolleys back and forth in the length of said body, and agitators carried by said slide.

1,904,797. AUTOMOBILE DIFFERENTIAL. CHARLES N. MCMANUS, Mitchell, S. Dak. Filed Apr. 28, 1932. Serial No. 607,621. 3 Claims. (Cl. 74—7.)

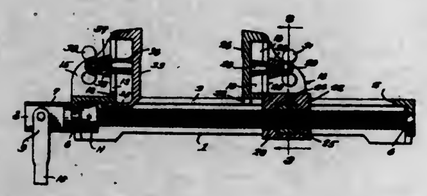
1. A differential comprising a mounting having grooves, bars mounted in said grooves for limited circumferential movement relative to the mounting, a ring gear secured to said bars, bearings journalled in said mounting, double acting overrunning clutches between said bearings and the

mounting, pivotally mounted levers between the clutches and the bars for rendering the clutches operative and inoperative by the movement of the ring gear relative to



the mounting and to permit the bearings to rotate free of the mounting when the power on said bearings exceeds the power on the mounting.

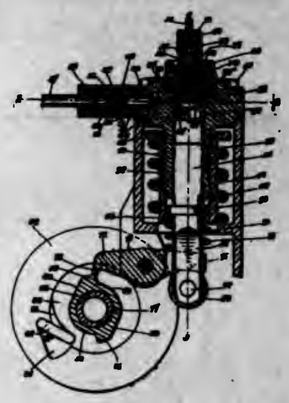
1,904,798. VISE. JOSEPH SAMUELS NURNBERGER, St. Albans, W. Va. Filed Jan. 11, 1932. Serial No. 585,987. 2 Claims. (Cl. 81—33.)



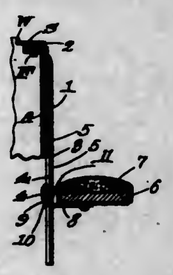
1. A vise including a slotted base, a feed screw therein, fixed and movable jaws on the base, an operative connection between the screw and movable jaw, a rib on one face of each jaw, supplemental jaws bearing against and adapted to receive the ribs, said ribs constituting means for holding the supplemental jaws against lateral displacement, and means carried by the supplemental jaws for clamping them to the main jaws.

1,904,799. PUMP MECHANISM. HARRY A. PALMER, Boston, Mass., assignor to Palmer Inventions, Incorporated, a Corporation of Massachusetts. Filed Apr. 29, 1932. Serial No. 608,330. 2 Claims. (Cl. 103—154.)

1. In a fuel pumping mechanism for internal combustion engines, a tubular structure having a part thereof of uniform inner diameter to provde a chamber for a fuel intake and expelling plunger, said chamber being open at its inner end, a normally closed valve controlled fuel outlet structure secured to the tubular structure and having a reduced portion extending into the outer portion and abutting the inner face of said part to provide a normally closed apertured outer wall for said chamber, said tubular structure including a valve controlled fuel intake normally closed to a source of fuel supply, said intake arranged inwardly of and in very close proximity to said wall, disposed at right angles to the latter and opening into said chamber at the extreme outer end of the latter, and an intermittently operable, spring controlled, reciprocatory fuel intake and expelling plunger operating in said chamber and constituting means for simultaneously closing said intake and apertured wall to said chamber at the end of its expelling stroke and for opening said intake and apertured wall on its intake stroke.



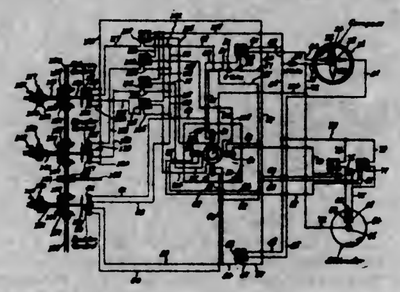
1,904,800. ARMREST. GEORGE RAYMOND PITTMAN, Wichita, Kans. Filed July 18, 1931. Serial No. 551,775. 1 Claim. (Cl. 155—198.)



The combination with a hanger having spaced apertures, of a rest, a wing connected thereto, there being a hanger receiving opening between the rest and wing, means operated by the downward movement of the rest away from the hanger for pivotally connecting the wing to the hanger, said means including a stud on the wing and overhanging the opening for insertion into one of the apertures in the hanger, and a longitudinal stiffening rib pressed from the hanger and providing a guide groove for the stud, said apertures opening into the groove.

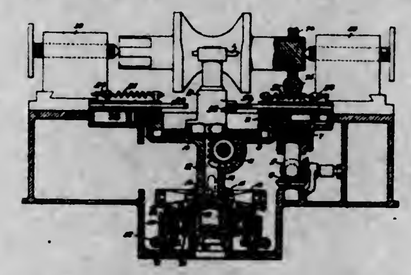
1,904,801. AUTOMATIC AIRPLANE AND DIRIGIBLE CONTROL APPARATUS. NICOLA CONSOLATO PLUTINO, Welland, Ontario, Canada. Filed July 26, 1932. Serial No. 624,797. 17 Claims. (Cl. 244—29.)

1. An automatic control apparatus for an airplane and the like, comprising separate controls for the airplane, electrical devices for the controls, electrical circuits for the devices, a plumb control relay in said circuits to close the same and operate the devices by deviation of the relay out of its normal axis, a compass, an altimeter, and



electrical circuits between the plumb contact relay and the compass and altimeter to operate the relay independently of its operation by deviation from its normal axis.

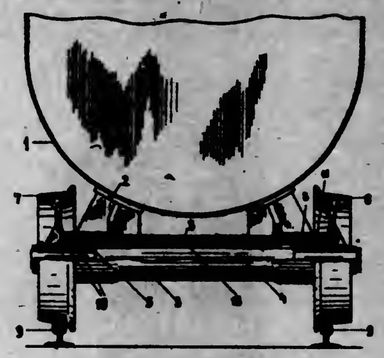
1,904,802. APPARATUS FOR MACHINING ROLLS FOR ROLLING MILLS AND THE LIKE. HANS SCHIMMEL, Komotau, Czechoslovakia. Filed Dec. 5, 1931, Serial No. 579,277, and in Germany Dec. 24, 1930. 26 Claims. (Cl. 82—18.)



1. In an apparatus for machining circumferential portions of rolls of the type described, the combination of means for upporting at least one roll to be machined, a tool holder rotatable about an axis disposed transversely to the axis of a roll sp supported, a tool in said holder and which continuously carries out a working movement, mechanism for moving said tool holder positively in an outward radial direction relatively to the axis of rotation thereof as the same rotates and at least one cam operable to move said tool holder in an inward radial direction relatively to said axis for the purpose described.

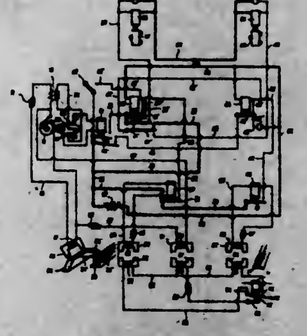
26. In an apparatus for machining the circumferential portions of rolls of the type described the combination of two pairs of headstocks each arranged to support a roll to be machined with the axes of the said rolls disposed parallel to one another, feed mechanism operatively connected to said headstocks and adapted to move each pair of head-stocks towards and away from the other pair in a direction transverse to the axis of a roll supported thereby, a tool holder disposed between a pair of rolls supported by said head-stocks, means for rotating said tool holder about an axis disposed transversely to the plane extending through the axes of said rolls, means operable to move said tool holder positively in an outward radial direction with respect to the axis of rotation thereof as the same rotates and at least a pair of cams operable to move said tool holder in an inward radial direction relatively to said axis as the tool holder rotates for the purpose described.

1,904,803. AUTOMATIC LUBRICATING DEVICE. FRANZ SCHMIED, Teplitz-Schoenau, Czechoslovakia. Filed Mar. 18, 1932, Serial No. 599,774, and in Czechoslovakia June 11, 1931. 8 Claims. (Cl. 184—2.)



1. In a wheeled vehicle the combination with an axle, and wheel bearings carried by said axle, of a casing located around said axle and between said bearings and constituting a lubricant container, and a weight member in said container adapted to force lubricant from said container to the wheel bearings under the action of gravity when the axle is inclined.

1,904,804. AUTOMATIC TRAIN CONTROL. DANIEL HERBERT SCHWEYER, Easton, Pa. Original application filed Mar. 27, 1922, Serial No. 547,067. Divided and this application filed Mar. 13, 1928. Serial No. 261,275. 10 Claims. (Cl. 246—63.)

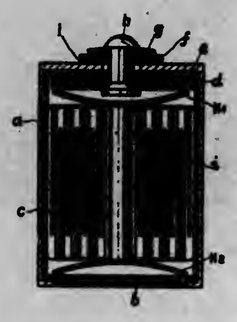


1. In automatic train control apparatus, vehicle-carried alternating current inductive means controlled from the trackside and including a generator for energizing said means, a direct current control element, and an electrical connection between said means and element including a transformer and a full wave mechanical rectifier driven with the generator in order that said element be conductive in response to variations in the energization of the first-named means.

1,904,805. ELECTRICAL LEAD-IN. OTTO SELLING, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Feb. 7, 1930, Serial No. 426,126, and in Germany Feb. 27, 1929. 7 Claims. (Cl. 175—41.)

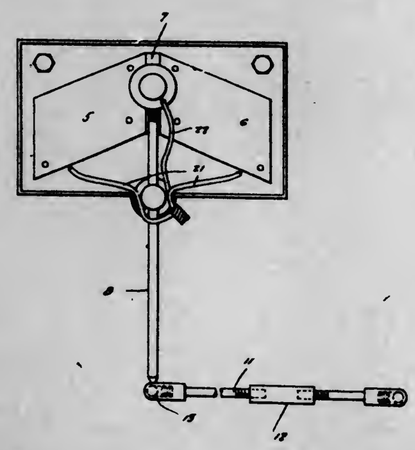
1. An electrical lead-in adapted to exclude moisture from a supporting casing comprising in combination a perforated wall, an electrical conductor having a head

formed on at least one end thereof and extending through said perforation in said wall, a washer of insulating material on one side of said wall, a washer of conducting material adapted to be positioned against the outer face of said insulating washer, a second washer of insulating material on the opposite side of said wall, one of said insulating washers comprising a thin sheet of semi-plastic material,



and metallic resilient means interposed between said second insulating washer and the head of said electrical conductor for maintaining a substantially constant pressure on said insulating washers regardless of the contraction or expansion of the lead-in unit due to temperature variations whereby a moisture tight seal is obtained between the conductor and the wall.

1,904,806. AUTOMATIC DIRECTION SIGNAL SWITCH. ALVA THOMPSON, Los Angeles, Calif. Filed Dec. 18, 1931. Serial No. 581,971. 1 Claim. (Cl. 200—11.)



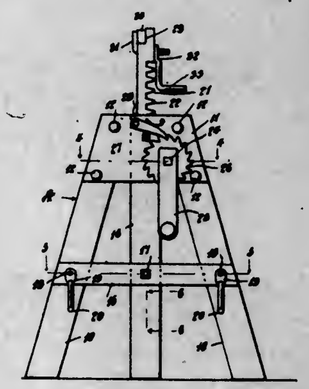
A switch of the class described comprising a casing, a block of non-conductive material located in the casing and having a raised central portion having parallel sides, a pair of contact plates fastened to the block having their adjacent ends contacting the sides of the raised part of the block, said contact plates diverging from the raised part of the block, an arm pivoted intermediate its ends to the casing and having a part extending into the casing and a brush carried by said part of the arm for engaging the contact plates when the arm is moved to either side of its neutral position, said brush engaging the raised part of the block when the arm is in neutral position.

1,904,807. SAFETY ATTACHMENT FOR MOVING PICTURE APPARATUS. ANTON SZELIGA, New York, N. Y., assignor of one-half to Frederick Tichy, New York, N. Y. Filed Apr. 28, 1931. Serial No. 532,333. 7 Claims. (Cl. 88—17.)



4. In a film cutting device, the combination of a slotted base plate, means for feeding a film through said slot, a cutter reciprocally mounted upon said base plate, a lever pivotally mounted upon said cutter, a spring having one end secured to said base plate and the other end secured to one arm of said lever, a hook on the other arm of said lever, means for retracting said cutter against the action of said spring, a trigger adapted to engage said hook to maintain said lever in position to retain said cutter in a retracted position, electric means for actuating said trigger, and thermostatic means for controlling said electric means.

1,904,808. ADJUSTABLE FOLDING SCAFFOLD. CONSTANT VANHORN, Sentinel Butte, N. Dak. Filed Apr. 27, 1932. Serial No. 607,823. 5 Claims. (Cl. 304—7.)

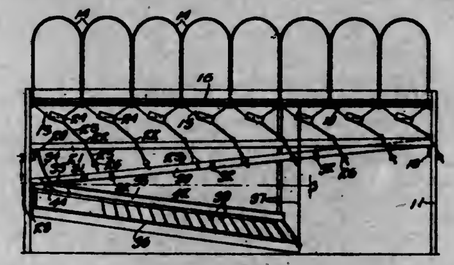


1. A device of the class described comprising angularly disposed legs, a breast plate connecting the legs, a vertical leg between the first mentioned legs, a cross bar connecting all of the said legs, said vertical leg being of channel form, a lifting bar slidable in the channel of the last mentioned leg and provided with rack teeth, a pinion in mesh with the rack teeth, a shaft journaled on the breast plate mounting said pinion, a ratchet wheel on said shaft, and a pawl coacting with said ratchet wheel.

1,904,809. FOWL NEST. HENRY H. WAGNER and CHARLES L. WAGNER, Pickering, Mo., assignors of one-third to Omer Wray, Pickering, Mo. Filed Apr. 19, 1932. Serial No. 606,166. 3 Claims. (Cl. 119—43.)

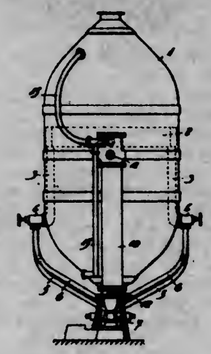
1. In a device of the kind described comprising a nest and an inclined chute, an egg storage cabinet having an upper portion forming a passageway, a lower portion and a series of pivoted flaps separating said passageway from the lower portion of said cabinet, said lower portion being

provided with transverse means dividing said portion into a plurality of compartments, said cabinet sloping longitudinally and laterally to cause an egg to roll longi-



tudinally in said passageway into the lowermost empty compartment, then laterally in said compartment, substantially as set forth.

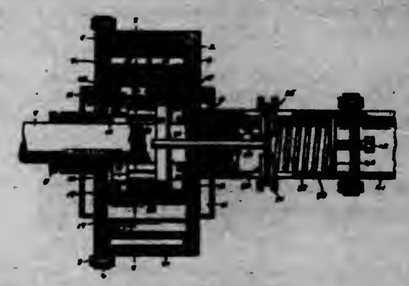
1,904,810. ARRANGEMENT IN DIGESTERS ADAPTED FOR MANUFACTURING CELLULOSE AND WORKING WITH CIRCULATION EFFECTED BY A CENTRIFUGAL PUMP. OSCAR ALBANUS WIRÉN, Stockholm, Sweden. Filed May 7, 1932, Serial No. 609,916, and in Sweden July 26, 1930. 2 Claims. (Cl. 92—7.)



1. Improvement in circulating systems for cellulose digesters wherein the reaction liquid by means of a pump aggregate is forced to circulate through the digester and an outside pipe system, consisting in the arrangement of a plurality of suction pipes conveying reaction liquid from the digester to an intake of a pump; a multiple-branch unit provided with a plurality of inlet branches and a common outlet uniting said suction pipes with said intake; the inlet channels of said multiple-branch unit being at the plane of junction parallel with each other and with the outlet channel, and adjacent channels separated by means of edged partitions; said channels being so formed that cross-sections taken immediately before and immediately after said plane of junction will enclose areas with coincident interior outlines, so that the inlet channels will smoothly merge without any projections and obstructions into the outlet channel.

1,904,811. HYDRAULIC TRANSMISSION MECHANISM. GEORGE EUGENE ZAHN, Freedom, Pa. Filed Dec. 27, 1930. Serial No. 505,153. 3 Claims. (Cl. 192—58.)

1. A fluid transmission including a fluid casing forming a part of a driven device and a power shaft extending into the casing concentrically thereof, said casing having an eccentrically located chamber in which the shaft is eccentrically located, a rotary element engaging the wall of said chamber, a drive element secured to the shaft, wings pivoted to the drive element to successively engage the rotary element during the rotation of the drive element, and a fluid control means to trap fluid between the walls of the



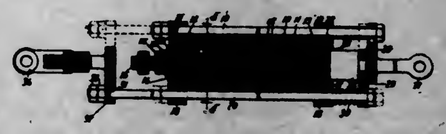
chamber and certain of a pair of wings to build up desired pressures for rotating the casing from the shaft through the rotary element.

1,904,812. CEMENTING MACHINE. GEORGE G. ALBERT, New York, N. Y. Filed Mar. 16, 1931. Serial No. 523,132. 2 Claims. (Cl. 154—35.)



1. A machine for assembling the plies of laminated boards including a toothed roller for feeding one ply of the board and forming indentations in one surface thereof, a container having an outlet for adhesive, means for transferring adhesive from the outlet of the container to coat the said ply and fill the indentations, means on the container for movably supporting a second ply and maintaining the container normally in a predetermined position, and means for guiding said second ply onto and pressing it upon the coated and indented surface of the other ply.

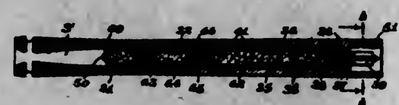
1,904,813. ELECTRIC CONTROLLER. VINCENT G. APPLE, Dayton, Ohio, assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed June 13, 1928. Serial No. 285,091. 4 Claims. (Cl. 201—51.)



4. A controller adapted to be included in an electric circuit to vary the resistance thereof, said controller comprising, in combination, a relatively long insulation lined container, a plurality of discs of relatively good conductive material but of high contact resistance inclosed therein and forming a part of the electric circuit, a binding post associated with the disc at one end of said container, a contact plug adapted to be brought into contact with the disc at the opposite end thereof to complete the circuit, yieldable means normally retaining said plug out of contact, supporting means for said binding post rigidly associated with said container and including a tension link projecting beyond the end thereof opposite said binding post and a cooperating slidable tension link secured to said plug and

extending beyond the end of said container opposite thereto, whereby mechanical tensioning of said links brings said contact plug into contact with said disc and places the same under compression in proportion to the tension created to decrease the resistance in said circuit.

1,904,814. CIGAR AND CIGARETTE HOLDER. ABRAHAM ANNELEWITZ, Far Rockaway, N. Y. Filed July 11, 1931. Serial No. 550,257. 2 Claims. (Cl. 131—10.)

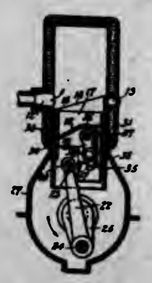


1. A cigar and cigarette holder including a mouthpiece, a body, said mouthpiece and body having bores extending entirely therethrough longitudinally, said body having a cigar receiving socket, a foraminous container arranged in said body, a container open at both ends positioned in said mouthpiece and extending into the other container, and a piercing member carried by said foraminous container positioned to extend into said socket.

1,904,815. PROCESS FOR PRINTING ACETATE SILK OR MATERIALS CONTAINING AN ORGANIC CELLULOSE ETHER OR ESTER. OSCAR BALLY, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 30, 1929, Serial No. 396,407, and in Switzerland Oct. 12, 1928. 6 Claims. (Cl. 8—5.)

1. A process of printing the group of textile materials consisting of colloids of the cellulose series of the group of the organic esters and ethers of cellulose, which consists in printing the material with such sulfonic acids of a-aminoanthraquinones which contain aromatically bound sulfo groups, and then steaming the material.

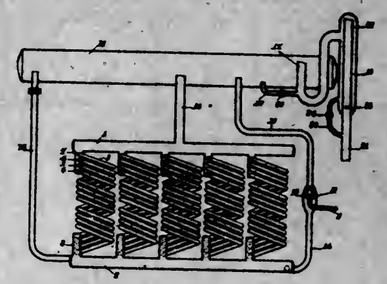
1,904,816. INTERNAL COMBUSTION ENGINE. GEORGE P. BEAUDRY, Montreal, Quebec, Canada. Filed Feb. 14, 1930. Serial No. 428,478. 2 Claims. (Cl. 123—47.)



1. In an internal combustion engine, the combination of a cylinder, a tubular element arranged within said cylinder and slidable on the wall thereof, a piston slidable in said element, axially alined bearings on said element, a piston rod having axially alined stub shafts on the upper end thereof received in said bearings respectively, said piston having its lower end cut away to allow the lower edge of the piston to fall below said bearings.

1,904,817. REFRIGERATING PLANT. RAOUL BERNAT and HENRI BERNAT, Bordeaux, France. Filed July 9, 1931, Serial No. 549,746, and in France July 16, 1930. 4 Claims. (Cl. 62—126.)

1. A refrigerating apparatus comprising an upper receptacle, a lower receptacle, refrigerating tubes extending between said receptacles and connecting the same, means for leading a refrigerating liquid from the lower receptacle to the upper receptacle, an exit conduit leading from the



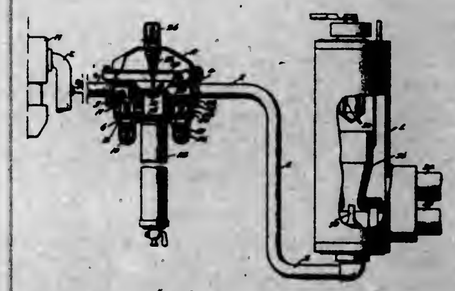
upper portion of the upper receptacle and another conduit leading from the lower part of said receptacle to said exit conduit.

1,904,818. CLEANING APPARATUS. MARION H. BISSELL, Chicago, Ill. Filed Apr. 20, 1929. Serial No. 356,854. 2 Claims. (Cl. 15—230.)



1. A device of the character described comprising a member including a plate and a rim around and upstanding from the plate, a member adapted to be disposed within the rim, means for retaining said second-named member on said first-named member, a resilient split ring disposed within the rim between the rim and the second-named member, a cleaning member including a portion extended across one side of said second-named member and including a portion disposed between the ring and the second-named member, means for contracting the ring to bind the said second-named portion of the cleaning member against the second-named member and means to rotate said device.

1,904,819. PRESSURE AND FLOW CONTROL DEVICE FOR COMBUSTION INDICATORS. GEORGE R. BLODGETT, Toledo, Ohio, assignor to Moto Meter Gauge & Equipment Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,667. 12 Claims. (Cl. 23—255.)



7. Means for supplying gas to a combustion indicator comprising a connection to a source of a pulsating supply of gas for said indicator, a container supplied from said connection and pressure regulating means controlling the supply from said container to the indicator.

1,904,820. AZO DYE. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, a Corporation of Great Britain. Filed June 30, 1930, Serial No. 465,064, and in Great Britain July 3, 1929. 3 Claims. (Cl. 260—77.)

3. A dyestuff having the general formula

$$R-N=N-C_6H_4.CO.NH.C_6H_4-N=N-R'$$

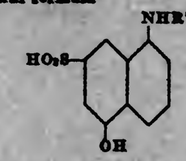
in which R represents an organic residue of a 2:8-, 1:8-, or 1:5-amino-naphthol-sulfonic acid or an N-substituted or a benzene azo derivative thereof and R' represents the residue of a coupling component selected from the group consisting of an aromatic compound of the benzene series and a compound of the naphthalene series consisting of the naphthols and their sulfonic acids, the naphthylamines and their sulfonic acids, the 2:8-, 1:8-, 1:5-amino-naphthol-sulfonic acids and their N-substituted derivatives.

1,904,821. DISAZO DYESTUFFS AND METHOD OF PREPARING SAME. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Aug. 6, 1930, Serial No. 473,512, and in Great Britain Aug. 16, 1929. 8 Claims. (Cl. 260—78.)

8. A disazo dyestuff obtainable by coupling tetrazotised m:m' tolidine with one molecular proportion of a compound of the group consisting of salicylic acid and a methyl-2-naphthyl-amine-7-sulphonic acid and with one molecular proportion of a naphthalene compound of the group consisting of 2-naphthol, 2-naphthol-sulphonic acids, and 2-naphthyl amine-6-sulphonic acids.

1,904,822. AZO DYESTUFFS AND METHOD OF PREPARING SAME. RAINALD BRIGHTMAN, Manchester, England, assignor to Imperial Chemical Industries Limited, Westminster, England. Filed Aug. 7, 1930, Serial No. 473,764, and in Great Britain Aug. 26, 1929. 7 Claims. (Cl. 260—83.)

7. A disazo dyestuff prepared by coupling the product of diazotisation of a p-aminoazo compound of the benzene and naphthalene series with an amino-naphthol-sulphonic acid of the general formula



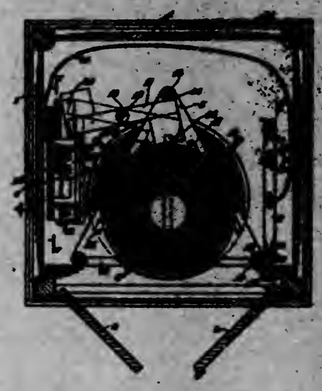
in which R'' represents hydrogen or a radical of the benzene series.

1,904,823. AUTOMATIC TIRE GAUGE. JOHN D. BURKHOLDER, Harrisonburg, Va., assignor to Automatic Devices, Inc., Harrisonburg, Va., a Corporation of Virginia. Filed Mar. 10, 1930. Serial No. 434,785. 7 Claims. (Cl. 73—110.)



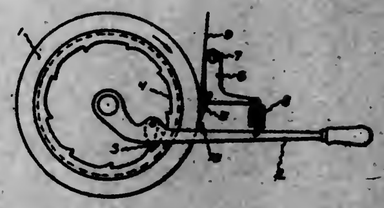
2. A tire gauge including a tube stem, means within the tube stem for frictionless indicating of the pressure of the tire, a disk formed with a central opening, a diaphragm open to the pressure within the tube stem and affected by said pressure through the opening in the disk to thereby engage and operate said pressure indicating means, said disk determining the indicating range of the gauge by the thickness and diameter of the central opening in said disk.

1,904,824. CABINET FOR KEEPING SOUND RECORDS. NICOLAS CROUSEL, Buenos Aires, Argentina. Filed Jan. 5, 1931. Serial No. 506,004. 7 Claims. (Cl. 312—45.)



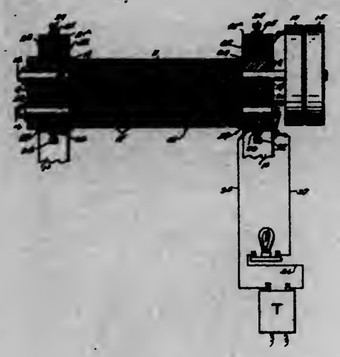
1. An improved cabinet for keeping sound records, comprising a series of individual compartments for holding the records; a record expeller for each compartment which operates to expel the record; an operating button; a mechanism operated by said button to operate any one of the expellers; means controlled by the button for actuating the mechanism; an indicating panel for registering thereon, line by line, the titles or headings of the records contained in the compartments, said panel being adapted to slide adjacent to a fixed index; said mechanism being movable with the panel so that the mechanism will be stopped opposite to the expeller corresponding to the compartment whose record is registered on the line of the indicator situated at the index.

1,904,825. METHOD AND APPARATUS FOR EDGE ROLLING OF CREPE PAPER. CARL ALLAN FREDRIK, Malmo, Sweden. Filed Jan. 7, 1931, Serial No. 507,949, and in Sweden Sept. 24, 1930. 25 Claims. (Cl. 93—1.)



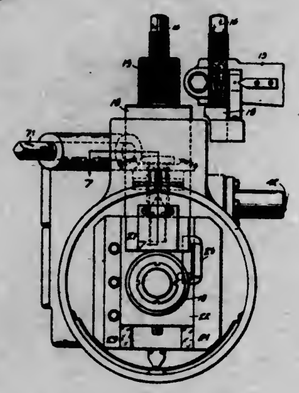
1. A method for edge rolling crepe paper, comprising pressing the paper edge against a resilient pad surface, simultaneously moving such pad surface transversely in relation to a working blade the edge of which is positioned at an acute angle to said surface, and feeding the paper edge in between said working blade and pad surface, due to friction against the latter.

1,904,826. MEANS FOR DETECTING METALLIC OBJECTS IN HIDES AND SKINS. ANTHONY PHILIP GIULIANO, Newark, N. J. Filed May 22, 1930. Serial No. 454,758. 2 Claims. (Cl. 149—14.)



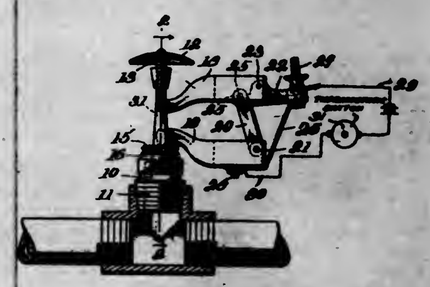
1. Means for detecting the presence of metallic objects in hides including two parallel metallic rollers connected in a normally open signal circuit and spaced from each other to permit the passage of the hide between them, one of said rollers being longitudinally fluted, the other roller having reversely pitched spiral threads extending in opposite directions from the middle of the roller whereby to cause the hide to be laterally stretched as it passes between the rollers and cause the emergence of the object through the faces of the hide and permit the object to come in contact with the upper and lower rollers.

1,904,827. MECHANISM FOR PRODUCING CURVED AXIAL SURFACE ON ROLLS. HARPER A. GOOD, Waynesboro, Pa., assignor to Landis Tool Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed May 29, 1931. Serial No. 541,069. 10 Claims. (Cl. 51—49.)



1. A roll grinding machine comprising a bed, a wheel carriage traversable upon the bed, a wheel base tiltably mounted upon the carriage and carrying a grinding wheel mounted approximately above the pivot point, a crank carrying an eccentric pin positioned adjacent the under side of the rear of the wheel base, a block positioned against said pin and the said underside of the wheel base and guided for straight line movement, and means for operating the said crank in proper timed relation with the traverse of the carriage to impart straight line movement to said block to move the said grinding wheel toward and from the said work to grind a crown or concave surface on the work said movement being in accordance with simple harmonic motion to produce approximately a mathematical sine curve on the work, substantially as set forth.

1,904,828. THERMOELECTRIC SPRINKLER HEAD. CHARLES E. GREEN, Pawtucket, R. I., assignor to Pawtucket Screw Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Jan. 28, 1930. Serial No. 424,032. 10 Claims. (Cl. 169—89.)

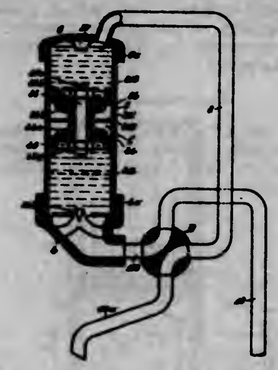


1. The combination with a sprinkler head having a flow controlling valve, of a toggle device for holding the valve on its seat, including means for placing stress upon said toggle device when in operative position, thereby to retain same in valve holding position, means in said sprinkler head cooperative with said first means for placing stress upon said device, and means to retain said device under stress, said last means being operable under the action of heat to release the device from such stress, said first means including an insulating member, thermally responsive means, and electroconductive means connecting said thermally responsive means through said insulating member to said stress retaining means.

7. A thermo-electric sprinkler head, comprising a flow controlling valve, a toggle device for seating said valve, means for placing said device under stress, said toggle device consisting of toggle levers, a rocker hinge forming a fulcrum between the ends of said levers, and a pair of toggle links pivoted respectively to said levers and engageable with each other to restrain said levers from movement, one of said links being pivoted adjacent an end, to its lever and having its other end extending from the lever and thermally controlled means connecting said extended end to the other lever thereby to retain said links in engagement, and effective under the action of heat to permit a dis-engagement of said links.

1,904,829. LIQUID DELIVERY AND MEASURING DEVICE. ERNST HURLBRINK, Berlin-Westend, Germany, assignor to the Firm Fabrik Explosionssicherer Gefässe Solskotten G. m. b. H., Salskottem I. W., Germany. Filed Feb. 27, 1931, Serial No. 518,807, and in Germany Jan. 14, 1930. 8 Claims. (Cl. 221—96.)

1. A device for dispensing and measuring of liquids, especially of lubricating oil, comprising: a measuring cylinder of a transparent material, a liquid supply duct, a liquid dispensing duct, a piston adapted to reciprocate in said measuring cylinder and to subdivide the said measuring cylinder into two measuring chambers, reversing means adapted alternately to connect the one or the other of said measuring chambers with the liquid supply duct or with the liquid dispensing duct respectively, said piston formed of two piston-parts spaced apart from each other with an intervening space between them, linear marks provided on the side wall of said measuring cylinder, and a flat disc secured to said piston between said piston-parts, the peripheric edge of said disc being closely

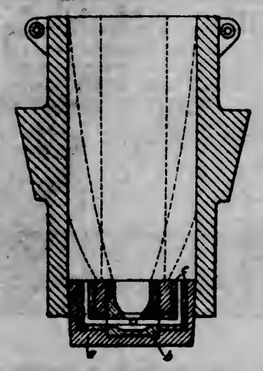


adjacent to the inner face of said measuring cylinder and forming a ring mark being in alignment with said linear marks in each of the end positions of said piston.

1,904,830. PROCESS FOR THE PRODUCTION OF MOTOR DRIVING SPIRITS. HANS KAPPER, Duisburg-Meiderich, Germany. Filed Mar. 27, 1930, Serial No. 439,537, and in Germany Oct. 29, 1926. 1 Claim. (Cl. 196—52.)

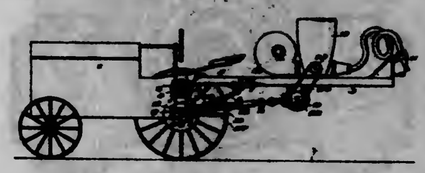
Process for the production of motor spirit consisting in mixing in an autoclave 500 kg. of a crude benzine obtained by the low temperature coking of long flaming gas coal with 100 kg. of finely divided active carbon, in heating said mixture in an autoclave for 3 hours at about 350° C. in an atmosphere of hydrogen at a pressure of 110 atmospheres, and in steam blowing the contents of the autoclave.

1,904,831. APPARATUS FOR CASTING HOLLOW BODIES IN CHILL MOLDS ROTATABLE ABOUT VERTICAL AXES. ALBERT KRUP, Gelsenkirchen, Germany. Filed July 17, 1931, Serial No. 551,497, and in Germany Dec. 10, 1930. 2 Claims. (Cl. 22—65.)



1. A casting mold for casting hollow bodies by vertical centrifugal casting comprising a replaceable bottom having a recessed central block provided with a plurality of channels leading from said recess and a plurality of channel blocks arranged about said central block and having passageways therein communicating with the channels of said central block to conduct metal from the recess of said central block into the mold.

1,904,832. TRACTOR POWER COUPLING MECHANISM. EDGAR KNAPP and CARL G. ALLENDORF, Rittenhouse, N. Y.; George F. Thompson executor of said Edgar Knapp, deceased. Original application filed Dec. 2, 1927, Serial No. 237,208. Divided and this application filed Sept. 27, 1930. Serial No. 484,969. 1 Claim. (Cl. 180—53.)



An apparatus for treating growing plants, comprising an automotive tractor having a power take-off shaft adjacent the center of its rear axle, means enclosing the rear axle, a brace having portions secured to the enclosing means on each side of the power take-off shaft and at points below the plane of the power take-off, said brace being tilted upwardly from the horizontal, a platform having a portion of its frame extended forwardly over the brace and being provided with means at the extremity of said extended portion for securing it to said tractor, means on the bottom of said frame secured to the upwardly tilted brace, whereby the latter is constituted a cantilever support for said platform, a driven device mounted on the platform, and self adjusting means for transmitting power from the tractor motor to the driven device.

1,904,833. MANUFACTURE OF A COAL SUBSTITUTE. JOHN IVO MARRE, Paris, France, assignor to the Firm Carbonäx, Société à Responsabilité Limitée, Paris, France. Filed Oct. 27, 1930, Serial No. 491,636, and in Belgium Nov. 8, 1929. 3 Claims. (Cl. 44—1.)

3. As a new product a coal substitute practically free of ash consisting of carbonized lignin substantially free of acid and alkali soluble materials.

1,904,834. PROCESS FOR ELECTRICALLY WELDING METAL TUBING. HAROLD FLETCHER MCLOUGHLIN, Solihull, England. Filed May 10, 1930, Serial No. 451,372, and in Great Britain May 27, 1929. 5 Claims. (Cl. 219—10.)

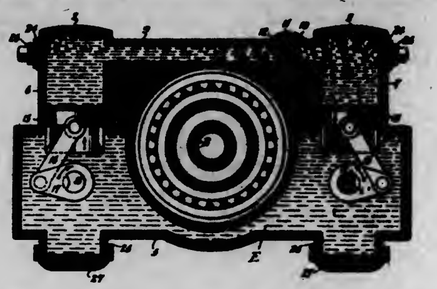


1. An electrical resistance method of continuously welding the seam of a metal tube which comprises progressively moving the tube axially relative to separated points along the tube, applying potential at such points across the seam and simultaneously applying potential between said points.

1,904,835. SPEED REGULATOR FOR REVOLVING DOORS. HARRY MUNSON, Wantagh, N. Y., assignor to Van Kannel Revolving Door Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 6, 1931. Serial No. 520,748. 10 Claims. (Cl. 20—12.)

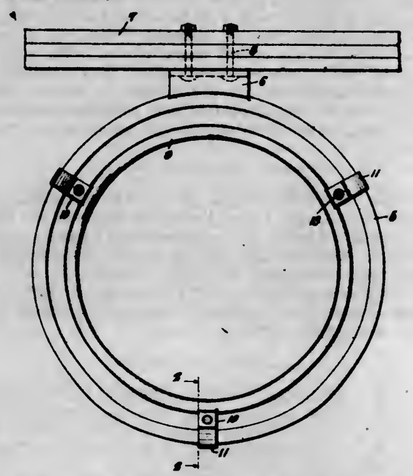
1. In combination, a revolving door and a hydraulic speed regulator therefor including an overhead support for the door fashioned to provide a closed casing filled

with an incompressible fluid, means operable by rotation of the door for moving the fluid in opposite directions within said casing and means intercepting the movement



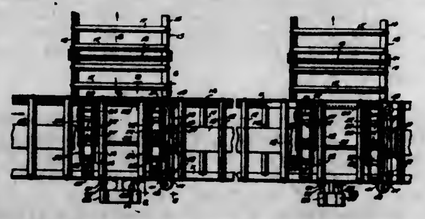
of the liquid to prevent its movement beyond a predetermined maximum whereby to limit the speed of rotation of the door.

1,904,836. GOAL. EARL R. PEOPLES, Beardstown, Ill. Filed May 14, 1930. Serial No. 452,373. 6 Claims. (Cl. 273—1.5.)



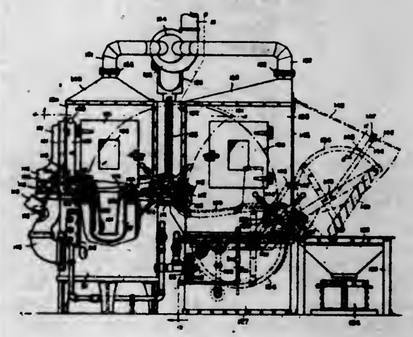
1. A goal of the character described comprising a main hoop, a smaller hoop, supporting arms extending radially from the smaller hoop adapted to engage said main hoop and a clamping plate for securing the supporting arm in firm engagement with the main hoop.

1,904,837. SWITCHING CONVEYER. HERBERT D. POSEY, Cleveland, Ohio, assignor to Logan Co., Inc., Louisville, Ky., a Corporation of Kentucky. Filed Jan. 3, 1930. Serial No. 416,295. 17 Claims. (Cl. 198—38.)



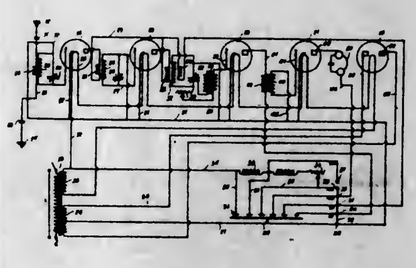
1. A switching conveyer comprising a main conveyer, normally inoperative means movable to operative position for arresting the progress of an article moving along said main conveyer at a predetermined point intermediate the length thereof, means operative for discharging an article from said main conveyer after its progress therealong has been arrested by said first named means, a common device for rendering both of said means operative, and means carried by the article for determining the operation of said actuating device.

1,904,838. HEAT TREATING APPARATUS FOR METAL WORK. HEYMAN ROSENBERG, New York, N. Y. Filed Apr. 29, 1930. Serial No. 448,849. 6 Claims. (Cl. 266—6.)



1. In heat treating apparatus for metal work, the combination, with a furnace and salts vat, of a housing for the space above the furnace for confining and directing fumes rising from the furnace and vat, said housing having an elongated, relatively narrow opening adapted to enable movement of a pyrometer thermocouple to and from a position in the vat, and a door for said opening, the parts being apertured to accommodate said thermocouple in either of its positions.

1,904,839. RADIO CIRCUIT. AUGUST F. P. STEMEY, Baltimore, Md., assignor of one-half to Stephen Ratajczak, Baltimore, Md. Filed Oct. 30, 1930. Serial No. 492,341. 3 Claims. (Cl. 250—27.)



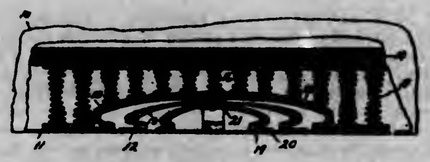
1. In a radio receiving circuit, a plurality of indirectly heated cathode tubes, a rectifier tube having a filamentary cathode, means for energising the cathodes of all of said tubes comprising a series circuit including the heater elements of said indirectly heated cathode tubes, the cathode of said rectifier tube and a source of alternating current, means for energising the anode circuits of the indirectly heated cathode tubes from a source of alternating current which is rectified by said rectifier tube.

1,904,840. SLICER. VERA VAEH, Minneapolis, Minn. Filed Jan. 12, 1931. Serial No. 508,516. 6 Claims. (Cl. 146—125.)



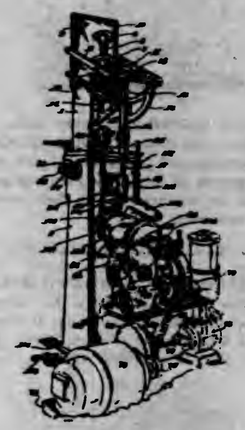
1. A fruit and vegetable slicer comprising an upper closed cylindrical casing mounted on a lower cylindrical casing and having open ends, a vertically corrugated shell within said upper casing, and a circular tamp having notches in its periphery to register with the corrugations in said shell, an operating rod for imparting motion to said tamp, and a cover for the upper end of said upper casing, and having an aperture at its center for receiving said operating means for the tamp, and inward extending flanges on the upper end of said lower casing adapted to support said upper casing and to provide an operating face, a circular rotatable slicing knife, a cog ring mounted on the lower face of said circular knife, and adapted to operate upon said flange, an operating handle having a crank at one end and a pinion at its other end adapted to cooperate with the cog ring to rotate the same.

1,904,841. REAR END CONSTRUCTION FOR VEHICLE BODIES. FRANK B. WATTS, Detroit, Mich., assignor to Hupp Motor Car Corporation, Detroit, Mich., a Corporation of Virginia. Filed Dec. 22, 1930. Serial No. 504,141. 11 Claims. (Cl. 296—63.)



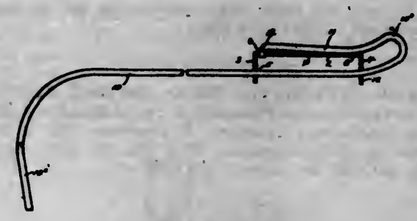
1. A rear end construction for vehicle bodies comprising a floor section having an opening therethrough for axle housing clearance, and a closure member for said opening having flexible portions spaced above the opening providing for maximum deflection of the axle housing with the minimum height of closure.

1,904,842. MACHINE FOR VACUUM SEALING. JOHN J. WILLIAMS, Wheeling, W. Va., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed May 28, 1927. Serial No. 195,103. 16 Claims. (Cl. 226—82.)



1. In a vacuum sealing machine, a sealing chamber, a sealing plunger, a pedestal supporting the sealing chamber, said pedestal constituting a vacuum tank, a shaft journaled in the walls of the vacuum tank, and a cam carried by said shaft and adapted to operate said sealing plunger.

1,904,843. RAKE. WHITMORE WITHINGTON, Cleveland, Ohio, assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 21, 1930, Serial No. 491,125. Renewed Aug. 26, 1931. 11 Claims. (Cl. 55—114.)



1. In a rake, a cross head in the form of a channel having a pair of relatively angularly disposed walls and a web portion, one of the walls provided with a row of perforations, a plurality of tines provided with looped rear ends each projected through one of said perforations, the free arm of each tine loop spring pressed from without the channel into a perforation cooperatively formed in the web portion of the channel by its inherent resiliency, to prevent displacement of the inserted tine relative to the cross head.

1,904,844. SECTION INSULATOR. FRED L. WOLF, Mansfield, Ohio, assignor to The Ohio Brass Company, Mansfield, Ohio, a Corporation of New Jersey. Filed Mar. 16, 1932. Serial No. 599,168. 20 Claims. (Cl. 191—39.)

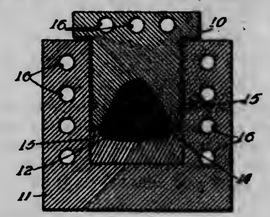
1. A trolley wire section insulator comprising an elongated insulating bar having a conductor holder at each end, a runner holding member associated with each con-

ductor holder, an insulated runner positioned between the runner holding members and comprising an elongated fiber member having its ends exposed for attachment to the runner holding members on the insulator, metal members embracing the fiber member adjacent its ends adjacent to but spaced from the adjacent holding member, the



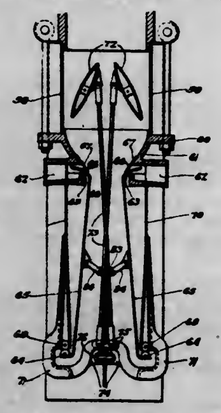
end of the metal embracing member being beveled and the adjacent face of adjacent holding member being correspondingly beveled and the said beveled faces overlapping and a covering of resilient soft vulcanized rubber extending along the surfaces of the fiber member between the said metal members.

1,904,845. METHOD OF FORMING MOLDED ARTICLES. JOSEPH JAMES ZELENKA, La Grange, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1929. Serial No. 329,811. 2 Claims. (Cl. 18—55.)



1. The method of producing a molded article of ornamental appearance which comprises molding the article in a mold having a recess located within the article forming cavity mold at the parting line thereof to form a ridge around the article with a fin of excess material integral therewith, holding the article in the mold until the material thereof is completely finished and set, removing the article from the mold, and removing the fin of excess material and a part of the ridge.

1,904,846. AUTOMATIC FLUID CONTROL SYSTEM. MAXWELL ALPERN, Philadelphia, Pa., assignor to American Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1930. Serial No. 431,522. 24 Claims. (Cl. 137—78.)



1. In a fluid system including a series of ducts, a device in each duct automatically throttling the flow of liquid in the duct in inverse proportion to the resistance offered to said flow and a hydraulic interconnection between said devices whereby the throttling operation of any of said devices is accompanied by a reverse throttling in another device or devices.

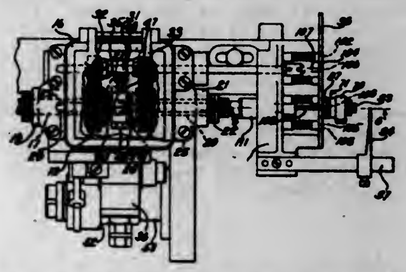
9. In a fluid control system, a duct, a throttle within the duct, a motor for operating the throttle operated by variations in pressure in the duct in advance of the throttle, and means providing a constricted throat for the duct between the motor and throttle adjustable as to width, said means being mounted independently of said motor.

1,904,847. ELECTROMAGNETIC DEVICE. BETHEL JAY BABBITT, Riverside, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 10, 1928. Serial No. 318,523. 6 Claims. (Cl. 200—104.)



1. In an electromagnetic device, a coil arranged to be traversed by an electric current for establishing an electromagnetic field, a magnetic member having a portion extending into the coil, a tongue fixed to the magnetic member, an armature hinged to the magnetic member and having a portion thereof extending into the magnetic field at the point of its maximum flux density, and a tongue fixed to the armature and cooperating with the tongues fixed to the magnetic member to provide between the armature and the magnetic member an air gap and path of low reluctance which will be increased upon actuation of the armature.

1,904,848. MATERIAL WORKING MACHINE. ROY J. BRAVERS, Brookfield, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 31, 1930. Serial No. 425,050. 15 Claims. (Cl. 29—51.)



1. In a material working apparatus, a transfer arm, means for holding material carried by said transfer arm, a cam member, means for swinging said transfer arm for moving said material holding member relative to said cam member whereby the material may be moved into said material holding member, a processing member, a collar for said processing member disposed in said cam member, and means for imparting a lateral movement to said transfer arm for moving said material holding member and the material with said collar to move the material into engagement with said processing member.

12. In a material working apparatus, means for holding the material, a processing member, power means for rotating said processing member, means for operatively connecting said power means with said processing member whereby said processing member may be rotated in one direction relative to the material, means for locking the operative engagement of the power means with said processing member, means for releasing the locking means whereby said power means may be operatively connected to said processing member for rotating said processing member in the opposite direction, and yieldable means included in the means for operatively connecting said power means with said processing member for permitting longitudinal movement of said processing member.

1,904,849. FISHLINE REEL. LE BONHEUR, Elyria, Ohio, assignor to The General Industries Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 5, 1928. Serial No. 259,015. 6 Claims. (Cl. 206—166.)



1. In a fishing reel, a frame comprising an end plate, a spool, a shaft therefor, a bearing for said shaft, said bearing being secured to the plate, a cap having inclined lateral walls of circular transverse section threaded onto the bearing providing a thrust bearing for said shaft, and a cup-like friction member secured against the plate and provided with a resilient skirt frictionally engageable with the inclined walls of the cap, said skirt being curved in transverse sections a portion thereof being of varying radius resiliently resisting distortion into circular form during threading of the cap on the bearing, the end wall of the member having arcuate slits adjacent its side walls.

1,904,850. SIGN. JAMES BOYCE, Laketown Township, Allegan County, Mich., and RAYMOND F. HANCOCK, Marion, Ind., assignors to Chicago Glass Novelty Corporation. Filed June 24, 1929. Serial No. 373,087. 7 Claims. (Cl. 40—133.)



1. A sign unit comprising a base plate formed from transparent glass and a composite sign character embossed thereon from the material of said plate to give effect of a plurality of distinct characters of different sizes superposed one upon the other, said composite character comprising, in cross section, an outwardly convexed thin-walled central character stroke positioned forwardly of and opening rearwardly with respect to said plate, and a second character stroke wider than said first stroke and having a portion positioned on each side of said central stroke so as to form a uniform raised border therefor, said portions being formed to provide a lens effect, and a coating of colored paint on the inner side of said central stroke.

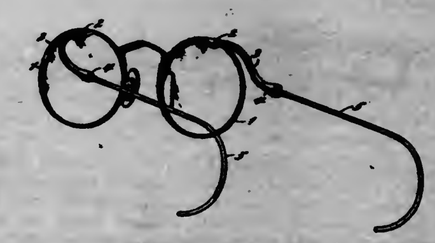
1,904,851. METHOD OF MAKING FOOTWEAR. WILLIAM H. BRENNAHAN, Lynn, Mass., assignor, by mesne assignments, to Compo Shoe Machinery Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Apr. 24, 1928, Serial No. 272,449. Divided and this application filed Dec. 5, 1928. Serial No. 323,917. 6 Claims. (Cl. 12—142.)

1. That method of providing a shoe, having inner and outer soles, with an arch support, which comprises as steps providing an arch-supporting pad, providing a last having a cavity in its under surface, lasting the shoe upon the last, disposing the pad between the inner and outer soles and in registry with said cavity, the opposed surfaces of the inner and outer soles being adhesive, and



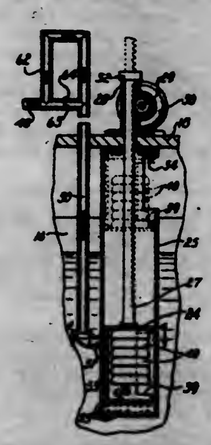
subjecting the shoe to pressure whereby permanently to unite the outer and inner soles and to cause the inner sole to protrude into the cavity of the last.

1,904,852. SPECTACLES. OSWALD B. CARSON, Greensburg, N. Y. Filed Nov. 30, 1931. Serial No. 577,975. 10 Claims. (Cl. 88—38.)



1. In a pair of spectacles, the combination with the lenses of links mounted upon the upper peripheral portion thereof, extending therefrom outwardly, downwardly and rearwardly following the peripheral contour of the lenses and terminating in connecting means for the attachment of the temples.

1,904,853. METHOD OF AND APPARATUS FOR PREPARING AND HANDLING MOLTEN MATERIALS. HERBERT F. CARTER, Roselle Park, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 12, 1930. Serial No. 495,056. 7 Claims. (Cl. 266—34.)

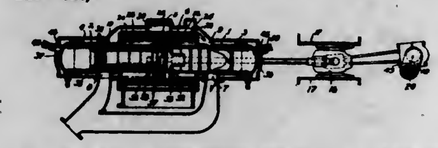


1. A method of preparing a lead antimony alloy, comprising melting a predetermined quantity of lead, sub-

merging a predetermined amount of antimony in the molten lead, and directing a stream of the molten lead against the submerged antimony to dissolve it and thoroughly mix it with the lead.

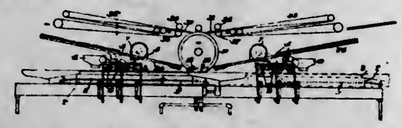
3. In an apparatus for preparing molten materials, means for melting a normally solid material and for maintaining it in a molten state, means for submerging a plurality of layers of a soluble solid material having a specific gravity less than that of the molten material in the molten material, and means for directing a stream of the molten material against the upper layers of said submerged solid material to dissolve said upper layers and to permit the lower layers of said solid material to move upward into the position previously occupied by said upper layers.

1,904,854. DOUBLE ACTING INTERNAL COMBUSTION ENGINE. CHARLES P. CLARK, Olean, and CARL A. BJORNSON, Wellsville, N. Y., assignors to Clark Bros. Co., Olean, N. Y., a Corporation of New York. Filed May 12, 1930. Serial No. 451,616. 8 Claims. (Cl. 123—62.)



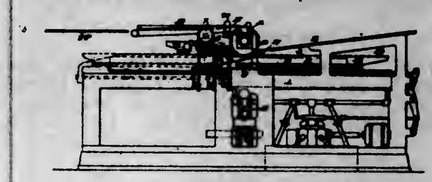
7. In an internal combustion engine, two aligned power cylinders, a compression cylinder, of greater diameter than said power cylinders, located between adjacent ends of the power cylinders, removable cylinder heads for the opposite ends of said power cylinders, a piston structure comprising a piston for each of said power cylinders and an intermediate stepped piston for the compression cylinder, piston rings for the power pistons adjacent their head ends, the length of the permissible path of travel of said stepped piston between the power cylinders being great enough to permit the power pistons to be projected so far from the head ends of the power cylinders, when said cylinder heads are removed, as to expose the said piston rings, a cross-head, a piston rod connected to said stepped piston adjacent the periphery thereof and extending therefrom substantially parallel with said piston structure, outside the power pistons thereof, through an opening in said cross-head, the diameter of said piston rod for some distance from its cross-head-end being smaller than the diameter of said opening in the cross-head, a shoulder on the piston rod, and a collar on the piston rod between said shoulder and the cross-head to transmit the thrust of the piston rod to the cross-head, the length of said collar being sufficient and the piston rod having said smaller diameter for a sufficient length from its cross-head-end to permit the piston rod to pass far enough through the cross-head, when the collar is removed, to permit the piston-ring area of the adjacent power piston to be projected beyond the end of its cylinder.

1,904,855. BED AND CYLINDER PRINTING PRESS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 7, 1931. Serial No. 535,685. 15 Claims. (Cl. 101—278.)



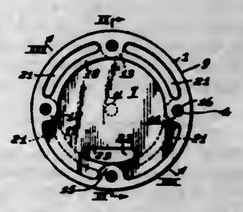
1. In a bed and cylinder printing press, a reciprocating form bed, and an oscillating impression cylinder operable, on each stroke, to print one sheet and deliver a previously printed sheet tail end first.

1,904,856. BED AND CYLINDER PRINTING PRESS. CALVERT B. COTTRELL, 3d, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,794. 4 Claims. (Cl. 101—361.)



1. In a bed and cylinder printing press, a bed and its form reciprocating in a right line, an inking mechanism including distributing and form rollers, means independent of the bed drive for driving the said rollers continuously in one direction only, and means for raising the form rollers out of the path of the form on one stroke of the bed.

1,904,857. HEAT EXCHANGER. CHARLES A. CROWL, New Castle, Pa., assignor, by mesne assignments, to Stewart P. Folts, New Castle, Pa., as trustee. Filed June 10, 1932. Serial No. 616,459. 2 Claims. (Cl. 257—245.)



1. A heat exchanger comprising a plurality of interchangeable double-walled fluid conducting elements having integral rims projecting outwardly from the walls connected end to end, each of said elements being provided with a conduit through it and a plurality of apertures in its walls and forming with the other elements two parallel intertwining zigzag fluid passages, one of said passages being disposed in said elements and the other between them, and means for delivering fluids to and discharging them from the respective passages.

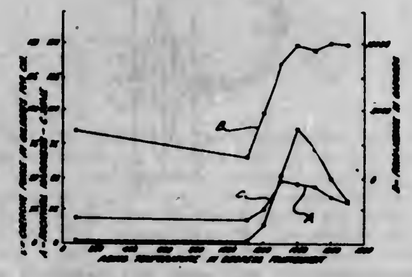
1,904,858. SHIRT PRESSING MACHINE WITH LATERALLY MOVABLE HEAD. ERNEST DAVIS, Syracuse, N. Y., assignor to The Prosperity Company Inc., Syracuse, N. Y., a Corporation of New York. Filed Oct. 29, 1928. Serial No. 315,705. 18 Claims. (Cl. 68—9.)



13. A shirt pressing machine including cooperative pressing elements; a neck band holder adjacent one end of one of the pressing elements, the other pressing element being formed with a cut-out portion complemental

to the neck band holder; means for moving one of said pressing elements toward and from the other to close and open the press; and automatic, yieldable means for moving one of said pressing elements laterally with respect to the other to bring the edge of the cut-out portion of the upper pressing element close to the neck band clamp.

1,904,859. FERROUS ALLOY. REGINALD S. DEAN, Washington, D. C., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 24, 1930. Serial No. 488,263. 12 Claims. (Cl. 175—21.)



1. The method of producing a permanent magnet which comprises alloying a metal of the group including tungsten, molybdenum, beryllium, and tantalum with substantially carbon-free iron, forming a magnet of the alloy, heating the alloy to form a substantially homogeneous solid solution, cooling the solution at a rate to form a supersaturated solution, heat treating the magnet to develop its magnetic properties, and subjecting the magnet to a magnetising force to magnetise the magnet.

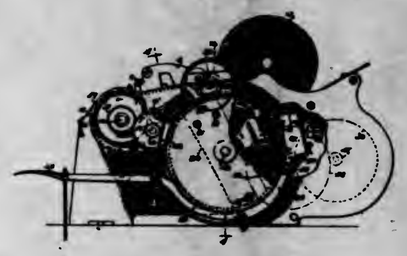
1,904,860. RAKE. CHARLES H. DENNIS, Jackson, Mich., assignor to The American Fork & Hoe Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 19, 1929. Serial No. 356,366. 12 Claims. (Cl. 55—114.)



1. In a rake, a handle, a head supported at an end thereof and extending transversely thereto, said head being in the form of a channel having down-turned front and rear flanges, a plurality of tine elements supported by the head, each including a pair of tine forks, projected forwardly therefrom and integrally joined by a forwardly extending loop, said loop and forks resiliently compressively engaging said head to retain the forks in a given longitudinal adjustment thereon.

1,904,861. TAPE HANDLING APPARATUS. JOSEPH ETTI., Plainfield, N. J., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed June 12, 1931. Serial No. 543,875. 17 Claims. (Cl. 164—42.)

8. In tape handling apparatus, the combination of a rotor, a motor for driving the same, a clutch pawl carried by said rotor, a gear adjacent the rotor and adapted to be clutched thereto by said pawl, a relatively stationary shoe in the path of said pawl for retracting the same on predetermined movement of the rotor, a feed roller driven by said gear, a brake therefor, an electromagnet for actuating said brake, contact mechanism carried by said rotor for controlling the circuit of said electromagnet, a pawl for holding the clutch pawl in inoperative position,



a manual lever for actuating said last mentioned pawl to inoperative position, switch mechanism in the circuit of said electromagnet carried by said lever and moved to closed position when said lever is moved to release the clutch pawl, and stationary contact mechanism adapted to be engaged by the rotor carried contact mechanism to complete the circuit to the electromagnet upon movement of the rotor to position to actuate the clutch pawl to inoperative position.

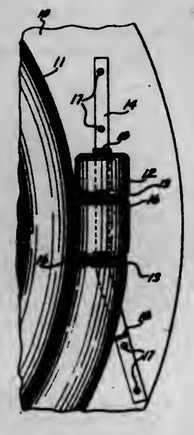
1,904,862. TOLL POSTING MACHINE. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, New York, N. Y., a Corporation of Delaware. Original application filed May 14, 1925, Serial No. 30,267. Divided and this application filed Apr. 9, 1929. Serial No. 353,778. 14 Claims. (Cl. 197—127.)

1. In a machine of the class described, the combination with a flat platen, and printing mechanism thereover, of a storage receptacle located beyond one edge of the platen, and means for tilting the platen toward the receptacle to facilitate the transfer of a work element from the platen to the receptacle.

1,904,863. DEVICE FOR FASTENING THE END OF A COILED MEMBER TO A SUPPORTING STRUCTURE. JAMES T. GRIFFIN, Oak Park, JOHN P. DEANE, Berwyn, and JAMES G. CUBERTON, Chicago, Ill., assignors to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 6, 1929. Serial No. 412,150. 4 Claims. (Cl. 242—117.)

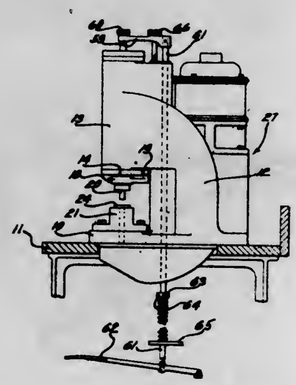
1. A device for securing the end of a sheathed cable to its supporting reel, said end being provided with spaced

depressions, comprising a member crimped to engage the depressions and interposed between the reel and the cable



end, and means for attaching the cable end to the crimped member.

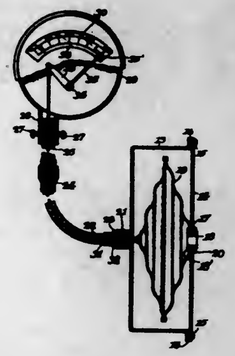
1,904,864. MATERIAL WORKING APPARATUS. RALPH JONGEDYK, Hinsdale, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 461,035. 9 Claims. (Cl. 138—17.)



1. In a material working apparatus, a differential area piston, means for delivering pressure fluid to the smaller area of said piston, manually controlled means associated with said first means for delivering pressure fluid to the greater area of said piston from said means, a by-pass for said means, and means connected to said manually controlled means operative after the piston has advanced through a predetermined distance to close the by-pass.

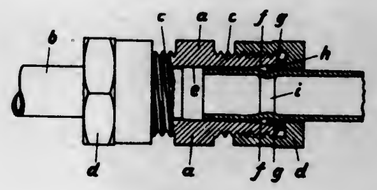
1,904,865. SPEEDOMETER FOR MARINE CRAFT. CARL KNOBLOCH, Akron, Ohio. Filed Oct. 10, 1928. Serial No. 311,611. 3 Claims. (Cl. 73—122.)

1. A speedometer for boats, comprising in combination a diaphragm casing formed with a water inlet opening, means for venting said casing to the atmosphere, and means for attaching said casing to and externally of a boat with said opening below the water line of the boat, a self-collapsing bellows diaphragm mounted in said casing and having an opening in one fold thereof registering and



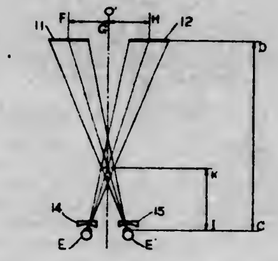
communicating with said water inlet opening, a speed registering indicator adapted to be mounted on the boat, and a connection between the other fold of said diaphragm and said indicator through which a flexing movement of said diaphragm is transmitted to said indicator.

1,904,866. JOINT FOR PIPES. HANS KREIDEL, Wiesbaden, Germany. Filed Mar. 15, 1930, Serial No. 435,992, and in Germany Dec. 27, 1929. 3 Claims. (Cl. 285—182.)



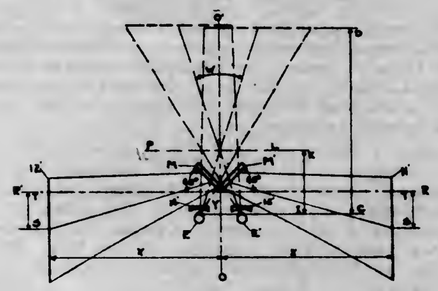
2. A joint for making a fluid pressure tight connection with a metallic tube, comprising a body having a bore to receive the extremity of a tube, said bore having an outwardly flared portion at the tube receiving end of said body, a hollow cylindrical metallic pressure sleeve having an external diameter approximately as great as that of the flared portion of said bore at its point of greatest diameter, said sleeve having an internal diameter slightly greater than the external diameter of the tubing with which it is to be used, said sleeve also having an outwardly extending annular flange at one end thereof, and means having threaded engagement with said body for applying pressure to the flanged end of said sleeve thereby to force the latter into said flared bore, whereby said sleeve will be forced radially inwardly to form an annular inwardly projecting bead thereon, the end portion of said sleeve thereby tightly engaging said tube and forming a fluid tight joint between said body and said tube the angular flange of said sleeve being engageable with the flared end portion of said body for limiting the inward movement of said sleeve into said bore.

1,904,867. METHOD OF RÖNTGENOLOGICAL REPRODUCTION. HENRY F. KURTZ, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 26, 1927. Serial No. 222,161. 8 Claims. (Cl. 250—84.)



8. A method of producing X-ray stereograms which comprises establishing an exposure distance which is greater than normal viewing distance, successively exposing a pair of sensitised elements to a source of X-rays, shifting the source of X-rays between the successive exposures, and developing the exposed elements, the relation of the amount of shift of said source to the exposure distance being substantially the same as the relation of the average interpupillary distance to normal viewing distance.

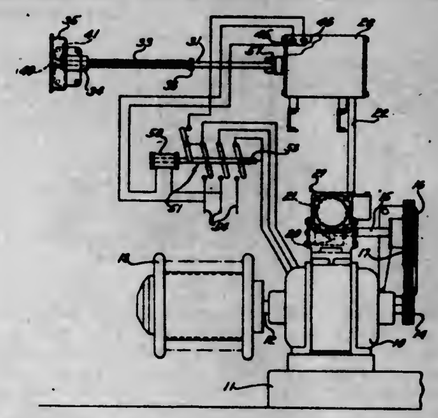
1,904,868. STEREOSCOPE. HENRY F. KURTZ, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Original application filed Sept. 26, 1927, Serial No. 222,161. Divided and this application filed May 19, 1930. Serial No. 453,530. 5 Claims. (Cl. 88—39.)



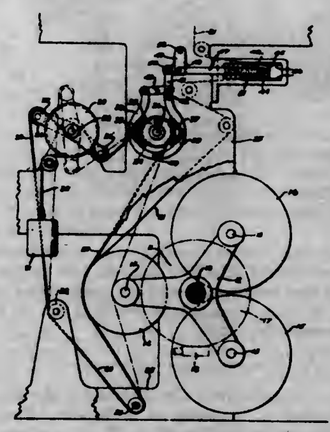
1. A device for stereoscopically recomposing X-ray stereograms comprising angularly disposed reflecting means for reflecting images of stereograms which are disposed laterally of said reflecting means at a predetermined distance and optical means associated with said reflecting means for forming said reflected images at a distance from the observer which is less than the predetermined distance between the stereograms and the reflecting means.

1,904,869. INDICATING AND CONTROL DEVICE FOR MATERIAL RECEIVING APPARATUS. EINER W. LARSEN, Chicago, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,561. 6 Claims. (Cl. 242—39.)

1. In a material receiving apparatus, means for receiving material, means for actuating the receiving means, means for continually indicating the amount of material received by the receiving means, and means for automatically rendering the actuating means effective upon the resetting of the indicating means to a zero indication.



1,904,870. WEB CONTROLLING MECHANISM. KENNETH G. LAYCOCK, Shavertown, Pa., assignor to Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 18, 1930. Serial No. 436,835. 10 Claims. (Cl. 242—75.)

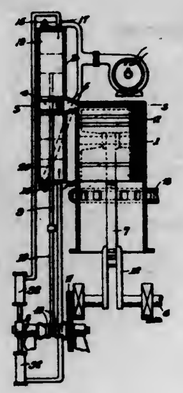


7. Web controlling mechanism including in combination a magazine reel to support active and reserve web rolls, a continuous belt contacting with the active web roll to tension the web drawn therefrom, means for opposing movement of the belt, a pair of rollers between which the belt is threaded and means for revolving the rollers to take up slack in the belt.

1,904,871. MULTIPLE EXPANSION ENGINE. LAWRENCE W. LINDSEY, Brooklyn, N. Y., assignor to Doherty Research Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1928. Serial No. 302,269. 1 Claim. (Cl. 60—15.)

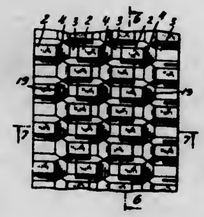
In a two cycle multiple expansion internal combustion engine a high pressure cylinder, a low pressure cylinder, a transfer passage between said cylinders, means to supply a scavenging air charge to one of said cylinders, means

whereby said scavenging air passes through said transfer passage to scavenge the other of said cylinders whereby a fresh charge fills both cylinders, means for partially and



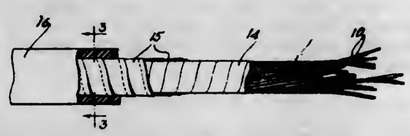
simultaneously compressing the charge in both cylinders to a predetermined pressure and means to further compress said charge in said high pressure cylinder alone.

1,904,872. MOVING PICTURE SCREEN. FRED HARRIS LYNDS, North Attleboro, Mass. Filed Mar. 19, 1930. Serial No. 437,061. 8 Claims. (Cl. 88—24.)



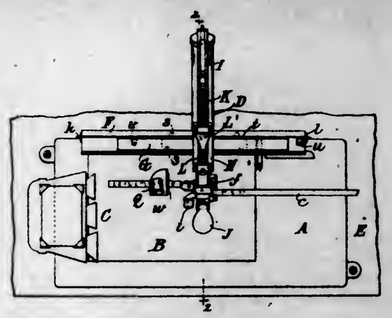
1. A moving picture screen having a substantially continuous corrugated reflecting surface, and having portions thereof of two thicknesses with the depressions and raised portions of said corrugations overlapping to form passages through the screen.

1,904,873. ELECTRIC CABLE. OSCAR SEVERIN MARKUSON, Hilton, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 2, 1926. Serial No. 78,798. 2 Claims. (Cl. 173—266.)



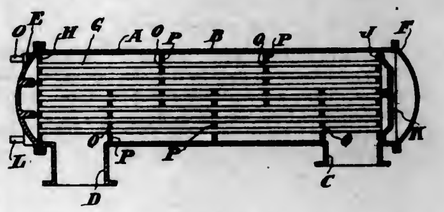
2. A telephone cable comprising a plurality of individually insulated conductors assembled into a solid core, a continuous insulating medium disposed therearound to form an imperforate sheath therefor, a sheath composed of thin lead ribbon wrapped helically about said imperforate sheath, and a relatively thick sheathing of tough rubber formed about and engaging the lead sheath.

1,904,874. MEANS FOR GUMMING TAPE ON BLANKS. RALPH I. MEADER, Lynbrook, N. Y. Filed Feb. 6, 1932. Serial No. 591,383. 14 Claims. (Cl. 216—20.)



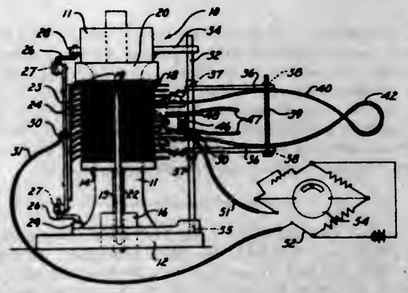
1. A tape applier combined with horisontal longitudinal guiding means for directing its movements in parallel, longitudinal lines.

1,904,875. HEAT EXCHANGER. CHESTER W. METZGAR, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 23, 1931. Serial No. 552,587. 8 Claims. (Cl. 257—240.)



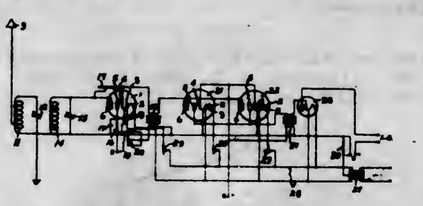
3. A heat exchanger comprising a casing, tubes in the casing, means supporting the ends of the tubes, and bakelite baffles to support the intermediate portions of the tubes and being arranged on opposite sides of the casing and in staggered relationship to deflect a medium flowing through the casing.

1,904,876. METHOD OF MAKING ELECTRICAL CONDENSERS. ROBERT E. PARK, Jr., Jersey City, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 24, 1930. Serial No. 497,806. 11 Claims. (Cl. 175—41.)



1. A method of making condensers which includes subjecting a plurality of condenser elements to a pressure, and simultaneously segregating by testing a group of some of the elements to comprise a condenser.

1,904,877. RADIO CIRCUIT. EDWARD G. PARVIN, Roselle, N. J. Filed Aug. 4, 1931. Serial No. 554,965. 6 Claims. (Cl. 250—27.)



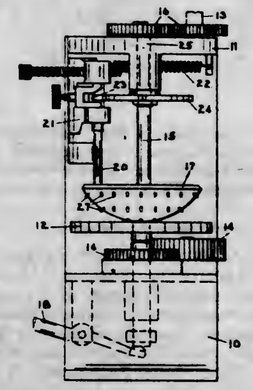
1. A radio circuit of the type described comprising in combination a multi-electrode audion including a cathode, a grid and two anodes, an input circuit connected between one anode and the cathode, an output circuit connected between the grid and the cathode and a connection between the other anode and the cathode.

1,904,878. MACHINE FOR HANDLING STRIP MATERIAL. ADOLPH POTDEVIN, Garden City, N. Y., assignor to Potdevin Machine Company, Brooklyn, N. Y., a Corporation of New York. Filed Aug. 19, 1930. Serial No. 476,378. 12 Claims. (Cl. 242—58.)



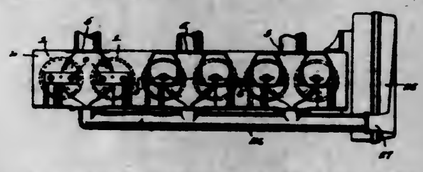
1. In a machine for handling strip material, the combination of a support or stand for a roll of the material, a pair of arms pivoted on said stand or support, bearings carried by said arms, and worm and gear mechanism for rotating said arms to bring said bearings beneath the supply roll, continued rotation of said arms lifting the roll out of its original position into a new position for rotation, while continuing the operation of withdrawing material from the roll.

1,904,879. LENS CUTTING MACHINE. JOHN R. POWELL, Rochester, N. Y., assignor to Bausch & Lomb Optical, Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 21, 1930. Serial No. 430,248. 11 Claims. (Cl. 33—28.)



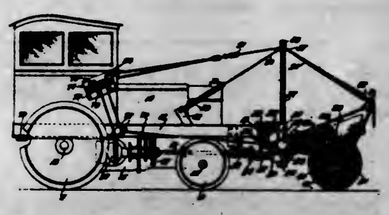
1. A lens cutting machine comprising a cutting tool, a plate, a lens support on said plate, means for rotating said plate and support, said support comprising a spherical shell having an inner concave surface adapted to carry a lens and an outer convex surface positioned to roll upon said plate, and means for moving said plate and support toward said tool.

1,904,880. AIR COOLED INTERNAL COMBUSTION ENGINE. JAMES B. POWERS, Syracuse, N. Y. Filed July 9, 1929, Serial No. 376,896. Renewed Mar. 9, 1932. 18 Claims. (Cl. 123—177.)



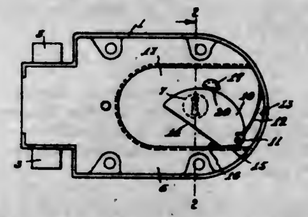
1. In an internal combustion engine, the combination of a cylinder, a head for the cylinder formed with an exhaust chamber having inlets for cooling air and having a port opening between the cylinder and the exhaust chamber formed to cause injector action by the exhaust gases for drawing a cooling air current over the outside wall of the cylinder and into said chamber.

1,904,881. SWEEPING MACHINE. OTIS F. PARKERSON, Brooklyn, N. Y. Filed Nov. 11, 1927. Serial No. 232,612. 6 Claims. (Cl. 15—82.)



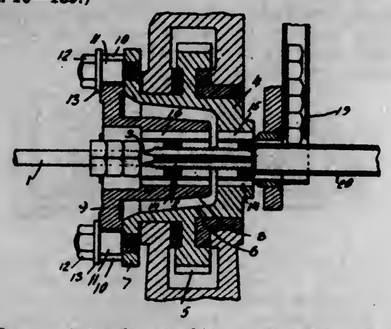
1. In a sweeper of the class described, a wheeled vehicle, a rotatable broom associated with the vehicle, independently movable supports for said broom, separate manually controlled means for positively varying the positions of said supports in two planes, and means for rotating the broom.

1,904,882. BURGLARPROOF LOCK. WALTER PRIOR, Jr., South Orange, N. J., assignor, by direct and mesne assignments, of one-half to August F. W. Viehweger, Poughkeepsie, N. Y., and one-half to Harry B. Morgan, Amenia, N. Y. Filed Apr. 20, 1929. Serial No. 356,662. 8 Claims. (Cl. 70—14.)



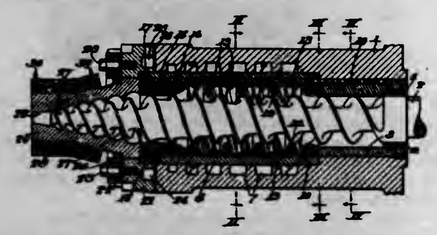
1. A lock of the character described, comprising a casing, a recessed rear plate, a bushing having an actuator disposed within said plate, a baffle plate pivotally leaning on said actuator, a resilient member affixed by one of its ends to said baffle member and its other end loosely bearing on the walls of said casing whereby when said actuator is removed said resilient member will cause the baffle plate to cover said bushing, and a stop pin in said recess for preventing the retraction of said baffle plate.

1,904,883. FLOATING CHUCK FOR TAPPING MACHINES. WILLIAM D. RIGNEY, Port Chester, N. Y., assignor to Russell, Burdsall & Ward Bolt & Nut Company, Port Chester, N. Y., a Corporation of New York. Filed July 11, 1930. Serial No. 467,147. 10 Claims. (Cl. 10—139.)



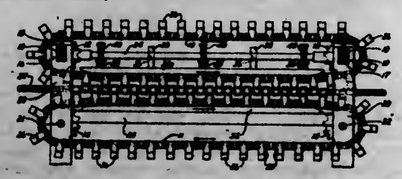
3. In a nut tapping machine, a threaded tap, a revolving chuck member having an axial passage and a floating chuck member carried by said revolving chuck member and having an axial passage in alignment with said first mentioned passage whereby a nut blank to be threaded may be positioned in said revolving chuck member and said floating chuck member at the same time, the walls of said passages being provided with wear plates adapted to engage the side walls of a nut blank adjacent a corner of the blank.

1,904,884. EXTRUDING MACHINE. VERNON ROYLE, Paterson, N. J. Filed June 4, 1929. Serial No. 368,371. 19 Claims. (Cl. 18—12.)



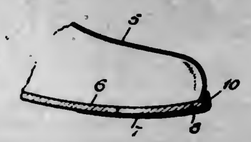
14. A machine of the character described comprising, a feed screw, and a series of removable annular elements juxtaposed and surrounding the screw, said elements having a set of circumferentially arranged formations spaced apart on their interiors, said formations being of substantial depth in a radial direction at one portion and of no substantial depth at another portion and said formations being disposed at an angle to the longitudinal axis of the screw.

1,904,885. CAPSTAN. GEORGE A. SMILEY, Baltimore, Md., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 13, 1930. Serial No. 460,867. 6 Claims. (Cl. 254—135.)



1. A capstan for advancing strands, comprising a pair of endless members, and strand gripping elements secured to the members at spaced positions therealong, the gripping elements of one member being disposed in offset relation with respect to the gripping elements of the other member.

1,904,886. TAP PLATE FOR DANCING SHOES. JAMES SELVA, Laureiton, N. Y. Filed Dec. 17, 1931. Serial No. 581,573. 2 Claims. (Cl. 36—8.3.)



1. A tap plate for dancing shoes formed of light metal and comprising a relatively flat body portion adapted to be connected to and substantially only cover that portion of the sole of the shoe beneath the toes and having a concavity at its rear end, and a peripheral substantially vertical flange projecting upwardly from the front and side edges of said body of the shoe to which the plate is secured, said flange being of a depth or height at said front end greater than the thickness of the sole of the dancing shoe to which it is adapted to be applied, and being adapted to engage the edge of the sole at the sides, the height of said flange and the thickness of said body gradually decreasing rearwardly from the tip of the plate.

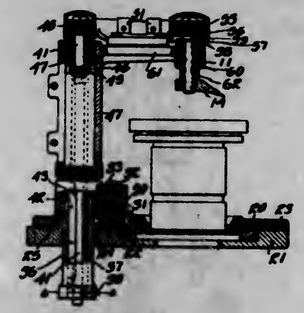
1,904,887. ELECTRIC CABLE. PARKE LAWTON SHEE, Berwyn, Ill., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1929. Serial No. 353,960. 16 Claims. (Cl. 173—264.)



7. In an electric cable, a core comprising a plurality of insulated conductors, and a comparatively narrow rigid wall of moisture resistant material surrounding the individual conductors along a portion of the core length.

1,904,888. DIAL AND CYLINDER CONNECTION FOR KNITTING MACHINES. WILLIAM L. SMITH, JR., and ROBERT H. LAWSON, Pawtucket, R. I.; said Smith assignor to May Hosiery Mills, Nashville, Tenn., a Corporation of Tennessee. Original application filed Feb. 21, 1930, Serial No. 430,436. Divided and this application filed Mar. 10, 1931. Serial No. 521,578. 2 Claims. (Cl. 66—28.)

1. In a knitting machine of the character described, including a needle dial and a needle cylinder, means for rotating the dial in time with the said cylinder including a train of gears comprising a ring gear attached to for driving the said cylinder, a gear secured to the said ring gear, a shaft operably connected to the dial, a gear on



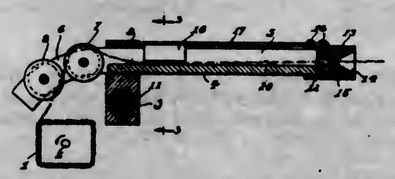
said shaft, an intermediate gear between said last-named gear and the gear on the ring gear, all of said last-named gears lying in a single plane, substantially as set forth.

1,904,889. QUICK BREAK PLUG CONNECTER. HERMAN L. STRONGSON, New York, N. Y., assignor to Bernard D. Colen, New York, N. Y. Filed Nov. 14, 1930. Serial No. 495,705. 9 Claims. (Cl. 173—332.)



1. A plug connecter of the type described comprising an insulating casing having recesses therein, a movable spring clip in each recess, a spring connected to each clip, and means for attaching each spring to the casing.

1,904,890. COIL FORMING DEVICE. CHESTER H. THORDARSON, Chicago, Ill., assignor to Thordarson Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 12, 1931. Serial No. 515,185. 10 Claims. Cl. 140—92.2.)



1. A hand tool for shaping and winding coils, comprising a handle portion through which wire is fed, adjustable means cooperating with said handle portion for exerting a frictional drag on said wire, and a pair of wire guiding rollers rotatably mounted in one end of the tool.

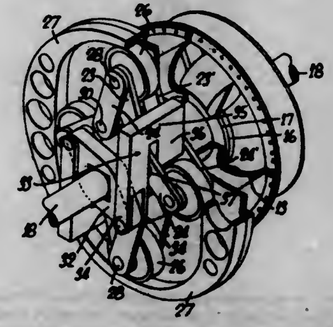
1,904,891. FOLDING CHAIR. MILTON L. TINSLEY, Grantwood, N. J., assignor to Ferguson Brothers Manufacturing Company, Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 11, 1931. Serial No. 574,371. 6 Claims. (Cl. 155—141.)

1. In a folding chair, a combined back and rear leg frame, a seat frame hinged thereto, a front leg frame hinged to the seat frame, and means ensuring a simultaneous folding or unfolding movement of the seat and front leg frames, said means comprising a folding lever connecting the seat and front leg frames and a lever connecting the folding lever with the combined back and rear



leg frame, and manually releasable means mounted at the front of the seat frame for locking the chair in its unfolded position.

1,904,892. ROTARY ENGINE COMPRESSOR AND THE LIKE. CARL E. TRUBE, Ossining, N. Y.; Sarah M. Trube, administratrix of said Carl E. Trube, deceased, assignor of one-half to William L. Hoge, Louisville, Ky. Filed Jan. 28, 1930. Serial No. 423,922. 27 Claims. (Cl. 121—49.)

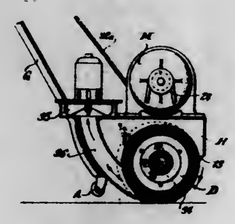


4. In a machine of the character described, in combination, a rotatable shaft, an annular cylinder, a plurality of sets of pistons movable within said cylinder, means uniting the pistons in each set, means providing an internal cam surface, a plurality of control elements movable along said cam surface, link-work pivoted to each of said uniting means and arranged to connect each uniting means to said control elements, and means including a link pivoted to the aforesaid link-work at a point within an angle having its vertex on the axis of said shaft and having its sides intersecting a pivot point where said link-work joins one of said uniting means and a pivot point on said link-work adjacent one of said control elements for connecting said link-work to said shaft.

1,904,893. SURFACE CONDITIONING MACHINE. OTTO WEINRICH, Kenmore, N. Y. Filed Aug. 1, 1930. Serial No. 472,432. 3 Claims. (Cl. 51—170.)

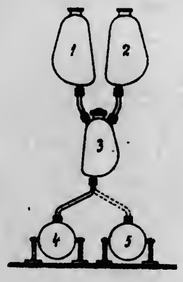
1. A drum for surface treating machines comprising a cylindrical reinforcing member, said member being

formed with apertures at points in its extent, a layer of rubber upon the outer surface of said reinforcing member forming a base, a layer of rubber upon the inner surface of said member, said outer and inner layers being vulcan-



ized together through said apertures and a layer of relatively softer rubber secured to said outer layer of rubber, said layer of relatively softer rubber being cut away to permit securement of a sheet of treating material upon said drum.

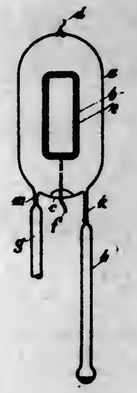
1,904,894. PROCESS AND APPARATUS FOR THE MANUFACTURE OF CELLULOSE. DANIEL WESTAD, Bygdoy near Oslo, Norway. Filed Apr. 4, 1931, Serial No. 527,672, and in Norway May 27, 1930. 9 Claims. (Cl. 92—7.)



1. A process of recovering cellulose from raw materials, comprising subjecting a charge of the raw material to impregnation with a digestion-liquid under a pressure raised several atmospheres above normal and at a temperature considerably below 100° C. in a closed impregnation vessel for a period of several hours, thereupon transferring the entire charge including the contained digestion liquid into another vessel, and then heating the charge consisting of impregnated raw material and digestion liquid to digestion temperatures considerably above 100° C. for a period of time sufficient to effect complete dissolution of the incrustations on the material.

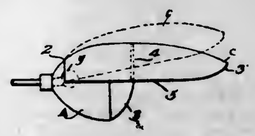
1,904,895. MANUFACTURE OF PHOTO-ELECTRIC CATHODES. NORMAN ROBERT CAMPBELL, Watford, England, assignor to The General Electric Company Limited, London, England. Filed Dec. 16, 1930, Serial No. 502,639, and in Great Britain Jan. 6, 1930. 5 Claims. (Cl. 250—27.5.)

1. In the manufacture of a photoelectric cathode, the process which comprises heating a support, coated with a compound that is to react with an electropositive metal, to a temperature above 50° C., producing a slow stream of the vapour of the electropositive metal, bringing the said stream into contact with the said support, measuring the space current between the support and the anode of the



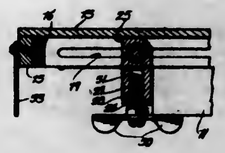
photoelectric tube during the passage of the said stream and stopping the stream when the said space current diminishes rapidly.

1,904,896. HEADLIGHT FOR AUTOMOBILES. LADISLAUS DOBOS, Binghamton, N. Y. Filed Feb. 26, 1929. Serial No. 342,770. 1 Claim. (Cl. 240—48.4.)



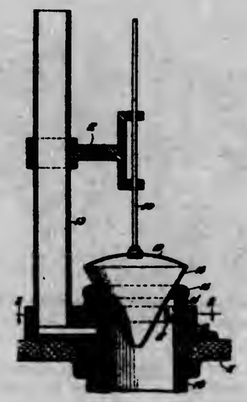
A headlight for automobiles, comprising a flaring casing having a body portion open at its top, a complementary lid portion hingedly connected at the rear to the body portion at a right angle to the vertical axial plane of the headlight and forming with the body portion a complete headlight casing, an integral anti-glare hood portion shaped to conform to the headlight casing, projecting forwardly from the lid and extending in front of the body portion, and a reflector on the under surface of the projecting hood.

1,904,897. FOLDING TABLE TOP. HENRY KAHRS, Brooklyn, N. Y.; Mary Dickie Wright executrix of said Henry Kahrs, deceased. Filed May 7, 1931. Serial No. 535,758. 2 Claims. (Cl. 45—31.)



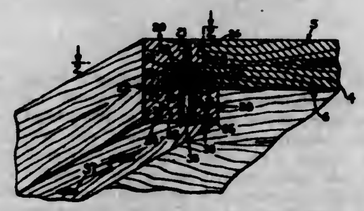
1. An auxiliary table top for attachment to various size table tops having a flat top member provided with spaced parallel clamping bars slidably mounted on the under side thereof, and means for securing said clamping bars in an adjusted position, and headed clamping screws threaded into said clamping bars and adapted to have their headed portions screwed into clamping engagement with the under side of a table top proper.

1,904,898. FLUSH VALVE. ALBERT H. KENNEDY, Rockport, Ind. Filed Apr. 9, 1930. Serial No. 442,836. 1 Claim. (Cl. 4—57.)



In a flush tank, an outlet conduit having a cylindrical counterbore and an annular groove adjacent to the bottom of the counterbore; a cylindrical seat member of flexible and yieldable material having an external bead adapted to snap into said groove when the seat member is forced into the bottom of the counterbore; an enlarged, reinforcing bead on the upper end of the seat to receive a tapered valve; and spring means to lock the seat member in the counterbore.

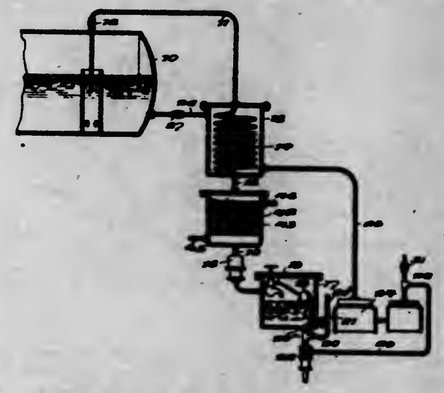
1,904,899. DRAWING BOARD. ADOLF W. KEUFFEL, Montclair, N. J., assignor to Keuffel & Esser Co., Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 28, 1931. Serial No. 577,758. 16 Claims. (Cl. 45—131.)



1. In a device of the character described, in combination, a top having a tongue along at least one edge thereof, at least one end cleat formed with a groove to receive a tongue, and means seated in the respective sides of the groove and drawing the sides of the groove together to clamp the tongue therebetween.

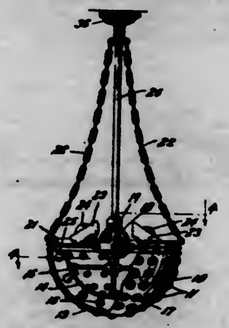
1,904,900. CONTROL OF THE SALINE CONTENT OF BOILER WATERS. HEINRICH KRONSBEIN, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Continuation of application Serial No. 173,781, filed Mar. 8, 1927. This application filed Nov. 11, 1931. Serial No. 574,442. 18 Claims. (Cl. 122—1.)

1. In controlling the concentration of salines in boiler water, a simplified method of removing saline matter introduced in the feed water which consists in discharging boiler salines under pressure from the boiler substantially continuously over consecutive operating periods at constant rates fixed for said periods and calculated to remove from the boiler the salines introduced in the feed water during the respective periods, maintaining the rate for each period constant irrespective of changes in the boiler pressure, releasing the discharged boiler salines



to atmospheric pressure and adjusting the rate of flow of the saline discharge at intervals, said adjustment being in accordance with observed variations in the density of the discharged salines.

1,904,901. ELECTRIC LIGHT FIXTURE. HARRY W. LAWRENCE, Denver, Colo. Filed Apr. 4, 1931. Serial No. 527,705. 3 Claims. (Cl. 240—49.)



1. An electric light fixture comprising: a perforated outer bowl, faceted lenses carried in the perforations of said outer bowl; a lamp supporting bowl supported within said outer bowl and adapted to carry electric lamps; and means for rotating said lamp supporting bowl said latter bowl conforming in contour to said outer bowl and acting as a shield to prevent the light from said lamps from escaping through the open side of said outer bowl.

1,904,902. FLASH LIGHT. GOODRICH B. PRATT, Grantwood, N. J., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Aug. 16, 1930. Serial No. 475,855. 4 Claims. (Cl. 240—60.)

1. In a portable electric lamp, in combination, an adjustable head band, a plate formed with slots proximate opposite edges, respectively, for the reception of the head band, the mid-portion of said plate being offset to form a groove rectangular in cross-section, a pad of yielding non-metallic material secured to the plate on the side opposite to the groove, and a lamp comprising a housing, apertured brackets carried with the housing, a base comprising a frame formed with spaced, parallel apertured

arms, and formed, in a direction opposite to the arms, with spaced foot portions, and a reversely bent spring clip having parallel arms yieldingly pressed together,



one arm being secured to the frame between the arms and the other arm being adapted for reception in the groove on the head band.

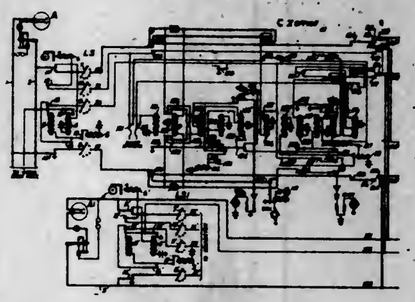
1,904,903. CIGARETTE HOLDER. AGNES G. SWEET, Pawtucket, R. I. Filed Nov. 4, 1930. Serial No. 493,428. 1 Claim. (Cl. 131—51.)



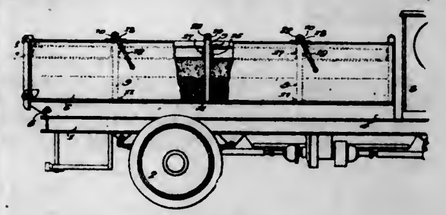
A device of the character described comprising an elongated handle, a stationary jaw member having a shank screw threadedly secured to the handle, said shank having a longitudinal slot therein, a movable jaw having an extension adapted to be received in said slot, a pivot pin passing through the shank and through the extension whereby the movable jaw may be pivotally carried by the shank, an extension formed on the movable jaw for operating the same, a coil spring interposed between the shank and extension for normally holding the movable jaw in closed relation with the stationary jaw and means carried by the extension adapted to partially cover and conceal the operative part of the extension and shank and serve as an operating finger piece.

1,904,904. AUTOMATIC TELEPHONE SYSTEM. VICTOR S. THARP, Elmhurst, and CLARENCE E. LOMAX, Oak Park, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Jan. 7, 1929, Serial No. 330,843. Renewed Sept. 14, 1931. 48 Claims. (Cl. 179—7.1.)

1. In a telephone system, a calling line and a meter associated therewith, a called line, an operator's position, means for extending a connection from said calling line to either said called line or to said position, means responsive when a call is extended to said called line for operating said meter to register an impulse for each unit of time during the course of the call, and means responsive when a call is extended to said position and under the control of the operator for operating said meter to register a plurality of impulses for each unit of time during the course of the call.



1,904,905. BATCH DIVIDING AND COVERING MEANS. JAMES MONNESS TITCOMB, Washington, D. C. Filed Sept. 26, 1930. Serial No. 484,086. 15 Claims. (Cl. 298—8.)



15. In a dump truck body including a bottom and defining walls forming a receiving chamber to receive a batch of sand; gravel and cement or like varied material; a flexible cement encasing envelope; said envelope comprising flexible large area top and bottom body faces, flexible side walls secured to the body faces, a rear portion and front overlap and underlap flaps extending from said top body face and said front wall providing a discharge throat; and means to secure the rear portion to a wall of the truck body; said side walls being secured to the top body face throughout a portion only of their length to provide greater freedom of said overlap flap; and having side wall flap extensions for cooperating with the first mentioned flaps in sealing the envelope against free egress of cement; and releasable means to secure said underlap and overlap flaps to position.

1,904,906. BATCH DIVIDING AND COVERING MEANS. JAMES MONNESS TITCOMB, Washington, D. C. Filed Mar. 16, 1931. Serial No. 523,134. 10 Claims. (Cl. 298—8.)

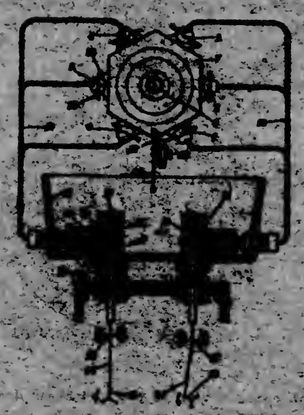
1. The combination with a dump truck body including a bottom, side walls, a front wall, and a rear wall, defining a material receiving compartment, said rear wall being movable when the body is to be dumped to permit egress of material from the compartment; of a flexible separator sheet attached at one end to the front wall and being of an area sufficient to separate upper and lower layers of material and adapted when the truck is dumped

[illegible] layers of the layers of material while on [illegible] thereof to one layer side, and a layer about [illegible] over the upper layer of material and having fric-



tional engagement with the edges of the separator sheet to complete thereunto in completely encasing said upper layer of material.

1,904,907. METHOD AND APPARATUS FOR THE EXTRUSION OF METAL. WILLIAM TRAVIS, Hinckley, Leicestershire, England. Filed Nov. 4, 1931, Serial No. 572,987, and in Great Britain Nov. 5, 1930. 4 Claims. (Cl. 207—10.)



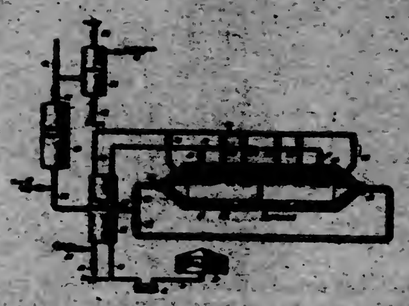
1. A method of extrusion comprising feeding molten material towards an extrusion chamber by a series of impulses and in a stream of small effective cross-section (less the cross-section of the extruding chamber), subjecting the stream to cooling before it enters the extrusion chamber so that the material therein is in a plastic state, and depositing the plastic material by the cooling operation beneath the extrusion chamber and through the [illegible]

1,904,908. HYDROGEN PREPARATION. VARDAMAN VOLLMER, Hammond, Ind., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Aug. 7, 1929. Serial No. 384,248. 2 Claims. (Cl. 23—212.)

1. The method of obtaining hydrogen at a pressure of about 200 to 300 atmospheres which comprises partially oxidizing a hydrocarbon at a pressure slightly higher than the desired pressure and passing the resulting carbon monoxide, hydrogen and [illegible] at the pressure at a catalyst without [illegible]

2. [illegible] at a pressure of about 200 to 300 atmospheres which comprises continuously

introducing a hydrocarbon and an oxidizing gas into a [illegible] zone whereby carbon monoxide, hydrogen and water are formed, and continuing said [illegible]

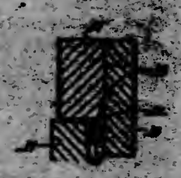


with steam for producing hydrogen without appreciably diminishing the pressure whereby the resulting hydrogen is at a pressure of about 200 to 300 atmospheres.

1,904,909. MORTAR CEMENT. Guy H. Wagner, Youngstown, Ohio, assignor to The Bessemer Cement Corporation, Youngstown, Ohio, a Corporation of Ohio. Filed Jan. 21, 1931. Serial No. 510,819. 18 Claims. (Cl. 106—24.)

1. A mortar cement having hydraulic characteristics comprising a mixture of hydrated [illegible] cement clinker, and [illegible] ground to a fineness of [illegible] than 96% passing through a 200 mesh screen, the ingredients being in such proportions as to give a [illegible] plasticity in cement mixtures without using [illegible]

1,904,910. GASKET. [illegible], Assignor to W. Arnesen and Peterson Brothers, Worcester, Mass. Filed May 11, 1928. Serial No. [illegible]. 1 Claim. (Cl. 20—69.)

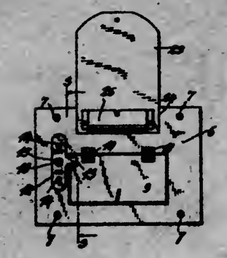


The combination with a door having a rabbet extending into the edge thereof parallel with the plane of the door and having a projection extending from said rabbet of the subject to the edge of the door of a gasket having a dovetailed part projecting into a recess in the rabbet into the rabbet and a fin with bifurcations thereon, the [illegible] bifurcations being adapted to engage the door [illegible]

1,904,911. MAIN SWITCH AND FUSE CABINET. Homer A. Wentworth, Denver, Colo. Filed Jan. 4, 1932. Serial No. [illegible]. 8 Claims. (Cl. [illegible]—38.)

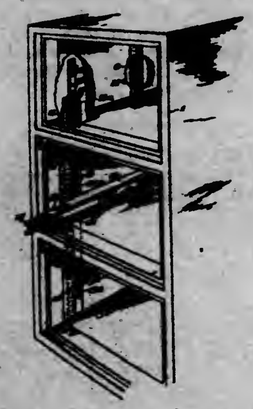
2. A panel section and frame [illegible] having a box section provided with a removable cover member, the cover member having a transparent [illegible] ing, a door hinged to one side of the [illegible] with cover [illegible] door [illegible] [illegible] [illegible]

opening through which the handle extends, the slide having also two holes that extend through the other two slots for holding the slide and guiding it in its movements and



a projection formed integral with the slide, said projection extending over the door when the switch is closed and being located above the door when the switch is open.

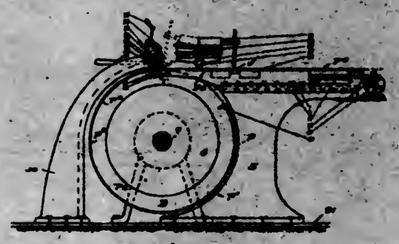
1,904,912. MONOLITHIC FILING CABINET AND ATTACHMENTS THEREFOR. CARL F. WOLTERS, Marietta, Ohio, assignor to Remington Rand Inc., Buffalo, N. Y., a Corporation of Delaware. Original application filed June 16, 1925, Serial No. 37,527, now Patent No. 1,807,948, dated June 2, 1931. Divided and this application filed July 6, 1928. Serial No. 290,864. 26 Claims. (Cl. 109—2.)



1. A fire proof cabinet, comprising a monolithic body formed with a plurality of thermally insulated compartments open at the front end, a metallic shell encasing said body, a drawer in each compartment mounted for movement into and out of said compartment, a monolithic front on each drawer, a metallic cover encasing said front, the marginal portion of each front and cover being formed for sealing cooperation with the front of said shell and the body in closed position to insulate the contents of each compartment from external heat.

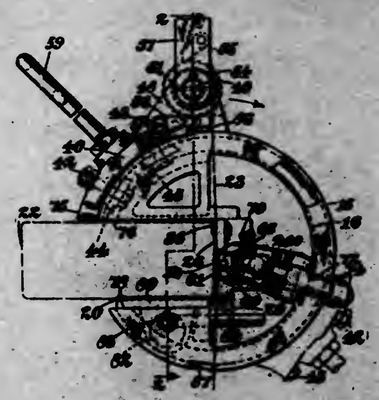
1,904,913. METAL FABRICATING MACHINE. JAMES LUCIAN ADAMS, Jr., East Chicago, Ind., assignor of nine-tenths to Graver Corporation, East Chicago, Ind., a Corporation of Illinois. Filed Jan. 6, 1928. Serial No. 244,924. 12 Claims. (Cl. 219—8.)

1. In a machine for the fabrication of tubular metal structures, an assembly table for receiving and supporting material placed thereon, welding means cooperating therewith for welding material thereon, winding means for drawing material therefrom, means for actuating said winding means to effect drawing of the material, opposed roll supports between which material may be drawn from said assembly table by said winding means, and means



for adjusting the position of said assembly table toward or from the winding means in line one with the other while maintaining the same angular relationship therebetween.

1,904,914. TIGHTENING AND SEALING DEVICE. DANIEL AMBROSE BRADLEY, London, England, assignor to Boabands Limited, London, England, a British Company. Filed Nov. 12, 1931, Serial No. 574,900, and in Great Britain Nov. 20, 1930. 7 Claims. (Cl. 81—9.1.)

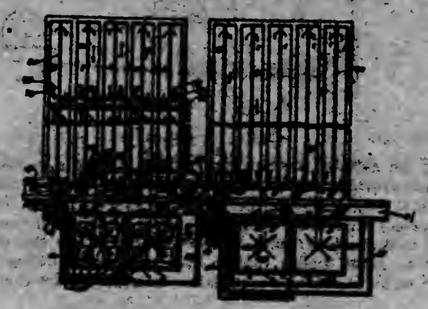


1. A tightening device of the character described comprising in combination a support having a face which is to lie against a side of a package to be encircled by a band, in which face is a recess for receiving a clip in a position in which it lies close to said side of the package, which clip has an anchor over which the band may be bent backwards, and to which clip one end portion of the band is to be preliminarily attached, a tensioning means which is mounted on the support, and to which the second end portion of the band extending across the clip is to be attached, which tensioning means is arranged to swing, whilst maintaining the tension on the band, along a semi-circular path whereof the axis is at the anchor of the clip and lies across the band.

1,904,915. IRON SULPHIDE MATERIAL AND PROCESS OF MAKING THE SAME. JOHN E. CAIN, Washington, D. C., and RAMPTON W. YATES, Cincinnati, Ohio, assignors to The Richardson Company, Lockland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1932. Serial No. 270,571. 7 Claims. (Cl. 23—152.)

5. A process for producing ferrous sulphide material which consists in causing white iron ore, pyrites and carbon to react together in the presence of burning fuel to produce molten ferrous sulphide material and a slag.

1,904,916. ACTIVATED SLUDGE PROCESS OF SEWAGE AND OTHER SEWAGE LIQUID PURIFICATION. JAMES ALBERT ONSLOW, London, England, assignor to Activated Sludge, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 24, 1927, Serial No. 228,858, and in Great Britain Oct. 27, 1926. 4 Claims. (Cl. 210—2.)



1. A sewage treatment process comprising treating sewage with activated sludge, separating the resulting sludge and effluent, treating the effluent with an activated sludge high in nitrifying bacteria, separating the effluent from the sludge in the second treatment, returning a part of the latter sludge to the sewage in the first treatment, and using the rest of said latter sludge to supply said activated sludge high in nitrifying bacteria.

1,904,917. SANITARY BRUSH. EUGENE CUSHIN, Minneapolis, Minn. Filed Apr. 8, 1932. Serial No. 603,967. 2 Claims. (Cl. 15—194.)



1. A method of constructing a brush head in which a rectangular sheet of material is first folded along the longitudinal center line thereof, the portions adjacent the fold being disposed parallel to and substantially in contact with each other, said folded sheet is then slit transversely from the free edges of said portions thereof toward the folded edge to form a series of narrow, bristle-like strips, the corners are removed from the free ends of said strips, said folded and slit sheet is rolled to form a cylindrical bristle structure, and means is applied adjacent the end formed by said folded edge to retain said structure in rolled form.

1,904,918. HEATING AND VENTILATING APPARATUS. WARREN EWARD, Columbus, Ohio, assignor, by mesne assignments, to Buckeye Blower Company, Columbus, Ohio, a Corporation of Delaware. Filed Feb. 15, 1932. Serial No. 593,178. 7 Claims. (Cl. 257—137.)

1. In combination, a relatively narrow vertically-disposed casing having an air inlet opening at the bottom, a side inlet and a top air outlet, means of supporting the casing above the floor, a radiator disposed across the bottom inlet, a centrifugal blower located in alignment with the bottom inlet, an electric motor for driving said fan, a damper disposed between the fan and the outlet, a blower adjacent the outlet, and a thermostat over the radiator, and means controlled thereby for actuating said damper.

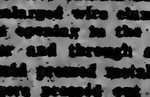


1,904,919. ELECTRIC TERMINAL CONNECTER. WILLIAM G. HARDWICK, Chicago, Ill., assignor to Railway Utility Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 2, 1932. Serial No. 602,711. 4 Claims. (Cl. 173—339.)



2. An electrical connector for securing a wire to a metallic terminal extension, comprising, a pressed metal member substantially U-shaped in form, adapted to fit over an end of the terminal extension, the upper part of said pressed metal member having a cup-shaped seat for the abutment of the wire therein and a threaded binding post having an enlarged wire clamping head adapted to extend through an opening in the upper part of said pressed metal member and through an opening in said terminal extension, said pressed metal member having a pair of resilient fingers projected out of the lower part thereof in thrust engagement with the threaded portion of said binding post on the lower side of said terminal extension.

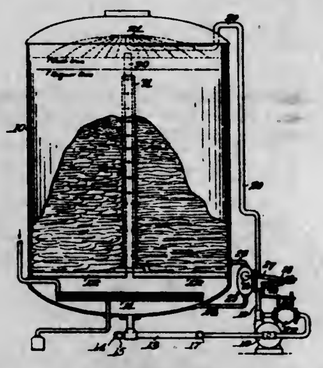
1,904,920. APPARATUS FOR FORMING SEMER METAL CAPS. JOHN M. HOFFMANN, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 21, 1930. Serial No. 477,092. 6 Claims. (Cl. 113—42.)



1. In a cap forming apparatus, the combination of a pair of opposed, relatively movable [illegible] having a forward and a return movement, each [illegible] a die positioned therebetween in the path thereof, [illegible] for guiding a punch pad and an [illegible] therewith [illegible]

strumentalities and operating during their forward movement to draw the said disc from between the clamping surfaces of said instrumentalities and into them one of them thereby shaping the disc into a cap having its edge left projecting, a curling die formed in one of said instrumentalities and positioned in alignment with the projecting edge of said cap, a relatively strong spring moving with a said instrumentality for engaging said punch pad and resiliently holding the drawn cap against said anvil during a part of the forward and a part of the return movement, said organization permitting initial return movement of the instrumentalities while holding the drawn cap, whereby said curling die engages the projecting edge of said cap and reshapes it to provide a completely formed cap, and spring means for normally pressing said punch pad upwardly relative to said strong spring.

1,904,921. KIER. EUGENE D. JEFFERSON, Waban, Mass., assignor to Rodney Hunt Machine Company, Orange, Mass., a Corporation of Massachusetts. Filed Mar. 28, 1931. Serial No. 524,438. 3 Claims. (Cl. 8—18.)



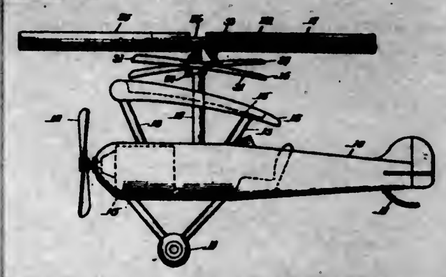
1. In a kier, the combination with a grate, of an equalising pipe extending from the grate upwardly practically to the liquor line, said equalising pipe being provided with perforations for admitting liquor from the kier and being closed at the bottom.

1,904,922. DUMP BODY OPERATING MECHANISM. THEODORE G. JUNGMEYER, Milwaukee, Wis. Filed Jan. 27, 1930. Serial No. 423,676. 8 Claims. (Cl. 298—22.)



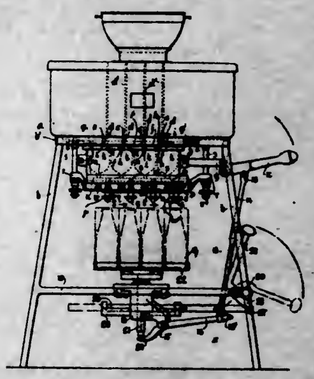
1. In combination with a supporting frame having a dumping body pivotally mounted thereon, a tilting mechanism comprising a pair of intermedially pivoted levers, means for supporting the pivotal connections for said levers for longitudinal movement relative to said supporting frame, links connecting one of the arms of each lever to the dumping body, rigid links working below the said pivotal connections of said levers and operatively connecting the other arms of said levers with the supporting frame to cause the last mentioned arms of said levers to swing downwardly and then upwardly as said dumping body is moved to discharge position during their longitudinal movement, and means for moving the fulcrum points of both levers in unison.

1,904,928. AEROPLANE. THOMAS MURDOCH MACCASKIN, Chicago, Ill., assignor to Hathaway Watson, Chicago, Ill. Filed Mar. 21, 1930. Serial No. 437,727. 6 Claims. (Cl. 244—15.)



1. An aeroplane comprising a wing having a pocket or recess provided therein, a pair of auxiliary wings arranged in said recess, means for elevating said auxiliary wings upwardly from said wing and out of said pocket, means for raising one of said auxiliary wings above the other and at right angles thereto and means for tilting one part of an auxiliary wing relative to another part thereof.

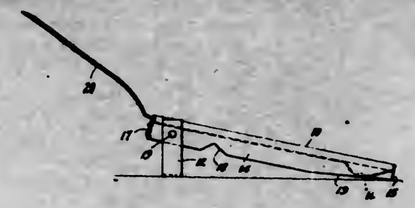
1,904,924. MACHINE FOR FILLING BOTTLES AND OTHER VESSELS. HEINRICH VALDEMAR NIELSEN, West Warf, Cardiff, South Wales, assignor to The Hygienic Manufactures and Supplies Company Limited, London County, England, a British Company. Filed May 8, 1928, Serial No. 276,146, and in Great Britain May 27, 1927. 18 Claims. (Cl. 226—102.)



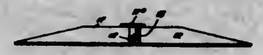
1. For a machine for filling bottles and other vessels with liquid and other flowable material, a supply container, a measuring chamber provided with ports through one of which said chamber is charged from said container and through another of which said chamber is discharged, means for cutting off the supply of flowable material to said chamber, means for cutting off the discharge from said chamber, means for allowing the escape of air from the measuring chamber through the container when the measuring chamber is being charged, other means leading from and forming a direct passage from the measuring chamber to the atmosphere from the commencement of discharge, means being provided whereby there is relative movement between the measuring chamber and the means for cutting off the supply of flowable material.

1,904,925. FRYING PAN. GEORGE W. PEARCE, Akron, Ohio, assignor of one-half to Stanley H. Austin, Akron, Ohio. Filed Sept. 10, 1931. Serial No. 562,015. 5 Claims. (Cl. 53—7.)

1. A frying pan having in combination a support pivoted so as to be freely shiftable thereon by lifting the pan and adapted to support the pan in a tilted position, said support being operable to a supporting position by lifting one side of the pan from a supporting surface, said pan being returnable to a horizontal position on said supporting surface by shifting the pan while maintaining contact of the support with said surface.



1,904,926. SANITARY WELL TOP. WILLIAM C. H. PETERS, Albert City, Iowa. Filed Nov. 9, 1931. Serial No. 573,799. 1 Claim. (Cl. 103—218.)



A sanitary well top formed complete in two sections, each section being formed with a raised pump seat portion at the center of its inner edge, the remainder of each section having its top surface inclined downwardly and outwardly, an upwardly extended rib formed on the inner edge of one of the sections and extending from the raised central portion to the outer end, the other section being formed on its inner edge with an inverted U-shaped rib shaped to receive said upwardly extended rib, and to thereby form a leak proof joint and at the same time securely lock the two sections together against movement away from each other.

1,904,927. SWITCH MECHANISM. RUDOLF POPP, Valparaiso, Ind., assignor to McGill Manufacturing Company, Valparaiso, Ind., a Corporation of Indiana. Filed May 12, 1931. Serial No. 536,823. 5 Claims. (Cl. 200—64.)



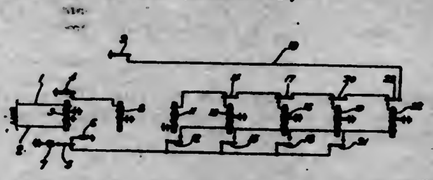
4. A pull chain connector for switch mechanisms comprising a tubular cap having a wall opening, a connector adapted to be inserted in the cap for receiving the chain at one end and connecting to the switch mechanism at its other end, and a spring catch for the connector adapted to snap into the wall opening to hold the connector and thereby the chain in the cap, said spring catch being pressable inwardly clear of the wall through said opening to remove the cap and chain from the connector.

1,904,928. APPARATUS FOR INSTRUCTION FOR STRINGED MUSICAL INSTRUMENT PLAYING. LEO POSTNOFF, Brooklyn, N. Y. Filed June 16, 1931. Serial No. 543,367. 24 Claims. (Cl. 84—286.)

1. Means for use in carrying out instruction in the manipulation of a stringed musical instrument, tones from which are produced by bowing, which includes: a support for carrying the bow for association with the instrument during bowing-simulating movements, and means associated with the support for indicating the pressure applied by the bow against the support during such movements of the bow.

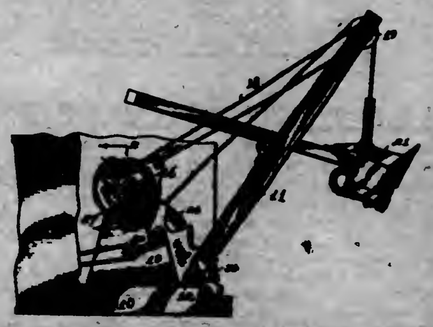


1,904,929. RELAY SYSTEM. RODNEY G. RICHARDSON, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Sept. 3, 1931. Serial No. 561,018. 27 Claims. (Cl. 179—16.)



1. In combination, a plurality of counting relays, a condenser, an impulse receiving relay, a charging circuit for said condenser including contacts on said impulse receiving relay, and a discharging circuit for said condenser controlled by said impulse receiving relay to successively operate said counting relays responsive to received impulses.

1,904,930. SELF-LOCKING BOOM HOIST. GEORGE T. ROWE, Cedar Rapids, Iowa. Filed Sept. 29, 1930. Serial No. 485,141. 4 Claims. (Cl. 254—187.)



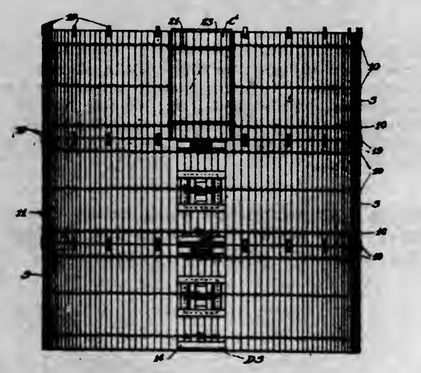
1. In combination, a cable drum, a clutch controlled mechanism for imparting winding movement to said drum, a worm gear mechanism for retarding the unwinding movement of said drum, means actuated by the reverse movement of said drum for automatically connecting said worm gear mechanism to said drum.

1,904,931. METHOD OF ASSEMBLING METAL MEMBERS WITH RUBBER BUSHINGS. RALPH H. ROSENBERG, Detroit, Mich., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1931. Serial No. 509,898. 15 Claims. (Cl. 28—88.2.)



1. An apparatus for assembling a rubber sleeve in telescoping relationship between a pair of metallic members which comprises a funnel, a plunger and a yieldable washer actuable by said plunger and adapted to abut an end of the rubber sleeve and force it through the funnel.

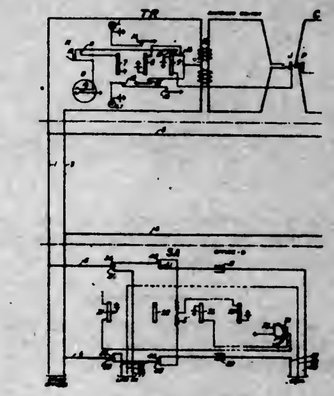
1,904,932. PORTABLE SILO OR THE LIKE. PETER RUTTEN, Osakis, Minn. Filed May 25, 1931. Serial No. 539,812. 4 Claims. (Cl. 20—1.4.)



1. In portable building structure of the class described, a plurality of substantially cylindrical sections each comprising a multiplicity of vertical staves and flexible encircling members to which said staves are attached, and means associated with at least one of the annular edges of each section for securing the adjacent section thereto with edges of said sections in abutment said sections forming a continuous wall and said sections being capable of being rolled into compact cylindrical form.

1,904,933. TELEPHONE SYSTEM. NORMAN H. SAUNDERS, Chicago, and CLARENCE E. LOMAX, Oak Park, Ill., assignors, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 24, 1931. Serial No. 558,912. 24 Claims. (Cl. 179—27.)

1. In a telephone system, a switching center and a plurality of automatic offices serially connected by a trunk line, subscribers' lines terminating in said offices, means at the switching center for transmitting digit impulses representing the number of a called subscriber's line over the trunk line, the first digit of the number designating the office in which the called line is located, a switching

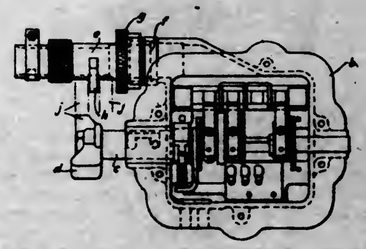


device in each office operated responsive to the transmission of the first digit of the called number, and means controlled by the devices in the offices other than the one designated by the digit transmitted for temporarily clearing the trunk line of all connections in such offices.

1,904,934. RETARDER FOR USE IN RUBBER VULCANIZATION PROCESS. ROBERT L. SIBLEY, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, a Corporation of Ohio. Filed Mar. 18, 1931. Serial No. 523,648. 12 Claims. (Cl. 18—53.)

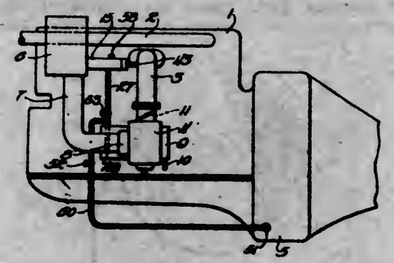
1. The process of vulcanizing rubber which comprises heating a mixture of rubber and sulfur in the presence of a substituted ammonia, wherein one or more hydrogen atoms of said ammonia have been replaced by an acyl radical only containing more than one carbon atom.

1,904,935. ELECTRIC SWITCH. GEORGE SCOTT, London, England, assignor to Chicago Pneumatic Tool Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 5, 1930, Serial No. 473,205, and in Great Britain Apr. 4, 1930. 4 Claims. (Cl. 200—50.)



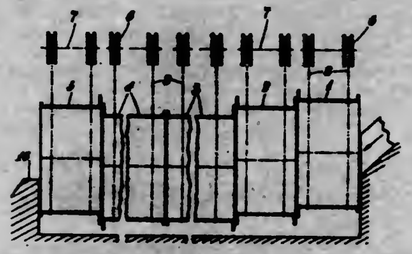
1. In combination, an electric switch, a power lead having a plug secured to said switch, a control shaft for said switch arranged for axial movement and having a handle for actuating the same, said handle being movable to "on" position in at least two positions of axial adjustment of said shaft, an arm in the form of a quadrant on said switch handle, and means on said plug engaged by said arm to prevent withdrawal of the plug when said handle is in each of its "on" positions.

1,904,936. COMBINED PRIMER AND CYLINDER LUBRICATOR FOR INTERNAL COMBUSTION ENGINES. CHARLES LAWRENCE STOKES, Los Angeles, Calif., assignor, by mesne assignments, to Lynn A. Williams, Evanston, Ill., and Clifford C. Bradbury, Glencoe, Ill., trustees. Original application filed Nov. 11, 1925, Serial No. 67,864, now Patent No. 1,764,606, dated June 17, 1930. Divided and this application filed Nov. 2, 1928. Serial No. 316,658. 8 Claims. (Cl. 123—196.)



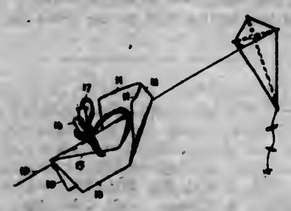
1. A primer and lubricator for internal combustion engines, comprising a valve body having a port for communicating with the intake manifold of an internal combustion engine, means for feeding liquid fuel priming charge to said port during the starting of the engine and other means for feeding a lubricant to the liquid fuel charge.

1,904,937. BARKING DRUM. JOHN STRINDLUND, Tofte I Hurum, Norway. Filed July 21, 1931, Serial No. 552,092, and in Sweden July 23, 1930. 6 Claims. (Cl. 144—208.)



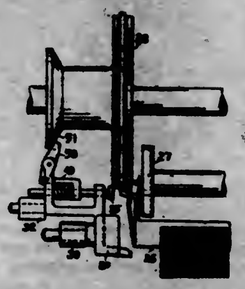
1. In a barking drum having an inlet end and an outlet end, the combination of several substantially horizontal rotary drum sections arranged end to end, each drum section having entirely open and unconstricted ends, the section nearest the inlet end of a pair of adjacent drum sections having its axis located higher than the axis of the other of said drum sections in the direction perpendicular to the slanting level formed by the rolling wood in the drum when rotated.

1,904,938. TRAVELER FOR KITE STRINGS. HERBERT DANIEL AUB, Bloomfield, N. J. Filed May 28, 1932. Serial No. 613,079. 3 Claims. (Cl. 244—24.)



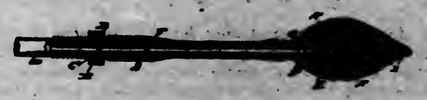
1. A kite-string traveler consisting of a saddle formed with a ridge and sails, a parachute with a sail adapted to be folded and laid over the saddle ridge, and a forked figure connected to the parachute shrouds and adapted to loosely engage the parachute sail.

1,904,939. LOOM FOR WEAVING TUFTED FABRIC AND METHOD OF WEAVING. CHARLES EDWARD BARRETT, Yonkers, N. Y., assignor to Alexander Smith & Sons Carpet Company, Yonkers, N. Y., a Corporation of New York. Filed Aug. 18, 1931. Serial No. 557,772. 2 Claims. (Cl. 139—8.)



1. The combination in a loom for weaving tufted fabrics, of means for forming a shed of the warp threads, tube frames and tuft yarn spools, a tube frame carrier, a clutch for transferring the tube frames from the carrier to the shed and returning them to the carrier, brake pins carried by the clutch for directly engaging the faces of the spool flanges, means for moving the clutch transversely in and out of engagement with a tube frame, and means for retracting the brake pins in the clutch concurrently with the release of the clutch.

1,904,940. CLEANING AND WASHING BRUSH. HARRY BATMAN, Detroit, Mich., assignor to Oscar Sherr, Detroit, Mich. Filed Apr. 16, 1931. Serial No. 530,449. 2 Claims. (Cl. 15—122.)

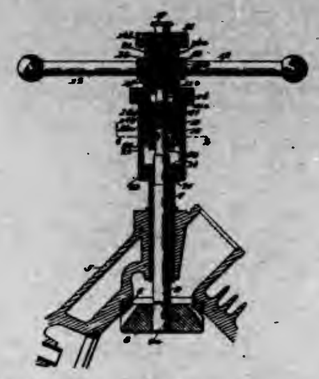


1. In a cleaning and washing brush, the combination of a pipe nozzle fitted at one end with a coupling member for attachment to a cooperating hose coupling, said pipe nozzle being perforated at its forward end for the discharge of water; and a brush having bristles secured between a pair of twisted wires coiled relatively close together around the nozzle, that the bristles may be massed and project radially from and longitudinally beyond the end of the nozzle, the ends of said pair of wires extending through a hole in the nozzle and soldered to the nozzle to secure the brush thereon.

1,904,941. VALVE RESEATING TOOL DRIVER. ALLEN I. DUNN, Cedar Rapids, Iowa, assignor to Cedar Rapids Engineering Company, Cedar Rapids, Iowa. Filed Aug. 12, 1929. Serial No. 385,436. 1 Claim. (Cl. 279—75.)

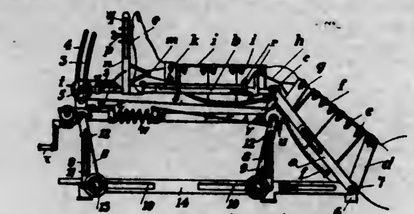
A tool holder for the purpose indicated comprising a chuck member having a longitudinal groove in its external surface, a sleeve having an inwardly tapering opening in its forward end and surrounding said chuck member and having an inward projection to cooperate with said groove, said sleeve having an external screw-threaded surface, a sleeve having its internal cylindrical surface screw-threaded to engage the screw threads of the first mentioned sleeve and cooperate therewith, said chuck member having a ball mounted in the wall thereof to move transversely thereof, said first mentioned sleeve being adapted,

when moving longitudinally relatively to the chuck member, to cause said ball to move inwardly into gripping position or to permit said ball to move outwardly into



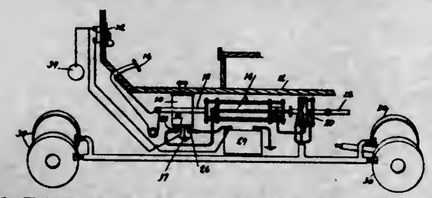
tool-releasing position, and resilient means in said first mentioned sleeve to actuate said chuck member inwardly to cause the ball to assume tool-gripping position.

1,904,942. SURGICAL LEG-STRETCHING DEVICE. LUDWIG HEIGL, Welden, Germany, assignor of one-fourth to Fred Zeissel and James S. Kendall, Knox County, Tex. Filed Mar. 29, 1930, Serial No. 440,088, and in Germany Feb. 12, 1930. 2 Claims. (Cl. 128—84.)



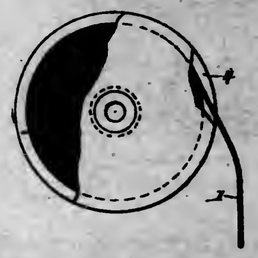
1. A surgical leg-stretching device comprising in combination, a leg supporting frame having a tiltable upper portion, a thigh strap connected to said frame, knee and ankle straps, a foot rest arranged to slide on said tiltable frame portion, means for connecting said foot rest to the ankle strap, ropes connecting said foot rest with the knee strap, adjustable guide pulleys supporting said ropes on the tiltable frame portion, a winch mounted on the frame, ropes connecting said winch with the foot rest, pulleys guiding said latter ropes on the different frame portions to allow a supported leg to be stretched by means of the winch, and a spring element inserted between the ropes and the winch.

1,904,943. VEHICLE CONTROL MECHANISM. VINCENT G. APPLE and WILLIAM H. PETIT, Dayton, Ohio, assignors to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed Jan. 13, 1930. Serial No. 420,373. 8 Claims. (Cl. 192—3.)



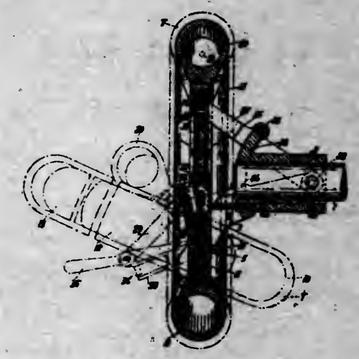
1. Vehicle mechanism comprising brakes, a manually operable brake control member, an ignition switch, power mechanism for applying and releasing said brakes, means controlled by the manual exertion on said brake control member for varying the effective force transmitted by the said power mechanism, and means controlled by said ignition switch for locking the brakes in any position.

1,904,944. RECORD STRIP FOR SOUND REPRODUCING MACHINES. JOHANNUS G. M. HERKLOTS, Koesingan, Cheribon, Java, Dutch East Indies. Filed Oct. 3, 1930. Serial No. 486,245. 1 Claim. (Cl. 274—11.)



A record for a talking machine comprising a flexible strip having a plurality of sound grooves therein, said grooves extending longitudinally and being of gradually decreasing length, and identification indicia located next to the ends of the grooves to identify the composition recorded.

1,904,945. COLLAPSIBLE TIRE BUILDING FORM. FRANK L. JOHNSON, Akron, Ohio. Filed Sept. 10, 1930. Serial No. 480,955. 12 Claims. (Cl. 154—9.)



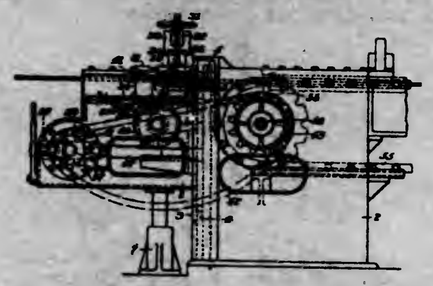
1. In a collapsible tire building core, the combination of a key section and a group of sections constituting a complete core, an arm rigidly connected to the key section and movable about a pivot in the rear of the core plane, the group of sections being pivoted to swing as a group about a pivot on one side of the core axis.

12. In a collapsible tire building core, a key section and a group of sections constituting the complete core, an arm connected to the key section, a pivot for the arm, a pivot for the group of sections, and a toggle connected to the key section and to the pivot for the group of sections.

1,904,946. PRODUCING CALCIUM NITRATE FROM DOLOMITE WHILE SIMULTANEOUSLY OBTAINING MAGNESIA. OTTO KIPPE, Osnabruck, Germany, assignor of one-half to Kleckner-Werke A.-G., Castrop-Rauxel, Germany, a Corporation of Germany. Filed Mar. 29, 1932, Serial No. 601,878, and in Germany Mar. 3, 1931. 4 Claims. (Cl. 23—102.)

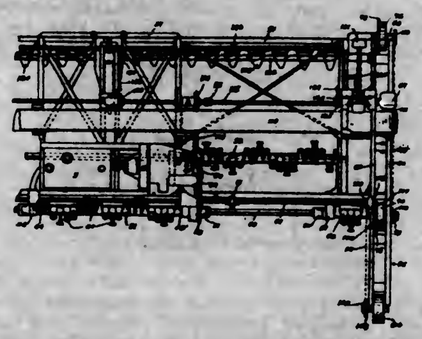
1. A method of producing calcium nitrate, and simultaneously obtaining magnesia, from dolomite, consisting in dissolving the dolomite in nitric acid and precipitating magnesia by means of a material in the group consisting of milk of lime and of dolomite, the milk having previously been filtered through fine sieves.

1,904,947. WIRE DRAWING MACHINE. JACOB T. LEMCK, Beaver, Pa., assignor to Union Drawn Steel Company, Beaver Falls, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1928. Serial No. 250,505. 27 Claims. (Cl. 205—4.)



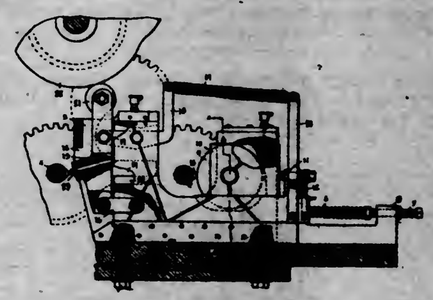
1. Apparatus for feeding wire through a drawing die comprising a pusher mechanism movable with the wire and having wire engaging grippers, and a plurality of wire engaging guides relatively movable longitudinally interposed between the pusher and the drawing die and co-operating with the pusher for guiding the wire into the die.

1,904,948. MECHANICAL FINE GRADER. GLENWAY MAXON, Jr., Chicago, and WILLIAM ORD, deceased, Chicago, Ill., by Harriet P. Ord, executrix, Hollywood, Calif., assignors to The Engineering Development Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 18, 1929. Serial No. 393,516. 6 Claims. (Cl. 37—108.)



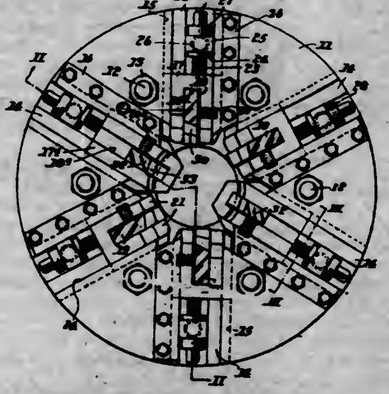
1. A sub-grade surfacing machine having a relatively light rigid frame, wheels for moving said frame upon rails at the sides of the area to be graded, arbor mechanism carried thereby, said arbor mechanism mounted transversely to the direction of travel of the machine, pickers mounted on said arbor mechanism, power means on said frame adapted to rotate said arbor mechanism to move the pickers against the forward travel of the machine, a driving connection from said power means to the wheels, and means for dividing the power between said arbor mechanism and said wheels, the tractive force applied to said wheels being less than the force delivered horizontally by the pickers against the ground, whereby abnormal resistance encountered by the pickers will cause the machine to move backward against the continuing forward tractive effort.

1,904,949. LATHE. HERMAN W. MELLING, Jackson, Mich. Filed Sept. 13, 1930. Serial No. 481,685. 9 Claims. (Cl. 82—19.)



1. In a structure of the class described, the combination of a rotary work holder, a tool carriage reciprocating transversely of the work holder, a spring acting to urge said carriage toward the work, a tool carriage control cam which is a replica of the shape of the work to be cut, a tool holder, a pair of parallel supporting links for said tool holder mounted on said carriage, one of said supporting links being provided with a rearwardly projecting arm, a spring connected to said arm and acting to urge said tool holder upwardly, a tool mounted on said tool holder to face downwardly, a tool holder actuating cam mounted above said tool holder and in a plane above the plane of the work, and a roller on said tool holder coacting with said cam.

1,904,950. PIPE FACING TOOL. WILLIAM M. NECKERMAN, Youngstown, Ohio, assignor to Republic Steel Corporation, Youngstown, Ohio, a Corporation of New Jersey. Filed July 25, 1930. Serial No. 470,664. 2 Claims. (Cl. 82—1.)

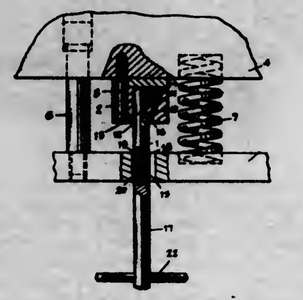


1. In a pipe-finishing device, a rotary head, radial slots therein, tool blocks reciprocable in said slots, radial recesses in said blocks extending to the inner end only of some blocks and to the outer ends only of others, and cutting tools seated in said recesses and engaging the closed ends thereof whereby the tools are firmly supported against radial displacement.

2. In a pipe finishing device, a rotary head having radial slots formed therein, tool retaining blocks slidably mounted in the slots, a plurality of cutters for simultaneously acting on the end of the pipe, certain of said cutters adapted to engage the inner wall of the pipe and the other of said cutters adapted to engage the outer

wall of the pipe, said blocks having recesses with closed ends formed therein and adapted to receive said cutters, and bearing surfaces adjacent the closed end of said tool receiving slots against which the tool bears thereby presenting a firm support for the tool during the cutting operation.

1,904,951. PUNCH. PETER PETERSON, Detroit, Mich. Filed Mar. 21, 1930. Serial No. 437,725. 1 Claim. (Cl. 164—124.)



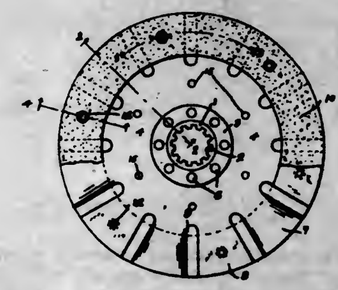
In combination with a ram and a stripper plate, the stripper plate connected to the ram for short limited movements relative to the ram, the stripper plate having an opening, a punch having a shank at one end and a shearing edge at the other end, the punch located in and projecting through the opening, the ram having a socket, a ball latch located in the ram for securing the punch in the socket of the ram, the shank of the punch having a sloping concave surface operable by rotative movement of the punch to force the ball away from the axis of the punch to release the punch from the ball latch, a spring for pressing the ball against the surface of the punch, at a point located at the bottom of the concavity, the punch having a spiral corrugation located on the shank and below the ram and normally above the lower surface of the stripper plate and adapted to receive a tool having a spiral corrugated surface fitting the corrugated surface of the punch and insertable through the said opening and adapted to engage the punch by rotation and rotate the punch to disengage it from the ram and withdraw the punch through the opening of the plate.

1,904,952. APPARATUS FOR MAKING EMULSIFIED COMPOUNDS INCLUDING HYDROCARBONS. ROBERT H. RUSSELL, Cleveland, Ohio, assignor to Gas Fuel Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Feb. 4, 1930, Serial No. 425,857. Divided and this application filed Mar. 25, 1931. Serial No. 525,292. 1 Claim. (Cl. 261—92.)



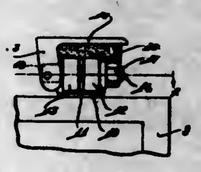
An apparatus for use in making emulsified compounds, comprising a closed pressure chamber, a movable mechanical agitator arranged within the chamber, means for forcing water and oil into one end of said chamber near the bottom of the latter, means for introducing a pressure gas into the top of an intermediate portion of the chamber, a depending partition arranged within the opposite end portion of the chamber, a weir rising from the bottom of the chamber and positioned between said partition and the last mentioned end of the chamber, and means for discharging the compound from a point between said weir and the last mentioned end of the chamber.

1,904,953. CLUTCH OR TRANSMISSION PLATE. IRA SAKS, Cleveland, Ohio. Filed Aug. 18, 1931. Serial No. 557,786. 3 Claims. (Cl. 192—107.)



1. A clutch plate comprising the combination of a pair of discs each having a series of alternately bowed and flat peripheral sectors, radially extending slots between each of said bowed and flat sectors whereby said sectors are circumferentially isolated from each other, said flat sectors of each disc being in registry with each other, and friction facing rings secured to said flat sectors, said slots extending from the circumference of said discs to a point beyond the inner edge of said facing ring.

1,904,954. BATTERY POST CLAMP. BYRON M. SCHMUHL, Centerline, Mich., assignor of one-third to Wm. Cadsow Ramsay, Detroit, Mich. Filed Apr. 27, 1929. Serial No. 358,487. 2 Claims. (Cl. 173—269.)



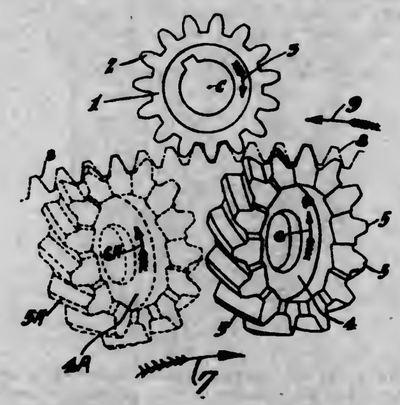
1. A battery post clamp of the class described comprising: a clamping member for clamping about a battery post and having its ends angularly turned and in spaced relation; a bolt projected through said angularly turned ends; a nut threaded on said bolt; a head on said bolt; a cover swingably mounted on said head; a laterally projecting portion on said cover for overlying the battery post; and cam extensions on said cover for moving said ends into approach upon movement of said cover to operative position.

1,904,955. BALANCED SPRING HAMMER MAGNETIC TYPE. FRANK SCHOUTEN, Glenarm, Md., assignor to The Black & Decker Manufacturing Company, Towson, Md., a Corporation of Maryland. Filed Feb. 7, 1931. Serial No. 514,176. 14 Claims. (Cl. 172—126.)

1. The combination in a portable power-driven hammer of a solenoid, having a core, means for energizing the solenoid periodically to reciprocate the core, a ram, means for guiding the ram, and balanced spring means connecting the ram to the core whereby the reciprocating motion of the core is imparted by the spring to the ram.



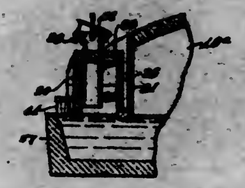
1,904,956. METHOD OF CUTTING THE TEETH OF GEARS. OLIVER G. SIMMONS, Lakewood, Ohio. Filed Mar. 27, 1930. Serial No. 439,819. 18 Claims. (Cl. 90—9.)



1. The herein described method of generating teeth in a gear blank with a gear shaper cutter having helical teeth which comprises positioning the cutter with its axis at an angle to the axis of the blank, rotating the cutter and blank in intermeshing relation, reciprocating the cutter across the face of the blank and simultaneously moving the cutter laterally into and out of engagement with the blank while maintaining intermeshing relation between the cutter and blank and an imaginary curvilinear rack conjugate to both the cutter and blank and moving between the same.

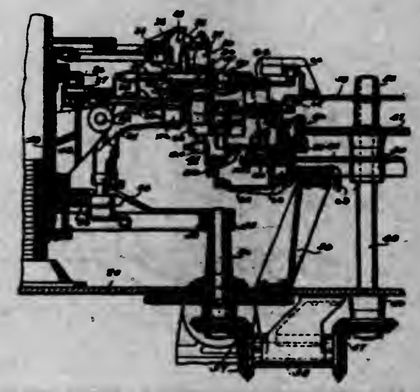
1,904,957. GLASS FURNACE. LEONARD D. SOUDER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed May 24, 1929. Serial No. 365,627. 1 Claim. (Cl. 49—54.)

In a glass furnace the combination of a tank to contain molten glass, said tank having a lateral extension providing an exposed gathering area, a vertical wall defining the inner margin of the gathering area and having its lower edge spaced a short distance above the level of the glass, a second vertical wall spaced from the first named wall and forming therewith a chamber, said second wall projecting downwardly into the glass to completely segregate the chamber from the furnace proper, a cover connecting the upper ends of said walls, means for introducing a heat regulating medium at one end of the chamber,



and a stack projecting through the cover in proximity to the other end of said chamber, said stack adapted to be adjusted vertically to change the spaced relation between its lower end and the level of the molten glass whereby to regulate the application of the heat regulating medium to the glass in proximity to the lower end of said stack.

1,904,958. GLASSWARE FORMING MACHINE. LEONARD D. SOUDER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Mar. 26, 1930. Serial No. 438,941. 11 Claims. (Cl. 49—9.)

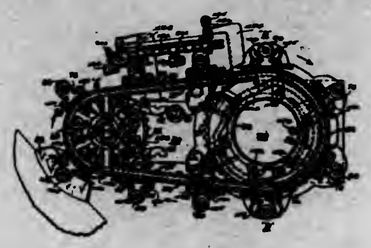


2. In a glassware forming machine, the combination of a series of finishing molds moving in a closed horizontal path past a blank transferring position, means for placing blanks in the finishing molds at said position, supporting means for the finishing molds including a continuous upwardly facing bearing plate extending parallel with the path of travel of the finishing molds, carriers individual to the finishing molds slidingly supported on said plate, an endless chain connecting the series of finishing mold carriers, and means for continuously moving the chain to thereby cause the finishing molds to travel in succession past said transfer position.

1,904,959. GLASSWARE FORMING MACHINE. LEONARD D. SOUDER, Toledo, Ohio, assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Apr. 14, 1930. Serial No. 444,163. 24 Claims. (Cl. 49—5.)

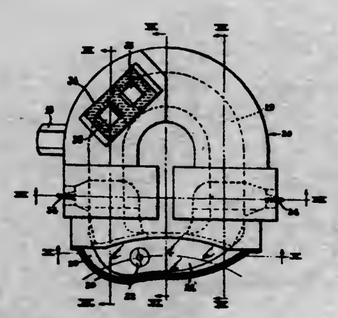
1. In a glassware forming machine, blank and finishing mold carriages arranged side by side and rotatable continuously about different vertical axes, means for rotating said carriages, partible body blank molds on the blank mold carriage, partible finishing molds on the

finishing mold carriage, an endless carrier encircling said carriages and so connected thereto as to be constantly moved by rotation of said carriages, and a series of neck



molds mounted on said carrier and adapted to be brought by movement of the latter into register with the blank and finishing molds in alternation.

1,904,960. GLASS WORKING TANK. LEONARD D. SOUBIER, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed June 19, 1931. Serial No. 545,501. 7 Claims. (Cl. 49—56.)

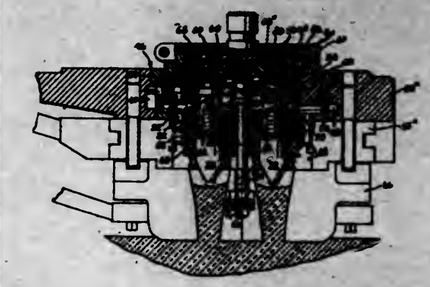


3. In a stationary glass working tank, a continuous upwardly facing channel including a substantially U-shaped portion, means for delivering glass to the channel, a jack arch spanning the ends of said U-shaped portion and defining the inner margin of a gathering area, a cover extending over the U-shaped portion of the channel and cooperating with the jack arch in forming a heating chamber, and means for supplying heat to said chamber.

1,904,961. MACHINE FOR FORMING HOLLOW GLASSWARE. LEONARD D. SOUBIER, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed June 19, 1931. Serial No. 545,502. 22 Claims. (Cl. 49—5.)

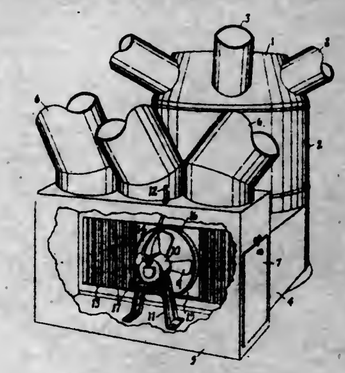
4. In combination, a neck mold, a blank mold in register therewith, a plunger, mechanical means for placing the plunger in an operative position in said molds, vacuum applying means for exhausting air from the molds and causing delivery of molten glass thereto, and vacuum operated means for imparting a glass compacting movement to the plunger.

20. A partible two-section mold having a plurality of cavities therein, plungers individual to the cavities, a holder for the plungers, means for projecting the plungers into said cavities, a locking device including a locking pin and means on the meeting faces of the mold sections to interlock with said pin for securing the mold against



premature opening, and means whereby projection of the plungers into said cavities moves the locking pin into locking position.

1,904,962. HOT AIR HEATING SYSTEM. CLAUDE S. STOUT, Marshall, Mich., assignor to Marshall Furnace Company, Marshall, Mich. Filed Dec. 14, 1931. Serial No. 580,799. 18 Claims. (Cl. 126—110.)



1. In a hot air heating system, including a furnace having a hot air chamber, a cold air boot connected to said hot air chamber for supplying air thereto, a cold air chamber connected to said boot for supplying air thereto, cold air supply pipes connected to said cold air chamber, and a forced air supply unit disposed at the juncture between said cold air chamber and said boot, comprising a frame, a cylinder disposed in the center of said frame, a vertical wall having an opening for said cylinder, spaced baffles arranged in staggered relation from front to rear, facing the hot air chamber and carried by said frame in the space at the sides of said wall for allowing air to pass therethrough toward the hot air chamber but resisting the passage of air in the opposite direction, and a fan in said cold air chamber for forcing air through said cylinder as desired.

1,904,963. MASK FOR MOVING PICTURE SCREENS. EARL J. VALLEN, Akron, Ohio. Filed July 12, 1929. Serial No. 377,700. 8 Claims. (Cl. 88—24.)

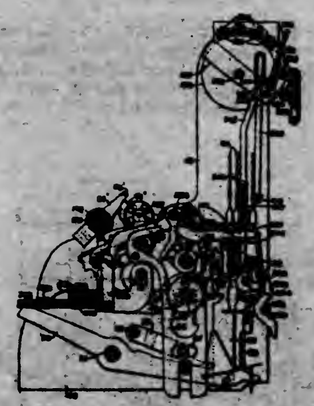
1. A device for reducing the projection area of a moving picture screen to compensate for the difference in the location or extent of sound and silent pictures upon the screen, said device comprising a horizontal rail, carriers

movable over the rail, and a curtain suspended therefrom, the forward edge of the curtain being provided with means to keep the same smooth and unwrinkled, said means in-



cluding a rigid vertical batten and a plurality of spaced levers connected to said batten and so constructed and arranged as to effect lateral movement of the latter.

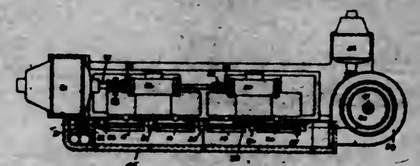
1,904,964. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 28, 1919, Serial No. 293,141. Renewed Dec. 26, 1931. 22 Claims. (Cl. 235—3.)



1. In a machine of the class described, the combination of a totalizer, item entering means for entering items on said totalizer, indicators for indicating items entered in the totalizer, means for holding said indicators in the indicating position, an operating device for taking a total of said items from said totalizer, and means operable upon the actuation of said operating device for disabling said holding means.

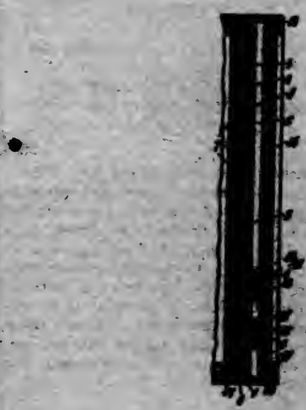
1,904,965. WIRE DRAWING MECHANISM. ALFRED T. YUNGMAN, Akron, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed Feb. 7, 1929. Serial No. 338,142. 8 Claims. (Cl. 205—14.)

8. In combination, a multiple-drum drawing bench including a plurality of dies, a drawing drum for each die, means associated with said drums adapted to drive them at speeds having fixed predetermined differentials, a finishing die, and a winding unit having a winding drum thereon adapted to draw a wire through said finishing die at a speed adjustable to correspond to the number of dies



in use, the drive for said winding drum being separate and independent from that of said drawing drums, in order that said winding drum may be driven in combination with any number less than the total number of drawing drums to provide a multiple purpose drawing machine.

1,904,966. COMBINED ANIMATED AND CHANGEABLE SIGN. RUSS M. AMMERMAN, Cincinnati, Ohio. Filed Nov. 19, 1930. Serial No. 496,696. 12 Claims. (Cl. 40—128.)

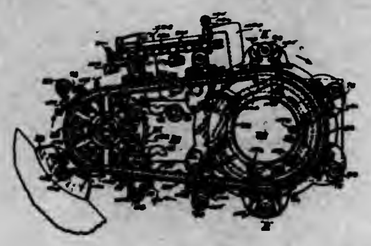


1. A sign comprising a transparent element and a translucent element behind said transparent element, sets of display matter contrasting with said translucent element, one set of which is in front and the other set of which is in back of said translucent element, at least part of one of said sets being removably mounted on one of said elements whereby it is changeable, and means for intermittently illuminating the rear of said elements and display matter.

1,904,967. PIPE JOINT AND THE METHOD OF MAKING SAME. BYRON E. BARNES, Akron, Ohio, assignor to The Bigge Boiler Works Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 9, 1930. Serial No. 474,722. 19 Claims. (Cl. 113—112.)

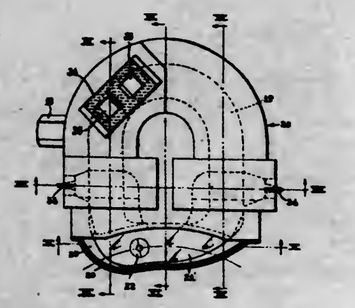
1. The method of joining a male end of a pipe section to a female end of a pipe section which comprises forming recesses in the lower half of the male pipe end and in the upper half of the female pipe end, providing opposed slot-like openings in the end of one of the pipes, bringing the two pipe ends into approximately horizontal alignment with the slots in the male pipe end at the sides thereof, and telescoping the male end in the female end, welding the pipes together through the recesses then sealk welding the upper half of the joint from the outside and the

finishing mold carriage, an endless carrier encircling said carriages and so connected thereto as to be constantly moved by rotation of said carriages, and a series of neck



molds mounted on said carrier and adapted to be brought by movement of the latter into register with the blank and finishing molds in alternation.

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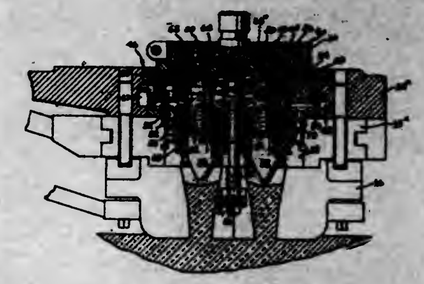


3. In a stationary glass working tank, a continuous upwardly facing channel including a substantially U-shaped portion, means for delivering glass to the channel, a jack arch spanning the ends of said U-shaped portion and defining the inner margin of a gathering area, a cover extending over the U-shaped portion of the channel and cooperating with the jack arch in forming a heating chamber, and means for supplying heat to said chamber.

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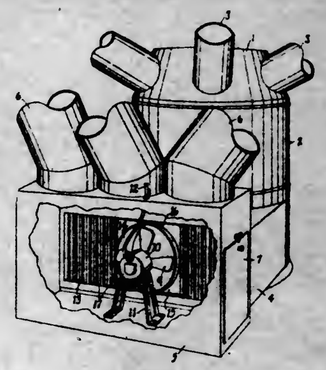
4. In combination, a neck mold, a blank mold in register therewith, a plunger, mechanical means for placing the plunger in an operative position in said molds, vacuum applying means for exhausting air from the molds and causing delivery of molten glass thereto, and vacuum operated means for imparting a glass compacting movement to the plunger.

20. A partible two-section mold having a plurality of cavities therein, plungers individual to the cavities, a holder for the plungers, means for projecting the plungers into said cavities, a locking device including a locking pin and means on the meeting faces of the mold sections to interlock with said pin for securing the mold against



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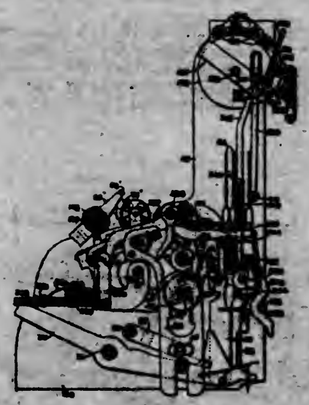
1. A device for reducing the projection area of a moving picture screen to compensate for the difference in the location or extent of sound and silent pictures upon the screen, said device comprising a horizontal rail, carriers

movable over the rail, and a curtain suspended therefrom, the forward edge of the curtain being provided with means to keep the same smooth and unwrinkled, said means in-



cluding a rigid vertical batten and a plurality of spaced levers connected to said batten and so constructed and arranged as to effect lateral movement of the latter.

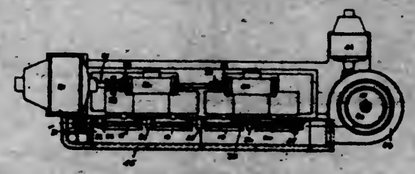
1,904,964. CASH REGISTER. EDWARD J. VON PEIN, Dayton, Ohio, assignor, by mesne assignments, to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Apr. 28, 1919, Serial No. 293,141. Renewed Dec. 26, 1931. 22 Claims. (Cl. 235—2.)



1. In a machine of the class described, the combination of a totalizer, item entering means for entering items on said totalizer, indicators for indicating items entered in the totalizer, means for holding said indicators in the indicating position, an operating device for taking a total of said items from said totalizer, and means operable upon the actuation of said operating device for disabling said holding means.

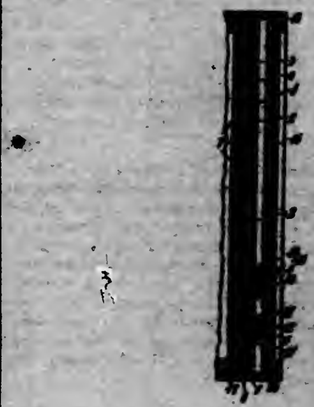
1,904,965. WIRE DRAWING MECHANISM. ALFRED T. YUNGMAN, Akron, Ohio, assignor to The Vaughn Machinery Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed Feb. 7, 1929. Serial No. 338,142. 8 Claims. (Cl. 205—14.)

3. In combination, a multiple-drum drawing bench including a plurality of dies, a drawing drum for each die, means associated with said drums adapted to drive them at speeds having fixed predetermined differentials, a finishing die, and a winding unit having a winding drum thereon adapted to draw a wire through said finishing die at a speed adjustable to correspond to the number of dies



in use, the drive for said winding drum being separate and independent from that of said drawing drums, in order that said winding drum may be driven in combination with any number less than the total number of drawing drums to provide a multiple purpose drawing machine.

1,904,966. COMBINED ANIMATED AND CHANGEABLE SIGN. REX M. ANDERSON, Cincinnati, Ohio. Filed Nov. 19, 1930. Serial No. 496,636. 12 Claims. (Cl. 40—132.)

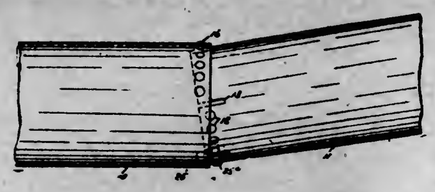


1. A sign comprising a transparent element and a translucent element behind said transparent element, sets of display matter contrasting with said translucent element, one set of which is in front and the other set of which is in back of said translucent element, at least part of one of said sets being removably mounted on one of said elements whereby it is changeable, and means for intermittently illuminating the rear of said elements and display matter.

1,904,967. PIPE JOINT AND THE METHOD OF MAKING SAME. BYRON R. BARNUM, Akron, Ohio, assignor to The Biggs Boiler Works Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 9, 1929. Serial No. 384,722. 19 Claims. (Cl. 113—112.)

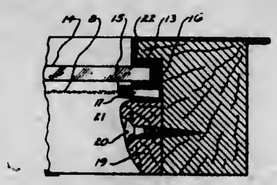
1. The method of joining a male end of a pipe section to a female end of a pipe section which comprises forming recesses in the lower half of the male pipe end and in the upper half of the female pipe end, providing opposed slot-like openings in the end of one of the pipes, bringing the two pipe ends into approximately horizontal alignment with the slots in the male pipe end at the sides thereof, and telescoping the male end in the female end, welding the pipes together through the recesses then caulk welding the upper half of the joint from the outside and the

lower half from the inside, and connecting the inner and outer caulking welds together through the slot-like openings in the male pipe end.



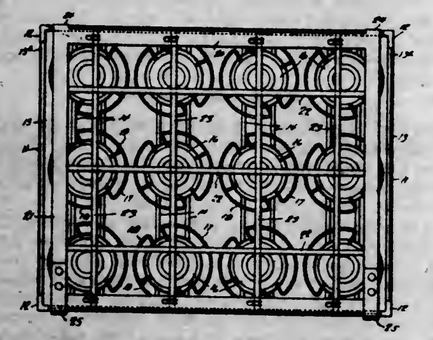
17. A permanent welded pipe joint comprising two aligned pipes, one having a male and the other a female end, and a radially projecting stud on the male pipe end engaged in a recess in the female pipe end, the stud and the recess being at the top of the joint, and the pipe joint being welded about the joint and through said recess.

1,904,968. AUTOMOBILE WINDOW SCREEN. LEWIS L. BREDIN, Detroit, Mich., assignor to Chamberlin Metal Weatherstrip Co., Detroit, Mich., a Corporation of Michigan. Filed Mar. 18, 1929. Serial No. 346,549. 3 Claims. (Cl. 156—39.)



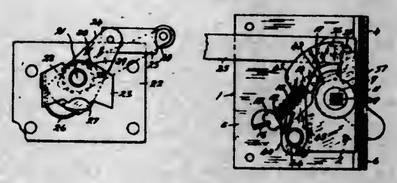
3. In a window having its side members each formed with a rabbet providing an L shaped recess extending in each case from one edge of a member toward the other and providing a side and a bottom face of the recess at a right angle one to the other, a glass channel supported in the recess and against the said side thereof, a finish strip secured to the bottom face of the recess at a distance from the channel, the inner edge of the finish strip in conjunction with the glass channel providing a second channel, and resilient means in the said second channel providing in conjunction with the glass channel a runway for opposite edges of a screen.

1,904,969. SERVING AND WASHING TRAY. JOHN P. CAVANO and GEORGE VONDICAKIS, Cleveland, Ohio. Filed May 24, 1930. Serial No. 455,201. 2 Claims. (Cl. 220—19.)



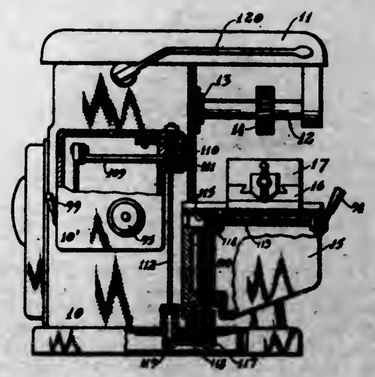
1. A serving and washing tray comprising a skeleton tray made up of a plurality of angle irons one for each corner, and making up a tray structure, a plurality of pairs of cross bars forming a bottom, a plurality of cup sockets attached to each pair of bars, each cup socket comprising a wire skeleton framework defining curved socket walls with diametrically opposed slots and a flanged sheet metal bottom, side walls, each comprising a zigzag wire, and a cover comprising a metallic frame shorter than said tray and provided with hooks at one side to engage a portion of a side wall, a spring latch at the other side to engage the opposite side wall, and non-metallic cross members carried by said cover above said cup sockets to prevent breakage.

1,904,970. DOORLATCH. EVERETT J. COOK, Toledo, Ohio, assignor to The Dura Company, Toledo, Ohio, a Corporation of Ohio. Filed Dec. 22, 1930. Serial No. 504,103. 18 Claims. (Cl. 292—332.)



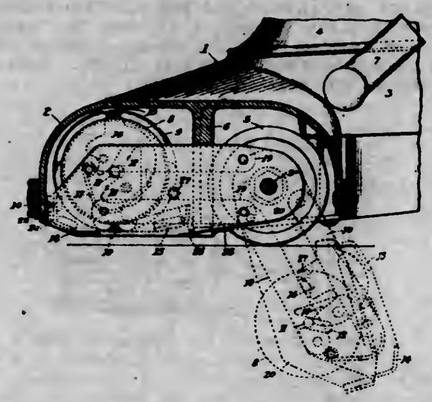
1. In a door latch, the combination with a latch bolt, of levers at opposite sides of said latch bolt for actuating the same, a member engageable with one of said levers to hold the same from actuating said latch bolt, and means for actuating the other of said levers and controlling the engagement of said holding member and the first mentioned of said levers.

1,904,971. MILLING MACHINE. HANS ERNST and LESTER F. NENNINGER, Cincinnati, Ohio, assignors to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 31, 1930. Serial No. 458,852. 17 Claims. (Cl. 74—58.)



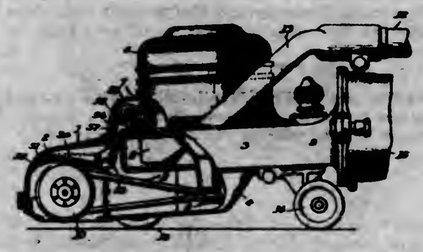
1. In a milling machine having a rotatable spindle, a variable speed transmission therefor, a prime mover, means to couple the prime mover with the transmission, a branch transmission mechanism connected with the branch transmission for actuation during non-rotation of the spindle, independently actuable clutch means for connecting the branch transmission to the prime mover, and an automatic knock-out for said clutch operable when the first transmission is coupled to the prime mover.

1,904,972. SUCTION CLEANER. OLE C. WILLIS, Lakewood, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Jan. 21, 1931. Serial No. 510,068. 9 Claims. (Cl. 15—8.)



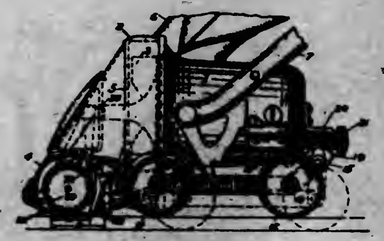
1. In a suction cleaner, a casing including a nozzle, a sub-nozzle including nozzle lips, means sealing said lips to said nozzle, and means supporting said sub-nozzle for vertical translation without tilting relative to said nozzle.

1,904,973. SUCTION CLEANER. DONALD G. SMELLIE, Canton, Ohio, assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed June 29, 1931. Serial No. 547,563. 3 Claims. (Cl. 15—16.)



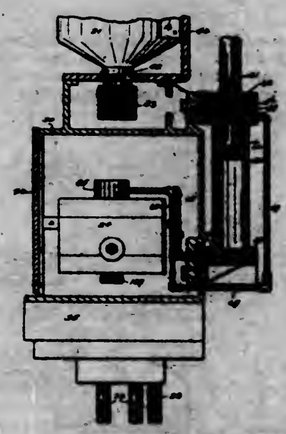
1. In a suction cleaner, a casing including a suction nozzle having spaced surface-contacting lips, a fan open to said nozzle, an electric motor connected to said fan, and means to reduce the suction in said nozzle upon said suction passing a predetermined point in order to limit the covering displacement in said nozzle between said lips, said means comprising means to control the speed of said motor, a pressure-responsive device in the nozzle exposed to the pressure therein, and means connecting said pressure-responsive device to said speed-controlling means.

1,904,974. SUCTION CLEANER. HOWARD EARL HOOVER, Glencoe, Ill., assignor to The Hoover Company, North Canton, Ohio, a Corporation of Ohio. Filed Dec. 17, 1931. Serial No. 581,569. 6 Claims. (Cl. 15—16.)



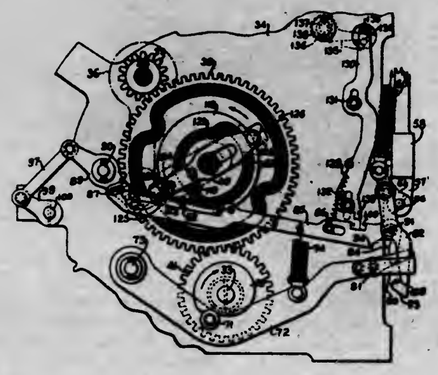
1. In a suction cleaner a body including a nozzle, a movable lip on said nozzle defining one side of a nozzle mouth, means to raise and lower said body relative to a supporting surface, and means operable upon the adjustment of said last mentioned means to move said lip to widen or narrow said nozzle mouth.

1,904,975. METAL CUTTING MACHINE AND CONTROL SYSTEM THEREFOR. WALTER F. BABCOCK, Detroit, Mich., assignor to The Foote-Burt Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 25, 1930. Serial No. 491,174. 15 Claims. (Cl. 77—32.)



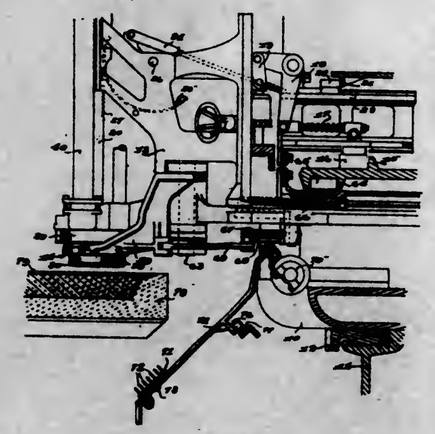
1. In a metal cutting machine, a frame, a plurality of tool driving and supporting carriages slidably mounted on the frame, cylinders fixed to respective carriages, pistons fixed to the frame and operating in respective cylinders to advance and retract the carriages toward and from their operating positions, pumps mounted on respective carriages, connections between the pumps and their respective cylinders, valve control mechanisms mounted on respective carriages to control the action of their respective pumps, means interconnecting the valve control mechanisms to cause their respective pumps to initiate the movement of each head simultaneously, and motors on respective carriages to drive respective pumps and tools.

1,904,976. CASH REGISTER. FRIEDRICH W. F. BURGER, Berlin, Germany, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed May 14, 1929. Serial No. 362,962. 20 Claims. (Cl. 235—2.)



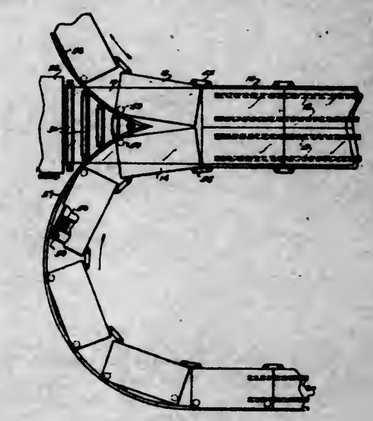
2. In a machine of the class described; the combination with a total control member adjustable from one position to another; means to automatically restore the total control member to the position from which it was adjusted; and means controlled by the total control member to render the automatic restoring means effective; of a plurality of manipulative devices; and means controlled thereby to control the effectiveness of the automatic restoring means.

1,904,977. MACHINE FOR MAKING GLASS STOPPERS AND THE LIKE. JOHN E. COLLINS, Alton, Ill., assignor to Owens-Illinois Glass Company, a Corporation of Ohio. Filed Oct. 1, 1930. Serial No. 485,589. 16 Claims. (Cl. 49—29.)



11. The combination of a mold block having mold cavities therein opening downwardly through said block, means providing a wall surrounding and rising from said block, means cooperating with said wall for forming a vacuum chamber, means for exhausting the air from said chamber and the mold cavities for filling the mold cavities with molten glass by suction, means for moving the formed articles from the cavities into said chamber, and means for removing the articles from said chamber.

1,904,978. APPARATUS FOR THE MANUFACTURE OF SHEET GLASS. CARROLL CONE, Toledo, Ohio, assignor to Libbey-Owens-Ford Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Sept. 10, 1931. Serial No. 562,118. 6 Claims. (Cl. 198—189.)



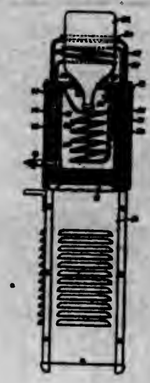
1. In apparatus for receiving a newly formed sheet of glass from a forming machine, a plurality of tables movable in relation to the forming machine for receiving the sheet therefrom, each table being composed of two separate sections positioned side by side, the opposed table sections abutting one another throughout their entire length to provide a substantially solid unbroken sheet supporting surface, conveying means located in the projected path of travel of the tables, and means for moving opposed table sections forwardly and also laterally away from one another as they approach said conveying means.

1,904,979. HAIR WAVING CLAMP. PETER FALCONE and RALPH E. WINTON, San Jose, Calif. Filed Oct. 28, 1930. Serial No. 491,668. 2 Claims. (Cl. 132—36.1.)



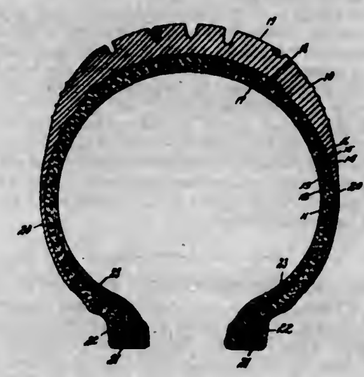
1. In combination, a hair waving clamp comprising a pair of hingedly connected clamping members having a cross-sectional configuration such as to form a groove along the bottom edges of their meeting sides whereby to form a chamber when the clamp is placed on a head, and means disposed in the chamber so formed adapted to discharge air upwardly between the said clamping members.

1,904,980. REFRIGERATING APPARATUS. HARRY B. HULL, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Apr. 30, 1929. Serial No. 359,205. 8 Claims. (Cl. 62—141.)



1. A beverage cooling and dispensing apparatus comprising an insulated beverage chamber, a removable beverage container supported in an inverted position above said chamber and having its opening projecting into said chamber, mechanical cooling means about said container and mechanical cooling means in said chamber.

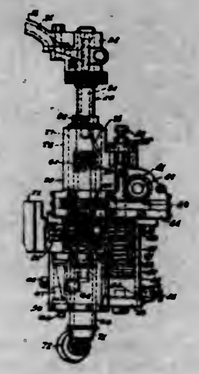
1,904,981. TIRE CONSTRUCTION. WILLIAM A. KARL, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Oct. 2, 1929. Serial No. 396,725. 8 Claims. (Cl. 152—13.)



1. In a pneumatic tire construction, a tire carcass formed of a plurality of plies of suitable material, a pair of beads embedded at the inner periphery of said carcass, and a flipper about about each bead and extending between certain of the plies into the sidewalls of the tire, said flipper being formed of strip material including fibres felted with rubber, in which the fibres extend circumferentially of the bead.

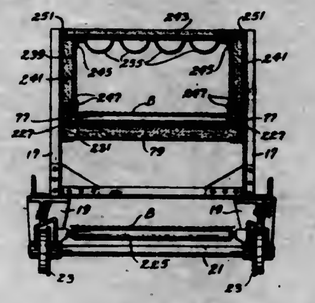
1,904,982. GLASSWARE FORMING MACHINE. JOHN E. MCLAUGHLIN, Toledo, Ohio, assignor to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Nov. 8, 1928. Serial No. 316,935. 12 Claims. (Cl. 49—14.)

10. The combination with a finishing mold and means for moving said mold in a closed path, of a holding device mounted for movement in a closed path with the mold, said holding device adapted to engage an article in the mold and hold it during opening of the mold, a piston motor, means operated and controlled by said motor to move the holding device laterally to a position over the article, cam actuated means to move the holding device



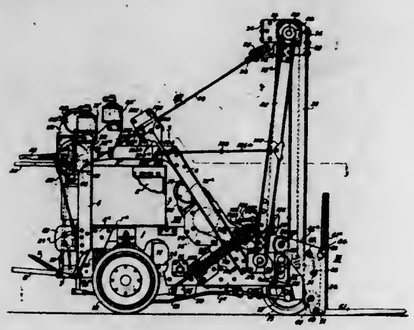
downwardly into engagement with the article, a cam brought by movement of the mold into engagement with said means for moving the holding device downwardly into contact with the article, and means for adjusting the cam to vary the point of initial contact of the holding device with said article.

1,904,983. LEER. FRANK T. NESBITT, Alton, Ill., assignor, by mesne assignments, to Owens-Illinois Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 9, 1928. Serial No. 245,331. 1 Claim. (Cl. 49—47.)



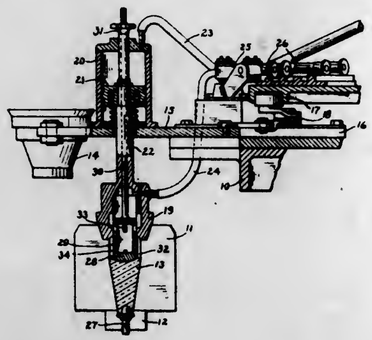
In a leer for annealing glassware, a support, a tunnel carried by said support, a leer conveyor arranged in the lower portion of the tunnel, supporting means for the conveyor, said tunnel including abutting heating and cooling sections, said cooling section comprising a continuous sheet metal jacket inverted U-shape in cross section forming a roof and pair of opposed longitudinal side walls, means for anchoring the inner end of said jacket to the support, a pair of side rails spaced apart transversely of the leer and extending longitudinally thereof in proximity to the margins of the roof, jacket supporting means fixed to the jacket and slidingly contacting the upper surface of the side rails providing for expansion and contraction of the jacket independently of the conveyor support and remaining leer structure near the anchoring point, cooling flues extending lengthwise of the upper portion of the jacket, and means for directing a temperature regulating medium through said flues.

1,904,984. INDUSTRIAL TRUCK. EDWARD H. REMDE, Cleveland, Ohio, assignor to The Baker-Raulang Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 18, 1930. Serial No. 436,855. 19 Claims. (Cl. 187—11.)



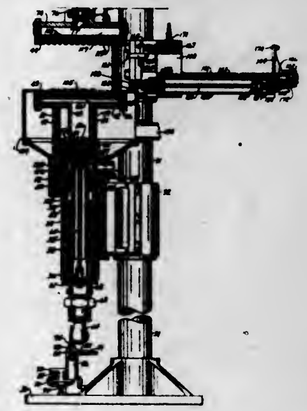
1. In apparatus of the class described, the combination of a wheel mounted frame, a guide frame thereon, an elevating member mounted for movement along said guide frame, a flexible member connected to said elevating member for moving it along said guide frame, a sheave at the upper end of said guide frame and around which said flexible member is reeved, a support movably mounted on one of said frames, near the lower end of said guide frame, a sheave carried by said support and around which said flexible member is reeved, means for winding up and paying out said flexible member, the pull on said flexible member operating through the sheave on said support to move the latter in one direction, and a spring normally acting on said support to move it in the opposite direction.

1,904,985. MACHINE FOR FORMING HOLLOW GLASSWARE. JOHN F. RULE, Toledo, Ohio. Filed Sept. 15, 1927. Serial No. 219,596. 3 Claims. (Cl. 49—8.)



1. In a machine for forming hollow glass articles, the combination of a mold open at its upper end to receive a charge of glass, a blow head movable to and from the mold and adapted to seat on the said open end of the mold, a piston within the blow head adapted to be projected downward into the mold into position to rest on the glass in the mold, and means for supplying air to the blow head for compacting the glass in the mold, said piston being movable upwardly by the pressure of the glass thereon when the glass is blown upward in the mold by air pressure supplied through the lower end thereof, said piston being of hollow cylindrical formation and having openings adjacent its upper end to admit air under pressure from the blow head, and having openings adjacent its lower end for the transmission of the air pressure into the mold during the compacting of the glass in the mold.

1,904,986. QUENCHING MACHINE. HOWARD B. SCOTT and RALPH E. MCCOY, Dayton, Ohio, assignors to The National Cash Register Company, Dayton, Ohio, a Corporation of Maryland. Filed Feb. 6, 1930. Serial No. 426,391. 27 Claims. (Cl. 266—6.)

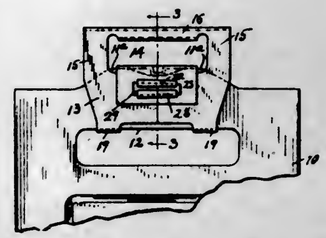


1. In a machine of the class described having a plate; means, including a hollow shaft, to guide the plate; a pipe therein adapted to carry a fluid; and means, including a relative movement of the hollow shaft and pipe to begin a flow of the fluid.

8. In a machine of the class described, two press assemblies operated pneumatically; a valve; means to operate one assembly through its pressing stroke, and the other assembly through its return stroke, when the valve is in one position; and means to reverse the operation when the valve is in another position.

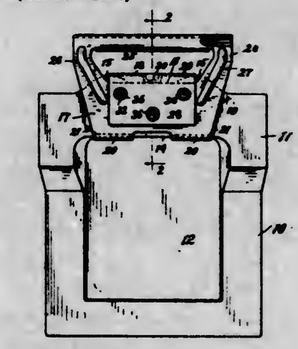
14. In a machine of the class described, a lower plate upon which an article to be hardened is placed; an upper plate assembly; means to lower the upper plate assembly to press the article against the lower plate; and a wiping means, tripped for operation by the upper plate assembly upon its return movement.

1,904,987. BATTERY HANDLE. MALVERN W. SEVERANCE, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed June 24, 1930, Serial No. 463,390. Renewed May 31, 1932. 4 Claims. (Cl. 16—114.)



1. A container handle comprising a pair of sheet metal members having cooperating portions adapted to receive a portion of a container therebetween, one of said members having a slot therein and an inclined flange adjacent thereto formed by the metal struck up to form said slot, and the other of said members having an abutment projecting through said slot, and a wedge engaging said inclined flange and abutment for urging said cooperating portions toward each other.

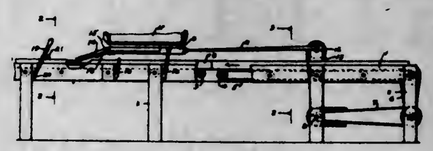
1,904,988. BATTERY HANDLE. MALVERN W. SEVERANCE, Cleveland, Ohio, assignor to Willard Storage Battery Company, Cleveland, Ohio, a Corporation of West Virginia. Filed Feb. 21, 1930. Serial No. 430,149. 2 Claims. (Cl. 16—125.)



2. In combination with a storage battery box having a pair of spaced protuberances on each upper end wall, a sheet metal handle adapted to be detachably secured to one of said end walls, comprising a sheet metal member extending across the end wall above said protuberances and having a flange engaging the inner faces of said protuberances, said sheet metal member having a depression located between the protuberances extending downwardly far enough to bear upon the end wall and adapted to receive the upper extremity of a hold-down member and transmit pressure therefrom directly to said end wall.

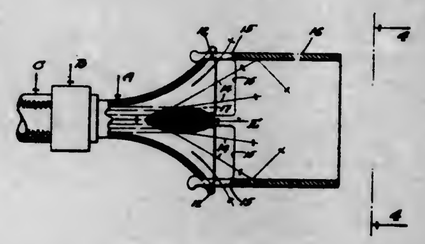
1,904,989. SPREADER. WILLIAM B. SIMPSON, Campbell, Calif. Filed Sept. 26, 1931. Serial No. 565,887. 1 Claim. (Cl. 214—1.)

A machine for spreading fruit and similar material comprising, in combination, supporting means, a tray mounted thereon, means for moving the tray continuously thereover, a reciprocating spreader chute mounted for movement longitudinaly of the tray and adapted to receive the material and having a discharge end communicating with



the tray adjacent the bottom thereof to engage the material discharged on to the tray when a shaking movement is applied to the chute whereby to push the individual elements into close relationship.

1,904,990. CEMENT GUN NOZZLE. JOHN T. VAWTER, Los Angeles, Calif. Filed Dec. 31, 1929. Serial No. 417,648. 4 Claims. (Cl. 91—45.)



1. A nozzle of the character described comprising: a casing adapted to be mounted upon a material conveying conduit, said casing being tromba shaped; a particle obstructing element mounted in the orifice of said nozzle; and a sleeve mounted upon said casing beyond the orifice of said tromba shaped nozzle.

Patents Nos. 1,904,901 to 1,906,219

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Designs	89	No. 89,673 to No.	89,761,	inclusive.
Patents	1,269	No. 1,904,901 to No.	1,906,219,	inclusive.
Total	1,742			

Interference Notices

U. S. Patent Office, *Washington, Apr. 6, 1933.*

Edward S. Carey, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Frank A. Whiteley, 911 Foshay Tower, Minneapolis, Minn., and patent granted October 4, 1932, No. 1,880,786, to Edward S. Carey, 881 Park Place, Milwaukee, Wis., and a notice of such declaration sent by registered mail to said Carey at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Carey, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

U. S. Patent Office, *Washington, Mar. 28, 1933.*

Frank L. Myers, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application for patent of Edwin Archer Turner, 350 Madison Avenue, New York, N. Y., and patent granted January 12, 1932, No. 1,840,913, to Frank L. Myers, 508 Cathedral Street, Baltimore, Md., and a notice of such declaration sent by registered mail to said Myers at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Myers, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the interference will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Notice of Cancellation

U. S. Patent Office, *Washington, Mar. 24, 1933.*

Lee B. Gribbons, his assigns or legal representatives, take notice:

A cancellation proceeding having been instituted by this Office upon the application of The Simonis Company, 2101 Indiana Avenue, Chicago, Ill., to effect the cancellation of the trade-mark registration of Lee B. Gribbons, of 58 East 29th St., Chicago, Ill., No. 217,228, dated August 31, 1926, and the notice of such proceeding sent by registered mail to the said Gribbons at the said address having been returned by the post office as undeliverable, notice is hereby given that unless said Gribbons, his assigns or legal representatives, shall enter an appearance therein within 30 days from the first publication of this order the cancellation will be proceeded with as in case of default. This notice will be published in the Official Gazette for three consecutive weeks.

WM. A. KINNAN,
First Assistant Commissioner.

Adverse Decisions in Interference

In interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed:

Pat. 1,815,840, H. J. L. Frank, Wiring trough flange, decided March 29, 1932, claims 1 and 3.

Pat. 1,881,716, Bertram Mayer and Hugo Siebenbürger, Vat-dyestuffs of the dibenzanthrone series and process of making same, decided March 27, 1933, claims 1, 2, 3, 4, 5, and 6.

Pat. 1,844,212, W. H. De Lancey, Visible discharge indicater, decided March 29, 1932, claims 1, 2, 3, 4, 5, 6, 7, and 8.

Pat. 1,900,477, C. F. Richter, Digester, decided March 21, 1933, claims 1, 2, and 7.

Condition of Applications Under Examination at Close of Business April 8, 1933

(Total number of applications awaiting action, excluding Trade-Mark Division, 51,698; Trade-Mark Division, 1,095. Oldest new case, Dec. 8, 1932; oldest amended, Dec. 8, 1932. The dates given are 1932 except where † indicates 1933.)

Room No.	Divisions, Examiners, and Subjects of Inventions	Oldest new application and oldest action by applicant awaiting office action: New	Amended	No. of applications awaiting action
6624	1. LOEFFLER, F. A., Closure Operators; Fences; Gates; Tillage; Handling Implements	Dec. 9	Dec. 9	642
6768	2. HERRMANN, D. (Act.), Fishing and Trapping; Dairy; Animal Husbandry; Presses; Tobacco; Velocipedes.	Dec. 9	Dec. 9	939
4088	3. LINDSEY, A., Heating; Metal Founding; Metallurgy; Metal Treatment; Electric Furnaces	†Jan. 12	†Jan. 12	572
7063	4. MERRITT, A. D., Conveyers; Hoists; Handling Apparatus; Excavating	Dec. 27	Dec. 30	589
3628	5. MACNAB, J. F., Harvesters; Music; Acoustics; Sound Recording; Knotters	†Jan. 9	†Jan. 16	490
4808C	6. LEWERS, A. M., Carbon Chemistry	Dec. 10	Dec. 12	1,080
5726	7. JARBOE, C. G., Optics; Photography	Dec. 12	Dec. 12	1,088
7514	8. ADAMS, F. L., Beds; Chairs; Kitchen and Table Articles; Racks and Cabinets	†Feb. 8	†Feb. 8	544
4624	9. ADAMS, R. E., Pumps; Fluid and Fluid-Current Motors	†Jan. 12	†Jan. 19	653
6612	10. HUNTER, O. F., Land Vehicles—Animal Draft Appliances, Bodies and Tops	†Jan. 10	†Jan. 10	490
5067B	11. BENHAM, E. V., Boots, Shoes, and Leggins; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whip Apparatus.	Dec. 8	Dec. 10	678
7701	12. HENRY, C. C., Machine Elements	Dec. 24	Dec. 27	573
5096	13. BORLIK, F. J., Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Working; Needle and Pin Making; Turning; Boring and Drilling.	†Jan. 5	†Jan. 5	778
5097	14. BRUMBAUGH, N. J., Farriery; Metal Bending; Metal Tools and Implements, Making; Sheet Metal Ware, Making; Wire Fabrics; Wire Working; Metal Working, Blanks and Processes.	†Jan. 20	†Jan. 17	539
4807	15. WORRELL, L. W., Glass; Plastic Block and Earthenware Apparatus; Plastics	Dec. 11	Dec. 11	1,245
5612	16. SPENCER, C. J., Telegraphy; Telephony	†Jan. 14	†Jan. 14	606
5701	17. ARMSTRONG, H. (Act.), Label Pasting and Paper Hanging; Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet-Material Associating or Folding; Sheet or Web Feeding; Type Setting.	Dec. 8	Dec. 8	1,006
4612	18. PORTER, M. E., Motors, Expansible-Chamber Type; Power Plants; Speed-Responsive Devices	†Feb. 10	†Feb. 9	309
4096	19. KENNEDY, A. R., Furnaces and Stoves; Heating Systems; Fuel Burners	Dec. 9	Dec. 9	1,082
6613	20. GROVE, S. D., Miscellaneous Hardware; Closure Fasteners; Locks and Latches; Safes; Undertaking	†Feb. 10	†Feb. 9	356
7783	21. THOMPSON, T. J., Textiles; Cloth Finishing	Dec. 8	Dec. 10	908
5724	22. RINGLE, D. (Act.), Aeronautics; Firearms, Ordnance, and Explosive Devices; Air Guns, Catapults, and Targets; Boats and Buoys; Ships; Marine Propulsion.	Dec. 14	Dec. 16	927
7802	23. GROESBECK, W. D., Coin Handling; Recorders; Registers	Dec. 12	Dec. 10	567
5063	24. DURAS, C. O., Apparel; Apparel Apparatus; Garment Supporters; Sewing Machines	†Feb. 9	†Feb. 12	440
5709	25. BLAKELY, C. F., Agitating; Butchering; Classifying Solids; Centrifugal-Bowl Separators; Mills; Threshing; Vegetable and Meat Cutters and Comminntors.	Dec. 8	Dec. 8	1,078
5698	26. ADAMS, W. M. (Act.), Electricity, Generation; Motive Power	†Jan. 10	†Jan. 9	508
5708	27. CLARK, W. N. (Act.), Brushing, Scrubbing, and Cleaning; Washing Apparatus	†Jan. 10	†Jan. 10	621
4628	28. BENSON, A. R., Internal-Combustion Engines	Dec. 8	Dec. 8	867
5062	29. MORRIS, B. N., Woodworking; Tools; Compound Tools; Furniture; Metal Working, Assembling	Dec. 10	Dec. 12	412
4074	30. SHIPMAN, J. L., Automatic Temperature and Humidity Regulation, Illuminating Burners; Illumination; Thermostats and Humidostats.	†Jan. 9	†Jan. 9	659
4716	31. HOLMES, W. N., Gas, Heating and Illuminating; Mineral Oils	Dec. 8	Dec. 8	1,248
4086	32. BARTHOLOMEW, J. A., Gas and Liquid Contact Apparatus; Heat Exchange; Gas Separation	†Jan. 13	†Jan. 17	641
6096	33. WYMAN, W. I., Bridges; Masonry and Concrete Structures; Metallic Building Structures; Roads and Pavements; Roofs; Wooden Buildings.	Dec. 12	Dec. 10	1,247
6625	34. SAPERSTEIN, S. (Act.), Electricity, Transmission to Vehicles; Pneumatic Dispatch; Railways, Rolling Stock, Switches, and Signals; Store Service; Vehicle Fenders; Track Sanders.	Dec. 8	Dec. 8	949
3600	35. REYNOLDS, E. C., Buckles, Buttons, Clasps, Etc.; Card and Sign Exhibiting; Signals; Toilet	Dec. 8	Dec. 8	852
7624	36. McFAYDEN, A. D. (Act.), Automatic Weighers; Geometrical and Measuring Instruments; Force Measuring.	Dec. 8	Dec. 8	1,264
5680	37. WEAVER, M. E., Electricity, Circuit Makers and Breakers	†Jan. 9	†Jan. 9	598
7510	38. KRAFFT, C. F., Earth Boring; Hydraulic and Earth Engineering; Mining, Quarrying, and Ice Harvesting; Stoneworking; Walls.	Dec. 9	Dec. 12	726
4574	39. WHITNEY, F. J. (Act.), Fluid-Pressure Regulators; Multiple Valves; Valves; Water Distribution	Dec. 9	Dec. 9	922
7880	40. OBERLIN, J. J., Receptacles	Dec. 16	Dec. 16	1,400
6082	41. WHITNEY, M. L., Land Vehicles, Wheels, and Axles; Resilient Tires and Wheels; Wheel Substitutes; Railway Draft Appliances; Spring Devices.	Dec. 12	Dec. 12	667
5582	42. CUTTING, H. O., Electric Signaling	Dec. 9	Dec. 8	989
4896B	43. KLINGE, E. F., Baths, Closets, Sinks, and Spittoons; Sewerage; Electricity, Medical and Surgical; Medicines; Surgery; Dentistry; Artificial Body Members.	Dec. 9	Dec. 9	1,009
4087B	44. SHAFFER, C. H., Dispensing; Filling and Closing Portable Receptacles; Refrigeration	Dec. 10	Dec. 9	751
7097	45. HILL, H. D., Pulleys and Shafting; Lubrication; Bearings and Guides	†Feb. 8	†Feb. 13	482
4613	46. TAYLOR, M., Evaporators; Fluid Sprinkling; Fire Extinguishers; Boilers	Dec. 12	Dec. 12	631
7600	47. BARKER, H., Clutches and Power Stops; Brakes; Motors	Dec. 8	Dec. 8	1,284
5731	48. ROEPKE, O. B., Electricity, General Applications	Dec. 9	Dec. 9	717
7726	49. SHEFFIELD, E. L., Check-Controlled Apparatus; Domestic Cooking Vessels; Ventilation; Driers; Liquid Separation or Purification.	Dec. 8	Dec. 8	867
4701	50. BLAKE, C. L., Plastic and Liquid Coating Compositions; Coating	Dec. 8	Dec. 9	906
5628	51. BACKUS, C. D., Radiant Energy	†Jan. 9	†Jan. 9	865
7709	52. KNOTTS, M. K., Supports; Chucks; Joint Packing; Pipe and Rod Joints or Couplings; Tool-Handle Fastenings.	†Jan. 9	†Jan. 14	545
6897	53. PECK, M. K., Books; Manifolding; Printed Matter; Stationery, Educational Appliances; Paper Files and Binders; Tents, Canopies, Umbrellas, and Canes; Curtains, Shades, and Screens.	†Feb. 10	†Feb. 9	408
5874	54. WAITE, W. E., Electric Lamps; Vapor Electric Devices; Space Discharge Tubes; Light Sensitive Circuits.	Dec. 8	Dec. 8	880
6887	55. BOWEN, S. T. {Bread, Pastry, and Confection Making; Cutlery	†Jan. 13	†Jan. 14	234
	{Designs	†Mar. 8	†Mar. 15	239
4725	56. PORTER, F. J., Electrochemistry; Laminated Fabrics; Paper Making; Substance Preparation	Dec. 10	Dec. 12	903
3626	57. NICHOLSON, G. D. G., Cutting and Punching; Bolt, Nut, Rivet, Nail, Screw, Chain, and Horse-Shoe Making; Driven and Screw Fastenings; Jewelry; Nut and Bolt Locks.	Dec. 14	Dec. 23	475
5605	58. DOWELL, E. F., Abrading; Typewriting	Dec. 12	Dec. 13	513
4709	59. RICHARD, V. I., Chemistry; Alcohol; Fertilizers; Cement and Lime; Hides, Skins, and Leather; Fuel.	Dec. 13	Dec. 14	596
5696	60. GLASS, R. L., Electricity, Heating, and Welding; Batteries; Resistances and Rheostats; Prime Mover Dynamo Plants.	Dec. 8	Dec. 8	1,044
6724	61. PARKS, G. E., Elevators; Winding and Reeling; Pushing and Pulling; Fire Escapes; Ladders; Scaffolds; Horology; Time-Controlling Apparatus.	Dec. 9	Dec. 8	808
7526	62. COCHRAN, W. W., Toys; Amusement Devices; Baggage; Package and Article Carriers; Bottles and Jars; Deposit and Collection Receptacles.	Dec. 27	Dec. 27	1,221
4866	63. WINKELSTEIN, A. H., Bleaching and Dyeing; Explosive Pyrotechnic, and Match Compositions; Preserving; Sugar, Starch, and Carbohydrates.	Dec. 10	Dec. 10	1,158
4708	64. NASH, P. M., Acetylene; Distillation; Gas Mixers; Oils, Fats, and Glue	Dec. 21	Dec. 22	1,088
5624	66. McDERMOTT, F. P., Electricity, Conductors; Conduits and Housings; Repeaters; Relays; Wave Transmission.	Dec. 8	Dec. 8	1,182
2060B	Trade-Marks, Labels, and Prints: F. A. RICHMOND {Trade-Marks	†Mar. 9	†Mar. 24	921
	{Labels and Prints	†Mar. 15	†Mar. 24	174

DECISIONS IN PATENT AND TRADE-MARK CASES

U. S. Court of Customs and Patent Appeals

In re Fischer

No. 3,064. Decided February 6, 1933

Patentability—Roofing Element.

Claims for a roofing element *Held* unpatentable over the prior art.

Appeal from the Patent Office. Affirmed.

Mr. Albert F. Robinson for Fischer.

Mr. T. A. Hostetler and *Mr. Howard S. Miller* for the Commissioner of Patents.

Bland, *J.:*

Claims 13 to 18, inclusive, being all of the claims of appellant's application for a patent, were disallowed by the Examiner, which action was affirmed by the Board of Appeals of the United States Patent Office. From such decision of the Board, appeal to this court has been taken.

The application relates to an insulation roofing element, particularly a shingle element, which shingle is treated with waterproofing solution such as liquid asphalt. One of the embodiments of appellant's alleged invention is to treat one surface only of the shingle, leaving the remaining portion of the fibrous shingle unimpregnated with the waterproofing coating. The second embodiment disclosed is to impregnate both sides, leaving the center unimpregnated. A third form is to impregnate both sides and the ends, leaving the center unimpregnated. A fourth embodiment consists in impregnating one surface of the shingle as in the first embodiment, and then having on the surface a further protective waterproof covering, which may be made of the same impregnating material, if sufficiently thick. The fifth claimed invention is the same as the fourth, except that upon shingles which have been impregnated with a heavy waterproofing coating, either on both sides or on both sides and the ends, slate particles are embedded in one of the layers.

The claims are drawn to cover the said five embodiments. Claim 13 is fairly illustrative and reads:

13. A roofing element comprising a thick body of fibrous material having a heavy coating of waterproofing material applied to one surface and partially penetrating the body to provide a waterproof layer over an unsaturated layer.

The Examiner rejected the claims on the following references: White, 1,029,652, June 18, 1912; Young, 1,488,186, March 25, 1924; White, 1,569,107; Jan. 12, 1926.

The Board of Appeals set out the above references in its decision and held as follows:

The patent to Young states on page 1, in the paragraph commencing at line 93, that the fibrous material may be covered or impregnated. The drawing clearly discloses and describes a covering layer for the fibers. It is appellant's allegation that this patent is too indefinite in this respect and does not clearly disclose the heavy coating which only partially penetrates the body of fibrous material. We cannot agree with appellant's view. We believe that this reference is a clear and adequate anticipation of the subject-matter of the appealed claims. Appellant contends that the surface of the Young structure is not granular as called for in some claims. In our opinion it is, although there is a certain uniting of the grains. In any event, viewing this patent merely as a publication, we do not consider that there would be any invention in omitting the patentee's welded layer.

It would serve no useful purpose to discuss the details of the references, since we agree with the conclusion of the Board and the reasons which brought it to such conclusion.

We have not overlooked the extended argument in appellant's elaborate brief on a number of different contentions, and especially the contention that the *"omission of parts so that a less number perform all the functions of the greater is invention."* Under the circumstances of this case, we do not think that invention would rest in such omission.

The decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

Woelm *v.* Hasselquist

No. 3,082. Decided January 3, 1933

1. Interference—Patent and Application—Construction of Issue.

"In view of the fact that the count is not limited to the precise structure disclosed in the specification of appellant's patent, appellant may not now insist that limitations be read into it for the purpose of avoiding the issue of priority. On the contrary, the count must be given the broadest interpretation which it will reasonably support."

2. Same—Priority—Right to Make the Claims.

Record reviewed and *Held* that H. is entitled to make the claim in issue and that priority was properly awarded to him since his filing date was prior to any date of conception alleged by W.

Appeal from the Patent Office. Affirmed.

Messrs. Warfield, Fraser & Brown and *Mr. Donald L. Brown* for Woelm.

Messrs. Cromwell, Greist & Warden and *Mr. Raymond L. Greist* for Hasselquist.

Hatfield, *J.:*

This is an appeal in an interference proceeding from the decision of the Board of Appeals of the United States Patent Office affirming the decision of the Examiner of Interferences awarding priority of invention to appellee.

The count in issue was taken from appellant's Patent No. 1,700,246, issued January 29, 1929, on an application filed June 1, 1928. It reads:

2. In a step-by-step pencil mechanism, the combination of a plurality of reciprocable lead propelling grippers provided with jaws arranged for the reception of lead therebetween, means to reciprocate said grippers, and means to impart to said grippers a jaw-separating movement of definite extent at predetermined periods in the operation of the mechanism.

The invention in issue relates to mechanical pencils, so constructed that the lead contained therein is advanced step by step by reciprocable lead-propelling grippers provided with jaws, as described in the count.

In the operation of appellant's structure, the jaws, gripping the lead, are moved downwardly toward the point of the pencil, and, upon reaching a certain point, release the lead and return to their former position, where they again grip and hold the lead securely while the pencil is in use. The jaws remain in this position until the beginning of another operation.

In appellee's structure, the cycle of operation is reversed—the jaws, in gripping engagement with the lead at the lower limit of movement, are disengaged, move upwardly to the upper limit of movement, reengage the lead and move downwardly to their original position, where they hold the lead securely while the pencil is in use. They remain in this position until the beginning of another operation.

Appellant's structure is of the "push-cap type," that is, it is operated by subjecting the cap at the upper end of the pencil to pressure, and then removing the pressure.

Appellee's structure is of the rotary type, that is, it is operated by: First, rotating the ferrule to the left, which causes the gripping jaws to release the lead and move upwardly to the upper limit of movement, and second, rotating the ferrule to the right, which causes the jaws to grip the lead and move downwardly to the lower limit of movement.

Counsel for appellant moved to dissolve the interference on the ground that appellee had no right to make the claim constituting the count in issue.

The motion was denied by the Law Examiner.

Due to the fact that the date alleged in appellant's preliminary statement for conception of the invention defined in the involved count was subsequent to the filing date of appellee, and as the Law Examiner had theretofore held that appellee could make the claim constituting the count in issue, the Examiner of Interferences awarded priority of invention to appellee.

On appeal, the Board of Appeals held that the involved count was sufficiently broad to read upon appellee's disclosure.

It is conceded by counsel for appellant that, if appellee is entitled to make the count in issue, he is entitled to an award of priority. It is contended, however, that appellee does not disclose in his application either

a plurality of reciprocal lead-propelling grippers,

or

means to impart to said grippers a jaw-separating movement of definite extent at predetermined periods in the operation of the mechanism,

within the meaning of the language of the count.

Relative to the first contention, counsel for appellant claims that appellant's structure consists, among other things, of two lead-propelling grippers "separable and distinct," and that the involved count is limited to such a structure.

It appears from the record that this question was not raised in appellant's motion to dissolve the interference, and was not discussed in the decision of the Law Examiner. Whether that issue was presented to the Board of Appeals does not appear from the record. It may be observed, however, that appellee discloses in his application a feed-finger unit, comprising a band of triangular cross-section and, formed integrally therewith, *three reciprocable resilient lead-engaging feed fingers*—lead propelling grippers—provided with a plurality of jaws. The count in issue calls for a plurality of reciprocable lead-propelling grippers, and is not limited to a plurality of *separable* and *distinct* lead-propelling grippers, as disclosed in the specification of appellant's patent.

With reference to appellant's second contention, that appellee's application does not disclose means to impart to the lead-propelling grippers a jaw-separating movement of definite extent "at predetermined periods in the operation of the mechanism," it may be said that, if appellee's application did not disclose means to impart to the lead-propelling grippers a jaw-separating movement of definite extent, at predetermined periods in the operation of his structure, the mechanism could not be successfully operated, that is, the jaw-separating movement must be, and, in our opinion, is, definite and of sufficient extent to release the lead at predetermined periods. If, as argued by counsel for appellant, the engaging fingers in appellee's structure should, due to use and age, lose their resiliency and fail to perform their intended function—admittedly the same as that performed by the lead-propelling grippers of appellant's structure—age and wear will have merely taken their inevitable toll.

We are here concerned with the structure and operation, not the durability, of appellee's device.

[1] In the operation of appellee's mechanism, the jaw-separating movement always takes place at the beginning of the lead-advancing operation, whereas, in the operation of appellant's structure, the jaw-separating movement takes place when the lead has been completely advanced. In that respect, the two devices are distinguishable. They are identical, however, in that the jaw-separating movement in each device is at the beginning of the rearward movement of the lead-propelling grippers. Accordingly, we are clearly of the opinion that, although the structures of the two devices are different, the count in issue is sufficiently broad to cover them. In view of the fact that the count is not limited to the precise structure disclosed in the specification of appellant's patent, appellant may not now insist that limitations be read into it for the purpose of avoiding the issue of priority. On the contrary, the count must be given the broadest interpretation which it will reasonably support. *Field* v. *Stow*, 18 C. C. P. A. (Patents) 1437, 49 F.(2d) 840, 412 O. G. 557; *Sweetland* v. *Cole*, 19 C. C. P. A. (Patents) 751, 53 F.(2d) 709, 415 O. G. 4.

[2] We conclude, therefore, that the tribunals of the Patent Office reached the right conclusion. Accordingly, the decision of the Board of Appeals is affirmed.

Affirmed.

U. S. Court of Customs and Patent Appeals

WOELM *v.* HASSELQUIST

No. 3,923. Decided January 5, 1933

INTERFERENCE—PRIORITY—RIGHT TO MAKE THE CLAIM. Record reviewed and *Held* that H. is entitled to make the claim in issue and that priority was properly awarded to him since his filing date was prior to any date of conception alleged by W.

APPEAL from the Patent Office. Affirmed.

Messrs. Warfield, Fraser & Brown and *Mr. Donald L. Brown* for Woelm.

Messrs. Cromwell, Greist & Warden and *Mr. Raymond L. Greist* for Hasselquist.

GARRETT, *J.*:

This is a companion case to No. 3068, between the same parties, but presents different issues.

On January 29, 1929, Woelm received Patent No. 1,700,247 on application filed April 27, 1925, for "magazine lead pencil." The application upon which the patent was granted seems to have been a continuation, in part, of a prior application filed June 1, 1923.

On February 23, 1922, Hasselquist filed an application, which has since been pending.

Shortly after the issuance of said Woelm patent, Hasselquist copied therefrom claim 12, for the purpose of interference.

The interference was declared June 15, 1929. Woelm, who is the junior party, moved its dissolution on the ground that Hasselquist had no right to make the claim. The Law Examiner denied the motion and the Examiner of Interferences gave judgment for Hasselquist upon the record which, upon appeal, was affirmed by the Board of Appeals. From the latter decision appeal was taken to this court.

The single count reads:

In a step by step pencil, the combination of a casing, a lead-gripping and feeding unit reciprocable within said casing and comprising a plurality of lead-gripping jaws, a member fixedly connected with said casing and formed with an inclined surface in the path of movement of said gripping unit for causing a lead gripping action by said jaws.

The sole question is whether Hasselquist may make the claim which constitutes the count.

An analytical examination of the count discloses the following so-called units, which we designate by numerals in parentheses, with the features of unit No. 2 designated by letters in parentheses.

(1) A casing.

(2) A lead-gripping and feeding unit reciprocable within the casing, comprising

(*a*) A plurality of lead-gripping jaws; (*b*) a member fixedly connected with the casing formed with an inclined surface in the path of movement of said gripping unit.

The foregoing elements comprise the entire combination embraced in what the count defines as a "step by step pencil."

The complete physical structures of the contending parties are evidently quite different in internal arrangement, although the drawings bear much external resemblance. In Woelm's structure the lead is driven downwardly by pressure upon the cap at the top of the casing. In Hasselquist the lead is advanced by the rotary movement of one portion of the casing with respect to another portion of the casing. Woelm's brief states:

Woelm's pencil is a push type pencil, Hasselquist's pencil is a rotary type pencil.

It results that Woelm's casing (leaving the cap out of consideration) comprises a single barrel, having a sloping lower end, while Hasselquist's barrel, or casing, apparently consists of two parts, an upper and lower, so combined as that one revolves with relation to the other, the lower part sloping gradually from near its upper end to its point.

As we view the case, the essential issue is quite a narrow one.

Appellant states his conception of it in the following contention:

* * * Hasselquist cannot make the count as he shows no casing surrounding his lead-gripping and feeding unit to which a member is fixedly attached for causing a lead-gripping action to the jaws, nor does he show any member with an inclined surface in the path of movement of the gripping unit for causing a lead-gripping action to said jaws within the meaning of the count in issue.

The issue was, in effect, stated by the Board to be, whether certain gripping means disclosed by Hasselquist, whereby there is a gripping of the lead for holding it securely during the writing operation (such means being in addition to other means that grip the lead for the purpose of advancing it), may be regarded as "a gripping unit for causing a lead-gripping action" as called for in the last clause of the count.

A detailed description of the operation of the respective devices is given in the opinion by Judge Hatfield in the companion case, 3068, *Woelm* v. *Hasselquist*, 20 C. C. P. A. (Patents) ——, —F.(2d) —, and need not be here repeated.

Appellant's contention is based upon the construction which he insists should be given the count, to wit, that the "gripping unit for causing a lead gripping action" refers to a unit confined to the first gripping movement; also appellant insists that in the Hasselquist device the lead gripping and feeding unit is in the lower, sloping end, or point, of the container and that this is not a casing in the meaning of the count.

To so hold would require that the count be construed strictly by appellant's *device*, whereas it seems, as stated, to be broader in its import.

We are unable to see wherein there is error in holding the sloping section of the barrel of Hasselquist to be a part of the casing. Nothing in the count itself indicates anything to the contrary, nor is there any language in the count which limits the location of the lead gripping and feeding unit to any specific place within the casing.

Neither is there anything in the count to limit the connection of "a member fixedly connected with said casing" to the *front end* of such member, nor does the count limit the "lead gripping action of the gripping movement" to the *first and only* "lead gripping action."

All these limitations would have to be read into the count in order to sustain appellant's conten-

tion. We see no reason why the rule of broad interpretation is not here applicable. Of course, in an interference case well defined limitations may not be disregarded, but such limitations, to be binding, must appear in the count itself. *Woelm* v. *Hasselquist*, supra.

The decision of the Board of Appeals is affirmed. Affirmed.

Patent Suits

[Notices under sec. 4921, R. S., as amended Feb. 18, 1922]

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1,199,111, Claborn P. Randolph, Vehicle spring; 1,207,807, Theodore Lindenberg, Spring attachments; 1,284,482, Lawrence Skok, Metal casings for leaf springs; 1,544,669, Justin W. Macklin, Metal casing for leaf spring cover; 1,648,742, Fred Schlesser, Spring covers, filed Feb. 16, 1933, D. C. Del. (Wilmington), Doc. 1016 Eq., *Ajax Spring Stabilizer* v. *Briggs and Stratton Corp.*

1,205,678, Erich Steudel, Folding paper boxes, 1,423,272, same, Foldable carton; 1,840,425, Oliver B. Andrews, Bread band, filed Mar. 18, 1933, D. C., E. D. N. Y. (Brooklyn), Doc. E 6901, *O. B. Andrews Co.* v. *S & B Bakers Supply Corp.*

1,207,807. (See 1,199,111.) 1,209,696. (See 1,177,697.)

1,228,267. (See Re. 16,074.)

1,251,377, Albert W. Hull, Methods and means for obtaining constant direct current potentials; 1,297,188, Irving Langmuir, Systems for amplifying variable currents; 1,811,095, Henry Joseph Round, Thermionic amplifiers and detector; Re. 18,579 (of 1,698,668), Stuart Ballantine and Lewis M. Hull, Demodulator and method of demodulation, filed Mar. 9, 1933, D. C., S. D. N. Y., Doc. E 74–457. *Radio Corp. of America et al.* v. *Homer F. Lyman* (*Lyman Mfg. Co., "Musique" Radio Co., and Lyman Radio Mfg. Co.*)

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1,263,138. (See 1,262,860.)

1,277,229, Burt E. Lloyd, Sounding device for dolls; 1,507,826, Leo J. Grubman, Sound-producing devices for dolls, etc., filed Dec. 19, 1932, D. C., S. D. N. Y., Doc. E 73–190, *Voices, Inc.*, v. *Karl Ohlbaum and Son, Inc.* Dismissed without costs (notice Mar. 14, 1933).

1,284,482. (See 1,199,111.) 1,297,188. (See 1,251,377.)

1,307,733, Arthur V. Gullborg, Lubricating apparatus; 1,307,734, same, Lubricating means; 1,459,662, Charles W. Mansel, Lubricating systems; 1,475,980, Ozark Zerk, Lubricating apparatus, filed Oct. 27, 1932, D. C. Minn. (St. Paul), Doc. 2608 Eq., *Alemite Corp.* v. *Globe Sales Co. et al.* Decree holding patents infringed Dec. 3, 1932.

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1,320,188, Robert B. Wasson, Pistons; 1,402,809, Louis P. Moores, Piston for internal combustion motor; 1,758,444, Ferdinand Jehle and Frank Jardine, Pistons; 1,815,733, Edward W. Gulick, Pistons; 1,818,807, Martin B. Covert, Piston; 1,872,724, Gustave E. Franquist, Pistons, filed Mar. 28, 1933, D. C., E. D. Mich. (Detroit), Doc. 5835, *Cleveland Trust Co.* v. *Chrysler Corp.*

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1,371,004, Frans Slama & Hans Wolf, Catalyst, filed Mar. 22, 1933, D. C. Md. (Baltimore), Doc. 2167 Eq., *The Gen'l Chemical Co.* v. *Standard Wholesale Phosphate and Acid Works, Inc.*

1,379,855, Joseph Donner, Cream depilatory, appeal filed Mar. 20, 1933, C. C. A., 8th Cir. (St. Louis, Mo.), Doc. 9613, *Joseph Donner* v. *Sheer Pharmacal Corp.* Decree, D. C., Ct. E. Div. Mo., reversed Mar. 20, 1933.

1,394,242, William G. Wheat, Underslung attachment for motor vehicles, filed Mar. 20, 1933, D. C., W. D. Mo. (Kansas City), Doc. 2267, *William G. Wheat* v. *Ford Motor Co.*

1,402,809. (See 1,320,188.)

1,418,041. (See Re. 16,074.)

1,423,272. (See 1,205,678.)

1,436,459, John Reece, Seat covers, filed Mar. 3, 1933, D. C., E. D. Mo. (St. Louis), Doc. 10312, *Nov.-Klean Seat Pad Co.* v. *J. & R. Motor Supply Co.* Consent decree favor plaintiff Mar. 22, 1933.

1,459,662. (See 1,307,733.)

1,464,880, William R. Mestice, Coats and method of making the same, appeal filed Jan. 10, 1933, C. C. A., 2nd Cir. (New York city), Doc. 12511, *William R. Mestice* v. *Ohrbach's Affiliated Stores, Inc.* Decree affirmed (notice Mar. 22, 1933.)

1,475,980. (See 1,307,733.)

1,491,915, William L. McLaine, Float plug, filed Nov. 10, 1930, D. C., S. D. Calif. (Los Angeles), Doc. S. 68–J Eq., *Baker Oil Tools, Inc., et al.* v. *Lorraine Corp.* Dismissed for want of prosecution Feb. 10, 1933.

1,507,826. (See 1,277,229.)

1,526,982, Edward W. Hill, Stencil sheets, filed Mar. 16, 1933, D. C., S. D. Ind. (Indianapolis), Doc. 1460, *A. B. Dick Co.* v. *Perry L. Wolf* (*doing business as Wolf Duplicator Co.*).

1,544,669. (See 1,199,111.)

1,575,944, 1,575,945, Ben K. Stroud, Application of mud-laden fluids to oil or gas wells, filed Mar. 18, 1930, D. C., S. D. Calif (Los Angeles), Doc. E 27–C Eq., *Nat'l Pigments and Chemical Co.* v. *Chamberlain Co., Inc., et al.* Consent decree, holding patent valid and infringed Mar. 8, 1933. Doc. R–28–M Eq., *Nat'l Pigments & Chemical Co.* v. *Flynt Silica & Spar Co. and James M. Conlon.* Consent decree as to Conlon holding patent valid and infringed Mar. 8, 1933.

1,575,945. (See 1,575,944.)

1,592,548, Hervey S. Walker, Under-floor duct systems, filed Oct. 7, 1929, D. C., S. D. N. Y., Doc. E 50–302, *Hervey S. Walker* v. *Western Electric Co., Inc., et al.* Dismissed (notice, Mar. 21, 1933).

1,602,327, Hyman A. Blanchard, Concrete curbing, filed Aug. 28, 1929, D. C., W. D. N. Y. (Buffalo), Doc. 67, *Hymen A. Blanchard* v. *Whitmore, Reuber & Vicinus, Inc.* Dismissed Mar. 14, 1933.

1,608,472, John J. Aurynger, Condenser, filed Mar. 20, 1933, D. C., S. D. N. Y., Doc. E 75–43, *John J. Aurynger* v. *Radio Corp. of America.*

1,619,285. (See Re. 16,074.)

1,619,286. (See Re. 16,074.)

1,638,614, Frank G. Brewster, Electromagnetic indicator, filed Mar. 7, 1933, D. C., Vt. (Burlington), Doc. 139, *Frank G. Brewster* v. *Gen'l Motors Corp. et al.*

1,643,420. (See Re. 17,274.)

1,643,742. (See 1,199,111.)

1,648,806, Louis A. Hazeltine, Wave signaling systems, filed Dec. 10, 1932, D. C., S. D. Calif. (Los Angeles), Doc. Y–76–H Eq., *Hazeltine Corp.* v. *Trans-Continental Radio, Inc., et al.* Decree favor plaintiff Mar. 15, 1933.

1,698,668. (See Re. 18,579.)

1,702,878, Frederick J. Mersfelder and Paul Bales, Clean-out plugs, filed Mar. 22, 1933, D. C., E. D. N. Y. (Brooklyn), Doc. E 6903, *M. & B. Mfg. Co., Inc.*, v. *Paul Minah et al.*

1,709,752. (See Re. 17,274.)

1,713,711. (See Re. 17,710.)

1,715,523, William S. Turner, Floor coverings for automobiles and the like; 1,715,525, William S. Vrooman, Floor coverings for automobiles and the like; Des. 75,536, William S. Vrooman, Rubber matting, filed Mar. 10, 1933, D. C., N. D., E. Div. Ohio (Cleveland), Doc. 4622, *The Paine & Williams Co.* v. *The Trump Products Co. et al.*

1,715,525. (See 1,715,523.)

1,723,189, William Friedman, Syringe, filed Mar. 27, 1933, D. C., E. D. N. Y. (Brooklyn), Doc. E 6907, *Charles Cefarelli* v. *William Fewett et al.*

1,758,444. (See 1,320,188.) 1,759,462. (See Re. 18,497.)

1,774,812, 1,774,813, Henry P. Brasutigam, Refrigerating apparatus; 1,860,525, Bertram B. Geyer, Refrigerating apparatus, filed Dec. 6, 1932, D. C., S. D. N. Y., Doc. E 73–81, *Frigidaire Corp.* v. *United States Stamping Co.* Dismissed without prejudice (notice Mar. 25, 1933).

1,774,813. (See 1,774,812.) 1,779,011. (See Re. 17,710.)

1,779,104. (See Re. 17,710.)

1,785,637, Clarence Lipper, Method of making hats and the product thereof, filed Jan. 22, 1931, D. C., S. D. N. Y., Doc. E 57–253, *Lipper Mfg. Co.* v. *Adam Hat Co. Inc., et al.* Discontinued (notice, Mar. 25, 1933.)

1,811,095. (See 1,251,377.) 1,815,733. (See 1,320,188.)

1,818,807. (See 1,320,188.)

1,819,258, 1,892,993, Mendel Nevin, Syringes; 1,839,695, same, Hypodermic Syringes, filed Mar. 7, 1933, D. C., S. D. N. Y., Doc. E 74–447, *Novocol Chemical Mfg. Co., Inc.*, v. *Harold Epstein et al.*

1,823,333, Charles P. McCormick, Tire boots, filed Mar. 9, 1932, D. C., N. D. Ill. (Chicago), Doc. 11525, *Charles P. McCormick et al.* v. *Daytona Accessories Mfg. Co. et al.*

1,828,378. (See Re. 18,497. 1,839,695. (See 1,819,258.)

1,840,425. (See 1,205,678.)

1,840,845, Patrick J. Lucey, Feeding mechanism for slicing machines, filed Jan. 26, 1932, D. C., N. D. Ill. (Chicago), Doc. 11350, *American Slicing Machine Co.* v. *Cincinnati Time Recorder Co.* Consent decree holding patent valid and infringed Feb. 11, 1933.

1,847,817, Don Cole, Lubricating system, appeal filed Dec. 23, 1932, C. C. A., 3d Cir. (Philadelphia), Doc. 5070, *Dooley Improvements, Inc.*, v. *Motor Improvements, Inc., et al.*

1,860,825. (See 1,774,812.) 1,864,459. (See Re. 18,497.)

1,864,460. (See Re. 18,497.)

1,865,821, Wilson L. Blayney, Scarfs and the method of making the same, filed Feb. 8, 1933, D. C., S. D. N. Y., Doc. E 74–143, *Marshall Field & Co.* v. *Rose Silk Mills, Inc., et al.* Consent decree holding patent valid and infringed (notice Mar. 25, 1933).

1,872,724. (See 1,320,188.)

1,877,754. (See Re. 17,710.)

1,888,542, John E. Rosberg, Apparatus for treating meats, filed Mar. 11, 1933, D. C., N. D. Calif. (San Francisco), Doc. 3525–K Eq., *Tiedemann & Harris, Inc., et al.* v. *California Casing Co. et al.*

1,892,993. (See 1,819,258.)

1,896,143. (See Re. 18,497.)

Re. 16,074 (of 1,228,267), Adolph Wahle, Rotary pumps; 1,340,091, 1,418,041, Reuben N. Trane, Centrifugal pump; 1,619,285, 1,619,286, Arthur W. Burks, Pumps, appeal filed Nov. 27, 1931, C. C. A., 3rd Cir., Doc. 4779, *Westco-Chippewa Pump Co.* v. *Delaware Electric & Supply Co. et al.* Decree of lower court affirmed Mar. 17, 1933.

Re. 16,074 (of 1,228,267), Adolph Wahle, Rotary pumps, appeal filed Oct. term, 1932, C. C. A., 3rd Cir., Doc. 4779, *Westco-Chippewa Pump Co.* v. *Delaware Electric & Supply Co. et al.* Decree of D. C. Ct. affirmed Mar. 17, 1933. Doc. 4780, *Delaware Electric & Supply Co. et al.* v. *Westco-Chippewa Pump Co.* Decision same as above.

Re. 17,274 (of 1,643,420), Hans Porter, Rear view mirrors for automobiles; 1,709,752, Dean M. Schlenberger and Arthur G. Jagel, Rear vision mirror, filed Dec. 24, 1930, D. C., S. D. N. Y., Doc. E 57–145, *The Simplex Piston Ring Co. of America, Inc.*, v. *Sam Holland, doing business as The Lef-Bits Mirror Co.* Dismissed without prejudice (notice Mar. 25, 1933).

Re. 17,710 (of 1,713,711), Edwin S. Pearce, Waste reclamation systems; Re. 18,599 (of 1,779,011, same, Method of conditioning waste; 1,779,104, same, Method of renovating waste, filed Mar. 14, 1933, D. C., S. D., Ind. (Indianapolis), Doc. 1458, *Railway Service & Supply Corp.* v. *Journal Box Servicing Corp.*

Re. 18,497 (of 1,759,462), Harry E. Norviel, Ignition coil and lock switch; 1,896,143, same, Coil switch unit, filed Mar. 22, 1933, D. C., E. D. N. Y. (Brooklyn), Doc. E 6904, *Delco Remy Corp.* v. *Automotive Specialty Corp.*

Re. 18,497 (of 1,759,462), Harry E. Norviel, Ignition coil and lock-switch; Re. 18,498 (of 1,828,378), same, Ignition apparatus; 1,864,459, same, Switch; 1,864,460, same, Switch and coil unit, filed Mar. 22, 1933, D. C., E. D. N. Y., Doc. 6905, *Delco Remy Corp.* v. *Motor Products Co., Inc.*

Re. 18,498 (of 1,828,378). (See Re. 18,497.)

Re. 18,579 (of 1,698,668). (See 1,251,377.)

Des. 56,702, Theodore Ludwig, Soap, filed Feb. 24, 1932, D. C., S. D. N. Y., Doc. E 65–295, *Brillo Mfg. Co.* v. *Maurice Levine.* Discontinued (notice Mar. 27, 1933).

Des. 58,480, Leopold Hauser, Buckles; Des. 67,778, Winifred L. Gibbons, Shoe Buckles, filed Mar. 22, 1933, D. C. R. I. (Providence), Doc. 444, *C. G. King & Co., Inc.*, v. *Fernando M. Ronci* (*F. Ronci Co.*).

Des. 75,536. (See 1,715,523.)

Des. 84,118, George H. Stephens, Clock or similar article, filed Oct. 27, 1931, Doc. 11025, *The Hammond Clock Co.* v. *Electric Clock Corp. of America et al.* Decree holding patent valid and infringed Jan. 18, 1933.

Des. 85,420, Ernest W. Freudenberg, Embroidered textile fabric or a similar article, filed Mar. 15, 1933, D. C., S. D. N. Y., Doc. E 75–17, *Amrein Freudenberg Co., Inc.*, v. *Kate Gardstein, individually and doing business as Gardstein Embroidery Co.*

Des. 87,778. (See Des. 58,480.)

Des. 87,991, Jean Aemisegger, Textile fabric; Des. 88,091, Max U. Juestrich, Textile fabric, filed Mar. 7, 1933, D. C., S. D. N. Y., Doc. E 74–449, *The American Fabrics Co.* v. *Mitchell and Weber, Inc.* Discontinued (notice Mar. 24, 1933).

Des. 88,597 (a), Des. 88,603, William Willheim, Textile fabric or similar article, filed Mar. 23, 1933, D. C., S. D. N. Y., Doc. E 75/101, *William Willheim Co., Inc.*, v. *Topaz Frocks, Inc., et al.* Doc. E 75/102, *William Willheim Co., Inc.*, v. *Simon & Dona, Inc., et al.*

Des. 88 597 (b), Des. 88,603, Des. 89,105, William Willheim, Textile fabric or similar article, filed Mar. 23, 1933, D. C., S. D. N. Y., Doc. E 75/103, *William Willheim Co., Inc.*, v. *Kastle & Helpern, Inc., et al.*

Des. 88,091. (See Des. 87,991.)

Des. 88,603. (See Des. 88,597 (a) and (b).)

Des. 89,105. (See Des. 88,597 (b).)

Des. 89,105, William Willheim, filed Mar. 23, 1933, D. C., S. D. N. Y., Doc. E 75–104, *William Willheim Co., Inc.*, v. *La France Silk Corp. et al.*

T. M. 116,845. Moses Herzog, Hair nets, filed Feb. 6, 1933, D. C. Mid. D. Pa. (Scranton), Doc. 1028, Jan. term 1933, *Moses Herzog* v. *Nathan B. Cohen*. Decree granting permanent injunction Mar. 7, 1933.

T. M. 155,871, Winthrop Chemical Co., Inc., Sedative and hypnotic, filed Nov. 28, 1931, D. C., N. D. Ill. (Chicago), Doc. 11188, *Winthrop Chemical Co., Inc.*, v. *Christian A. Christiansen (Witte's Pharmacy)*. Consent decree holding validity and infringement Jan. 11, 1932.

Disclaimers

Re. 17,585.—*Josef Mayer*, Karlsbad, Czechoslovakia. PERMANENT-HAIR-WAVING APPLIANCE. Patent dated February 11, 1930. Disclaimer filed April 4, 1933, by the assignee, *The Philad Company*.

Disclaimer is hereby entered to claims 4, 5, 6, and 7 in the above identified Letters Patent, the said claims being in the following words, to wit:

"4. A heater comprising a pair of rigid levers pivoted intermediate their ends, an arcuate casing with straight parallel edges carried by one end of each lever, a heat insulating grip at the other end of each lever, electrical heating elements within said casings, and a spring between said levers pressing said casings toward each other.

"5. A heater comprising two arcuate members arranged to substantially enclose a strand of hair on all sides except that adjacent the scalp of the wearer, electrical heating means associated therewith, a pair of levers pivoted together intermediate their ends, each lever being rigidly attached to one of said arcuate members at one end, and having its other end formed into a heat insulating handle, and a spring means pressing said members toward each other.

"6. A heater comprising a pair of rigid levers pivoted intermediate their ends, an arcuate casing carried by one end of each lever, a heat insulating grip at the other end of each lever, electrical heating elements within said casings, and a terminal-enclosing insulating cover carried by each lever.

"7. A heater comprising two arcuate members arranged to substantially surround a flat spirally wound strand of hair and in this position to have their edges adjacent the wearer's scalp spaced from each other throughout their length, electrical heating means associated therewith, a pair of levers pivoted intermediate their ends, each lever being rigidly attached to one arcuate member and carrying a heat insulating handle."

1,673,942.—*David Helpern*, Brooklyn, N. Y. PERMANENT-WAVING ATTACHMENT. Patent dated June 19, 1928. Disclaimer filed April 4, 1933, by the assignee, *The Philad Company*.

Disclaimer is hereby entered to claims 2, 3, 4, 5, and 6 in the above identified Letters Patent, the said claims being in the following words, to wit:

"2. A device of the character described, including a clamp having elongated jaws in which a lock of hair is adapted to be gripped adjacent to the roots of the hair, a core extending along the said clamp, about which the lock of hair is wound, and means acting between the clamp and the core to set the latter in central relation to the opening between said jaws.

"3. A device of the character described, including a clamp having elongated jaws between which a lock of hair is adapted to be gripped in proximity to the roots of the hair, a core extending along the clamp, about which the hair is adapted to be wound, and means acting between the clamp and the core to cause the latter to retain the hair wound thereon in close proximity to the clamp.

"4. A device of the character described, including a clamp having elongated jaws between which a lock of hair is adapted to be gripped in proximity to the roots of the hair, a core extending along the clamp, about which the hair is adapted to be wound, and means acting between the core and the clamp to prevent the core from turning and hair unwinding, said means serving to set the core in central relation to the opening between the jaws.

"5. A device of the character described, including a clamp having elongated jaws between which a lock of hair is adapted to be gripped in proximity to the roots of the hair, a core extending along the clamp, about which the hair is adapted to be wound, and means acting between the core and the clamp to prevent the core from turning and the hair unwinding, to retain the hair in close proximity to the clamp, wound on said core.

"6. A device of the character described, including a clamp having elongated jaws between which a lock of hair is adapted to be gripped in proximity to the roots of the hair, a core extending along the clamp, upon which the hair is adapted to be wound, and means acting between the clamp and the core to prevent the core from turning and the hair unwinding."

1,683,581.—*George Decker*, Cleveland, Ohio. HAIR-WAVING OUTFIT. Patent dated September 4, 1928. Disclaimer filed April 4, 1933, by the assignee, *The Philad Company*.

Disclaimer is hereby entered to claims 1, 4, and 5 in the above identified Letters Patent, the said claims being in the following words, to wit:

"1. In a hair waving outfit, a clamp comprising a pair of members hingedly connected together at one end, disengageable means for connecting the opposite ends together said disengageable means including an eccentrically mounted cam, a pair of protecting bars, and means for connecting one protecting bar with each of said members, said protecting bars conforming to the size and shape of said members."

"4. In a hair waving outfit, a clamp comprising a pair of metallic members hingedly connected together at one end, swinging disengageable means connecting the opposite ends together, a pair of protecting bars formed of substantially non-heat conducting material, and means for connecting one protecting bar to each of said members, said protecting bars conforming to the size and shape of said members, said last mentioned means being formed to space the protecting bars from said members.

"5. A clamp of the character described comprising a pair of arms articulately connected together at one end of the clamp, a pair of links pivotally connected at one end to the free end of one of said arms, said links being adapted to be positioned to embrace the end of the other arm, a latching lever pivotally connected to the free end of said links, said latching lever having a cam end engageable with the end of the arm inserted between the links and operative to press said arms together."

Adjudicated Patents

(D. C. Ind.) Butterfield patent, No. 1,461,067, for process for making paper folding boxes or the like, *Held* invalid. *Interstate Folding Box Co.* v. *Empire Box Corporation*, 2 F. Supp. 531.

(C. C. A. N. Y.) Regar patent, No. 1,719,062, for method of producing scallops in knitted fabrics, *Held* invalid. *H. K. Regar & Sons* v. *Scott & Williams*, 63 F.(2d) 229.

(D. C. Md.) Benese patent, No. 1,837,752, for tinsel winding machine, *Held* invalid. *George Franke Sons Co.* v. *Wiebke Mach. Co.*, 2 F. Supp. 490.

TRADE-MARKS

OFFICIAL GAZETTE, APRIL 25, 1933

[VOL. 429. No. 4]

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 1 of said act, a fee of ten dollars must accompany each notice of opposition.

CLASS 1

Raw or Partly-Prepared Materials

Ser. No. 328,199. ZELLSTOFFFABRIK WALDHOF, Mannheim-Waldhof, Germany. Filed June 21, 1932.



Applicant disclaims the words "Suomi Finland" apart from the mark as shown in the drawing.

For Chemical Pulp, Sulphite and Sulphate Pulp, and Mechanical Pulp.

Claims use since July 1, 1931.

CLASS 2

Receptacles

Ser. No. 335,074. SHELLMAR PRODUCTS COMPANY, Chicago, Ill. Filed Feb. 17, 1933.

SHELLMAR



For Wrappers, Bags, and Cartons Produced Wholly or in Part from Paper or Cellulose Sheeting.

Claims use since Aug. 5, 1931.

CLASS 4

Abrasive, Detergent, and Polishing Materials

Ser. No. 324,577. WHITTEMORE BROS. CORP., Cambridge, Mass. Filed Feb. 27, 1932.

Bag O' Shines

The word "Bag" as found in the trade-mark, when used apart from the mark, is disclaimed.

For Brushes and Materials for Cleaning, Polishing and Coloring Leather Goods, Contained in a Flexible Bag.

Claims use since January, 1932.

Ser. No. 324,558. GARFINKEL & RITTER, doing business as Jaunty Silk Company, New York, N. Y. Filed Feb. 2, 1933.

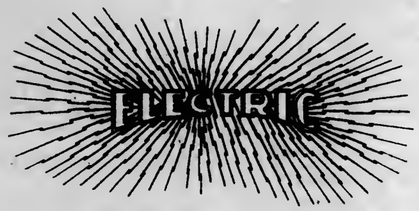


The drawing is stippled for shading purposes only. No claim is made to the exclusive use of the words "Silk Stain Remover" apart from the mark as shown in the drawing.

For Preparation for Removing Spots, Stains, and the Like.

Claims use since August, 1931.

Ser. No. 334,983. THE CLEVELAND CLEANER AND PASTE CO., Cleveland, Ohio. Filed Feb. 15, 1933.



For Compound for Cleaning Wall Paper, Frescoe, Calcimine, Window Shades, and Tapestries.
Claims use since Jan. 1, 1889.

Ser. No. 334,984. THE CLEVELAND CLEANER AND PASTE CO., Cleveland, Ohio. Filed Feb. 15, 1933.

PAINTERS' FRIEND

For Paint Cleaning Compound which May Also be Used for General Household Cleaning Purposes.
Claims use since Dec. 15, 1932.

Ser. No. 335,006. SHU-MILK PRODUCTS CORPORATION, Orange, N. J. Filed Feb. 15, 1933.



The drawing is lined to indicate red. The representation of the carton is disclaimed apart from the mark as shown in the drawing.
For Shoe Cleanser, Shoe Polishes, and Dressing.
Claims use since Jan. 3, 1933.

Ser. No. 335,280. LEE W. LOCKWOOD, doing business as La Dento Laboratories, Minneapolis, Minn. Filed Feb. 25, 1933.

LA DENTO

For Sterilizing, Cleansing Powder for Artificial Teeth.
Claims use since Dec. 17, 1930.

Ser. No. 335,595. RICHARD HUDNUT, New York, N. Y. Filed Mar. 11, 1933.

CHEVRON

For Shaving Cream.
Claims use since Sept. 10, 1932.

Ser. No. 335,768. COLGATE-PALMOLIVE-PEET COMPANY, Chicago, Ill. Filed Mar. 17, 1933.

BARDELLO

For Soap.
Claims use since March, 1925.

CLASS 6

Chemicals, Medicines, and Pharmaceutical Preparations

Ser. No. 313,573. THE J. W. WOOLFOLK CO., INC., Fort Valley, Ga. Filed Apr. 20, 1931.

ZINK-O-DUST

Applicant disclaims the right to the exclusive use of the words "Zink" and "Dust", apart from the trade-mark as shown in the drawing.
For Dry Insecticide and Fungicide Composition.
Claims use since December, 1929.

Ser. No. 318,897. GEORG DRALLE, Hamburg and Altona, Germany. Filed Sept. 4, 1931.

ILLUSION

For Perfumery.
Claims use since Mar. 25, 1909.

Ser. No. 324,002. ARTHUR A. DORT, Brooklyn, N. Y. Filed Feb. 12, 1932.

Trodacha

For Perfumes, Face Creams, Face Powders, Talcum Powder, Body Powders, Sachets, Manicuring Necessities.—Namely, Cuticle Softener, Cuticle Remover, Nail Cleanser, and Nail Polish; Skin Tonics, Ointments, and Lotions; Hair Preparations, Shampoos, Bath Crystals, Bath Powders, Dental Cream, and Mouth Wash; Toilet Waters, After-Shaving Lotions and Essential Oils—Namely, Perfume Preparations.
Claims use since Nov. 11, 1931.

Ser. No. 327,600. ORLANDO KEITH OWEN, doing business as Dao Corporation, Terre Haute, Ind. Filed May 31, 1932.

DAO

For Insecticide.
Claims use since Apr. 5, 1932.

Ser. No. 332,240. JOSEPH THIMEY, Denver, Colo. Filed Nov. 17, 1932.



For Cold Cream, Acne Cream, Liquefying Cream, Hand Lotions, Cucumber Cream, Witch Hasel Cream, Complexion Rejuvenator Cream, After Shave Lotion, Nourishing Cream, Vanishing Cream, Rose Cleansing Cream, Antichap Lotion, Freckle Cream, Lemon Cleansing Cream, Wrinkle and Tissue Cream, Skin Tonic, Skin Lotion for Pimples and Blackheads, Skin Bleach, Skin Whitener, Beauty Clay, Deodorant, Lilac Vegetal, Henna Shampoo, Depilatory, Hair Curler, Brilliantine, Pineapple Shampoo, Hair Dressing, Dandruff Lotion, Tar Shampoo, Cocoanut Shampoo, Hair Pomade, Hair Tonic, Eau de Cologne, Muscle Oil, Bay Rum, Astringent, Nail Polish, Talcum Powder, Liquid Powder.
Claims use since September, 1922.

Ser. No. 332,390. THE R. M. HOLLINGSHEAD CO., Camden, N. J. Filed Nov. 21, 1932.

WHIZ

For Carbon Decomposer, Anti-Freeze Compounds, Chemicals and Chemical Preparations—Namely, Insecticides.
Claims use since Sept. 1, 1905.

Ser. No. 333,219. GODFREY L. CABOT, INC., Boston, Mass. Filed Dec. 20, 1932.

SPHERON

For Carbon Black for Use in the Manufacture of Rubber.
Claims use since Dec. 6, 1932.

Ser. No. 333,468. PARFUMERIE ST. DENIS, New York, N. Y. Filed Dec. 29, 1932.

DE TOUT MON COEUR

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cold Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches, Face Packs; Skin Whitener in Liquid, Cream, and Solid Form; Eyebrow and Eyelash Grower, Eye Drops, Eyebrow Pencils, Chemical Preparations Suitable for the Darkening of Eyebrows and Eyelashes, Hand Lotions, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powders, Sachets, Hair Salves, Hair Elixirs, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Depilatories, Nail Creams, Nail Bleaches, Nail Powders, Nail Polishes, Witch Hasel, Peroxide, Petroleum Jellies, Witch Hasel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes and Toilet Water.
Claims use since Nov. 15, 1932.

Ser. No. 333,783. ADA FLINT SMITH, doing business as Essa Manufacturing Co., Albany, N. Y. Filed Jan. 5, 1933.



For Ointment and Toilet Cream.
Claims use since Aug. 15, 1902.

Ser. No. 334,023. PARFUMERIE RIGAUD, INC., New York, N. Y. Filed Jan. 17, 1933.

RIGAUD

The proper name "Rigaud" being disclaimed herein apart from the mark shown.

For Perfumes, Toilet Waters, Face Creams, Bath Salts, Bath Powder, Face Powder, Talcum Powder, Sachet, Rouge, Lip Sticks, Lotion for the Skin and Hair, Brilliantine.

Claims use since Dec. 29, 1932.

Ser. No. 334,076. SOCIETE A RESPONSABILITE LIMITEE: LE BAKERFIX, Nanterre, France. Filed Jan. 18, 1933.



The portrait shown is a picture of Josephine Baker.

For Perfumes, Toilet Waters, Face Powders, Talcum Powders, Rouge, Lip Sticks, Skin Creams, Hair Lotions, Hair Tonics, Hair Fixatives, Hair Straightening Preparations.

Claims use since July, 1932.

Ser. No. 334,344. ROBERT S. BENNETT, doing business as Antro Chemical Company, Cleveland, Ohio. Filed Jan. 26, 1933.

ANTRO

For Preparation for the Relief of Sinus Infections, Catarrh, Hay Fever, Colds, and All Nasal Infections.

Claims use since June, 1932.

Ser. No. 334,365. LES LABORATOIRES DAUSSE, SOCIETE ANONYME, Paris, France. Filed Jan. 26, 1933.

NELOMBO

For Perfumes, Toilet Waters, Face Powders, Face Powder Compacts, Rouges, Lipsticks, Eyebrow Pencils, Hair Tints in Solid Form, Lavender Waters, Vegetal Lotions, Eau de Cologne, Bath Salts, Dentifrices in Liquid and Paste Form, Face and Skin Creams, Beauty Lotions, Shampoos, Depilatories in Paste Form, Liquid Toilet Astringents, Nut Oil Lotion for the Skin, Brilliantine, and Nail Polishes.

Claims use since Dec. 18, 1931.

Ser. No. 334,510. NOX-KWIK, Baltimore, Md. Filed Jan. 31, 1933.

Nox-Kwik
LINIMENT

No claim is made to the word "Liniment" apart from the mark as shown on the drawing.

For Liniment for the Treatment of External Irritations, Muscular Soreness, Bruises, Sprains, Insect Bites, Rheumatic Pains, Neuralgic Pains, Chapped Hands, and Rub for Athletes.

Claims use since Sept. 1, 1932.

Ser. No. 334,684. MAYO BROTHERS, Fort Madison, Iowa. Filed Feb. 6, 1933.



The word "Salve" is disclaimed apart from the other features of the mark shown in the drawings.

For Salve Used in the Treatment of Boils, Carbuncles, Bone Felon, Cuts, and Infections.

Claims use since Jan. 14, 1933.

Ser. No. 334,939. MARK J. SULLIVAN, doing business as Tyoga Products Company, Wellsboro, Pa. Filed Feb. 13, 1933.



For Lubricating Oil for the Intestinal Tract, Hair Tonic and Scalp Treating Preparations, Facial Cleansing Creams, Cold Creams, Menthol Camphor Creams; Liniment for External Use Recommended for Treatment of Sprains, Bruises, and Rheumatism; Face and Hand Lotion, Shampoo Preparation for Treatment of the Scalp, Perfumery, Almond Skin and Complexion Cream, and Perfumed Starch for Use in Washing and Ironing Wearing Apparel.

Claims use since Nov. 15, 1932.

Ser. No. 334,995. ANDREW D. GREEN, Evansville, Ind. Filed Feb. 15, 1933.



For Salve for External Use for the Treatment of All External Sores Such as Cancer, Boils, Burns, Exzema, Cuts, Raw and Infected Sores of Long Standing.

Claims use since Dec. 10, 1932.

Ser. No. 334,998. HORTON & CONVERSE, doing business as La Salle Pharmacal Co., Los Angeles, Calif. Filed Feb. 15, 1933.

PEARLBRIGHT

For Tooth Powder.

Claims use since Jan. 15, 1933.

Ser. No. 335,018. COMFORT MANUFACTURING COMPANY, Chicago, Ill. Filed Feb. 16, 1933.

All American

For Astringents, Astringent Cerates, Bleach Creams, Beauty Creams, Cleansing Creams, Obesity Creams, Refreshing Creams, Obesity Astringents, Dry Rouges, Liquid Rouges, Face Bleaches; Skin Whitener in Liquid, Cream, and Solid Form; Face Packs, Eyebrow and Eyelash Grower, Eye Drops, Hand Lotions, Eyebrow Pencils, Skin Lotions, After Shaving Lotions, Pomades, Face Powders, Talcum Powders, Body Powder, Sachets, Hair Salves, Hair Elixirs, Chemicals Suitable for the Darkening of Eyelashes and Eyebrows, Dandruff Preparations, Hair Tonics, Hair Oils, Shampoos, Hair Dyes, Bath Salts, Smelling Salts, Lip Sticks, Incense, Tooth Powders, Mouth Washes, Dentifrices, Tooth Pastes, Nail Powders, Nail Polishes, Depilatories, Nail Creams, Nail Bleaches, Witch Hazel, Peroxide, Petroleum Jellies, Witch Hazel Salves, Camphor Creams, Foot Powders, Corn Salves, Deodorants, Disinfectants, Bay Rum, Perfumes, and Toilet Waters.

Claims use since Feb. 6, 1933.

Ser. No. 335,022. HOMME ENTERPRISES, INC., New York, N. Y. Filed Feb. 16, 1933.

Lady of Leisure

For Perfumes.

Claims use since Nov. 10, 1932.

Ser. No. 335,045. THE J. B. WILLIAMS COMPANY, Glastonbury, Conn. Filed Feb. 16, 1933. Under section 5b of the act of 1905 as amended in 1920.

Williams

For Preparations for Treatment of the Hair and Beard, Toilet Powders, Preparations for Cleaning the Teeth, and After-Shaving Preparations.

Claims use since October, 1901, as to preparations for treatment of the hair and beard; since about the month of March, 1915, as to toilet powders; since about the year 1891 as to preparations for cleaning the teeth; and since about Oct. 27, 1917, as to after-shaving preparations.

Ser. No. 335,082. HERMAN BARST, doing business as Selsit Products Co., New York, N. Y. Filed Feb. 18, 1933.

B. X. T.

For Preparation for the Treatment of Indigestion.

Claims use since Feb. 8, 1933.

Ser. No. 335,405. TENNESSEE EASTMAN CORPORATION, Kingsport, Tenn. Filed Mar. 1, 1933.

TEC-ANTI-FREEZE

The term "Anti-Freese" is disclaimed except as part of the compound word shown in the drawing.

For Anti-Freese Compound.

Claims use since Nov. 12, 1932.

Ser. No. 335 512. MCCOY'S LABORATORIES, INC., New York, N. Y. Filed Mar. 6, 1933.



In the drawing the background upon which the letters are superimposed is shown in red. The words "Cod Liver Oil Extract Tablets" are disclaimed apart from the mark shown on the drawing.

For Cod Liver Oil and Cod Liver Oil Compound in Tablet Form.

Claims use since Nov. 30, 1929.

Ser. No. 335,524. THE SHERWIN-WILLIAMS COMPANY, Cleveland, Ohio. Filed Mar. 6, 1933.

BANDIP

For Insecticides.
Claims use since Jan. 18, 1933.

Ser. No. 335,640. HOUBIGANT, INC., New York, N. Y. Filed Mar. 14, 1933.

DULL finish

For Face Powder.
Claims use since Jan. 2, 1933.

CLASS 9

Explosives, Firearms, Equipments, and Projectiles

Ser. No. 335,300. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 25, 1933.

ALLSTATE

For Gun and Revolver Cartridges.
Claims use since Dec. 29, 1932.

CLASS 10

Fertilizers

Ser. No. 335,497. CAPITOL RENDERING WORKS, INC., Denver, Colo. Filed Mar. 6, 1933.

IVY

For Fertiliser.
Claims use since 1905.

Ser. No. 335,665. COMMERCIAL LABORATORIES, INC., Newark, N. J. Filed Mar. 15, 1933.

Thrivo

For Plant Fertiliser.
Claims use since July 21, 1932.

CLASS 11

Inks and Inking Materials

Ser. No. 334,903. THE AULT & WIBORG COMPANY, New York, N. Y. Filed Feb. 13, 1933.

RITE RITE

For Carbon Paper and Typewriter Ribbons.
Claims use since March, 1925.

CLASS 12

Construction Materials

Ser. No. 335,077. STANDARD FUEL ENGINEERING COMPANY, Detroit, Mich. Filed Feb. 17, 1933.

ZERO

For Refractory Material in Plastic Form—Namely, for Use in the Formation of Furnace Hearths and for Boiler and Furnace Linings and for Repair Thereof.
Claims use since Feb. 15, 1933.

CLASS 14

Metals and Metal Castings and Forgings

Ser. No. 333,146. CHASE BRASS & COPPER CO. INCORPORATED, Waterbury, Conn. Filed Dec. 17, 1932.

OLYMPIC

For Sheet-Metal and Wire.
Claims use since Sept. 28, 1932 on sheet-metal and since Oct. 4, 1932, on wire.

CARNEGIE LIBRARY OF ATLANTA

Ser. No. 333,508. COPPER & BRASS RESEARCH ASSOCIATION, New York, N. Y. Filed Dec. 30, 1932.

CABRA

For Copper and Copper Alloys.
Claims use since Dec. 1, 1932.

Ser. No. 334,350. DORMAN, LONG & CO., LIMITED, Middlesbrough, England. Filed Jan. 26, 1933.

CHROMADOR

For Joist Steel, Channel Steel, Angle Steel, T Steel, and Steel in Flats and Plates, All for Use in Bridge Building and Structural Engineering.
Claims use since July 1, 1932.

CLASS 16

Paints and Painters' Materials

Ser. No. 320,592. S. C. JOHNSON & SON, Racine, Wis., assignor to S. C. Johnson & Son, Inc., Racine, Wis., a Corporation of Wisconsin. Filed Oct. 29, 1931.

JOHNSON'S WAX

Claim is hereby waived to the word "Wax" apart from the trade mark shown in the drawing.
For Polishing Wax for Coating and Polishing Wood, Metal, and Other Surfaces.
Claims use since Jan. 21, 1931.

Ser. No. 334,962. THE CLEVELAND CLEANER AND PASTE CO., Cleveland, Ohio. Filed Feb. 15, 1933.

APEX



The word "Apex" is printed in red.
For Painters Wall Size.
Claims use since March, 1932.

Ser. No. 334,985. THE CLEVELAND CLEANER AND PASTE CO., Cleveland, Ohio. Filed Feb. 15, 1933.



The drawing is lined for the colors blue and red.
For Brush Cleaner.
Claims use since April, 1929.

CLASS 17

Tobacco Products

Ser. No. 335,762. BAYUK CIGARS INCORPORATED, Philadelphia, Pa. Filed Mar. 17, 1933.

PRINCE HAMLET

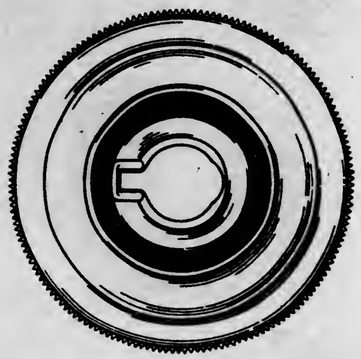


For Cigars.
Claims use since Mar. 9, 1897.

CLASS 19

Vehicles, Not Including Engines

Ser. No. 326,960. STANT MANUFACTURING COMPANY, Connorsville, Ind. Filed May 7, 1932.

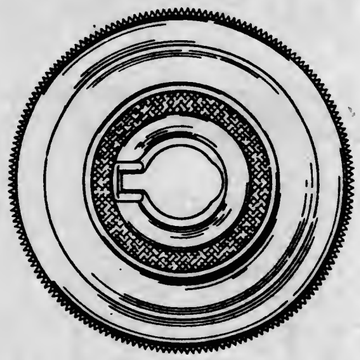


The trade-mark consists of a black circle arranged concentric with the center portion of said filler caps and spaced between said central portion and the periphery of said filler caps, all other subject matter in the drawing being specifically disclaimed for trade-mark purposes.

For Vehicle Radiator and Gasoline Filler Caps.

Claims use since Apr. 21, 1932.

Ser. No. 326,965. STANT MANUFACTURING COMPANY, Connorsville, Ind. Filed May 7, 1932.



The trade-mark consists of an orange circle arranged concentric with the center portion of said filler caps and spaced between said central portion and the periphery of said filler caps, all other subject matter in the drawing being specifically disclaimed for trade-mark purposes.

For Vehicle Radiator and Gasoline Filler Caps.

Claims use since Apr. 21, 1932.

Ser. No. 335,418. GREEN FOUNDRY COMPANY, St. Louis, Mo. Filed Mar. 2, 1933.

GREENITE

For Cast Metal Brake Drums.

Claims use since Feb. 21, 1933.

CLASS 21

Electrical Apparatus, Machines, and Supplies

Ser. No. 328,420. THE FRINK CORPORATION, Long Island City, N. Y. Filed June 30, 1932.



No claim is made to the word "Lamp" apart from the mark shown in the drawing.

For Electric Floor and Table Lamps and Parts Thereof.

Claims use since May 31, 1932.

Ser. No. 328,421. THE FRINK CORPORATION, Long Island City, N. Y. Filed June 30, 1932.



The picture is a representation of St. Therese.

For Electric Floor and Table Lamps and Parts Thereof.

Claims use since May 31, 1932.

Ser. No. 329,794. THE FRINK CORPORATION, Long Island City, N. Y. Filed Aug. 24, 1932.

The
Little Flower

For Electric Floor and Table Lamps and Parts Thereof.

Claims use since May 31, 1932.

Ser. No. 331,259. THE KITCHENAID MANUFACTURING COMPANY, Troy, Ohio. Filed Oct. 14, 1932.

Kaidette

For Electrically-Driven Beating, Treating, and Mixing Machines for Foodstuffs and Whipping, Beating, Mixing, Stirring, and Juice Extracting Attachments Therefor.

Claims use since Oct. 1, 1932.

Ser. No. 332,787. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Dec. 5, 1932.

CRAFTSMAN

For Portable Electric Drills and Saws and Portable Electric Motors.

Claims use since Oct. 28, 1927.

Ser. No. 333,958. WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Jan. 14, 1933.

MICRO-TROLLER

For Vacuum Tube Controllers for Controlling Electric Motors.

Claims use since Dec. 15, 1932.

Ser. No. 334,091. EDISON-SPLITDORF CORPORATION, West Orange, N. J. Filed Jan. 19, 1933.

ALBANITE

For Spark Plugs.

Claims use since Jan. 14, 1933.

Ser. No. 334,672. ECLIPSE MACHINE COMPANY, Elmira Heights, N. Y. Filed Feb. 6, 1933.

PROTIX

For Unitary Electrical Starting Mechanism for Internal Combustion Engines and Parts Thereof and Circuit Controlling Mechanism Therefor, Automatic Starter Controllers and Backfire Circuit Breakers.

Claims use since Jan. 20, 1933.

Ser. No. 334,673. ECLIPSE MACHINE COMPANY, Elmira Heights, N. Y. Filed Feb. 6, 1933.

STARTIX

For Unitary Automatic Electrical Starting Mechanism for Internal Combustion Engines and Parts Thereof and Circuit Controlling Mechanism Therefor, Automatic Starter Controllers and Backfire Circuit Breakers.

Claims use since June 20, 1931.

Ser. No. 334,868. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed Feb. 11, 1933.

SYNCRONODE

For Power Devices Comprising the Combination of a Transformer and a Rectifier for Adapting Current to Radio Use, and Parts Therefor.

Claims use since Jan. 30, 1933.

Ser. No. 334,972. CHICAGO TELEPHONE SUPPLY COMPANY, Elkhart, Ind. Filed Feb. 14, 1933.

C.T.S.Co.

For Volume Controls, Tone Controls, and Switches, for Use in Connection with Radio Receiving and Amplifying Equipment.

Claims use since April, 1930.

Ser. No. 334,989. DRIVER-HARRIS COMPANY, Harrison, N. J. Filed Feb. 15, 1933.

Lohm

For Wire Especially Adapted for Electrical Purposes.

Claims use since Dec. 31, 1932.

Ser. No. 334,990. DRIVER-HARRIS COMPANY, Harrison, N. J. Filed Feb. 15, 1933.

Midohm

For Wire Especially Adapted for Electrical Purposes.

Claims use since Dec. 12, 1932.

Ser. No. 335,223. WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, East Pittsburgh, Pa. Filed Feb. 28, 1933.

MOTOR WATCHMAN

For Manually-Operated Motor Starting Switches.

Claims use since Mar. 3, 1932.

CLASS 22

Games, Toys, and Sporting Goods

Ser. No. 332,577. THE DRAPER-MAYNARD COMPANY, Plymouth, N. H. Filed Nov. 29, 1932.

HUSKY  BRAND

The word "Brand" is disclaimed apart from the mark shown in the drawing.

For Balls, Bats, Rackets, Clubs, Sticks, Bases, Goals, Gloves, Mitts, Masks, Protectors, Racket-Presses, Racket-Covers, Nets and Bags Used in the Games of Baseball, Football, Basketball, Tennis, and Golf.

Claims use since Nov. 22, 1932.

Ser. No. 335,387. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1. 1933.

ANODE

For Rubber Toy Balloons.
Claims use since Jan. 29, 1932.

Ser. No. 335,388. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1, 1933.

ANOTEX

For Rubber Toy Balloons.
Claims use since Jan. 29, 1932.

Ser. No. 335,389. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1, 1933.

ANODEX

For Rubber Toy Balloons.
Claims use since Jan. 29, 1932.

Ser. No. 335,465. ESTHER LAROSE HARRIS, Atlanta, Ga. Filed Mar. 7, 1933.



For Toy Drawing Books.
Claims use since Feb. 25, 1933.

Ser. No. 335,505. HAMBLET STUDIOS, INC., Akron, Ohio. Filed Mar. 6. 1933.

JIGETTE

For Picture Puzzles.
Claims use since December, 1932.

Ser. No. 335,624. EARL L. STENDAHL, doing business as Stendahl Art Gallery, Los Angeles, Calif. Filed Mar. 13, 1933.

MASTERPIECE

For Jig Saw Puzzles.
Claims use since Nov. 25, 1932.

Ser. No. 335,722. THE HOLABIRD COMPANY, Bryan, Ohio. Filed Mar. 16, 1933.

SILHOUETTE

For Puzzles.
Claims use since Feb. 21, 1933.

Ser. No. 335,763. BERTHA BEHRMAN, doing business as Alexander Doll Co., New York, N. Y. Filed Mar. 17, 1933.

ALICE IN WONDERLAND

For Dolls.
Claims use since Feb. 1, 1933.

CLASS 23

Cutlery, Machinery, and Tools, and Parts Thereof

Ser. No. 333,726. BRADSPEED CORPORATION, St. Louis, Mo. Filed Jan. 7, 1933.

BRADSPEED

For Machinery for Manufacturing Boots, Shoes, and Parts Thereof, Comprising Electrically Driven Conveyors and Gravity Conveyors, Tunnel Type Driers, and Box Type Driers.
Claims use since Dec. 18, 1932.

Ser. No. 334,035. C & H SALES CORPORATION, Boston, Mass. Filed Jan. 17, 1933.

OILEVATOR
Automatic Electric Fuel Pump

Applicant disclaims the words "Automatic Electric Fuel Pump."
For Household Automatic Pumps for Oil Burners.
Claims use since Dec. 15, 1932.

Ser. No. 334,377. ACE PRODUCTS COMPANY, INC., New York, N. Y. Filed Jan. 26, 1933.

THE E-Z GRATER
an ACE PRODUCT

The words "Grater" and "Product" are disclaimed apart from the mark as shown on the accompanying drawing. The applicant disclaims the right to the use of the word "The", the right to the word "Grater", the right to the word "An", the right to the word "Ace", and the right to the word "Product" when not used collectively in connection with the name "E-Z", as shown on the accompanying drawing.
For Kitchen Graters.
Claims use since Dec. 1, 1932.

Ser. No. 334,608. KALKER TRIEURFABRIK UND FABRIK GELOCHTER BLECHE MAYER & CIE., AKTIENGESELLSCHAFT, Cologne, Germany. Filed Feb. 3, 1933.

Ultratrieur

For Rotary Grain Separators.
Claims use since Dec. 17, 1930.

Ser. No. 335,093. INGERSOLL-RAND COMPANY, New York, N. Y. Filed Feb. 18, 1933.

JACKBITS

For Cutting Head for Drill Steels.
Claims use since Jan. 19, 1933.

CLASS 24

Laundry Appliances and Machines

Ser. No. 335,468. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

No. 56

No claim being made to the word "No."
For Ironing Tables.
Claims use since Sept. 26, 1928.

Ser. No. 335,469. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

NO. 4

No claim is made to the word "No."
For Ironing Tables.
Claims use since Jan. 27, 1932.

Ser. No. 335,470. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

NO. 34

No claim is made to the word "No."
For Ironing Tables.
Claims use since July 27, 1932.

Ser. No. 335,471. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

No 52

No claim is made to the word "No."
For Ironing Tables.
Claims use since Jan. 27, 1932.

Ser. No. 335,472. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

No. 54

No claim being made to the word "No."
For Ironing Tables.
Claims use since Jan. 27, 1932.

Ser. No. 335,473. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

No. 148

No claim is made to the word "No."
For Ironing Tables.
Claims use since Jan. 27, 1932.

Ser. No. 335,474. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

NO. 14

No claim is made to the word "No."
For Ironing Tables.
Claims use since Jan. 21, 1933.

Ser. No. 335,475. NATIONAL WASHBOARD COMPANY, Chicago, Ill. Filed Feb. 24, 1933.

No. 48

No claim being made to the word "No."
For Ironing Tables.
Claims use since Sept. 26, 1928.

CLASS 26

Measuring and Scientific Appliances

Ser. No. 330,028. BRAUER BROS. INC., St. Louis, Mo. Filed Aug. 31, 1932.

LAST
-O-
METER

The word "Meter" except when used in association with another feature of mark shown is hereby disclaimed.
For Upper Gauging Attachments for Making Shoe Lasts.
Claims use since July 1, 1932.

Ser. No. 333,280. THE CONDE NAST PUBLICATIONS, INC., New York, N. Y. Filed Dec. 22, 1932.

PETER PAN PATTERN 

The word "Pattern" is disclaimed apart from the mark shown.
For Paper Patterns for Garments.
Claims use since Dec. 15, 1932.

Ser. No. 333,287. GENERAL ELECTRIC X-RAY CORPORATION, Chicago, Ill. Filed Dec. 22, 1932.

DUREX

For Photographic Developing Solutions and for Other Chemical Baths Used in Photography.
Claims use since Oct. 1, 1932.

CLASS 27

Horological Instruments

Ser. No. 331,013. SOCIÉTÉ ANONYME DE LA FABRIQUE D'HORLOGERIE LE COULTRE & CIE., Le Sentier, Switzerland. Filed Oct. 6, 1932. Under 10-year proviso.

LECOULTRE

For Watches, Watch Movements, and Parts Thereof.
Claims use since 1882.

Ser. No. 331,014. SOCIÉTÉ ANONYME DE LA FABRIQUE D'HORLOGERIE LE COULTRE & CIE., Le Sentier, Switzerland. Filed Oct. 6, 1932. Under 10-year proviso.

LE COULTRE Co

For Watches, Watch Movements, and Parts Thereof.
Claims use since 1882.

CLASS 28

Jewelry and Precious-Metal Ware

Ser. No. 335,294. WILLIAM REISS, INC., New York, N. Y. Filed Feb. 25, 1933.

HOCUS-POCUS

For Jewelry for Personal Wear, Not Including Watches.
Claims use since Jan. 3, 1933.

CLASS 29

Brooms, Brushes, and Dusters

Ser. No. 335,305. G. BUNAU VARILLA, Boulogne, France. Filed Feb. 25, 1933.



No claim is made to the words "Marque Déposée" and "Brosses".
For Cleaning Brushes, Hair Brushes, Nail Brushes, Shoe Brushes, Clothes Brushes, Tooth Brushes, Scrubbing Brushes, Floor Brushes.
Claims use since Aug. 19, 1932.

CLASS 31

Filters and Refrigerators

Ser. No. 335,478. THE CROSLEY RADIO CORPORATION, Cincinnati, Ohio. Filed Feb. 27, 1933.

SHELVADOR

For Electrical Refrigerators for the Preservation of Foodstuffs.
Claims use since Feb. 7, 1933.

CLASS 32

Furniture and Upholstery

Ser. No. 333,092. WEMDON, INC., Buffalo, N. Y. Filed Dec. 14, 1932.

AUTO-RELAX

For Chairs.
Claims use since Oct. 5, 1932.

Ser. No. 335,301. SEARS, ROEBUCK AND CO., Chicago, Ill. Filed Feb. 25, 1933.



For Kitchen Chairs and Ottomans.
Claims use since Nov. 22, 1932.

Ser. No. 335,320. INTERNATIONAL DISTRIBUTING CO., Janesville, Wis. Filed Feb. 27, 1933.

Arbordale

For Porch Shades and Window Shades.
Claims use since Feb. 11, 1933.

CLASS 34

Heating, Lighting, and Ventilating Apparatus, Not Including Electrical Apparatus

Ser. No. 335,481. SHERWOOD BROS., INC., Baltimore, Md. Filed Mar. 1, 1933.

SHERWOOD
CENTRI HEATING
SERVICE

The words "Heating Service" are disclaimed apart from the mark shown on the drawing.
For Oil Burners.
Claims use since Aug. 24, 1932.

CLASS 36

Musical Instruments and Supplies

Ser. No. 328,357. LESTER PIANO COMPANY, Philadelphia, Pa. Filed June 28, 1932. Under 10-year proviso.

CABLE & SONS

For Pianos and Player Pianos.
Claims use since 1869.

Ser. No. 335,412. BOHLAND & FUCHS, Graslitz, Czechoslovakia. Filed Mar. 2, 1933.



For Bugles, Corneta, Trumpets, Altos, Mellophones, French Horns, Baritones, Trombones, Basses, Sousaphones, Saxophones, Basset Horns, Helicons, Sax Horns, Serpent Horns, and Tubas.
Claims use since Oct. 14, 1932.

CLASS 37

Paper and Stationery

Ser. No. 335,567. ROCKWELL-BARNES COMPANY, Chicago, Ill. Filed Mar. 9, 1933.

DOCKET

For Bond Paper.
Claims use since June 1, 1932.

CLASS 38

Prints and Publications

Ser. No. 332,086. CONOVER & MAST, New York, N. Y. Filed Nov. 12, 1932.

MODERN
BREWERY

For Periodical Publications.
Claims use since Nov. 11, 1932.

Ser. No. 335,099. STREET & SMITH PUBLICATIONS, INC., New York, N. Y. Filed Feb. 18, 1933.

NICK CARTER

For Periodical.
Claims use since Jan. 31, 1933.

Ser. No. 335,372. L. G. TREADWAY SERVICE CORPORATION, New York, N. Y. Filed Feb. 28, 1933.

The COLONIAL WATCHMAN

For Periodicals.
Claims use since Jan. 28, 1933.

Ser. No. 335,521. PETROLAGAR LABORATORIES, INC., Chicago, Ill. Filed Mar. 6, 1933.

Medical Abstracts

For Magazine Published from Time to Time.
Claims use since Feb. 21, 1933.

CLASS 39

Clothing

Ser. No. 320,250. J. J. GROVER SHOE COMPANY, Stoneham, Mass. Filed Oct. 19, 1931.



Applicant disclaims any exclusive right to the word "Shoe" in the trade mark.
For Shoes Made of Leather Lined with Fabric.
Claims use since Sept. 4, 1931.

Ser. No. 328,946. THE JULIAN & KOKENGE COMPANY, doing business as The Lape & Adler Company, Columbus and Cincinnati, Ohio. Filed Feb. 8, 1932.



The word "Aviatrix" is disclaimed apart from the other features of the mark.
For Women's Shoes Made in Whole or in Part of Leather.
Claims use since Mar. 20, 1931.

Ser. No. 324,804. HARRY SIR & SON, INC., New York, N. Y. Filed Mar. 4, 1932.

FLASHINESS

For Leather Shoes.
Claims use since Mar. 1, 1931.

Ser. No. 333,263. MARION SHOE COMPANY, Marion, Ind. Filed Dec. 21, 1932.

Bill Buddy

For Shoes Made Principally of Leather.
Claims use since Oct. 26, 1931.

Ser. No. 334,545. A. V. VICTORIUS & CO., INC., New York, N. Y. Filed Feb. 1, 1933.

IRONHOSE

The letters of the trade-mark as now used are printed in black, each with a red border. Applicant disclaims the word "Hose" apart from the mark shown in the drawing.
For Men's, Women's, and Children's Hosiery.
Claims use since 1905.

Ser. No. 334,726. ADORABLE FROCKS, INC., New York, N. Y. Filed Feb. 7, 1933.

Arlyne Juniors

No claim is made to the word "Juniors" apart from the mark as shown on the drawing.
For Ladies' Dresses, Coats, Suits, Gowns, and Wraps.
Claims use since Dec. 1, 1932.

Ser. No. 334,924. LUXITE SILK PRODUCTS CO., Milwaukee, Wis. Filed Feb. 13, 1933.

Luxite Slendations
SLENDERIZING UNDERWEAR

Exclusive right to the use of the words "Slenderizing Underwear" is disclaimed apart from the other features of the trade-mark as shown in the drawing.
For Underwear and Foundation Garments for Women.
Claims use since Nov. 11, 1932.

Ser. No. 335,277. I. B. KLEINERT RUBBER COMPANY, New York, N. Y. Filed Feb. 25, 1933.

Braform

For Ladies' Undergarments—i. e., Brassières With and Without Dress Shields.
Claims use since Feb. 20, 1933.

Ser. No. 335,585. THE NOLDE AND HORST COMPANY, Reading, Pa. Filed Mar. 10, 1933.



For Hosiery.
Claims use since Mar. 8, 1932.

CLASS 42

Knitted, Netted, and Textile Fabrics

Ser. No. 324,880. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Mar. 8, 1932.

SPUNNESE

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Mar. 5, 1932.

Ser. No. 334,907. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Feb. 13, 1933.

Plumelle

For Pile Fabrics in the Piece.
Claims use since Feb. 8, 1933.

Ser. No. 334,908. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y. Filed Feb. 13, 1933.

Shelta

For Pile Fabrics in the Piece.
Claims use since Feb. 7, 1933.

Ser. No. 335,167. MAX KASHINS CO., INC., New York, N. Y. Filed Feb. 21, 1933.

"CHEVO" CLOTH

No claim is made to the word "Cloth" apart from the mark shown on the drawing.
For Cotton Woven Piece Goods.
Claims use since Jan. 3, 1933.

Ser. No. 335,187. CELANESE CORPORATION OF AMERICA, New York, N. Y. Filed Feb. 23, 1933.

ORGANZEL

For Fabrics Made Wholly or Partially of Cellulose Derivatives.
Claims use since Feb. 21, 1933.

Ser. No. 335,208. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed Feb. 23, 1933.

Patraque

For Silk Fabrics in the Piece.
Claims use since Feb. 14, 1933.

Ser. No. 335,209. ONONDAGA SILK COMPANY, INC., Syracuse and New York, N. Y. Filed Feb. 23, 1933.

Kalka

For Silk Fabrics in the Piece.
Claims use since Jan. 14, 1933.

Ser. No. 335,242. W. E. MCKAY & CO., INC., New York, N. Y. Filed Feb. 24, 1933.

RYB=ROW

For Textile Fabrics in the Piece, Made of Cotton, Rayon, and/or Combinations of the Same.
Claims use since Jan. 7, 1932.

Ser. No. 335,365. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass. Filed Feb. 28, 1933.

QUICK-PICK

For Sheets.
Claims use since Feb. 16, 1933.

Ser. No. 335,366. NAUMKEAG STEAM COTTON COMPANY, Salem, Mass. Filed Feb. 28, 1933.

KWIKPIK

For Sheets.
Claims use since Feb. 16, 1933.

CLASS 44

Dental, Medical, and Surgical Appliances

Ser. No. 333,645. WEAVER JACKSON COMPANY, Los Angeles, Calif. Filed Jan. 4, 1933.

"Q"

For Permanent-Wave Hair Pads for Hair-Waving Apparatus.
Claims use since Nov. 16, 1932.

Ser. No. 335,173. RESEARCH PRODUCTS CORPORATION, New York, N. Y. Filed Feb. 21, 1933.

PORSILON

For Filling Material for Teeth (Silicate Cement).
Claims use since Feb. 10, 1933.

Ser. No. 335,299. SCHWEIZ. SERUM- & IMPFINSTITUT BERN, Berne, Switzerland. Filed Feb. 25, 1933.

Glucator

For Apparatus for Determining Sugar in Urine.
Claims use since June, 1932.

Ser. No. 335,382. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1, 1933.

ANODE

For Surgeon's Rubber Gloves.
Claims use since Jan. 29, 1932.

Ser. No. 335,383. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1, 1933.

ANOTEX

For Surgeon's Rubber Gloves.
Claims use since Jan. 29, 1932.

Ser. No. 335,384. AMERICAN ANODE INC., Akron, Ohio. Filed Mar. 1, 1933.

ANODEX

For Surgeon's Rubber Gloves.
Claims use since Jan. 29, 1932.

CLASS 45

Beverages, Nonalcoholic

Ser. No. 335,519. ORANGE-CRUSH COMPANY, Chicago, Ill. Filed Mar. 6, 1933.

OCCO

For Nonalcoholic, Noncereal, and Maltless Beverages and Syrups, Compounds, and Concentrates for Making the Same.
Claims use since Feb. 11, 1933.

Ser. No. 335,542. RICHARDSON CORPORATION, Rochester, N. Y. Filed Mar. 7, 1933.

BIG BETSY

For Nonalcoholic, Maltless Beverages, and Syrup Used in Making the Same.
Claims use since Feb. 7, 1933.

CLASS 46

Foods and Ingredients of Foods

Ser. No. 278,673. AMERICAN CONE & PRETZEL COMPANY, Philadelphia, Pa. Filed Jan. 31, 1929.

Rold-Gold

For Cookies, Cakes and Crackers, Macaroons, Peanut Butter, and Sugar Wafers.
Claims use since November, 1928.

Ser. No. 284,869. THE PANGO MILK CHOCOLATE CO., Toledo, Ohio. Filed May 31, 1929.

RED ARROW

For Evaporated Milk.
Claims use since May 25, 1929.

Ser. No. 307,579. JOSEPH BURNETT CO., Boston, Mass. Filed Nov. 6, 1930.

DREADNAUGHT



For Vanilla Food Flavoring Extract.
Claims use since Nov. 5, 1929.

Ser. No. 308,716. AMTORG TRADING CORPORATION, New York, N. Y. Filed Dec. 8, 1930.

AKO ★

For Canned Crab Meat.
Claims use since 1927.

Ser. No. 325,928. CLARENCE B. WILLIAMS, Chicago, Ill. Filed Apr. 8, 1932.

Golden Goodies

For Popcorn Confections.
Claims use since Dec. 15, 1931.

Ser. No. 329,966. OTTO EGGEBRAG, doing business as Northwestern Brokerage Co., Eau Claire, Wis. Filed Aug. 29, 1932.



The picture in the drawing is wholly fanciful.
For Wheat Flour.
Claims use since Sept. 1, 1931.

Ser. No. 330,701. FELTON CHEMICAL COMPANY, INC., Brooklyn, N. Y. Filed Sept. 27, 1932.

QUADROVAN

For Candies, Ice Cream, Fruit Syrups for Flavoring Foods and Ingredients of Foods, and Food Flavoring Extracts.
Claims use since Sept. 10, 1932.

Ser. No. 331,408. LIBERTY MILLS, San Antonio, Tex. Filed Oct. 20, 1932.

SKY HIGH

For Wheat Flour.
Claims use since Oct. 13, 1898.

Ser. No. 333,729. DUGAN BROTHERS OF NEW JERSEY, INC., Newark, N. J. Filed Jan. 7, 1933.

BREAD
CAKES PIES

Applicant disclaims sole right to the words "Bakers for the Home", "Bread", "Cakes", and "Pies" except in combination with the mark as shown.
For Bread, Cakes, and Pies.
Claims use since Nov. 7, 1932.

Ser. No. 334,154. NATIONAL BISCUIT COMPANY, New York, N. Y. Filed Jan. 20, 1933.

POPULARITY

For Bakery Products—Namely, Biscuit.
Claims use since Nov. 27, 1906.

Ser. No. 334,725. WILLAPOINT OYSTERS INCORPORATED, Seattle, Wash. Filed Feb. 7, 1933.

Willapoint

For Canned Raw Oysters and Canned Cooked Oysters.
Claims use since Oct. 19, 1930.

Ser. No. 334,774. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Feb. 8, 1933.



The diagonal cross-hatching on the drawing represents the color orange, the cross-hatching around the borders of the label and of the several panels thereof represents the color gold, and the diagonal lining on the drawing represents the color green, these colors being particularly claimed.

For Tea.

Claims use since Sept. 15, 1905.

Ser. No. 334,775. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Feb. 8, 1933.



The cross-hatching on the drawing represents the color gold, the diagonal lining on the drawing represents the color green, and the parallel lining extending in the direction of the greatest length of the label as shown represents the color red, these three colors being particularly claimed.

For Tea.

Claims use since Sept. 15, 1905.

Ser. No. 334,788. THE BACHRACH-FELD COMPANY, INC., doing business as Nuwort Concentrated Malt Co., Cincinnati, Ohio. Filed Feb. 9, 1933.

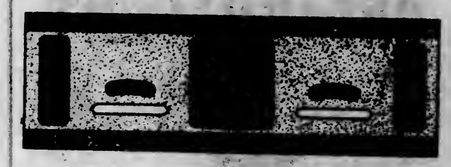


No claim is made to the word "Nuwort" apart from the mark shown in the drawing.

For Concentrated, Liquid Malt Syrup.

Claims use since Oct. 19, 1932.

Ser. No. 334,811. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Feb. 9, 1933.

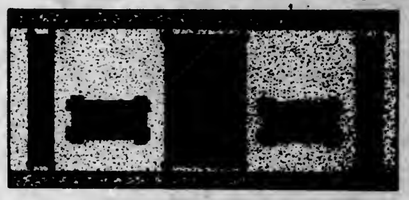


The stippling on the drawing represents the color grey, the cross-hatching on the drawing represents the color gold, and the parallel lining on the drawing represents the color red, these three colors being particularly claimed.

For Tea.

Claims use since July 23, 1906.

Ser. No. 334,812. STANDARD BRANDS INCORPORATED, New York, N. Y. Filed Feb. 9, 1933.



The stippling on the drawing represents the color grey, the cross-hatching on the drawing represents the color gold, and the parallel lining on the drawing represents the color red, these three colors being particularly claimed.

For Tea.

Claims use since August, 1906.

Ser. No. 334,895. F. VITELLI & FIGLIO, New York, N. Y. Filed Feb. 11, 1933.

PRIDE OF NAPLES

For Canned Peeled Tomatoes.

Claims use since Feb. 1, 1933.

Ser. No. 334,919. JOHNSON'S FUR & SALES CO., Chippewa Falls, Wis. Filed Feb. 13, 1933.



No claim, however, is made to the word "Fed" apart from the mark as shown on the drawing.

For Fox Feed.

Claims use since Nov. 14, 1932.

Ser. No. 334,964. HAWAIIAN PINEAPPLE COMPANY, LTD., Honolulu, Hawaii, and San Francisco, Calif. Filed Feb. 14, 1933.

DIAMOND HEAD

For Canned Pineapple Juice.

Claims use since Apr. 5, 1932.

Ser. No. 334,965. LAKE WALES CITRUS GROWERS ASSOCIATION, Lake Wales, Fla. Filed Feb. 14, 1933.

KING WALES

For Citrus Fruits.

Claims use since Oct. 1, 1931.

Ser. No. 335,101. THE VONHIFF-DRAYER CO., Baltimore, Md. Filed Feb. 18, 1933.

V-D

For Candy.

Claims use since June 1, 1921.

Ser. No. 335,102. THE VONHIFF-DRAYER CO., Baltimore, Md. Filed Feb. 18, 1933.

Vee-Dees

For Candy.

Claims use since 1928.

Ser. No. 335,129. PALM BEACH LOXAHATCHEE COMPANY, West Palm Beach, Fla. Filed Feb. 20, 1933.



Applicant hereby disclaims the representation of a tomato apart from the mark as shown on the drawing.

For Fresh Tomatoes and Canned Tomatoes.

Claims use since Dec. 20, 1932.

Ser. No. 335,205. ROBERT P. MOORMAN, doing business as R. P. Moorman Co., Indianapolis, Ind. Filed Feb. 23, 1933.

OBO

For Processed Nuts.

Claims use since Feb. 6, 1933.

Ser. No. 335,328. MEAD JOHNSON & COMPANY, Evansville, Ind. Filed Feb. 27, 1933.

CEMAC

For Cereal, Egg, and Milk Free Diet for Allergic Children.

Claims use since Jan. 30, 1933.

Ser. No. 335,346. THE CALWHEY CO., San Francisco, Calif. Filed Feb. 28, 1933.

CALWHEY

For Stabilized Dry Whey Skimmed Milk Product for Internal Human Use.

Claims use since Dec. 22, 1932.

Ser. No. 335,357. GLENN CONFECTIONS, INC., Buffalo, N. Y. Filed Feb. 28, 1933.

FIRE CHIEF

For Toy Whistles Made of Paraffine and Sugar, Capable of Being Chewed.

Claims use since Sept. 26, 1932.

Ser. No. 335,360. LAKESHIRE CHEESE COMPANY, Plymouth, Wis. Filed Feb. 28, 1933.

Early American

No claim is made to the exclusive use of the word "American" apart from the mark shown in the drawing.

For Cheese.

Claims use since Jan. 30, 1933.

Ser. No. 335,376. AARON WEINER, doing business as Aaron Coffee Company, Philadelphia, Pa. Filed Feb. 28, 1933.

Cup-O-Luck

For Coffee and Tea.

Claims use since Dec. 23, 1932, on coffee, and since Jan. 25, 1933, on tea.

Ser. No. 335,377. STEPHEN F. WHITMAN & SON, INC., Philadelphia, Pa. Filed Feb. 28, 1933.

Motif

For Candy.
Claims use since May 13, 1932.

Ser. No. 335,484. DORGAN-MCPHILLIPS PACKING CORPORATION, Mobile, Ala. Filed Mar. 2, 1933.

VAKPAK

For Canned Shrimp.
Claims use since Dec. 27, 1932.

Ser. No. 335,522. QUAKER CITY WHOLESALE GROCERY COMPANY, INC., Philadelphia, Pa. Filed Mar. 6, 1933.

BUDGET

For Canned Fruits and Canned Vegetables.
Claims use since Oct. 20, 1932.

Ser. No. 335,529. VICTOR FLOUR MILLS, INC., Pittsford, N. Y. Filed Mar. 6, 1933.

VICPIT

For Wheat Flour.
Claims use since Nov. 1, 1932.

Ser. No. 335,559. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Filed Mar. 9, 1933.

CHANDU

For Coffee.
Claims use since Feb. 27, 1933.

Ser. No. 335,560. BEECH-NUT PACKING COMPANY, Canajoharie, N. Y. Filed Mar. 9, 1933.

ORALGENE

For Chewing Gum.
Claims use since Feb. 28, 1933.

CLASS 48

Malt Beverages and Liquors

Ser. No. 334,110. C. AND J. MICHEL BREWING COMPANY, La Crosse, Wis. Filed Jan. 19, 1933.

ELFENBRÄU

For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since July 24, 1908.

Ser. No. 335,454. STERLING PRODUCTS COMPANY, Evansville, Ind. Filed Mar. 3, 1933.

TARGET

For Malt Beverage Containing no More Than the Legal Amount of Alcohol.
Claims use since November, 1919.

Ser. No. 335,546. BERGHOFF BREWING CORPORATION, Fort Wayne, Ind. Filed Mar. 8, 1933. Under 10-year proviso.

Berghoff

For Malt Beverage with Not More Than the Legal Alcoholic Content.
Claims use since 1887.

Ser. No. 335,778. THEO. HAMM BREWING CO., St. Paul, Minn. Filed Mar. 17, 1933.

BLUE SEAL

For Malt Beverages Containing Not More Than the Legal Alcoholic Content.
Claims use since Jan. 30, 1933.

Ser. No. 335,864. GLOBE BREWING CO., INC., Utica, N. Y. Filed Mar. 20, 1933.

ROYAL STYLE

For Malt Beverages with Not More Than the Legal Alcoholic Content.
Claims use since Mar. 11, 1933.

CARNEGIE LIBRARY OF ATLANTA

CLASS 49

Distilled Alcoholic Liquors

Ser. No. 334,561. HIJOS DE FRANCISCO SERRANO, Oviedo, Spain. Filed Feb. 2, 1933.

ANIS ASTURIANA



MARCA REGISTRADA

No claim is made to the word "Anis" and "Marca Registrada".
For Aniseed Brandies and Liquors.
Claims use since Oct. 1, 1916.

Ser. No. 334,562. HIJOS DE FRANCISCO SERRANO, Oviedo, Spain. Filed Feb. 2, 1933.



No claim is made to the representation of a bottle per se, nor to the words "Dulce," "Anis," and "Oviedo."
For Anisette.
Claims use since Jan. 1, 1919.

Ser. No. 335,551. CHARLES MARCHANT, Glasgow, Scotland. Filed Mar. 8, 1933.



No claim is made to any of the matter appearing on the drawing with the exception of the facsimile signature of applicant.
For Whiskey.
Claims use since 1906.

Ser. No. 335,552. ROWETT, LEACH & CO. LIMITED, London, England. Filed Mar. 8, 1933.

HIGHLAND DAWN

For Scotch Whisky.
Claims use since Mar. 8, 1932.

CLASS 50

Merchandise Not Otherwise Classified

Ser. No. 334,084. THE BUXBAUM COMPANY, Akron, Ohio. Filed Jan. 19, 1933.

AKROMATS

For Floor Coverings and Mats Made of a Combination of Rubber and Textile Material.
Claims use since Oct. 18, 1932.

Ser. No. 335,278. CROMPTON COMPANY, West Warwick, R. I. Filed Feb. 25, 1933.

Tarnishield

For Treated Tarnish Proof, Napped, and Pile Fabrics for Use in Packing Silver.
Claims use since Feb. 1, 1933.

Ser. No. 335,526. THE STEARNS & FOSTER CO., Cincinnati, Ohio. Filed Mar. 6, 1933.

MOUNTAIN MIST

For Quilting Frames or Hoops.
Claims use since Apr. 7, 1931.

Ser. No. 335,717. CHICAGO CURLED HAIR COMPANY, Chicago, Ill. Filed Mar. 16, 1933.

SPRINGSTEP

For Carpet Pads and Carpet Lining.
Claims use since October, 1932.

TRADE-MARK REGISTRATIONS GRANTED

[ACT OF FEBRUARY 20, 1905]

APRIL 25, 1933

302,519. CORSETS, GIRDLES, CORSELETTES, COMBINATIONS OF BRASSIÈRES, AND UNDERDRAWERS, MATERNITY CORSETS, AND BANDEAUX. THE LAY & WAY COMPANY, New York, N. Y.
Filed September 24, 1932. Serial No. 330,631. PUBLISHED JANUARY 24, 1933. Class 39.

302,520. RYE BREAD. THE RUBEL BAKING COMPANY, Cincinnati, Ohio.
Filed September 20, 1932. Serial No. 330,521. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,521. METALLIC ABRASIVE SCOURING PADS. METAL TEXTILE CORPORATION, West Orange, N. J.
Filed September 20, 1932. Serial No. 330,517. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,522. LADIES' HOSIERY. STANLEY L. BELLEMERE, doing business as Layne Hosiery Company, Reading, Pa.
Filed September 19, 1932. Serial No. 330,443. PUBLISHED JANUARY 31, 1933. Class 39.

302,523. SHOES. P. W. MINOR & SON, INC., Batavia, N. Y.
Filed September 12, 1932. Serial No. 330,271. PUBLISHED JANUARY 10, 1933. Class 39.

302,524. CHILI SAUCE, TOMATO CATSUP, TOMATO JUICE, ETC. THE HARBAUER COMPANY, Toledo, Ohio.
Filed September 10, 1932. Serial No. 330,227. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,525. WOMEN'S, MISSES', AND CHILDREN'S SHOES, BOOTS, OVERSHOES, AND HOUSE SLIPPERS MADE OF PLAIN AND FANCY LEATHERS, SATINS, FELTS, STRAWS, RUBBER, VELVETS, AND METAL CLOTHS FOR STREET AND DRESS WEAR. WOHL SHOE COMPANY, St. Louis, Mo.
Filed September 9, 1932. Serial No. 330,219. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,526. BOOTS, SHOES, AND SLIPPERS OF RUBBER, LEATHER, FABRIC, OR COMBINATIONS THEREOF, AND LADIES' HOSIERY. THE APPLEBAUM-MAUTNER COMPANY, INC., Madison, Wis.
Filed September 9, 1932. Serial No. 330,194. PUBLISHED JANUARY 3, 1933. Class 39.

302,527. WOOLEN PIECE GOODS. FORSTMANN WOOLEN CO., Passaic, N. J.
Filed September 1, 1932. Serial No. 330,042. PUBLISHED JANUARY 24, 1933. Class 42.

302,528. ICE CREAMS AND ICES. WASHINGTON MAID, INCORPORATED, Washington, D. C.
Filed August 31, 1932. Serial No. 330,026. PUBLISHED NOVEMBER 1, 1932. Class 46.

302,529. HAIR NET TO BE USED ON A HAT. MARTHA W. AHLES, Chicago, Ill.
Filed October 6, 1932. Serial No. 330,987. PUBLISHED JANUARY 17, 1933. Class 42.

302,530. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,978. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,531. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,977. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,532. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,976. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,533. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,975. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,534. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,974. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,535. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,972. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,536. BREAD (RYE BREAD AND PUMPERNICKEL). GEO. F. STUHMER & COMPANY, Brooklyn, N. Y.
Filed October 5, 1932. Serial No. 330,971. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,537. MEN'S, WOMEN'S, AND CHILDREN'S LEATHER, RUBBER, AND FABRIC SHOES. FAMILY SHOE CORP., New York, N. Y.
Filed October 4, 1932. Serial No. 330,925. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,538. BLANKETS. THE MAY DEPARTMENT STORES COMPANY, St. Louis, Mo.
Filed September 29, 1932. Serial No. 330,793. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,539. POLISH, RUBBING COMPOUND, LIQUID WAX, ETC. CHARLES F. KELLOM & CO., INC., Holmesburg, Pa.
Filed September 28, 1932. Serial No. 330,749. PUBLISHED FEBRUARY 7, 1933. Class 16.

302,540. CLEANSING COMPOUND HAVING INCIDENTAL WATER SOFTENING QUALITIES. F. M. RIGGS, Maywood, Ill.
Filed September 23, 1932. Serial No. 330,646. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,541. BRASSIÈRES. MODEL BRASSIERE CO. INC., Brooklyn, N. Y.
Filed September 24, 1932. Serial No. 330,632. PUBLISHED JANUARY 17, 1933. Class 39.

302,542. WHISKEY. THE FRANKFORT DISTILLERY, INC., Louisville, Ky.
Filed January 4, 1933. Serial No. 333,630. PUBLISHED FEBRUARY 7, 1933. Class 49.

302,543. APPLIANCES FOR MEASURING AND RECORDING THE GROWTH OR PRODUCTION OF GROWING HUMAN HAIR. PRO-KER LABORATORIES, INC., New York, N. Y.
Filed January 3, 1933. Serial No. 333,607. PUBLISHED FEBRUARY 14, 1933. Class 26.

302,544. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF, AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 3, 1933. Serial No. 333,582. PUBLISHED FEBRUARY 7, 1933. Class 21.

302,545. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF, AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 3, 1933. Serial No. 333,581. PUBLISHED FEBRUARY 7, 1933. Class 21.

302,546. MEDICINAL OINTMENT FOR SKIN DISORDERS. THE AYER COMPANY, Lowell, Mass.
Filed January 3, 1933. Serial No. 333,572. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,547. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF, AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 3, 1933. Serial No. 333,579. PUBLISHED FEBRUARY 7, 1933. Class 21.

302,548. CARBON BLACK FOR USE IN THE MANUFACTURE OF PAINTS AND VARNISHES. GODFREY L. CABOT, INC., Boston, Mass.
Filed December 30, 1932. Serial No. 333,501. PUBLISHED FEBRUARY 14, 1933. Class 16.

302,549. ROOT BEER EXTRACT. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 27, 1932. Serial No. 333,452. PUBLISHED FEBRUARY 7, 1933. Class 45.

302,550. WRITING AND PRINTING PAPER. STRATHMORE PAPER COMPANY, Mittineague, Mass.
Filed December 28, 1932. Serial No. 333,442. PUBLISHED FEBRUARY 7, 1933. Class 37.

302,551. RAZOR BLADES. HEPPENSTALL COMPANY, Pittsburgh, Pa.
Filed December 28, 1932. Serial No. 333,431. PUBLISHED FEBRUARY 14, 1933. Class 28.

302,552. WIRE ROPE. A. LESCHEN & SONS ROPE COMPANY, St. Louis, Mo.
Filed December 27, 1932. Serial No. 333,394. PUBLISHED FEBRUARY 7, 1933. Class 7.

302,553. BRANDY. CRESTA BLANCA COMPANY, San Francisco, Calif.
Filed December 27, 1932. Serial No. 333,383. PUBLISHED FEBRUARY 7, 1933. Class 49.

302,554. SMOKING STANDS AND CABINETS, TELEPHONE SETS, BOOK CASES, ETC. SUN GLOW INDUSTRIES, INC., Mansfield, Ohio.
Filed December 24, 1932. Serial No. 333,364. PUBLISHED FEBRUARY 14, 1933. Class 32.

302,555. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed December 24, 1932. Serial No. 333,350. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,556. MALT BEVERAGE WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. ANHEUSER-BUSCH, INCORPORATED, St. Louis, Mo.
Filed December 24, 1932. Serial No. 333,349. PUBLISHED FEBRUARY 14, 1933. Class 48.

302,557. NOM DE PLUME FOR A MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,326. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,558. NOM DE PLUME FOR A MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,325. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,559. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,322. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,560. MEN'S CLOTHING—NAMELY, SUITS, COATS, PANTS, VESTS, OVERCOATS, AND TOPCOATS. THE MIDDLEHADS COMPANY, INC., Philadelphia, Pa.
Filed December 22, 1932. Serial No. 333,297. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,561. FISH NETS. THE LINEN THREAD COMPANY, New York, N. Y.
Filed December 22, 1932. Serial No. 333,293. PUBLISHED FEBRUARY 14, 1933. Class 22.

302,562. MITER BOX OR DEVICE. NATIONAL SPECIALTIES CO., INC., Fort Wayne, Ind.
Filed December 21, 1932. Serial No. 333,269. PUBLISHED FEBRUARY 14, 1933. Class 23.

302,563. TOWELS OF TEXTILE FABRIC. TUCAPAU MILLS, Tucapau, S. C.
Filed December 20, 1932. Serial No. 333,243. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,564. MALT BEVERAGES HAVING NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. CLOVERDALE SPRING CO., Baltimore, Md.
Filed December 19, 1932. Serial No. 333,184. PUBLISHED FEBRUARY 7, 1933. Class 48.

302,565. WORK SHIRTS AND DRESS SHIRTS. DAVID FELDMAN, doing business as Feldman & Sons, Baltimore, Md.
Filed December 15, 1932. Serial No. 333,174. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,566. PHOSPHORIC PHOTO SCREENS. DWIGHT I. COOKE, Washington, D. C.
Filed December 17, 1932. Serial No. 333,150. PUBLISHED FEBRUARY 7, 1933. Class 26.

302,567. APPLICATOR FOR TREATMENT OF HAIR AND SCALP FOR TINTING, RETOUCHING, AND BLEACHING THE HAIR. HYMAN & HYMAN, INC., New York, N. Y.
Filed December 16, 1932. Serial No. 333,124. PUBLISHED FEBRUARY 14, 1933. Class 44.

302,568. OPHTHALMIC MOUNTINGS. JOHN D. BROCK, doing business as Specialty Optical Co., Kansas City, Mo.
Filed December 16, 1932. Serial No. 333,113. PUBLISHED FEBRUARY 7, 1933. Class 26.

302,569. ICE SKATES AND SKATE OUTFITS, THE LATTER CONSISTING OF ATTACHED SHOES AND SKATES. NESTOR JOHNSON MANUFACTURING COMPANY, Chicago, Ill.
Filed December 15, 1932. Serial No. 333,103. PUBLISHED FEBRUARY 7, 1933. Class 22.

302,570. LADIES' SILK UNDERWEAR—NAMELY, PAJAMAS, NIGHTGOWNS, SLIPS, DANCE SETS, AND PANTIES. SUSSBERG & FEINBERG, INC., New York, N. Y.
Filed December 14, 1932. Serial No. 333,088. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,571. MANILA ROPE. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 14, 1932. Serial No. 333,086. PUBLISHED FEBRUARY 14, 1933. Class 7.

302,572. FRESH CITRUS FRUITS. COACHELLA GRAPEFRUIT ORCHARDS INC., Los Angeles, Calif.
Filed August 30, 1932. Serial No. 329,980. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,573. CHILI POWDER. MRS. G. E. CLAUSEN, doing business as C. B. Gentry Chili Powder Co., Los Angeles, Calif.
Filed August 30, 1932. Serial No. 329,979. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,574. NEWSPAPER ARTICLES. BULLETIN COMPANY, Philadelphia, Pa.
Filed August 27, 1932. Serial No. 329,885. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,575. SOAPS. BALTZ & KOERPER, Philadelphia, Pa.
Filed August 20, 1932. Serial No. 329,725. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,576. HAND SOAPS. QUALITY SOAP MANUFACTURING COMPANY, Milwaukee, Wis.
Filed August 20, 1932. Serial No. 329,719. PUBLISHED FEBRUARY 7, 1933. Class 4.

302,577. WOMEN'S, MISSES', AND CHILDREN'S HATS AND CAPS; SCARFS OF SILK, WOOL, RAYON, LINEN AND COTTON, UNDERWEAR OF KNITTED, NETTED, AND TEXTILE FABRICS; BLOOMERS, CHEMISES, BRASSIÈRES, NEGLIGEES, PETTICOATS, SLIPS, PANTIES, VESTS AND SHIRTS FOR UNDERWEAR, NIGHTGOWNS, PAJAMAS, WRAPS, SKIRTS FOR UNDER AND OUTER WEAR, KNICKERS, RIDING HABITS, BEACH OVERALLS AND BEACH PAJAMAS, COATS, BLOUSES, SHIRTWAISTS, GOWNS, FROCKS, DRESSES, AND SUITS. MODERN MERCHANDISING BUREAU, INC., New York, N. Y.
Filed August 19, 1932. Serial No. 329,685. PUBLISHED JANUARY 17, 1933. Class 39.

302,578. MEN'S HATS. ADAM HAT STORES, INC., New York, N. Y.
Filed August 18, 1932. Serial No. 329,616. PUBLISHED JANUARY 17, 1933. Class 39.

302,579. OLIVE OIL. GIUSEPPE L. MEZZETTA, San Francisco, Calif.
Filed August 2, 1932. Serial No. 329,290. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,580. TEA. FEDERAL TEA COMPANY, INC., Baltimore, Md.
Filed July 28, 1932. Serial No. 329,142. PUBLISHED SEPTEMBER 20, 1932. Class 46.

302,581. INFANTS' SHOES OF LEATHER, FABRIC, OR COMBINATION OF SUCH MATERIALS. ETHELBRICK SHOE MANUFACTURING CO., Cagey, Ill.
Filed July 1, 1932. Serial No. 328,484. PUBLISHED JANUARY 3, 1933. Class 39.

302,582. ROUND LEATHER BELTING. JOEL S. PERKINS & SON, Philadelphia, Pa.
Filed November 29, 1932. Serial No. 332,598. PUBLISHED FEBRUARY 7, 1933. Class 35.

302,583. POP CORN IN ITS NATURAL STATE. THE BARTELDES SEED COMPANY, Lawrence, Kans.
Filed June 28, 1932. Serial No. 328,345. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,584. NEGLIGEE SHIRTS AND BREECHES, PANTS, COATS, KNICKERS, AND SHORTS FOR MEN AND BOYS. SWEET-ORR & Co., INC., Wappingers Falls, and New York, N. Y.
Filed June 24, 1932. Serial No. 328,283. PUBLISHED JANUARY 31, 1933. Class 39.

302,585. BUTTONS OF NON-PRECIOUS MATERIAL. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich.
Filed June 13, 1932. Serial No. 327,951. PUBLISHED JANUARY 17, 1933. Class 40.

302,586. SHOES, MADE OF LEATHER FABRIC OR COMBINATIONS OF THESE MATERIALS AND COMBINATIONS OF THE MATERIALS AND RUBBER. CHIPPEWA SHOE MANUFACTURING COMPANY, doing business as Kushion-Aire Shoe Company, Chippewa Falls, Wis.
Filed June 11, 1932. Serial No. 327,904. PUBLISHED JANUARY 17, 1933. Class 39.

302,587. SOAP. KRESGE DEPARTMENT STORE CORP., Newark, N. J.
Filed May 13, 1932. Serial No. 327,060. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,588. AWNINGS AND AWNING HARDWARE. HERMAN G. GALLAS, Chicago, Ill.
Filed April 20, 1932. Serial No. 326,352. PUBLISHED FEBRUARY 14, 1933. Class 50.

302,589. AWNINGS AND AWNING HARDWARE. HERMAN G. GALLAS, Chicago, Ill.
Filed April 20, 1932. Serial No. 326,351. PUBLISHED FEBRUARY 14, 1933. Class 50.

302,590. KIMONOS, AND BABY GARMENTS—NAMELY, RUBBER DIAPERS. CLARA H. RAINEY, Malone, N. Y.
Filed April 19, 1932. Serial No. 326,269. PUBLISHED JANUARY 31, 1933. Class 39.

302,591. ABRASIVE PAPER AND CLOTH. BEHR-MANNING CORPORATION, Troy and Watervliet, N. Y.
Filed April 14, 1932. Serial No. 326,076. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,592. HAIR COMBS WHICH ARE FILLED OR COATED WITH RADIO-ACTIVE SUBSTANCES. CAMILLO BARBEN, Vienna, Austria.
Filed March 31, 1932. Serial No. 325,676. PUBLISHED FEBRUARY 7, 1933. Class 40.

302,593. SHOE SOLES. OSCAR BROCKMAN, doing business as Oscar Brockman Company, Louisville, Ky.
Filed October 25, 1932. Serial No. 331,540. PUBLISHED JANUARY 17, 1933. Class 39.

302,594. NURSES' APPAREL—NAMELY, APRONS, BIBS, BATH ROBES, CAPS, COLLARS, CUFFS, AND UNIFORMS. MARVIN-NEITZEL CORPORATION, Troy, N. Y.
Filed October 24, 1932. Serial No. 331,509. PUBLISHED JANUARY 3, 1933. Class 39.

302,595. COTTON PIECE GOODS, PILLOW CASES, AND SHEETS. WAMSUTTA MILLS, New Bedford, Mass.
Filed October 24, 1932. Serial No. 331,520. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,596. BRASSIÈRES. ABRAHAM ZWIEBELSON, doing business as Mollie Mayers, New York, N. Y.
Filed October 24, 1932. Serial No. 331,526. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,597. FOUNDATION GARMENTS, CORSETS, BRASSIÈRES, GIRDLES, AND COMBINATIONS OF THE SAME. THE CORSETRY INCORPORATED, South Norwalk, Conn.
Filed October 24, 1932. Serial No. 331,493. PUBLISHED JANUARY 17, 1933. Class 39.

302,598. FOOTWEAR, COMPRISING SHOES MADE OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. MARION SHOE COMPANY, Marion, Ind.
Filed October 24, 1932. Serial No. 331,507. PUBLISHED JANUARY 17, 1933. Class 39.

302,599. CHOCOLATE COVERED FROZEN CONFECTIONS, ICE CREAM, SHERBETS, AND CUSTARDS, EITHER CHOCOLATE COATED OR WITHOUT SUCH COATING. FOREMOST DAIRIES, INC., Jacksonville, Fla.
Filed October 20, 1932. Serial No. 331,899. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,600. CANNED SHRIMP. JAS. V. DUNBAR, INC., New Orleans, La.
Filed October 21, 1932. Serial No. 331,426. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,601. WOMEN'S HATS. HENRY POLLAK, INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,264. PUBLISHED JANUARY 3, 1933. Class 39.

302,602. CERTAIN NAMED WEARING APPAREL. HILTON CLOTHES CORPORATION, New York, N. Y., and Newark, N. J.
Filed October 14, 1932. Serial No. 331,275. PUBLISHED JANUARY 3, 1933. Class 39.

302,603. MEN'S, WOMEN'S, AND CHILDREN'S SHOES, SLIPPERS, AND SANDALS MADE OF LEATHER, IMITATION LEATHER, RUBBER, FABRIC, AND COMBINATIONS OF SAID MATERIALS; AND MEN'S, WOMEN'S, AND CHILDREN'S RUBBERS. SIMON WEINER, New York, N. Y.
Filed October 13, 1932. Serial No. 331,281. PUBLISHED JANUARY 17, 1933. Class 39.

302,604. WOOLEN AND/OR SILK KNITTED FABRICS. LOMBARDI KNITCRAFT, INC., New York, N. Y.
Filed October 14, 1932. Serial No. 331,276. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,605. MALT EXTRACT. GERHARD LANG BREWERY, doing business as Gerhard Lang Bottling Works and Buffalo Products Co., Buffalo, N. Y.
Filed October 12, 1932. Serial No. 331,187. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,606. SMOKING PIPES, CIGARETTE CASES, CIGAR CASES, PIPE CASES, AND TOBACCO POUCHES. JOHN WANAMAKER PHILADELPHIA, Philadelphia, Pa.
Filed October 12, 1932. Serial No. 331,206. PUBLISHED FEBRUARY 14, 1933. Class 8.

302,607. COATS, VESTS, TROUSERS, KNICKERBOCKERS, TOP COATS, AND OVERCOATS FOR MEN, YOUTHS, AND BOYS. J. SCHOENEMAN, INCORPORATED, Baltimore, Md.
Filed December 8, 1932. Serial No. 332,900. PUBLISHED JANUARY 31, 1933. Class 39.

302,608. CHINA TABLE WARE, BOTH DOMESTIC AND COMMERCIAL, AND ORNAMENTAL CHINA WARE. ONONDAGA POTTERY COMPANY, Syracuse, N. Y.
Filed October 6, 1932. Serial No. 331,004. PUBLISHED FEBRUARY 7, 1933. Class 30.

302,609. WELDING RODS AND HARD FACED CASTINGS. ADVANCE WELDING & ALLOYS, LTD., Springfield Gardens, N. Y.
Filed December 7, 1932. Serial No. 332,864. PUBLISHED FEBRUARY 7, 1933. Class 14.

302,610. MEN'S AND BOYS' JACKETS, COATS, PANTS, RIDING BREECHES, AND KNICKERS. BERTHOLD LAMM, Baltimore, Md.
Filed December 7, 1932. Serial No. 332,865. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,611. CHILDREN'S DRESSES AND TOP COATS. JOSEPH LOVE, INC., New York, N. Y.
Filed December 7, 1932. Serial No. 332,848. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,612. ETHYL-HEXYL BARBITURIC ACID HYPNOTIC. PARKE, DAVIS & Co., Detroit, Mich.
Filed November 7, 1932. Serial No. 331,961. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,613. CIGARETTES. JOSEPH S. SLAMEY, Boston, Mass.
Filed November 8, 1932. Serial No. 331,996. PUBLISHED FEBRUARY 7, 1933. Class 17.

302,614. BATHING SUITS. TERESINA MARIA NEGRI, Paris, France.
Filed November 4, 1932. Serial No. 331,904. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,615. PRESERVED FRUITS AND VEGETABLES. WINTERFRESH FOODS, INC., Chicago, Ill.
Filed November 5, 1932. Serial No. 331,940. PUBLISHED JANUARY 31, 1933. Class 46.

302,616. GLOVES MADE OF LEATHER, FABRIC, RUBBER, AND/OR COMBINATIONS THEREOF; AND UNDERWEAR MADE OF KNITTED, NETTED, AND TEXTILE FABRICS. LARSMAN, GRAY COMPANY, Croydon, Pa., and New York, N. Y.
Filed November 3, 1932. Serial No. 331,867. PUBLISHED JANUARY 17, 1933. Class 39.

302,617. BOYS' AND MEN'S CLOTHING AND FURNISHINGS AND WOMEN'S, MISSES', AND CHILDREN'S WEARING APPAREL—VIZ, UNDERWEAR, HOSIERY, AND LEATHER AND FABRIC GLOVES. KIRBY, BLOCK & FISCHER, INC., New York, N. Y.
Filed November 4, 1932. Serial No. 331,897. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,618. LACES IN THE PIECE AND SOLD BY THE YARD. LANDE & MISKEND, INC., New York, N. Y.
Filed November 2, 1932. Serial No. 331,829. PUBLISHED JANUARY 24, 1933. Class 42.

302,619. MIXED CALF FOOD. ALBERS BROS. MILLING COMPANY, Portland, Oreg.
Filed November 3, 1932. Serial No. 331,846. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,620. LEATHER SHOES. DAVISON-PAXON COMPANY, Atlanta, Ga.
Filed November 1, 1932. Serial No. 331,777. PUBLISHED JANUARY 24, 1933. Class 39.

302,621. COMPOSITION RUBBER SHOE SOLES. OSCAR BROCKMAN, Louisville, Ky.
Filed November 2, 1932. Serial No. 331,816. PUBLISHED JANUARY 3, 1933. Class 39.

302,622. CANNED SALMON. FIDALGO ISLAND PACKING CO., Seattle, Wash.
Filed October 31, 1932. Serial No. 331,731. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,623. SMOKED BUTTS. MERKEL INC., New York, N. Y.
Filed October 28, 1932. Serial No. 331,662. PUBLISHED JANUARY 31, 1933. Class 46.

302,624. CANNED SALMON. FIDALGO ISLAND PACKING COMPANY, Seattle, Wash.
Filed October 31, 1932. Serial No. 331,730. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,625. PICKLED HERRING, SALTED HERRING, SMOKED HERRING, AND CANNED FISH. OTTO L. KUEHN CO., Milwaukee, Wis.
Filed October 28, 1932. Serial No. 331,644. PUBLISHED JANUARY 31, 1933. Class 46.

302,626. LEGGINGS, WINDBREAKERS, BLOUSES SKI-PANTS, SKI-SUITS, AND PLAY-SUITS. HOWLETT & HOCKMEYER CO. INC., New York, N. Y.
Filed October 26, 1932. Serial No. 331,582. PUBLISHED JANUARY 31, 1933. Class 39.

302,627. BOOTS AND SHOES OF LEATHER, FABRIC, AND/OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed October 25, 1932. Serial No. 331,556. PUBLISHED JANUARY 17, 1933. Class 39.

302,628. INFANTS', CHILDREN'S, AND MISSES' SHOES MADE OF LEATHER. BURLINGTON COUNTY SHOE COMPANY, Mount Holly, N. J.
Filed October 25, 1932. Serial No. 331,542. PUBLISHED JANUARY 17, 1933. Class 39.

302,629. A MEDICINAL COMPOUND. ELGIN W. JOHNSTON, doing business as E. W. Johnston Co., Toledo, Ohio.
Filed December 5, 1932. Serial No. 332,774. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,630. WOMEN'S, MISSES', AND CHILDREN'S ARCH-SUPPORT SHOES. WOML SHOE COMPANY, St. Louis, Mo.
Filed December 5, 1932. Serial No. 332,799. PUBLISHED JANUARY 24, 1933. Class 39.

302,631. RUBBER GLOVES FOR USE IN AUTOPSIES, BEAUTY TREATMENT, AND THE LIKE. THE MASSILLON RUBBER COMPANY, Massillon, Ohio.
Filed December 1, 1932. Serial No. 332,707. PUBLISHED FEBRUARY 7, 1933. Class 44.

302,632. KNIT GOODS—NAMELY, POLO SHIRTS, SWEAT SHIRTS, SWEATERS, AND KNIT UNDERWEAR. NORWICH KNITTING COMPANY, Norwich, N. Y.
Filed December 3, 1932. Serial No. 332,729. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,633. MEN'S, BOYS', AND CHILDREN'S OUTER GARMENTS, CONSISTING OF COATS, VESTS, PANTS, TROUSERS, TOP-COATS, OVERCOATS, AND SUMMER CLOTHING FOR MEN, BOYS, AND CHILDREN, CONSISTING OF COATS, VESTS, AND PANTS MADE OF EITHER WOVEN OR KNITTED MATERIAL. COHEN, GOLDMAN & CO., INC., New York, N. Y.
Filed December 2, 1932. Serial No. 332,686. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,634. WRITING INKS. THE ROBERT KELLER INK COMPANY, Detroit, Mich.
Filed December 1, 1932. Serial No. 332,706. PUBLISHED FEBRUARY 7, 1933. Class 11.

302,635. NURSES' AND/OR MAIDS' UNIFORMS. HERBERT A. LOEB, New York, N. Y.
Filed November 29, 1932. Serial No. 332,588. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,636. SAFETY PAPER. HAMMERMILL PAPER COMPANY, Erie, Pa.
Filed December 1, 1932. Serial No. 332,654. PUBLISHED FEBRUARY 7, 1933. Class 37.

302,637. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed November 29, 1932. Serial No. 332,573. PUBLISHED JANUARY 24, 1933. Class 42.

302,638. TOUPEES, WIGS, TRANSFORMATIONS, HAIR LACE PIECES. MAX FACTOR & CO. INC., Los Angeles, Calif.
Filed November 29, 1932. Serial No. 332,580. PUBLISHED FEBRUARY 7, 1933. Class 40.

302,639. LEATHER AND FABRIC SHOES. SEYMOUR TROY & CO., INC., New York, N. Y.
Filed November 26, 1932. Serial No. 332,497. PUBLISHED JANUARY 17, 1933. Class 39.

302,640. FIELD SEEDS AND GRAIN SEEDS. ED. F. MANGELSDORF & BROTHERS, St. Louis, Mo.
Filed November 28, 1932. Serial No. 332,537. PUBLISHED FEBRUARY 7, 1933. Class 1.

302,641. PAINT, VARNISHES, AND PAINT PIGMENTS IN POWDER AND PASTE FORM. JOHN C. DOLPH COMPANY, Newark, N. J.
Filed November 25, 1932. Serial No. 332,447. PUBLISHED FEBRUARY 7, 1933. Class 16.

302,642. CLOTH IN THE PIECE MADE ALL OR IN PART OF WORSTED, WOOL, MOHAIR, CAMEL'S HAIR, ALPACA, SILK, RAYON, COTTON. B. B. & R. KNIGHT CORPORATION, Providence, R. I.
Filed November 26, 1932. Serial No. 332,492. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,643. UPHOLSTERY AND DRAPERY FABRICS. ROBERT HELLER, INC., New York, N. Y.
Filed November 23, 1932. Serial No. 332,410. PUBLISHED JANUARY 24, 1933. Class 42.

302,644. UPHOLSTERY AND DRAPERY FABRICS MADE FROM WOOL, COTTON, SILK, ARTIFICIAL SILK, COMBINATIONS OF WOOL, COTTON, SILK, AND ARTIFICIAL SILK, AND SUCH COMBINATIONS PLUS HORSEHAIR. ARTIFICIAL HORSEHAIR, OR OTHER SYNTHETIC THREADS. ROBERT HELLER, INC., New York, N. Y.
Filed November 23, 1932. Serial No. 332,409. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,645. LEATHER SHOES. JOHN E. LOCK, Milwaukee, Wis.
Filed November 21, 1932. Serial No. 332,344. PUBLISHED JANUARY 24, 1933. Class 39.

302,646. SHOES OF LEATHER, LEATHER AND RUBBER, LEATHER AND FABRIC, AND COMBINATIONS THEREOF, AND RUBBER HEELS. CROSSETT SHOE CO., Augusta, Me.
Filed November 22, 1932. Serial No. 332,366. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,647. TEXTILES OF SILK, WOOL, AND COTTON, AND MIXTURES OF SILK AND WOOL, AND COTTON AND WOOL, ALL IN THE PIECE. HOWLETT & HOCKMEYER CO. INC., New York, N. Y.
Filed December 7, 1932. Serial No. 332,845. PUBLISHED FEBRUARY 7, 1933. Class 42.

302,648. SHOES MADE OF LEATHER AND OF COMBINATIONS OF LEATHER AND FABRIC. GAROFALO BRO'S SHOE CO. INC., Brooklyn, N. Y.
Filed November 19, 1932. Serial No. 332,296. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,649. FROZEN CONFECTIONS. ESKIMO PIE CORPORATION, doing business as New York Eskimo Pie Corporation, New York and Brooklyn, N. Y.
Filed July 9, 1932. Serial No. 328,664. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,650. PHARMACEUTICAL PREPARATIONS FOR AIDING AND REGULATING DIGESTION AND FOR TREATING DIGESTIVE DISORDERS. KALI-CHEMIE AKTIENGESELLSCHAFT, Berlin, Germany.
Filed July 14, 1932. Serial No. 328,791. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,651. MILK POWDER FOR HUMAN CONSUMPTION. ERNEST D. FEAR, Kansas Cty, Mo.
Filed June 3, 1932. Serial No. 327,684. PUBLISHED JANUARY 31, 1933. Class 46.

302,652. CONFECTIONERY—NAMELY, CHOCOLATES, BONBONS, HARD CANDIES, CLEAR MINTS, BUTTER MINTS, MARSHMALLOWS, TOFFEE, FRUIT FLAVORED GUM DROP PATTIES, GLACÉ FRUITS, AND CRYSTALLIZED GINGER. REID, MURDOCH & CO., Chicago, Ill.
Filed June 15, 1932. Serial No. 328,017. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,653. CANNED AND PACKAGED COFFEE AND TEA. THE WEBER COFFEE COMPANY, Philadelphia, Pa.
Filed March 4, 1932. Serial No. 325,277. PUBLISHED JANUARY 31, 1933. Class 46.

302,654. HAMS. HUGHES-CURRY PACKING CO., Anderson, Ind.
Filed April 15, 1932. Serial No. 326,144. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,655. BRICK MOLDS. J. B. CROWELL & SONS, Wallkill, N. Y.
Filed May 1, 1931. Serial No. 314,043. PUBLISHED FEBRUARY 7, 1933. Class 23.

302,656. CERTAIN NAMED CHEMICAL AND MEDICINAL PRODUCTS. COMPAGNIE DE BETHUNE, Bully-Les-Mines, France.
Filed February 20, 1931. Serial No. 311,261. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,657. PRINTED PERIODICAL PUBLISHED MONTHLY AND AT OTHER INTERVALS. CRESCENT PUBLISHING CO., INC., New York, N. Y.
Filed November 4, 1930. Serial No. 307,543. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,658. CERTAIN NAMED CHEMICAL AND MEDICINAL PRODUCTS. COMPAGNIE DE BETHUNE, Bully-les-Mines, France.
Filed February 20, 1931. Serial No. 311,262. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,659. PRINTED PERIODICAL PUBLISHED MONTHLY AND AT OTHER INTERVALS. CRESCENT PUBLISHING CO., INC., New York, N. Y.
Filed November 4, 1930. Serial No. 307,544. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,660. CANDY. AMTORG TRADING CORPORATION, New York, N. Y.
Filed August 18, 1929. Serial No. 288,461. PUBLISHED JANUARY 18, 1931. Class 46.

302,661. A MEDICINAL NASAL PREPARATION. LOGAN LABORATORIES, LTD., New York, N. Y.
Filed November 15, 1932. Serial No. 332,156. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,662. RUGS MADE FROM TEXTILE FABRICS OF WOOL. THE WARREN WOOLEN COMPANY, Stafford Springs, Conn.
Filed November 16, 1932. Serial No. 332,205. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,663. HOUSEHOLD BROOMS AND BRUSHES MADE FROM BROOM CORN. NOXON BROOM COMPANY, LTD., Avoca, N. Y.
Filed November 17, 1932. Serial No. 332,233. PUBLISHED FEBRUARY 7, 1933. Class 29.

302,664. BUCKLES MADE OF NON-PRECIOUS METAL, INCLUDING ORNAMENTAL BUCKLES FOR WOMEN'S MILLINERY, DRESSES AND SHOES. THE RIKER COMPANY, Newark, N. J.
Filed November 11, 1932. Serial No. 332,074. PUBLISHED FEBRUARY 7, 1933. Class 40.

302,665. PIECE GOODS OF COTTON, SILK, WOOL, LINEN, AND MIXTURES OF SAME FOR DRESSES, SWEATERS, COATS, AND THE LIKE. PECK & PECK, New York, N. Y.
Filed November 12, 1932. Serial No. 332,100. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,666. SPAGHETTI AND ALIMENTARY PASTE PRODUCTS. VICTORIA FUSILLI COMPANY, Long Island City, N. Y.
Filed December 10, 1932. Serial No. 332,950. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,667. CORNFLOUR. DECATUR MILLING COMPANY, INC., Decatur, Ill.
Filed December 12, 1932. Serial No. 332,995. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,668. COFFEE. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y.
Filed December 7, 1932. Serial No. 332,828. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,669. OLIVE OIL. ARTHUR J. CAPONE, doing business as Elios, New York, N. Y.
Filed December 9, 1932. Serial No. 332,911. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,670. PICKLED CHILES. CIRO ESCOBEDA, Downey, Calif.
Filed December 5, 1932. Serial No. 332,762. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,671. COFFEE. THE GREAT ATLANTIC & PACIFIC TEA COMPANY, New York, N. Y.
Filed December 7, 1932. Serial No. 332,827. PUBLISHED JANUARY 31, 1933. Class 46.

302,672. CANDY. DAGGETT CHOCOLATE COMPANY, doing business as Belle Rose Chocolate Co., Cambridge, Mass.
Filed December 1, 1932. Serial No. 332,647. PUBLISHED JANUARY 31, 1933. Class 46.

302,673. COFFEE. KANSAS CITY WHOLESALE GROCERY CO., Kansas City, Mo.
Filed December 1, 1932. Serial No. 332,649. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,674. POWDERED FOOD PRODUCT PREPARED FROM ORIENTAL LENTILS AND GRAIN. S. STEPHEN MARVIN, doing business as Du Barry & Company. Burbank, Calif.
Filed November 28, 1932. Serial No. 332,538. PUBLISHED JANUARY 31, 1933. Class 46.

302,675. FRESH CITRUS FRUITS. REDLANDS FOOTHILL GROVES, Redlands, Calif.
Filed November 28, 1932. Serial No. 332,550. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,676. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed November 19, 1932. Serial No. 332,303. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,677. COFFEE. THE FITZGERALD MFG. COMPANY, doing business as Old Berkshire Coffee Company, Torrington, Conn.
Filed November 22, 1932. Serial No. 332,370. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,678. FROZEN CONFECTIONS. AMY F. WILLIAMS, doing business as Nu-Sno Company, Greeley, Colo.
Filed November 17, 1932. Serial No. 332,242. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,679. CANDY. LIFE SAVERS, INC., Port Chester, N. Y.
Filed November 19, 1932. Serial No. 332,304. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,680. FURNITURE POLISHES AND CLEANSERS. LANEX CORPORATION, New York, N. Y.
Filed December 9, 1932. Serial No. 332,923. PUBLISHED FEBRUARY 7, 1933. Class 16.

302,681. FULLER'S EARTH, BLEACHING EARTH, AND ACTIVATED CLAYS. WILHELM PRIEM & COMPANY, G. M. B. H., Magdeburg, Germany.
Filed December 10, 1932. Serial No. 332,961. PUBLISHED FEBRUARY 7, 1933. Class 1.

302,682. TEXTILE FABRICS—NAMELY, COTTON PIECE GOODS. TRIPPS, BARKER & CO., New York, N. Y.
Filed December 10, 1932. Serial No. 332,969. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,683. ROOT BEER STEINS OF GLASS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 10, 1932. Serial No. 332,965. PUBLISHED FEBRUARY 14, 1933. Class 33.

302,684. GRAVEL FOR CAGED BIRDS. CHAPPEL BROS., INC., Rockford, Ill.
Filed December 12, 1932. Serial No. 332,992. PUBLISHED FEBRUARY 14, 1933. Class 1.

302,685. WHOLE WHEAT FLOUR COMBINED WITH FLAX SEED MEAL AND PSYLLIUM SEED MEAL. A. H. KENNEDY, Rockport, Ind.
Filed December 8, 1932. Serial No. 332,721. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,686. BOND PAPER. ROBBINS-SCHULMAN STATIONERY CO. INC., New York, N. Y.
Filed December 10, 1932. Serial No. 332,962. PUBLISHED FEBRUARY 7, 1933. Class 37.

302,687. FISH MEAL TO BE USED AS POULTRY AND STOCK FEED. CHAS. W. PRIDDY & COMPANY, INC., Norfolk, Va.
Filed December 1, 1932. Serial No. 332,661. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,688. TOILET PAPER ROLLS, FOLDED TOILET SHEET PAPER. HUGH FELIX CARROLL, Cedarhurst, N. Y.
Filed November 30, 1932. Serial No. 332,668. PUBLISHED FEBRUARY 14, 1933. Class 37.

302,689. DAIRY PRODUCTS—NAMELY, MILK, CREAM, BUTTER, CHEESE, AND EGGS, AND FARM PRODUCTS—NAMELY, LIVE AND DRESSED POULTRY, AND VEGETABLES. JOHN C. LETTS, doing business as Ayrlawn Farms, Bethesda, Md.
Filed November 30, 1932. Serial No. 332,621. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,690. SOAP. CHANEL, INC., New York, N. Y.
Filed December 1, 1932. Serial No. 332,645. PUBLISHED FEBRUARY 7, 1933. Class 4.

302,691. MALT SYRUP. RIVERSIDE PRODUCTS COMPANY, Cincinnati, Ohio.
Filed December 30, 1932. Serial No. 333,532. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,692. PILE FABRICS IN THE PIECE. SIDNEY BLUMENTHAL & CO. INC., New York, N. Y.
Filed December 31, 1932. Serial No. 333,547. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,693. MINERAL WATER. HERCULES MINERAL SPRINGS, INC., Detroit, Mich.
Filed December 29, 1932. Serial No. 333,479. PUBLISHED FEBRUARY 7, 1933. Class 45.

302,694. SERIES OF CARTOON STRIPS. KING FEATURES SYNDICATE, INC., New York, N. Y.
Filed December 30, 1932. Serial No. 333,518. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,695. METALLIC FOIL FOR WRAPPING PAPER. REYNOLDS METALS COMPANY, New York, N Y..
Filed December 15, 1932. Serial No. 333,108. PUBLISHED FEBRUARY 7, 1933. Class 37.

302,696. DENTAL GOLDS. J. F. JELENKO & COMPANY, INC., New York, N. Y.
Filed December 28, 1932. Serial No. 333,454. PUBLISHED FEBRUARY 14, 1933. Class 44.

302,697. NEWSPAPER SECTION. NEW YORK EVENING JOURNAL, INC., New York, N. Y.
Filed December 27, 1932. Serial No. 333,398. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,698. SHOES OF LEATHER, FABRIC, OR COMBINATIONS THEREOF. JARMAN SHOE COMPANY, Nashville, Tenn.
Filed December 21, 1932. Serial No. 333,260. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,699. LIQUID PREPARATION FOR APPLICATION TO THE UNDER SURFACE OF RUGS TO PRODUCE A NON-SKIDDING SURFACE. AIR-WAY ELECTRIC APPLIANCE CORPORATION, Toledo, Ohio.
Filed December 27, 1932. Serial No. 333,376. PUBLISHED FEBRUARY 7, 1933. Class 5.

302,700. TOOTH BRUSHES. HOLTON & ADAMS, New York, N. Y.
Filed December 27, 1932. Serial No. 333,390. PUBLISHED FEBRUARY 14, 1933. Class 29.

302,701. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,323. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,702. NOM DE PLUME FOR A MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,327. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,703. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,320. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,704. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,321. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,705. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,318. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,706. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,319. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,707. CARBON BLACK FOR USE IN THE MANUFACTURE OF VARNISHES AND LACQUERS. GODFREY L. CABOT, INC., Boston, Mass.
Filed December 14, 1932. Serial No. 333,056. PUBLISHED FEBRUARY 7, 1933. Class 16.

302,708. PREPARATION FOR THE RELIEF OF PAINFUL MENSTRUATION. PAUL H. LEMEN, doing business as Amita Laboratories, Philadelphia, Pa.
Filed December 14, 1932. Serial No. 333,074. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,709. CANNED CRAB MEAT, CRAB LEGS, AND CLAMS. JOHN BENEDICT O'NEILL, doing business as Alaska Sea Products, Inc., and Alaska Distributing Co., Seattle, Wash.
Filed December 12, 1932. Serial No. 333,008. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,710. DOG BISCUITS. JOHN WRIGHT (London) Limited, London, England.
Filed December 12, 1932. Serial No. 333,022. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,711. NONALCOHOLIC, NONCEREAL, MALTLESS BEVERAGES SOLD AS SOFT DRINKS, AND FOR SYRUPS, EXTRACTS, AND CONCENTRATES USED IN MAKING THE SAME. CLIQUOT CLUB COMPANY, Millis, Mass.
Filed April 22, 1932. Serial No. 326,363. PUBLISHED FEBRUARY 14, 1933. Class 45.

302,712. PHOTOGRAPHIC AND ELECTRO-PHYSICAL SOUND RECORDING APPARATUS AND EQUIPMENT, ETC. RCA VICTOR COMPANY, INC., Camden, N. J.
Filed June 17, 1932. Serial No. 328,074. PUBLISHED FEBRUARY 7, 1933. Class 26.

302,713. BUTTONS OF NON-PRECIOUS MATERIAL. UNIVERSAL BUTTON FASTENING & BUTTON COMPANY, Detroit, Mich.
Filed November 23, 1932. Serial No. 332,429. PUBLISHED FEBRUARY 7, 1933. Class 40.

302,714. NATURAL MINERAL WATERS AND SALTS MADE THEREFROM FOR DRINKING PURPOSES. SOCIETÀ REGIE TERME DI MONTECATINI, Rome, Italy.
Filed April 8, 1932. Serial No. 325,924. PUBLISHED FEBRUARY 7, 1933. Class 45.

302,715. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,799. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,716. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,800. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,717. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,797. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,718. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF, AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,798. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,719. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,793. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,720. HOUSEHOLD AND STORE REFRIGERATORS AND PARTS THEREOF AND REFRIGERATING SYSTEMS USED FOR THE PRESERVATION OF FOODSTUFFS OR OTHER MATTER. ELECTROLUX SERVEL CORPORATION, New York, N. Y.
Filed January 10, 1933. Serial No. 333,795. PUBLISHED FEBRUARY 14, 1933. Class 31.

302,721. PERIODICAL. ROY PRESS, New York, N. Y.
Filed January 5, 1933. Serial No. 333,688. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,722. DAILY NEWSPAPER. STAR-CHRONICLE PUBLISHING COMPANY, St. Louis, Mo.
Filed January 7, 1933. Serial No. 333,745. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,723. CANNED VEGETABLES. BURNHAM & MORRILL COMPANY, doing business as Oxford Packing Co., Portland, Me.
Filed January 3, 1933. Serial No. 333,575. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,724. SECTION OR COLUMN APPEARING IN A NEWSPAPER. THE POST PRINTING AND PUBLISHING COMPANY, Denver, Colo.
Filed January 3, 1933. Serial No. 333,605. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,725. THREAD CUTTING TOOLS SUCH AS TAPS AND DIES. THE J. M. CARPENTER TAP & DIE CO., Pawtucket, R. I.
Filed December 2, 1932. Serial No. 332,683. PUBLISHED FEBRUARY 7, 1933. Class 28.

302,726. WINES. SANDEMAN HERMANOS Y COMPANIA, Jerez de la Frontera, Cadiz, Spain.
Filed November 30, 1932. Serial No. 332,633. PUBLISHED FEBRUARY 14, 1933. Class 47.

302,727. RUM, WHISKY, GIN, AND BRANDY. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland.
Filed November 23, 1932. Serial No. 332,405. PUBLISHED FEBRUARY 14, 1933. Class 49.

302,728. WHISKY, RUM, GIN, AND BRANDY. THE DISTILLERS AGENCY LIMITED, Edinburgh, Scotland.
Filed November 23, 1932. Serial No. 332,406. PUBLISHED FEBRUARY 14, 1933. Class 49.

302,729. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. WILLIAM F. LAWRENZ, Long Beach, Calif.
Filed November 18, 1932. Serial No. 332,326. PUBLISHED FEBRUARY 14, 1933. Class 45.

302,730. WEIGHING SCALES. WALTER E. BERARLEY, doing business as The Brearley Co., Rockford, Ill.
Filed November 22, 1932. Serial No. 332,364. PUBLISHED FEBRUARY 7, 1933. Class 26.

302,731. MALT BEVERAGE, WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT. KASKO PRODUCTS CO., INC., Philadelphia, Pa.
Filed November 18, 1932. Serial No. 332,257. PUBLISHED FEBRUARY 7, 1933. Class 48.

302,732. DOORS, STRUCTURAL PANELS, PANEL STOCK, MOLDINGS, BUILDING TRIM, VENEERING; VENEERED STOCK IN SHEET, BOARD, AND STICK FORM; LUMBER IN SHEET, BOARD AND STICK FORM, INCLUDING NATURAL, ARTIFICIAL AND COMPOUND LUMBER; SUCH PRODUCTS BEING USUALLY TREATED WITH OR CONSTRUCTED WITH A SYNTHETIC RESIN CONDENSATION PRODUCT. FARLEY & LOETSCHER MFG. CO., Dubuque, Iowa.
Filed November 19, 1932. Serial No. 332,294. PUBLISHED FEBRUARY 7, 1933. Class 12.

302,733. WHISKY. THE GLENLYNE DISTILLERY COMPANY LIMITED, Ardrishaig, Scotland.
Filed November 1, 1932. Serial No. 331,783. PUBLISHED FEBRUARY 7, 1933. Class 49.

302,734. BITUMINOUS EMULSIONS. PIONEER PAPER COMPANY, Los Angeles, Calif.
Filed November 16, 1932. Serial No. 332,198. PUBLISHED FEBRUARY 14, 1933. Class 12.

302,735. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. JESSE LU VERN DONAHOO, doing business as The Jin Twin Company, Minneapolis, Minn.
Filed October 27, 1932. Serial No. 331,620. PUBLISHED FEBRUARY 7, 1933. Class 45.

302,736. PLOW POINTS. FARM TOOLS, INC., Mansfield, Ohio.
Filed October 29, 1932. Serial No. 331,678. PUBLISHED FEBRUARY 7, 1933. Class 28.

302,737. CHAMPAGNE WINE. CHARLES HEIDSIECK REIMS SOCIÉTÉ A RESPONSABILITÉ LIMITÉE, Reims, France.
Filed September 19, 1932. Serial No. 330,452. PUBLISHED FEBRUARY 14, 1933. Class 47.

302,738. WHISKY, RUM, GIN, AND BRANDY. J. G. TURNEY & SON, LIMITED, London, England.
Filed September 27, 1932. Serial No. 330,716. PUBLISHED FEBRUARY 14, 1933. Class 49.

302,739. ROD AND PISTON PACKING MADE OF FABRIC AND COMPOSITIONS. JOHNS-MANVILLE CORPORATION, New York, N. Y.
Filed July 28, 1932. Serial No. 329,145. PUBLISHED FEBRUARY 14, 1933. Class 35.

302,740. MALT BEVERAGES WITH NOT MORE THAN THE LEGAL ALCOHOLIC CONTENT AND EXTRACTS THEREFOR. KOEPPMAN AND BLUMENAU, Bay City, Mich.
Filed August 22, 1932. Serial No. 329,747. PUBLISHED FEBRUARY 14, 1933. Class 48.

302,741. SWEET PICKLES, SOUR PICKLES, DILL PICKLES, SWEET AND SOUR RELISH, CANNED AND IN BULK. CHAS. F. CATES & SONS, INC., Faison, N. C.
Filed August 24, 1932. Serial No. 329,823. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,742. ICE CREAM. ALPINE ICE CREAM CO. INC., Corona, N. Y.
Filed August 19, 1932. Serial No. 329,665. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,743. DRAIN PIPE SOLVENT. KLEEN CHEMICAL COMPANY, Philadelphia, Pa.
Filed October 5, 1932. Serial No. 330,986. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,744. ARTIFICIAL VICHY WATER. THE PERFECT VICHY BOTTLING CO., Cincinnati, Ohio.
Filed September 20, 1932. Serial No. 330,520. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,745. COUGH SYRUP. JOSEPH U. GREENSTEIN, doing business as Columbia Drug Store, Washington, D. C.
Filed November 2, 1932. Serial No. 331,824. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,746. INTRA-VAGINAL PROPHYLACTIC. GEORGE A. LASSMAN, doing business as Imunal Manufacturing Company, Brooklyn, N. Y.
Filed October 25, 1932. Serial No. 331,559. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,747. FRESH DATES. ALGERIAN DATE IMPORTING CO., New York, N. Y.
Filed November 28, 1932. Serial No. 332,506. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,748. FOOT ARCH CORRECTIVES IN THE NATURE OF ARCH SUPPORTS. DOUGLAS ROSS LOCKE, Montreal, Quebec, Canada.
Filed November 2, 1932. Serial No. 331,831. PUBLISHED FEBRUARY 14, 1933. Class 44.

302,749. PREPARED PIE-CRUST MIXTURE. EMELIA E. SINGER, Los Angeles, Calif.
Filed November 4, 1932. Serial No. 332,000. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,750. PREPARED FOOD FOR CAGE BIRDS. CHAPPEL BROS., INC., Rockford, Ill.
Filed December 2, 1932. Serial No. 332,685. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,751. SHOES AND SLIPPERS OF LEATHER OR KID. THE JUVENILE SHOE CORPORATION OF AMERICA, Aurora and St. Louis, Mo.
Filed November 11, 1932. Serial No. 332,066. PUBLISHED JANUARY 17, 1933. Class 39.

302,752. WASHED MOTION PICTURE FILM SCRAP. JEFFERYS & CO., LTD., Burbank, Calif.
Filed November 7, 1932. Serial No. 332,017. PUBLISHED FEBRUARY 14, 1933. Class 1.

302,753. HATS FOR MEN, WOMEN, AND CHILDREN. FRANK SCHOBLE AND COMPANY, Philadelphia, Pa.
Filed November 15, 1932. Serial No. 332,162. PUBLISHED FEBRUARY 7, 1933. Class 39.

302,754. CANDY. ADA KESSELMAN, doing business as The Play Money Candy Co., Philadelphia, Pa.
Filed November 15, 1932. Serial No. 332,153. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,755. HARD RUBBER COMBS FOR DRESSING AND CLEANING THE HAIR. AMERICAN HARD RUBBER COMPANY, Hempstead and New York, N. Y.
Filed November 17, 1932. Serial No. 332,214. PUBLISHED JANUARY 17, 1933. Class 40.

302,756. CHEESE. MAX LANDAU, doing business as Max Landau & Co., New York, N. Y.
Filed November 16, 1932. Serial No. 332,191. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,757. SOLDERING FLUXES. KESTER SOLDER COMPANY, Chicago, Ill.
Filed November 30, 1932. Serial No. 332,620. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,758. FRESH CITRUS FRUITS. R. O. MACDONALD, doing business as Native Son Orchards Co., Lindsay, Calif.
Filed November 28, 1932. Serial No. 332,536. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,759. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS AND SHOES MADE OF LEATHER, FABRIC, RUBBER, OR ANY COMBINATION OF ONE OR MORE OF SAID MATERIALS. A. H. GEUTING COMPANY, Philadelphia, Pa.
Filed November 28, 1932. Serial No. 332,567. PUBLISHED JANUARY 24, 1933. Class 39.

302,760. PREPARED FOOD FOR DOGS. THE MORRISON COMPANY, Philadelphia, Pa.
Filed November 29, 1932. Serial No. 332,594. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,761. SHEETS, PILLOW CASES, AND COTTON PIECE GOODS. PELZER MANUFACTURING COMPANY, Boston, Mass.
Filed December 20, 1932. Serial No. 333,236. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,762. BOOTS AND SHOES OF LEATHER, FABRIC, AND/OR COMBINATIONS THEREOF. INTERNATIONAL SHOE CO., St. Louis, Mo.
Filed December 21, 1932. Serial No. 333,259. PUBLISHED FEBRUARY 14, 1933. Class 39.

302,763. CHEMICAL COMPOSITION FOR USE IN COMPOUNDING RUBBER. THE ROBERT J. KING COMPANY, INCORPORATED, Stamford, Conn.
Filed December 19, 1932. Serial No. 333,191. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,764. HOLLANDAISE SAUCE AND AU GRATIN CHEESE SAUCE. ELIS F. A. SIVADE, doing business as Sivade Good Foods Company, Atlantic City, N. J.
Filed December 19, 1932. Serial No. 333,206. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,765. STOCK FOOD. GENERAL MILLS, INC., Minneapolis, Minn.
Filed December 19, 1932. Serial No. 333,186. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,766. CHEMICAL COMPOSITION FOR USE IN COMPOUNDING RUBBER. THE ROBERT J. KING COMPANY, INCORPORATED, Stamford, Conn.
Filed December 19, 1932. Serial No. 333,190. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,767. CARPET CLEANING COMPOUND. ILLINOIS DYESTUFF CORPORATION, Chicago, Ill.
Filed December 6, 1932. Serial No. 333,173. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,768. DYESTUFFS FOR DYEING AND PRINTING. GENERAL DYESTUFF CORPORATION, New York, N. Y.
Filed December 19, 1932. Serial No. 333,185. PUBLISHED FEBRUARY 7, 1933. Class 6.

302,769. COSMETICS. HARRY G. BLANCHARD, doing business as Beauty Maid Products Company, Buffalo, N. Y.
Filed December 17, 1932. Serial No. 333,142. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,770. CARTOONS AND COMIC STRIPS. REUBEN L. GOLDBERG, New York, N. Y.
Filed December 17, 1932. Serial No. 333,152. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,771. TOOTH BRUSHES. PRO-PHY-LAC-TIC BRUSH COMPANY, Northampton, Mass.
Filed December 15, 1932. Serial No. 333,107. PUBLISHED FEBRUARY 14, 1933. Class 29.

302,772. BIRD FOOD. CHAPPEL BROS., INC., Rockford, Ill.
Filed December 16, 1932. Serial No. 333,114. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,773. OVERNIGHT BAGS, HARNESS, BRIEF CASES, AND POCKETBOOKS. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 14, 1932. Serial No. 333,085. PUBLISHED FEBRUARY 7, 1933. Class 3.

302,774. ARTIFICIAL FISHING FLIES. COOK, NEWTON & SMITH, INCORPORATED, New Haven, Conn.
Filed December 15, 1932. Serial No. 333,098. PUBLISHED FEBRUARY 7, 1933. Class 22.

302,775. HAIRPINS. THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill.
Filed December 14, 1932. Serial No. 333,069. PUBLISHED FEBRUARY 14, 1933. Class 40.

302,776. PUBLICATION PUBLISHED MONTHLY OR FROM TIME TO TIME. H. S. RICH & CO., Chicago, Ill.
Filed December 14, 1932. Serial No. 333,080. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,777. WEEKLY PUBLICATION. CALIFORNIA RETAIL GROCERS AND MERCHANTS ASSOCIATION, LTD., San Francisco, Calif.
Filed December 14, 1932. Serial No. 333,057. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,778. TEXTILE BLANKETS. THE ESMOND MILLS, Esmond, Smithfield, R. I.
Filed December 14, 1932. Serial No. 333,061. PUBLISHED FEBRUARY 14, 1933. Class 42.

302,779. WHEAT FLOUR. THE QUAKER OATS COMPANY, Chicago, Ill.
Filed December 12, 1932. Serial No. 333,010. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,780. ADHESIVE LIQUID SOLDER OR CEMENT. JULIA C. DE MILLE, Baltimore, Md.
Filed December 13, 1932. Serial No. 333,028. PUBLISHED FEBRUARY 7, 1933. Class 5.

302,781. WASHING COMPOUNDS. FERMAX PRODUCTS Co., Irvington, N. J.
Filed December 22, 1932. Serial No. 333,285. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,782. CARTOONS. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,317. PUBLISHED FEBRUARY 14, 1933. Class 38.

302,783. MAGAZINE SECTION. THE F-R PUBLISHING CORPORATION, New York, N. Y.
Filed December 23, 1932. Serial No. 333,316. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,784. FRESH AND CURED MEATS, LARD, CHEESE, AND BUTTER. EAST TENNESSEE PACKING COMPANY, Knoxville, Tenn.
Filed October 6, 1931. Serial No. 319,769. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,785. PASTRY AND RAVIOLI. ARTHUR E. BARILI, Los Angeles, Calif.
Filed September 8, 1931. Serial No. 318,891. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,786. TEXTILE SHEETS, SHEETINGS, AND PILLOW CASES. CANNON MILLS, INC., New York, N. Y.
Filed November 17, 1931. Serial No. 321,198. PUBLISHED JANUARY 17, 1933. Class 42.

302,787. RUBBER HEELS. PANTHER RUBBER MANUFACTURING COMPANY, Stoughton, Mass.
Filed October 31, 1931. Serial No. 320,692. PUBLISHED JANUARY 3, 1933. Class 39.

302,788. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed December 24, 1931. Serial No. 322,419. PUBLISHED JANUARY 31, 1933. Class 42.

302,789. FRESH LEMONS. SAN FERNANDO HEIGHTS LEMON CO., San Fernando, Calif.
Filed December 12, 1931. Serial No. 322,069. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,790. CERTAIN NAMED HAIRPINS. THE HUMP HAIRPIN MANUFACTURING COMPANY, Chicago, Ill.
Filed December 30, 1931. Serial No. 322,612. PUBLISHED FEBRUARY 14, 1933. Class 40.

302,791. APPLES IN THEIR NATURAL STATE. SYLVANUS HYNES, doing business as The Hynes Ice & Cold Storage Co., Canon City, Colo.
Filed December 28, 1931. Serial No. 322,535. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,792. NONALCOHOLIC MALTLESS ORANGE DRINK. C. F. WAID, Dallas, Tex.
Filed January 25, 1932. Serial No. 328,425. PUBLISHED FEBRUARY 7, 1933. Class 45.

302,793. DENTAL PLATE ADHESIVE POWDER. SYLVAN M. EDISON, doing business as Sanident Company, Chicago, Ill.
Filed January 23, 1932. Serial No. 323,436. PUBLISHED FEBRUARY 14, 1933. Class 6.

302,794. SHINGLES, CLAPBOARDS, AND ROOFING MATERIALS OF ASBESTOS, FELT, ASPHALT, SLATE OR COMBINATIONS THEREOF, AND IMITATION MASONRY BUILDING UNITS FOR ROOFS, WALLS, AND SIDING. FREDERICK E. HORNE, Malden, Mass.
Filed January 25, 1930. Serial No. 295,216. PUBLISHED FEBRUARY 7, 1933. Class 12.

302,795. WOOL FELT HAT BODIES FOR WOMEN ONLY. AMERICAN SCOTTI CORPORATION, New York, N. Y.
Filed August 5, 1931. Serial No. 317,661. PUBLISHED MARCH 1, 1932. Class 39.

302,796. FABRICS MADE WHOLLY OR PARTIALLY OF CELLULOSE DERIVATIVES. CELANESE CORPORATION OF AMERICA, New York, N. Y.
Filed August 18, 1931. Serial No. 318,096. PUBLISHED JANUARY 31, 1933. Class 42.

302,797. DATES. HARICHT, BRAUN & CO., New York, N. Y.
Filed July 24, 1931. Serial No. 317,277. PUBLISHED FEBRUARY 14, 1933. Class 46.

302,798. MEN'S, WOMEN'S, AND CHILDREN'S BOOTS AND SHOES MADE WHOLLY OR IN PART OF LEATHER, RUBBER, CANVAS, OR TEXTILE MATERIAL. E. E. TAYLOR CORPORATION, Boston, Mass.
Filed August 10, 1931. Serial No. 317,860. PUBLISHED MARCH 22, 1932. Class 39.

302,799. BAY LEAVES, DRIED BEANS, BEEF EXTRACT, ETC. THE CITIZENS' WHOLESALE SUPPLY COMPANY, Columbus, Ohio.
Filed June 1, 1931. Serial No. 315,715. PUBLISHED OCTOBER 6, 1931. Class 46.

302,800. BAY LEAVES, DRIED BEANS, BEEF EXTRACT, ETC. THE CITIZENS' WHOLESALE SUPPLY COMPANY, Columbus, Ohio.
Filed June 1, 1931. Serial No. 315,716. PUBLISHED OCTOBER 6, 1931. Class 46.

302,801. CANDIES, ICE-CREAM. JOSEPH O. EDY, Alameda, Calif.
Filed May 13, 1931. Serial No. 314,490. PUBLISHED FEBRUARY 7, 1933. Class 46.

302,802. A GRANULAR OR POWDERED PREPARATION FOR USE AS A COLLOID, THICKENER, OR STABILIZER FOR LIQUIDS TO PRODUCE BODY AND VISCOSITY AND PERFECT HOMOGENIZATION OF INGREDIENTS IN MIXTURES SUCH AS ICE CREAM AND OTHER FOODS. CHITTENDEN, TURNER & COMPANY, INC., Boston, Mass.
Filed May 28, 1931. Serial No. 315,134. PUBLISHED JANUARY 31, 1933. Class 46.

302,803. COFFEE, TEA, CANDY, FRUIT PRESERVES, COCOA, CEREAL BREAKFAST FOODS, BREAD, SALTED NUTS, AND PASTRY. KRESGE DEPARTMENT STORE CORPORATION, Newark, N. J.
Filed February 4, 1932. Serial No. 323,821. PUBLISHED JANUARY 31, 1933. Class 46.

302,804. PERIODICAL MAGAZINE. THE CHICAGO ASSOCIATION OF COMMERCE, Chicago, Ill.
Filed April 13, 1931. Serial No. 313,282. PUBLISHED FEBRUARY 7, 1933. Class 38.

302,805. FLOOR CLEANER AND BLEACH. KLEEN CHEMICAL COMPANY, Philadelphia, Pa.
Filed January 28, 1932. Serial No. 323,437. PUBLISHED FEBRUARY 14, 1933. Class 4.

302,806. CIGARETTE PAPERS. RENÉ BOLLORÉ, Odet, France.
Filed December 31, 1931. Serial No. 322,570. PUBLISHED FEBRUARY 14, 1933. Class 8.

[ACT OF MARCH 19, 1920, SEC. 1 (b)]

THESE REGISTRATIONS ARE NOT SUBJECT TO OPPOSITION

302,807. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JOS. S. FINCH & COMPANY, New York, N. Y.
Filed Feb. 9, 1933. Serial No. 334,792.

OLD TOBIN

For Whiskey, Brandy, and Other Potable Distilled Spirits.
Claims use since January, 1927.

302,808. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VEGETABLE PRODUCTS CORPORATION, doing business as Vegetised Foods, Inc., Burbank, Calif. Filed Jan. 4, 1933. Serial No. 333,643.

BURBANK

For Vegetable Tablets, Vegetable Mineral Broth, Vegetable Soup Mixture, Vegetable Tea, Salt—a Combination of Concentrated Vegetables and Sea Salt—Having Laxative Effects, Prepared Kelp Concentrate, All of the Foregoing Goods Used Primarily for Medicinal Purposes.
Claims use since June 21, 1931.

302,809. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FLORENCE ORR MURRAY, doing business as La France Baume Analgesique Company, Boston, Mass. Filed Jan. 25, 1933. Serial No. 334,334.

La France

For Medicines, Applied Externally, for the Relief of Pain of Neuralgia, Head Colds, Common Chest Colds, Headache, Sprains, Strains, Tired Feet.
Claims use since Mar. 1, 1928.

302,810. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) HARVEY-WHIPPLE, INCORPORATED, Springfield, Mass. Filed May 31, 1932. Serial No. 327,588.

Master Kraft

For Domestic Oil Burners.
Claims use since Mar. 1, 1932.

302,811. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) AMERICAN STEEL FOUNDRIES, Chicago, Ill. Filed Sept. 24, 1932. Serial No. 330,614.

CUSHION TRUCK

For Railway Equipment—Namely, Railway Car Trucks, Side Frames, Bolsters, Transoms, Spring Planks, Journal Boxes, Springs, Spring Clips, Spring Bands, Spring Seats and Brackets, Spring Caps, Brake Hanger Brackets, Swing Hangers, Center and Side Bearings, Equalizers, Spring Nests, Wheel and Axle Assemblies and the Parts Thereof, Roller, Ball, and Friction Bearings, Wheels, Axles, Cages, and Shrink Collars.
Claims use since Mar. 4, 1932.

302,812. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN SAFETY RAZOR CORPORATION, Brooklyn, N. Y. Filed Mar. 23, 1932. Serial No. 325,395.

DOUBLEDGE

For Razor Blades.
Claims use since Mar. 10, 1932.

302,813. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CALIFORNIA ART SUPPLY COMPANY, Palo Alto, Calif. Filed Apr. 22, 1932. Serial No. 326,861.

SUR-GRIP

For Certain Named Floor Waxes and Polishes and Furniture Polish.
Claims use since Mar. 1, 1929.

302,814. (CLASS 39. CLOTHING.) L. KARNO & CO. INC., Chicago, Ill. Filed Feb. 18, 1932. Serial No. 324,288.

HI-TEST

For Composition Rubber Soles to be Used in Connection with Rubber Heels and Leather Soles.
Claims use since Jan. 15, 1932.

302,815. (CLASS 39. CLOTHING.) UNITED STATES RUBBER COMPANY, New York, N. Y. Filed Mar. 19, 1932. Serial No. 325,805.

TRIM-ARCH

For Canvas and Rubber Shoes.
Claims use since Feb. 17, 1932.

302,816. (CLASS 37. PAPER AND STATIONERY.) EDWARD LATIMER, Jr., Philadelphia, Pa. Filed Feb. 9, 1932. Serial No. 324,003.

WAXRAP

For Wax Paper.
Claims use since Jan. 25, 1932.

302,817. (CLASS 12. CONSTRUCTION MATERIALS.) WILHOYTE DECORATIVE PLASTER CO., Gary, Ind. Filed Feb. 15, 1932. Serial No. 324,216.

Fine Art

For Colors for Tinting Plaster.
Claims use since July 1, 1930.

302,818. (CLASS 39. CLOTHING.) CHARLES RICKLES, doing business as Elks Toggery Shops, Philadelphia, Pa. Filed Aug. 6, 1931. Serial No. 317,741.

ROSLYN TIES
NON-CRUSHABLE

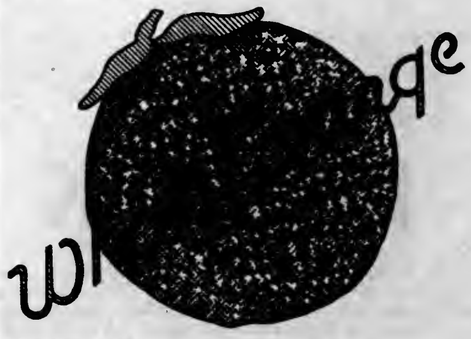
For Neckties.
Claims use since July 25, 1931.

302,819. (CLASS 39. CLOTHING.) MAIDEN FORM BRASSIERE CO., INC., New York, N. Y. Filed Jan. 18, 1932. Serial No. 322,959.

NON-A-LASTIC

For Brassières, Bandeaux Corsets, Corselettes, and Girdles.
Claims use since Dec. 30, 1931.

302,820. (CLASS 45. BEVERAGES, NONALCOHOLIC.) MONROE HARRISON, Chicago, Ill. Filed Apr. 21, 1931. Serial No. 313,598.



For Nonalcoholic, Maltless Orange Drink.
Claims use since Nov. 1, 1930.

302,821. (CLASS 39. CLOTHING.) DALTON HAT CO., INC., Yonkers, N. Y. Filed Oct. 11, 1930. Serial No. 306,640.

HUNTLEY

For Men's Felt Hats.
Claims use since Sept. 15, 1930.

302,822. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) BENJAMIN WOLF CO. INC., New York, N. Y. Filed Feb. 11, 1933. Serial No. 334,894.

"SILKERCHIEF"

For Handkerchiefs.
Claims use since Dec. 14, 1931.

TRADE-MARK REGISTRATIONS RENEWED

40,259. PHOTOGRAPHIC DEVELOPING PREPARATION. Registered May 5, 1903. FARBWERKE, VORMALS MEISTER, LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed May 5, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,295. WATER COLORS AND OIL COLORS. Registered May 12, 1903. REDEKER & HENNIS, Nuremberg, Germany. Renewed May 12, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

40,308. A PREPARATION FOR THE HAIR. Registered May 12, 1903. REUBEN GOLDSTEIN EDWARDS. Renewed May 12, 1933, to Edwards' Harlene, Limited, London, England, a Corporation of Great Britain, successor.

40,358. AN ANTISEPTIC DENTAL FILLING AND REMEDY. Registered May 12, 1903. EDWARD W. DODEZ, Fort Wayne, Ind. Renewed May 12, 1933.

40,742. ARTIFICIAL TABLE-WATERS. Registered July 7, 1903. W. T. WAGNER'S SONS. Renewed July 7, 1933, to The W. T. Wagner's Sons Company, Cincinnati, Ohio, a Corporation of Ohio, successor.

40,749. PLAYING CARDS. Registered July 14, 1903. THE NEW YORK CONSOLIDATED CARD COMPANY, New York, N. Y. Renewed July 14, 1933, to The United States Playing Card Company, East Norwood, Cincinnati, Ohio, a Corporation of Ohio, assignee.

89,953. MEDICATED PASTILS AND LOZENGES. Registered January 21, 1913. SALVADOR ANDREU GRAU. Renewed January 21, 1933, to Hijos del Dr. Andreu, Barcelona, Spain, a Firm, successor.

90,577. SHOE-HOLDERS AND BOOT AND SHOE TREES. Registered March 4, 1913. REGAL SHOE COMPANY, as assignee of Regal Shoe Company Inc., Boston, Mass. Renewed March 4, 1933, to Regal Shoe Company, Whitman, Mass., a Corporation of Massachusetts, assignee by mesne assignments.

90,619. A CORN-PRODUCT ADHESIVE PASTE. Registered March 11, 1913. AMERICAN HOMINY COMPANY, Indianapolis, Ind. Renewed March 11, 1933, to Decatur Milling Company, Inc., Decatur, Ill., a Corporation of Indiana, assignee by mesne assignments.

90,629. A SKIN-DISEASE REMEDY. Registered March 11, 1913. THE CAMPHO-SORCIN LABORATORY, Ossining, N. Y., a Firm. Renewed March 11, 1933.

90,665. WHEAT-FLOUR. Registered March 11, 1913. VALIER & SPIES MILLING CO., St. Louis, Mo. Renewed March 11, 1933, to Valier & Spies Milling Corporation, Kansas City, Mo., a Corporation of Delaware, assignee by mesne assignments.

91,054. CLOCKS AND WATCHES. Registered April 8, 1913. WESTERN CLOCK CO. Renewed April 8, 1933, to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

91,105. CRUCIBLES. Registered April 15, 1913. THE MORGAN CRUCIBLE COMPANY, LIMITED, London, England, a Corporation of Great Britain. Renewed April 15, 1933.

91,282. CLOCKS AND WATCHES. Registered April 22, 1913. WESTERN CLOCK CO. Renewed April 22, 1933, to Western Clock Company, Peru, Ill., a Corporation of Illinois, assignee.

91,362. RUBBER BOOTS AND SHOES AND BOOTS AND SHOES OF CERTAIN MATERIALS. Registered April 29, 1913. MISHAWAKA WOOLEN MANUFACTURING CO. Renewed April 29, 1933, to Mishawaka Rubber and Woolen Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana, by change of name.

91,401. ASPHALT. Registered April 29, 1913. WARREN CHEMICAL & MANUFACTURING COMPANY. Renewed April 29, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, successor.

91,409. TAR DISTILLATES FOR USE AS STAINS AND PRESERVATIVES FOR WOOD. Registered April 29, 1913. BARRETT MANUFACTURING COMPANY. Renewed April 29, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

91,451. PREPARATIONS FOR REMOVING PAINT AND OTHER COATINGS FROM SURFACES. Registered May 6, 1913. BALL CHEMICAL COMPANY, Pittsburgh, Pa., a Corporation of Pennsylvania. Renewed May 6, 1933.

91,452. NAPHTHALENE, CRUDE AND REFINED. Registered May 6, 1913. BARRETT MANUFACTURING COMPANY. Renewed May 6, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

91,499. A COMPOUND OF QUININ AND DIETHYLBARBITURIC ACID PREPARED FOR PHARMACEUTICAL USE. Registered May 6, 1913. E. MERCK, Darmstadt, Germany. Renewed May 6, 1933 to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignment.

91,540. TURPENTINE AND TURPENTINE COMPOSITIONS. Registered May 6, 1913. RENNINWERKE RHENANIA GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Duesseldorf-Reisholz, Germany. Renewed May 6, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,547. TARRED FELT ROOFING. Registered May 13, 1913. BARRETT MANUFACTURING COMPANY. Renewed May 13, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

91,584. SENSITIZED PHOTOGRAPHIC PAPER AND CARDBOARD. Registered May 13, 1913. KRAFT & STEUDEL FABRIK PHOTOGRAPHISCHER PAPIERE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Dresden, Germany. Renewed May 13, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,592. PLUMBAGO CRUCIBLE. Registered May 13, 1913. THE MORGAN CRUCIBLE COMPANY LIMITED, London, England, a Corporation of Great Britain. Renewed May 13, 1933.

91,647. A REMEDY FOR FURUNCULOSIS AND ACNE. Registered May 20, 1913. CHEMISCHE FABRIK GÜSTROW, DR. HILLRINGHAUS & DR. HEILMANN, Güstrow and Heideweg, Germany. Renewed May 20, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,659. CALCULATING AND ADDING MACHINES. Registered May 20, 1913. GRIMME NATALIS & Co. COMMANDITGESELLSCHAFT AUF ACTIEN, Brunswick, Germany. Renewed May 20, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,680. N-MONODIBROMOPROPYL-C,C-DIETHYLBARBITURIC ACID, PREPARED FOR PHARMACEUTICAL USE. Registered May 20, 1913. E. MERCK, Darmstadt, Germany. Renewed May 20, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,685. SERUM PREPARATIONS IN FORM FOR APPLICATION TO BOILS AND SIMILAR AFFLICTIONS. Registered May 20, 1913. NITRITFABRIK AKTIENGESELLSCHAFT, Coepenick, near Berlin, Germany. Renewed May 20, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,748. OVERALLS. Registered May 27, 1913. ALEXANDER BROTHERS COMPANY, Savannah, Ga., a Corporation of Georgia. Renewed May 27, 1933.

91,764. A CHEMICAL OR BIOLOGICAL REAGENT FOR CERTAIN NAMED PURPOSES. Registered May 27, 1913. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Hochst-on-the-Main, Germany. Renewed May 27, 1933, to The Chemical Foundation, Incorporated, Wilmington, Del., and New York, N. Y., a Corporation of Delaware, assignee by mesne assignments.

91,836. COAL-TAR OILS. Registered June 3, 1913. BARRETT MANUFACTURING COMPANY. Renewed June 3, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

91,888. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. Registered June 3, 1913. MORGAN CONSTRUCTION COMPANY, Worcester, Mass., a Corporation of Massachusetts. Renewed June 3, 1933.

91,892. PIPES, TUBES, AND CASINGS. Registered June 3, 1913. NATIONAL TUBE COMPANY, Pittsburgh, Pa., a Corporation of New Jersey. Renewed June 3, 1933.

91,955. PILLOWS. Registered June 10, 1913. CHAS. EMMERICH & CO. Renewed June 10, 1933, to Emmerich Pillows, Inc., Chicago, Ill., a Corporation of Illinois, assignee by mesne assignments.

92,060. A PURGATIVE. Renewed June 17, 1913. FARBENFABRIKEN OF ELBERFELD COMPANY. Renewed June 17, 1933, to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York, assignee.

92,096. MATRICES. Registered June 17, 1913. MERGENTHALER LINOTYPE COMPANY, New York, N. Y. Renewed June 17, 1933, to Merganthaler Linotype Company, Brooklyn, N. Y., a Corporation of New York.

92,167. PREPARED ROOFINGS. Registered June 24, 1913. BARRETT MANUFACTURING COMPANY. Renewed June 24, 1933, to The Barrett Company, New York, N. Y., a Corporation of New Jersey, assignee.

92,264. KERCHIEFS AND HANDKERCHIEFS. Registered June 24, 1913. J. ROBINSON & COMPANY. Renewed June 24, 1933, to Ricardo Katz, New York, N. Y., assignee.

92,339. NATURAL BLACK OR VEGETABLE BLACK, A SUBSTITUTE FOR LAMPBLACK. Registered July 1, 1913. INDUSTRIAL CHEMICAL COMPANY. Renewed July 1, 1933, to Industrial Chemical Sales Company, Inc., New York, N. Y., a Corporation of New York, by change of name.

92,356. CERTAIN HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS. Registered July 1, 1913. MORGAN CONSTRUCTION COMPANY, Worcester, Mass., a Corporation of Massachusetts. Renewed July 1, 1933.

92,551. CLOCKS AND PARTS THEREOF. Registered July 15, 1913. HAMBURG-AMERIKANISCHE UHRENFABRIK, Renewed July 15, 1933, to Gebruder Junghans Aktiengesellschaft, Schramberg, Germany, a Corporation of Germany, assignee.

93,080. CANDY. Registered August 19, 1913. CLARENCE ARTHUR CRANE, Cleveland, Ohio. Renewed August 19, 1933, to Life Savers, Inc., Port Chester, a Corporation of Delaware, assignee.

93,085. BOATS. Registered August 19, 1913. THE ELECTRIC LAUNCH CO., Bayonne, N. J., a Corporation of New Jersey. Renewed August 19, 1933.

93,126. SEWING MACHINES AND PARTS THEREOF AND ATTACHMENTS THEREFOR. Registered August 19, 1913. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed August 19, 1933.

93,127. SEWING MACHINES AND PARTS THEREOF AND ATTACHMENTS THEREFOR. Registered August 19, 1913. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed August 19, 1933.

93,128. SEWING-MACHINE NEEDLES. Registered August 19, 1913. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J., a Corporation of New Jersey. Renewed August 19, 1933.

93,160. MEASURING OIL-PUMPS. Registered August 26, 1913. S. F. BOWSER & Co. INC., Fort Wayne, Ind., a Corporation of Indiana. Renewed August 26, 1933.

93,184. CORDS, TWINES, ROPES, AND CLOTHES-LINES MADE OF COTTON OR OTHER YARN. Registered August 26, 1913. HENRY C. KELLEY COMPANY. Renewed August 26, 1933, to The Grady-Travers Company, Incorporated, New York, N. Y., a Corporation of New York, assignee.

93,254. COFFEE. Registered September 2, 1913. ARBUCKLE BROTHERS, New York, N. Y., a Firm. Renewed September 2, 1933.

93,271. PAPER-CLIPS. Registered September 2, 1913. THE FRITZ-TABER MFG. CO., New Bedford, Mass., a Firm. Renewed September 2, 1933.

93,280. ORANGES, LEMONS, GRAPE-FRUIT, LIMES, AND TANGERINES. Registered September 2, 1913. LEE COUNTY PACKING CO., Fort Myers, Fla., a Corporation of Florida. Renewed September 2, 1933.

LABELS

REGISTERED APRIL 25, 1933

41,958.—*Title:* THE CROSS PUZZLE. For Puzzles. AYRAUD & HALLAM, San Antonio, Tex. Published February 27, 1933.

41,959.—*Title:* B/G LUNCHES—PREPARED TO YOUR ORDER—READY TO GO IN A JIFFY. For Sandwiches, Salads, Pies, Cakes, Fruits, Coffee, Tea, and Milk. B/G SANDWICH SHOPS, INC., Chicago, Ill. Published December 30, 1932.

41,960.—*Title:* STATUS. For Cigars. RICHARD BAYLIN, doing business as B. & S. Cigar Company, Chester, Pa. Published February 1, 1933.

41,961.—*Title:* SKY RIDE. For Candy. PAUL F. BEICH COMPANY, Bloomington, Ill. Published March 9, 1933.

41,962.—*Title:* BILOXI MISS. For Canned Shrimp. BILOXI CANNING & PACKING CO., INC., Biloxi, Miss. Published April 29, 1932.

41,963.—*Title:* NITE N PARIS PAJAMAS. For Pajamas. S. BLECHMAN SONS INC., New York, N. Y. Published January 11, 1933.

41,964.—*Title:* JIG TIME. For Puzzles. THE CHILCOTE COMPANY, Cleveland, Ohio. Published February 20, 1933.

41,965.—*Title:* JIGGER JIG. For Puzzles. THE CHILCOTE COMPANY, Cleveland, Ohio. Published February 20, 1933.

41,966.—*Title:* CONCENTRATED CLOROX DISINFECTANT, CLEANSER, GERMICIDE, DEODORANT PREPARED ESPECIALLY FOR AGRICULTURAL AND INDUSTRIAL USE. For Disinfecting, Cleansing, Germicidal, and Deodorizing Compounds. CLOROX CHEMICAL CO., Oakland, Calif. Published December 28, 1932.

41,967.—*Title:* COOK-RITE. For Gravy Powder. COOK-RITE FOOD PRODUCTS COMPANY, New York, N. Y. Published March 3, 1933.

41,968.—*Title:* TASTY GRAHAM WAFERS. For Graham Wafers. DAVIDSON BISCUIT COMPANY, Mt. Vernon, Ill. Published January 9, 1933.

41,969.—*Title:* EL RANCHERO. For Pickled Chiles. CIRO ESCORZA. Published February 22, 1933.

41,970.—*Title:* GENERAL HEALTH NIPPLES. For Nursing Bottle Nipples. GENERAL HEALTH CORPORATION, Philadelphia, Pa. Published January 15, 1931.

41,971.—*Title:* EMMET. For Varnishes. THOS. H. GIBSON, Newark, N. J. Published November 18, 1932.

41,972.—*Title:* SIX-N-ONE. For Breakfast Cereal. THE GRIST MILL, Los Angeles, Calif. Published January 23, 1933.

41,973.—*Title:* JIFFY. For Jar Rubbers. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Published December 15, 1931.

41,974.—*Title:* JIFFY JAR RUBBERS. For Jar Rubbers. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Published December 15, 1931.

41,975.—*Title:* OPENS THE JAR IN A JIFFY. For Jar Rubbers. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Published December 15, 1931.

41,976.—*Title:* GOOD HOUSEKEEPING. For Jar Rings. HAMILTON RUBBER MANUFACTURING COMPANY, Trenton, N. J. Published December 15, 1931.

41,977.—*Title:* ROSE QUEEN. For Soap. HASKINS BROTHERS & COMPANY, Sioux City, Iowa. Published March 10, 1933.

41,978.—*Title:* NATIONAL BELLAS HESS SHOES. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 27, 1933.

41,979.—*Title:* THE PEDIPOISE SHOE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 23, 1933.

41,980.—*Title:* CIRCLE OF FASHION. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 15, 1933.

41,981.—*Title:* DE LUXE COMPO. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 23, 1933.

41,982.—*Title:* VIM-ODE. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 16, 1933.

41,983.—*Title:* FOOTRELAX. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published February 21, 1933.

41,984.—*Title:* TRI-PLEX. For Boxes. HOAGUE-SPRAGUE CORPORATION, Lynn, Mass. Published March 2, 1933.

41,985.—*Title:* DEAR PP—APPIAN LAB. N. Y. For Perfume. OSWALD IANNOTTI, New York, N. Y. Published February 17, 1933.

41,986.—*Title:* AIRCRAFT FLORIDA PEPPERS. For Peppers. FRANK JILL, INC., New York, N. Y., and Fort Lauderdale, Fla. Published February 8, 1933.

41,987.—*Title:* MY KEL TOOTH POWDER. For Tooth Powder. THE KENT COMPANY, INC., Kansas City, Mo. Published March 7, 1933.

41,988.—*Title:* KILGORE OH BOY. For Cap Pistols. THE KILGORE MANUFACTURING COMPANY, Westerville, Ohio. Published January 14, 1933.

41,989.—*Title:* FREE SAMPLE POCKET PACKET OF FULL SIZE SHEETS KLEENEX. For Pocket Size Packets of Disposable Tissues. KLEENEX COMPANY, Chicago, Ill. Published March 13, 1933.

41,990.—*Title:* KOFFEE-KLEAR. For a Substance for Clearing Coffee. KOFFEE KLEAR COMPANY, Chicago, Ill. Published March 6, 1933.

41,991.—*Title:* KOHLER'S AMERICAN MADE. For Cigars. G. A. KOHLER & CO., Yoe, Pa. Published February 1, 1933.

41,992.—*Title:* KOTEX WITH PATENTED EQUALIZER. For Sanitary Pad. KOTEX COMPANY, Chicago, Ill. Published March 15, 1931.

41,998.—*Title:* PONDER PUZZLES. For Puzzles. KARL S. KROBCK, doing business as Ponder Puzzles Company, Inc., Hubbard, Ohio. Published February 9, 1933.

41,994.—*Title:* DOUBLE QUICK PAINT & VARNISH REMOVER. For Paint and Varnish Remover. O. LAPLACE, doing business as Rex Chemical Company, New York, N. Y. Published February 20, 1933.

41,995.—*Title:* EGG MATZOS. For Egg Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio, and Jersey City, N. J. Published December 15, 1932.

41,996.—*Title:* ROUND TEA MATZOS. For Round Tea Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio, and Jersey City, N. J. Published December 22, 1932.

41,997.—*Title:* HYGIENIC MATZOS. For Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio, and Jersey City, N. J. Published December 10, 1932.

41,998.—*Title:* THIN TEA MATZOS. For Thin Tea Matzos. THE B. MANISCHEWITZ COMPANY, Cincinnati, Ohio, and Jersey City, N. J. Published December 22, 1932.

41,999.—*Title:* NAPHTHA CREME. For Household Cleaner. MIDWEST HARDWARE COMPANY, Chicago, Ill. Published July 18, 1932.

42,000.—*Title:* COL-O-JAR. For Colors in Oil. MONAD PAINT & VARNISH COMPANY, Philadelphia, Pa. Published October 1, 1932.

42,001.—*Title:* FRESH COLORS. For Paints. MONAD PAINT & VARNISH COMPANY, Philadelphia, Pa. Published October 1, 1932.

42,002.—*Title:* MONAD LONG LIFE. For White Lead. MONAD PAINT AND VARNISH COMPANY, Philadelphia, Pa. Published October 1, 1932.

42,003.—*Title:* MONAD COL-O-JAR. For Colors in Oil. MONAD PAINT & VARNISH COMPANY, Philadelphia, Pa. Published October 1, 1932.

42,004.—*Title:* NEW JERSEY COPPER BRONZE COMPOSITION. For Paint. NEW JERSEY PAINT WORKS, HARRY LOUDERBOUGH, INC., Jersey City, N. J. Published February 15, 1933.

42,005.—*Title:* PICCADILLY. For Safety Matches. NORTHAM TRADING CORPORATION, New York, N. Y. Published January 3, 1933.

42,006.—*Title:* TURNBULL. For Oranges and Grapefruit. OAK HILL CITRUS GROWERS ASSOCIATION, Oak Hill, Fla. Published December 17, 1931.

42,007.—*Title:* PEERLESS VISOR-ETTE. For Attachment for Automobile Visor. PEERLESS NOVELTY COMPANY, Grand Haven, Mich. Published January 24, 1933.

42,008.—*Title:* QUEEN'S TASTE. For Bread. RAUSCH & GRIMM BAKING CORPORATION, Long Island City, N. Y. Published March 6, 1933.

42,009.—*Title:* REGAN'S WONDER CUP COFFEE. For Coffee. R. W. REGAN CO., Chicago, Ill. Published January 3, 1933.

42,010.—*Title:* HERVA MATE. For Brazilian Tea. EMILY RITTER, Philadelphia, Pa. Published January 24, 1933.

42,011.—*Title:* ROYCO TEA (GREEN LABEL). For Tea. ROYAL ESTATES TEA CO., Hoboken, N. J. Published January 1, 1933.

42,012.—*Title:* VIENNA BEAUTY HEALING SKIN CREAM GREASELESS. For Greaseless Healing Skin Cream. ISIDOR SCHERER, doing business as Foreign Chemical Co., Baltimore, Md. Published February 2, 1933.

42,013.—*Title:* JIGGERED LETTER. For Puzzle Consisting of Pieces to be Associated Together. HENRY SCHMIDT & BROS. INC., Philadelphia, Pa. Published March 4, 1933.

42,014.—*Title:* NEW DEAL. For Cigars. JOSEPH SCHWARTZ, Cleveland, Ohio. Published February 20, 1933.

42,015.—*Title:* THE ONOTUFT PATENTED BOX SPRING. For Box Springs. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa. Published September 20, 1932.

42,016.—*Title:* THE WONDER MAT INNER-SPRING MATTRESS. For Inner-Spring Mattresses. SLEEPER PRODUCTS, INC., Wilmington, Del., and Philadelphia, Pa. Published September 20, 1932.

42,017.—*Title:* CERTIFIED DISTILLED WATER. For Certified Distilled Water. SPARKLETTS BOTTLED WATER CORPORATION, Los Angeles, Calif. Published January 15, 1933.

42,018.—*Title:* FLEISCHMANN'S CREAM. For Phosphate and Lactate Mixture Suitable for Use With Sodium Bicarbonate for the Same Purpose as Baking Powder. STANDARD BRANDS INCORPORATED, New York, N. Y. Published March 6, 1933.

42,019.—*Title:* CHASE AND SANBORN'S SEAL BRAND TENDER LEAF ORANGE PEKOE AND PEKOE. For Tea Balls. STANDARD BRANDS INCORPORATED, New York, N. Y. Published March 7, 1933.

42,020.—*Title:* ROYAL QUICK SETTING CHERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,021.—*Title:* ROYAL QUICK SETTING LIME FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,022.—*Title:* ROYAL QUICK SETTING STRAWBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,023.—*Title:* ROYAL QUICK SETTING RASPBERRY FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,024.—*Title:* ROYAL QUICK SETTING LEMON FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,025.—*Title:* ROYAL QUICK SETTING ORANGE FLAVOR GELATIN DESSERT. For Gelatin Dessert. STANDARD BRANDS INCORPORATED, New York, N. Y. Published November 24, 1932.

42,026.—*Title:* STARLIGHT. For Cigars. STARLIGHT BROS. INC., New York, N. Y. Published October 26, 1931.

42,027.—*Title:* STUHMER'S. For Rye Bread. GEO. F. STUHMER & COMPANY, Brooklyn, N. Y. Published November 17, 1932.

42,028.—*Title:* 'BLACK LEAF' WORM POWDER. For Worm Powder for Poultry. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published February 15, 1933.

42,029.—*Title:* 'BLACK LEAF' WORM PELLETS FOR POULTRY. For Worm Pellets for Poultry. TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, Louisville, Ky. Published February 15, 1933.

42,030.—*Title:* ROYAL STORES. For General Merchandise. UNITED SERVICE ADVERTISING, Newark, N. J. Published July 8, 1932.

42,031.—*Title:* LA FRONTERA MEXICAN STYLE CHILE CON CARNE. For Canned Chile Con Carne. WALKER'S AUSTEX CHILE COMPANY, doing business as Austin Canning Co., Austin, Tex. Published January 3, 1933.

PRINTS

REGISTERED APRIL 25, 1933

14,142.—*Title:* COPYRIGHTED DECEMBER 5, 1931 FOR YOUR SAKE MADAM. For Rugs and Carpets. BIGELOW-SANFORD CARPET CO., INC., New York, N. Y. Published February 20, 1933.

14,143.—*Title:* COME ON LET'S GO ROLLER SKATING. For Roller Skates. CHICAGO ROLLER SKATE COMPANY, Chicago, Ill. Published November 15, 1932.

14,144.—*Title:* CHILTON PEN. For Fountain Pens. THE CHILTON PEN COMPANY, INC., New York, N. Y. Published March 1, 1933.

14,145.—*Title:* SAVES TIME BUILDS APPETITE WONDER SHREDDER. For Food Shredders. DIXON-PROSSER INC., Seattle, Wash. Published September 15, 1931.

14,146.—*Title:* FREE! ACCEPT, PLEASE, BETTY CROCKER'S NEW E-Z SERVE CAKE PLATE. For Cake Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published February 20, 1933.

14,147.—*Title:* APRICOT TOPSY TURVY. For Flour. GENERAL MILLS, INC., Minneapolis, Minn. Published March 15, 1933.

14,148.—*Title:* JIGETTE PICTURE PUZZLE. For Picture Puzzles. HAMBLET STUDIOS, INC., Akron, Ohio. Published February 8, 1933.

14,149.—*Title:* WHERE'S THE FIRE. For Coffee. HILLS BROS., San Francisco, Calif. Published January 6, 1933.

14,150.—*Title:* FOUR POINT SERVICE DISPLAY. For Ice Cream. THE MATHEWS COMPANY, Detroit, Mich. Published December 15, 1932.

14,151.—*Title:* AN EXTRA PAIR $1. For Shoes. MINNEAPOLIS SHOE CO., Minneapolis, Minn. Published March 8, 1933.

14,152.—*Title:* MINNEAPOLIS SHOE CO. For Shoes. MINNEAPOLIS SHOE CO., Minneapolis, Minn. Published March 8, 1933.

14,153.—*Title:* MINOR'S FEMINIZED MUNSON THE HUMAN FOOT IN LEATHER. For Footwear. P. W. MINOR & SON, INC., Batavia, N. Y. Published February 20, 1933.

14,154.—*Title:* RELATED LASTS. For Footwear. P. W. MINOR & SON, INC., Batavia, N. Y. Published February 20, 1933.

14,155.—*Title:* UNIFIED MEASUREMENTS. For Footwear. P. W. MINOR & SON, INC., Batavia, N. Y. Published February 20, 1933.

14,156.—*Title:* DETAILED CONSTRUCTION. For Shoes. MUNICIPAL SHOE CO. INC., Brooklyn, N. Y. Published February 11, 1932.

14,157.—*Title:* MADE FROM NATURE'S CHOICEST BARLEY—GOOD OLD BLUE RIBBON MALT. For Malt Extract. PREMIER MALT PRODUCTS CO., Peoria Heights, Ill. Published February 28, 1933.

REISSUES

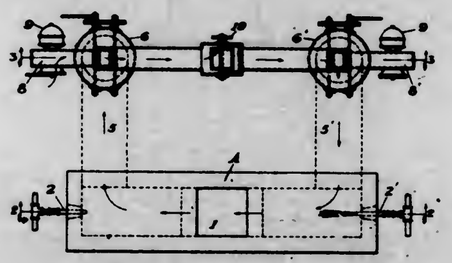
APRIL 25, 1933

18,800. ANTIRATTLE DEVICE. ISAAC ANDREWS, Spartanburg, S. C. Original No. 1,813,182, dated July 7, 1931, Serial No. 493,180, filed Nov. 3, 1930. Application for reissue filed Oct. 31, 1932. Serial No. 640,573. 5 Claims. (Cl. 16—86.)



5. In a door dovetail, in combination, a casing, an abutment thereon, a carrier vertically slidable in said casing above said abutment, a substantially non-resilient roller carried by said carrier and exposed below the same, and resilient means for urging said carrier downwardly.

18,801. RECIRCULATING SYSTEM AND APPARATUS FOR WASTE FURNACE GASES. GUSTAV A. MERKT, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Original No. 1,814,567, dated July 14, 1931, Serial No. 393,100, filed Sept. 18, 1929. Application for reissue filed Feb. 13, 1933. Serial No. 656,559. 22 Claims. (Cl. 263—15.)

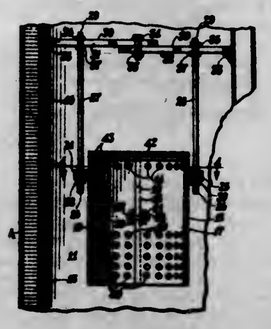


1. In the operation of a heating furnace, the improvement which consists in entraining the waste furnace gases by a blast of air on the outgoing side of the furnace, and using a portion only of the resulting mixture of air and waste gases on the ingoing side of the furnace to support combustion therein.

18,802. PROCESS FOR MAINTAINING THE COMPOSITION OF VISCOSE PRECIPITATING BATHS CONTAINING MAGNESIUM SULPHATE. JOHANN JOSEPH STOECKLY and RICHARD BARTUNEK, Teltow Seehof near Berlin, Germany, assignors to American Glanzstoff Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 27, 1928, Serial No. 322,295, now Patent No. 1,793,640, and in Germany Dec. 15, 1927. Divided and application filed June 17, 1930, Serial No. 461,845, Patent No. 1,863,172, dated June 14, 1932. Application for reissue filed Oct. 21, 1932. Serial No. 638,914. 4 Claims. (Cl. 23—121.)

1. For maintaining the composition of sulphuric acid viscose precipitating baths containing magnesium sulphate and sodium sulphate in solution, a process comprising the steps of separating out part of the soluted sodium sulphate in substantially pure form from the bath at a magnesium sulphate content of less than about 170 gr. per litre by cooling the same, to from 0 to —10° C. separately concentrating the resulting liquor and adding it, with a proportion of magnesium sulphate to the precipitating bath.

18,803. FURNACE APPLIANCE. JOHN M. DUFFY, Ventnor, N. J. Original No. 1,822,517, dated Sept. 8, 1931, Serial No. 513,839, filed Feb. 6, 1931. Application for reissue filed Jan. 24, 1933. Serial No. 653,276. 4 Claims. (Cl. 126—148.)



4. A device of the kind described for use in a furnace having a fire box, said device comprising a hollow apertured member, a horizontally adjustable supporting framework attached thereto, whereby said hollow member may be adjusted horizontally, and means for securing said hollow member in its position of horizontal adjustment.

18,804. KNITTED FOOTWEAR AND METHOD OF MAKING THE SAME. ELMER N. JOHA, Wauwatosa, Wis., assignor to Reliable Knitting Works, Milwaukee, Wis., a Corporation of Wisconsin. Original No. 1,888,172, dated Nov. 15, 1932, Serial No. 615,605, filed June 6, 1932. Application for reissue filed Jan. 5, 1933. Serial No. 650,342. 17 Claims. (Cl. 66—177.)

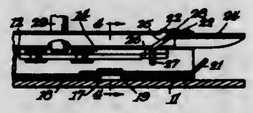


13. Knitted footwear of the shoe or slipper type having longitudinally extending wales in the side portions, connected across the toe and instep by wales extending at an angle to those in the side portions from the point of the toe to the ankle encircling margin, and having selvedged margins at the ankle and along the sole, said toe and instep covering wales being continuous with the side wales along lines of deflection extending from the ankle embracing selvedged margins to the selvedged sole margins.

18,805. PROCESS OF MANUFACTURING WHITE PORTLAND CEMENT, ETC. GUSTAV BERGER, FELIX ENGELHARDT, and RICHARD STECKHAN, Brunswick, Germany, assignors to "Miag" Mühlenbau und Industrie Aktiengesellschaft, Brunswick, Germany. Continuation of original application Serial No. 171,366, filed Feb. 26, 1927, Patent No. 1,865,418, dated June 28, 1932, Serial No. 573,304, filed Nov. 5, 1931, and in Germany Jan. 27, 1927. Application for reissue filed Dec. 16, 1932. Serial No. 647,696. 9 Claims. (Cl. 106—25.)

9. The herein described process of manufacturing cement, which consists in adding fluorspar and borax to ground raw material containing coloring matter, melting the mixture, granulating the same, and thereafter treating the same for transforming the same into cement.

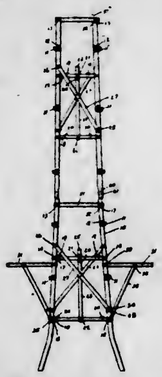
18,806. LOOSE LEAF BINDER. JAMES C. DAWSON, Webster Groves, Mo., assignor to Elma N. Dawson, Webster Groves, Mo. Original No. 1,897,001, dated Feb. 7, 1933, Serial No. 519,137, filed Feb. 28, 1931. Application for reissue filed Feb. 27, 1933. Serial No. 659,542. 12 Claims. (Cl. 129—24.)



5. In a loose leaf binder, a plate arched transversely with the crown upward, a toggle including prong-bearing members having a toggle joint beneath the intermediate portion of the plate, a rivet through the plate in the crown of the arch, a booster lever fulcrumed upon the rivet and having one arm operatively associated with the toggle joint to raise it and open the prongs.

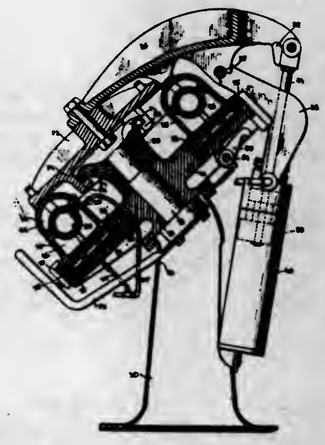
10. A loose leaf binder having a cover plate, a rivet head projecting above the normal surface of the plate, and a transverse rib formed in the cover adjacent the rivet to prevent the paper leaves from catching upon the rivet head.

18,807. KNOCKDOWN CONVERTIBLE STAND. WILLIAM C. KIRK, Indianapolis, Ind. Original No. 1,688,546, dated Oct. 23, 1928, Serial No. 161,788, filed Jan. 18, 1927. Application for reissue filed Oct. 22, 1930. Serial No. 490,519. 4 Claims. (Cl. 211—85.)



1. A knockdown display stand, comprising a pair of independent and self-sustaining stand units, each comprising four legs arranged in pairs, two opposite pairs being rigidly connected together for forming sides and means connecting collapsibly said paired sides together for knockdown purposes, the upper ends of the lower stand legs and the lower ends of the upper stand legs being complementary and forming a detachable connection between the units.

18,808. VULCANIZER. JAMES WILLIAM BRUNDAGE, Akron, Ohio, assignor, by mesne assignments, to National Rubber Machinery Company, Akron, Ohio, a Corporation of Ohio. Original No. 1,832,856, dated Nov. 24, 1931, Serial No. 261,449, filed Mar. 14, 1928. Application for reissue filed Mar. 4, 1932. Serial No. 596,880. 7 Claims. (Cl. 18—17.)

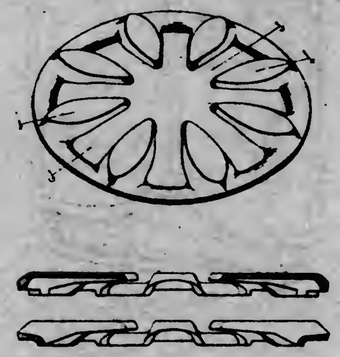


7. Apparatus for vulcanizing inner tubes or the like, said apparatus comprising complemental mold sections, means for supporting one mold section in a fixed position against movement in one axial direction and against movement in transverse directions therefrom, said mold section being freely movable in the other axial direction, a fixed pivot independent of the mold sections, means carrying the other mold section, and normally supported on said fixed pivot, said supporting means and said fixed pivot being located whereby the second section may be swung on said fixed pivot into a closed position in registry with the first section when supported in said fixed position, said carrying means being free to move off said fixed pivot, locking means associated with the supporting means for engaging the swinging section to hold it in registry with the first named section on said supporting means, and means for forcing the first named section and the swinging section off said supporting means against said locking means to squeeze the mold sections together after the same are closed, said forcing means comprising a fluid pressure operated platen associated with said supporting means.

DESIGNS

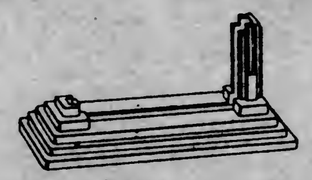
APRIL 25, 1933

89,673. GAS RANGE GRID. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 25, 1933. Serial No. 46,973. Term of patent 7 years.



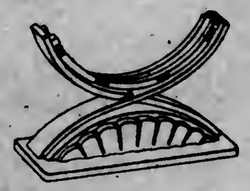
The ornamental design for a gas range grid, substantially as shown.

89,674. PICTURE FRAME. WALTER BARTZ, New York, N. Y., assignor to Man-O-Lamp Corporation, a Corporation of New York. Filed Mar. 1, 1933. Serial No. 47,362. Term of patent 3½ years.



The ornamental design for a picture frame substantially as shown and described.

89,675. PICTURE FRAME. WALTER BARTZ, New York, N. Y., assignor to Man-O-Lamp Corporation, a Corporation of New York. Filed Mar. 1, 1933. Serial No. 47,363. Term of patent 3½ years.



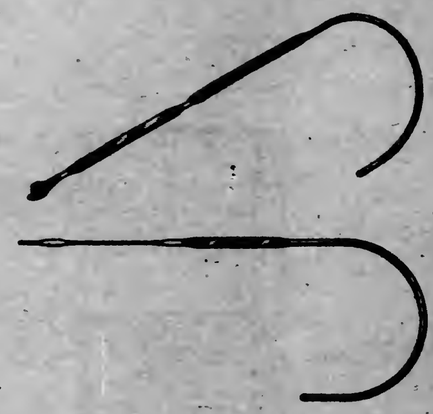
The ornamental design for a picture frame substantially as shown and described.

89,676. PICTURE FRAME. WALTER BARTZ, New York, N. Y., assignor to Man-O-Lamp Corporation, a Corporation of New York. Filed Mar. 1, 1933. Serial No. 47,364. Term of patent 3½ years.



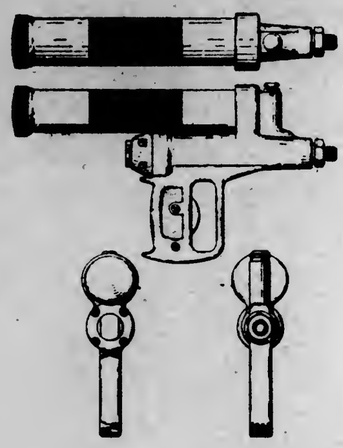
The ornamental design for a picture frame substantially as shown and described.

89,677. TEMPLE FOR SPECTACLES. AUSTIN B. BELGARD, Chicago, Ill., assignor to Belgard-Spero, Inc., a Corporation of Delaware. Filed Oct. 29, 1932. Serial No. 45,629. Term of patent 7 years.



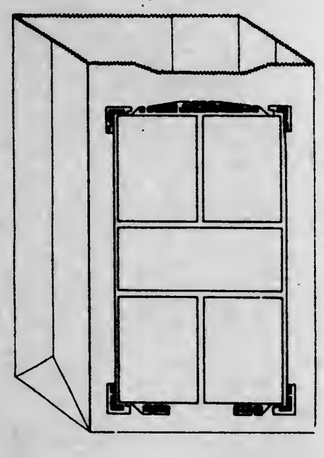
The ornamental design for a temple for spectacles, as shown.

89,678. GREASE GUN. JOHN F. CARTER, Bryan, Ohio, assignor to The Aro Equipment Corporation, Bryan, Ohio, a Corporation of Ohio. Filed Jan. 18, 1933. Serial No. 46,818. Term of patent 7 years.



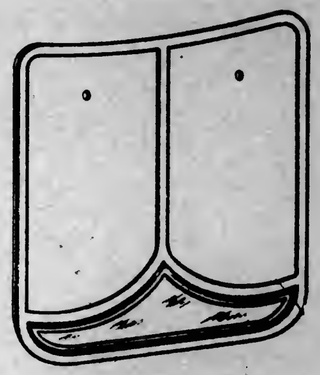
The ornamental design for a grease gun substantially as shown.

89,679. BAG. DAVID A. CHRISTIANSON, Atlanta, Ga., assignor, by mesne assignments, to The Ad-Bag Sales Corporation, a Corporation of Delaware. Filed Sept. 8, 1932. Serial No. 44,774. Term of patent 3½ years.



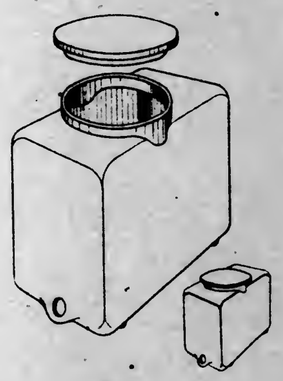
The ornamental design for a bag, as shown.

89,680. FENDER APRON. JOSEPH H. COHEN, Bridgeport, Conn. Filed Dec. 29, 1932. Serial No. 46,650. Term of patent 14 years.



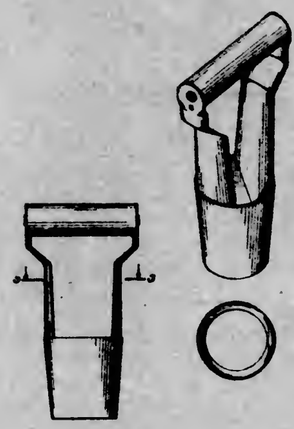
The ornamental design for a fender apron, as shown and described.

89,681. COMBINED GLASS CONTAINER AND COVER. ALVIE C. CRIMMEL and HENRY H. CRIMMEL, Hartford City, Ind. Filed July 11, 1932. Serial No. 44,309. Term of patent 7 years.



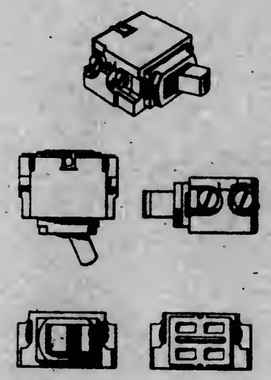
The ornamental design for a combined glass container and cover substantially as shown and described.

89,682. PLANTING TOOL. JOHN P. CROASDALE, Jr., Berwyn, and JOHN ARTHUR ROBERTS, Philadelphia, Pa. Filed Oct. 5, 1932. Serial No. 45,233. Term of patent 7 years.



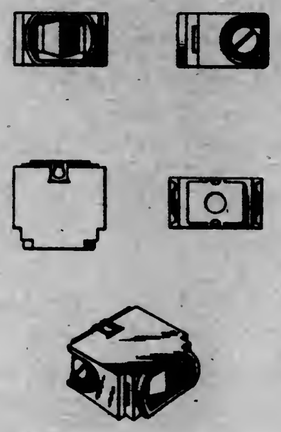
The ornamental design for a planting tool as shown.

89,683. ELECTRIC SNAP SWITCH. VICTOR R. DESPARD, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 28, 1933. Serial No. 47,029. Term of patent 14 years.



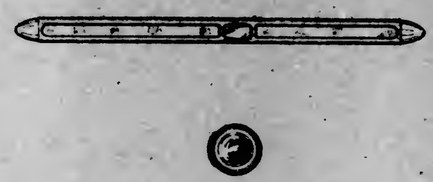
The ornamental design for an electric snap switch substantially as shown.

89,684. ELECTRIC CONVENIENCE OUTLET. VICTOR R. DESPARD, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 28, 1933. Serial No. 47,030. Term of patent 14 years.



The ornamental design for an electric convenience outlet substantially as shown.

89,685. VEHICLE SIGNAL LAMP. CHARLES L. DILLINGHAM, Indianapolis, Ind. Filed Oct. 24, 1932. Serial No. 45,534. Term of patent 14 years.



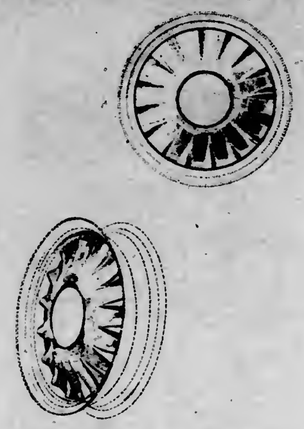
The ornamental design for a vehicle signal lamp, as shown.

89,686. VEHICLE SIGNAL LAMP. CHARLES L. DILLINGHAM, Indianapolis, Ind. Filed Oct. 28, 1932. Serial No. 45,605. Term of patent 14 years.



The ornamental design for a vehicle signal lamp, as shown.

89,687. DISK WHEEL. CAROLUS L. EKSERDJIAN and TALMON A. DAVENPORT, Detroit, Mich. Filed Dec. 7, 1932. Serial No. 46,820. Term of patent 3½ years.



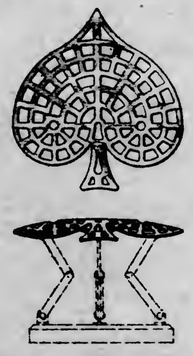
The ornamental design for a disk wheel substantially as shown.

89,688. FLOWER HOLDER. ETHEL A. FIELD, New York, N. Y. Filed Jan. 11, 1933. Serial No. 46,791. Term of patent 14 years.



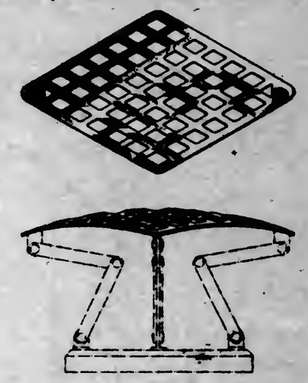
The ornamental design for a flower holder as shown.

89,689. FLOWER HOLDER. ETHEL A. FIELD, New York, N. Y. Filed Jan. 11, 1933. Serial No. 46,792. Term of patent 14 years.



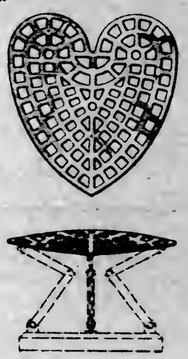
The ornamental design for a flower holder as shown.

89,690. FLOWER HOLDER. ETHEL A. FIELD, New York, N. Y. Filed Jan. 11, 1933. Serial No. 46,793. Term of patent 14 years.



The ornamental design for a flower holder as shown.

89,691. FLOWER HOLDER. ETHEL A. FIELD, New York, N. Y. Filed Jan. 11, 1933. Serial No. 46,794. Term of patent 14 years.



The ornamental design for a flower holder as shown.

89,692. DRESS. NETTIE FISCHMANN, St. Louis, Mo. Filed Mar. 1, 1933. Serial No. 47,359. Term of patent 3½ years.



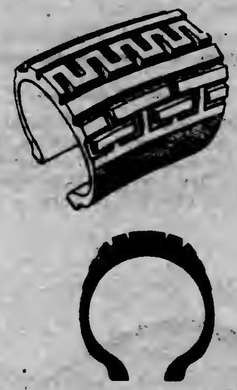
The ornamental design for a dress, as shown.

89,693. LADIES' SUIT. NETTIE FISCHMANN, St. Louis, Mo. Filed Mar. 1, 1933. Serial No. 47,360. Term of patent 3½ years.



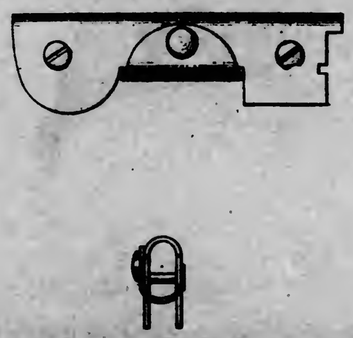
The ornamental design for a ladys' suit, as shown.

89,694. VEHICLE TIRE. ELIS O. FRITCH, Cumberland, Md., assignor to The Kelly-Springfield Tire Company, Cumberland, Md., a Corporation of New Jersey. Filed Jan. 14, 1933. Serial No. 46,829. Term of patent 14 years.



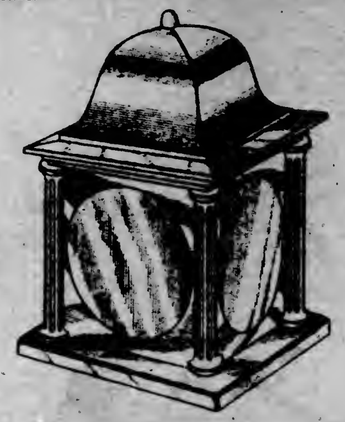
The ornamental design for a vehicle tire as shown.

89,695. POCKET KEYHOLDER. MORTON GOLDSHOLL, Chicago, Ill. Filed Dec. 30, 1932. Serial No. 46,668. Term of patent 14 years.



The ornamental design for a pocket keyholder as shown.

89,696. DOME FOR A LIQUID DISPENSING APPARATUS. CLEMENT P. GRIFFITH, Fort Wayne, Ind., assignor to S. F. Bowser & Company, Inc., Fort Wayne, Ind. Filed Dec. 15, 1932. Serial No. 46,482. Term of patent 7 years.



The ornamental design for a dome for a liquid dispensing apparatus substantially as shown and described.

89,697. TEXTILE FABRIC OR SIMILAR ARTICLE. MACLYN GUHL, Forest Hills, N. Y., assignor to William Willheim Co., Inc., New York, N. Y. Filed Mar. 18, 1933. Serial No. 47,503. Term of patent 3½ years.



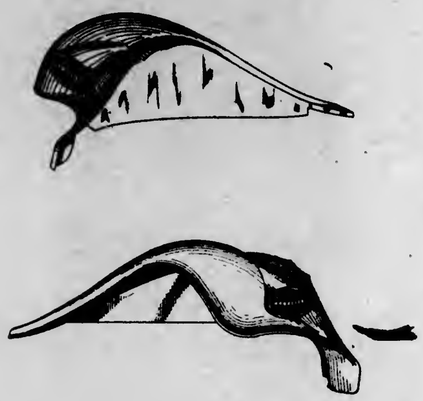
The ornamental design for a textile fabric or similar article as shown.

89,698. FINGER RING. ARTHUR HOPPE, River Edge, N. J., assignor to J. R. Wood & Sons, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Jan. 25, 1933. Serial No. 46,979. Term of patent 14 years.



The ornamental design for a finger ring, as shown and described.

89,699. COMBINED FENDER, HEAD LAMP, PARKING LAMP, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,643. Term of patent 14 years.



The ornamental design for a combined fender, headlamp, parking lamp, and horn casing substantially as shown.

89,700. COMBINED FENDER, HEAD LAMP, PARKING LAMP, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,644. Term of patent 14 years.



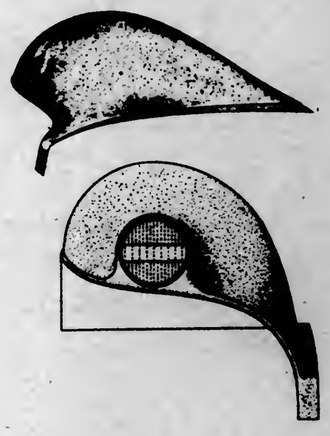
The ornamental design for a combined fender, headlamp, parking lamp, and horn casing substantially as shown.

89,701. COMBINED FENDER, HEAD LAMP, PARKING LAMP, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,645. Term of patent 14 years.



The ornamental design for a combined fender, headlamp, parking lamp, and horn casing substantially as shown.

89,702. COMBINED FENDER AND HEAD LAMP CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Car Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,646. Term of patent 14 years.



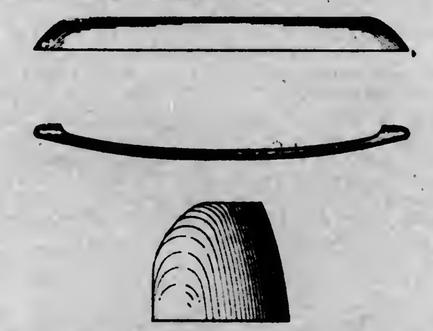
The ornamental design for a combined fender and headlamp casing substantially as shown.

89,703. COMBINED FENDER, HEAD LAMP CASING, PARKING LAMP CASING, AND HORN CASING. JAMES R. HUGHES, South Bend, Ind., assignor to The Pierce-Arrow Motor Company, Buffalo, N. Y., a Corporation of New York. Filed Oct. 29, 1932. Serial No. 45,649. Term of patent 14 years.



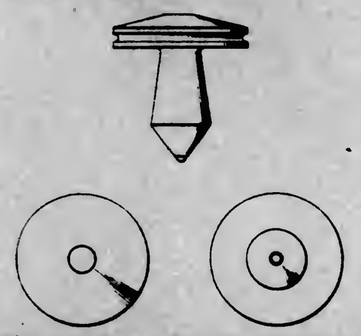
The ornamental design for a combined fender, headlamp casing, parking lamp casing and horn casing substantially as shown.

89,704. IMPACT BAR FOR AUTOMOBILE BUMPERS. HERBERT S. JANDUS, Detroit, Mich., assignor to General Spring Bumper Corporation, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1933. Serial No. 47,121. Term of patent 7 years.



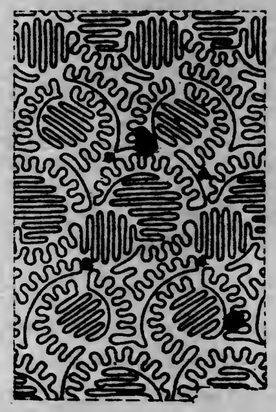
The ornamental design for an impact bar for automobile bumpers as shown.

89,705. SPINNING TOP. JOSEPH JOHNSON, Milwaukee, Wis. Filed Feb. 14, 1933. Serial No. 47,212. Term of patent 7 years.



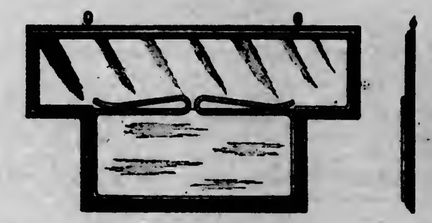
The ornamental design for a spinning top as shown.

89,706. TEXTILE FABRIC. MAX U. JUROTRICH, Ridgefield, N. J., assignor to The American Fabrics Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 27, 1932. Serial No. 46,689. Term of patent 3½ years.



The ornamental design for a textile fabric, substantially as shown and described.

89,707. DISPLAY SIGN OR SIMILAR ARTICLE. ALFRED KANTER, University City, Mo. Filed Feb. 6, 1933. Serial No. 47,130. Term of patent 3½ years.



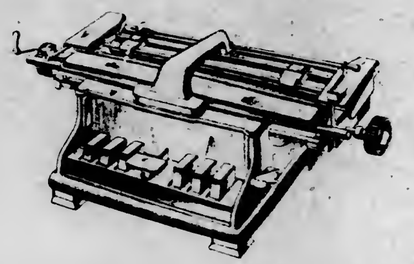
The ornamental design for a display sign or similar article, substantially as shown.

89,708. PASTRY CUP. URBAN A. KREIDLER, East Orange, N. J., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed July 30, 1932. Serial No. 44,491. Term of patent 14 years.



The ornamental design for a pastry cup, as shown and described.

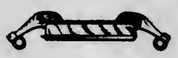
89,709. BRAILLE-WRITING MACHINE. ALFRED G. F. KUROWSKI, Brooklyn, N. Y., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 25, 1933. Serial No. 47,309. Term of patent 14 years.



The ornamental design for a Braille-writing machine, as shown.

89,710. WRIST WATCH OR SIMILAR ARTICLE. SAMUEL LACHOWITZ, Brooklyn, and IRVING SCHIFFMAN, New York, N. Y. Filed Jan. 24, 1933. Serial No. 46,963. Term of patent 7 years.





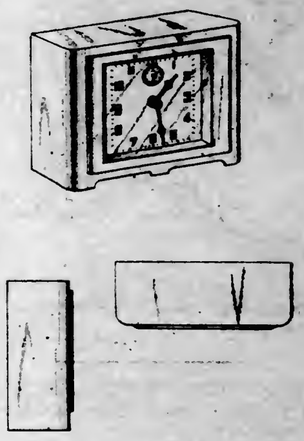
The ornamental design for a wrist watch or similar article, substantially as shown and described.

89,711. ENSEMBLE DRESS. DOROTHY LONG, New York, N. Y., assignor to Franklin Simon & Company, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 1, 1933. Serial No. 47,367. Term of patent 3½ years.



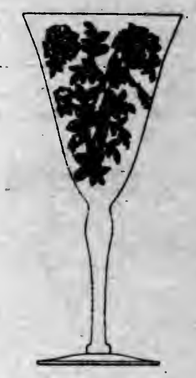
The ornamental design of an ensemble dress substantially as shown.

89,712. COMBINED ALARM CLOCK CASE AND DIAL. PAUL LUX, Waterbury, Conn., assignor to LUX Clock Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Feb. 21, 1933. Serial No. 47,279. Term of patent 3½ years.



The ornamental design for a combined alarm clock case and dial, as shown.

89,713. GOBLET OR SIMILAR ARTICLE. DENNIS E. MARTIN, Glassport, Pa., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1933. Serial No. 46,892. Term of patent 7 years.



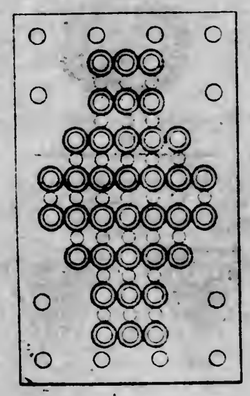
The ornamental design for a goblet or similar article, substantially as shown and described.

89,714. GOBLET OR SIMILAR ARTICLE. DENNIS E. MARTIN, Glassport, Pa., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 20, 1933. Serial No. 46,893. Term of patent 7 years.



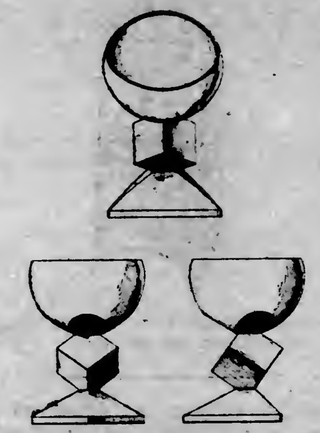
The ornamental design for a goblet or similar article, substantially as shown and described.

89,715. GAME BOARD. ROBERT B. MCCLURE, Warren, Ohio. Filed July 18, 1931. Serial No. 40,594. Term of patent 3½ years.



The ornamental design for a game board as shown and described.

89,716. GLASS CONTAINER. ARTHUR DOUGLAS NASH, Toledo, Ohio, assignor to The Libbey Glass Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 11, 1933. Serial No. 47,179. Term of patent 3½ years.



The ornamental design for a glass container, as shown.

89,717. DRINKING WATER COOLER FOUNTAIN. DONALD H. RENYME, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 24, 1930. Serial No. 37,776. Term of patent 7 years.



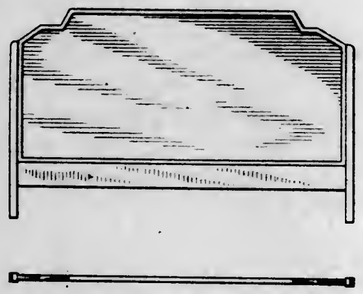
The ornamental design for a drinking water cooler fountain as herein shown and described.

89,718. DRINKING WATER COOLER FOUNTAIN. DONALD H. REEVES, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 24, 1930. Serial No. 87,778. Term of patent 7 years.



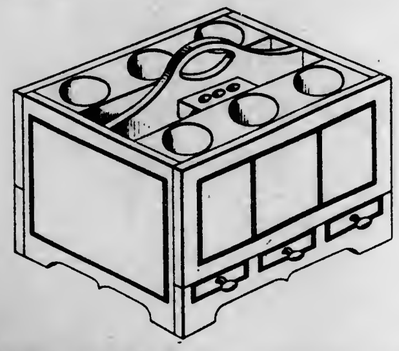
The ornamental design for a drinking water cooling fountain as herein shown and described.

89,719. FOOTBOARD FOR A BEDSTEAD OR SIMILAR ARTICLE. HARRY RODSTEIN and ISIDORE NATHANSON, New York, N. Y. Filed Feb. 20, 1933. Serial No. 47,272. Term of patent 7 years.



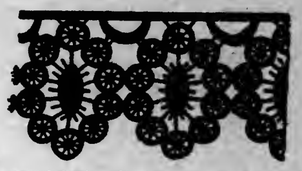
The ornamental design for a footboard for a bedstead or similar article, as shown.

89,720. CHIP CONTAINER. SOL ROTH, Columbus, Ohio. Filed Feb. 4, 1933. Serial No. 47,103. Term of patent 7 years.



The ornamental design for a chip container, as shown.

89,721. LACE OR THE LIKE. OSCAR F. SCHICKER, Teaneck, N. J. Filed Jan. 30, 1933. Serial No. 47,041. Term of patent 7 years.



The ornamental design for lace or the like as shown.

89,722. LACE OR THE LIKE. OSCAR F. SCHICKER, Teaneck, N. J. Filed Jan. 30, 1933. Serial No. 47,042. Term of patent 7 years.



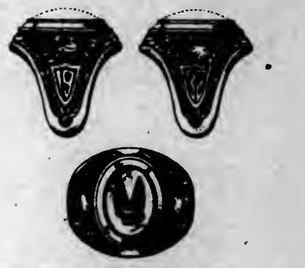
The ornamental design for lace or the like as shown.

89,723. LACE OR THE LIKE. OSCAR F. SCHICKER, Teaneck, N. J. Filed Jan. 30, 1933. Serial No. 47,043. Term of patent 7 years.



The ornamental design for lace or the like as shown.

89,724. FINGER RING. SIDNEY SIZELER, New Orleans, La. Filed Feb. 4, 1933. Serial No. 47,111. Term of patent 7 years.



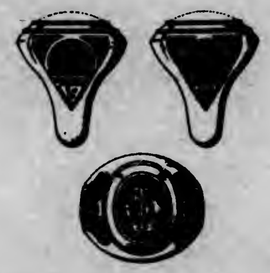
The ornamental design for a finger ring, as shown.

89,725. FINGER RING. SIDNEY SIZELER, New Orleans, La. Filed Feb. 4, 1933. Serial No. 47,112. Term of patent 7 years.



The ornamental design for a finger ring, as shown.

89,726. FINGER RING. SIDNEY SIZELER, New Orleans, La. Filed Feb. 4, 1933. Serial No. 47,113. Term of patent 7 years.



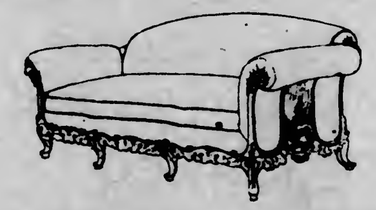
The ornamental design for a finger ring, as shown.

89,727. COMBINED PAPER WEIGHT AND PEN HOLDER. LOWELL J. SMITH, Connersville, Ind., assignor to Stant Manufacturing Co., Connersville, Ind., a Corporation of Indiana. Filed Feb. 11, 1933. Serial No. 47,192. Term of patent 7 years.



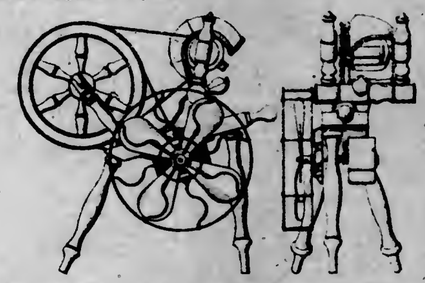
The ornamental design for a combined paper weight and pen holder as shown.

89,728. UPHOLSTERED SOFA OR SIMILAR ARTICLE. JOHN TAVIS, Bayside, N. Y., assignor to Mendel Singer, Samuel Singer, Nathaniel Singer and Hayward Singer, copartners trading as M. Singer & Sons, New York, N. Y. Filed Feb. 8, 1933. Serial No. 47,149. Term of patent 3½ years.



The ornamental design for an upholstered sofa or similar article, as shown.

89,729. COMBINED LAMP AND FAN. LOUIS TUCKER, Chicago, Ill. Filed Dec. 19, 1932. Serial No. 46,532. Term of patent 7 years.



The ornamental design for a combined lamp and fan, as shown.

89,730. COMBINED FOUNTAIN PEN AND DESK STAND HOLDER THEREFOR. AMOS S. VAN HISE, Brooklyn, N. Y. Filed Aug. 9, 1932. Serial No. 44,561. Term of patent 7 years.



The ornamental design for a combined fountain pen and desk stand holder therefor substantially as shown.

89,731. COMBINED FOUNTAIN PEN AND DESK STAND HOLDER THEREFOR. AMOS S. VAN HISE, Brooklyn, N. Y. Filed Aug. 9, 1932. Serial No. 44,562. Term of patent 7 years.

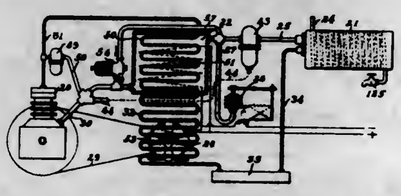


The ornamental design for a combined fountain pen and desk stand holder therefor, substantially as shown.

PATENTS

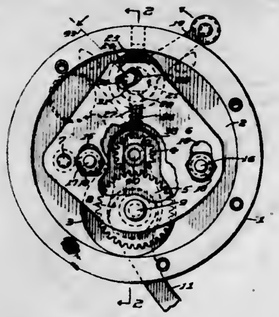
GRANTED APRIL 25, 1933

1,904,991. REFRIGERATING APPARATUS. ROBERT R. CANDOR, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 28, 1929. Serial No. 343,399. 8 Claims. (Cl. 62—115.)



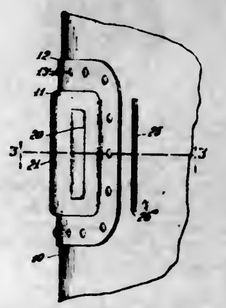
1. A refrigerating apparatus including liquid refrigerant supplying and gaseous refrigerant liquefying means, an expansion coil receiving liquid refrigerant from said means, an automatic pressure regulating valve for said coil, a water cooling conduit in thermal relation with said coil, the flow of refrigerant in said coil and of liquid in said conduit being in relatively opposite directions, a valve for said conduit, said last named valve and said regulating valve having common manual means for controlling same.

1,904,992. FISHING REEL. CLARENCE A. GODSHALK, Ardmore, and FREDERICK HENKE and DAVID BEHRSING, Philadelphia, Pa., assignors, by mesne assignments, to Ocean City Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 2, 1932. Serial No. 608,600. 4 Claims. (Cl. 242—84.7.)



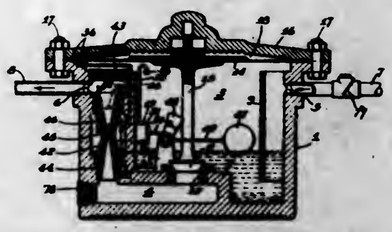
1. In a free spool reel, the combination of a reel head, a spool spindle, one end of which is journaled in said head, a pinion fixed on said spindle, a driving gear, an oscillatory member mounted on the outer side of said head to oscillate, and movable back and forth in a fixed path, connections between said member and said driving gear to move said gear toward the axis of said pinion into mesh with said pinion when said oscillatory member is moved to one limit of its motion, and to move said driving gear away from the axis of said pinion and out of mesh with said pinion when said oscillatory member is moved to the other limit of its motion, and resilient means on said reel and head to yieldingly hold said member at the limits of its motion in either direction, and operative, when said member is manually moved toward one of said limits beyond a point substantially midway between said limit, to automatically throw said member to that limit of its travel toward which it was being manually moved.

1,904,993. FACE PROTECTOR. ROBERT MALCOM, Chicago, Ill. Refiled for abandoned application Serial No. 455,174, filed May 24, 1930. This application filed Aug. 3, 1931. Serial No. 554,904. 2 Claims. (Cl. 2—8.)



1. In a protector of the character described having a main body provided with a sight-opening and with slots arranged beyond said opening; a lens-holding frame arranged about said opening and riveted to the forward face of the body, the opposite side walls of the frame intermediate of the front and rear sides thereof being provided with indentations on the inner faces thereof; a lens-holding skeleton member of resilient material of length greater than the distance between the side walls of the frame, the opposite ends of the member being each provided with an extension adapted to seat in said indentations; and a sheet of bendable non-conducting material provided with a sight-opening, said sheet being of dimensions greater than said frame and adapted to extend across the sight-opening in the body on the face side thereof, the ends of said sheet having tongues adapted to pass through the slots in the body and thereby removably hold said sheet flush with the inner face of the main body.

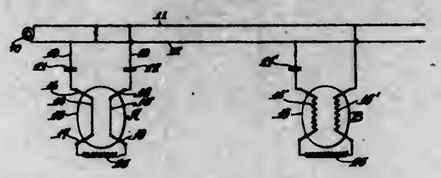
1,904,994. STEAM TRAP. JOHN M. MALONE, Pittsburgh, Pa. Filed Mar. 1, 1932. Serial No. 596,049. 12 Claims. (Cl. 137—103.)



1. A steam trap comprising an enclosed casing having an inlet and an outlet orifice provided therein, a partition dividing said casing into an inlet chamber containing said inlet orifice and an outlet chamber containing said outlet orifice, a discharge valve seated in a valve opening in said partition, a flexible partition arranged in the upper portion of said inlet chamber and forming a pressure chamber with the top of said casing, means operably connecting said valve to said flexible partition, and means responsive to the level of condensate collected in the inlet chamber for selectively placing said pressure chamber in

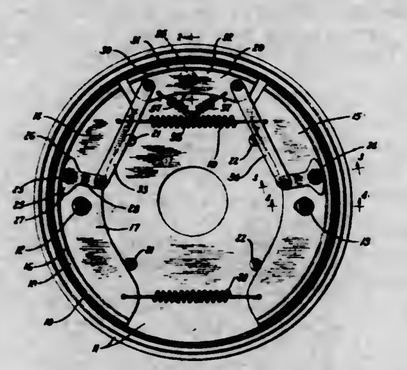
communication with the inlet chamber and the outlet chamber to control the opening and closing of said valve in response to the resultant movement of said flexible partition.

1,904,995. METHOD AND APPARATUS FOR PRODUCING LIGHT. EDWIN FITCH NORTHRUP, Princeton, N. J. Filed June 11, 1930. Serial No. 460,531. 19 Claims. (Cl. 176—124.)



6. In an electric lamp, a source of current supply, a lamp body containing a plurality of elements adapted to be heated to incandescence, connections from the source to the respective elements, reactance in the connections, and opposite reactance connected from one element to another.

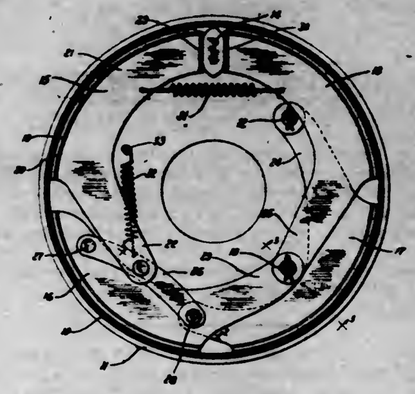
1,904,996. BRAKE. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,381. 1 Claim. (Cl. 188—78.)



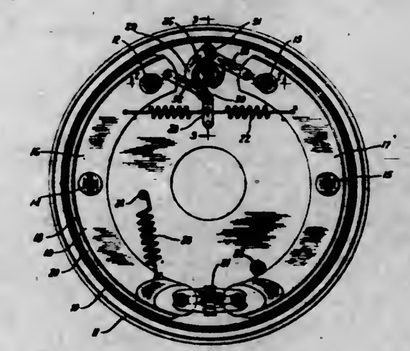
A brake comprising a rotatable drum, a fixed support associated with the drum, centrally anchored primary and secondary shoes arranged in oppositely disposed relation on the support and adaptable for movement thereon, double action cams positioned on the support and adaptable for applying forces at substantially the center of the respective shoes, an actuating shoe positioned between the primary and secondary shoes adapted to be moved against the drum and to be given a slight circumferential movement thereby and means connecting the actuating shoe with the cams so that the cams may be actuated to apply the primary and secondary shoes in either a forward or reverse direction with equal braking effects.

1,904,997. BRAKE. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,382. 9 Claims. (Cl. 188—78.)

1. A brake comprising a train of friction elements each having a heel and a toe, two of the elements being anchored at their heels and means operated by another element for applying force to the toes of the anchored elements, and another friction element effective in reverse braking and actuated simultaneously with said third element.

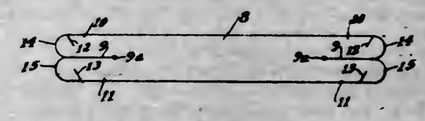


1,904,998. BRAKE. HUMPHREY F. PARKER, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 17, 1930. Serial No. 453,383. 12 Claims. (Cl. 188—78.)



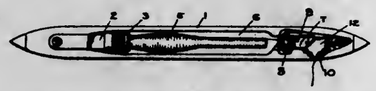
1. A brake comprising a fixed support forming a brake anchorage, levers slidably fulcrumed on the support, operating means connected to the power applying ends of the levers and means connecting the levers to the separable ends of the friction member of the brake.

1,904,999. GARMENT HANGER COVER. HARRY M. REED, Chattanooga, Tenn., assignor of one-half to H. L. Reis, Birmingham, Ala. Filed Dec. 15, 1932. Serial No. 647,383. 8 Claims. (Cl. 223—61.)



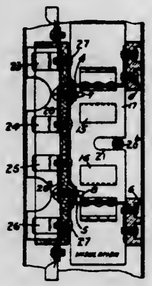
1. A garment hanger cover comprising an elongated strip of sheet material having end slits forming a pair of tongues at each end of the strip, and flap means to interlock the tongues at each end in overlapped relationship.

1,905,000. LOOM SHUTTLE. EDWARD ROSS, Lawrence, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 13, 1932. Serial No. 632,961. 13 Claims. (Cl. 139—217.)



1. A shuttle for filling replenishing looms, comprising a shuttle body supporting an automatically ejected filling carrier, an automatically threading tension device carried by the said shuttle body, and an inclined guide pin positioned between the said tension device and the filling carrier and operable upon ejection of the filling carrier to engage and guide the outgoing filling end laterally out of the said tension device.

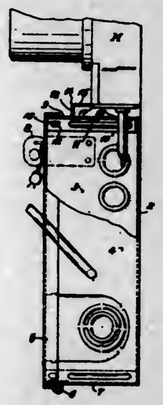
1,905,001. ELECTRIC CIRCUIT CONTROLLING APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Apr. 14, 1930. Serial No. 444,050. 5 Claims. (Cl. 200—3.)



1. In a fused electric switch, the combination of two similar pairs of stationary switch contacts respectively having oppositely facing parallel contact faces substantially perpendicular to a rear supporting wall, a pair of forward facing fuse receiving contacts in front of a transverse plane at the front of the switch contacts, means for establishing external circuit connections with one switch contact of each pair, means for establishing other external circuit connections with the other switch contact of one pair and with one fuse contact, a direct electrical connection between the remaining switch contact and fuse contact, and a switching member behind the said transverse plane movable between the switch contacts of the two pairs and comprising contact means adapted to engage and electrically connect the contacts of either pair while the contacts of the other pair remain electrically unconnected, the said switching member thus serving optionally to establish a circuit through one pair of switch contacts and the fuse and fuse contacts or through the other pair of switch contacts independently of the fuse and fuse contacts.

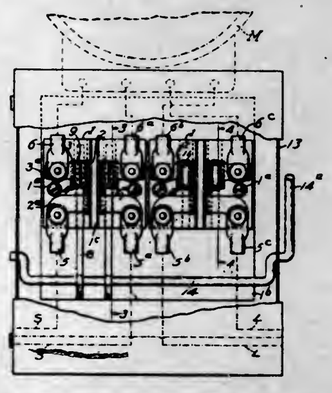
1,905,002. ELECTRIC APPLIANCE INCLOSING CABINET. JOSEPH SACHS, West Hartford, Conn. Continuation of application Serial No. 204,077, filed July 27, 1927. This application filed Sept. 23, 1931. Serial No. 565,536. 5 Claims. (Cl. 247—2.)

1. In an electric meter protecting cabinet adapted for inclosing a current controlling appliance, the combination with the back and side walls of the cabinet, of an end wall normally positioned perpendicularly to the said back and side walls so as to substantially close the cabinet at one end, the said end wall having an opening therein open at the rear and smaller than the downward projecting portion of an electric meter with which the cabinet may be associated and the said end wall being movable forward out of its normal position to facilitate meter installation, and an adapter member normally movable with the end wall and provided with vertical front and side flanges directly engaging and fitting the end wall at the outer face thereof in front of and at the sides



of the opening therein, the said adapter member being provided with a flat top wall parallel with the end wall and having an opening therein into which the aforesaid portion of the meter may extend with a substantially close fit in order to ensure the protection of the said portion of the meter as well as of parts within the cabinet.

1,905,003. ELECTRIC METER SERVICE APPLIANCE. JOSEPH SACHS, West Hartford, Conn. Filed Apr. 2, 1932. Serial No. 602,861. 14 Claims. (Cl. 200—5.)

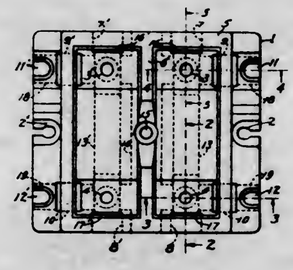


1. A contact holding unit for an electric circuit making and breaking device, comprising in combination, two stationary contacts, and a base supporting the contacts and having two separate differently positioned means thereon respectively adapted for controlling the movement of two different optionally usable circuit making and breaking members into and out of circuit making position between the said contacts.

1,905,004. FUSE DEVICE. JOSEPH SACHS, West Hartford, Conn. Filed June 10, 1932. Serial No. 616,405. 12 Claims. (Cl. 200—133.)

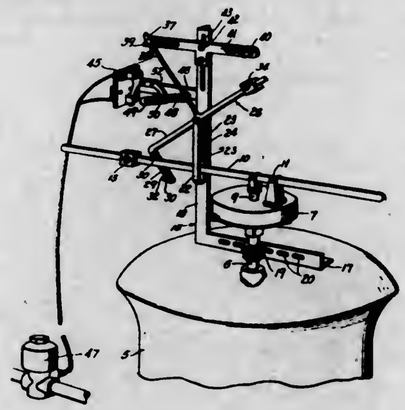
1. A fuse block having a forward facing portion adapted for the mounting thereon of at least one pair of spaced fuse contacts and also having a forward projecting barrier at the ends and at both sides of the said portion, the said barrier having at least one opening in each

end wall and two openings in each side wall and each said opening being in register with a fuse contact position so as to be adapted to receive a conductor connectible at



its inner end with a fuse contact and connectible at its outer end with a wire terminal or other electrical appurtenance.

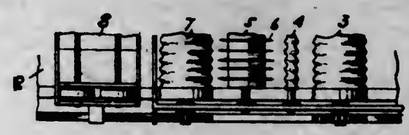
1,905,005. CONTROL MECHANISM FOR STEAM HEATING SYSTEMS. HENRY SCHIBBLOH, Kansas City, Mo. Filed Dec. 6, 1930. Serial No. 500,547. 3 Claims. (Cl. 236—26.)



3. In combination with a pressure-actuated diaphragm surrounded by a casing, a rod pivotally connected adjacent one of its ends to the diaphragm and to said casing, a weight adjustably mounted on the rod adjacent its opposite end, a frame, means for mounting the frame in adjustable relation to said casing, spaced stop members carried by the frame, a lever assembly pivotally mounted on the frame including a bar having a lateral end provided with adjustably spaced stop means for engaging opposite sides of said rod, a weight adjustably mounted on the opposite end of the bar, a lateral arm fixed to the bar intermediate its ends and provided with a weight engageable with the stop members on the frame, a switch carried by the frame, and means for operably connecting the switch to said arm.

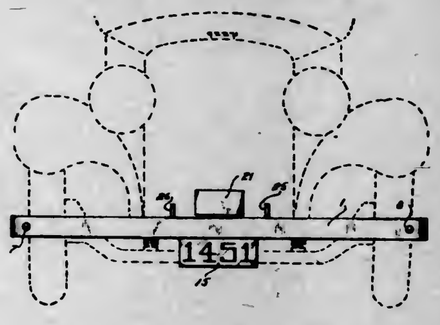
1,905,006. METHOD OF MAKING CORRUGATED WIRE GLASS. ARNO SHUMAN, Philadelphia, Pa., assignor to Pennsylvania Wire Glass Company, Philadelphia, Pa., a Corporation of New Jersey. Filed June 25, 1930. Serial No. 463,624. 1 Claim. (Cl. 49—86.)

A process of the manufacture of corrugated wire glass, comprising the following steps: embedding wire mesh into the fluid glass which causes wounds at the peaks of the corrugations of the glass; closing the wounds by



rolling the glass on a line surface of glass to push the plastic glass from the valleys toward the peaks to close the wounds; and pressing the glass to smooth its surface.

1,905,007. COMBINATION AUTOMOBILE LICENSE CARRIER, BUMPER, AND RELEASE. STEPHEN SKOKO, Portland, Oreg. Filed Dec. 7, 1932. Serial No. 646,134. 5 Claims. (Cl. 116—32.)



1. In a device of the class described, the combination of front and rear members spaced apart by compressible elements disposed at the oppositely disposed ends of the front and rear members, means for removably securing the rear member to the frame of an automobile, a cross bar disposed at the rear and secured to and in spaced relationship with the rear bumper member, a locking lug disposed upon the cross bar and forwardly extending therefrom, guide brackets secured to the rear member and in which a license plate is normally held and supported upon the forwardly extending lug of the cross bar, rockable means for normally maintaining the front and rear members spaced apart, said means being adapted for being actuated by wind pressure, and means for locking the front and rear members together when the front member is repressed.

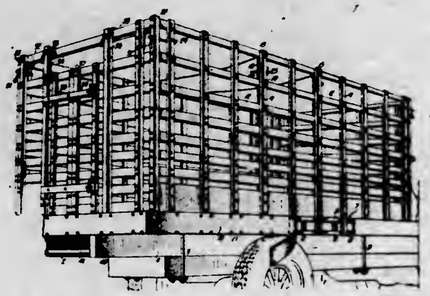
1,905,008. RUG UNDERLAY. WILLIARD JORDAN SLAGLE, Cambridge, Mass., assignor to Dewey and Almy Chemical Company, Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1930. Serial No. 487,922. 8 Claims. (Cl. 154—49.)

2. An underlay for floor coverings comprising a sheet of creped paper having both faces surfaced with a thin coating of vulcanized rubber.

1,905,009. TRUCK BODY. MYLES STANDISH, Omaha, Nebr. Original application filed Aug. 18, 1928, Serial No. 300,725. Divided and this application filed Apr. 28, 1930. Serial No. 447,894. 2 Claims. (Cl. 296—3.)

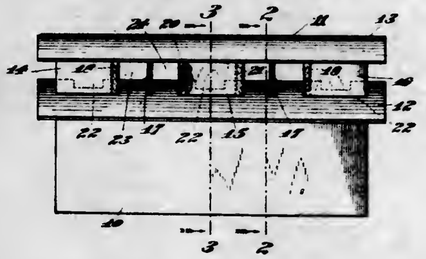
1. In a truck body including a platform having spaced pockets, a rack section including a stake receivable in one of said pockets and a series of vertically spaced horizontal slats fixed to the stakes and having registering free ends projecting beyond the stake, an angle iron including a leg fixed to the outer faces of said slats and

having a free edge registering with the registering end faces of said ends of the slats, and an apertured leg projecting outwardly from the slats, a second rack section including a stake receivable in another of said pockets and having a longitudinal groove in the inner edge thereof, and a series of vertically spaced slats fixed to the inner face of the stake and having registering vertical end faces registering with one wall of said groove and spaced from the vertical free edge of the stake to abut



the end faces of the slats of the first named rack section, a vertical plate fixed to the inner faces of the slats and having an edge portion projecting beyond said end faces of the slats, and a fastener having a portion engaged with said grooved stake and a portion engageable in the aperture of said projecting angle iron leg for retaining the slats of the second named rack section in end abutting relation with the slats of the first named rack section.

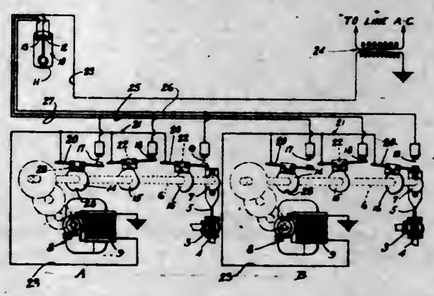
1,905,010. VENTILATOR. RICHARD H. STEVENS, Baltimore, Md., assignor to Bethlehem Steel Company, a Corporation of Pennsylvania. Filed Apr. 17, 1931. Serial No. 530,871. 4 Claims. (Cl. 98—42.)



1. A ventilator for a building having an apertured roof comprising, two monitors each superposed over an aperture in the roof of said building, a vertical transverse baffle, said monitors having their inner oppositely disposed transverse walls apertured and in spaced relation to one another and to said baffle, and a secondary roof continuous over said monitors and said baffle.

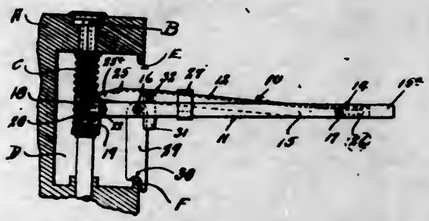
1,905,011. TEMPERATURE REGULATING SYSTEM. DUNCAN J. STEWART, Rockford, Ill., assignor to Howard D. Colman, Rockford, Ill. Filed Jan. 10, 1931. Serial No. 507,900. 4 Claims. (Cl. 236—74.)

1. In a heating system, the combination of a pair of valves controlling the radiation of heat from different radiators in a room to be heated, a power operator for each valve including an electric motor and a shaft rotated thereby and adapted in successive half revolutions to alternately open and close the associated valve, a thermostat common to both of said operators, a circuit for each operator for maintaining energization of the operator motor independently of said thermostat including a switch actuated by said shaft so as to be opened when the shaft reaches valve-open or valve-closed position and to be closed in each operator cycle after a predetermined movement of said shaft, a pair of circuits for each operator arranged to be closed selectively by said thermostat to initiate successive cycles of the associated operator and each including a switch adapted to be closed in the approach of said shaft toward one of its rest positions but prior to opening



of said maintaining switch, and to be opened in the subsequent movement of the shaft after closure of the maintaining switch, and cam means on each operator shaft for timing the actuation of the associated starting circuit switches so that the time interval between the closure of either of such switches and the succeeding opening of the maintaining switch is shorter than the interval between the starting of the other operator shaft and the closure of the maintaining switch actuated thereby.

1,905,012. COMBINED VALVE LIFTER, SPRING COMPRESSOR, AND REPLACER. JOSEPH SUNNEN, Kirkwood, Mo. Filed Dec. 4, 1930. Serial No. 499,893. 6 Claims. (Cl. 29—86.8.)



1. A tool of the class described comprising in combination a pair of longitudinally disposed levers, each having one of their ends bifurcated to form spring engaging jaws, said jaws being adapted to be arranged in the same vertical plane, a slot and pin connection pivotally connecting the opposite ends of said levers whereby one of said levers can be moved longitudinally so as to dispose the jaw thereof rearwardly of the jaw of the other lever, a laterally disposed projection formed on one of said levers, and an extension formed on the other member and projecting vertically therefrom for engaging said transverse projection and locking said levers against longitudinal movement relatively to each other.

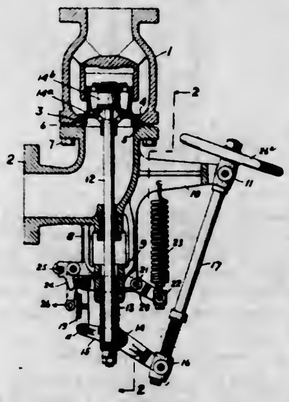
1,905,013. TOOTH SWAGE. SAMUEL M. TAYLOR, Loyalton, Calif., assignor to Smooth Saw Equipment Company, Loyalton, Calif., a Corporation of Nevada. Filed Mar. 7, 1931. Serial No. 520,822. 9 Claims. (Cl. 76—54.)

1. A tooth swage including the combination of a swage block, a saw clamping means associated therewith, a swaging die operatively mounted in said block and having a flattened portion adapted to be initially engaged by the face of the tooth to be swaged, and means for initially



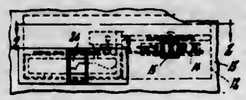
rotating said die and then to simultaneously rotate and draw said die substantially parallel to and along the face of the tooth to be swaged.

1,905,014. COMBINED SHUT-OFF AND TRIP VALVE. MARTIN P. TELLER, Philadelphia, Pa., assignor to Schutte & Koerting Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 31, 1932. Serial No. 602,162. 2 Claims. (Cl. 137—139.)



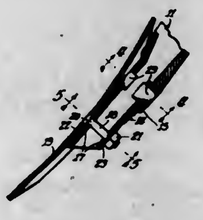
2. In a shut off and trip valve the combination of an upper or inlet valve body or section, a lower or outlet valve body or section, a valve seat ring clamped at the joint between the bodies or sections, the outlet body or section being integrally provided with a valve yoke and with a bracket, valve operating gear carried by the yoke, a hand wheel shaft carried by the bracket for actuating said gear, a projection integrally provided on the yoke, and a latch pivoted to the projection for cooperation with said gear.

1,905,015. MOTOR VEHICLE SPEEDOMETER. ALOIS A. THOMANN, Brookline, and ALBERT H. THOMANN, Medford, Mass. Filed July 30, 1930. Serial No. 471,812. 9 Claims. (Cl. 234—33.)



1. In a speed recording device having a ribbon feeding means controlled by a speed responsive means; a cylindrical member rotatively oscillatable by a motor vehicle at a speed determined by that of the vehicle, a plurality of independently movable markers arranged to mark the ribbon at different distances from its edges, operating mechanism for the markers including a conditioning member adapted to cause said operating mechanism to actuate any marker, and selecting mechanism operable by oscillations of the cylindrical member to adjust said conditioning member to position causing the actuation of any marker by the operating mechanism.

1,905,016. UNIVERSAL FOOTPIECE FOR CULTIVATOR SHOVELS AND THE LIKE. HARRY RANDALL TRAPHAGEN, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Aug. 12, 1929, Serial No. 385,283. Divided and this application filed Mar. 20, 1931. Serial No. 524,046. 3 Claims. (Cl. 97—187.)



1. A universal footpiece for cultivators and the like, comprising an elongated bar having a substantially cylindrical lower end portion provided with an aperture extending transversely therethrough intermediate the length thereof, said cylindrical portion having a shovel-back-fitting seat on its forwardly presented surface the bar also having a transversely apertured and transversely enlarged portion adjacent the upper end of said cylindrical portion.

1,905,017. ROOF FLASHING. LIONEL VALLAS, Chicago, Ill. Filed Sept. 3, 1931. Serial No. 560,944. 7 Claims. (Cl. 108—26.)

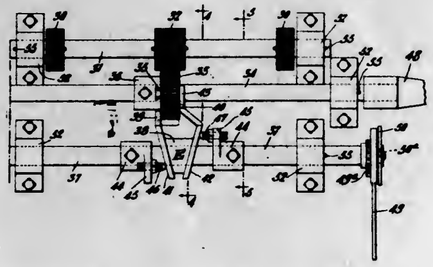


1. Flashing of the character described comprising a plurality of saturated sheets of fabric; a sheet metal reenforcing strip for the upper longitudinal edges of the fabric sheets, bent along a longitudinal line with the edges of the fabric disposed at said bend, the two parallel sides of said metal strip with the enfolded fabric sheets then bent upwardly to provide a shoulder along the upper longitudinal edge of the flashing; and a resilient wedge member adapted to ride onto said shoulder into tilting position with one longitudinal edge in bearing relation with the upper side of the metal reenforcing strip while the other longitudinal edge is in binding relation with the upper side of a crevice in the wall to which the flashing is applied.

1,905,018. MATERIAL MEASURING AND HANDLING APPARATUS. FRED VOELKER, Jr., Pittsburgh, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Sept. 18, 1929. Serial No. 393,393. 1 Claim. (Cl. 221—145.)

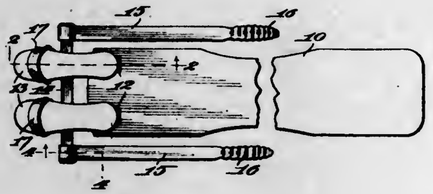
In material measuring and handling apparatus, the combination of a material supply device, a discharge con-

trol means for the device including a gear, operating means for the control means including a shaft, a gear mounted for rotative and sliding movement on said shaft



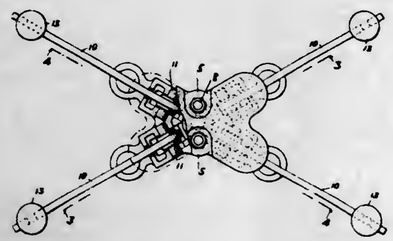
and clutch means for coupling and uncoupling the second mentioned gear and the shaft without disengaging the intermeshing gears.

1,905,019. EXERCISING APPARATUS. DEB TURNER, Hollywood, Calif. Filed Feb. 24, 1930. Serial No. 430,614. 1 Claim. (Cl. 272—79.)



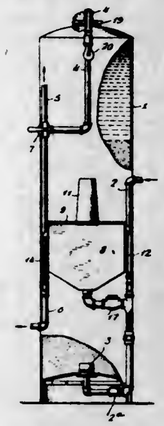
In an exercising apparatus, a base, a pair of foot boards hinged to the forward portion of said base, a transverse bar secured to the undersides of the intermediate portions of said foot boards, elastic straps connected to the ends of said transverse bar and extending rearwardly therefrom, a bolt extending transversely through the forward portion of each foot board and a foot retaining strap connected to the ends of each bolt and overlying the forward portion of the corresponding foot board.

1,905,020. AUTOMATIC EQUALIZING SUPPORT. FRANK R. WALLACE and JOHN T. RAMSDEN, Philadelphia, Pa., assignors to The Tabor Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1930. Serial No. 494,330. 12 Claims. (Cl. 248—30.)



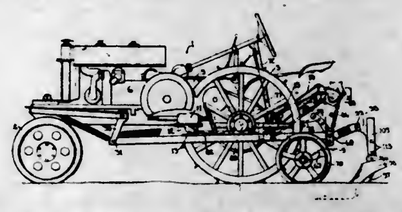
9. An equalising support comprising, in combination, relatively fixed elements arranged in spaced relation, a group of contacting wedges arranged between said elements and adapted in some positions to partially fill the space between them and in other positions to jam between them, supports for receiving the load, and means cooperating with the supports and wedges and adapted to position the supports in load receiving position and the wedges in position for partially filling the space between the element and said means further adapted to concentrate the group of wedges and jam them between said elements under deposition of the load on the supports.

1,905,021. WATER SOFTENING APPARATUS. RICHARD E. WAGNER, Rockaway Park, N. Y. Filed June 13, 1930. Serial No. 460,926. 6 Claims. (Cl. 210—24.)



1. An apparatus for the treatment of water comprising a main tank provided with requisite water inlet and outlet connections, an auxiliary tank supplied from the main tank water inlet connection, and an ejector utilising the inlet flow to the main tank for effecting continuous delivery during such flow from the auxiliary tank to the main tank.

1,905,022. MIDDLE BURSTER. CHARLES H. WHITE, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Nov. 12, 1930. Serial No. 495,045. 35 Claims. (Cl. 97—47.)

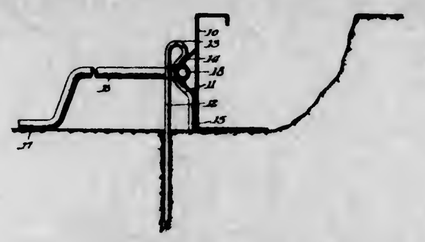


1. The combination with a tractor including front and rear wheels, of an implement attachment comprising a transverse draft bar detachably connected with the tractor forward of the rear wheels thereof, a plurality of beams extending longitudinally of the tractor and attached to said bar, earth-working devices on said beams directly behind said rear wheels, and power lift mechanism for raising and lowering the beams.

1,905,028. ROAD STRIP AND SUPPORT. WILLIAM E. WHITE, Chicago, Ill., assignor to Kalman Steel Company, Chicago, Ill., a Corporation of Delaware. Filed May 26, 1930. Serial No. 455,898. 8 Claims. (Cl. 25—118.)

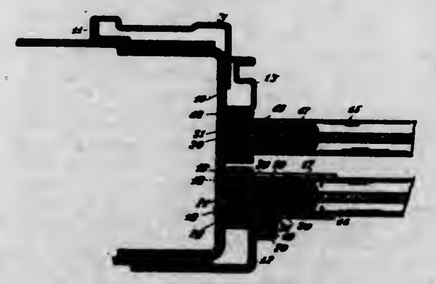
5. In combination, a channel adapted to act as a groove-forming element in the edge of a concrete slab,

said channel having an opening adapted to receive an angularly bent dowel bar, and a stake adapted to be driven



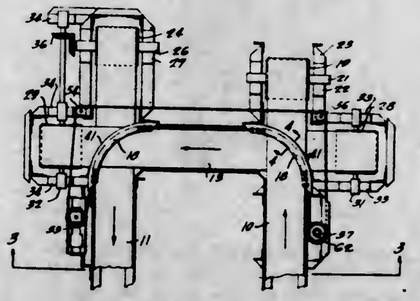
into the soil and to be rotated after being driven, said stake having a recess at one side of its center of rotation adapted to receive and hold said channel.

1,905,024. WINDOW CONSTRUCTION. EMIL A. ZETMEIR, Topeka, Kans. Filed Sept. 18, 1931. Serial No. 563,520. 11 Claims. (Cl. 189—65.)



1. In a window construction, channeled members secured to opposite sides of the window opening and slidingly receiving the sides of a window-sash, the members being provided with rack forming ribs, intermediate of the sides of the members, with one side of each member provided with a weather-strip disposed toward the side rail of the sash.

1,905,025. CONVEYER SYSTEM. LAVONT C. ALLEN, Syracuse, N. Y., assignor to The Lamson Company, Syracuse, N. Y., a Corporation of Massachusetts. Filed Nov. 5, 1930. Serial No. 493,486. 8 Claims. (Cl. 198—20.)



1. Conveying apparatus comprising a plurality of belt conveyers having intersecting courses of travel and having their adjacent surfaces contiguous at intersections of their courses of travel, live roller deflector mechanism at intersections of their courses of travel comprising a series of closely adjacent vertically disposed live rollers arranged in an arcuate path extending approximately diagonally across the intersection, frames for rotatably supporting the rollers in this position, and an endless belt in operative engagement with the rollers of the deflector mechanism of at least two intersections for operating such rollers.

1,905,026. DISPERSION OF RUBBER IN NONAQUEOUS LIQUIDS. RICHARD ALMY, Little Compton, R. I., assignor to Dewey and Almy Chemical Company, North Cambridge, Mass., a Corporation of Massachusetts. Filed Oct. 16, 1930. Serial No. 489,243. 10 Claims. (Cl. 106—28.)

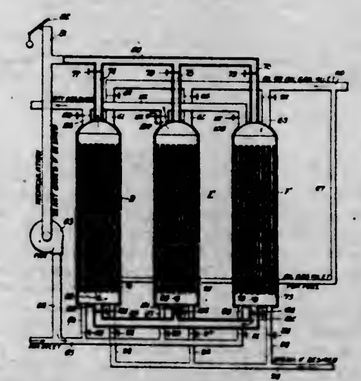
1. The method of colloidally dispersing rubber in paraffin wax which comprises adding molten paraffin wax to concentrated latex at a temperature approximating the boiling point of water to produce an oil-in-water type of emulsion of the paraffin in the latex and heating the mixture to remove the water by evaporation.

1,905,027. SIX-LAMP WRAPPER. HAROLD AMATEL, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Mar. 1, 1930. Serial No. 432,320. 2 Claims. (Cl. 206—65.)



1. A container for fragile articles comprising a four sided open ended casing having a corrugated interior wall, and a plurality of four sided open ended article wrappers proportioned to completely occupy the space within the casing and having portions of the edges of their ends depressed to conform with said corrugated wall and other edges disposed in the trough portions of the corrugations.

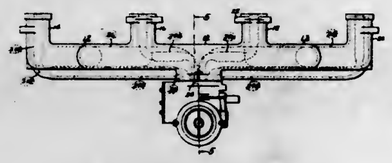
1,905,028. TREATMENT OF OIL GAS. CHARLES W. ANDREWS and ARTHUR J. BOYNTON, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1928. Serial No. 311,003. 1 Claim. (Cl. 48—197.)



The method of reducing the specific gravity of gas, which comprises passing the gas through a plurality of stoves, the first stove being at such a temperature that

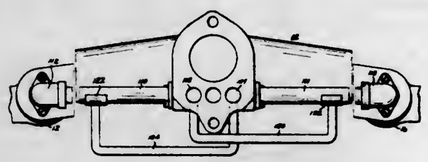
heavier constituents of the gas are cracked therein, the second stove being at a lower temperature and absorbing heat from the treated gases passing therethrough, simultaneously heating a third stove to a temperature suitable for cracking the heavier constituents of the gas, by combustion of a portion of untreated gases therein, controlling the temperature by recirculation of a selected portion of combustion products, and periodically varying the operation so that in the complete cycle each of the three stoves is in turn first heated by combustion, second used to treat the gas, and third heated by passing the hot treated gas therethrough.

1,905,029. DUPLEX CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,321. 19 Claims. (Cl. 123—52.)



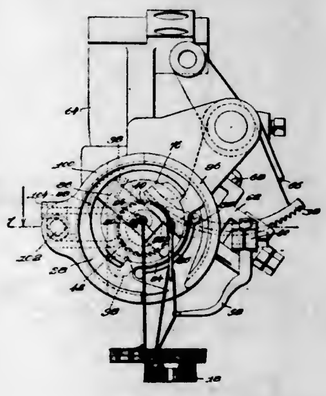
1. A charge forming device for a multi-cylinder internal combustion engine comprising a plurality of mixing chambers, means for supplying fuel to said mixing chambers, an air chamber for supplying air to said mixing chambers having a partition therein dividing said chamber into two passages each of which communicates with one of said mixing chambers, and a single air inlet admitting air to both of said passages.

1,905,030. CHARGE FORMING DEVICE. FRED E. ASELTINE, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Nov. 2, 1929. Serial No. 404,322. 13 Claims. (Cl. 123—52.)



1. A charge forming device for multicylinder internal combustion engines comprising a plurality of secondary mixing chambers communicating with different intake ports of said engine, primary mixture conduits supplying a primary mixture of fuel and air to said secondary mixing chambers, and means preventing the accumulation of fuel in any one of said secondary mixing chambers during the intake stroke of the piston in any engine cylinder not receiving combustible mixture directly from that particular secondary mixing chamber, said means comprising means for communicating the engine suction to the primary mixture conduit delivering into said particular secondary mixing chamber at a point anterior to the outlet of said conduit.

1,905,031. SHOE SEWING MACHINE. FRED ASHWORTH, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 9, 1929. Serial No. 338,756. 9 Claims. (Cl. 112—36.)



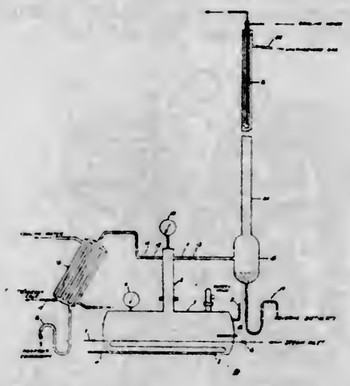
1. In a lockstitch sewing machine the combination, with the other stitch forming devices including a straight hook needle, of a shuttle, a shoe supporting horn arranged to extend within the shoe, needle threading mechanism located within the horn, a loop spreader to engage and spread the needle loop for the entrance of the shuttle, and means acting automatically when rendered operative to stop the needle, shuttle and loop spreader with the last needle loop engaged and spread by the needle and loop spreader with the work side of the loop in position to be readily severed.

1,905,032. SEWING MACHINE SHUTTLE. FRED ASHWORTH, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Feb. 9, 1929, Serial No. 338,756. Divided and this application filed May 1, 1930. Serial No. 448,909. 6 Claims. (Cl. 112—233.)



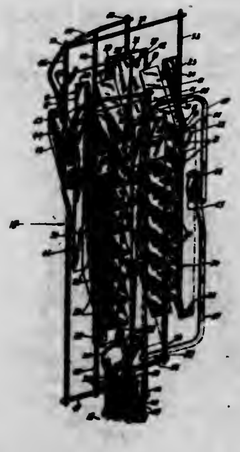
1. A shuttle for shoe sewing machines comprising a discoidal shuttle casing having an open end, and a removable thread holder forming a closure for the open end of the shuttle casing provided with a central hollow thread supporting stud projecting inwardly into the shuttle casing and forming a thread passage extending through the stud and opening on the outer side of the thread holder.

1,905,033. CONCENTRATION OF FORMALDEHYDE SOLUTIONS. HARLAN A. BOND, Metuchen, N. J., assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Dec. 9, 1927. Serial No. 238,879. 20 Claims. (Cl. 260—138.)



1. The process comprising distilling aqueous formaldehyde solutions under such conditions that the vapors therefrom are at a temperature above the normal atmospheric boiling point of the solution and collecting the vapors therefrom as formaldehyde of greater concentration than that of said aqueous solutions.

1,905,034. ELECTRON EMISSION DEVICE. JOHN W. MARDEN and ERNEST A. LEDERER, East Orange, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 27, 1927. Serial No. 228,995. 12 Claims. (Cl. 250—27.5.)



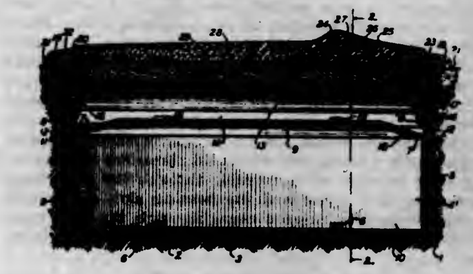
8. An electron emission device comprising a grid element composed of a plurality of vertical rows of vanes arranged in parallel spaced relation, a plate element composed of a plurality of vertical rows of vanes disposed in parallel spaced relation, a cathode consisting of a plurality of lengths of filament wire and means for supporting said elements in a common vertical plane at the side of said cathode and with the vanes substantially transverse to said lengths of filament wire.

1,905,035. ELECTRON DISCHARGE DEVICE. JOHN W. MARDEN, East Orange, N. J., assignor to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 26, 1929. Serial No. 342,787. 6 Claims. (Cl. 250—27.5.)



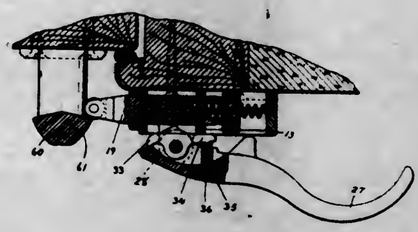
1. A cathode structure for an electron discharge tube comprising a disc of insulating material, said disc having a shoulder on the periphery thereof, a hollow cup shaped cathode, having an open end, supported on said disc with the open end thereof engaging said shoulder, said disc having a pair of apertures therein, current conductors extending through said apertures and a heating element supported above said insulator by said conductors.

1,905,036. MAUSOLEUM. WILLIAM A. MARTIN, Trenton, Mo. Filed June 6, 1932. Serial No. 615,531. 6 Claims. (Cl. 72—7.)



1. A vault including a container having a vertical peripheral wall provided with an interior upwardly facing shoulder, an inside cover adapted to rest on said shoulder, a layer of sealing cement on said cover having its entire upper surface extending to a level for draining liquid rising in the cement over the upper edge of said wall, and a top for the container.

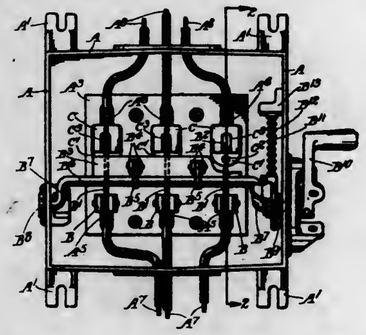
1,905,037. REFRIGERATING APPARATUS. WILLIAM H. MATTHEWS, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,749. 10 Claims. (Cl. 292—173.)



1. In combination with a keeper therefor, a free bolt latch comprising a casing, a bolt mounted to reciprocate in said casing, a handle, and means cooperating with said

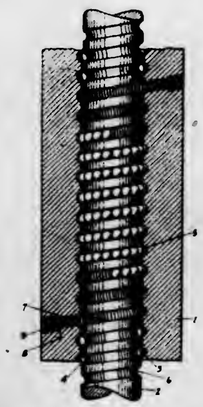
handle for positively reciprocating said bolt in both directions, and means whereby said bolt may reciprocate out of and into engagement with said keeper without imparting motion to said handle.

1,905,038. ARC REDUCING ELECTRIC SWITCH. THOMAS E. MCDOWELL, Chicago, Ill., assignor to The Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 15, 1930. Serial No. 475,441. 5 Claims. (Cl. 200—144.)



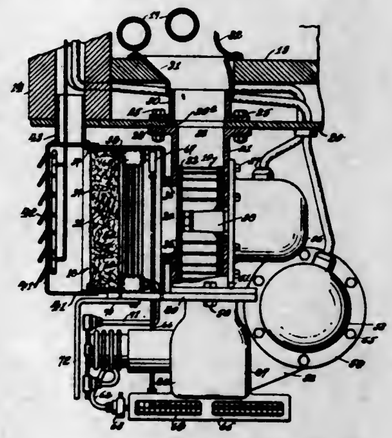
1. Switch mechanism including in combination, a contact member, a blade movable into and out of engagement with said contact member, an arc quenching device about said contact member, said device comprising a housing having spaced side walls providing a slot, the inner faces of said side walls being provided with a plurality of spaced parallel grooves forming pockets, metal plates in said grooves disposed one plate to a pocket, said plates having notches therein which are in register with one another and with the housing slot when said plates are in position, the blade member being movable through the registering notches of said plates and the housing slot, said plates having projections thereon engaging with the side walls to prevent displacement of said plates from said housing.

1,905,039. ANTIFRICTION THREAD FOR SHAFTS. MARION S. MCKELLAR, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed May 16, 1931. Serial No. 537,982. 2 Claims. (Cl. 74—41.)



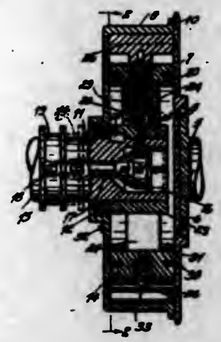
1. A shaft, a nut thereon, said shaft and nut having mating spiral grooves therein forming screw threads, a single row of balls movable in said grooves, and a single spring at each end of said grooves bearing against said row of balls, to limit the movement of said balls toward either end of said nut.

1,905,040. AIR CONDITIONING SYSTEM FOR RAILWAY CARS. LEE W. MELCHER, Winnetka, Ill. Original application filed Sept. 2, 1930, Serial No. 479,227. Divided and this application filed July 9, 1931. Serial No. 549,623. 12 Claims. (Cl. 257—7.)



5. The combination with a railway car, of an air filter mounted under the body of the car, a conduit extending through the bottom of the car, a motor-driven fan also mounted under the car-body and connected to draw air through the filter and to discharge the filtered air through the conduit into the car, and a refrigerating unit associated with the filter and fan and comprising a refrigerant line positioned to cool the air forced through the filter by the fan.

1,905,041. HYDRAULIC CLUTCH. EDWARD R. MONROE, Bay City, Mich., assignor of one-fourth to Clyde G. McPherson, Black River, Mich. Filed Aug. 25, 1930. Serial No. 477,504. 8 Claims. (Cl. 192—58.)



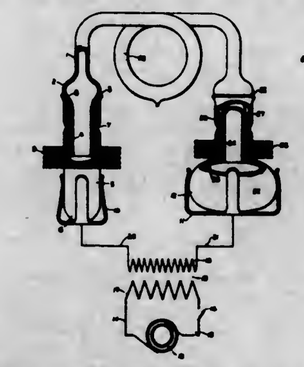
1. In a hydraulic clutch comprising an eccentrically bored shell adapted to be connected to a driving member, a driven member journaled in said shell and including a shaft, said driven member being provided with a rim forming a chamber between said rim and shell, a liquid reservoir in the driven member and concentric with said chamber, and check valves mounted in said rim for admitting liquid from said reservoir to said chamber as the shell is rotated.

1,905,042. PRESSURE CONTROLLED VALVE. EMMETT B. MOORE, Evanston, Ill. Filed Aug. 14, 1930. Serial No. 475,151. 1 Claim. (Cl. 152—11.5.)



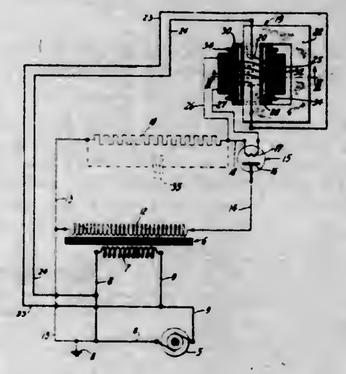
A device for connecting a sealed container with a source of fluid pressure comprising a stem having a flow passage through it and constituting a rigid part of said device and arranged to be permanently mounted in the container wall; a casing of which said stem is a rigid part arranged to be located within the container, said casing having a diaphragm chamber communicating with the passageway through the stem, and a duct providing communication between said chamber and the cavity of the container; a diaphragm in the casing having one side exposed to pressure in the chamber, the passageway through the stem being formed to provide a valve seat; a valve member co-acting with said seat for controlling flow through the stem passageway; a valve stem connected to the valve member and associated with the diaphragm for movement therewith in the pressure-responsive movement of the diaphragm, the valve being adjustable relatively to the diaphragm for varying the predetermined pressure necessary for moving the valve to closed position, said stem being formed with a detachable part at the portion of said stem outside the container to permit access to said valve for adjustment thereof; means normally urging the diaphragm in valve-opening direction, and a check valve mounted in the detachable portion of the stem arranged to open for inflow and seating against reverse flow.

1,905,043. LUMINOUS DISCHARGE DEVICE. MONTFORD MORRISON, Montclair, N. J., assignor, by mesne assignments, to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Feb. 25, 1929. Serial No. 342,463. 6 Claims. (Cl. 176—126.



1. A gaseous ionization electrical discharge device comprising a translucent tube with a spaced extension end and a hollow metallic electrode of relatively large area surrounding said tube end and sealed externally to a small area thereof to provide a substantial spacing between the greater portion of the area of said tube end and said surrounding electrode, said electrode being operated internally at sub-atmospheric pressure and externally at atmospheric pressure.

1,905,044. CONSTANT POTENTIAL DEVICE. MONTFORD MORRISON, Montclair, N. J., assignor to Westinghouse X-Ray Company, Inc., a Corporation of Delaware. Filed July 2, 1931. Serial No. 458,281. 6 Claims. (Cl. 175—363.)



1. In combination with a unitary load, a source of alternating current therefor, a thermionic discharge device provided with a cathode to be heated for permitting current to flow to said load during one half wave of the alternating current cycle while suppressing the remaining half wave, and a transformer for heating the cathode of said device provided with a primary winding having an elongated surface area and a secondary winding disposed relative to said primary winding and having an elongated surface area for producing an electrostatic capacity effect within said transformer to supply constant potential energy to said unitary load.

1,905,045. TROMBONE. FREDERICK W. NEPTUNE, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Oct. 12, 1931. Serial No. 568,357. 5 Claims. (Cl. 84—395.)

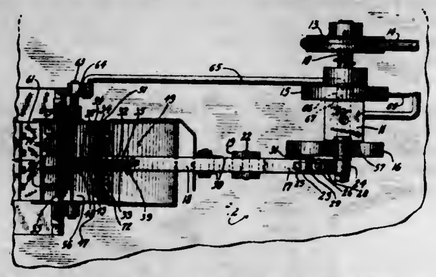


3. In a trombone having a bell section, a bell branch, and a pair of braces rigidly connecting said bell section with said bell branch, a curved thumb hook mounted between said braces and adjacent the lower junction of one of said braces with said bell branch.

1,905,046. MACHINE FOR FEEDING COILED SECTIONS. CHARLES A. NICOLAI and ERIK LINDEGAARD, Bloomfield, N. J., assignors to Westinghouse Lamp Company, a Corporation of Pennsylvania. Filed Oct. 8, 1930. Serial No. 487,238. 11 Claims. (Cl. 140—182.)

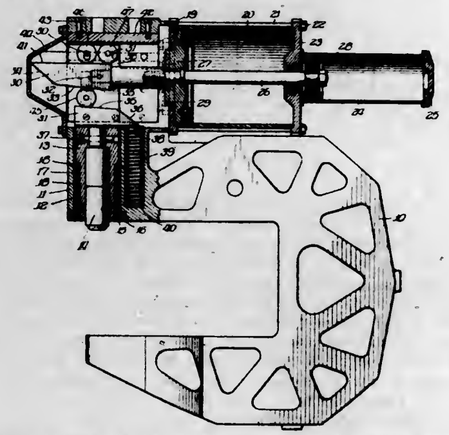
1. A machine for feeding coiled sections comprising a hopper for supporting a plurality of sections, lifting means

for removing a section from said hopper, a rocker plate, means for moving said lifting means over said plate for



the deposit of a section on said plate and means for actuating said plate to discharge said section.

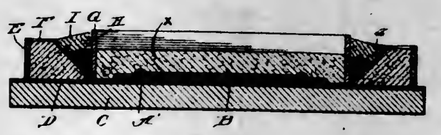
1,905,047. ROLLER WEDGE RIVETER. ALLAN A. NORIN, Chicago, Ill., assignor to Hanna Engineering Works, Chicago, Ill., a Corporation of Illinois. Filed June 21, 1930. Serial No. 462,735. 1 Claim. (Cl. 74—14.)



In a machine of the character described, a longitudinally movable wedge, means for producing movement of said wedge in opposite directions, a transversely movable plunger actuated in one direction by the working stroke of said wedge, resilient means for returning said plunger during the return stroke of said wedge, a wedge-shaped block carried by said plunger, said wedge and said wedge-shaped block each having a double inclined working surface for producing initial rapid movement of said plunger and final slow movement of said plunger with respect to the movement of said wedge, a movable roller in rolling contact with the working surface of said wedge and said wedge-shaped block, means guided for movement in the direction of travel of said wedge supporting the axis of said roller for movement in the direction of movement of said plunger with respect to the movement of said wedge and means actuated by the return movement of said wedge for moving said last-named means and said roller into a predetermined initial position with respect to the working surfaces of said wedge and said wedge-shaped block.

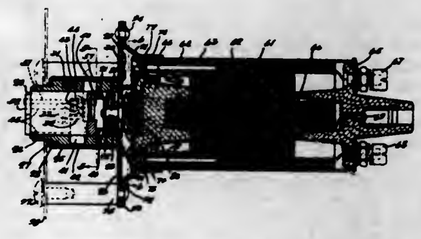
1,905,048. METHOD OF MAKING WOOD MOLD DIES. CHARLES B. NORRIS, FRANK M. CURRAN, and HENDRIK W. VAN STERNWYK, Grand Rapids, Mich., assignors to Haskelite Manufacturing Corporation, a Corporation of New York. Filed Apr. 23, 1930. Serial No. 446,656. 5 Claims. (Cl. 22—204.)

1. The method of producing one of a pair of dies adapted to mold wood panels, which comprises the making of an electro-deposited shell with flaring sides and having the design in the under face of the bottom wall, setting the shell on a support, placing a frame, larger than the shell on the support, around the shell, setting a second



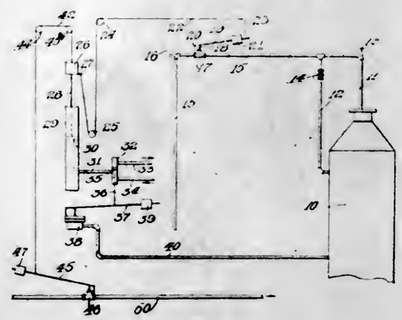
frame within the shell, filling the spaces between the sides of the pan and the two frames with non-combustible material, and pouring molten metal into the pan in the space within the inner frame.

1,905,049. LOCK SWITCH. HARRY E. NORVIEL, Anderson, Ind., assignor to Delco-Remy Corporation, Dayton, Ohio, a Corporation of Delaware. Original application filed Aug. 21, 1926, Serial No. 130,615. Divided and this application filed Apr. 12, 1927. Serial No. 183,143. 7 Claims. (Cl. 200—44.)



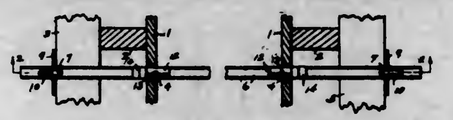
1. An electric circuit controller and lock therefor comprising, in combination, a unitary sub-assembly including a linearly movable operating member, a lock therefor, and a case for the member and lock; a unitary sub-assembly including a switch having a linearly movable contact and a case for the switch; means for connecting the two cases; and means including in one of the sub-assemblies for transmitting motion from the operating member to the movable contact and extending through an opening in one of the cases.

1,905,050. APPARATUS FOR AND METHOD OF COOKING WOOD PULP. LEON VICTOR PELOT, Wisconsin Rapids, and FRANK PELOT, Port Edwards, Wis., assignors to Nekoosa-Edwards Paper Company, Port Edwards, Wis., a Corporation of Wisconsin. Filed Apr. 29, 1932. Serial No. 608,154. 10 Claims. (Cl. 92—7.)



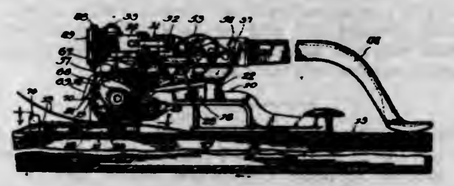
1. In combination with a pressure cooking vessel, valved pressure relief means, valved steam inlet means and means actuated by pressure in the vessel to operate said relief and steam inlet means.

1,905,051. SPREADER CLAMP. ERNEST A. POOD, Houston, Tex. Filed Aug. 14, 1930. Serial No. 475,815. 2 Claims. (Cl. 25—131.)



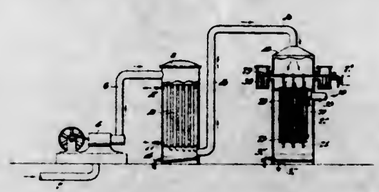
2. The combination with a form for molding concretious material and having aligned openings, of a clamp formed of a strip of material having end keyways and fitted through said openings, wedges through said keyways, keys fitted inwardly through said openings adjacent said strip and whose inner ends project into the form and means on the keys engaging with the form to retain the keys against accidental displacement.

1,905,052. STRETCHING TOOL. HOWARD C. PORTER, La Grange Park, Ill., assignor to Signode Steel Strapping Company, Chicago, Ill., a Corporation of Delaware. Filed Mar. 18, 1932. Serial No. 599,694. 13 Claims. (Cl. 254—51.)



1. In a stretching tool, in combination a frame having a foot to underlie a binder, a rotatable tensioning device overhanging the foot, manually operable means for actuating the tensioning device, and a tie actuated by said means for securing the outer ends of said foot and tensioning device against spreading.

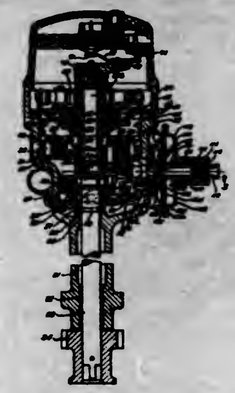
1,905,053. TREATMENT OF GAS. ALFRED R. POWELL, Elizabeth, N. J., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Filed Aug. 5, 1931. Serial No. 555,216. 4 Claims. (Cl. 183—114.)



1. The process of treating fuel gas, which comprises freeing the gas from tar, ammonia, and other undesirable constituents, compressing the purified gas, cooling the compressed gas to substantially atmospheric temperature, and removing oil mist thereby formed in the gas by electrical precipitation.

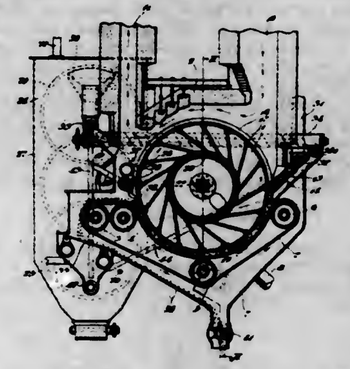
1,905,054. IGNITION APPARATUS. FRANK H. PRESCOTT and JAMES L. ARTHUR, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Mar. 25, 1931. Serial No. 525,200. 6 Claims. (Cl. 123—117.)

1. An ignition timer for internal combustion engines comprising in combination, a circuit interrupter, an engine driven cam for operating the same, devices responsive respectively to engine load conditions and engine speed conditions for controlling the timing of the operation of the circuit interrupter with respect to the cycle of engine operations, and means carried by one of said devices co-



operating with the other of said devices for limiting the total amount of ignition interrupter advance produced by the combined effect of the devices.

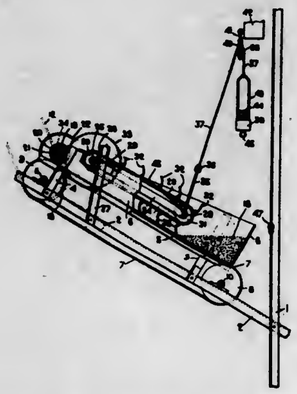
1,905,055. METHOD OF AND APPARATUS FOR PRODUCING COKE. FRANZ PUENING, O'Hara Township, Allegheny County, Pa. Filed Apr. 7, 1928. Serial No. 268,204. 8 Claims. (Cl. 202—14.)



1. The combination with two spaced movable members, one of said members being adapted to be heated to coke coal in contact therewith, and means for supplying a layer of coal to the heatable member and a layer of fine coke superposed on the layer of coal and in contact with the other member, of a source of heating gases for heating said heatable member, means for discharging the resultant product of said heatable member and said fine coke from said heatable member, and means for supplying fine coke adjacent to said discharging means and so as to constitute a seal by the fine coke between the heating gases and the gases of distillation of said coal.

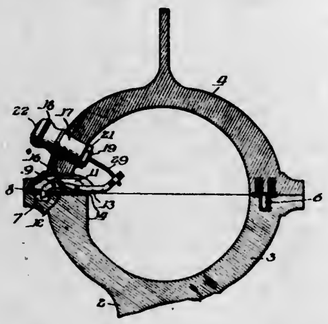
2. The method of coking coal by means of a moving heat-storage device which comprises supplying coal to a portion of the surface of said device to be treated during a portion of its path of movement, supplying hot gases for heating said device to coking temperature during another portion of its path of movement, the coal and heating gases being applied to the same surface of the device, coking the coal on the device by heat previously absorbed thereby and supplying solid granular material infusible at the coking temperature for sealing said device between the different portions of its path of movement to prevent interchange of heating gases and gases of distillation.

1,905,056. MECHANISM FOR DISTRIBUTING ARTICLES UPON A TRAVELING ASSEMBLING CARRIER. FORREST G. PURINTON, Waterbury, Conn., assignor to The Patent Button Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 3, 1930. Serial No. 499,717. 8 Claims. (Cl. 198—29.)



1. A machine for assembling small articles in predetermined closely arranged juxtaposition comprising an inclined hopper having a bottom, side walls and a transverse wall at its lower end to receive a compact mass of said small articles, said bottom comprising a traveling assembling carrier provided with means to engage and remove from the mass of articles in said hopper only such articles as are presented thereto in a predetermined position, a traveling spreader having yieldable means to engage the mass of articles, means for actuating said spreader to cause it gradually to drag the articles from the mass and sweep and distribute the same over said assembling carrier, and means for yieldably supporting said spreader to permit it to accommodate itself to the varying depth of the mass of articles in the hopper.

1,905,057. LOCK. BRUNO RICCINI, Chicago, Ill., assignor to Daprato Statuary Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 20, 1931. Serial No. 524,033. 3 Claims. (Cl. 70—14.)



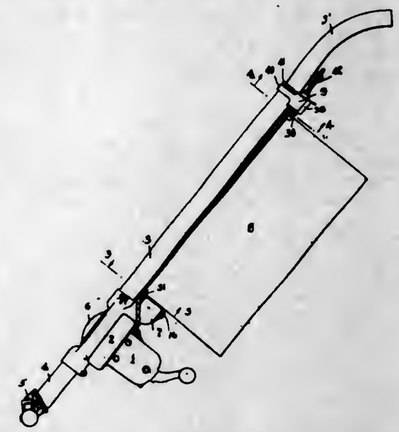
1. In a locking mechanism, a cylindrical casing terminating at one end in an operating knob, a lock cylinder slidingly mounted in said casing, means for limiting the sliding movement of said cylinder in both directions comprising a collar upon said cylinder and a sleeve within said casing, a spring within said casing for maintaining the cylinder in one extreme position, and means for locking the cylinder in its other extreme position and a latch actuated by said cylinder.

1,905,058. SWAB PLUNGER. NORMAN H. RICKER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Feb. 1, 1932. Serial No. 590,073. 5 Claims. (Cl. 103—52.)



1. A swab plunger comprising a tubular body member, a valve seat at the lower end thereof, a valve adapted to close upwardly into said seat, a support for said valve below said seat, and means within said support normally acting to move said valve to open position.

1,905,059. VACUUM CLEANER. FREDERICK RIEBEL, Jr., and DEWEY M. DOW, Toledo, Ohio, assignors to Air Way Electric Appliance Corporation, Toledo, Ohio, a Corporation of Delaware. Filed May 20, 1931. Serial No. 538,638. 6 Claims. (Cl. 183—51.)



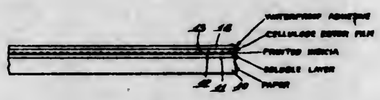
1. In combination with a suction cleaner including a handle and a projecting part extending therebelow, a latch member longitudinally slidable relative to said part and projecting therebeyond at each end, one end of said latch member being formed to receive a bag element, and the other end being formed for engagement by an operator.

1,905,060. PROCESS OF TREATING COAL WITH OIL. HAROLD J. ROSE, Penn Township, Allegheny County, Pa., and WILLIAM H. HILL, New York, N. Y., assignors to The Koppers Company of Delaware, a Corporation of Delaware. Filed Apr. 12, 1929. Serial No. 354,694. 2 Claims. (Cl. 44—1.)

1. A process comprising heating a mixture of water-gas tar and about 10 per cent of sulphur in the presence of coal up to about 320° C. under pressure, gradually reducing the temperature below 200° C., and then reducing the pressure.

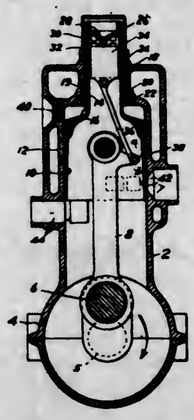
2. A process comprising heating 80 parts by weight of water-gas tar and 8 parts by weight of sulphur in the presence of 20 parts by weight of coal up to about 320° C. under pressure, gradually reducing the temperature below 200° C., and then reducing the pressure.

1,905,061. ART OF SHADING DRAWINGS. HARRY SAX, Chicago, Ill. Filed Feb. 11, 1931. Serial No. 515,061. 8 Claims. (Cl. 41—33.)



1. A film for toning drawings which comprises a thin cellulose ester support, a plurality of indicia on one side thereof, and a waxy non-smudging adhesive on the other side.

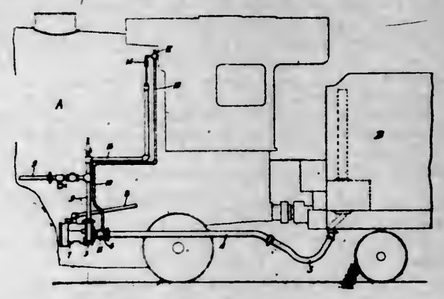
1,905,062. INTERNAL COMBUSTION ENGINE. JOSEPH SCHAEFFERS, Camden, N. J. Filed May 24, 1930, Serial No. 455,180, and in Germany Jan. 4, 1930. 8 Claims. (Cl. 123—47.)



7. A two-cycle internal combustion engine comprising a cylinder, a piston movable in the cylinder, a shaft, connections between the piston and shaft for driving the latter, a hollow extension carried by the piston, providing communication between its opposite sides, and reciprocating in a bore aligned with the cylinder, said extension having an intake port arranged to communicate with the cylinder when the piston is at the outer end of its stroke, and the cylinder having an exhaust port arranged to be uncovered by the piston at the outer end of its stroke, and automatic means within the extension of the piston arranged to delay the closing of the intake port until after the closing of the exhaust port.

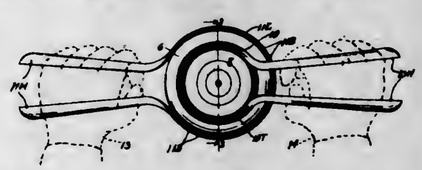
1,905,063. LOCOMOTIVE. EUGENE L. SCHELLENS, Millburn, N. J., and CHRISTOPHER A. SCHELLENS, Marblehead, Mass., assignors to C-S Engineering Company, Jersey City, N. J., a Corporation of Delaware. Filed July 27, 1927. Serial No. 208,796. 4 Claims. (Cl. 122—412.)

1. In a locomotive having a boiler with its feed check valve and a tank, a feed water system including a heater, a centrifugal pump positioned for gravity feed from said tank, said pump having connections to said boiler and heater, whereby it is subject to possible leak or influx of steam and air from both, vent means for the pump



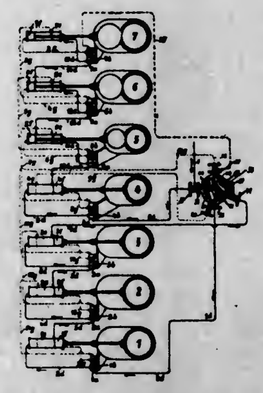
in communication with the discharge side of the pump, and means for closing off said communication upon operation of the pump.

1,905,064. PRESERVING JAR HANDLING MEANS. SARAH E. SCHLOTT, St. Paul, Minn. Filed May 12, 1930. Serial No. 451,820. 1 Claim. (Cl. 81—3.1.)



In a car cap manipulating device of the class described, comprising a clamp formed of flat metal stock with a loop part threaded interiorly to engage a correspondingly threaded jar-cap, and a pair of integral handles extending approximately radially from said loop, the latter comprising in part a lower outwardly flared flange terminating at its perimeter in a downwardly directed rim flange to form a guard for the lower rim of the jar cover.

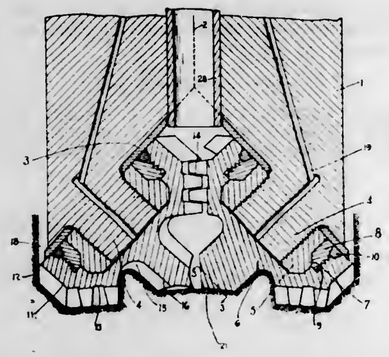
1,905,065. VALVE ACTUATING MEANS FOR AIR HEATERS. BERNHARD SCHOLL, Rolsdorf near Duren, Germany, assignor to Zimmermann & Jansen, G. m. b. H., Duren-Rhld., Germany, a Company of Germany. Filed Oct. 27, 1930, Serial No. 491,459, and in Germany Dec. 16, 1929. 6 Claims. (Cl. 137—144.)



1. In a system for controlling valves or gates of commercial plants, the combination, with the members to be controlled, of actuating cylinders and pistons one for

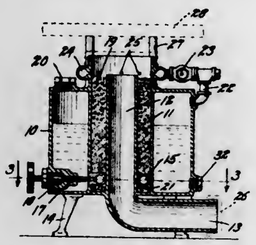
each of said members, fluid operated valves controlling the supply of motive fluid to said cylinders, tubular connections for connecting said valves and cylinders in series and so that after operation each piston connects the working chamber of its cylinder with the next valve for supplying the motive fluid from the working chamber thereto and each valve connects the chambers of the cylinder controlled thereby respectively with the supply and discharge of the motive fluid, and means for supplying the motive fluid to said valves for setting the same in positions for directing the motive fluid to said cylinders.

1,905,066. ROLLING DRILL CUTTER. FLOYD L. SCOTT, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Aug. 19, 1930. Serial No. 476,301. 9 Claims. (Cl. 255—71.)



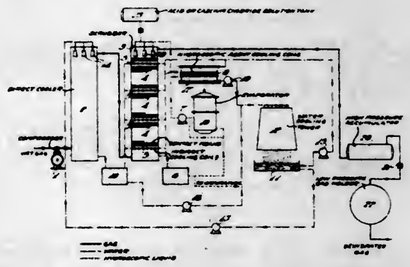
1. A well drill including a head, a pair of downwardly and inwardly inclined shafts thereon, inwardly tapered, cutters rotatable on said shafts, said cutters having a toothed cylindrical area, positioned to cut the outer part of the hole, and a toothed cylindrical area adjacent the center of the hole.

1,905,067. LIQUID FUEL BURNER. SAMUEL T. SHERRICK, Denver, Colo., assignor to S. & C. Holding Corporation, Denver, Colo., a Corporation of Colorado. Filed Mar. 28, 1932. Serial No. 601,543. 5 Claims. (Cl. 158—72.)



1. A liquid fuel burner comprising: a fuel reservoir; a burner sleeve projecting upwardly from within said reservoir through the top thereof; an air conduit passing upwardly through said burner sleeve in spaced relation to the walls thereof and opening through the bottom of said fuel reservoir; porous material filling the space between said air conduit and said burner tube; and a perforated tubular ring surrounding said air conduit within said burner sleeve, said ring communicating with said reservoir.

1,905,068. APPARATUS FOR DEHYDRATING GAS. FREDERICK W. SPERR, Jr., Pittsburgh, Pa., assignor to The Koppers Company of Delaware, a Corporation of Delaware. Original application filed Oct. 11, 1926, Serial No. 140,749. Divided and this application filed Dec. 30, 1930. Serial No. 505,567. 1 Claim. (Cl. 261—11.)



Apparatus for dehydrating fuel gas which comprises, in combination, a compressor located in the path of the gas, a direct cooler and a scrubber having internally disposed direct-contact sections and indirect cooling sections, located in the path of the compressed gas, a brine cooler, means for recirculating a water absorbent brine through said brine-cooler and the direct-contact sections of said scrubber, an atmospheric cooling tower, and means for supplying cooled water from said tower to said direct cooler, the indirect cooling sections of said scrubber and said brine-cooler.

1,905,069. SOAP DISH. RAY L. STAIR, Los Angeles, Calif. Filed Jan. 2, 1929. Serial No. 329,872. 1 Claim. (Cl. 45—28.)

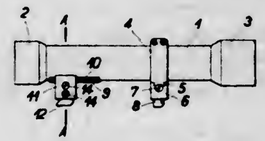


As an article of manufacture, a soap dish, comprising a body formed in a single piece from rubber and comprising a bottom and inclined walls projecting upwardly from the sides and ends of said bottom, there being a drain opening formed through the bottom of the dish adjacent to one side thereof, the upper surface of the bottom of which dish declines from all directions toward said outlet opening, a spout formed integral with the underside of the dish around the opening therein, which spout projects outwardly and downwardly a reenforcing member formed integral with the underside of the bottom of the receptacle immediately to the rear of said spout and below the lowermost portion of the upper surface of the bottom of the soap dish, nuts imbedded in the bottom of said dish for the reception of vacuum suction cup fastening means lugs formed integral with the bottom of the body of the disc immediately below said nuts, vacuum suction cups applied to the underside of the dish with their upper portions engaging said lugs and screws projecting from said cups upwardly through said lugs and engaging said nuts.

1,905,070. TELESCOPE SIGHT. ADOLF STEINLE, Jena, Germany, assignor to Firm of Carl Zeiss, Jena, Germany. Filed Feb. 25, 1930, Serial No. 431 184, and in Germany Mar. 6, 1929. 1 Claim. (Cl. 33—50.)

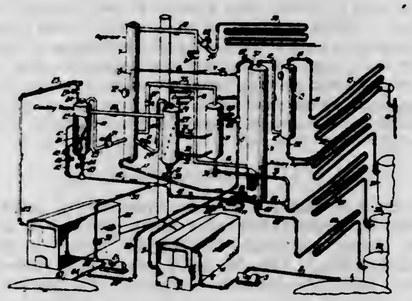
A device for fixing a telescope on a rifle, the said device consisting of two clamping devices adapted to detachably

support the telescope and to engage projections in the rifle barrel, at least one of the clamping devices being provided with a row of projections approximately parallel



to the axis of the telescope, and the telescope being equipped with rack teeth interlocking with the projections of the clamping device.

1,905,071. METHOD OF TREATING HYDROCARBONS. EDWARD E. STEWART, Wichita Falls, Tex. Original application filed Nov. 6, 1926, Serial No. 146,671. Divided and this application filed Feb. 11, 1929. Serial No. 338,951. 3 Claims. (Cl. 196—58.)



1. The method of treating hydrocarbon oil including heating a stream of oil under pressure to cracking temperature, passing the heated stream of oil through a confined column of the hot oil at cracking temperature in a primary cracking zone, maintaining pressure on said column of hot oil to retain the column in liquid state, passing oil from said primary cracking zone to a secondary cracking zone, drawing off liquid from the secondary cracking zone at a rate to prevent substantial accumulation of liquid oil therein, passing vapors from said secondary cracking zone to a vapor reaction zone, controlling flow of vapors to the vapor reaction zone to maintain relatively high pressure in the secondary cracking zone, delivering vapors from the vapor reaction zone to a blending zone, condensing heavier components of said vapors in the blending zone, delivering condensate from the blending zone to a primary separating zone, withdrawing vapors from the primary separating zone, drawing liquid oil from said primary separating zone for supply of cracking stock, and delivering preheated initial charging stock to the blending zone for commingling of vapors and condensate of said initial stock with vapors and condensate of the cracked oil.

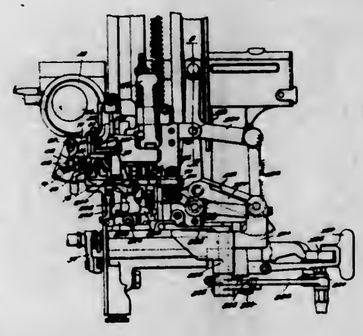
1,905,072. FILMED COAL AND COMPOSITION OF MATTER FOR PRODUCING SAME. KENNETH B. STUART, Pueblo, Colo., assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filed Oct. 24, 1930. Serial No. 491,069. 1 Claim. (Cl. 44—6.)

A composition of matter, for filming coal, comprising residue from the refining of benzol, rosin size and water in substantially the following proportions—residue 8 gallons and rosin size 8 pounds, mixed with sufficient water to make 50 gallons.

1,905,073. METHOD OF FILMING COAL. KENNETH B. STUART, Pueblo, Colo., assignor to The Colorado Fuel and Iron Company, Denver, Colo. Filed Oct. 13, 1930. Serial No. 488,551. 13 Claims. (Cl. 44—6.)

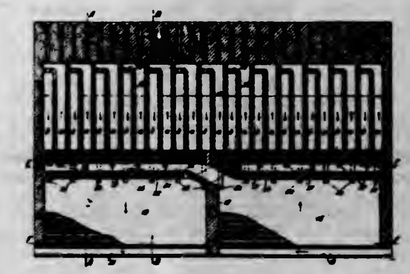
1. The method of filming coal comprising applying to the surface of the coal para coumarone in solution.

1,905,074. SHOE SEWING MACHINE. LAURENCE E. TOPHAM, Wenham, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 27, 1928. Serial No. 265,169. 26 Claims. (Cl. 112—47.)



1. In a machine provided with devices engaging the work and acting intermittently to perform an operation on the work and feed the work, carriers to which said devices are connected arranged to reciprocate along the line of feed, mechanisms for actuating said devices and reciprocating said carriers to impart a continuous feeding movement to the work, and adjusting means common to said carrier reciprocating mechanisms for adjusting said mechanisms simultaneously.

1,905,075. RETORT OVEN FOR PRODUCING GAS AND COKE. FRIEDRICH TOTZEK, Essen-Stoppenberg, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Nov. 3, 1928, Serial No. 316,975, and in Germany Nov. 10, 1927. 18 Claims. (Cl. 202—144.)



1. A coke oven battery comprising a series of alternate horizontal coking chambers and heating walls therefor arranged side by side in a row, each of said heating walls comprising a row of vertical flues, two parallel rows of regenerators along opposite sides of the battery respectively and below the coking chambers and heating walls, a partition extending throughout the longitudinal middle axis of said battery and separating the two rows of regenerators, ducts directly communicably connecting the re-

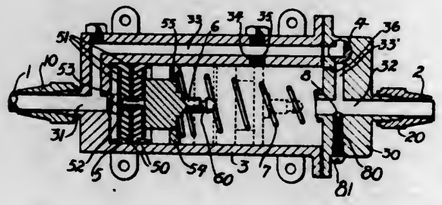
generator chambers on one side of said partition with flues in the portion of the oven above them, and a canal extending from the inner top corner of each regenerator chamber first slightly ascending and then in substantially horizontal direction above the regenerator chamber and below the levels of the bottoms of the flues on the other side of said partition, and ducts communicably connecting each canal with flues in the portion of the oven above the same, the ascending portions of adjoining canals crossing each other in spaced relation.

1,905,076. WALKING STICK. LLOYD VAN SCIVER, Chestnut Hill, Pa. Filed Feb. 3, 1932. Serial No. 590,701. 8 Claims. (Cl. 135—47.)



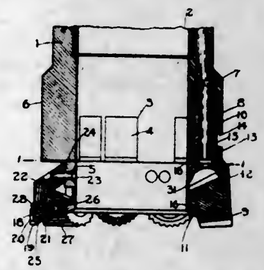
3. A combination cane and pickup device including a cane, a finger normally along the lower part of the cane, a pivoted connection between the finger and cane at the upper end of the finger, teeth arcuate with respect to the pivot and rigidly connected to the finger, a rack operatively connected to the said teeth, a link having a lower end supporting the rack and mechanism operative at the handle of the cane for vertically shifting the link in order to open and close the finger with respect to the cane.

1,905,077. SAFETY MEANS FOR HYDRAULIC BRAKES. HENRY A. WALKER, Rockport, Wash. Filed July 19, 1930. Serial No. 469,026. 3 Claims. (Cl. 303—84.)



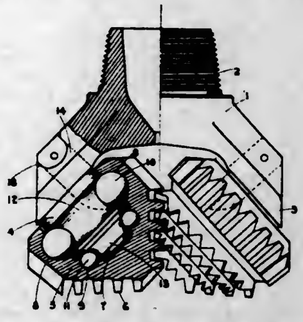
2. In combination with a pressure supply conduit and a pressure transmitting conduit, a cylinder connected at its opposite ends to the respective conduits, a piston normally movable from a position of rest, at the pressure end of the cylinder, towards the opposite end, but normally stopping short of such end, its return being induced by reacting pressure through the pressure transmitting conduit, means for engaging and holding said piston following abnormal movement away from the pressure end, but releasable upon application of reacting pressure, comprising a circumferentially grooved stem on said piston aligned with and of a size to enter the pressure transmitting outlet of the cylinder, and a ball-catch in such outlet engageable with said groove.

1,905,078. CORE DRILL REAMER. LOUIS H. WELLENSIEK, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Oct. 5, 1931. Serial No. 566,856. 6 Claims. (Cl. 255—72.)



1. A core drill including a body, a head thereon, rolling drill cutters mounted on said head, rolling reamer cutters on said head between said drill cutters, said reamer cutters being tapered upwardly and outwardly and having cutting teeth on the periphery and along the lower outer margin acting on the side wall of the hole and a beveled larger end presented downwardly and toothed to cut the bottom of the hole.

1,905,079. ROLLER CUTTER RETAINING DEVICE. LOUIS H. WELLENSIEK and FRED C. SMITH, Jr., Houston, Tex., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Nov. 21, 1931. Serial No. 576,510. 2 Claims. (Cl. 255—71.)

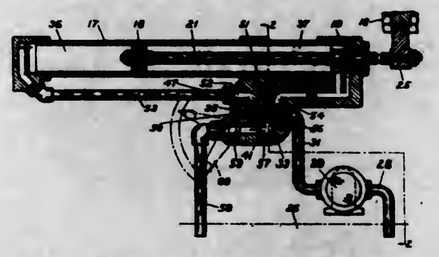


1. In a well drill, a head, cutter shafts thereon tapered adjacent their ends, said shafts having grooves thereon for ball bearings, one of which is upon said tapered area, balls in said grooves, cutters on said shafts and a bore in said head and shaft leading in a straight line to one of said grooves, and means to fill said bore holding the balls in said groove.

1,905,080. HYDRAULICALLY ACTUATED TABLE RECIPROCATING MECHANISM. JOSEPH R. WHITTLES, Rockford, Ill., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 30, 1930. Serial No. 505,661. 2 Claims. (Cl. 121—45.)

1. In combination with a fluid pressure motor having a cylinder and piston for reciprocating a machine table and end ports in the cylinder, a reversing valve connected with said ports comprising a casing having a chamber for a rotary valve, an axial inlet port and three peripheral

ports opening through the casing to the chamber, one of which ports serves as an exhaust and the others serve for feeding fluid to the motor, a rotary valve within the chamber having an axial bore communicating with the inlet port, a feed passage in said valve extending from the bore to the periphery and having its opening at the periphery so shaped and arranged that, when the valve is in a neutral position, it may communicate with both feed ports to balance the pressure on both sides of the piston and at the same time prevent exhaust of fluid from either



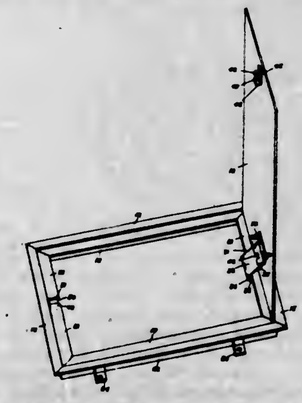
end of the cylinder, an exhaust passage on the opposite side of the valve from the feed groove and spaced therefrom by walls, but which is so arranged that it may connect either feed port with the exhaust port, each of said walls being narrower than the width of either feed port so that when the valve is moved from a neutral to a reverse position, part of the fluid may by-pass in a gradually decreasing amount from the feed groove through one of the feed ports into the exhaust passage and cause a gradual acceleration of the piston.

1,905,081. COVERED WELDING ROD. HENRY B. WOODS, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Dec. 23, 1929. Serial No. 416,211. 3 Claims. (Cl. 219—8.)

1. A welding electrode composed of a metal core, a covering therefor containing calcium carbonate, silica, sodium silicate and ferromanganese in the following proportions by weight:

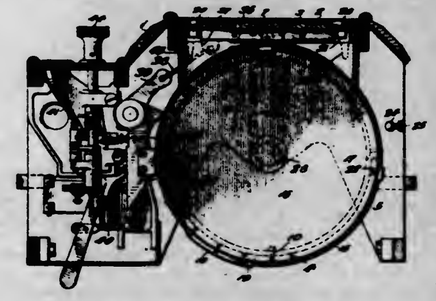
Calcium carbonate	24 to 45
Silica	25 to 45
Sodium silicate	5 to 20
Ferromanganese	5 to 25

1,905,082. FLUSH PANEL CONSTRUCTION. HARRY B. WUBBLING, Cincinnati, Ohio. Filed Dec. 19, 1930. Serial No. 503,418. 3 Claims. (Cl. 184—46.)



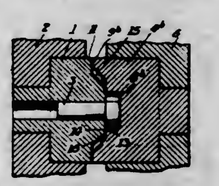
2. The combination with a frame having an inwardly projecting flange with a way therethrough and a closing panel adapted to contact said flange, of a latch member attached to the rear of the panel and movable from the outer face thereof, said latch member being receivable through said way and movable to a latched relationship with said flange, and means on the latch member and flange and adapted to initiate opening movement of the panel upon unlatching thereof.

1,905,083. VENDING DRUM FOR COIN CONTROLLED VENDING MACHINES. ALBERT M. CRAMER, Philadelphia, Pa., assignor to Horn and Hardart Baking Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Oct. 17, 1927. Serial No. 226,675. 3 Claims. (Cl. 232—1.)



1. A rotatably mounted vending drum for coin controlled vending machines having super-imposed article receiving compartments, said drum having a second opening in proximity to each compartment provided with a bottom bar extending below the top of the juxtaposed compartment, and a door for each compartment controlling access thereto and adapted to move into a second opening and have its opening movement limited by the bar thereof.

1,905,084. MANUFACTURE OF BOLTS. JOSEPH F. FING, La Grange, Ill., assignor to United Screw and Bolt Corporation, Chicago, Ill., a Corporation of Ohio. Filed Nov. 28, 1930. Serial No. 498,636. 15 Claims. (Cl. 10—25.)

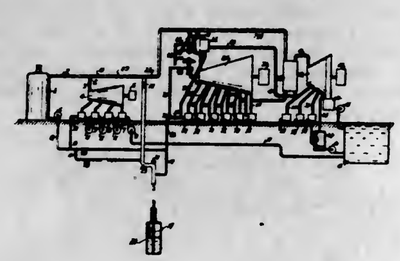


1. A pair of die members for use in a bolt or screw forming machine, one of said die members being provided with a recess to receive a piece of stock, the other of said die members being provided with a die recess therein, one of said members being further provided with a projecting abutment surface arranged to engage the other die member and limit the relative movement of said members toward each other, one of said members also being recessed to provide a depository to receive scrap material trimmed from the stock.

1,905,085. HOT WATER STORAGE FOR POWER GENERATION. FRANK W. GAY, Newark, N. J. Filed Apr. 28, 1930. Serial No. 447,921. 6 Claims. (Cl. 60—84.)

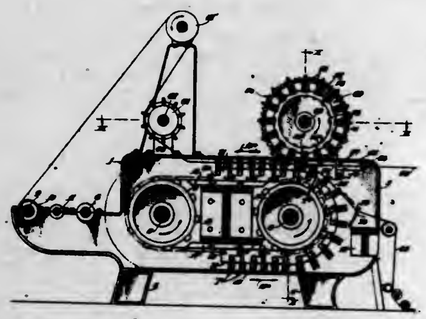
1. In a power generating station adapted to carry peak loads, a high pressure boiler, a huge storage reservoir arranged to store water at high temperature and pressure, means for utilizing the greater portion of the energy delivered by said boiler during light load periods to heat

water for storage in said reservoir, a plurality of evaporators arranged in series, said evaporators being connected to said storage reservoir during heavy load periods so that hot water from said reservoir is allowed to pass in succession through each of said evaporators, a turbine having a plurality of turbine stages, said turbine being connected to receive steam from said boiler during heavy



load periods, connecting pipes serving to connect each of said evaporators to a respective stage of said turbine, whereby a portion of the water from said reservoir, in passing through a respective one of said evaporators, flashes into steam and is delivered through a connecting pipe to the respective turbine stage, thereby augmenting the steam supplied directly from the boiler to said turbine.

1,905,086. WIRE FABRIC MAKING MACHINE. ISRAEL C. GELLMAN, Rock Island, Ill., assignor to Northwestern Barb Wire Company, Sterling, Ill., a Corporation of Illinois. Filed Sept. 8, 1931. Serial No. 561,527. 17 Claims. (Cl. 140—4.)



1. In a machine for making wire fabric embodying line and mesh wires, means for feeding a plurality of mesh wires, cams engageable with said mesh wires for deflecting juxtaposed portions of the mesh wires on opposite sides of each line wire alternately toward and away from said line wire, and means for wrapping the deflected portions about the line wires.

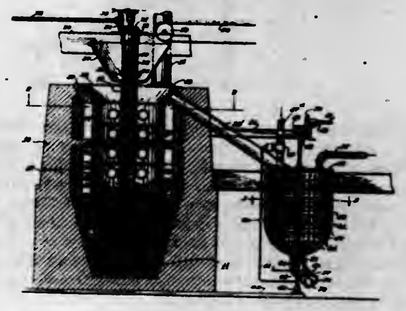
1,905,087. REACTIVATION OF SPENT FILTER MATERIALS. MAX GONBEL, Terre Haute, Ind., assignor to Commercial Solvents Corporation, Terre Haute, Ind., a Corporation of Maryland. Filed June 19, 1930. Serial No. 462,426. 11 Claims. (Cl. 252—2.)

1. A process for the revivification of spent decolorising agents which comprises extracting with a solvent mixture comprising an alcohol, a ketonic body, an aromatic hydrocarbon, and a diluent comprising a low-boiling petroleum fraction.

1,905,088. ANTHRAQUINONE VAT DYES AND A PROCESS OF MAKING THE SAME. ROBERT J. GOODRICH and EDWARD T. HOWELL, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed Aug. 8, 1929. Serial No. 384,463. 9 Claims. (Cl. 260—61.)

8. As a new product, a dyestuff composed of substantially pure brominated dimethoxy dibenzanthrone.

1,905,089. APPARATUS FOR THE CONTINUOUS CALCINATION OF GYPSUM. FRED J. GOUGH, Fort Dodge, Iowa, assignor to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 18, 1929. Serial No., 407,812. 4 Claims. (Cl. 222—6.)



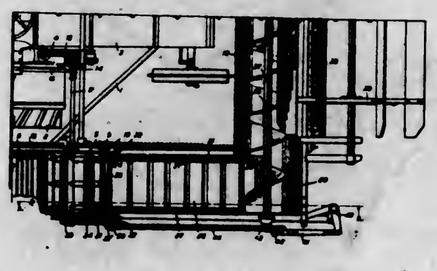
1. In a calcining apparatus for gypsum, a pair of cylinders of different diameters and in concentric arrangement, means for rotating the smaller of said cylinders, stirring arms secured to said small cylinder, said small cylinder being provided adjacent the upper and lower ends thereof with openings for the admission and discharge of material, a screw conveyor rigidly positioned in said small cylinder, means for rotating said small cylinder so as to cause the movement of material down said small cylinder into the bottom of said large cylinder, and means for heating said large cylinder.

1,905,090. CLUTCH MECHANISM. RONALD GEORGE GRIFFITH, Croydon, England, assignor to Creed and Company, Limited, Croydon, England. Filed Aug. 14, 1931, Serial No. 557,083, and in Great Britain July 2, 1931. 7 Claims. (Cl. 178—34.)



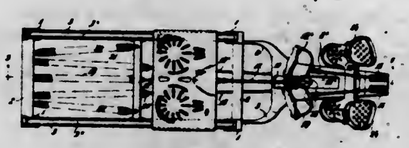
1. A rotatable type-head clutch mechanism comprising, a rotatable driving member, a type-head having a number of type characters arranged thereon and frictionally driven by said driving member, a stationary series of selectable stop members corresponding to said type characters, a yielding stop arm carried by said type-head and engageable with an actuated one of said series of stop members, and means controlled by the stop arm and rendered effective by the engagement thereof with an actuated stop member to reduce the frictional driving contact between the driving member and the type-head.

1,905,091. COMBINED HARVESTER, THRESHER, AND SEPARATOR. PERRIN J. HANSON, Independence, Mo., assignor, by mesne assignments, to Gleaner Harvester Corporation, Independence, Mo., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 448,072. 4 Claims. (Cl. 56—20.)



1. In a machine of the character described including a main frame and a separating mechanism on the main frame, a substructure adjustably supported from the main frame including a transverse conveyor housing, an interconnected longitudinal raddle housing communicating the transverse housing with the separator mechanism, a raddle in the longitudinal housing for delivering grain to the separator mechanism, and a screw conveyor in the transverse housing extending across the width of the raddle and arranged so that flights thereof move over the upper surface of the raddle for discharging grain substantially uniformly across the width of said raddle.

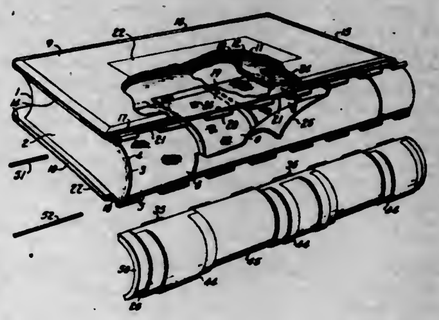
1,905,092. EXERCISE MACHINE. PETER S. HARDY, Stratford, Conn., assignor to Health Developing Apparatus Company, Inc., New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1931. Serial No. 556,380. 14 Claims. (Cl. 272—72.)



1. An exercising machine comprising a main frame having parallel side rails and front and rear transverse members supporting said rails, a seat movable over said rails, a supplemental frame member pivotally connected to and projecting forwardly of the first-named frame member and held against upward movement by abutment with the said front transverse member, a foot rest and a guide device carried by the supplemental frame member, hand grips and flexible tensioned connections therefor led over said guide device.

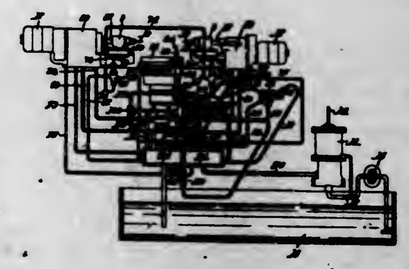
1,905,093. COVER FOR PERMANENTLY BOUND BOOKS. ERNEST C. HAHEL and ERNEST C. HAHEL, Jr., Atchison, Kans. Filed Dec. 16, 1931. Serial No. 581,286. 14 Claims. (Cl. 281—37.)

14. In a book including permanently bound signature sections, side covers for the signature sections, means permanently connecting the side covers to the signature sections, hinge sections permanently carried by the side covers, a removable back member for the book, hinge sections fixed to the side edges of the back member, and



means detachably connecting the respective hinge sections for securing the back member to said permanently attached side covers.

1,905,094. HYDRAULIC FEED SYSTEM FOR MACHINE TOOLS. ERIC J. HIRVONEN, Worcester, Mass., assignor to Leland-Gifford Company, a Corporation of Massachusetts. Filed May 31, 1930. Serial No. 457,953. 13 Claims. (Cl. 77—32.)



1. In a device for operating a machine tool, the combination with a tool head mounted to reciprocate, hydraulic means for moving the tool head forwardly to perform the work and withdrawing it automatically to its extreme retracted position, a feed pipe connected with a source of fluid under pressure, a hand-operated starting valve connected to said feed pipe, and a second pipe leading from the valve and adapted to be opened and closed thereby, of a work table, means for moving the work table to place the work in operative position, and a system of piping connected with the first named pipe through which pressure is applied to said work table moving means to actuate the table, means including a hydraulically-operated valve under conjoint control of said starting valve and said tool head for effecting the actuation of said hydraulic means to reciprocate said tool head, a second valve in the pipe system which is in series with said starting valve and is normally closed, but adapted to be opened by the movement of the tool head to its extreme retracted position to effect the operation of said table moving means.

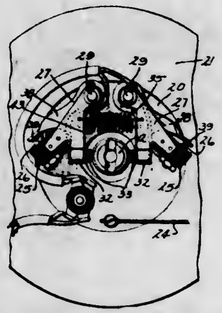
3. In a hydraulic operating means for machine tools and the like, the combination with a reciprocable tool head and automatic means for operating the tool head,

said tool head having a cam thereon, of means for conducting fluid under pressure, a valve to which said means is connected, the valve being provided with means whereby the pressure of the fluid will normally keep it closed, and means operated by the cam for opening the valve upon withdrawal of the head to its extreme neutral position, of a movable work table, means adapted to be operated upon the opening of said valve by the pressure of the fluid for advancing the work table a step to bring a piece of work into position for the tool to operate thereon, a work rest on the table, a jaw, means for moving the jaw in a position to engage the work on the rest and hold the jaw closed, a valve connected with the first named valve, and a handle on the second valve in position to be moved by said jaw to close said second valve whenever the jaw is held in an abnormal position either by the misplacement of the work therein or the presence of a foreign body.

1,905,095. BLACK VAT DYESTUFF PREPARATION. EDWARD T. HOWELL, Milwaukee, and ROBERT J. GOODRICH, South Milwaukee, Wis., assignors, by mesne assignments, to E. I. du Pont de Nemours & Company, a Corporation of Delaware. Filed May 21, 1930. Serial No. 454,506. 8 Claims. (Cl. 8—6.)

1. A vat dyestuff for coloring fibrous bodies in black shades comprising a composite mixture of dibenzanthrone and a vat dyestuff producing on the fibre a color within the range of orange to yellow, said vat dyestuff forming from 10 to 50% of the mixture.

1,905,096. BREAKER MECHANISM. FINN T. IBSENS, Wauwatosa, Wis., assignor to Outboard Motors Corporation, Milwaukee, Wis., a Corporation of Michigan. Filed Feb. 26, 1932. Serial No. 595,271. 7 Claims. (Cl. 200—27.)



1. In a timer mechanism, the combination with a cam shaft, a relatively fixed support, and breaker mechanism including relatively fixed and movable contacts, means yieldably mounting said relatively fixed contacts upon said support, means for governing the yielding movement of said relatively fixed contacts in accordance with erratic movements of said shell, and means for actuating the relatively movable contacts from said shaft whereby the several contacts are positioned as to timing by said support and are positioned entirely by said shaft in their movement to and from each other.

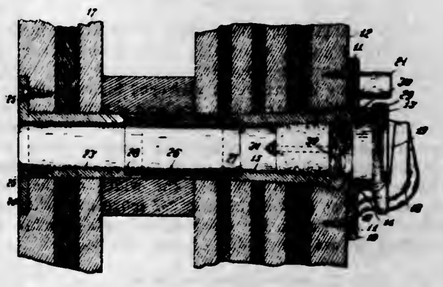
1,905,097. LOOSE LEAF MEMORANDUM BOOK. CLARENCE B. IRVING, Kansas City, Mo., assignor to Wilson-Jones Company, Chicago, Ill., a Corporation of Massachusetts. Filed Jan. 28, 1932. Serial No. 589,364. 7 Claims. (Cl. 129—1.)

1. In a loose leaf memorandum book, sheet holding means; a filler carried by said means comprising a plurality of filler units, each unit including a number of superimposed sheets all engaged by the holding means; and



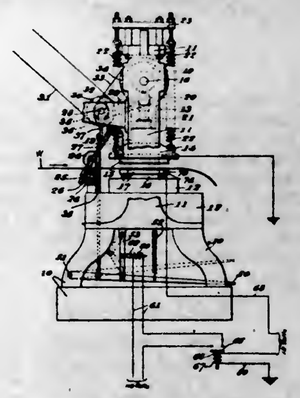
binding means comprising a narrow strip of adhesive at the edge of each unit for releasably maintaining the sheets thereof in associated relation.

1,905,098. CAR GASSING DEVICE. FRED A. ISAACSON, Chicago, Ill. Filed Sept. 10, 1931. Serial No. 562,105. 5 Claims. (Cl. 20—39.)



5. In a medium introducing device for railroad cars, a medium conveying sectional conduit arranged to extend from the car exterior to the car interior, the sections being arranged in interengaging relation at their ends and one of the sections composed of temperature non-conducting material; and a closure member for one end of the conduit.

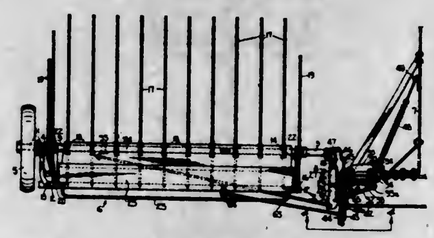
1,905,099. SAFETY DEVICE FOR DIE PRESSES. WILLIAM C. JAY, Philadelphia, Pa., assignor to Sanitary Products Corporation of America, Philadelphia, Pa., a Corporation of Virginia. Filed May 15, 1929. Serial No. 363,124. 4 Claims. (Cl. 192—127.)



1. In a machine having relatively movable die members for die stamping articles from sheet material, means for feeding sheet material between said members, mechanism

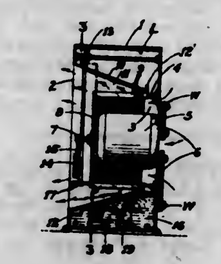
for relatively moving said members toward and away from each other, and means for starting and stopping said mechanism, the combination therewith of a stripper plate yieldingly mounted on one of said die members, mechanism for automatically actuating said last-named means to stop the machine including an electrically actuated device, a circuit through said device having a contact carried in an insulated mounting in said stripper plate and a conductor connected to the other die member.

1,905,100. BUNDLE CARRIER. ELLSWORTH T. JOHNSON, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed June 17, 1931. Serial No. 544,968. 31 Claims. (Cl. 56—480.)



1. In combination with a binder, a bundle carrier, and means mounted on said binder for supporting said carrier for horizontal swinging movement, said means having a longitudinally disposed sleeve providing a first pivotal support whereby said carrier is swingable vertically, and a second pivotal means about which said carrier may be tilted into bundle discharging position.

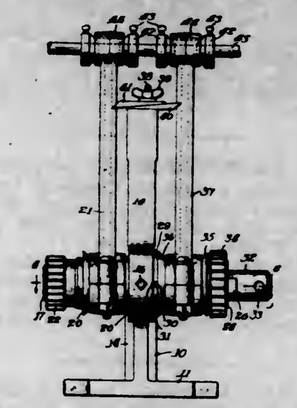
1,905,101. AIR CONDITIONER. HALBERT T. JOHNSON, Paso Robles, Calif. Filed Mar. 18, 1932. Serial No. 599,677. 6 Claims. (Cl. 261—92.)



1. An air conditioner comprising an open-topped tank for liquid, a horisontal open-ended rotary liquid-absorbing air conduit disposed relative to the tank to dip into the liquid, a fan inside the conduit clear of the liquid, arranged to cause air to be drawn into the conduit from one end and to be then thrown into contact with the inner periphery of the conduit and discharged from the opposite end thereof, and means to rotate the fan and conduit in opposite directions.

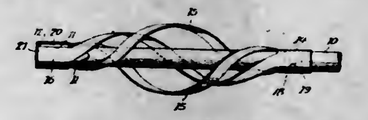
1,905,102. ALIGNING FIXTURE. LEONARD W. JOHNSON, Batavia, Ill. Filed Mar. 20, 1929. Serial No. 348,431. 4 Claims. (Cl. 77—62.)

1. A fixture comprising in combination, a base member, a shaft thereon extending outward at one side thereof, a second shaft extending outward from said base member on the side opposite said first mentioned shaft, an eccentric bearing member on one of said shafts, clamping means on each of said shafts whereby the crank shaft ends of a



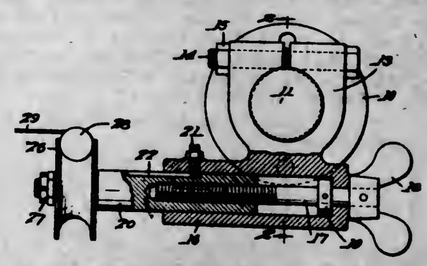
pair of connecting rods are secured in side to side relation with each other, and means whereby the said eccentric member may be rotated.

1,905,103. VALVE GUIDE CLEANER. LEONARD W. JOHNSON, Batavia, Ill. Filed Dec. 9, 1929. Serial No. 412,694. 8 Claims. (Cl. 104—19.)



1. A valve guide cleaner comprising in combination, a cleaner head having a plurality of spirally extending blades integrally formed with a collar portion, the said collar portion having flat faces adjacent the ends of the said blades, a stem having a plurality of flat faces formed thereon, and an end cap fitted over the free ends of the said blades and secured to said stem.

1,905,104. BEARING FOR INK ROLL DOCTORS. ARTHUR DUNLAP KERR, Holden, Mass., assignor to Rice, Barton & Fales, Incorporated, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 28, 1930. Serial No. 498,534. 8 Claims. (Cl. 308—6.)



1. A support for a doctor blade comprising a bracket stationarily mounted and having a hub thereon provided with an arcuate screw-thread, a split collar surrounding and supported by said hub, a screw extending through the collar from one side to the other and meshing with the thread on the hub for adjusting the collar circumferentially, means on the screw for tightening the collar on the hub, and a roller supported by the collar serving as a bearing for the journal of the doctor.

1,905,105. ELECTRODEPOSITION OF TIN-GOLD ALLOYS. HAROLD J. KERSTEN, Cincinnati, Ohio, assignor to Board of Directors of the University of Cincinnati, Cincinnati, Ohio. Filed Feb. 20, 1930. Serial No. 430,135. 6 Claims. (Cl. 204—2.)

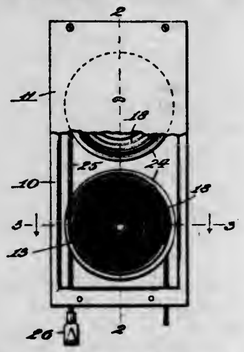
6. An electrolyte for producing white gold deposits having substantially the following proportions:

Gold potassium cyanide ($KAu(CN)_2$)	8 gm.
Potassium stannate $K_2SnO_3 : H_2O$	10 gm.
Water	1 liter

1,905,106. ELECTRODEPOSITION OF ZINC-GOLD ALLOYS. HAROLD J. KERSTEN, Cincinnati, Ohio, assignor to Board of Directors of the University of Cincinnati, Cincinnati, Ohio. Filed Feb. 20, 1930. Serial No. 430,136. 9 Claims. (Cl. 204—2.)

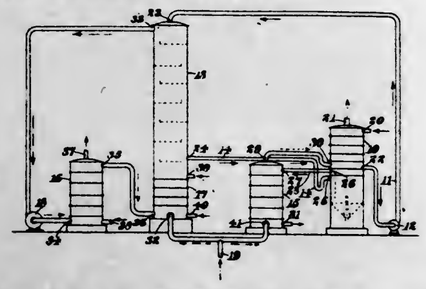
4. An electrodeposit of gold and zinc having a lilac color and comprising approximately 30% of zinc to 70% of gold, the said electrodeposit being dense and homogeneous and not subject to attack by concentrated and dilute nitric acid.

1,905,107. SASH BALANCE. ALBERT H. KERSTING, Los Angeles, Calif. Filed Oct. 19, 1931. Serial No. 569,575. 7 Claims. (Cl. 16—198.)



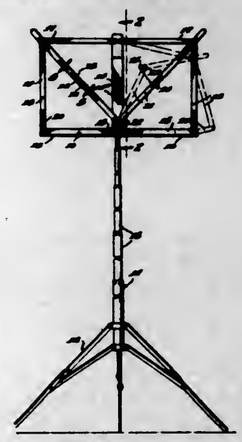
1. In a sash balance, a housing, a tubular axle secured to one of the walls of the housing a cable carrying drum arranged for rotation upon said axle, a spiral spring arranged within said drum, the inner end of which spring is connected to said axle, the outer end of which spring is connected to the peripheral portion of said drum and means for causing the inner convolutions of said spring to exert constant pressure against said drum.

1,905,108. DISTILLATION OF GAS LIQUOR. HEINRICH KOPPERS, Essen, Germany, assignor, by mesne assignments, to The Koppers Company of Delaware, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 16, 1931, Serial No. 523,101, and in Germany June 15, 1929. 3 Claims. (Cl. 23—193.)



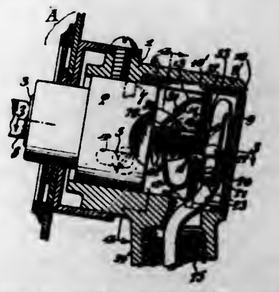
1. A process for the distillation of gas liquor and recovery of by-products therefrom which process consists in bringing the hot gas liquor after distillation therefrom of free ammonia into intimate contact with steam, and thereafter treating it (for example with lime) and further distilling it for the recovery of fixed ammonia.

1,905,109. SHEET HOLDING RACK. MARIE WILLIAM KRAUTH, Hamilton, Ohio, assignor to Krauth & Benninghofen, Hamilton, Ohio, a Firm. Original application filed May 17, 1928, Serial No. 278,596. Divided and this application filed Aug. 28, 1930. Serial No. 477,273. 1 Claim. (Cl. 45—121.)



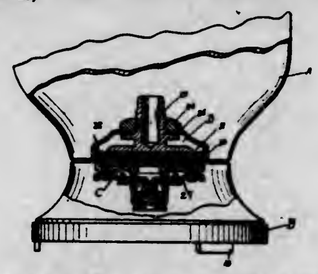
A foldable sheet holding rack comprising a center bar, a rest pivoted to the base of the center bar to move from a position parallel with said center strip to a position at right angles thereto, an upper bar pivotally connected to the top of the center bar and adapted to move in the same manner as the rest, a side bar, comprising, sections hinged together, said side bar pivotally connecting the respective outer end of the rest and top bar, a diagonal brace, comprising, sections hinged together, said brace pivotally connected to the lower end of the center bar and to the diagonally opposite connection of the upper bar and side bar, each of said hinged sections, making up the rack, being disposed in a different plane so as to swing freely on their pivots, and said center strip being centrally depressed so as to provide a portion also in a different plane.

1,905,110. ELECTRIC SWITCH LOCK. FREDERICK W. KULICKE, Philadelphia, Pa., assignor, by mesne assignments, to The Electrolock Manufacturing Company, Vicksburg, Miss., a Corporation of Mississippi. Filed Mar. 1, 1930. Serial No. 432,347. 2 Claims. (Cl. 200—44.)



1. In an electric switch lock having a casing and a lock cylinder mounted therein movable longitudinally thereof from an unlocked position to a locked position and vice versa, the combination in a switch, of a closure for said casing mounted in the rear end thereof and two contact arms mounted on said closure and insulated from said casing, one of said arms being relatively rigid and the other of said arms being relatively flexible and normally being in circuit closing contact at its free end with the free end of said rigid arm, said rigid arm being at all times out of the path of the movement of said cylinder and said flexible arm being offset toward said cylinder and in the path of the movement of said cylinder and engaged by said cylinder as the latter nears its locked position and moved by said cylinder and held out of contact with said rigid arm by said cylinder and grounded by its contact with said cylinder and so long as said cylinder is in its locked position.

1,905,111. PERCOLATOR. JOSEPH F. LAMB, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed May 26, 1930. Serial No. 455,486. 3 Claims. (Cl. 53—3.)



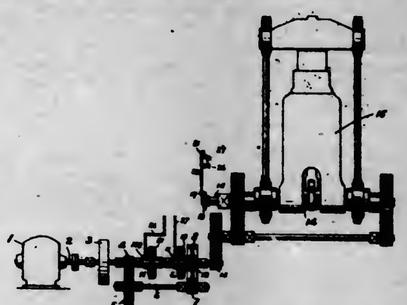
1. In an electrically heated cooking utensil of the character described, and in combination, a body member and a base member, said base member having a top wall and a cylindrical boss upstanding therefrom and defining a heating unit recess interiorly of the base member, said body member having a boss complemental to said first boss, the boss of the base member being snugly fitted in the boss of the body member whereby the cylindrical walls of the bosses are in close and constant intimate contacting engagement, and a heating unit having a top radiating member, said heating unit also having a bottom radiating member with a cylindrical flange snugly fitted in and in intimate contacting relation with the cylindrical wall of the boss on the base member, said heating unit also having a heating element interposed between and electrically insulated from said radiating members.

1,905,112. FRUIT PICKER'S STILT. GREGORY LANG, Yuba City, Calif. Filed May 12, 1930. Serial No. 451,555. 2 Claims. (Cl. 272—70.1.)



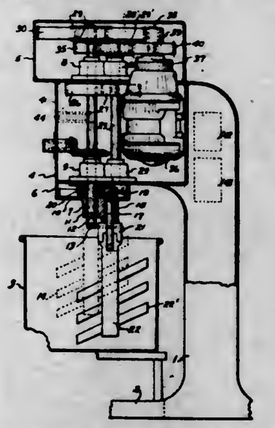
1. A stilt comprising a vertical frame topped by a foot plate, the frame including a cross bar below the foot plate and substantially parallel therewith, a pair of separate leg braces one pivoted on each side of the cross bar and extending upwardly along the side of and above the foot plate, a leg strap connecting the leg braces above the foot plate, a bracket on each side of the foot plate extending around one of the leg braces, the brackets being relatively longer than the width of the braces to allow the leg braces to rock on their pivot points on the cross bar with a slight fore and aft movement relative to the frame and foot plates.

1,905,113. OPERATING MEANS FOR A CRANK PRESS. CHARLES H. LASKER, Joliet, Ill. Filed May 5, 1932. Serial No. 609,365. 6 Claims. (Cl. 25—88.)



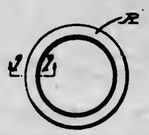
1. Operating means for a power press including in combination a motor, a power press driven by said motor, means for driving said press from said motor at high speed, means for driving said press from said motor at slow speed, and means for selecting one or other of said last mentioned means according to the position of said press.

1,905,114. VARIABLE-SPEED MIXING MACHINE. FRANK X. LAUTERBUR and EDWARD J. LAUTERBUR, Sidney, Ohio. Filed Apr. 14, 1931. Serial No. 529,976. 3 Claims. (Cl. 74—59.)



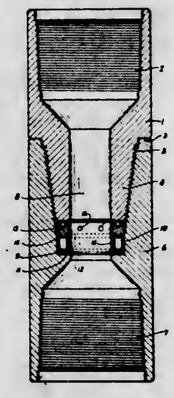
1. In a device of the character described, three parallel shafts, gear means fixed on one shaft, gears fixed on respective ones of the other two shafts, meshing together, gears rotatable on respective ones of these other two shafts, meshing with the gear means on the first shaft and constrained thereby both to rotate in the same direction, and means clutching the last mentioned gears to their respective shafts, one upon relative rotation of the shaft and gear in one direction only and the other upon relative rotation of the shaft and gear in the opposite direction only.

1,905,115. SEATING RING FOR PIPE COUPLINGS. PETER LOFGREN, Worcester, Mass., assignor to Rockwood Sprinkler Company of Massachusetts, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 6, 1931. Serial No. 514,018. 1 Claim. (Cl. 288—1.)



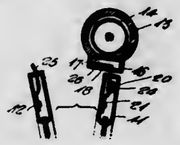
A seating ring for a pipe coupling member comprising a ring of non-corrosive metal adapted to be permanently embedded in the engaging face of said coupling member, said ring having a lip projecting substantially radially inward at its lower inner corner and having a bead projecting substantially radially outward at its upper outer corner and having substantially parallel conical upper and lower faces.

1,905,116. MOUNTING FOR ACID BOTTLES. ROBERT C. LUNSFORD, Jr., Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Nov. 25, 1930. Serial No. 497,982. 6 Claims. (Cl. 284—5.3.)



1. An acid bottle for declinometers comprising an annular container adapted to surround a tubular passage, and means to close the upper end of said bottle, acting also to fix said bottle in position.

1,905,117. FASTENER FOR HAND-BAGS. CHARLES MILLER, Long Island City, N. Y. Filed Nov. 23, 1931. Serial No. 576,906. 5 Claims. (Cl. 292—228.)



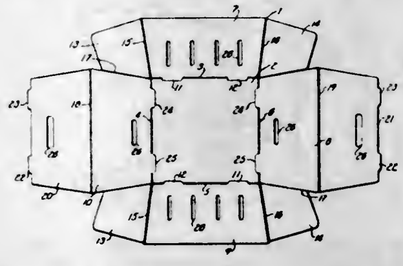
1. A fastener for a bag frame comprising two hinged sections, including a plate within one of said sections provided with a plurality of spaced eyelets, an operating member, a spring plate carried by said operating member having a plurality of spaced depending portions provided with eyelets in registry with said spaced eyelets, a flat torsion spring extending through all of said eyelets, said spring plate having an opening, and a catch on the other frame section engageable with said spring plate through the opening therein.

1,905,118. METHOD AND MEANS OF ERADICATING TYPEWRITTEN MATTER. AARON NADELL, Brooklyn, N. Y. Filed Jan. 8, 1927. Serial No. 159,982. 9 Claims. (Cl. 197—181.)



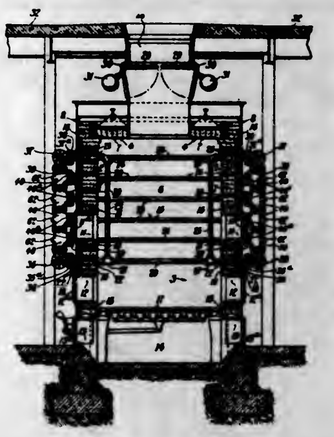
5. The combination comprising a strip of flexible material adapted to be placed in contact with typewritten matter, said strip being chemically treated with elements of a character to eradicate said typewritten matter and means on the typewriter for bringing the chemically treated portion in contact with the typewriting to be eradicated.

1,905,119. BERRY OR FRUIT BASKET OR BOX. EDWIN H. NEWTON, Kansas City, Mo., assignor to National Paper Box Co., Kansas City, Mo., a Corporation of Missouri. Filed Feb. 12, 1931. Serial No. 515,242. 5 Claims. (Cl. 229—34.)



1. A box of the character described including a bottom having tab-receiving openings, sides integral with the bottom, foot portions on the sides stamped from the bottom to form said openings, reinforcing wings on the sides, and tabs on the reinforcing wings received in said openings for locking said wings in functional position.

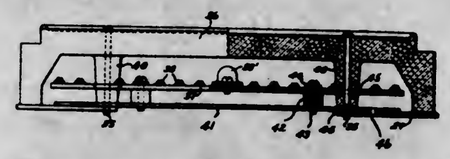
1,905,120. INCINERATOR. JOSEPH C. WOODMAN, Flushing, N. Y., assignor to Decarie Incinerator Corporation, New York, N. Y., a Corporation of New York. Filed Oct. 17, 1928. Serial No. 313,058. 8 Claims. (Cl. 122—2.)



8. An incinerator comprising a chamber with side walls and ends, a basket grate comprising a series of hollow U-shaped sections, fluid containing means providing space for steam separation, and circulation connections between the fluid containing means and the basket grate including

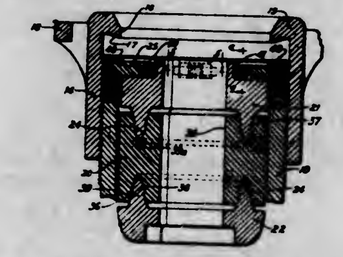
at each side of the chamber communicating upper and lower external headers individually connected with the tops and bottoms of said U-shaped sections and connected with the fluid containing means at different levels.

1,905,121. PANEL-BOARD SECTION. FREDERICK B. ADAM, St. Louis, Mo. Original application filed Dec. 26, 1925, Serial No. 77,682. Divided and this application filed Dec. 23, 1927. Serial No. 242,212. 7 Claims. (Cl. 175—360.)



1. A dead-front panelboard section including a plate adapted to accumulate a plurality of neutral connections, means for connecting the plate with the neutral side of the feeder, a removable unitary insulating body including a substantially imperforate cover portion, spaced outwardly of the plate to provide a space, for neutral conductors and their connections, between the plate and cover, and extending over substantially the greater part of the area of the section.

1,905,122. PACKING ASSEMBLY. LAWRENCE F. BAASH and ERWIN BURNS, Los Angeles, and GEORGE B. GARRARD, Long Beach, Calif. Filed July 7, 1930. Serial No. 465,818. 6 Claims. (Cl. 288—3.)



1. A packing assembly adapted to be used in a casing head having an opening to receive a packing device and having a packing actuating device with an inwardly projecting part which includes, a body of expansible packing adapted to be lowered into the opening, a rigid collar on the upper end of the packing, a latch pivoted in a recess in the collar and having an end part normally projecting from the periphery of the collar, the latch being adapted to be pivoted upwardly to pass the said projecting part when the assembly is lowered into the opening, and means for yieldingly holding the latch in a down position in the recess where it is entirely below the collar where its said end part projects from the periphery of the collar.

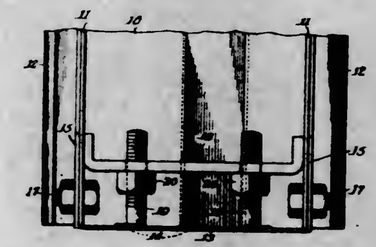
1,905,123. MOBILE ASH TRAY. EDGAR H. BARBE, Los Angeles, Calif., assignor to Rollodor Manufacturing Company, a Partnership composed of Amalia Earles and Edgar H. Barbe, Los Angeles, Calif. Filed Sept. 5, 1931. Serial No. 561,359. 4 Claims. (Cl. 131—51.)

1. A mobile self righting standard structure comprising a base, said base being revolute, hollow and divided into three segments disposed side by side along the axis thereof, a weight detachably secured to the medial segment with its center of gravity on one side of the axis thereof and having a tapped socket on the opposite side, a standard threaded into said socket, an axially disposed shaft secured to said weight and extending from the ends of said medial segment, hub sleeves detachably and rotatably secured on the ends of said shaft, and wheels on said hub sleeves extending between adjacent segments with rims



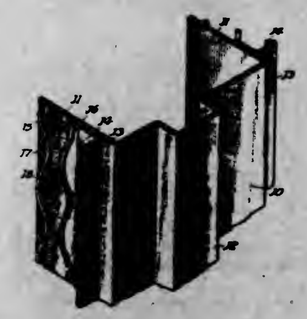
overlying the junctures of said segments, the end segments being hollow and having threaded posts secured in said sleeves.

1,905,124. FOOTPLATE FOR DOOR FRAMES. ISAAC A. BAUM, Chicago, Ill. Filed Mar. 25, 1929. Serial No. 349,633. 4 Claims. (Cl. 189—46.)



8. In combination, a channel member constituting a buck of a door frame, a U-shaped floor plate having its flanges adjustably connected to said buck, a cross member connecting the flanges of the buck and means comprising a screw jack contacting with the floor plate and said cross member for elevating the door buck.

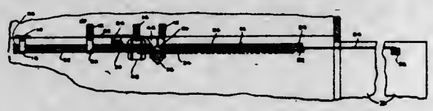
1,905,125. METAL JAMB CONSTRUCTION. ISAAC A. BAUM, Chicago, Ill. Filed Apr. 7, 1930. Serial No. 442,241. 4 Claims. (Cl. 72—98.)



8. In a metal jamb construction, a jamb member having a flange, an anchor comprising a plurality of alternately

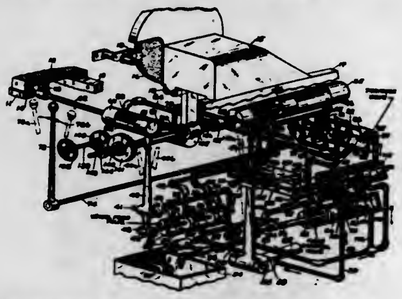
bent lengths of wire secured to said flange at alternate bends in the length thereof, the bends in the adjacent wires being secured to the flange in alternate relation each to the other.

1,905,126. ELECTRICAL DOOR OPERATING DEVICE. EDWIN R. BEEMAN, Minneapolis, Minn. Filed May 14, 1928. Serial No. 277,728. 5 Claims. (Cl. 268—63.)



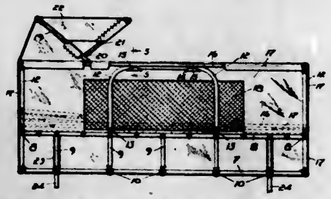
1. A door operating device comprising an overhead support, rounded guides extending downwardly from said support, an elongated cylindrical member slidably mounted in said guides, rack teeth carried by the underside of said member, a pinion meshing with said teeth, a motor adapted to drive said pinion in opposite directions for reciprocating said cylindrical member, and connections between said cylindrical member and the doors for opening and closing the latter.

1,905,127. HYDRAULICALLY OPERATED GRINDING MACHINE. ALBERT G. BELDEN and HERBERT A. SILVEN, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 8, 1929. Serial No. 353,531. 9 Claims. (Cl. 51—72.)



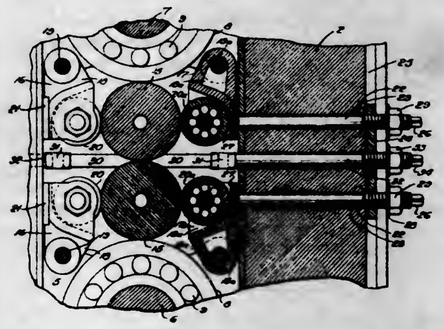
1. A grinding machine comprising a base, a work table slidably mounted thereon, a grinding wheel slide on said base, a rotatable grinding wheel on said slide, a cylinder and piston operatively connected to reciprocate said table, a second cylinder and piston connected to move said slide to feed the grinding wheel, a fluid pressure system including a pump to force fluid under pressure to said cylinders, a manually controlled valve mechanism to admit fluid to either of said cylinders while excluding it from the other, thereby preventing actuation of the slide and table simultaneously, and means for moving the slide independently of the fluid pressure actuated devices to adjust the position of the wheel relative to that of the work.

1,905,128. BABY'S FOLDING CRIB. PAMELIA F. BENSON, Long Beach, Calif. Filed Dec. 18, 1931. Serial No. 581,797. 4 Claims. (Cl. 5—98.)



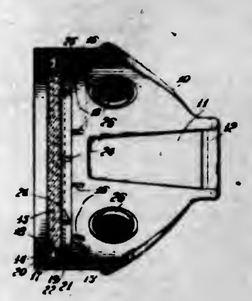
1. A folding crib having a body to receive a mattress, hinged sides and ends foldable inwardly upon said body, a surrounding top rail, a flexible and foldable covering attached at its upper edge to said top rail and sufficient in extent to form an enclosing wall above the mattress when said side and end members are elevated, said sides and ends being designed to underlie and support said top rail and said covering in their raised and operating positions.

1,905,129. ROLLING MILL. FLORENCE C. BIGGERT, Jr., Crafton, and LANE JOHNSON, Ingram, Pa., assignors to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 6, 1928. Serial No. 290,802. 7 Claims. (Cl. 80—38.)



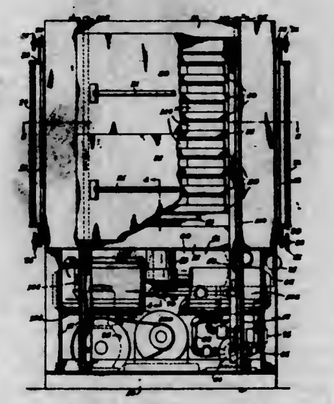
5. A rolling mill comprising a housing, a plurality of working rolls disposed in the housing, cases slidingly mounted in the housing, backing rolls for the working rolls journalled in the cases, brackets pivoted on the cases, and side rolls journalled in the brackets and disposed in engagement with the sides of the end portions of the working rolls for laterally supporting them.

1,905,130. GOGGLES. GEORGE A. BINDER, Chicago, Ill., assignor to Robert Malcom, Chicago, Ill. Filed Mar. 31, 1932. Serial No. 602,129. 11 Claims. (Cl. 2—14.)



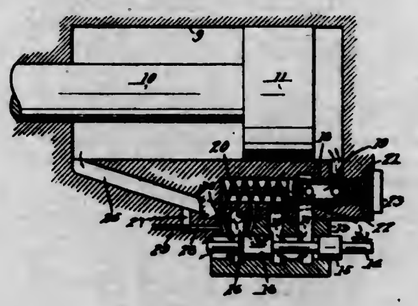
1. A goggle comprising a pair of eye-cups the outer ends whereof are each adapted to receive a lens; the inner wall of each cup at a distance removed from the outer end being inwardly enlarged and provided with circumferentially spaced air passages; a ring seatable on said enlargement adapted to provide a seat for the lens, said ring on its inner diameter and transversely of one annular face having a plurality of slots spaced circumferentially and adapted to register with said air passages in the eye-cup wall enlargement; the lens diameter being such that the peripheral edge of the lens rests at the inner peripheral edge of said ring and leaves the end of the slots in said ring uncovered; and means cooperating with the cup-wall whereby the lens will be maintained in the eye-cup and seated on said ring.

1,905,131. REFRIGERATING APPARATUS. CLARENCE BIRDSEYE and BICKNELL HALL, Gloucester, Mass., assignors to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 25, 1931. Serial No. 518,060. 30 Claims. (Cl. 62—114.)



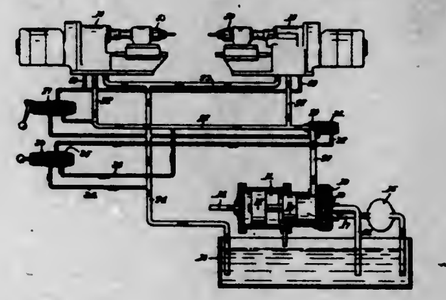
1. A refrigerating apparatus comprising a series of substantially horizontal heat-conductive plates movably disposed in substantially vertical alignment and adapted to receive thereon and therebetween products to be frozen, means for so connecting said plates as to maintain them equally spaced from each other, means for simultaneously varying the spacing thereof, and means for supplying cooling medium to the plates.

1,905,132. CONTROL FOR HYDRAULIC FEEDING MECHANISM. BENJAMIN S. T. BISHOP, Shrewsbury, and ERIC J. HERVONEN, Worcester, Mass., assignors to Leland-Gifford Company, a Corporation of Massachusetts. Filed Dec. 21, 1927. Serial No. 241,694. 10 Claims. (Cl. 121—45.)



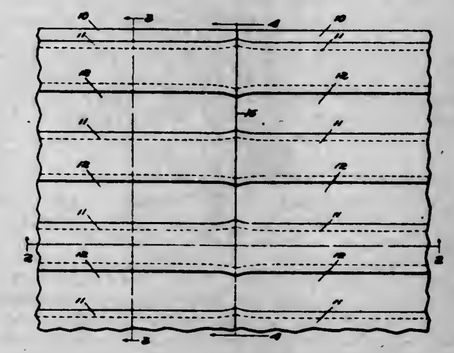
1. In a hydraulic actuating mechanism, the combination with a driving piston and cylinder, of means for introducing fluid under pressure into the cylinder on the driving side of the piston to advance it on a cutting stroke, a hollow valve for controlling said means having two sets of passages for normally allowing the fluid to flow freely into the cylinder, means for admitting a non-compressible fluid to the back side of the piston and allowing it to escape therefrom, a conduit connected with the back pressure side of the cylinder for introducing back pressure behind the valve and moving the valve to restrict the effective flow through the valve into the cylinder, and means for restricting the outflow of fluid from the back pressure side of the piston, on the cutting stroke.

1,905,133. HYDRAULIC FEED FOR MACHINERY. BENJAMIN S. T. BISHOP, Shrewsbury, and ERIC J. HERVONEN, Worcester, Mass., assignors to Leland-Gifford Company, a Corporation of Massachusetts. Filed Apr. 28, 1929. Serial No. 357,532. 10 Claims. (Cl. 60—52.)



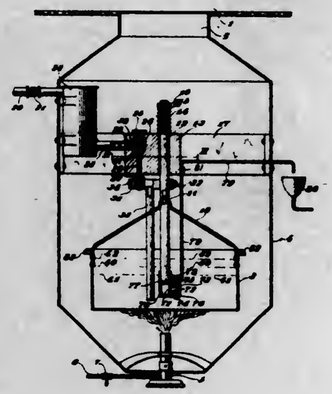
1. The combination with a machine comprising a reciprocable piston and a cylinder therefor, of a valve for admitting fluid under pressure to the high pressure side of the piston, means for automatically thereafter moving said valve by said piston into a position for restricting the flow of the pressure fluid to the cylinder to cause the piston to move more slowly, means for then moving said valve by said piston into a position for automatically cutting off the supply of fluid to the high pressure side of the cylinder and introducing it under pressure into the low pressure side to move the piston back and means for then moving said valve by said piston into a position for cutting off the supply of fluid to both sides of the piston for stopping the piston.

1,905,134. MOLD AND BONDING MEANS. JOHN L. BIXBY, Arlington, Mass., assignor to Ke-Bond Company, Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1931. Serial No. 522,687. 6 Claims. (Cl. 72—70.)



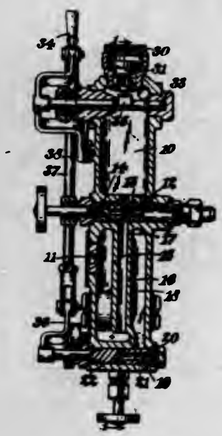
1. As a new article of manufacture, a bonding sheet comprising a plate having oppositely directed, hollow, dove-tail corrugations presenting grooves on opposite sides thereof, the corrugations on one side being closed along an edge which is transverse to said corrugations.

1,905,135. HUMIDIFYING APPARATUS. OSWALD H. BLACKWOOD, Pittsburgh, Pa., and LESTER F. BOSS, Woods Hole, Mass., assignors to The Koppers Company of Delaware, a Corporation of Delaware. Filed July 23, 1928. Serial No. 294,786. 5 Claims. (Cl. 126—350.)



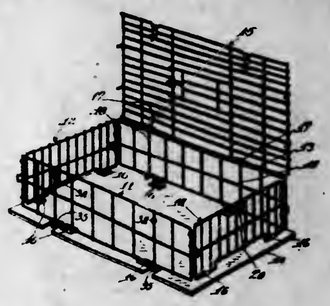
1. A humidifier comprising, in combination, a water supply conduit, a valve therein, an evaporating receptacle positioned to receive water from said conduit, means for intermittently removing small amounts of water from said receptacle, and means for heating said receptacle.

1,905,136. LUBRICATING DEVICE. JOHN BLISS, London, England, assignor to C. C. Wakefield & Company, Limited, London, England, a British Company. Filed Sept. 8, 1928, Serial No. 304,742, and in Great Britain Nov. 30, 1927. 10 Claims. (Cl. 184—50.)



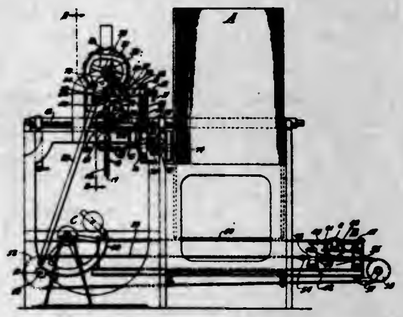
1. Lubricating apparatus of the kind specified comprising in combination a lubricant chamber, a steam chamber communicating therewith, means to pass condensate from the steam chamber to the lubricant chamber, a steam-inlet control valve for the steam chamber, an outlet control valve for the lubricant chamber, a single operating member, and a valve-timing operative connection between said member and both valves whereby the said steam-inlet control valve is opened prior to the outlet control valve of the lubri ant chamber.

1,905,137. COLLAPSIBLE SHIPPING CRATE. PER HJALMER BLOMBERG, Chicago, Ill. Filed Jan. 29, 1930. Serial No. 424,811. 18 Claims. (Cl. 220—6.)



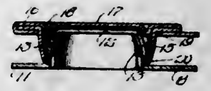
1. In a device of the character described, a base, side wall members mounted to pivot inwardly toward each other on said base, a top for engaging said side wall members in an extended condition, and guiding means extending across the width of one of said side wall members, said top slidably engaging said guiding means and detachably engaging the other of said side walls whereby said top need not extend beyond the confines of said side walls when said device is in a collapsed condition.

1,905,138. THREAD PRINTING APPARATUS. DANIEL BUTLER BONNER, Philadelphia, Pa. Filed Jan. 19, 1931. Serial No. 509,648. 9 Claims. (Cl. 91—12.01.)



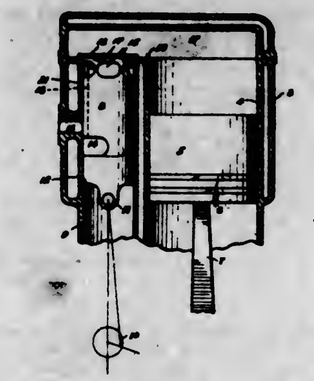
1. Thread printing apparatus comprising a rotatable thread carrying drum adapted to be rotated in steps of predetermined amplitude and in continuous rotation through distances of greater amplitude than such step movement; drive means for imparting such continuous rotation to the drum; drive means for imparting such step by step rotation to the drum including ratio changing means; and means for effecting rotation of the drum through the medium of either of said drive means.

1,905,139. SEAL. BRUCE BORLAND, Chicago, Ill. Filed Nov. 30, 1929. Serial No. 410,781. 1 Claim. (Cl. 292—322.)



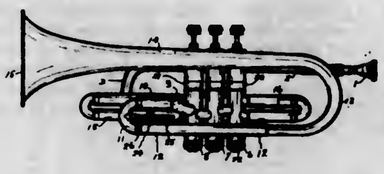
A strip having an integrally formed hollow button provided with a plurality of resilient tongues with their free ends adjacent to the strip, said strip having a hollow projection adjacent to the end thereof and folded to form a closure for one end of said projection and folded again with the projection extending through a hole in the strip, said projection having an annular inwardly projecting flange adapted to fit closely over the button and to engage with the ends of the tongues when the parts are in fastened position.

1,905,140. VALVE FOR INTERNAL COMBUSTION ENGINES. WILLIAM FREDERICK BOYCE, Toronto, Ontario, Canada. Filed June 10, 1932, Serial No. 616,429, and in Canada May 12, 1932. 1 Claim. (Cl. 123—188.)



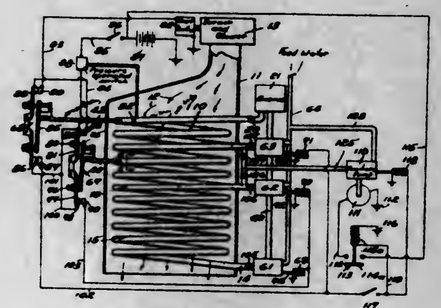
In a valve structure of the class described, an engine cylinder having a valve bore communicating with the head space and a port communicating with the bore, a cylindrical valve reciprocably disposed in said bore, said valve being chambered longitudinally and having openings at each end of its chamber communicating with its cylindrical surface, and an annular shoulder at the top of the valve for seating against a surface of the head space to seal off the bearing surface of the valve therefrom.

1,905,141. WIND MUSICAL INSTRUMENT. PHILIP J. BURELL, Elkhart, Ind., assignor to C. G. Conn, Ltd., Elkhart, Ind., a Corporation of Indiana. Filed Dec. 18, 1931. Serial No. 581,795. 4 Claims. (Cl. 84—379.)



3. An instrument of the class described, comprising in combination with a mouthpiece, valves and a bell, a pipe connecting said mouthpiece with one of said valves, and a pipe connecting another valve with the bell, a bent knuckle extending from a straight portion of the second named pipe directly into the said other valve, and twisted in direction towards the bottom of said last named valve.

1,905,142. BOILER WATER CONTROL. BRUCE BURNS and HOWARD B. LEWIS, Los Angeles, Calif., assignors to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed June 17, 1929. Serial No. 371,610. 4 Claims. (Cl. 122—448.)



1. In combination: a boiler adapted to produce steam; a steam-operated pumping system actuated by the steam generated by said boiler for supplying feed-water to said boiler at a plurality of sections; and an auxiliary pumping system for supplying feed-water to only a portion of said sections.

1,905,143. ELECTRIC LIGHT STRIP. JAMES D. CARR, Detroit, Mich., assignor to Pittsburgh Reflector Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed June 18, 1928. Serial No. 284,961. 4 Claims. (Cl. 247—27.)

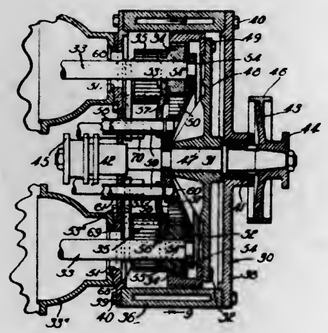


1. A combined electrical conduit and outlet unit comprising a pair of relatively long, continuously extending members adapted to be inter-engaged to form a wire conduit, one of the members constituting a base, the other member having knock-out plugs formed therein, and electrical outlet members in openings formed in the last-mentioned member, said member being effective for supporting and spacing the outlet members prior to positioning on the first-mentioned member.

1,905,144. METHOD FOR PRODUCING ESTERS. THOMAS S. CARSWELL, ERNEST T. STEHLEY, and NICOLAAS J. G. ALOSERIJ, St. Louis, Mo., assignors to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Aug. 6, 1928. Serial No. 297,858. 8 Claims. (Cl. 260—103.)

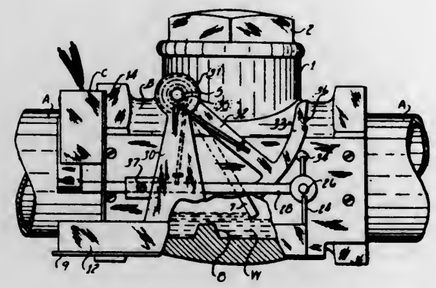
1. The method which comprises boiling a mixture of an aliphatic alcohol, whose boiling point is below 100° C. and which is soluble in water in all proportions, and a mono-carboxylic acid of the benzene series that is substantially non-volatile below 120° C. while avoiding a substantial excess of either of the ingredients, continuously fractionating the vapors, which consist of water and alcohol, to separate the water present therein and returning the alcohol to the boiling mixture.

1,905,145. TRANSMISSION. SAMUEL C. CARTER, Los Angeles, Calif. Filed Jan. 26, 1931. Serial No. 511,293. 17 Claims. (Cl. 74—7.)



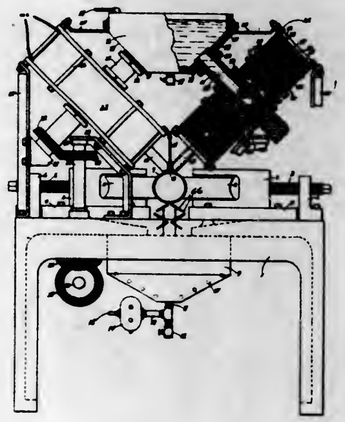
1. In combination, two power units adapted to operate in synchronism, a low speed shaft, a high speed shaft driven by each power unit, and a transmission including a gear on the low speed shaft, a pinion on each of the high speed shafts, and means for shifting the pinions into and out of engagement with the gear.

1,905,146. FLOW CONTROLLED SWITCH. FENTON G CHAPIN, East St. Louis, Ill., assignor of one-tenth to Walter A. Thum, St. Louis, Mo. Filed Dec. 8, 1930. Serial No. 500,893. 2 Claims. (Cl. 200—81.)



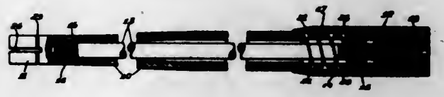
1. In combination, a standard, a bracket, a tubular valve-housing, a shaft mounted transversely upon the housing for rotatory movement, a valve fixed on the shaft for oscillation within the housing, an extension on the shaft supported by the standard, a lever pivotally mounted on the bracket for rocking movement, a lateral extension on the lever, an arm fixed at an end on the shaft-extension, an arcuate cam on the free end of the arm having both retaining and rocking engagement with the lever extension, and a spring coiled on the shaft-extension and having engagement with the standard and said arm for yieldingly retaining the valve and lever in normal position.

1,905,147. HOMOPOLAR ELECTRIC GENERATOR, DISTRIBUTOR, AND METHOD OF APPLICATION. EVERETT CHAPMAN, Cleveland Heights, Ohio. Filed June 27, 1929. Serial No. 374,161. 6 Claims. (Cl. 219—6.)



1. In a welding apparatus, a homopolar generator disposed adjacent the welding throat, and having a liquid tight casing and conduits associated therewith, fluid current conducting means within said casing and conduits, and means for moving said fluid means for carrying current to the work within said throat.

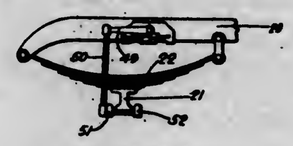
1,905,148. HAIR-CURLING DEVICE. ROBERT CHESTNUT, Grantwood, N. J., assignor to Aluminum Screw Machine Products Company, Edgewater, N. J., a Corporation of New Jersey. Filed June 27, 1932. Serial No. 619,547. 10 Claims. (Cl. 132—34.)



1. A hair-curling device comprising a tubular body member, a rotatable tip member mounted at one end thereof, a rotatable cap member mounted at the other end thereof, means connecting said cap and said tip whereby rotation is imparted to said tip by said cap, and means integral with said tubular body for permitting rotation of said cap and tip in one direction only.

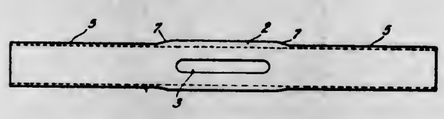
1,905,149. SHOCK ABSORBER VALVE. WILLIAM A. CHRIST, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed May 8, 1930. Serial No. 450,718. 6 Claims. (Cl. 251—120.)

8. A pressure release valve for controlling the flow of fluid through a port in a shock absorber comprising, in combination, a tubular valve having an annular flange adapted to engage the peripheral edge of the port; a valve stem slidably supporting said valve, said stem having two portions of different transverse dimensions separated by an annular groove, the larger diameter portion of the stem slidably fitting into the valve and having a longitudinal



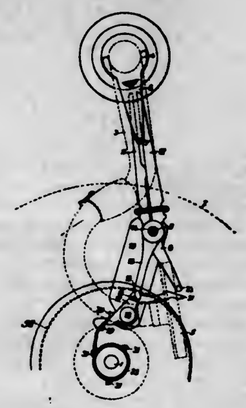
passage; a disc secured to the smaller diameter end of the stem; and a spring about the stem between the valve and the disc.

1,905,150. METHOD OF MAKING AXLE HOUSINGS. EUGENE B. CLARK, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Apr. 9, 1928. Serial No. 268,508. 11 Claims. (Cl. 29—153.1.)



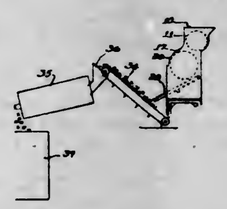
1. The method of making an axle housing from a piece of seamless tubing which consists in upsetting the central part of a length of tubing to increase the wall thickness thereof, slotting the central part of the blank for a suitable distance parallel with its axis and at diametrically opposite points substantially midway of its length, shrinking the ends of the blank to reduce the diameter thereof and to thicken the walls thereof, spreading the slotted portion into transverse tubular walls, expanding the central portion of said tube and folding over the edges thereof to form annular flanges substantially parallel to each other and to the longitudinal axis of the housing.

1,905,151. AUTOMATIC STOPPING DEVICE FOR TALKING MACHINES. GEORGE FREDERICK CLARK, West Drayton, England, assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1929, Serial No. 358,653, and in Great Britain June 5, 1928. 15 Claims. (Cl. 192—124.)



4. Automatic stopping means for a talking machine comprising a pivoted stop member, a member movable in conjunction with the sound arm, and a second member having frictional engagement with said first member, said second member being adapted to move said stop member in one direction and said first member being adapted to move said stop member in the opposite direction as said sound arm is moved in one direction only.

1,905,152. MINERAL WOOL AND METHOD OF AND APPARATUS FOR GRANULATING SAME. CHARLES H. CLINTON, Hinsdale, and PAUL F. THEOBALD and ROGER H. STITT, Chicago, Ill., assignors to United States Gypsum Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 22, 1931. Serial No. 531,982. 15 Claims. (Cl. 209—2.)



1. The method of granulating mineral wool which comprises subjecting pieces of wool to alternate granulating and screening actions so as to remove granules of mineral wool from the field of action substantially as soon as formed.

1,905,153. METHOD OF PRODUCING HIGH FREQUENCY LIGHT VARIATIONS. RAYMOND T. CLOUD, Chicago, Ill., assignor, by mesne assignments, to General Theatres Equipment, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1930. Serial No. 423,600. 4 Claims. (Cl. 176—123.)

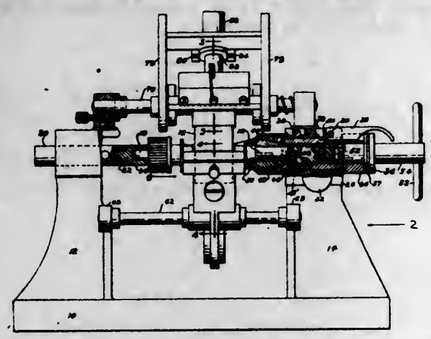


1. The method of producing high-frequency variations in light which comprises producing a small area of incandescence on one only of cooperating electrodes while limiting the production of materially effective light to that area, and varying the brightness of that area in accordance with high-frequency vibrations.

1,905,154. COIL POSITIONING MACHINE. EDWARD W. COLLINS, Detroit, Mich., assignor, by mesne assignments, to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Oct. 17, 1931. Serial No. 569,519. 4 Claims. (Cl. 29—34.)

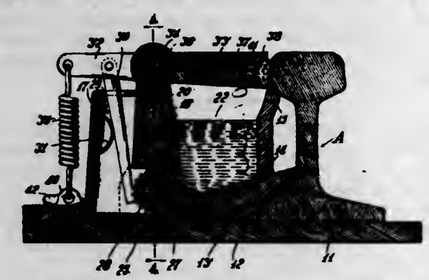
1. In a positioning machine of the class described, an axle, a plurality of arms journalled thereon, one of the arms having a movable blade in its end, a hammer on the other arm, and resilient means tending to separate the

arms and to resist movement of the hammer towards the blade to be depressed thereby, the resilient means including relatively telescoped tubes one of which is swivelly



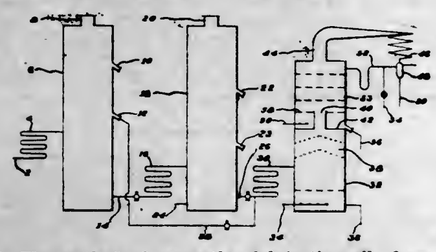
connected to the hammer, the other of which is swivelly connected to the blade arm, and a coiled compression spring in the tubes.

1,905,155. TRACK OILER. WILLIAM F. COORS, Tacoma, Wash. Filed Nov. 25, 1929. Serial No. 409,478. 10 Claims. (Cl. 184—3.)



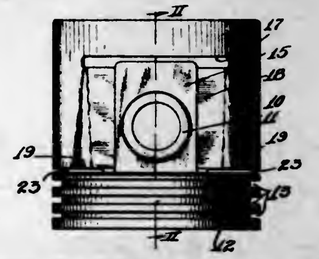
2. A device of the character described comprising a casing adapted to be secured adjacent to the side of a track-rail and being provided with a lubricant holding chamber; a cover for said chamber adapted to be engaged by the flange of a wheel passing along the track-rail; lubricant directing means communicating with said chamber and adapted to discharge the lubricant at the side of the rail-head; and means, operable when said cover is engaged by a wheel-flange, whereby the lubricant is forced from said chamber and through said lubricant directing means.

1,905,156. METHOD OF DIVIDING PETROLEUM BOTTOMS. GEORGE B. COURROUGH, Long Beach, Calif., assignor to The Lummus Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 8, 1932. Serial No. 597,513. 7 Claims. (Cl. 196—88.)



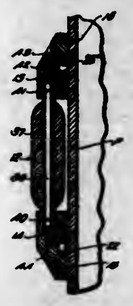
1. The method of separating lubricating oils from asphalt which consists in taking a starting mixture containing lubricating oils and non-volatile asphaltic residuum, adding thereto a diluent oil which is completely vaporizable under conditions at which vaporization of the starting material would be negligible, continuously subjecting all of the oils to flash vaporization from the asphaltic residuum by first heating the entire mixture in a confined stream under pressure and then releasing the mixture into a vaporizing zone maintained under a sufficient vacuum to vaporize the oils under the contained heat of the mixture, the temperature of heating being insufficient to crack any of the materials, condensing the vapors while preventing return of any condensate to the vaporizing zone, and withdrawing asphaltic residue.

1,905,157. COMPOSITE PISTON. JOHN R. COX, Cleveland, Ohio, assignor to Thompson Products, Incorporated, Cleveland, Ohio, a Corporation of Ohio. Filed May 20, 1931. Serial No. 538,695. 9 Claims. (Cl. 74—108.)



1. A composite piston comprising a head cast of light material subject to excessive expansion, and a cylindrical skirt having portions partially embedded in said head, said embedded portions being formed as flat indentations in the sides of the skirt and merging into the cylindrical surfaces of the skirt with intermediate beveled surfaces tapered from a wide surface adjacent the head to a narrow surface at the lower ends of the indented portions.

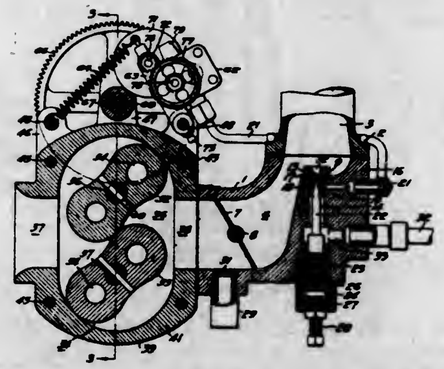
1,905,158. DRILL PIPE PROTECTOR. EDWARD CRAIG and WILLIAM O. COOPER, Brea, Calif. Filed Apr. 5, 1930. Serial No. 441,842. 13 Claims. (Cl. 308—6.)



1. A device of the character described adapted to be used in connection with a string of drill pipe, including, a cage adapted to be arranged on a length of drill pipe to surround the pipe, means for securing the cage on the drill pipe, and a yieldable bearing part carried by the cage to have its outer side projecting from the cage and its inner side adjacent the pipe so as to compress against the pipe when distorted.

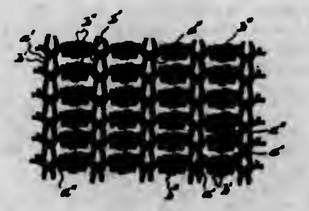
5. A bearing device for a string of drill pipe including, a cage adapted to be arranged on the drill pipe, the cage including two vertically spaced rings, and a spacer rib connecting the rings, and a plurality of yielding rollers between the rings rotatable about vertical axes, the outer sides of the rollers projecting beyond the rings and the inner sides of the rollers being spaced a short distance from the drill pipe so as to engage the pipe when the rollers are distorted inwardly.

1,905,159. CARBURETING DEVICE. CLINTON DAVIDSON, San Francisco, Calif. Filed Jan. 11, 1930. Serial No. 420,084. 2 Claims. (Cl. 261—35.)



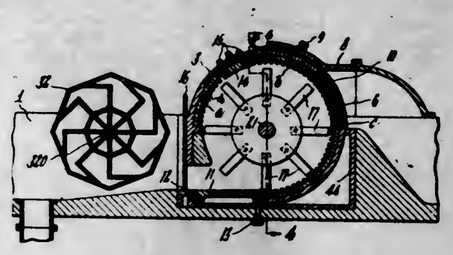
1. A carbureting device for use with an internal combustion engine including an intake manifold comprising a fuel nozzle in communication with said manifold, pressure responsive means in said nozzle, means in communication with said manifold for supplying air under pressure to said pressure responsive means, an air meter for air introduced into said manifold, and means regulated by said air meter for supplying fuel to said nozzle.

1,905,160. KNITTED METALLIC FABRIC. FREDERICK DE ANGELIS, West Orange, N. J., assignor to Metal Textile Corporation, a Corporation of Delaware. Filed Sept. 30, 1930. Serial No. 485,897. 3 Claims. (Cl. 66—202.)



1. A metallic fabric, comprising a carrier member having a gimping of metallic material spirally convolved in loose coils around and along the length of the same, said gimped carrier member being knitted to provide interengaged loop-formations each comprising a loop of the carrier member and a loop-portion contiguous thereto drawn out from a coil of said metallic gimping, substantially straight supporting carrier sections extending between horizontally adjacent loop-formations, upon which sections are carried groups of said loose coils, each coil group being segregated from adjacent groups by intervening knitted loop-formations, and said coil groups being anchored against longitudinal displacement from their respective carrier sections by the knitted interlocking engagement of the combined carrier member loops and associated loop-portions drawn from the coils of metallic gimping, all whereby the coil groups are exposed at one face of the fabric to form a raised curly nap thereon.

1,905,161. METHOD OF AND APPARATUS FOR HYDRATING CELLULOSE PULP. WILLIAM T. DOYLE, Dorchester, Mass., assignor to Sturtevant Mill Company, Boston, Mass., a Corporation of Massachusetts. Filed Apr. 26, 1932. Serial No. 607,528. 8 Claims. (Cl. 92—20.)



1. A cyclic method of hydrating cellulose pulp stock for papermaking or the like, which comprises preparing and maintaining a supply of such stock as a thick aqueous suspension, progressively removing stock from said supply and feeding it into a casing having an outlet through which the water of said suspension may freely flow but designed to permit the accumulation of stock in said casing, subjecting the stock in said casing to a swift succession of hammering impacts under conditions to discharge forcefully only a portion of said stock through said openings, returning the discharged stock to said supply, and repeating the cycle until the degree of hydration desired for papermaking has been produced in the stock.

4. A cyclic method of hydrating pulp stock for papermaking or the like, which comprises preparing and maintaining a supply of such stock as a thick, aqueous suspension; progressively removing stock from said supply, thickening it, and feeding it into a casing having an outlet through which the water of said suspension may freely flow but designed to permit the accumulation of stock in said casing; subjecting the thickened stock in said casing to a swift succession of hammering impacts under conditions to discharge forcefully only a portion of said stock through said opening; returning the discharged stock to said supply; and repeating the cycle until the degree of hydration desired for papermaking has been produced in the stock.

1,905,162. STERN PADDLE-WHEEL PROPULSION MECHANISM FOR BOATS. RAMON ENSENAT, Newark, N. J.; Edwin J. C. Joerg executor of said Ramon Ensenat, deceased. Filed Dec. 26, 1931. Serial No. 583,169. 2 Claims. (Cl. 115—49.)



1. The combination with the hull of a ship, of a beam at each side thereof and two beams each at one side of the longitudinal median line of the hull, all of said beams extending longitudinally of the hull and projecting from one end thereof, a paddle-wheel shaft journaled on the projecting ends of said beams transversely of said hull and having a paddle-wheel thereon, a prime mover mounted on said hull and having a shaft journaled paral-

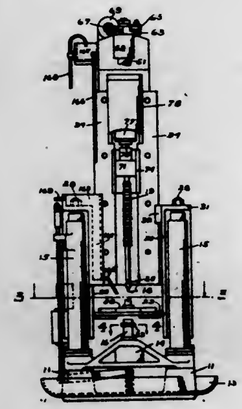
iel to said paddle-wheel shaft, and a train of gears journaled on the second-mentioned two beams and located therebetween connecting said prime mover shaft to said paddle-wheel shaft.

1,905,163. CLEANING DEVICE. JOHN B. FARQUHAR, Chicago, Ill., assignor to Champion Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1931. Serial No. 545,718. 4 Claims. (Cl. 15—209.)



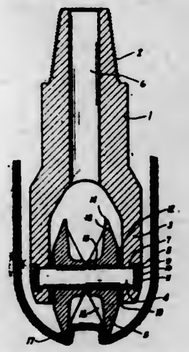
1. An article of the class described comprising a closed envelope, and a plurality of relatively long braided strands of absorbent material secured adjacent their central portions to opposite sides of said envelope.

1,905,164. BROACHING MACHINE. JOHN P. FERRIS, Whitefish Bay, and WALTER FERRIS, Milwaukee, Wis., assignors to The Oilgear Company, Milwaukee, Wis., a Corporation of Wisconsin. Original application filed Dec. 18, 1929, Serial No. 414,905. Divided and this application filed Nov. 9, 1931. Serial No. 573,928. 20 Claims. (Cl. 90—33.)



1. In a broaching machine having a draw head, a work support, and power drive for producing relative reciprocation between said work support and said draw head, the combination of power means for securing a broaching tool to said draw head, and means responsive to the operation of said tool securing means for controlling said power drive.

1,905,165. DISK BIT. HAROLD W. FLETCHER, Houston, Tex., assignor to Hughes Tool Company, Houston, Tex., a Corporation of Texas. Filed Mar. 17, 1930. Serial No. 436,335. 4 Claims. (Cl. 255—71.)



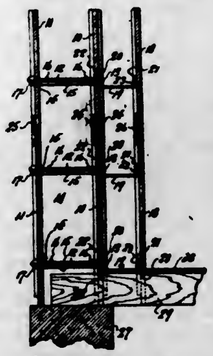
1. A drill head, a straight shaft supported thereon, disk-shaped cutters on said shaft, means to space said cutters apart in opposite relation on said shaft, and means on the inner faces of said cutters adapted to be acted upon by flushing fluid to rotate said cutters for the purpose stated.

1,905,166. UPHOLSTERY EDGE. HARRY FOX, Lowell, Mass., assignor to The Fox Edge Co. Inc., Lowell, Mass., a Corporation of Massachusetts. Filed July 22, 1931. Serial No. 552,858. 2 Claims. (Cl. 155—184.)



1. An edge comprising a layer of felted material and a fabric folded to bring its marginal portions into lapping relation and secured together to form an attaching fin, a filler within the folded portion back from said fin to form with said folded portion a bead thicker than said fin, and stitching passed through said bead in position to shape said bead into elongated cross section and to hold said bead with its long cross sectional axis extended at an obtuse angle to said fin.

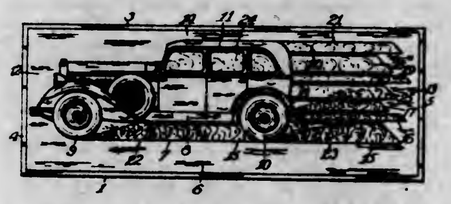
1,905,167. BUILDING WALL STRUCTURE. RUSSELL C. GRAEF, Westfield, N. J. Filed May 6, 1932. Serial No. 609,675. 11 Claims. (Cl. 72—30.)



1. A building wall comprising a plurality of interjoined abutting wall form building units; each unit including a pair of laterally spaced panels and transverse means to

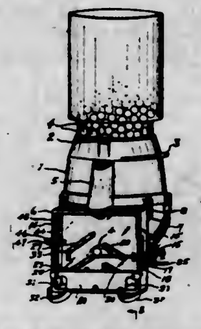
interconnect the same in spaced relation to provide a cast core wall mold, means to unite the meeting edges of panels of adjoining units in interlocking relation, combined suspension and spacing struts anchored to the inner panels of said units to project laterally therefrom, and interior finishing panels adapted to be supported by said struts in off-set spaced relation to said inner panels.

1,905,168. SIMULATION OF FAST-MOVING OBJECTS. FRANK A. GRITT, Indianapolis, Ind., assignor to Gritt Incorporated, Indianapolis, Ind., a Corporation of Indiana. Filed Oct. 5, 1931. Serial No. 567,022. 11 Claims. (Cl. 40—132.)



1. A display sign including a front part having an opaque portion and separate horisontal translucent panels, the opaque portion bearing a representation of an object characterised for high speed, the panels representing visual effects suggestive of results of the high speed movement of the object represented, and a plurality of lamps with horisontal distorting reflectors and light-interrupters in groups arranged behind the front part.

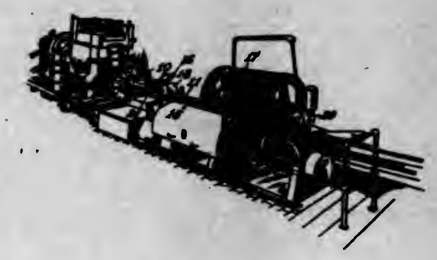
1,905,169. VENDING MACHINE ATTACHMENT. JACOB E. HARTLE, Jr., Madison, N. J. Filed Apr. 11, 1931. Serial No. 529,315. 7 Claims. (Cl. 273—138.)



7. A vending machine attachment comprising, a casing having an article discharge opening and a transparent wall extending above said opening, a bodily movable spoon contained within said casing, said casing having a slot in the wall thereof through which the handle of said spoon projects, said handle enabling said spoon to be manually moved as a whole with respect to said casing, chute means for conveying an article vended from a vending machine onto said spoon, and article conveying members contained within said casing for conveying articles dropped from said spoon toward said discharge opening.

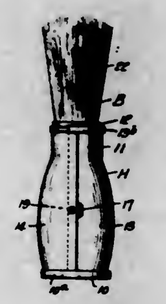
1,905,170. ORNAMENTAL BRICK AND METHOD OF PRODUCING SAME. EARL C. HERVEY, Indianapolis, Ind., assignor to Hydraulic-Press Brick Company, Indianapolis, Ind., a Corporation of Missouri. Filed Dec. 22, 1930. Serial No. 504,087. 6 Claims. (Cl. 25—156.)

1. The method of producing a rough-face brick which consists in ejecting a column of suitable material, separating a thin layer of said material from the upper face of the column, breaking said thin layer into comparatively narrow irregular strips, redepositing said strips upon the surface of the column from which the layer



was removed, breaking said strips into fragments and angularly displacing said fragments, re-adhering the fragments to the face of the column from which they were removed, and subjecting dimensioned portions of said column with its adhered fragments to a burning heat.

1,905,171. SHAVING BRUSH. HARRY FRANK HORNE, Los Angeles, Calif.; James Evans, jr., administrator of said Harry Frank Horne, deceased, assignor to Allen S. Evans. Filed Jan. 3, 1931, Serial No. 506,453. Renewed Aug. 2, 1932. 8 Claims. (Cl. 15—185.)

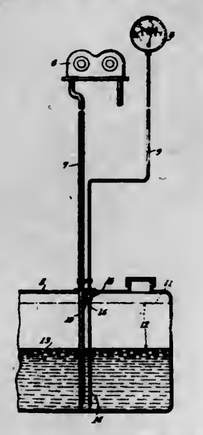


1. A shaving brush comprising a brushing element and a handle therefor including a pair of co-axially arranged sections relatively movable circumferentially to occupy open and closed positions, and means for mounting the brushing element on the handle for movment when the sections are open, to occupy a working position wherein the element projects from the handle and will be supported by the sections when closed, and to occupy a second position wherein the element will be enclosed by the sections when closed.

1,905,172. LIQUID GAUGE. CURTIS L. HOWSE, Detroit, Mich., assignor, by mesne assignments, to A C Spark Plug Company, Flint, Mich., a Corporation of Michigan. Filed July 13, 1927. Serial No. 205,858. 6 Claims. (Cl. 73—54.)

1. In apparatus of the character disclosed, a liquid containing tank, a gauge of the vacuum type having a vacuum line entered in said tank and open at its lower end to the liquid in the tank, a pump having a suction line entered in the tank and open at its lower end to the liquid in the tank, and a restricted communication connection between said vacuum line and suction line sub-

stantially at the maximum liquid level of the tank, said connection being sufficiently restricted to enable the pump to continue to function even though the gauge

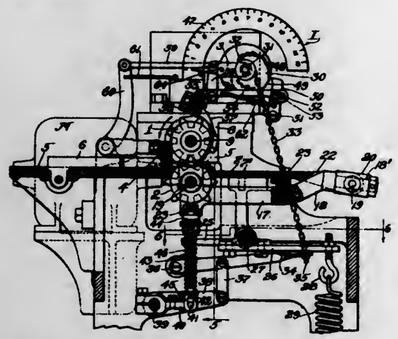


be disconnected or the vacuum line be broken, and to obviate the necessity for maintaining any fixed vertical distance between said tank and said gauge.

1,905,173. METHOD OF REFINING ROSIN. IRVIN W. HUMPHREY, Wharton, N. J., assignor to Hercules Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 20, 1930. Serial No. 422,229. 22 Claims. (Cl. 87—2.)

2. The method of refining rosin by the removal of color bodies therefrom which includes subjecting rosin in solution in gasoline to treatment with an ether, having a capacity for selectively dissolving color bodies in the rosin and which is capable of immiscibility with gasoline, separating the ether and color bodies dissolved thereby from the rosin-gasoline solution and recovering refined rosin from the rosin-gasoline solution.

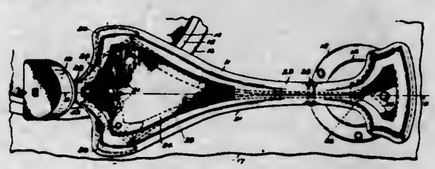
1,905,174. GRADING MACHINE. JAMES W. JOHNSTON, Manchester, N. H., assignor to Lacene Manufacturing Company, Manchester, N. H., a Corporation of Maine. Filed Mar. 3, 1931. Serial No. 519,747. 13 Claims. (Cl. 33—148.)



1. A grading machine of the kind having a pair of detecting rolls, one of which is movable toward and from the other, grading means and mechanism for adjusting the grading means in response to relative movements of the detecting rolls, comprising two arms on the free ends of which the ends of the movable detecting roll are journaled, said two arms being pivotally supported on the machine to turn about two axes, each common to said two arms, adapted to permit the movable detecting roll to be moved bodily toward and from the other roll and also to be canted out of parallelism with the other roll.

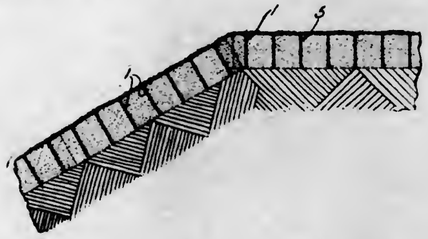
10. A grading machine of the kind described comprising a frame, a pair of detecting rolls, one of which is movable toward and from the other, a work supporting table removably mounted on the frame at the delivery side of the detecting rolls, and a support for said movable roll pivoted to the work table, whereby the work table, support and movable roll may be removed from or applied to the machine as an assembled unit.

1,905,175. SOUND RECORDING AND REPRODUCING UNIT. JAMES M. KENDALL, Woodbury Heights, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Mar. 12, 1931. Serial No. 521,936. 20 Claims. (Cl. 274—1.)



1. In a sound recording and reproducing apparatus, a translating device, a suspension means therefor having a point of support in spaced relation to said device, a connection in said suspension means flexible about an axis extending through said device and said point of support and between said device and said support, and means connected with said device and located more adjacent thereto than said point of support providing a relatively high moment of inertia about said axis.

1,905,176. METHOD OF AND MEANS FOR PREPARING LAWNS. EDWIN F. KIECKHEFER, Wauwatosa, Wis. Filed June 13, 1932. Serial No. 616,795. 8 Claims. (Cl. 47—1.)



1. The hereindescribed method of preparing or building lawns which consists in suitably preparing the ground, laying on the surface of the ground, intersecting and interfitted strip-like members constituted of pulp board impregnated with fertilizer whereby to define a multiplicity of small compartments, scattering surface soil over the ground until said compartments are filled, seeding the surface soil, and finally wetting down the soil, whereby the strip-like members retain the surface soil and also absorb moisture and give it off gradually to the soil, the strip-like members being constituted of fertilizing impregnated pulp board serving to enrich the soil as they gradually disintegrate and become absorbed in the soil.

1,905,177. LOCK. HARRY R. KIRKWOOD, Pittsburgh, Pa., assignor of one-fourth to Reid C. Speer, Pittsburgh, Pa. Filed Sept. 9, 1932. Serial No. 632,329. 7 Claims. (Cl. 70—47.)

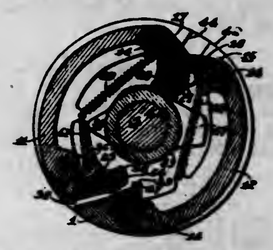
1. In combination in a lock, a case, a drum mounted for rotation in the case provided with a plurality of key

slots lengthwise of the drum and extending radially thereof, each adapted to receive a key which may be inserted and removed independently of each other key, a series of pin sockets in the case in alignment with each of the key slots when the drum is in locked position, corresponding



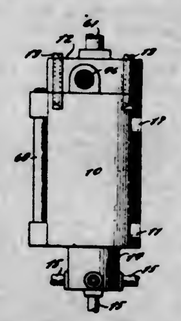
tumbler slots in the drum also in alignment with the sockets when the drum is in locked position, a tumbler in each tumbler slot, and a spring pressed locking pin in each of the sockets, all so arranged that each set of tumblers may be operated by its own key independently of the operation of the other sets of tumblers.

1,905,178. COLLAPSIBLE REEL. KURT P. KOHLER, Salem, Ohio, assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 13, 1930. Serial No. 481,703. 9 Claims. (Cl. 242—110.)



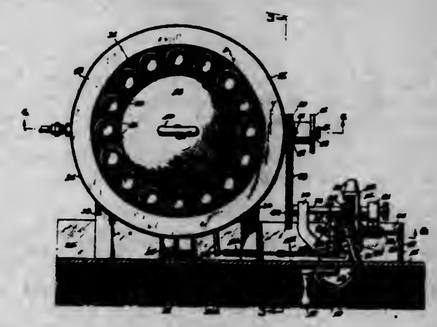
3. In a reel for winding strip material, in combination, a hub portion and a rim portion carried by the hub portion, said rim portion comprising a segment fixed to the hub portion, said rim portion comprising a segment fixed to the hub portion, two movable segments pivoted to the ends of the fixed segment, and a toggle mechanism constituting a collapsible segment joining the free ends of the movable segments.

1,905,179. LUBRICATING APPARATUS. SYLVANUS D. LOCKE, Bridgeport, CHARLES R. DOSCH, Stratford, and HENRY J. STEGEMAN, Fairfield, Conn., assignors, by mesne assignments, to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 13, 1922. Serial No. 567,906. 11 Claims. (Cl. 184—7.)



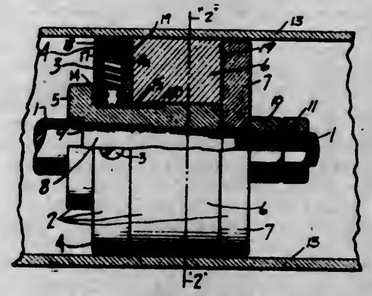
1. In a bearing lubricating system, a lubricant reservoir, a pipe leading therefrom to the bearing to be lubricated, a measuring mechanism in the pipe arranged to be operated by changes of pressure on the lubricant in the pipe to supply a quantity of lubricant to the bearing for each change of pressure, and a pump to produce pressure on the lubricant comprising a cylinder, a plunger therein, and means to reciprocate the plunger positively on its nonpressure stroke and under yielding pressure on its pressure stroke, the cubic contents of the cylinder which the plunger displaces in its pressure stroke being greatly in excess of the quantity of lubricant supplied by said measuring mechanism for each change of pressure, and said pump having provision to relieve the pressure in the cylinder before the non-pressure stroke begins, irrespective of the amount of lubricant passing into the delivery pipe.

1,905,180. DISPENSING MACHINE. LEONARD W. LOWTHER, Audubon, N. J., assignor to Horn & Hardart Baking Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Mar. 20, 1928. Serial No. 263,100. 5 Claims. (Cl. 312—36.)



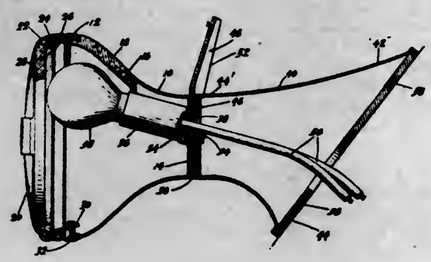
1. A dispensing device comprising a stationary container having a base plate, a spider rotatably mounted in said container on said base plate and means operable for rotating the spider, a chamber between said container and spider for retaining a plurality of articles to be dispensed, a recess in said container for dispensing said articles upon the rotation of said spider, and a stop spring actuated through the spider rotating means for limiting the rotation of said spider to the successive dispensing of a single article for each operation of the spider rotating means.

1,905,181. PUMP PISTON. WILLIAM FREDERICK McMAHON, Riverside, Calif. Filed Mar. 18, 1929. Serial No. 347,904. 5 Claims. (Cl. 74—109.)



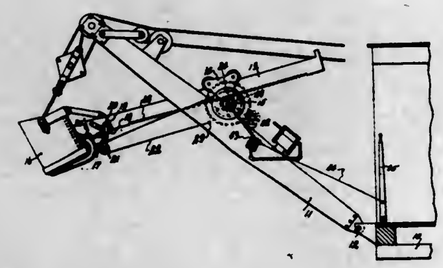
1. In a mechanism adapted to create a pressure upon a fluid, a pump piston adapted to move in a reciprocating movement, a piston member and a piston follower adapted to be moved toward said member, a pliable packing between said member and follower, means for utilizing the fluid pressure to impart longitudinal movement to said follower to compress and expand the said packing and a ratchet mechanism adapted to hold the pliable packing in a compressed and expanded state without pulsating action on each reciprocating movement of the piston.

1,905,182. TAIL LAMP. HOWARD C. MEAD, Anderson, Ind., assignor to Guide Lamp Corporation, Anderson, Ind., a Corporation of Delaware. Filed July 29, 1932. Serial No. 625,775. 5 Claims. (Cl. 240—8.3.)



1. In a lamp for automobiles and the like, the combination of a pair of tubular stampings each having one end expanded, the opposite ends of the stampings being alined, means housed within said stampings for securing said ends together, a lamp socket mounted in one of said stampings, a lamp in the socket, a cover glass over the expanded end of said stamping, and a conductor connected to the socket and concealed within the stampings.

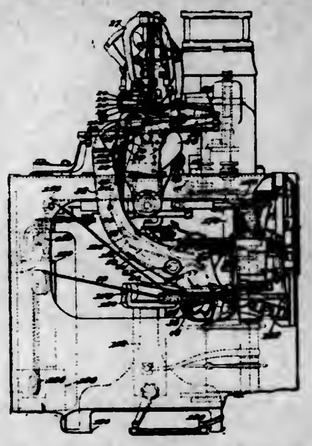
1,905,183. FLUID OPERATED DIPPER TRIP. GEORGE G. MORIN, Holyoke, Mass. Filed Feb. 26, 1931. Serial No. 518,436. 4 Claims. (Cl. 214—146.)



1. An excavating machine comprising a boom, a dipper stick rotatably and slidably mounted in the boom, a circular member rotatably mounted in the boom substantially at the intersection of the dipper stick and boom, the dipper stick being provided with means making rolling contact with the member, a dipper mounted at the end of the dipper stick and provided with a latched bottom, a drum having rotative coupling to the member and located concentrically therewith, said drum having an effective cable winding diameter equal to twice the effective diameter of the pinion, a pulley connected to the dipper latch, a cable secured to the boom, passing around the pulley, and wound upon the drum, and operator-controlled mechanism for rotating the drum relative to the pinion to cause the cable to be wound thereon and the dipper latch to be tripped.

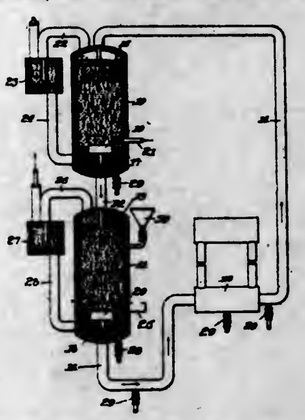
1,905,184. SHOE SUPPORTING JACK. ALFRED R. MORRILL, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed Nov. 23, 1927, Serial No. 235,869. Divided and this application filed July 8, 1931. Serial No. 549,377. 13 Claims. (Cl. 12—17.)

1. A machine for operating on shoes having, in combination, means for operating on a shoe, a work supporting horn arranged to extend within the shoe and a shoe supporting jack provided with heel and toe supports movable towards and from each other, clamping jaws mounted on the heel support arranged to receive the rear edge of



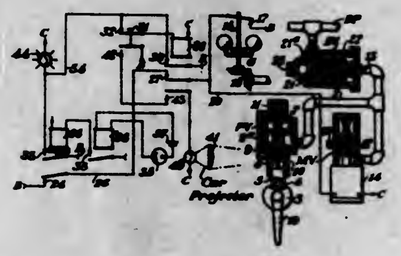
the shoe sole between them, and a rest on the toe support arranged to enter the crease between the upper and sole at the toe of the shoe.

1,905,185. HEAT TRANSFER. FRARING H. MORRIS, Whiting, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Sept. 2, 1927. Serial No. 217,135. 2 Claims. (Cl. 122—31.)



2. Apparatus for transferring heat from one independent fluid body to another comprising a pair of separate closed chambers, one of said chambers being adapted to contain a body of fluid to be cooled and the other a body of fluid to be heated, conduit means leading from the lower end of each of said chambers to the upper end of the other of said chambers, said chambers being otherwise independent and not in communication with each other, means for cyclically circulating a substantially immiscible heavier fluid heat transfer medium from the lower end of one chamber through one of said conduits into the upper end of the other of said chambers and from the lower end of the latter chamber through the other of said conduits and into the upper end of the first-named of said chambers, whereby heat contained by one fluid body is transferred to the other fluid body, and means for maintaining a body of said heat-transfer medium in the lower end of each of said chambers over the point of connection of the conduit leading to the upper end of the other of the said chambers, thereby preventing the said bodies of fluid being heat exchanged from becoming admixed with each other.

1,905,186. RAILWAY TRAFFIC CONTROLLING APPARATUS. BERNARD E. O'HAGAN, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Apr. 16, 1932. Serial No. 605,653. 15 Claims. (Cl. 246—29.)

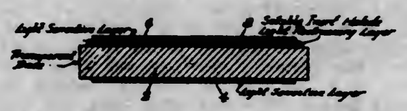


1. Railway traffic controlling apparatus comprising, a trackway trip arm movable to a non-tripping or a tripping position according as traffic conditions in advance are safe or unsafe, a car-carried brake applying trip arm arranged to be operated by the trackway trip arm when the latter is in its tripping position but not when it is in its non-tripping position, a car-carried source of light, manually controlled means adapted when actuated to illuminate said source of light, a light sensitive trackway element influenced by said light source to effect the movement of the trackway trip arm to its non-tripping position under unsafe traffic conditions, and car-carried speed governing means rendered active to establish a low speed restriction in response to such actuation of the manually controlled means.

1,905,187. MATERIAL FOR MAKING WATERPROOF MORTAR AND METHOD OF PRODUCING THE SAME. KNOTT C. RANKIN, Rockland, Me., assignor to Rockland & Rockport Lime Corporation, Rockland, Me., a Corporation of Maine. Filed Feb. 9, 1932. Serial No. 591,925. 11 Claims. (Cl. 106—24.)

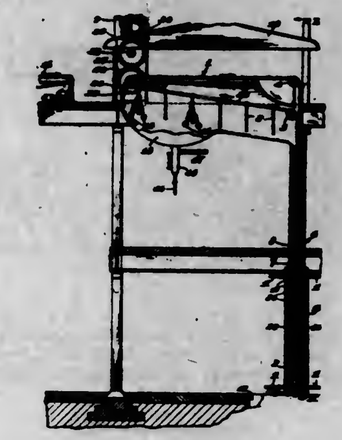
2. A material for making mortar, comprising a mixture of crushed, granular or pulverized quicklime and a fat or oil of animal or vegetable origin in such proportions that when slaked with an excess of water to a wet paste or putty the heat and boiling of the slaking lime causes the fat or oil to be completely dispersed through and intimately mixed with the wet lime paste or putty in an attenuated state of suspended subdivision in the wet mass to produce when dry a water-repellent mass.

1,905,188. POSITIVE PHOTOGRAPHIC FILM. VIRGIL B. SHARE, Parlin, N. J., assignor to Du Pont Film Manufacturing Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 2, 1930. Serial No. 472,682. 11 Claims. (Cl. 95—2.)



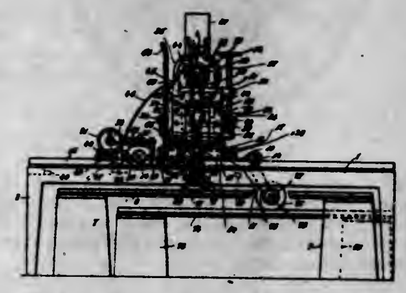
1. A positive photographic film having a base, a plurality of light sensitive emulsions, and a relatively light insensitive light restraining layer in a position to prevent the light from passing from one sensitive emulsion into another, said light restraining layer containing a suspension of a photographically inert salt which will be subsequently removed when said film is submitted to the usual developing, fixing, and finishing processes.

1,905,189. PROCESS AND APPARATUS FOR MAKING COMPOSITE GLASS. JAMES H. SHEETS, Brackenridge, Pa., assignor to Duplate Corporation, a Corporation of Delaware. Filed Aug. 11, 1930. Serial No. 474,376. 12 Claims. (Cl. 18—17.)



1. A process of compositing glass and a reinforcing sheet, which consists in assembling a pair of glass sheets with a reinforcing sheet therebetween with their opposing surfaces prepared for adhesion upon the application of heat and pressure, and moving the assembled sheets down into a heated bath of metal to a depth sufficient to composite the sheets by the pressure produced in the bath by gravity, the edges of the sheets being shielded from contact with the bath during such movement into the bath.

1,905,190. MARBLE WORKING MACHINE. THOMAS PAUL SILVESTER, New York, N. Y., assignor of one-third to Lisa Silvester and one-third to Vincent J. Silvester, New York, N. Y. Filed Nov. 24, 1928. Serial No. 321,674. 6 Claims. (Cl. 51—100.)

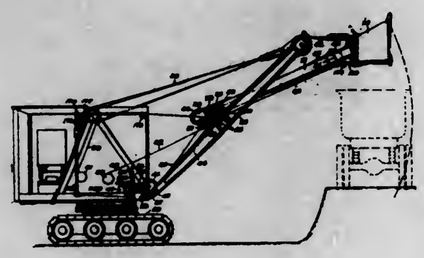


3. Apparatus for shaping and finishing marble comprising a frame mounted for movement in two directions at right angles to each other, and to swing about a pivot, a vertical shaft, bearings for said shaft at one end of the frame, a cutter on the shaft, means for vertically adjusting the shaft, and a motor on the frame to rotate the shaft.

1,905,191. EXCAVATOR. FREDERICK O. SNOW, Jr., Winchester, Mass., assignor to Mead-Morrison Manufacturing Company, East Boston, Mass., a Corporation of Maine. Filed June 25, 1931. Serial No. 546,783. 17 Claims. (Cl. 214—146.)

1. In an excavator, the combination of a scoop provided with a door, a latch for holding said door closed, a

latch-tripping rope, a take-up for said rope, a guide for said take-up, a clamp carried by said take-up, means for moving said scoop, means consequent upon movement of said scoop to cause said rope to trip said latch, and means



controlled by the operator to cause said clamp to clamp said guide, thereby to hold said take-up fixed, thereby to predetermine the point in the movement of said scoop when said rope will trip said latch.

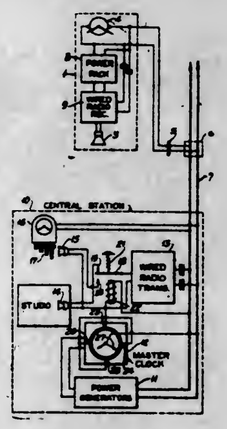
1,905,192. **REEL.** HOWARD H. TALBOT, Pittsburgh, Pa., assignor to United Engineering & Foundry Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 11, 1929. Serial No. 377,382. 19 Claims. (Cl. 242—110.)



1. In a reel, the combination with a plurality of relatively movable sections, of pivoted gripping means cooperating with one of said sections, and a cam shaft for successively expanding said sections and turning said gripping means into operative position.

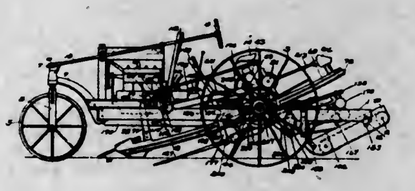
1,905,193. **COMBINED CLOCK AND RADIO SYSTEM.** ARTHUR M. TAGGNER, Maplewood, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed May 28, 1931. Serial No. 540,632. 4 Claims. (Cl. 179—2.5.)

1. A combined clock and radio system comprising, means for producing commercial alternating current, wire lines for conveying said alternating current, a regulator for controlling the frequency of said alternating current, a source of programs and a microphone associated therewith, a source of horological sound effects and a microphone associated therewith, a radio transmitting organization for transmitting carrier frequency energy over said wire lines, means under control of said regulator for selectively connecting said microphones to said transmitter at predetermined times, an electrically driven clock connected to said wire lines at a point removed from said source of horological sound effects, and means responsive to carrier



frequency energy connected to said wire lines for reproducing said programs and said horological sound effects in the vicinity of said electrically driven clock.

1,905,194. **HARVESTING MACHINE.** WILLIAM E. URSCHEL, Valparaiso, Ind. Filed Jan. 12, 1931. Serial No. 508,125. 11 Claims. (Cl. 55—108.)

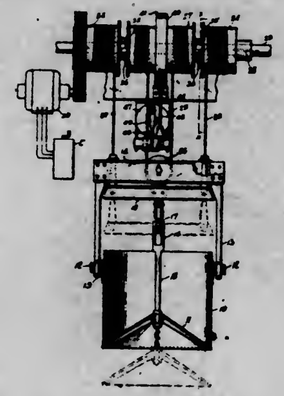


1. A conveyor holding root crops by their leaves, a cutter in the path of said conveyor, and crop positioning means comprising paired chains in succession and in parallel planes intermediate said conveyor and said cutter.

1,905,195. **CRANE TYPE CHARGER.** ROY J. WADD, Milwaukee, Wis., assignor to Harnischfeger Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 24, 1929. Serial No. 402,293. 2 Claims. (Cl. 214—116.)

1. A hoisting mechanism adapted for use with a bucket having a body and a drop bottom, said mechanism comprising raising and lowering drums for the bucket body and the drop bottom, respectively, individual cables connecting the bucket body and the drop bottom to their respective drums, said drums being mounted for relative rotation and disposed in axial alinement with their opposed ends in closely spaced relation, a power drive for one of the drums, lugs between the opposed ends of the drums and carried thereby, said lugs constituting the driving connection between the drums and disposed in eccentric relation to the common axis of rotation of the drums and in the path of each other whereby the drums may be rotated in unison through the power furnished to one of the drums for raising and lowering the bucket body and its drop bottom in closed relation or the power driven

drum may be rotated relatively to the other drum for raising and lowering the drop bottom independently of the bucket body when its drum is held against rotation, and a



manually controllable means for holding the last mentioned drum against rotation while the other drum is rotated with respect thereto.

1,905,196. **SIDE BEARING FOR RAILWAY CARS.** HENRY F. WARDWELL and WALTER C. BLADIN, Chicago, Ill. Filed Oct. 21, 1927. Serial No. 227,690. 1 Claim. (Cl. 308—226.)



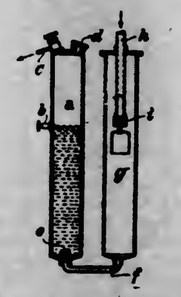
In a side bearing for railway cars, an elongated rectangular housing having bottom, side, and end walls, said bottom wall having a raised upper surface provided with a depression at its medial portion to form inclined runways terminating short of the ends of said bottom wall, and said runways having the margins thereof spaced from the side walls to afford drain grooves extending to the ends of said housing, said end walls being semi-cylindrical in horisoatal cross section and shaped to afford vertical spaced abutments lying beyond the ends of said runways, said end walls forming end chambers in said housing, and said abutments being reinforced by said semi-cylindrical walls, and projecting toward each other to a distance less than the width of said runways so as to lie in the path of a bearing member mounted on said runways, the bottom wall having apertures in said chambers for receiving fastening members, drain ports in said semi-cylindrical walls at the junction thereof with the bottom wall and in communication with said grooves, and a cylindrical bearing member riding on said raised upper surface and runways and limited in its travel by engagement of its cylindrical bearing surface with the vertical abutments formed adjacent to said end walls, engagement of said cylindrical member with said abutments by virtue of the termination of said runways and the position of said abutments being limited to relatively small areas of contact between the cylindrical member and said abutments for preventing the accumulation of moisture or ice adjacent thereto, tending to prevent free movement of said cylindrical bearing member.

1,905,197. **FLEXIBLE CABLE.** HARTWELL W. WEBB, Flint, Mich., assignor to A C Spark Plug Company, Flint, Mich., a Company of Michigan. Filed Feb. 6, 1929. Serial No. 337,064. 18 Claims. (Cl. 64—30.)



3. In a flexible driving shaft, a phosphor bronze core wire, a layer of phosphor bronze wire over said core wire, said core and layer being relatively immovable, two layers of hard steel wire over said layer, and an outermost layer of soft steel wire.

1,905,198. **WATER LOCK FOR ACETYLENE GENERATORS.** HEINZ WENDTLAND, Altona-on-the-Elbe, Germany. Filed Aug. 3, 1931, Serial No. 554,765, and in Germany Nov. 18, 1929. 7 Claims. (Cl. 48—56.)



1. A water lock for acetylene generators, comprising in combination: a closed container which is normally partly filled with water and is provided with a gas delivery port arranged above the water level, said container constituting the water lock proper; a second closed container which is normally empty; and a pipe connected at one end to the bottom of said first named container and at the other end to the bottom of said second container, said second container being provided with an inlet for gas and being adapted to receive water displaced by a back pressure from said first named container, substantially as described.

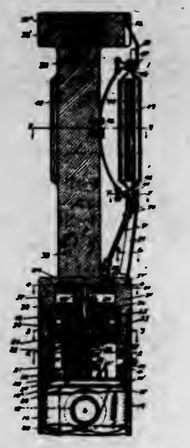
1,905,199. **FASTENING.** HARRY ALPHONSE WIDMER, London, England, assignor to Tuck-Tite Lock and Fastener Company Limited, London, England, a Company of Great Britain. Filed May 24, 1930, Serial No. 455,268, and in Great Britain Mar. 26, 1930. 14 Claims. (Cl. 24—211.)



1. A spring socket fastener comprising a spring grip mounted on the closing member of the article to be fastened and a stud comprising a cylinder with an element sliding in said cylinder mounted on the body of the article

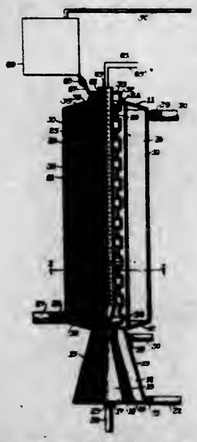
to be fastened and provided with a neck adapted to be positively engaged by said spring grip, a spring, and a sleeve in said element adapted to move the members of said grip outwardly to release said stud by pressure on said sleeve, said spring engaging the bottom of cylinder and the top of said sleeve.

1,905,200. MECHANISM FOR RECORDING ROTATION OF A WELL SURVEYING INSTRUMENT. WILLIAM J. WILLIAMS, South Gate, Calif., assignor of one-half to L. A. Wagner, Los Angeles, Calif. Filed Nov. 20, 1929. Serial No. 408,507. 9 Claims. (Cl. 234—5.8.)



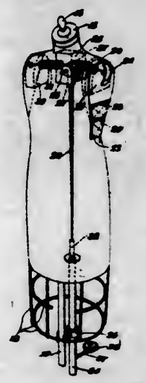
1. In mechanism for indicating rotation in drill pipe as it moves into a well, contact elements carried thereby and positioned to engage the wall of the well, recording mechanism for recording rotating movement about a center, a receiving sheet carried thereby and turning therewith, and operating connections from said contact elements and said recording mechanism, whereby the movement of said contact elements operates said recording mechanism and records on said sheet said rotation.

1,905,201. VACUUM DISTILLATION. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Jan. 2, 1930. Serial No. 417,889. 7 Claims. (Cl. 196—114.)



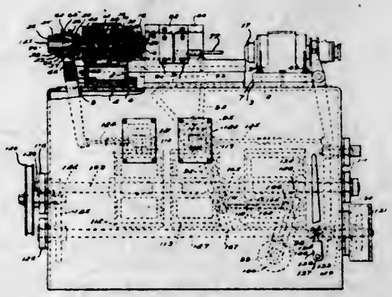
1. In vacuum distillation apparatus, a substantially vertical evaporating surface, means for heating said evaporating surface, means for flowing oil in a thin film over said surface, a condenser surface mounted close to said evaporating surface and substantially parallel thereto, and means interposed between said evaporating surface and said condenser surface for preventing excessive heat losses to the condenser.

1,905,202. COLLAPSIBLE DRESS FORM. SIMON WOLF, Bronx, N. Y. Filed Aug. 27, 1931. Serial No. 559,697. 8 Claims. (Cl. 223—18.)



1. In a dress form, a body having openings at the shoulders, closures for the openings, hinges connecting said closures at their bottoms to said body and resilient means to normally press said closures outwardly.

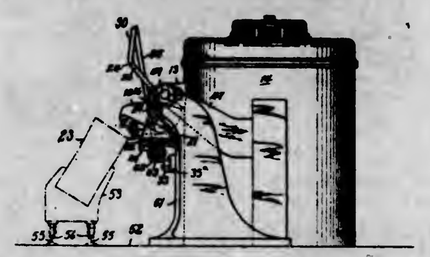
1,905,203. METAL WORKING MACHINE. GEORGE F. YAGER, Toledo, Ohio, assignor to The Bunting Brass & Bronze Company, Toledo, Ohio, a Corporation of Ohio. Filed July 14, 1930. Serial No. 467,907. 4 Claims. (Cl. 77—21.)



1. In a machine of the class described, a head, a spindle mounted to turn in said head, a cap carried by the spindle, work gripping means including a collet movable longitudinally of the spindle and operable upon engagement with the cap to grip the work, and actuating means for the collet including a work receiving member movable in the head as a follower for the collet, said longitudinally movable member having inclined means for deflecting toward said collet chips and other particles removed from the work while gripped by said collet, and said collet and cap having registering openings permitting said chips and other particles to be discharged laterally outwardly therefrom.

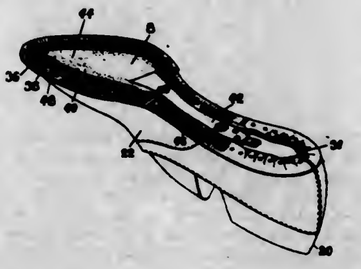
4. In a machine of the class described, a pair of spaced heads, work-gripping means carried by said heads, a reciprocating carriage, between said heads, tools projecting from opposite ends of said carriage for engagement with work in said gripping means, a rotary cam, and a driving connection between the cam and carriage adjustable to vary the movements of the carriage and tools relative to the heads and work-gripping means including a rack rigid with the carriage, a gear sector engaging the rack, a lever rigid with the sector, a lever adjacent the lever just mentioned and operatively connected to the cam, and a slidable connection between said levers.

1,905,204. APPARATUS FOR POURING MOLTEN METAL. FRANK D. ZINNO, Waterbury, Conn., assignor to The Chase Companies, Incorporated, Waterbury, Conn., a Corporation. Filed Dec. 30, 1929. Serial No. 417,383. 4 Claims. (Cl. 22—79.)



1. In apparatus for pouring molten metal, in combination, a tiltable melting furnace having a discharge opening, and a delivery container arranged in position to receive molten metal from said discharge opening and supported in fixed position laterally of the axis of said opening, the support for said delivery container including means whereby said container may be moved toward and away from said discharge opening to accommodate the position of said container to said opening upon tilting of the furnace, means whereby said container may be tilted upon a substantially horizontal axis to pour the molten metal therefrom, and means whereby said container may be swung upon a substantially vertical axis to position it for pouring as desired.

1,905,205. SHOE AND THE MANUFACTURE THEREOF. OSCAR C. ADAMS, Lynn, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 13, 1931, Serial No. 574,828. Renewed Jan. 28, 1933. 5 Claims. (Cl. 12—142.)



1. A shoe having its upper secured in lasted relation to its insole at its shank portion by staples driven through the marginal portion of the upper materials and into the insole in such a manner that the legs of the staples are deflected without passing entirely through the insole, and having its upper at the forepart held in lasted relation to the insole by stitching passing through a welt extending about the forepart of the shoe and through the marginal portion of the shoe upper and the between substance of the insole, the outsole of the shoe being secured to the marginal portion of the shoe upper at the shank and to the welting extending about the forepart of the shoe upper as well as to the adjacent portion of the shoe bottom by pyroxylin cement.

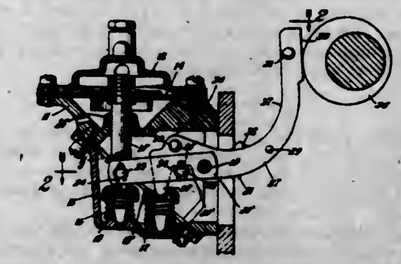
3. That improvement in methods of manufacturing shoes which comprises mounting upon the bottom of a last an insole the forepart of which is provided with a peripherally extending lip located a short distance from the margin of the insole, working the marginal portion of the shoe upper into lasted relation to the insole, securing it in lasted relation flat against the shank portion of the insole with permanent fastenings and against the lip at the forepart of the insole, stitching a welt to the marginal portion of the lasted shoe upper and to the lip at the forepart of the insole, trimming the surplus upper, welt and insole-lip material from the shoe bottom, and attaching an outsole to the shoe bottom with pyroxylin cement.

1,905,206. TOWEL CABINET AND TOWEL PACK THEREFOR. ALEXANDER ALLEN, Providence, R. I. Filed Dec. 9, 1931. Serial No. 579,898. 9 Claims. (Cl. 312—37.)



6. A towel cabinet comprising a casing, a partition in said casing dividing said casing into upper and lower compartments, said partition being adapted to support a pack of towels thereon in the upper compartment and means secured adjacent the front edge of said partition for securing the towels together at their center and the pack to said partition, said towels being adapted to hang down into the lower compartment when used.

1,905,207. FUEL PUMP OPERATING MEANS. ABRAHAM M. BABITCH and MILES G. HANSON, Flint, Mich. Filed Dec. 12, 1929. Serial No. 413,650. 1 Claim. (Cl. 103—215.)



In a fuel pump, a sectional actuating lever comprising: an inner lever section formed of separate stampings spaced apart sufficiently to permit the interposition of an

outer lever section therebetween; an outer lever section, also formed of separate stampings, movable therebetween; a pivot common to said sections; and a cam pin carried by one of said sections and conditionally engaging cam surfaces provided by edges of the stampings of the other of said sections,—said outer section including three stampings which are secured together by rivets near the respective ends thereof and the intermediate stamping being different in outline from the adjacent stamping to provide a head engageable by resilient means to hold said outer section in engagement with means for imparting reciprocatory movement thereto.

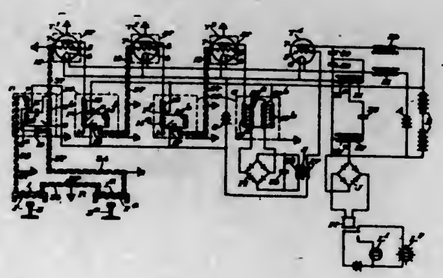
1,905,208. SAND TESTER. JAMES L. BADGETT, Boling, Tex., assignor of one-fourth to W. C. McMasters and one-fourth to J. E. Pomeroy, Pasadena, Tex. Filed Aug. 18, 1930. Serial No. 475,976. 8 Claims. (Cl. 166—1.)



1. A tool of the character described comprising a barrel, a tubular operating stem to the lower end of which the barrel is attached, a test stem having upper and lower openings and having a releasable, threaded connection with and extending beneath the barrel and whose lower end is formed into a probe adapted to be inserted into strata to be tested in a well bore and whose upper end has a sample chamber, sealing means between the test stem and barrel, said test stem upon release of said connection being movable into one position, relative to the barrel, to carry said sealing means beneath the openings to block said openings and to thereby effect the closing of said chamber to said strata and into another position to carry the sealing means between the openings to open said openings and chamber to said strata to permit fluid to flow from said strata into said chamber.

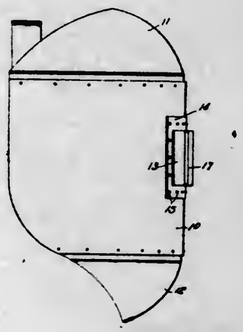
1,905,209. ELECTRICAL AMPLIFIER. PAUL N. BOSSART, Swissvale, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Feb. 25, 1930. Serial No. 431,085. 4 Claims. (Cl. 179—171.)

1. An electrical amplifier comprising an electron tube having a grid, a plate, and a filament; a grid circuit for said tube including a source of alternating current, a source of unidirectional current connected between the plate and the filament of said first tube, a capacity connected between the plate and filament of said tube, a first reactance connected across a portion of said capacity, a second reactance, a condenser; a second circuit including said condenser, said second reactance, and a portion of



said first reactance and tuned to resonance at the frequency of said source of alternating current; and a signaling device responsive to current in said second circuit.

1,905,210. WELDER'S MASK. FREDERICK M. BOWERS, Chester, Pa. Filed Dec. 4, 1931. Serial No. 578,894. 8 Claims. (Cl. 2—8.)

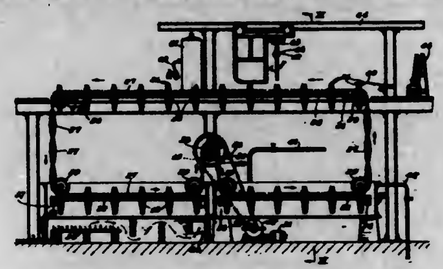


1. A welder's mask comprising an arcuate body, a housing fitted to the arcuate body and provided at one end with a slot, a sheet of transparent material within the housing, a tray, within the housing bearing upon said transparent sheet and covering the slot, a second subtransparent sheet within the tray, and spring pressed means for maintaining the said sheets and tray in position.

1,905,211. PROCESS AND APPARATUS FOR MAKING COMPOSITE GLASS OR OTHER COMPOSITE ARTICLES. VERN K. BOYNTON, Milwaukee, Wis., assignor to Duplate Corporation, a Corporation of Delaware. Filed June 25, 1928. Serial No. 288,126. 10 Claims. (Cl. 18—17.)

3. A process of applying heat and pressure to members to be joined together, which consists in enclosing the members in a container in a body of fluid with the surfaces to be joined in contact, shielding the line of joinder of

the members at the periphery thereof against fluid pressure, passing the container through a heated area so as to develop in the confined fluid the pressure necessary to

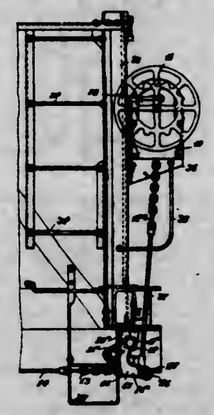


secure a joinder of the members, and then passing the container through a cooled area to reduce its temperature and that of its contents.

1,905,212. PROCESS OF WATER-PROOFING MATERIALS WITH AQUEOUS EMULSIONS. CARL ALFRED BRAUN, Munich, Germany, assignor to International Bitumen Emulsions Corporation, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 21, 1930, Serial No. 446,169, and in Germany Apr. 7, 1928. 4 Claims. (Cl. 92—21.)

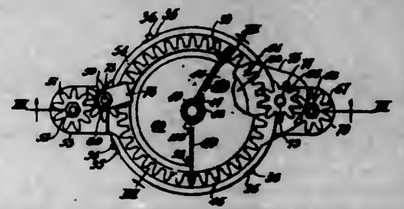
1. A process of waterproofing materials with aqueous emulsion of waterproofing agents which comprises pretreating the materials to be waterproofed with a solution of emulsion stabiliser, then mixing the materials with a quick-breaking aqueous emulsion of waterproofing agent substantially free from colloidal powders, and finally adding an electrolite to break the emulsion.

1,905,213. SIDE HAND BRAKE FOR RAILWAY CARS. RICHARD W. BURNETT, Chicago, Ill. Filed Sept. 11, 1930. Serial No. 481,222. 2 Claims. (Cl. 74—112.)



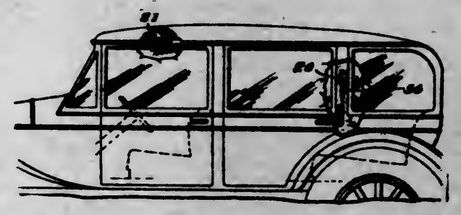
1. In combination with a brake rigging and the corner post construction of a railway car, a bracket secured to said corner post to project outwardly therefrom in a plane parallel to the side of the car, a hand power mechanism secured to said bracket and including a vertically disposed hand wheel operable in a plane parallel to the side of the car, and means for transmitting power from said power mechanism to the brake rigging comprising a connector connecting said brake rigging and movable beneath the car, a shaft extending transversely of the car, a rocking member secured to said shaft in alignment with said connector and to which said connector is attached, an operating lever secured to said shaft, and a vertically disposed connector connecting said lever with said power mechanism.

1,905,214. RADIO CLOCK. LEMOY F. BUSH, Edwardsville, Kans. Filed Mar. 5, 1928. Serial No. 259,695. 5 Claims. (Cl. 200—36.)



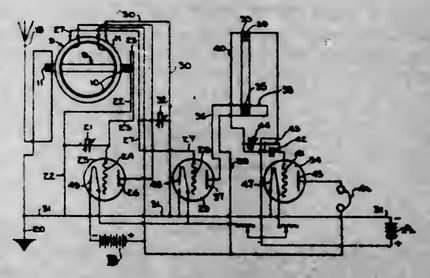
1. In a time controlled circuit breaking device, the combination of a circuit making and breaking device including a pair of cooperative and relatively movable elements adapted to expose varying amounts of conductive material, a brush traversing said elements, a clock provided with connections for actuating said brush, separate means for selectively positioning said elements for different time intervals, and indicators on the face of the clock and actuated by said positioning means for registering the respective starting and stopping points of the corresponding time interval.

1,905,215. TELEPHONE SYSTEM AND APPARATUS. JOSEPH O. CADIEUX, Meriden, Conn., assignor to Connecticut Telephone & Electric Corporation, Meriden, Conn., a Corporation of Delaware. Filed June 20, 1930. Serial No. 462,552. 6 Claims. (Cl. 179—1.)



1. A combination lamp and loud speaker comprising a casing having an outer flange adapted to be secured to the roof of a car, a lamp socket mounted therein, a conical diaphragm having a rim, a glass, and a frame supporting the glass and the rim of the diaphragm in the casing and a magnetic system adjacent the socket consisting of a coil and a core for actuating the diaphragm.

1,905,216. RADIO RECEIVING APPARATUS. FRANK L. CAPPS, Milford, Conn. Filed July 10, 1928. Serial No. 291,518. 9 Claims. (Cl. 179—171.)



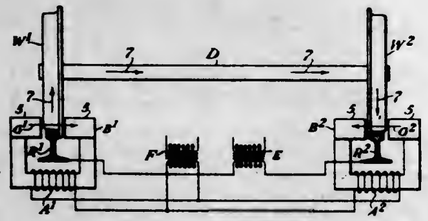
1. A radio receiving apparatus comprising a couple of radio frequency transformers supported with their geometrical centers coincident with each other and said transformers being fixed relatively in non-inductive relation to each other.

1,905,217. MECHANICAL ASSORTING DEVICE. CHARLES E. CONSTABLE and HENRY F. KUNOLD, Cincinnati, Ohio. Filed Sept. 30, 1929. Serial No. 396,346. 4 Claims. (Cl. 214—11.)



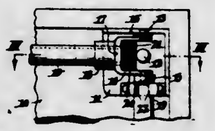
1. A mechanical assorting device comprising an endless conveying means having a series of horizontally arranged and spaced conveying platforms, means for driving said conveying means, a series of pivoted rake devices adapted to swing from an inoperative horizontal position above said conveying platforms to a vertical operative position adjacent to the upper surface of the corresponding conveying platforms, whereby material on said platform will be raked therefrom through the space between the conveying platforms as the conveying means is advanced, locking means for holding each of said rake devices in an inoperative elevated position, a key for each of said rake devices, and means carried by each of said platforms whereby the depression of one of said keys will cause the locking device of the corresponding rake device to be actuated and the rake device lowered into position in operative relation with said platform as the conveying means is advanced.

1,905,218. RAILWAY CAR RETARDER. PAUL H. CRAGO, Wilkinsburg, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1932. Serial No. 587,076. 4 Claims. (Cl. 188—62.)



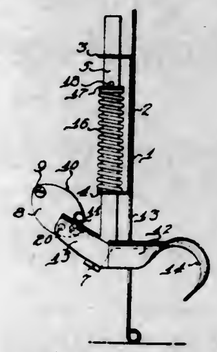
1. A railway car retarder comprising means for passing magnetic flux through a car wheel in a direction parallel to the axle, and means for passing electric current through said wheel in a path perpendicular to the path of such flux and in such direction as to coact with the flux to retard the movement of the car.

1,905,219. FOLDING TABLE. JAMES V. CRICHTON, Philadelphia, Pa. Filed Feb. 25, 1931. Serial No. 518,127. 6 Claims. (Cl. 45—11.)



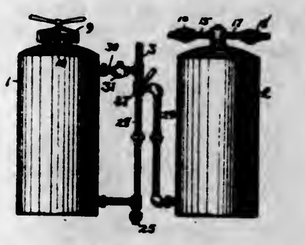
1. In a folding table, the combination with the top of an angularly-flanged corner piece embodying a depending stud, means integral with said corner piece affording pivotal support for a yoke member having a tubular boss, and a leg having sliding guidance in said boss with capacity to engage over or be restrained in contact with the side of the stud aforesaid.

1,905,220. HOOD FASTENER. STEPHEN DE ORLOW, East Lansing, Mich., assignor to Terastedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 7, 1930. Serial No. 465,936. 10 Claims. (Cl. 292—66.)



1. In a latch for the hoods of automotive vehicles, a keeper secured inside the hood to a stationary part of the vehicle, means mounted on the inside of the hood for slidable movement only, a foot on said means capable of being pushed under the keeper when the hood is latched, said foot having no contact with said keeper, a hook pivoted to said foot, said hook having a handle extending outside the hood and operating said hook to cause it to become engaged with or disengaged from the keeper.

1,905,221. WATER SOFTENING APPARATUS. RALPH C. DUNKELBERG, Fort Wayne, Ind. Filed Aug. 14, 1929. Serial No. 385,754. 1 Claim. (Cl. 210—24.)

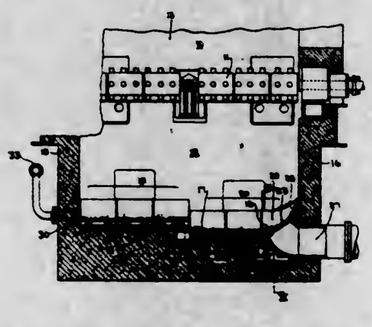


Water softening apparatus having a closed brine tank provided with a check-valve controlled water intake pipe at its top and a discharge pipe at its bottom; a water softening tank having an outlet at its top and an intake pipe connected with its bottom; and a water supply pipe communicating with the intake pipe for the brine tank and provided with a valve which valve has connections with the brine discharge pipe and the intake pipe for the softening tank, said valve being so disposed as to establish communication between the supply pipe and the softening tank or between said brine tank and the water softening tank, accordingly as said valve is adjusted.

1,905,222. FIREPROOF BODIES AND PROCESS FOR MAKING THE SAME. GEORGE H. ELLIS, St. Paul, Minn., assignor to The Insulite Company, Minneapolis, Minn., a Corporation of Minnesota. Filed July 19, 1930. Serial No. 469,249. 9 Claims. (Cl. 18—47.5.)

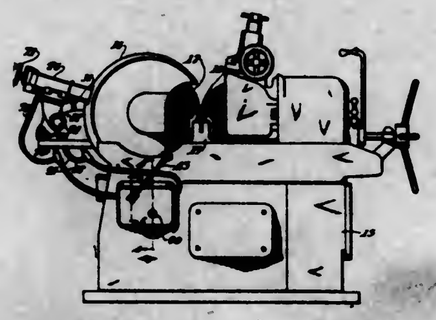
1. A process for producing fire-resistant bodies, which have a tensile strength ranging from thirty-four hundred to four thousand pounds per square inch and a specific gravity of approximately one, which consists in adding a protein-containing body to a woody pulped material in proportion within the range of fifteen to forty per cent by weight of the finished product, mixing the resulting mass, forming a sheet, and then simultaneously pressing and heating the sheet to temperatures within the range of from three hundred to four hundred degrees Fahrenheit, and at pressures within the range of four hundred to four hundred fifty pounds per square inch, and maintaining heat and pressure from twenty-five to forty minutes.

1,905,223. ASH DISPOSAL APPARATUS. ROBERT A. FORESMAN, Moores, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 14, 1931. Serial No. 575,081. 8 Claims. (Cl. 110—171.)



1. In ash disposal apparatus, the combination of a pit for receiving and storing ash and comprising side walls, end walls and a bottom wall having a discharge opening therein adjacent one of the end walls, that portion of the bottom wall between said one end wall and the opening being inclined upwardly and toward said end wall, and means providing for the movement of ash along the bottom wall and towards the discharge opening.

1,905,224. GRINDING MACHINERY. FREDERICK S. HAAS and CLEMENT BOOTH, Cincinnati, Ohio, assignors to Cincinnati Grinders Incorporated, Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 27, 1929. Serial No. 395,703. 15 Claims. (Cl. 125—11.)

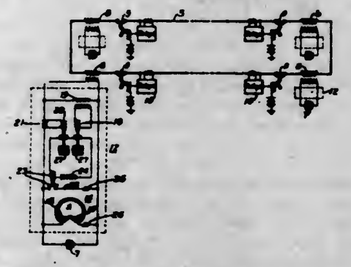


1. A mechanism of the nature described including a support, a slide movable traversely of the support, a tool holder movable transversely of the slide, a piston for actuation of the slide, a second piston for actuation of the tool holder, respective cylinders operatively supporting the pistons, a source of hydraulic power, and means for simultaneously coupling the source of power with one end or the other of each of the cylinders for simultaneous actuation of the feed and traverse controlling pistons whereby the tool is incremently fed toward a grinding wheel at the initiation of the movement of the slide.

1,905,225. ART OF COMPRESSED LAMINATED PRODUCTS. ADOLF HAWERLANDER, New York, N. Y., assignor to Halisite Corporation, New York, N. Y., a Corporation of New York. Original application filed Mar. 18, 1929, Serial No. 346,811, and in Great Britain Sept. 20, 1929. Divided and this application filed July 10, 1930. Serial No. 467,135. 2 Claims. (Cl. 154—2.)

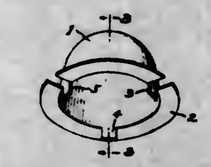
1. The process of making compressed fibrous products which comprises applying a film of gasoline to the surface sheets of veneer, covering the thus treated sheets with a liquid binder constituted of a phenolic condensation product, interposing a fibrous mass between two of said sheets of veneer, subjecting said composite mass to a temperature of approximately 400° F. and applying pressure to said composite mass while in a heated condition to compress the mass to a stable condition and to effect in conjunction with said heat the hardening of said binder.

1,905,226. SERIES CAPACITOR WITH COMBINATION PROTECTIVE EQUIPMENT. BERT V. HOARD, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 5, 1931. Serial No. 542,338. 19 Claims. (Cl. 175—294.)



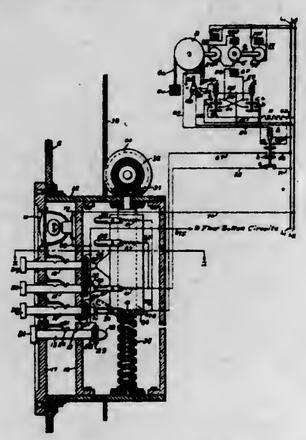
1. A synchronous-synchronous transmission system comprising a plurality of line sections, with high-speed fault-clearing relaying and circuit-interrupter means in each line-section, characterized by a series capacitor connected in series relation to a line-section, excess-voltage flash-over means in parallel relation to the series capacitor in said line-section, said flash-over means being of a type which is capable of carrying the current which would otherwise have passed through the capacitor, in the event of a fault on the transmission system, for a time longer than that necessary for the high-speed fault clearing relaying and circuit-interrupter means to clear the fault and being self-extinguishing when the voltage across itself returns to normal, whereby the series capacitor is automatically re-inserted in its line-section immediately after the clearance of a fault in another line-section.

1,905,227. COOKING UTENSIL. LEOPOLDINE HIESNAY, Ithaca, N. Y., and RUDOLF AMANN, Brookline, Mass. Filed Apr. 25, 1930. Serial No. 447,256. 1 Claim. (Cl. 53—6.)



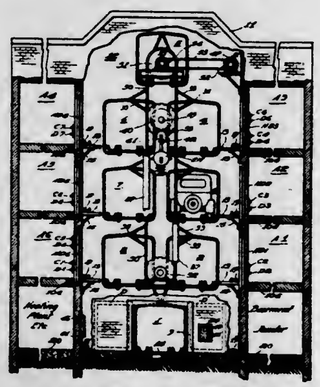
A cooking utensil comprising a shell of the shape of an inverted vessel, a rim surrounding the edge of said shell and feet supporting said shell and said rim, said shell and said feet being integrally stamped of a blank of sheet material.

1,905,228. SIGNALING SYSTEM FOR ELEVATORS. HENRY D. JAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 14, 1929. Serial No. 385,944. 2 Claims. (Cl. 177—336.)



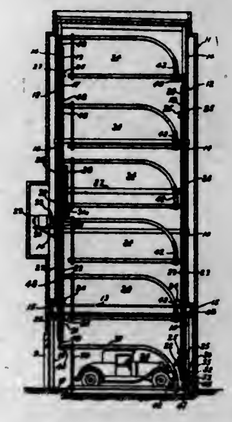
1. A signaling system for an elevator car operable past a plurality of floors comprising a signal device on the elevator car common to all of said floors for indicating to an attendant when stops are to be made at the floors, a plurality of circuits for operating said signal device, one for each floor, each of said circuits having a single opening therein, a plurality of floor contact members, one for each circuit, manually-operated means for selectively moving said contact members into active position and a cooperating traveling contact member, said contact members and said manually operated means being disposed on said elevator car, and means operable correspondingly to movements of the car for moving said traveling contact member into engagement with the operated floor contact members to successively close the openings in the circuits corresponding to the floors at which stops are to be made.

1,905,229. CIRCUITOUS ELEVATOR. HENRY D. JAMES, Edgewood, Pa., and GILBERT D. FISH, Pelham, N. Y., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 12, 1931. Serial No. 508,054. 36 Claims. (Cl. 187—16.)



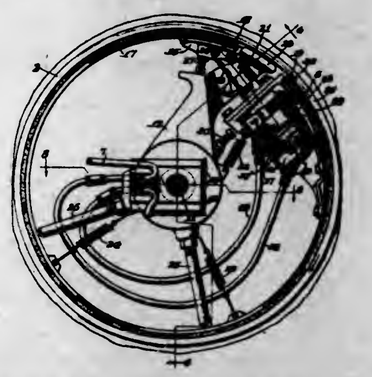
1. In an automobile-storage device, a plurality of automobile movers, movable in an endless path, and means including means on each mover cooperating with the doors of an automobile disposed on the corresponding mover, for preventing the movement of all the automobile movers when an automobile door is open outwardly more than a predetermined amount.

1,905,230. CIRCUITOUS ELEVATOR. HENRY D. JAMES, Edgewood, and GILBERT CURRIE, Forest Hills, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1931. Serial No. 512,291. 7 Claims. (Cl. 214—16.1.)



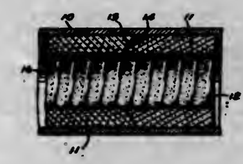
1. In a conveyor, a plurality of load-carrying slings movable in an endless path, each of said slings comprising a horizontally disposed platform, a trunnion bar for supporting said platform extending horizontally for a portion of its length parallel to said platform and for the remainder of its length bent through an arc to intersect said platform adjacent one end thereof to support it at one end, a substantially rectangular frame at the other end of said platform for permitting the entrance or exit of loads to and from said sling, and means for securing the respective ends of said trunnion bar to said platform and frame.

1,905,231. BRAKE MECHANISM. GEORGE C. JETT, Milwaukee, Wis., assignor of two-fifths to Walter H. Stiemke, Milwaukee, Wis. Filed Aug. 23, 1928. Serial No. 301,454. 4 Claims. (Cl. 188—152.)



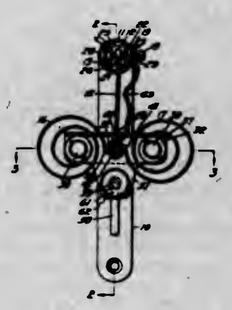
2. In a brake mechanism, a rotatable wheel, a frame for carrying said rotatable wheel, a brake drum secured to the wheel and having an open side, a dust proof cover adapted to close said open side to seal the interior of the drum from the surrounding atmosphere, an expansible brake band disposed within said drum, said cover having a central opening through which extends an axle from the wheel means for sealing said opening around said axle and a band torque arm, the arm and axle being secured to said frame, means connected with said arm for retaining the brake band free from the drum when contracted, brake band expanding means housed within the drum, the torque arm being adapted to limit the rotative movement of said brake band said cover being diametrically split and provided with means for clamping its two halves together with their perimeters sealed upon the outside of the brake drum so that the cover may be split and removed readily.

1,905,232. ELECTRICAL HEATING ELEMENT AND METHOD OF MANUFACTURE. ARTHUR J. KERCHER, Berkeley, and WILLIAM WESLEY HICKS, San Francisco, Calif., assignors to Wesix National Company, San Francisco, Calif., a Corporation of Delaware. Filed Dec. 17, 1928. Serial No. 326,531. 5 Claims. (Cl. 201—67.)



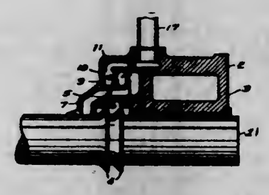
5. The method of constructing an electrical heating element making use of a helical resistance conductor and refractory tubular insulation which method comprises inserting the helical conductor into the bore of the tubular insulation, pouring fluid insulating cement into the bore to cover the resistance conductor with an adherent coating of the cement, allowing the portion of the cement which does not adhere to drain off and leave a restricted bore through the heating element, and then causing the adherent coating of cement to harden.

1,905,233. THERMOSTAT. ARTHUR J. KERCHER, Berkeley, Calif. Filed July 29, 1930, Serial No. 471,503. Renewed Aug. 15, 1932. 5 Claims. (Cl. 200—139.)



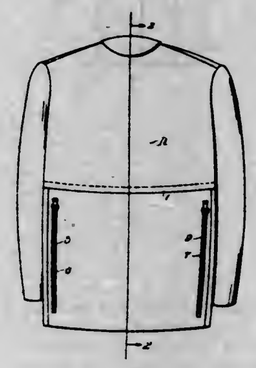
1. In an electrical control thermostat, a stationary contact, a movable contact movable between open and closed positions with respect to the stationary contact, a pair of bimetallic strips, a mounting to which an end of each strip is fixed, pivot pins serving as a connection between the free ends of the strips, said strips being normally tensioned to urge the free ends of said strips together, a member connecting said pivot pins with the movable contact, said strips being arranged to flex opposite responsive to like temperature changes, and means for adjustably rocking said mounting about an axis intersecting the center line of said pivot pins, whereby both of said bimetallic strips and the movable contact carrying member can be conditioned to effect closure of the contacts at a different temperature.

1,905,234. MEANS FOR PREVENTING OIL LEAKAGE FROM BEARINGS. JOHN M. LARRERTON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 20, 1929. Serial No. 415,478. 4 Claims. (Cl. 308—134.)



1. In connection with a suction-ventilated machine having a bearing subject to the suction, said bearing having an oil-collecting chamber, means to create the ventilating-suction, exhaust means for the suction-creating means, and a duct leading from the said exhaust means to the said oil-collecting chamber.

1,905,235. HUNTING COAT WITH DETACHABLE POCKET. CHARLES L. MANDELERT, Chippewa Falls, Wis. Filed May 2, 1931. Serial No. 534,485. 2 Claims. (Cl. 2—94.)

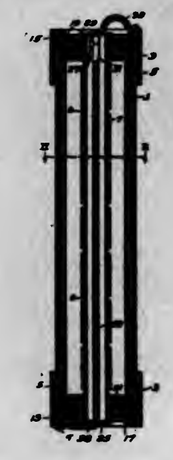


1. A hunting and outing jacket, comprising a jacket, a pocket removably secured to the outer rear portion thereof, the upper edge of said pocket being removable from engagement with said jacket to permit the said pocket to hand below the lower rear portion of said jacket to form a seat pad.

1,905,236. EXPULSION FUSE. GEORGE B. MANGAN, Washington, D. C., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 15, 1931. Serial No. 562,842. 6 Claims. (Cl. 200—127.)

1. In combination with an expulsion fuse having an insulating outer casing and a fuse element therein adapted to rupture under a predetermined current value, of an insulating inner container having closed ends, the fasten-

ing of one of the ends being weaker than that of the other end, said inner container being provided with weakened side-wall portions stronger than the fastening of said ends,



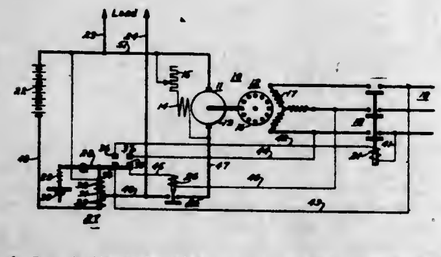
said inner container being held in said outer casing by fastenings which are stronger than said weakened portions of said inner container.

1,905,237. CHAIN FOR AUTOMOBILE TIRES. EDGAR J. MARTEL, Laconia, N. H. Filed Mar. 20, 1929. Serial No. 348,555. 5 Claims. (Cl. 152—14.)



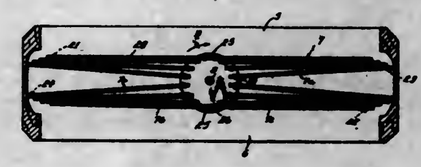
1. An anti-skid chain for tires, comprising a pair of flexible side members, a series of cross links connecting said side members at intervals, a flexible extension on one end of one of said side members having a free end, means on the other end of the same side member for slidably engaging said extension, and means for attaching the free end of said extension to the other said side member.

1,905,238. CONTROL SYSTEM. ARTHUR S. MARTHENS, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 27, 1931. Serial No. 525,730. 10 Claims. (Cl. 171—314.)



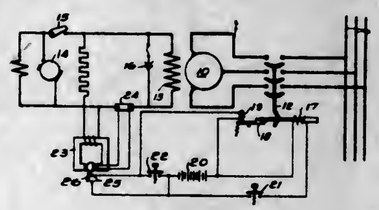
1. In a battery-charging control system, in combination, a storage battery, a source of electrical energy for charging the battery, switching means for connecting the charging source to the battery, and unitary means responsive to the terminal voltage and the charging current of the battery for controlling the switching means to cause the battery to be disconnected from the charging source when the battery is in a predetermined condition of charge.

1,905,239. ADVERTISING DEVICE. WILLIAM H. MCDONALD, Overton, Nev. Filed Sept. 9, 1930, Serial No. 480,696. Renewed Aug. 27, 1932. 12 Claims. (Cl. 40—35.)



1. In an advertising device of the kind described, the combination of a frame, a plurality of advertising cards mounted for rotation about a common axis so that two cards can be displayed simultaneously with their adjacent edges abutting against each other adjacent the axis of rotation, a disc having a plurality of openings corresponding to the cards, a pivot corresponding to each card rotatably mounted in its corresponding opening, means for rotating the disc with a step-by-step movement, means for subjecting the pivots to a torsional stress, and means located at each side of the said axis of rotation, and in the path of the cards to arrest the same in their displaying position.

1,905,240. PROTECTIVE SYSTEM FOR GENERATOR FIELD CIRCUITS. ALFRED J. A. PETERSON, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 6, 1928. Serial No. 310,691. 7 Claims. (Cl. 175—294.)

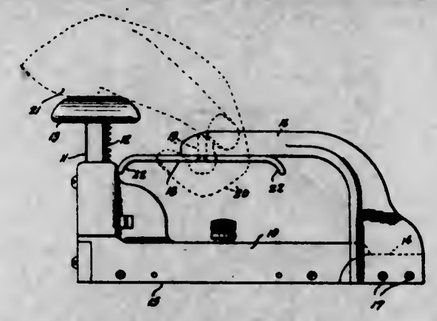


1. The combination with a generator, a load adapted to be supplied by said generator and a switch provided with tripping means for connecting said load to said generator, of a galvanometer relay having a moving coil adapted to be connected to a shunt in circuit with the generator field and contacts controlled by said moving coil for controlling the tripping means, said contacts being maintained disengaged as long as normal current flows in the field circuit and operatively engaged when the field current is interrupted to effect the substantially instantaneous operation of the tripping means to open the switch, and a lightning arrester connected in shunt-circuit relation with the field winding to absorb the self-induced voltage in said winding when the current therethrough is interrupted.

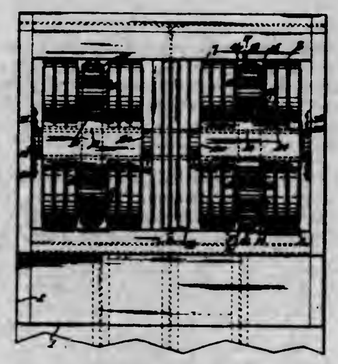
1,905,241. TACKING MACHINE. FRIDOLIN POLZER, South Norwalk, Conn., assignor to The E. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed Apr. 19, 1930. Serial No. 445,751. 3 Claims. (Cl. 1—48.)

1. In a tacking machine or the like, a housing, a movable plunger having a knob for hand operation thereof,

and a handle secured to the housing and extending to a position adjacent said knob and including a finger grip adjacent said knob pivoted so that it may occupy a position transversely the plane of the housing and may also be swung to a position in substantially the plane of the housing.



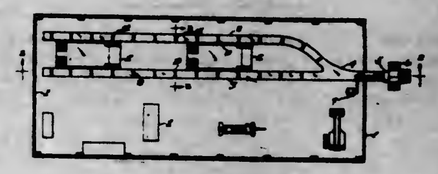
1,905,242. HEAVY DUTY VEHICLE. CHARLES A. ROGERS, LOUIS J. ROGERS and HUGH L. ROGERS, Albion, Pa. Filed Aug. 4, 1930. Serial No. 472,808. 12 Claims. (Cl. 280—81.)



8. In a heavy duty vehicle including a floor supporting a frame, a supporting truck therefor, said truck comprising a member rockably secured to said frame by a transversely extending pivot, wheels carried by said member and positioned in front and in the rear of said transverse pivot, a table carried on said members and lying close to the floor level of the vehicle and forming part of the floor thereof, said table being rockable with said member, whereby the wheels may rock about the transverse pivot without striking that portion of the floor formed by the table.

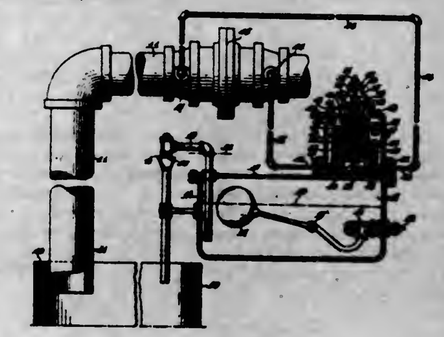
1,905,243. METHOD OF AND APPARATUS FOR REMOVING FUMES FROM BUILDINGS. LOUIS J. ROGERS, Albion, Pa. Filed Aug. 21, 1930. Serial No. 476,766. 5 Claims. (Cl. 98—48.)

3. The combination with a general workshop in which apparatus is to be spray painted unenclosed from the remainder of the shop, of a ventilating system for said shop for removing the paint fumes therefrom including a plurality of comparatively large tunnels having the upper surface of their walls near the floor level and below the level of the apparatus being painted the top walls of said tunnels having spaced openings communicating with the inside of said tunnels respectively and being large in proportion to said tunnels, said tunnels being spaced apart laterally for receiving in the space therebetween the apparatus to be painted, means to introduce air into said shop remote from said openings and means to withdraw the air from said apparatus and from said tunnels and exhaust it outside of said rooms, said means including a fan capable of discharging at slow speed a quantity of air



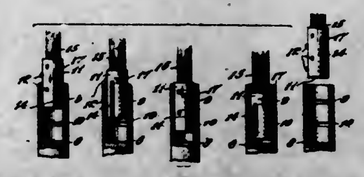
equal to the cubic content of said entire shop in a comparatively short time whereby a slow gradual movement of all the air in said shop past the apparatus being painted is obtained.

1,905,244. APPARATUS FOR CONTROLLING RATE OF FLOW OF A LIQUID. VICTOR A. ROMLIN, Philadelphia, Pa., assignor to Cochrane Corporation, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 28, 1929. Serial No. 402,919. 9 Claims. (Cl. 210—31.)



1. In apparatus of the character described, a closed container, means operable to provide for supply of liquid to said container and maintenance of the liquid contents at substantially a predetermined level, a fluid-pressure supply connection communicating with said container, valve means operable to control fluid pressure conditions in said container, and means responsive to fluid-pressure conditions in said container and operable in accordance with such conditions to control operating action of said valve means.

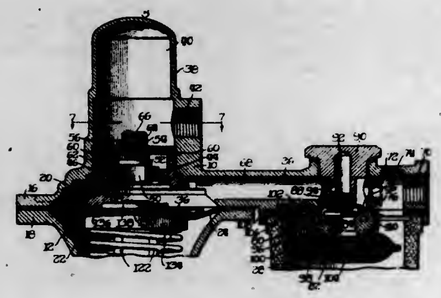
1,905,245. CABLE TERMINAL. CHARLES A. ROWLEY, East Orange, N. J. Filed Feb. 1, 1932. Serial No. 590,055. 5 Claims. (Cl. 173—269.)



1. A cable terminal for use with a tubular terminal having spaced internal annular grooves, comprising a metal cylindrical member having a plurality of staggeredly ar-

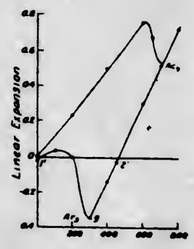
ranged bosses arranged longitudinally of the member and oppositely disposed longitudinal slots, said member having a section intermediate its length adapted to be forced into the insulation of a cable to hold the terminal in position.

1,905,246. MECHANICAL FUEL PUMP. FRED G. SCHWEISTHAL, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed Dec. 21, 1931. Serial No. 582,226. 3 Claims. (Cl. 103—150.)



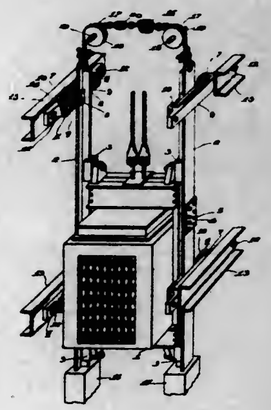
1. In a fuel pump of the diaphragm type, a pump casing member adapted to be secured to the upper side of the pumping diaphragm, said casing member having a recessed chamber on its lower side adapted to form a pumping chamber, an integral vapor dome chamber extending upwardly from said pumping chamber, and an outlet check valve assembly removably secured to the under side of said casing member to separate the pumping chamber from the vapor dome chamber.

1,905,247. WELDING ELECTRODE. HOWARD SCOTT, Wilkinsburg, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 8, 1931. Serial No. 528,475. 10 Claims. (Cl. 219—8.)



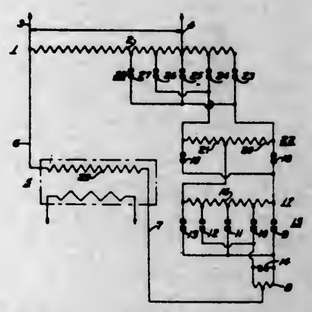
1. A welding electrode comprising iron as a major constituent and nickel and manganese as minor constituents, said electrode having an Ar_3 transformation occurring at some temperature between 550° and 200° C. carbon being less than about 0.3%.

1,905,248. ELEVATOR GUIDE SYSTEM. ARTHUR F. SKAIFE, Berkeley, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 3, 1929. Serial No. 411,278. 18 Claims. (Cl. 187—95.)



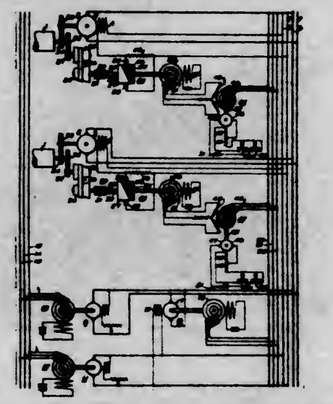
1. An alignment device for guide rails of an elevator car comprising bearing means secured to said rails, and means engaging said bearing members to permit movement of the guide rails only in the direction of travel of the elevator car.

1,905,249. TAP-CHANGING-UNDERLOAD EQUIPMENT. FRANKLIN L. SNYDER, Sharon, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 12, 1930. Serial No. 501,871. 3 Claims. (Cl. 171—119.)



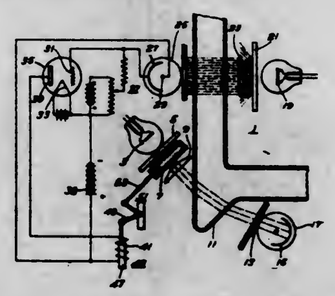
1. In a tap-changing system for transformers, a primary power circuit comprising a pair of conductors, a transformer winding energized from said power circuit and provided with a plurality of tap connections, an intermediate transformer energized from said first-named winding, and a tap-changing transformer energized from said intermediate transformer, tap-changing switches for varying the connection of said intermediate transformer to said first-named winding, reversing means for changing the connection of tap-changing transformer to said intermediate transformer, and a plurality of tap-changing switches for varying the connection of said tap-changing transformer to a power-circuit conductor.

1,905,250. MEANS FOR TAKING UP SLACK. STEPHEN A. STAEGE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 11, 1929. Serial No. 354,382. 7 Claims. (Cl. 172—293.)



7. In a system of motor drives for operating a machine having a plurality of rotatable members through which a sheet of thin material is passed, a plurality of direct-current motors for driving said members, a regulator unit associated with each direct-current motor and including a pilot motor, means for simultaneously actuating said several pilot motors to maintain a predetermined speed ratio between said direct-current motors, and means for temporarily modifying the action of selected regulator units to temporarily vary the speed of the associated direct-current motors from the predetermined relation to thereby remove the slack in said sheet between adjacent members.

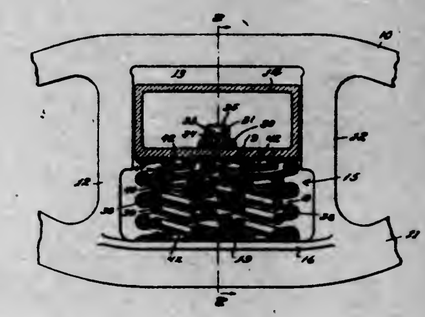
1,905,251. SELF COMPENSATING LIGHT CONTROL. CHARLES A. STITES, Forest Hills, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 27, 1931. Serial No. 547,446. 4 Claims. (Cl. 23—253.)



1. In apparatus for detecting the variation in properties of fluids by measuring the variation of the optical properties of said fluids, photo-sensitive means for compensating for the vitiating influence of impurities in said fluids.

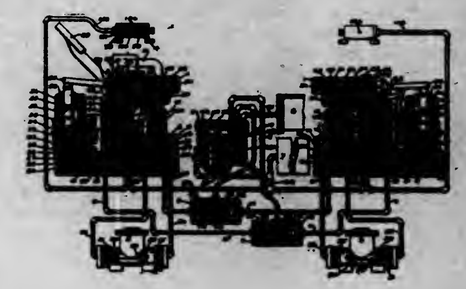
1,905,252. RAILWAY CAR TRUCK SPRINGS. THOMAS H. SYMINGTON, Baltimore, Md., assignor to T. H. Symington & Son, Inc., Baltimore, Md., a Corporation of Maryland. Filed July 6, 1931. Serial No. 549,050. 18 Claims. (Cl. 267—4.)

1. A car truck including a side frame having a window opening, a bolster extending into the opening, and a spring assembly within the opening for supporting the bolster, said assembly including a plurality of units certain of which are operable in sequence with respect to the



others, and means connecting the side frame and the bolster for maintaining the first operating ones of the units under initial compression.

1,905,253. SAFETY CAR EQUIPMENT. THOMAS H. THOMAS, deceased, Edgewood, Pa., by Mable M. Thomas, executrix, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Jan. 2, 1930. Serial No. 417,885. 26 Claims. (Cl. 303—6.1.)

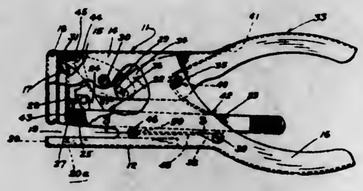


1. In a fluid pressure brake, the combination with a brake valve device comprising a valve mechanism operative to normally control the application and release of the brakes and valve means operative to initiate an emergency application of the brakes, of a plurality of rotatable shafts operative to control the operation of said valve mechanism and valve means, means for rotating one of said shafts, and resilient means operatively connecting said shafts, said resilient means rendering said brake valve device self-lapping.

1,905,254. STAPLING MACHINE. MAX VOGEL, Frankfort-on-the-Main, Germany, assignor to The H. H. Hotchkiss Company, Norwalk, Conn., a Corporation of Connecticut. Filed July 15, 1932. Serial No. 622,584. 10 Claims. (Cl. 1—49.)

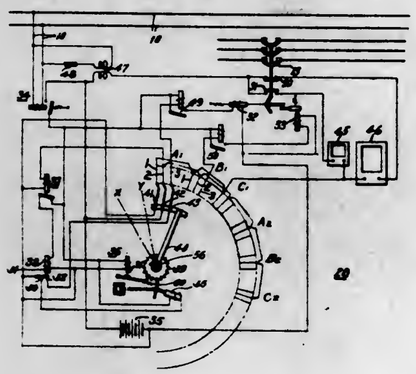
1. In a stapling machine, a main housing including an anvil-portion, a housing pivoted in said main housing and including a head having a raceway therein, a plunger operable in said raceway toward and from the anvil to drive staples through the raceway, means to operate the plunger to drive a staple, means whereby the initial movement of said operating means permits rocking of the

pivoted housing in a direction to carry its head and the raceway toward the anvil, and means shiftable to limit movement of said pivoted housing to permit of operation



of the plunger to eject a clogged staple from the raceway while the head of the pivoted housing is spaced from the anvil.

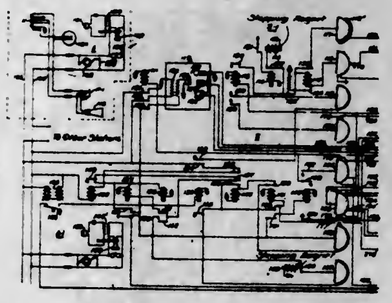
1,905,255. REMOTE CONTROL SYSTEM. ROY J. WENSLEY, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 5, 1922. Serial No. 565,976. 12 Claims. (Cl. 177—353.)



3. In an electrical control system, the combination with a control office, and apparatus units remotely disposed with respect thereto, of a signalling device at said office, means including a selector switch for selecting one of said units, means responsive to such selection for operating said signalling device to indicate the condition of said unit, and means for then operating said unit while said switch is maintained in selecting position.

1,905,256. CONTROL SYSTEM. THOMAS U. WHITE, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed June 23, 1925. Serial No. 39,069. 6 Claims. (Cl. 177—353.)

4. In combination, a central station, a remote station, a circuit connecting said stations, a plurality of devices at the remote station movable to two positions, a pair of devices at the remote station associated with said circuit for impressing current variations of different character on said circuit, an audible signal device at the central station responsive to the current variations of different character, selecting means at the remote station controlled from the central station over said circuit for selecting one of said first mentioned devices, a circuit closed by the selecting means and including one or the other of the second mentioned devices depending upon the position of the selected device, means including said selecting means for operating the first mentioned devices from the central station, means whereby the first mentioned de-



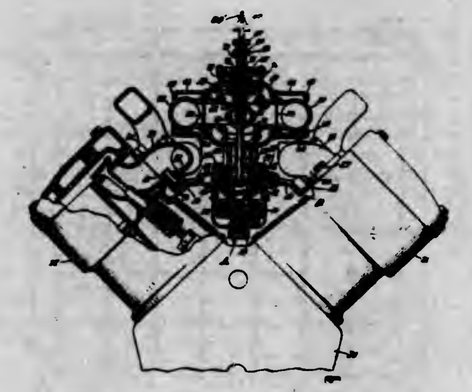
vices may be operated at the remote station independent of the central station, means whereby upon such operation one of the second mentioned devices is rendered active to continuously impress current variations on said first circuit independent of the selecting means, and means including said selecting means for discontinuing such activity of said one second mentioned device.

1,905,257. THERMOSTAT RADIATOR SHUTTER CONTROL. JOHN B. WHITTED, Chicago, Ill., assignor to Stewart-Warner Corporation, Chicago, Ill., a Corporation of Virginia. Filed July 25, 1931. Serial No. 553,219. 12 Claims. (Cl. 236—35.)



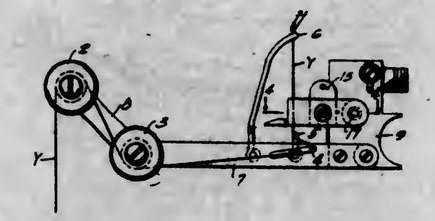
1. Controlling mechanism for a radiator shutter of a motor vehicle comprising a fixed cylinder, a piston movable in said cylinder, dividing said cylinder into a fluid reserve chamber and a fluid pressure chamber, means connecting said piston to said shutter, pumping means for delivering fluid from said reserve chamber into said pressure chamber to move said piston and shutter in one direction, resilient means for returning said piston and said shutter in the opposite direction and means restricting the return flow of the fluid from the pressure chamber to the reserve chamber to permit a slow return movement of said piston under the action of said resilient means.

1,905,258. CARBURETOR. CHARLES B. WILLIAMS, Detroit, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 12, 1928. Serial No. 277,277. 19 Claims. (Cl. 123—52.)



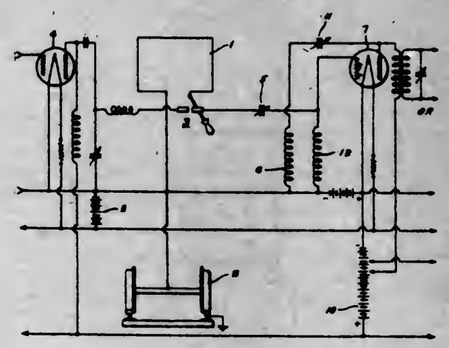
1. A charge forming device for an internal combustion engine having a plurality of cylinders and a separate intake port for each cylinder, including a primary mixing chamber and a secondary air chamber, a manifold opening into the secondary air chamber and including a separate branch opening into each of the intake ports, a plurality of conduits, in number equal to the number of cylinders of the engine, all opening at one end into the primary mixing chamber and each opening at its opposite end into the manifold one adjacent each intake port.

1,905,259. SLUB DETECTOR, CATCHER, OR BREAKER. EDWARD J. ABBOTT, Wilton, N. H., assignor to Abbott Machine Company, Wilton, N. H., a Corporation of New Hampshire. Filed Sept. 29, 1930. Serial No. 484,998. 15 Claims. (Cl. 28—70.)



1. Slub detecting mechanism comprising a pair of detector elements, each having a yarn-engaging part and a supporting arm disposed substantially at right angles to the yarn-engaging parts of the two elements being normally parallel and spaced to provide a throat for the passage of the yarn, a pivot for one arm, the other arm having an opening through which said pivot loosely passes, stop means limiting movement of the arms, said stop means being arranged to permit greater pivotal movement of the pivoted arm than of the other arm, the pivoted arm having an elongate slot therein and a pin projecting from the other arm into said slot.

1,905,260. RADIO RECEIVING SYSTEM. JAMES P. BARTON, Springfield, Mass., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 5, 1930. Serial No. 433,294. 2 Claims. (Cl. 250—20.)



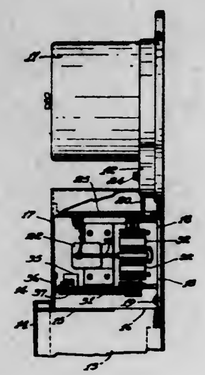
1. In a signaling system, a thermionic amplifier having a cathode, a control-electrode and an anode, an input inductor connected between the control-electrode and the cathode, a loop antenna one terminal of which is connected to the cathode and the other terminal of which is connected, through a tuning condenser, to the control-electrode, and a feed-back inductor and a condenser serially connected between said anode and said cathode, said feed-back inductor and said input conductor being inductively coupled in the sense to oppose the generation of oscillations in said amplifier.

1,905,261. SPEED INDICATOR. SETH FREDRIK BERNSTRÖM, Stockholm, Sweden, assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed June 5, 1931, Serial No. 542,302, and in Sweden June 20, 1930. 8 Claims. (Cl. 116—74.)



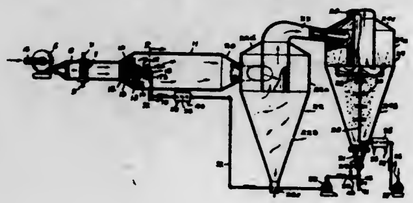
1. In a speed indicator, the combination, with a shaft and a bell, of means providing a channel rigidly connected to and turning with the shaft, and a member adapted to travel back and forth in said channel, said channel comprising two straight borings in divergent relation, the free end of one of said borings being in such relation to the bell that the traveling member is adapted, when it reaches said free end, to strike the bell at each rotation of the speed indicator whenever the rotation speed of the shaft is less than a predetermined speed.

1,905,262. AUXILIARY METER ATTACHMENT FOR WATTHOUR METERS. WILLIAM M. BRADSHAW, Summit, N. J., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 17, 1931. Serial No. 551,357. 9 Claims. (Cl. 171—84.)



5. In combination, a meter, a switch box and an auxiliary meter comprising conduit means for interconnecting the first named meter and the switch box.

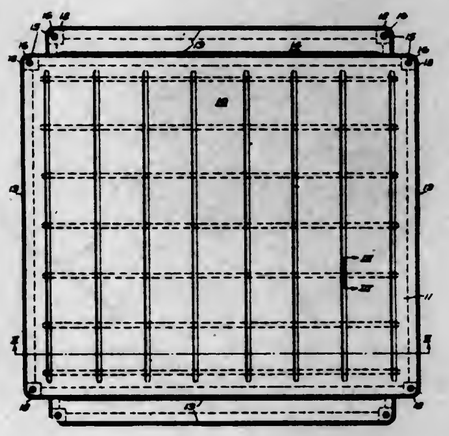
1,905,263. PROCESS AND APPARATUS FOR PRODUCING DEHYDRATED PRODUCTS. JAMES A. BURNER, Minneapolis, Minn., assignor to Air Systems Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Oct. 2, 1930. Serial No. 485,904. 3 Claims. (Cl. 159—4.)



2. The process of producing a dehydrated product which consists in passing air in a whirling stream through a drum and at the same time rotating a body of liquid product to break it up into a stream having a multiplicity of small particles moving under centrifugal force tangentially relative to a central longitudinal axis and introducing said particles into said drum in inner concentric relation to said air stream in such manner that the product particle stream is projected in the same general longitudinal direction through the drum as the air stream but the general centrifugal direction of the movement of the particle stream is opposed to the direction of whirl of the air stream thereby causing the air stream to act as an envelope to confine the hydrated particles of the product to prevent contact between the same and the sides of the drum until the particles have been completely dehydrated.

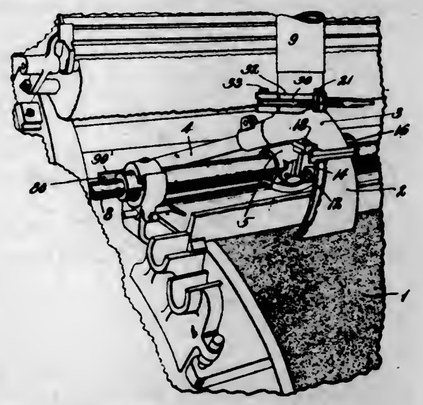
3. A dehydrating apparatus having in combination a drum, means for introducing air in a whirling forwardly moving stream into the rear end of said drum, a divider centrally disposed in said drum adjacent its rear end and deflecting the air to divide the same into an annular stream, and means for introducing a forwardly moving oppositely whirling stream of small particles of the product to be dehydrated into the drum ahead of said divider, and a collector connected to the forward end of said drum.

1,905,264. BUILT-UP CONDENSER PLATE. WALTER H. CAMPBELL, Springfield, and WILLIAM C. ELLSWORTH and CARL J. MADSEN, Chicopee Falls, Mass., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 26, 1930. Serial No. 498,882. 6 Claims. (Cl. 175—41.)



1. A condenser plate comprising two metallic plates having depressions therein, said metallic plates being positioned with the depressions of one metallic plate in contact with the depressions of the other metallic plate, and a rounded conducting surface connecting the edges of said metallic plates.

1,905,265. PNEUMATIC STRIPPER FOR CARDING ENGINES. ERNEST CLARK, Abington, Mass., assignor to Abington Textile Machinery Works, Boston, Mass., a Trust of Massachusetts. Filed Apr. 30, 1930. Serial No. 448,575. 17 Claims. (Cl. 19—109.)



1. A pneumatic stripper attachment for the cylinders of a carding engine having, in combination, a traversing carriage, a nozzle, a seat extending at each side of said nozzle, a surface upon the traversing carriage upon which said seat fits, and screw means holding the seat to the surface with capacity for easy removal and permitting replacement of the nozzle upon the carriage after removal without change in the spaced relation established between the nozzle and the cylinder before removal.

1,905,266. LOOM SHUTTLE. JOSEPH COLDWELL, Fall River, Mass. Filed Feb. 24, 1931. Serial No. 517,794. 5 Claims. (Cl. 139—214.)



1. A loom shuttle embracing in its construction, a shuttle body provided with a bobbin-receiving chamber intermediate its forepart and rear part, the forepart being provided with a passage way for the yarn as it unwinds from the bobbin in said chamber, the shuttle body also being provided with a return passage for carrying the yarn from the forepart to the interior of said bobbin chamber, the lateral wall of said bobbin chamber being provided with an outlet opening to receive the yarn from said return passage, and means interposed between the forwardly moving and rearwardly moving stretches of yarn preventing said stretches of yarn from being entangled with each other.

1,905,267. DIRECTION-INDICATING BEACON. FLOURNOY COREY, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 30, 1927. Serial No. 209,448. 3 Claims. (Cl. 177—352.)



2. In a direction-indicating beacon, a base, a cam surface thereon, a projector thereabove, a plurality of coaxial interfitting tubes, one of which is supported by the base and supports the projector, the lower end of the second tube having a follower engaging the cam surface and upper end thereof operatively engaging the projector at points spaced from those at which the first tube engages the projector.

1,905,268. METHOD OF DRAFTING TEXTILE FIBERS. LOUIS M. COTCHETT, Brookline, Mass., assignor to Textile Patent & Process Co. Incorporated, Boston, Mass., a Corporation of Massachusetts. Filed Nov. 5, 1930, Serial No. 493,680. Renewed Aug. 18, 1932. 3 Claims. (Cl. 19—130.)

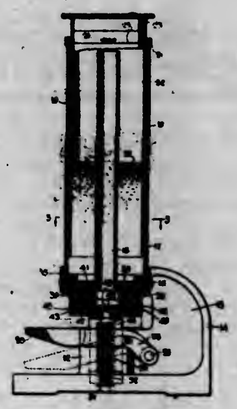


1. The method of preparing cotton for spinning which consists in laying individual fibers in approximate parallelism and overlapping relationship to produce a roving or sliver strand, subjecting the strand to a bath of liquid of sufficiently low surface tension to so thoroughly wet the strand that it becomes a coherent strand of mutually adhering wet fibers, and attenuating the wet strand by passing it between successive sets of rolls or the like.

1,905,269. PROCESS OF PRODUCING EXPANDED RUBBER MATERIAL. GEOFFREY PRICE DENTON, Rickmansworth, England. Filed Jan. 21, 1931, Serial No. 510,332, and in Great Britain May 14, 1930. 11 Claims. (Cl. 18—53.)

1. The process of producing expanded rubber material which consists in subjecting the dough to gas under high pressure, effecting partial vulcanization of the dough by heat whilst the dough is in the said gas under high pressure, cooling the dough, releasing the said pressure, and subsequently completing vulcanization and simultaneously expanding the dough by reheating it.

1,905,270. TESTING MACHINE. WILLARD L. EGY, Troy, N. Y., assignor to W. & L. E. Gurley, Troy, N. Y., a Corporation of New York. Filed June 4, 1930. Serial No. 459,204. 3 Claims. (Cl. 73—51.)

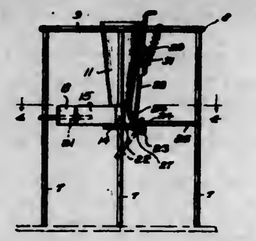


3. In a testing machine the combination with means for displacing air, and a conduit through which such air is displaced, of means for sustaining a specimen sheet in the path of air flowing through said conduit, said means including apertured clamping members, supporting means for said members adapted to guide one member in motion toward and from the other; yielding means for urging the movable member toward said other member; and a thrust transmitting means interposed between said movable clamping member and said yielding means and comprising a member provided with cylindrical thrust surfaces, the axes of said cylindrical surfaces being substantially at right angles with each other, one being in rolling contact with the yielding means and the other in rolling contact with the movable clamping member.

1,905,271. COMBINED CIGARETTE EXTINGUISHER AND ASH RECEPTACLE. LLOYD W. DICKINSON, Stone Lake, Wis., assignor of one-half to Merton K. Arford, Stone Lake, Wis. Filed Jan. 12, 1932. Serial No. 586,206. 5 Claims. (Cl. 131—51.)

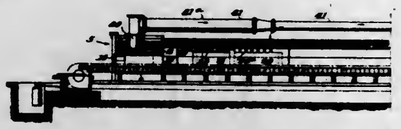
1. In a device of the character described, a support, a tube arranged thereon for receiving ashes and lit cigarettes, a movable gate arranged near and beneath the lower open end of the tube, and a pair of generally

straight blades arranged between the gate and the lower open end of the tube, one blade being movable from an open position to a shut position in approximate contact



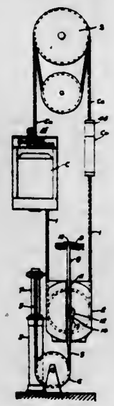
with the other blade, so that a lit cigarette supported by the gate between the blades may be squeezed by the blades and extinguished.

1,905,272. HEAT TREATING PROCESS. HENRY A. DREFFEIN, Chicago, Ill. Original application filed Nov. 28, 1930, Serial No. 498,669. Divided and this application filed July 13, 1931. Serial No. 550,529. 13 Claims. (Cl. 148—21.5.)



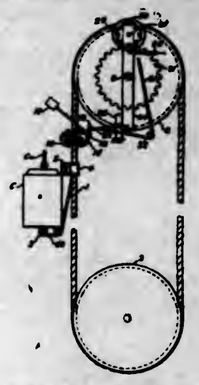
9. A process of treating metal sheets consisting of first passing the same through a heating chamber against the flow of heating gases and thereafter into a cooling chamber against the flow of cooled products of combustion.

1,905,273. BUFFER SAFETY STOP. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric Elevator Company, a Corporation of Illinois. Filed Aug. 8, 1930. Serial No. 473,916. 2 Claims. (Cl. 187—22.)



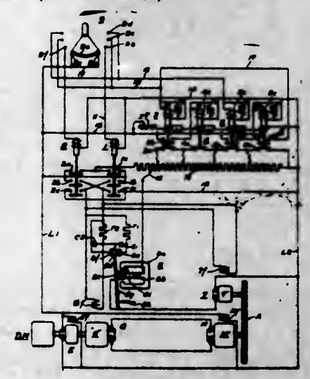
1. The combination with an elevator system comprising an elevator car, a counterweight, a hoist cable connected between the car and the counterweight and passing over a hoist sheave above the hatchway, a compensating cable connected between the car and the counterweight and passing through a compensating sheave suspended on the compensator cable at the bottom of the hatchway, and a buffer mounted on the bottom of the hatchway, of a buffer cable connected to the compensator sheave and to the plunger of the buffer, and a rigidly mounted idler pulley mounted on the bottom of the hatchway for receiving the cable as it passes from the compensator to the buffer, whereby an upward movement of the compensating sheave will cause a corresponding downward movement of the buffer plunger.

1,905,274. ELEVATOR GOVERNOR. JAMES DUNLOP, Park Ridge, Ill., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 27, 1930. Serial No. 505,117. 5 Claims. (Cl. 187—78.)



1. In a combined overspeed and acceleration governor for elevators, an overspeed governor, an inertia governor, means for driving said governors in accordance with the speed of the elevator car, rope-gripping jaws, and means for actuating the jaws to rope-gripping position, said means being responsive to either governor, irrespective of the position of the other.

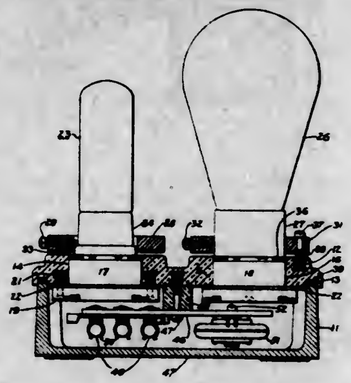
1,905,275. MOTOR CONTROL SYSTEM. WILLIAM F. EAMES, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 15, 1930. Serial No. 428,650. 12 Claims. (Cl. 172—239.)



1. In a motor control system, a motor, a generator, means for driving said generator, electrical connections between the armatures of said motor and said generator, means for impressing a voltage upon a field winding of said generator, means for regulating said voltage to cause the speed of said motor to be independent of load and for temporarily increasing said voltage above its final value while the motor is accelerating to a corresponding speed, and means for controlling said last mentioned means to cause the speed of said motor to have successively higher values at the expiration of successive intervals of time.

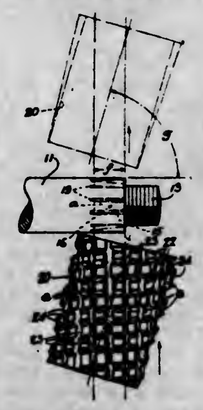
4. In a motor control system, a motor, a generator, means for driving said generator, electrical connections between the armatures of said motor and said generator, an auxiliary voltage supply, means for causing the voltage of said auxiliary supply to have successively higher values at the expiration of successive intervals of time, means for producing a voltage proportional to the speed of said motor, and means responsive to the algebraic sum of the voltage of said auxiliary supply and said last mentioned means for controlling the excitation of said generator to maintain said sum at a predetermined value.

1,905,276. PHOTOCELL AMPLIFIER UNIT. ELLIS O. ERICKSON, Pasadena, Calif., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 11, 1930. Serial No. 427,462. 2 Claims. (Cl. 250—41.5.)



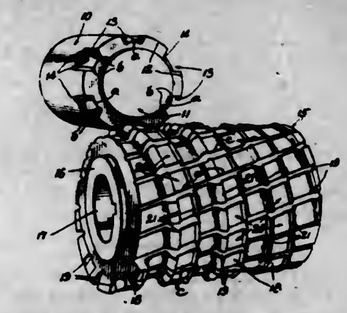
1. In a control-unit assembly including an open-end box, a grooved cover thereon, a pair of sockets in said grooved cover on the outside surface thereof, a photocell and an amplifier tube in the respective sockets and control elements located in said box and supported from said cover, means for hermetically sealing the control elements in said box, said means including resilient-material wax-treated stripe in the groove of the cover and operatively engaging the edge of the box and additional resilient-material wax-treated strips between the sockets and the photocell and the amplifier tube, and means for tightly clamping the treated strips in their respective operative positions.

1,905,277. METHOD OF MAKING SPLINE COUPLINGS. OTTO F. EWERT, Genoa City, Wis. Filed Aug. 3, 1931. Serial No. 554,625. 15 Claims. (Cl. 90—4.)



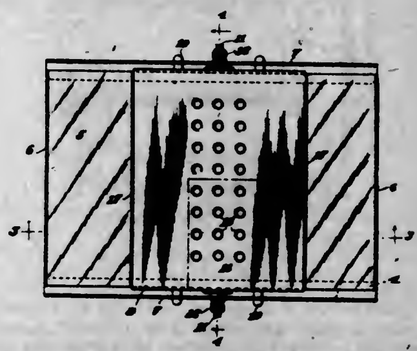
1. The method of hobbing an inside member of a spline coupling which comprises positioning the member and the hob in operative relation with the hob axially inclined to the perpendicular to the member, rotating the member and the hob in timed relation, and feeding the hob relatively across the axis of said member in a path at an angle to the hob axis during said rotation through cutting engagement.

1,905,278. METHOD OF MAKING SPLINE COUPLINGS. JOHN EDGAR, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed Aug. 3, 1931. Serial No. 554,645. 11 Claims. (Cl. 90—4.)



1. The method of hobbing a spline shaft section comprising rotating the section and a hob having a longitudinally tapered thread in timed relation, with the hob inclined longitudinally to the section, and moving the hob relatively across the section along a diagonal line inclined to the hob axis during said rotation through cutting engagement.

1,905,279. CAPSULE FILLING MACHINE. ELBERT L. FITCH, Newburgh, N. Y. Filed July 3, 1931. Serial No. 548,638. 3 Claims. (Cl. 226—40.)

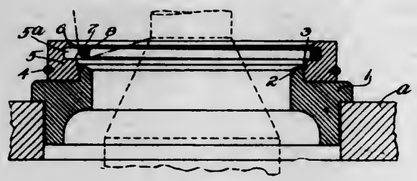


1. A capsule filling machine comprising a horizontal top, side supporting walls for the top, a capsule supporting plate disposed over the top and provided with openings to receive capsules resting on the top, side portions on the plate and having inclined lower edges, and inclined tracks on the supporting walls and engaged by the lower edges of the side portions to move the plate towards and from the top by sliding the plate relative to said top.

1,905,280. DEVICE FOR SPINNING AND TWISTING TEXTILE FIBERS. GEORGE N. GODDARD, Newton, Mass. Filed June 30, 1927. Serial No. 202,680. 9 Claims. (Cl. 118—59.)

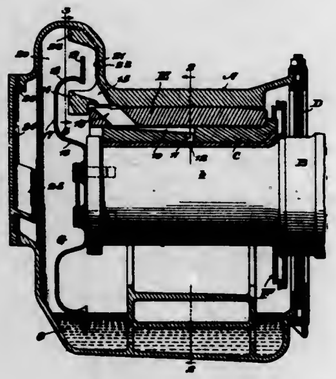
1. In a device for spinning and twisting textile fibers, the combination of an outer holding member provided with an annual interior ring-receiving groove, an inner flat-top copping ring over which the yarn has circumferential

slipping engagement sufficient to eliminate any dragging of the ring by the yarn, thus permitting reverse rotation of the ring, both members being proportioned to provide a crescent-like lateral clearance between them on one side



sufficiently wide to prevent contact of the yarn with the upper edge of said groove when the ring is pressed to the opposite side of the lateral thrust of the yarn, substantially as described.

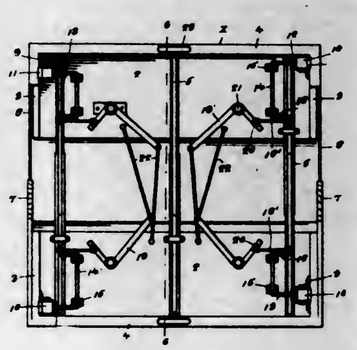
1,905,281. MEANS FOR COLLECTING AND FEEDING OIL TO JOURNAL BEARINGS. GEORGES GRANDJEAN, New York, N. Y., assignor to Isothermos Corporation, New York, N. Y., a Corporation of Delaware. Filed July 24, 1930. Serial No. 470,522. 1 Claim. (Cl. 308—86.)



In combination, a journal box, a bearing therein, an axle journaled against said bearing, a shelf formed on the box above said bearing and extending outwardly beyond the end of the latter, a paddle carried by said axle to dip into oil contained in the bottom of the box and to deliver it to said shelf, said paddle having an end portion arranged to pass over said shelf, and means for conducting oil from said shelf to said bearing.

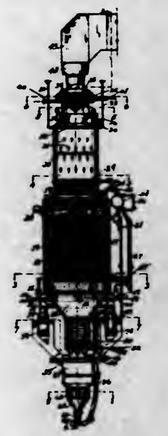
1,905,282. FOLDING TABLE. FLOYD H. HATFIELD, Rawlins, Wyo., assignor of one-tenth to Nathan R. Greenfield, one-tenth to Thomas W. Craig, and one one-hundredth to George M. Bergen, Rawlins, Wyo. Filed June 24, 1931. Serial No. 546,543. 5 Claims. (Cl. 45—116.)

2. A folding table comprising a sectional top, said sections having telescopic relation, legs pivoted to the sections, operating rods journalled to the sections, brace arms carried by said rods and slidably secured to the legs, bell crank levers pivoted to the sections and having one of their ends connected to the operating rods and their other ends pivoted to a section other than the section to which said bell crank levers are pivoed to cause the legs to move



into folding position when the sections of the top are collapsed and to move the legs into supporting position when the sections of the top are extended.

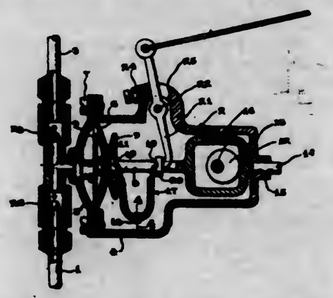
1,905,283. PROCESS AND APPARATUS FOR GENERATING VAPORS. HERMAN C. HEATON, Chicago, Ill. Filed Jan. 14, 1927, Serial No. 161,053. Renewed July 12, 1932. 25 Claims. (Cl. 122—235.)



, 1. In a vapor generator, a combustion chamber, steam generating surfaces around said chamber, means for passing hot products of combustion upwardly through said chamber and segregated particles of heat absorbent non-combustible solid material downwardly through said chamber in contact with said hot products of combustion, and means for utilizing the heat absorbed by said particles from said hot products of combustion after said particles have passed out of said chamber for heating the liquid for said vapor generator.

21. The process which comprises passing non-combustible solid material in segregated particles and hot gas into contact with each other in countercurrent direction and generating vapor by radiant heat from said solid material while in contact with said hot gas and also after said gas has left the vapor generating zone.

1,905,284. PUMP. FRANK H. HEITGER, Flint, Mich.; Mattie G. Heitger, Flint, Mich., administratrix of said Frank H. Heitger, deceased. Filed Sept. 27, 1928. Serial No. 308,609. 8 Claims. (Cl. 103—37.)



1. A fuel pump having a flexible forcing member and a resilient element for actuating the same for its discharge stroke, and means including a thermostatic element for increasing the force of said resilient element.

1,905,285. PROCESS OF BROMINATING ANTHANTHRONE. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. Divided and this application filed Dec. 11, 1929. Serial No. 413,418. 1 Claim. (Cl. 260—61.)

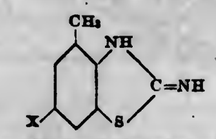
The process which comprises reacting upon 1 part of anthanthrone in the presence of about 20 parts of nitrobenzene with 3 parts of bromine at a temperature of from 160° to the boiling point of the liquid.

1,905,286. PROCESS FOR CHLORINATING ANTHANTHRONE. RICHARD HERZ, Frankfort-on-the-Main, and WERNER ZERWECK, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1926, Serial No. 145,697, and in Germany Nov. 7, 1925. Divided and this application filed Dec. 11, 1929. Serial No. 413,419. 1 Claim. (Cl. 260—61.)

The process which comprises reacting at room temperature upon 15 parts of anthanthrone with 16 to 20 parts of chlorine in the presence of 200 parts of chlorosulfonic acid and 0.2 parts of iodine.

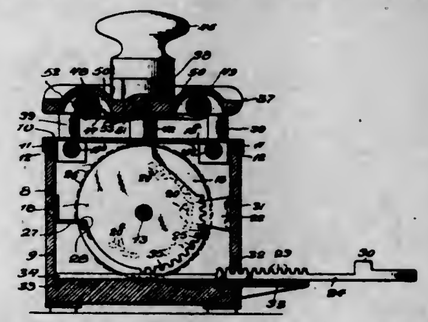
1,905,287. PROCESS FOR MANUFACTURING NUCLEAR HALOGENATED DERIVATIVES OF ARYLAMINOTHIAZOLE COMPOUNDS. RICHARD HERZ, Frankfort-on-the-Main, and MAX SCHUBERT, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1930, Serial No. 423,257, and in Germany Jan. 26, 1929. 3 Claims. (Cl. 260—44.)

1. A process for manufacturing compounds of the probable formula:



wherein X means chlorine or bromine, which process comprises acting with sulfurylchloride at 30–50° C. on a suspension of o-tolyl-thiourea in an aromatic high-boiling diluent, adding methanol to the reaction mass and acting finally with the theoretical amount of a halogen of the group consisting of chlorine and bromine calculated for the introduction of one halogen atom.

1,905,288. KEY CONTROLLED PRINTING MACHINE. MORRIS J. HOFFMAN, Chicago, Ill., assignor to The Tabulating Machine Company, New York, N. Y., a Corporation of New Jersey. Filed June 28, 1931. Serial No. 546,306. 20 Claims. (Cl. 101—96.)



1. A key controlled printing machine comprising in combination type members having type faces thereon for printing fixed data, said type members being locked against unauthorized manipulation in selected printing position, workmen's keys and other type members cooperating with said keys and bearing type faces selectively controlled and operated by said workmen's keys for printing data in connection with the fixed data printed by said locked type members.

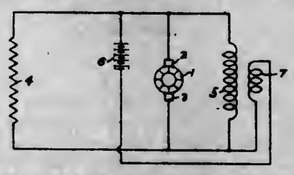
1,905,289. EXPLOSIVE. WALTER C. HOLMES, Woodbury, N. J., assignor to E. I. du Pont de Nemours & Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 31, 1929. Serial No. 389,867. 12 Claims. (Cl. 52—5.)

3. An explosive composition comprising a liquid explosive containing a nitrated aliphatic compound having more nitrate groups than nitroglycerin, and magnesium oxide.

1,905,290. PRODUCTION OF ALDOL. GEORGE FREDERICK HORSLEY, Norton-on-Tees, England, assignor to Imperial Chemical Industries Limited, London, England, a British Company. Filed Jan. 29, 1929, Serial No. 336,016, and in Great Britain Feb. 6, 1928. 8 Claims. (Cl. 260—140.)

1. Process of producing aldol which consists in condensing acetaldehyde in neutral solution, while excluding oxygen.

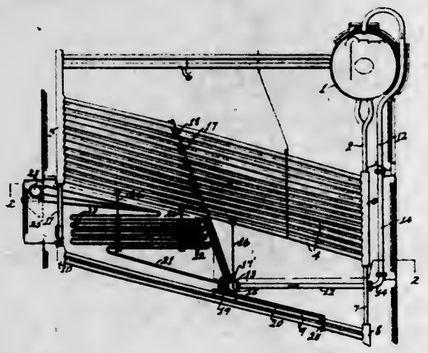
1,905,291. DIRECT CURRENT GENERATOR VOLTAGE REGULATOR. LAWRENCE A. HYLAND, Washington, D. C. Filed Jan. 6, 1932. Serial No. 585,014. 1 Claim. (Cl. 171—223.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757).



In combination with the commutator of a direct current generator, brushes contacting said commutator and adapt-

ed to be connected to a load circuit, a main field circuit connected to said brushes, and a dry electrolytic rectifier and a differential field circuit connected in series across said brushes, said differential field circuit being wound in the opposite sense to the said main field circuit.

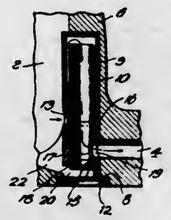
1,905,292. INTERDECK SUPERHEATER FOR WATER TUBE BOILERS. DAVID S. JACOBUS, Montclair, and JOHN E. BLACK, Rumson, N. J., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Jan. 29, 1929. Serial No. 335,864. 17 Claims. (Cl. 122—476.)



7. In a water tube steam boiler, a boiler setting, a bank of steam generating tubes within the setting, a steam and water drum, a row of tubes connected into the boiler circulation through the drum and generating tubes and located along a wall of the setting, a superheater within the setting, and a second row of tubes connected to the superheater and extending between and across the tubes of the first row to a steam chamber, the tubes of one of said rows being so bent that they form a plurality of rows transversely related to their original row at the positions wherein they cross the tubes of the other row.

16. In a superheater and boiler organization, a boiler section adapted to be supported by a framework so that its parts may move in response to temperature changes, a superheater having coils supported entirely by the steam generating tubes of the boiler section, an outlet header, means secured to the framework for supporting the header independently of the movable parts of the boiler section, and relatively flexibly arranged tubes connecting the superheater coils to the header.

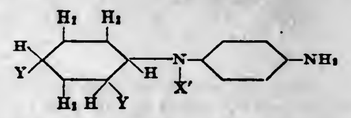
1,905,293. TOBACCO PIPE. JESSE M. JENKINS, Summit, N. J. Filed Oct. 15, 1930. Serial No. 488,749. 6 Claims. (Cl. 131—12.)



1. In a tobacco pipe, the combination of a bowl, a stem having a bore leading to the bowl, a vertical tubular shell and a tube therein located between the bowl and the bore of said stem and connected respectively thereto by openings in the walls of said tube and said shell, whereby the smoke is forced to travel substantially the length of both the shell and the tube in passing from the bowl to the bore of the stem, the said tube having a small orifice at its lower end and a base member having a chamber below said orifice, said chamber being in communication with said bowl.

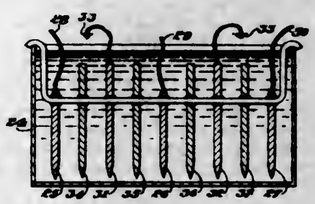
1,905,294. AZO DYESTUFFS AND PROCESS OF MAKING SAME. GEORG KALISCHER, Frankfort-on-the-Main, and RICHARD FLEISCHHAUER, Frankfort-on-the-Main-Fechenheim, Germany, assignors to General Aniline Works, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1930, Serial No. 467,123, and in Germany Aug. 3, 1929. 7 Claims. (Cl. 260—92.)

1. Process which comprises diazotising a 1-(N-acyl-cyclohexyl-amino)-4-amino benzene corresponding to the general formula:



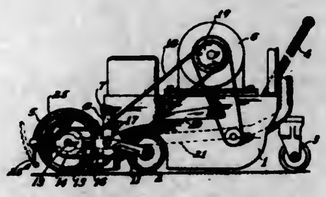
(wherein X' means an acyl-group which may contain an amino-group capable of being diazotised and the Y's mean hydrogen or one Y hydrogen and the other methyl) and combining the diazo-compounds thus obtained with azo components of the benzene, naphthalene or pyrazolone series containing sulfonic or carboxylic groups.

1,905,295. APPARATUS FOR TREATING SUGAR CONTAINING LIQUID. ALFRED LIMA, Jr., Los Angeles, Calif., assignor to Electrified Sugar Company, Los Angeles, Calif., a Corporation of Delaware. Filed Sept. 9, 1931. Serial No. 561,840. 6 Claims. (Cl. 204—5.)



1. In apparatus for treating sugar containing liquid, a tank for such liquid, means for subjecting such liquid in said tank to an electrolytic action, comprising aluminum electrodes at least one of which is unconnected with the source of electrical energy for the other of said electrodes, except through the conductivity of the electrolyte during the electrolytic action, and means for grounding said unconnected electrode.

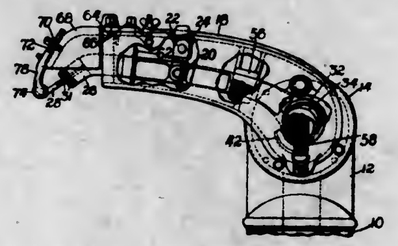
1,905,296. FLOOR SANDER. HENDRICK W. LUNDQUIST, Los Angeles, Calif. Filed July 26, 1929. Serial No. 381,196. 3 Claims. (Cl. 51—176.)



1. In an attachment of the class described for sanding machines, the combination with a portable frame having supporting wheels, a sanding drum, and a motor on the frame for driving said drum, of a pair of arms positioned

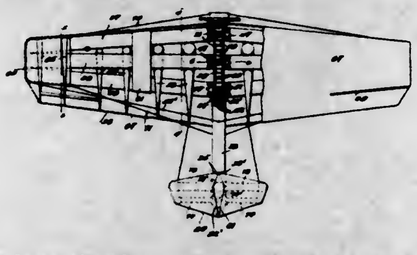
at the opposite sides of the forward end of the frame and secured at their upper ends thereto, a pair of drum supporting arms pivotally mounted intermediate their ends at the lower ends at the outer sides of said first arms, said drum being rotatably mounted on said drum supporting arms forwardly of said frame, means at the rear ends of said drum supporting arms for supporting said drum from and resiliently on the floor, means operatively connecting said motor to said drum, and straps rigidly connecting the lower end of the first arm to the pivotal axes of the supporting wheels of the frame.

1,905,297. FASTENING-PULLING MACHINE. FRED L. MACKENZIE, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 26, 1930. Serial No. 477,934. 16 Claims. (Cl. 12—16.)



1. In a machine of the class described, a movable fastening-pulling member, and gage members at the opposite sides of the path of the pulling member and beyond which said pulling member is movable into engagement with the work, one of said gage members being farther removed than is the other from the point of engagement of the pulling member with the work.

1,905,298. FLYING MACHINE. TAYLOR MCDANIEL, Washington, D. C., assignor to McDaniel Glider Incorporated, Washington, D. C., a Corporation of Maryland. Filed Aug. 13, 1930. Serial No. 475,092. 21 Claims. (Cl. 244—12.)



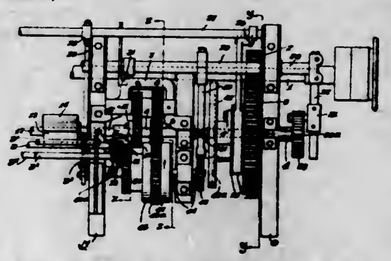
6. In an aircraft, a relatively rigid fuselage section, an inflated fuselage section tube engaging the rear end of the rigid fuselage section, an air-foil embodying inflated tubes engaging the opposite sides of the relatively rigid fuselage section, and means for increasing the degree of compression within all of said tubes by exerting a longitudinal pull upon the tubes.

1,905,299. INSTRUMENT FOR RECORDING INCLINATION. WILLIAM I. MCLAUGHLIN, Piedmont, and RUPERT G. WEDEMEYER, Palo Alto, Calif.; said Wedemeyer assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 493,056. 27 Claims. (Cl. 234—1.)

1. An instrument for measuring inclination including the combination of a pivotally mounted plumb-bob, a recording disc, a piston slidable to uncover a fluid passage, a spring means opposed to said piston, and means associated with said piston for yieldingly forcing said bob and disc to and from recording engagement.

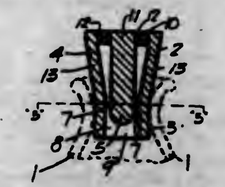


1,905,300. MACHINE FOR COMBING TEXTILE FIBERS. MANUEL P. MELLO, Fall River, Mass. Filed Mar. 20, 1931. Serial No. 524,058. 2 Claims. (Cl. 19—121.)



1. A driving head for a comber embracing in combination a driving and controlling shaft, a separate revoluble comb cylinder shaft carrying pairs of diametrically opposed half-laps, a gear connection between said shafts for driving the latter shaft one-half revolution for each revolution of the former, a differential speed transmission comprising a continuously revolving member rotated at constant speed by connection with the driving shaft, and an oscillatory variable speed member continuously and positively controlled by a lever and cam actuating connection with said driving shaft for positively controlling and producing forward and back rotation at different speeds, of piecing and detaching rolls, and means controlled and actuated by said drive shaft to operate lap feeding and nipping means through a complete cycle at each revolution of the drive shaft.

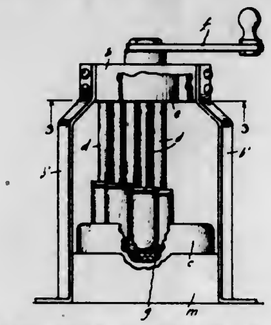
1,905,301. BOTTLE STOPPER AND THE LIKE. WALTER HENRY NASH, Arlington, Calif. Filed Mar. 16, 1932. Serial No. 599,211. 2 Claims. (Cl. 215—47.)



1. In a bottle stopper adapted to be moved in a longitudinal direction and comprising a pliable valve formed

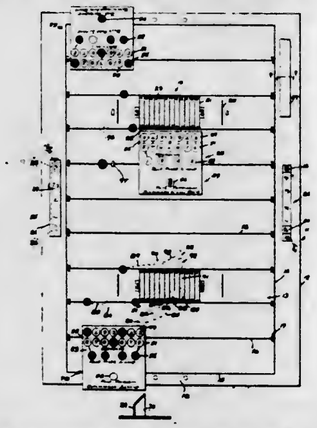
integral and concentric with a pliable valve seat, said pliable valve seat forming the bottle stopper body and surrounding said pliable valve and containing a fluid passageway adapted to be opened or closed by the longitudinal movement of said bottle stopper.

1,905,302. AMALGAM MIXING DEVICE. ERNEST V. PARKIN, Tacoma, Wash. Filed Feb. 21, 1931. Serial No. 517,491. 2 Claims. (Cl. 259—102.)



1. In a mixing device, a mortar having a concaved working face, a straddle frame adapted to be mounted over said mortar, an eccentric pestle element mounted in said frame for rotation about the axis of the mortar, said pestle element comprising a group of individual, non-rotating, longitudinally yielding spring controlled members of such length as to bear on the concave surface of said mortar with a predetermined pressure.

1,905,303. TABLE FOOTBALL GAME. THOMAS R. POTTER, Los Angeles, Calif. Filed Feb. 13, 1929. Serial No. 339,577. 22 Claims. (Cl. 273—94.)



1. A game comprising in combination a field board with suitable markings indicating distance, a series of pawns, each pawn having a rotatable element engaging the field board, such element in rotation causing a movement of the pawn indicating to the player a stride or series of strides of the pawn.

1,905,304. CYANIDE PROCESS. EDWARD J. PRANKE, Bayside, N. Y. Filed Nov. 29, 1929. Serial No. 410,654. 10 Claims. (Cl. 23—79.)

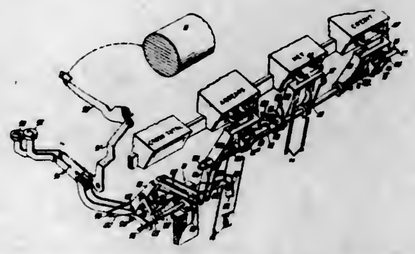
1. The process of producing cyanide which comprises intermingling elementary alkali metal with crude calcium cyanamid and heating the mixture above a red heat.

3. The process of producing sodium cyanide which consists in intermingling elementary sodium with crude calcium cyanamid, heating the mixture to above a red heat, cooling, extracting sodium cyanid with a suitable solvent, and removing the solvent from the contained sodium cyanid.

6. The process of producing cyanide which comprises heating crude calcium cyanamid above a red heat and substantially uniformly permeating the same at such temperature with elementary alkali metal vapors.

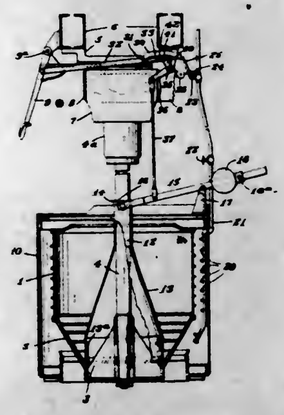
7. The process of producing cyanide which comprises intermingling elemeutary sodium with calcium cyanamid and carbon and heating the mixture above a red heat.

1,905,305. COMBINED TYPEWRITING AND COMPUTING MACHINE. HENRY RESCH, Bayonne, N. J., assignor to Underwood Elliott Fisher Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 27, 1928. Serial No. 273,178. 31 Claims. (Cl. 235—60.)



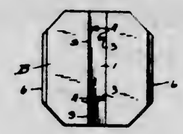
26. In a combined typewriting and computing machine, the combination with three registers, of two keys, each operating an individual proof type, means to enable one of said keys to select one of said registers and print the type therefor, means to enable the other of said keys to select the other of said registers and print the type therefor, and means to enable each key to control the remaining register.

1,905,306. CENTRIFUGAL APPARATUS. EUGENE ROBERTS, Hastings, N. Y., assignor to The Western States Machine Company, Salt Lake City, Utah, a Corporation of Utah. Filed Apr. 10, 1928. Serial No. 268,925. 13 Claims. (Cl. 210—74.)



1. In a sugar centrifugal apparatus the combination with a suspended gyratory centrifugal whose basket has a frusto-conical bottom with a central discharge opening, a bottom closing valve slidably mounted on the basket suspending shaft, and self-acting means for lifting said valve from bottom closing position when the centrifugal has slowed down to a predetermined speed.

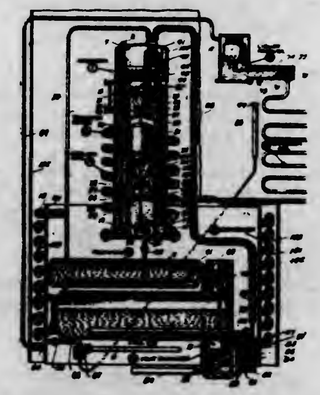
1,905,307. STEEL WOOL HOLDER. SAUL SCHULHOFF, Baltimore, Md. Filed Apr. 17, 1931. Serial No. 530,950. 2 Claims. (Cl. 15—209.)



1. A holder of the class described comprising a flexible body member having a groove on one face, material engaging fingers projecting from the side walls of said groove, the fingers on the two walls being offset from each other and the combined lengths of a finger on one wall of the groove and a finger on the other wall being greater than the width of the groove.

2. A holder of the class described comprising a flexible body member having a groove on one face, and headed material engaging fingers projecting from the side walls of said groove.

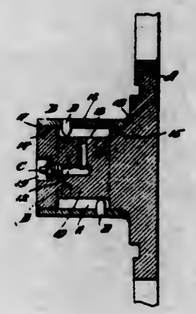
1,905,308. REFRIGERATING SYSTEM. RALPH E. SCHURTZ, Kansas City, Mo., assignor, by mesne assignments, of one-half to R. W. Bailey and C. T. Jobes, Kansas City, Mo. Filed Apr. 28, 1923. Serial No. 635,240. 9 Claims. (Cl. 62—5.)



1. In an absorption system of refrigeration including an absorber, a still, a condenser and an evaporator, a transfer device for transferring liquor from the absorber into the still, the transfer device including a tank having an inlet communicating with the absorber and an outlet communicating with the still, float-actuated means for opening the outlet and closing the inlet when a predetermined amount of liquor has flowed into the transfer device from the absorber, and a valve for opening and closing a pressure relief port at the top of the transfer device to maintain the port open while the liquor is flowing from the absorber into the transfer device.

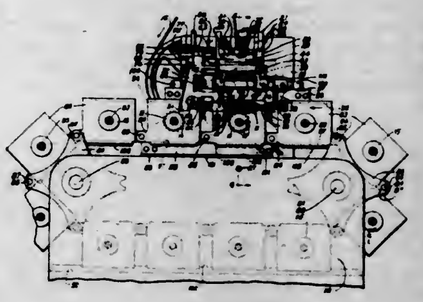
1,905,309. TRUNNION FOR LOCOMOTIVE VALVE MOTIONS. JOHN CESSNA SHARP, Chattanooga, Tenn., assignor to Nathan Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1930. Serial No. 432,897. 10 Claims. (Cl. 308—104.)

1. A trunnion comprising two members located one within the other and relatively formed to provide an oil reservoir between their confronting surfaces, the inner of said members having a passageway extending from an end of said member to said reservoir and through which oil is supplied to the latter, and a plurality of oil attracting and conducting wooden plugs whose inner ends



are immersed in the oil in said reservoir and whose outer ends extend through the outer member of the trunnion and are rigidly secured to the latter and terminate substantially flush with the outer surface of the trunnion.

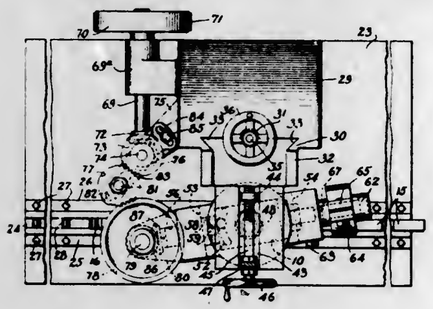
1,905,310. METHOD OF AND MACHINE FOR HOBBING GEARS AND THE LIKE. JOHN B. SINDERSON, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed May 9, 1928. Serial No. 276,208. 23 Claims. (Cl. 90—4.)



1. The method of hobbing gears comprising moving a gear blank relatively along a rotating hob, the hob being inclined longitudinally to the direction of said movement so that the effective length of the hub extends diagonally completely across the blank.

9. A machine for hobbing gears comprising, in combination, a base, a continuous work carrier mounted for movement over and through said base, said carrier comprising a plurality of carriages, each carriage having a work spindle for a gear blank, means for adjustably mounting a hob over said carrier in position to engage said blanks, said hob being adapted to be inclined longitudinally at an angle to the direction of movement of said blanks, means for continuously rotating said hob, means for guiding said carriages so as to constrain each work blank to be moved in the plane of the pitch outline of the teeth on the hob, each carriage being formed with a gear rack along its inner edge, and a feed worm adapted to mesh with said racks to drive said carrier, said feed worm being of such length that the succeeding carriage is engaged before the preceding carriage is disengaged.

1,905,311. METHOD OF AND MACHINE FOR HOBBING GEAR TEETH. JOHN B. SINDERSON, Rockford, Ill., assignor to Barber-Colman Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 2, 1928. Serial No. 266,611. 19 Claims. (Cl. 90—4.)



1. The method of hobbing gear racks with a hob having a cylindrical portion of uniform pitch comprising positioning the hob and the rack blank in operative relation to cut the rock blank upon relative movement therebetween longitudinally of the rack blank, the hob being inclined longitudinally to the rack blank to extend diagonally completely across the rack blank, and causing said relative movement with the hob in rotation.

12. A machine for hobbing racks having, in combination, a base having a vertical standard, a guideway formed on said base for a rack blank, said guideway having a roller table to facilitate the longitudinal movement of the blank, a head vertically adjustable on said standard and extending over said guideway, a slide horizontally adjustable on said head over said guideway, a hob, a saddle pivotally adjustable on the underside of said slide and having means for rotatably supporting the hob, and means for rotating the hob, the cutting action serving to effect a longitudinal movement of the blank on said table along the hob.

1,905,312. BERYLLIUM ALUMINUM ALLOY. JOSEPH KENT SMITH, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1931. Serial No. 582,653. 2 Claims. (Cl. 75—1.)

1. A beryllium-aluminum alloy of approximately the following composition: beryllium from 55% to 70%, aluminum from 25% to 40%, and manganese molybdenum and vanadium from about ½% to 2½% each.

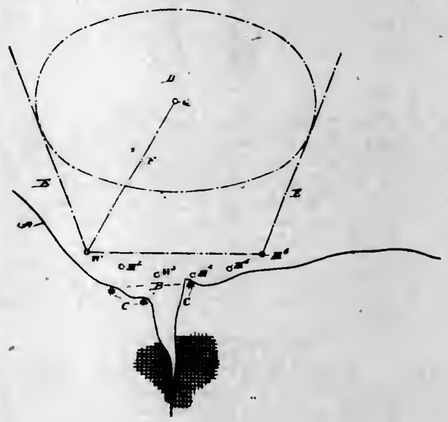
1,905,313 BERYLLIUM-ALUMINUM ALLOY. JOSEPH KENT SMITH, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1931. Serial No. 582,657. 2 Claims. (Cl. 75—1.)

1. A beryllium-alnminum alloy of approximately the following composition: beryllium from about 55% to about 70%, aluminum from about 25% to about 40% and manganese, molybdenum and zirconium in approximately equal amounts from about ½% to about 2½% each.

1,905,314. COPPER ALLOY. JOSEPH KENT SMITH, Detroit, Mich., assignor to Beryllium Development Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 22, 1931. Serial No. 582,662. 2 Claims. (Cl. 75—1.)

1. An alloy approximately consisting of copper 70 to 90%, nickle 10 to 30%, beryllium 0.1 to 2.0%, and manganese 0.1 to 2.0%.

1,905,315. SUBAQUEOUS SYSTEM OF ARTILLERY FIRE ADJUSTMENT. EDWARD B. STEPHENSON, Washington, D. C. Filed Jan. 9, 1925. Serial No. 1,510. 34 Claims. (Cl. 181—26.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 870 O. G. 757.)

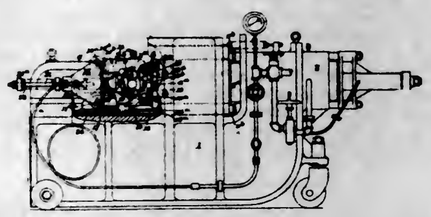


1. A method of subaqueous artillery fire adjustment comprising utilization of the pulse generated by a projectile striking a fluid medium, to determine the point of projectile impact.

1,905,316. WATER-SOLUBLE COMPLEX COMPOUNDS OF HEAVY METALS WITH 3.4-DIHYDROXYBENZENE ARSONIC ACID. KARL STREITWOLF, Frankfort-on-the-Main, ALFRED FEHRLE, Bad-Soden-on-the-Taunus, HANS HILMER, Frankfort-on-the-Main, and HANS SCHMIDT, Wuppertal-Vohwinkel, Germany, assignors to Winthrop Chemical Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 18, 1931, Serial No. 557,946, and in Germany Oct. 17, 1930. 4 Claims. (Cl. 260—14.)

1. Complex heavy metal salts of 3.4-dihydroxybenzene-1-arsonic acid, being therapeutically valuable, water-soluble powders.

1,905,317. CABLE SHEARING MECHANISM. HENRY A. STRINGFELLOW, Philadelphia, Pa., assignor to Southwark Foundry & Machine Company, Eddystone, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1930. Serial No. 505,838. 15 Claims. (Cl. 164—56.)



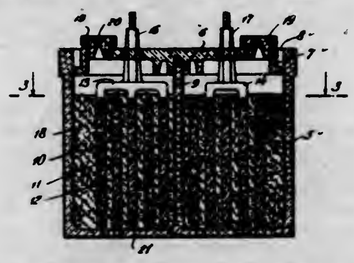
1. In shearing mechanism for wire rope or cable, the combination of a fixed shear blade suitably supported, a movable shear blade, means for moving the same with respect to the fixed shear blade, fixed clamping means for the rope or cable to be sheared disposed on one side of said shear blades, and movable clamping means on the opposite side of said shear blades.

1,905,318. SHOULDER STRAP MAINTENANCE DEVICE. HAROLD V. STUART, Milwaukee, Wis. Filed Nov. 18, 1932. Serial No. 643,261. 3 Claims. (Cl. 24—73.)



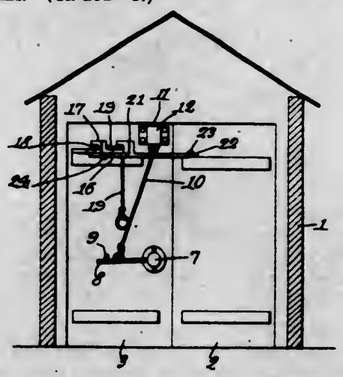
1. As a new article of manufacture, a shoulder strap retaining device comprising a resilient carrier strip, an attaching ribbon connected thereto, said ribbon having its opposite ends arranged to permit sewing of said ends to the dress, a retaining ribbon secured to said strip at one end, and separable fastening means on the free end of said second ribbon and corresponding end of said strip.

1,905,319. STORAGE BATTERY. NORMAN DEXTER STURGES, New York, N. Y. Filed Feb. 4, 1932. Serial No. 590,808. 1 Claim. (Cl. 136—144.)



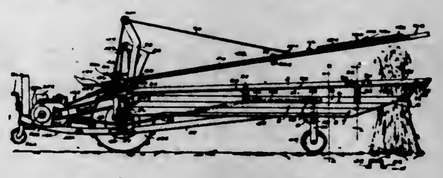
A lead storage battery comprising a container, positive and negative plates within the container having terminals connected thereto, a filling surrounding and interposed between the plates consisting of bagasse fibres partially cooked to loosen the encrusting casing and containing a substantial portion of the pith naturally present in the fibres, and an electrolyte absorbed in the filling material.

1,905,320. CLOSURE FASTENER. WALTER B. TRUEMAN, Mattoon, Ill. Filed Aug. 21, 1930. Serial No. 476,928. 2 Claims. (Cl. 292—5.)



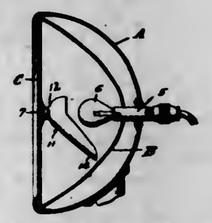
1. In a device of the class described, first and second doors mounted for swinging movement, a latch member on the second door, a shaft mounted to rock on the second door, an arm on the shaft, a connection between the arm and the latch member, a latch arm on the shaft, a keeper on the first door and held by the latch arm when the doors are closed, and spring means for moving the latch member to latched position, and for moving the latch arm into holding relation with respect to the keeper when the doors are closed, the keeper being of such length as to engage the edge of the latch arm to hold the latch member retracted, against the action of the spring means, as the doors move toward closed position.

1,905,321. SHOCK HANDLING MACHINE. LUTHER T. VELEN, Cheswold, Del. Filed July 6, 1929. Serial No. 376,468. 39 Claims. (Cl. 214—65.)



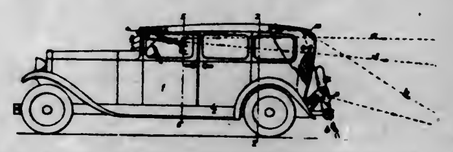
1. In a shock handling machine having a shock piercing and supporting beam, a framework upon which the beam is movably mounted, a carrier wheel having an arm movably connected with the beam, actuating means to move the arm in reference to the beam and thus move the beam in reference to the ground and framework; means associated with the actuating means for limiting the movements of the arm in opposite directions thus limiting the movement of the beam in opposite directions.

1,905,322. ANTIGLARE DEVICE. JOHN S. WALKER, Pittsburgh, Pa., assignor to Kant-Glare Manufacturing Company, Incorporated, Pittsburgh, Pa., a Corporation of Delaware. Filed Feb. 29, 1932. Serial No. 595,948. 1 Claim. (Cl. 40—428.4.)



The combination with a headlamp casing having a reflector, a front glass, an electric light bulb arranged between said reflector and glass, of an anti-glare device comprising a resilient vacuum cup body adapted to be engaged with the inner face of the front glass in alignment with the electric light bulb and having a central stud, a bolt embedded in the stud centrally thereof and projected a distance therefrom a scoop-like reflector having its apex engaged upon the bolt and contacting with the stud, and a nut forming a head for the bolt and threaded thereon to fasten the scoop-like reflector thereto and seated against the stud of the cup, said scoop-like reflector at that portion below its apex being inclined rearwardly with respect to the casing and terminating close to the reflector in said casing.

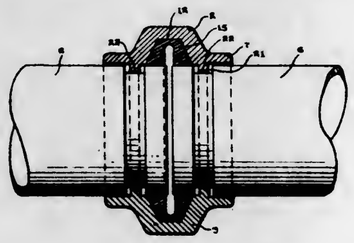
1,905,323. ATTACHMENT FOR VEHICLES. EDWARD WALLACE, Cleveland Heights, Ohio. Filed Apr. 27, 1931. Serial No. 533,174. 12 Claims. (Cl. 45—97.)



1. In a vehicle, the combination with a wheel mounted body having a rear window, a top and a driver's seat, of a

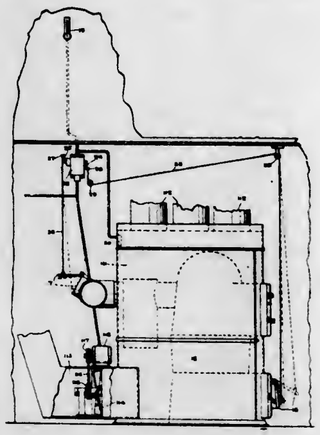
rear view reflector mounted in front of and in reflecting relation to the eye of a person seated in the driver's seat, and a ground view reflector mounted within said body above said rear window and adjacent thereto, said ground view reflector being curved on lines extending transversely of said body and arranged to reflect converging light rays passing through said window to said rear view reflector for reflection to the eye of a person seated in said seat.

1,905,324. PIPE COUPLING. MILLARD F. WATERS, Tulsa, Okla., assignor to Hanlon-Waters, Inc., Tulsa, Okla. Filed May 9, 1930. Serial No. 450,998. 4 Claims. (Cl. 285—193.)



3. A pipe coupling comprising a sectional housing provided with a centrally located annular cavity adapted to receive a leak-proof ring, a resilient leak-proof ring enclosed in said cavity and adapted to bridge the junction of two pipe sections arranged in end to end relation, said ring adapted to snugly engage the peripheries of the adjacent ends of said pipe sections, the opposite end walls of said housing being extended longitudinally of said pipe sections beyond the extremities of said leak-proof ring, to form substantially elongated annular stop collars, the inner peripheries of said collars being spaced a predetermined distance from the peripheries of the respective pipe sections, said intervening space being unobstructed to permit a limited relative movement of said pipe sections without undue strain on the coupling, ring or sections.

1,905,325. REMOTE CONTROL REGULATOR MOTOR. EVERETT H. WHITE, St. Paul, Minn. Filed Mar. 6, 1931. Serial No. 520,758. 20 Claims. (Cl. 236—9.)



1. In an electrically operated mechanism for the remote control of a device requiring motive power to effect its operation, a motor for regulating said device, an operating electrical circuit for said motor, a remotely controlled electrical circuit including a plurality of thermostatically actuated instruments each adapted to separately make said remotely controlled electrical circuit, and means in said remotely controlled electrical circuit for controlling said motor operating circuit.

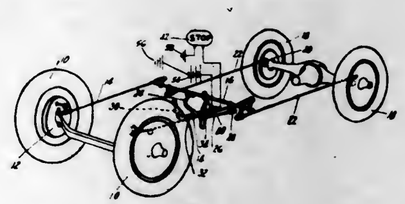
1,905,326. PROCESS OF PRODUCING MIXTURES OF CARBON MONOXIDE AND HYDROGEN. WILLIAM D. WILCOX, Lawrence, Kans. Filed June 28, 1930. Serial No. 464,689. 6 Claims. (Cl. 48—196.)

1. The process of converting hydrocarbon gases and vapors into a mixture of carbon monoxide and hydrogen in the volumetric proportions of one and two which comprises adding to the hydrocarbon vapors a volume of steam more than sufficient to oxidize the carbon content of the gases to monoxide, passing the mixture through a conduit heated externally to a temperature in excess of 1,800° F. and continuing the heating until a dissociation approaching 80% has been effected; adding to the mixture of gases a volume of oxygen sufficient to oxidise the carbon in the undecomposed residue of hydrocarbon gases to carbon monoxide and to convert to water vapor all hydrogen in excess of twice the volume of carbon monoxide.

1,905,327. METHOD AND COMPOSITION FOR PRESERVING WOOD. JOHN H. ZUMWALT, Tacoma, Wash. Filed Jan. 8, 1930. Serial No. 419,460. 2 Claims. (Cl. 99—12.)

1. The process of treating wood and similar materials which consists in impregnating it with a solution of sodium silicate and sodium arsenate, and then subjecting the impregnated wood to the action of an acid to precipitate the silica and sodium arsenate and enclose the sodium arsenate in the hydrated silicic acid.

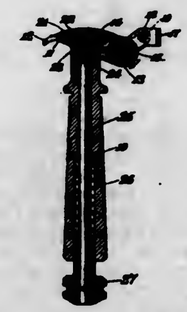
1,905,328. CONTROLLING MEANS. WILLIAM J. ANDRES, South Bend, Ind., assignor to Bendix Brake Company, South Bend, Ind., a Corporation of Illinois. Filed May 6, 1927. Serial No. 189,280. 15 Claims. (Cl. 177—339.)



1. A vehicle having, in combination, brakes, a pedal, a supplemental brake operating member, means whereby either said pedal or said operating member may apply the brakes, a stop-light, and means whereby said stop-light may be lighted only by actuation of the brakes by said pedal.

15. A vehicle having, in combination, brake mechanism, a pedal, a hand lever, means whereby said pedal may operate said mechanism, means whereby said hand lever may operate said mechanism and depress said pedal, said last mentioned means comprising a lost motion device having a part positively connected for movement with the hand lever and a second part positively connected for movement with the brake mechanism, a brake signal, a switch for operating said signal carried by one of the parts of said lost motion device and connected to the other of said parts, whereby upon relative motion of the parts of the lost motion device the switch will be closed and the brake signal actuated.

1,905,329. COMBINED SAFETY RAZOR AND SHARPENING DEVICE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed May 21, 1931. Serial No. 538,936. 12 Claims. (Cl. 30—12.)



10. The combination in a razor, of a razor head, means for holding a razor blade on said head in position for shaving, a sharpening device, and means supporting said sharpening device providing for movement of said sharpening device for cooperative engagement with either face of said razor blade while said razor blade remains held stationary on said head by said blade holding means.

1,905,330. COMBINED SAFETY RAZOR AND SHARPENING DEVICE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed June 4, 1931. Serial No. 541,977. 9 Claims. (Cl. 30—12.)



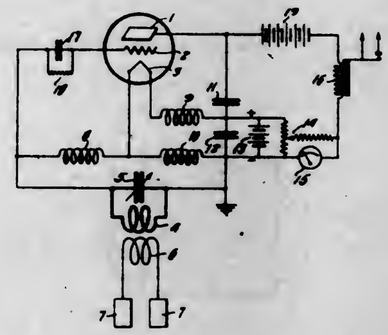
7. In a combined safety razor and sharpening device, a plate seat for supporting a razor blade, a handle rigidly secured to said seat, a sharpening device, a carriage on which said sharpening device is supported, means for supporting said carriage on said plate seat for sliding and pivoting movements respectively parallel and transverse with respect to the plane of a blade on said seat, and guiding means for controlling said sliding movement to cause proper cooperative engagement between a razor blade on said seat and said sharpening device.

1,905,331. COMBINED SAFETY RAZOR AND SHARPENING DEVICE. LOUIS V. ARONSON, Newark, N. J., assignor to Art Metal Works, Inc., a Corporation of New Jersey. Filed June 9, 1931. Serial No. 543,075. 14 Claims. (Cl. 30—12.)



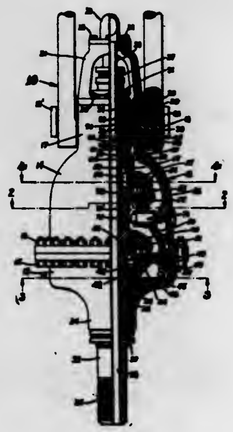
1. In a combined safety razor and sharpening device, a handle, razor blade supporting means pivoted on said handle for bodily transverse movement of the blade, and a sharpening device pivoted on said handle for movement into position to cooperate with either face of an edge of a razor blade supported by said supporting means.

1,905,332. CAPACITY CONTROLLED RELAY. CONSTANTIN D. BARBULESCO, Dayton, Ohio, assignor to Paul S. Edwards, Dayton, Ohio. Filed Sept. 18, 1928. Serial No. 305,754. 19 Claims. (Cl. 250—36.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



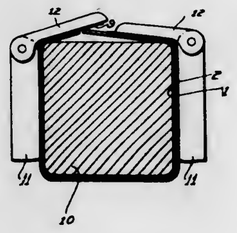
1. In combination, a self-modulated high frequency oscillator of the electron tube type comprising a vacuum tube having a filament, grid and plate, a tank circuit comprising a low inductance, large capacitance and low losses connected across the grid and plate, a coil between the filament and the grid and a second coil between the filament and plate of the tube.

1,905,333. ANTIFRICTION EQUALIZING BEARING. RAY W. BARRETT, Torrance, Calif. Filed July 14, 1930. Serial No. 467,853. 6 Claims. (Cl. 308—160.)



1. In combination with a shaft, a member surrounding said shaft, an antifriction bearing including spaced raceways surrounding said shaft, means whereby one of said raceways is connected to said shaft, a ring surrounding said shaft, said other raceway engaging said ring, said ring including an inclined outer face, a plurality of independent, spaced, circumferentially arranged segmental members surrounding said shaft and supported by a portion of said member, said segments including inner and outer inclined faces, said inner inclined faces of said segments engaging said outer inclined face of said ring, a second ring surrounding said first ring, said second ring including an inner inclined face engaging said outer inclined faces of said segments, a floating collar surrounding said shaft, said floating collar being supported on said second ring and means to connect said floating collar to said shaft.

1,905,334. PAPER RECEPTACLE AND METHOD OF MAKING THE SAME. EDGAR B. BICKER, St. Louis, Mo. Filed May 2, 1931. Serial No. 534,577. 10 Claims. (Cl. 93—36.)



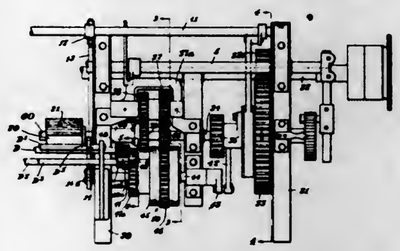
1. A paper box having inner and outer side walls secured together below the top edges and free of securement from said top edges to a predetermined spaced distance therebelow; and a top over the open top of said box and secured to the outer surface of said upper portion of the outer sheet whereby said upper portion of the outer sheet may be detached from the main body portion of the latter to form a flanged cover unitary together with said top.

1,905,335. CHASSIS LUBRICATING INSTALLATION AND THE FLOW CONTROL ELEMENTS THEREOF. JOSEPH BIJUR, New York, N. Y., assignor to Auto Research Corporation, a Corporation of Delaware. Original application filed Aug. 9, 1922, Serial No. 580,668. Divided and this application filed Jan. 7, 1929. Serial No. 330,720. 24 Claims. (Cl. 184—7.)



1. In a central distributing installation of the type comprising a source of liquid, and a conduit system supplied therefrom having an inlet; the combination therewith of a plurality of outlet branches connected in multiple thereto, each of said branches having a permeable flow obstructing filler retained therein and of substantial length compared to the bore of the pipe and each of said fillers, preventing substantial gravity flow through the system, being of resistance so high compared to the resistance of the conduit system that it will itself determine the proportionate rate of flow through the outlet branch, and being securely clamped in a conduit element positioned closely adjacent to the bearing and forming part of said branch.

1,905,336. MACHINE FOR COMBING TEXTILE FIBERS. FREDERICK C. BLANCHARD, Boston, Mass. Filed Oct. 12, 1929. Serial No. 399,198. 2 Claims. (Cl. 19—121.)

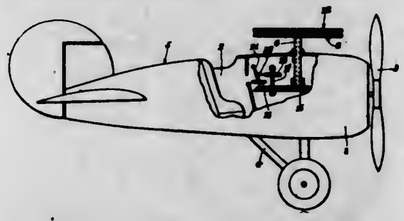


1. A driving mechanism for a combing machine embracing in combination a revoluble combing cylinder, plural half-laps peripherally secured thereto in symmetrical relation, a main control shaft, a speed reducing gearing forming a drive connection between the control shaft and the cylinder for driving the cylinder at reduced speed, coordinated lap-feeding means, nipper mechanism and detaching and piecing rolls driven by connections from said control shaft, the driving connection for said rolls embracing a reversible transmission uninterruptedly and positively maintaining a driving connection from the control shaft to said rolls and causing rotation of the detaching rolls forward and backward with predetermined intervals of pause whereby the action of the detaching rolls is positively coordinated with each half lap in succession without lost motion.

1,905,337. SAFETY ATTACHMENT FOR AEROPLANES. CLARENCE A. BOLCOM, Ionia, Mich. Filed Aug. 8, 1931. Serial No. 554,867. 2 Claims. (Cl. 244—19.)

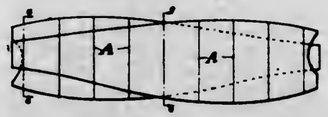
1. A safety attachment for aeroplanes comprising an inner and an outer rotatable shaft, the former extending above the latter, an atmospheric pressure revoluble retarder element fixed to the upper end of each of said shafts, said shafts having automatically operable co-

acting means intermediate their ends for normally latching said shafts from movement to maintain said elements in superposed parallel stationary relation, rotatable means operatively engaging with the lower end of said inner shaft for initially rotating such shaft to position the retarder element carried thereby transversely across and



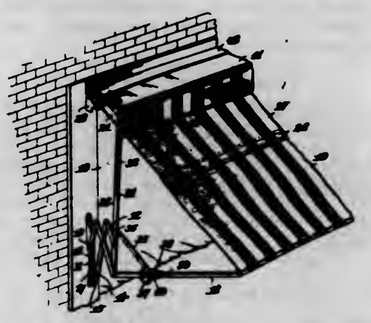
at right angles to the other of said elements whereby said elements are positioned to be revolved by atmospheric pressure, and the upper end of said inner shaft and central portion of that element carried by the outer shaft having coacting means to provide for said shafts operating in unison on the revolving of said elements and for retaining said elements at right angles to each other.

1,905,338. CANNED FISH PACKAGE AND PROCESS OF PREPARING THE SAME. BENJAMIN R. BRIERLY, Seattle, Wash. Filed Oct. 20, 1928. Serial No. 313,720. 7 Claims. (Cl. 99—8.)



1. The process of preparing fish for canning which consists in slitting the fish lengthwise, placing the parts produced by said slitting alongside each other in lengthwise reversed relation, and cutting said assembled parts transversely into lengths suited to the depth of the cans.

1,905,339. SKYLIGHT AWNING. FRANK BROWN, New York, N. Y. Filed Apr. 27, 1931. Serial No. 533,283. 10 Claims. (Cl. 156—44.)

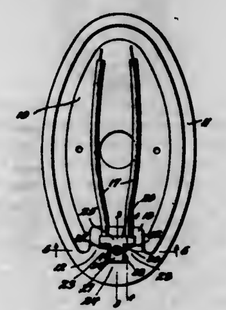


7. A skylight-awning comprising a transparent piece of material adapted to extend outwardly from the top of a window across the same, and an awning adapted to be folded in relation to said window and piece of material to exclude the direct rays of the sun, but allowing daylight to enter the window through said piece of material when the awning is down.

1,905,340. METHOD OF CONCENTRATING BERYLLIUM OXIDE OCCURRING IN MATERIALS CONTAINING BERYLLIUM SILICATE OR SILICATES. LOUIS BURGESS, New York, N. Y. Filed Jan. 16, 1932. Serial No. 587,125. 16 Claims. (Cl. 23—16.)

1. Process of concentrating beryllium oxide occurring in materials containing beryllium silicate, which comprises admixing such a material with sufficient carbon to reduce to silicon at least a part of the silicon oxide in said material, subjecting the mixture to heat sufficient to cause the admixed carbon to reduce at least a part of the said silicon oxide, thereby producing silicon and unreduced oxide, and separating the said silicon from the oxide.

1,905,341. CONVENIENCE OUTLET FOR CANOPIES. PETER E. BURNS, Syracuse, N. Y., assignor to Pass & Seymour, Inc., Syracuse, N. Y., a Corporation of New York. Filed Jan. 11, 1928. Serial No. 246,048. 7 Claims. (Cl. 173—334.)



3. In an electric fixture, in combination, a canopy of moulded material, said canopy having a slot to receive the blade of an attachment plug, said slot being enlarged into a contact receiving recess at the back of said canopy, a contact loose in said recess, a block adapted to cover said recess and to retain said contact in position, means on said canopy engaging said block to prevent movement thereof except in one direction and means on said block adapted to engage said canopy to prevent movement of said block in that direction.

1,905,342. MECHANICAL STOKER. WARREN DEAN BURTON, Oak Park, Ill., assignor to Combustioneer, Inc., Cicero, Ill., a Corporation of Illinois. Filed Jan. 2, 1929. Serial No. 329,793. 14 Claims. (Cl. 198—64.)



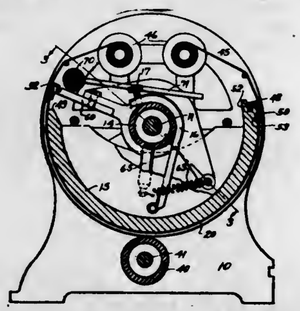
1. A stoker comprising, in combination, a hopper having a discharge opening, a discharge duct in communication at one end with said opening, said opening being enlarged at one side to extend beyond the adjacent portion of said duct, a screw conveyer extending from said hopper through said opening into said duct, means opposite the enlarged portion of said opening for securing said duct to said hopper, a removable closure engaging said duct and closing said enlarged portion of said opening, and means for driving said conveyer, said means including a separable connection operable to open automatically upon the application of an excessive load to said conveyer.

1,905,,348. FLUID TEMPERATURE MAINTAINER. WEBSTER I. CARPENTER, Norfolk, Va. Filed July 25, 1930. Serial No. 470,747. 4 Claims. (Cl. 219—39.)



1. A fluid temperature maintainer comprising, a flexible conduit adapted to be positioned between a dental syringe and a source of warm fluid supply, a pair of spaced electric terminals carried by the conduit, a flexible conductor connected with one of said terminals, said conductor extending longitudinally of the conduit and having its opposite end free of connection therewith, a flexible insulating member for the conductor, and a flexible resistance coil supported on the insulating member and having its respective ends connected wtih the other of said terminals and the free end of said conductor.

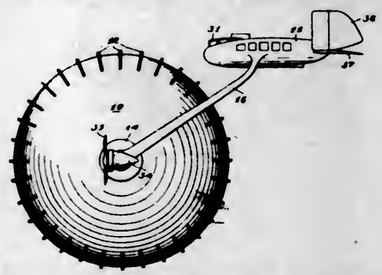
1,905,344. PRINTING APPARATUS. CLIFTON CHISHOLM, Cleveland, Ohio, assignor to Multigraph Company, Wilmington, Del., a Corporation of Delaware. Filed Dec. 22, 1930. Serial No. 503,872. 16 Claims. (Cl. 101—415.1.)



1. The combination with a segment having a groove in one edge, of a galley adapted to carry printing members and having a hook adapted to engage said groove and means on the galley adjacent the hook adapted to form an engagement with the segment to lock that end of the galley thereto.

1,905,345. MARINE VESSEL. ALESSANDRO O. DANDINI, San Francisco, Calif. Filed Mar. 1, 1932. Serial No. 596,013. 9 Claims. (Cl. 115—20.)

1. In a marine vessel, a spherical supporting surface having internal annular tracks therein, a shaft turnably mounted in the horizontal poles of said sphere having a passageway therein, a frame carried by said shaft and rigidly fixed thereto, propulsion machinery including motor trucks carried by said frame, said trucks adapted to engage and cooperate with said tracks for revolving said sphere, motor driven air propellers mounted on each end of said shaft for assisting in the maneuvering and propulsion of said vessel, a cabin removed from said sphere, and



means for supporting said cabin, including a hollow support having a passageway therein, said support having its upper end rigidly fixed to said cabin and its lower end rigidly fixed to said shaft, the passageway in said support adapted to communicate with the passageway in said shaft.

1,905,346. DISCHARGE PRINTING AND FABRIC PRODUCED THEREBY. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, East Orange, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed July 6, 1928. Serial No. 290,883. 11 Claims. (Cl. 8—5.)

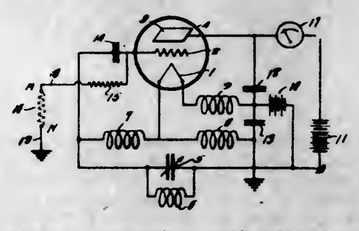
1. Method of discharge printing a fabric containing organic derivatives of cellulose, which fabric has applied thereto an anthraquinone dye in the unreduced state, comprising locally applying thereto an oxidising agent.

11. A discharge printed fabric containing cellulose acetate having differential color effects produced by the discharge printing of the fabric which has been dyed with an anthraquinone dye in the unreduced state, with an oxidising agent.

1,905,347. DISCHARGE PRINTING AND FABRIC PRODUCED THEREBY. CAMILLE DREYFUS, New York, N. Y., and GEORGE SCHNEIDER, Montclair, N. J., assignors to Celanese Corporation of America, a Corporation of Delaware. Filed May 6, 1930. Serial No. 450,309. 4 Claims. (Cl. 8—5.)

1. Method of discharge printing a fabric containing organic derivatives of cellulose, which fabric has applied thereto an anthraquinone dye in the unreduced state, comprising locally applying thereto an oxidising agent comprising a chromate and an acid.

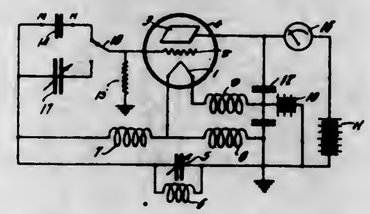
1,905,348. DIRECT READING OHMMETER. PAUL S. EDWARDS and CONSTANTIN D. BARBULESCO, Dayton, Ohio. Filed June 7, 1929. Serial No. 369,281. 7 Claims. (Cl. 175—183.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



1. An ohmmeter comprising a self-modulated oscillator including a vacuum tube and an associated low loss tank

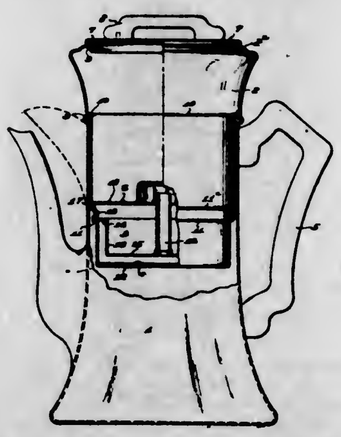
circuit, a resistance connected in the grid circuit of the tube and a current meter connected in the plate circuit of the tube and responsive to changes in the value of said resistance.

1,905,349. DIRECT READING CAPACIOMETER. PAUL S. EDWARDS and CONSTANTIN D. BARBULESCO, Dayton, Ohio. Filed June 7, 1929. Serial No. 369,282. 9 Claims. (Cl. 175—183.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



.1 A capaciometer comprising a vacuum tube oscillator, means to connect a capacitor to be tested in the grid circuit of the oscillator, and means to directly indicate the value of the capacitor comprising a meter connected in the plate circuit of the tube.

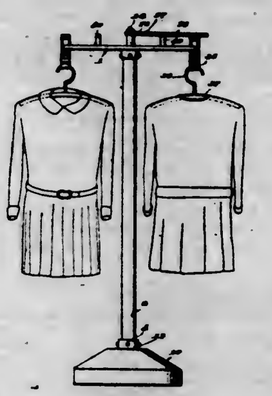
1,905,350. DRIP COFFEE MAKER. CHARLES E. PAGE, Los Angeles, Calif. Filed July 16, 1932. Serial No. 622,970. 8 Claims. (Cl. 53—3.)



1. A drip coffee maker including, a receptacle member, a casing disposed thereon, and provided with a foraminous bottom portion, a ground coffee container disposed within said casing, said container provided with a foraminous bottom portion, a filtering element disposed between the bottom of said casing and said container and a baffle member arranged to fit within and engage said casing, said baffle member also being engageable with said container for securing said container in place.

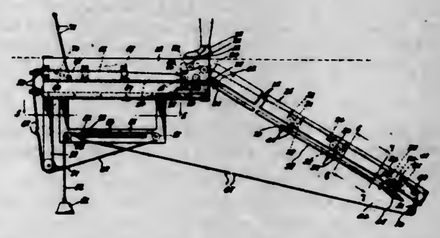
1,905,351. AUTOMATIC MERCHANDISE DISPLAYING DEVICE. ALBERT PERLING, Paris, Ky. Filed May 29, 1930. Serial No. 457,102. 4 Claims. (Cl. 211—1.5.)

3. A display rack comprising a base, a continous horisoutal trackway, a support upstanding from said base, a plurality of supporting arms radiating from said support and rigidly connected to the inner sides of said trackway, cams mounted upon certain of said arms and projecting above said trackway, a series of display units movably mounted on said trackway, each of said display units having abutment surfaces, a rotatable means including



a vertically movable arm, said arms adapted to engage said cams for movement thereof into and out of engagement with the abutments of said display units.

1,905,352. PUNTING MACHINE. DAVID M. PORTER, Hopkinsville, Ky. Filed May 22, 1931. Serial No. 539,373. 8 Claims. (Cl. 272—57.)



1. In a machine for practicing punting in the game of football, a foot engaging element, resistance means for the element during the initial forward kicking of the foot, means for increasing said resistance means during the subsequent movement of the foot, and additional means for further increasing the resistance means during the final movement of the foot.

1,905,353. ATTENUATION UNIT. RALPH K. POTTER, Landing, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed June 18, 1931. Serial No. 545,358. 5 Claims. (Cl. 178—44.)

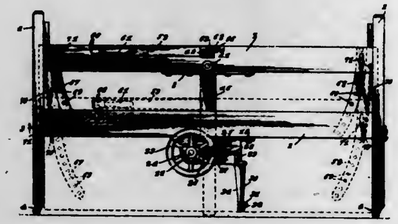


1. An attenuation network comprising a tube of electrically conductive material, a plurality of discs inserted therein said discs being composed of graphitic material, and a plurality of graphitic rods each having its ends supported by adjacent discs, the said rods being concentrically located within the said metallic tube.

1,905,354. DIAZO-COMPOUND OF 2-AMINO-CHLORO-1-OXY-3-SULPHOBENZENE AND ITS PRODUCTION. ERNEST SACK, Neuilly, France, assignor to Compagnie Nationale de Matieres Colorantes et Manufactures de Produits Chimiques du Nord Reunies, Etablissements Kuhlmann, Paris, France, a Corporation of France. Filed Aug. 1, 1928, Serial No. 296,864, and in France Aug. 5, 1927. 2 Claims. (Cl. 260—69.)

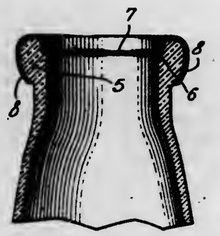
2. The herein described 5 chloro-3 sulpho-2 diazobenzene-1 oxide.

1,905,355. HOSPITAL BED. CHARLES L. SHULTZ, Brookline, Pa. Filed Apr. 21, 1931. Serial No. 531,808. 5 Claims. (Cl. 5—60.)



1. A hospital bed including a bedstead having its posts grooved longitudinally, a frame having its corners guided in the grooves, a sectional bottom pivotally supported in the frame, means for raising or lowering the frame, means for holding the frame raised or lowered, means for swinging the bottom in the frame, means holding the bottom when thus swung and means for swinging and sustaining the bottom sections in angular relation with respect to each other or in alinement.

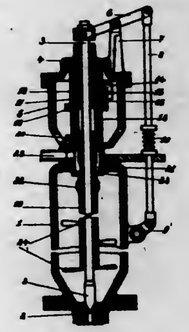
1,905,356. CAP FOR CONTAINERS. GEORGE E. WEST, Washington, D. C. Filed Jan. 2, 1932. Serial No. 584,483. 1 Claim. (Cl. 226—83.)



A method of applying a closure, composed solely of a cellulose acetate compound in thin sheet form, to a container, which comprises heating the outer surface of the closure and contracting the same, in a heated state, about the container, to bring the inner surface of the closure into direct contact with the container.

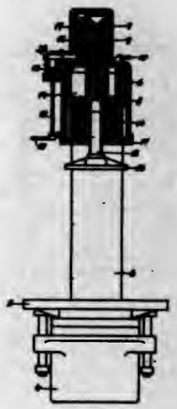
1,905,357. MOLDING APPARATUS. GUSTAV ZIMMERMANN, Dusseldorf, Germany. Filed Jan. 28, 1931, Serial No. 510,803, and in Germany Jan. 28, 1930. 10 Claims. (Cl. 22—36.)

1. The combination in a sand molding machine of a closed receptacle for molding sand, having a discharge opening in the bottom, means for feeding compressed air into said receptacle, and a solid bar above the opening



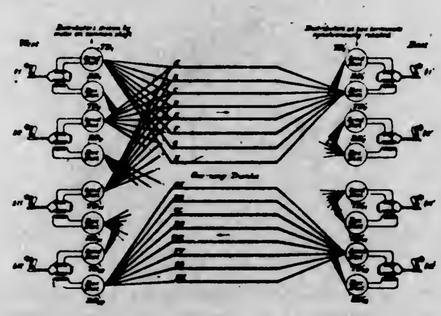
reciprocable vertically and when in its lowermost position adapted to close the opening and prevent the discharge of sand and air from the receptacle.

1,905,358. LOWERING DEVICE IN MOLDING MACHINES. GUSTAV ZIMMERMANN, Dusseldorf, Germany. Filed Mar. 3, 1931, Serial No. 519,909, and in Germany June 4, 1930. 8 Claims. (Cl. 22—82.)



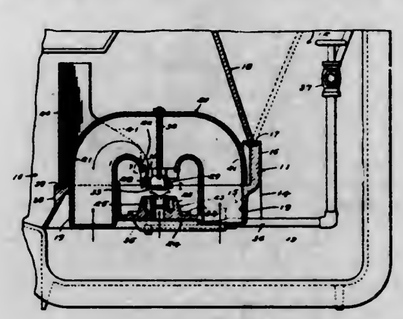
1. In a molding machine a supporting element, means by which said element is mounted for angular movement in a vertical plane, a molding table at one end of said element, a pair of cylinders at the other end of said element arranged in line with each other and one at its outer end communicating with the inner end of the other, a piston in the last named cylinder having a chamber to receive a liquid, said chamber communicating with said last named cylinder, a piston movable with the first named piston and movable in the first named cylinder and provided with a duct of restricted capacity establishing communication between the cylinders, a by-pass duct connecting the inner ends of the cylinders, a valve to control the passage of liquid through said duct from one cylinder to the other, means to supply motor fluid under pressure to the second named cylinder to impart outstroke to both of the pistons when the cylinders and pistons are in raised position, a pressure plate secured to and movable by the piston and means independent of the cylinders to impart instroke to the pistons.

1,905,359. CHANNEL SELECTION. HERMAN A. AFFEL, Ridgewood, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 14, 1931. Serial No. 575,124. 24 Claims. (Cl. 179—1.)



1. In a signaling system, a pair of switching stations, trunks extending between said stations, a signaling terminal at one station, and means responsive to sound currents incoming from said terminal to select and connect thereto an idle trunk.

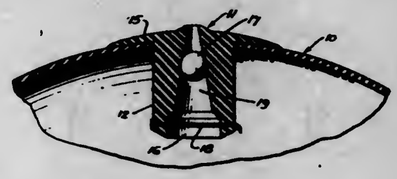
1,905,360. OIL BURNER. SQUIRE E. NOLES, Spring Valley, Ill., assignor to The Mundle Manufacturing Co., Peru, Ill., a Corporation of Illinois. Filed Sept. 11, 1930. Serial No. 481,256. 2 Claims. (Cl. 158—91.)



1. An oil burner comprising a base having spaced passages therethrough, a manifold extending above the base and engaging in said passages, an air discharge means in said manifold above the base, an oil well disposed below the discharge means and having a central opening to permit air to pass upwardly in the direction of the manifold discharge means and opposing the downward draft of air from the manifold, means for supplying oil to the well and a spreader interposed between the well and the discharge means and the upward draft of air from the central opening, the axis of the spreader being coaxial with the center of the discharge means and the central opening to evenly direct the opposing air currents in an outward direction, said air currents maintaining the flame from the oil away from the entire surface of the spreader.

1,905,361. CHECK VALVE FOR RUBBER BALLS. ROBERT H. BACON, Oakland, Calif. Filed July 1, 1929. Serial No. 375,148. 5 Claims. (Cl. 273—65.)

1. A check valve structure including a valve body formed of resilient material, a tapered valve chamber extending through the valve body, a ball valve in the chamber, the lower end of said chamber being of a diameter greater than the diameter of the ball valve, the upper end of said chamber being of a diameter smaller than the diameter of the ball valve, the chamber being so



gradually tapered that the ball valve may embed itself in the walls of the chamber and be held in place by the resiliency of the walls.

1,905,362. AMPOULE. ABRAHAM J. BLAIVAS, Brooklyn, N. Y. Filed Dec. 23, 1932. Serial No. 648,697. 1 Claim. (Cl. 128—272.)



A normally sealed ampoule comprising an elongated tubular glass container having an integral hook at its upper end, said hook and said elongated container being constructed and arranged to permit said ampoule to be suspended from a support, said hook having a passage in communication with the interior of said container and provided with a breakable seal, and a straight tubular stem integral with said container adapted to receive a flexible tube and extending from the bottom thereof, said stem having a breakable seal whereby the contents of said container can flow freely by gravity through said stem when the seals of said stem and said hook are broken.

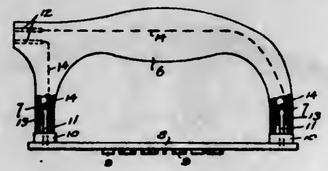
1,905,363. RUBBER ARTICLES OF EVERY KIND. OLOF GUSTAV BOHLIN, Helsingborg, Sweden, assignor to Helsingborgs Gummifabriks Aktiebolag, Helsingborg, Sweden. Filed Jan. 21, 1930, Serial No. 422,496, and in Germany Dec. 20, 1929. 5 Claims. (Cl. 91—68.)

1. An article of manufacture comprising a foundation layer of rubber and a nap upon said layer of fibers of prepared wood pulp cellulose.

1,905,364. ELECTRIC BRANDING IRON. RALPH BRINDLEY, Tacoma, Wash. Filed Oct. 6, 1931. Serial No. 567,165. 2 Claims. (Cl. 219—20.)

1. In an electric branding iron, the combination of an insulated manipulating handle having two separated legs; a unitary metallic branding iron formed of a high resistance material and adapted to be heated to branding temperature by an electric current passing from end to

end thereof; electric contact plugs extending from one side of said plate and adapted to enter sockets formed in the legs of said manipulating handle; means connecting



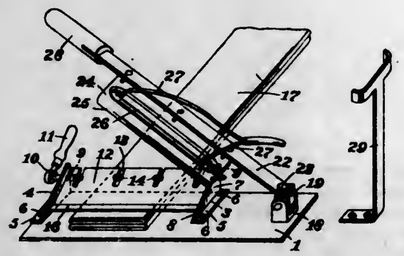
said sockets with a source of electric energy; and branding marks formed integral with said plate and extending from the opposite side of said plate and heated therewith.

1,905,365. METHOD OF MAKING INNER TUBES. JAMES C. CARLIN, Norristown, Pa., assignor to Lee Rubber and Tire Corporation, Conshohocken, Pa., a Corporation of New York. Filed Sept. 24, 1932. Serial No. 634,730. 9 Claims. (Cl. 154—14.)



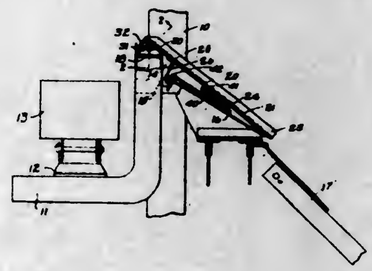
1. A method for forming inner tubes and the like which consists in cutting rubber tubing stock to desired lengths, folding the tube centrally whereby the free ends will coincide, bevelling the free ends in parallel relationship, treating the ends, refolding and matching the said ends, preliminarily holding the ends together and then vulcanizing the said tube.

1,905,366. MACHINE FOR CUTTING RUBBER STOCK. JAMES C. CARLIN, Norristown, Pa., assignor to Lee Rubber and Tire Corporation, Conshohocken, Pa., a Corporation of New York. Filed Sept. 27, 1932. Serial No. 635,108. 7 Claims. (Cl. 164—45.)



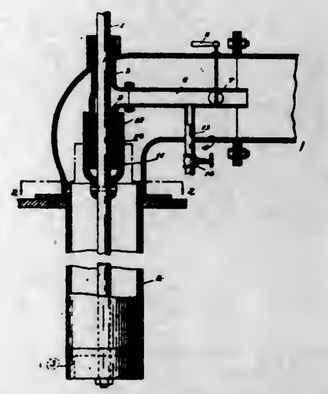
2. A machine for cutting rubber stock consisting of a base, an adjustable clamp for holding the stock, means for operating the clamp, triangularly formed guide plates presenting surfaces extending substantially at a thirty-five degree angle to the base, an arm pivotally mounted at its one end and capable of being lowered along an angle corresponding to the angle of the guide plates, a knife carried by said arm and adapted to contact with and be guided in its downward movement by said guide plates, means for heating the knife whereby the rubber stock will be cut at an angle of thirty-five degrees, and the severed walls also left in a semi-plastic condition.

1,905,367. APRON FOR CAR DUMPERS. ORLANDO M. CARAS, Maple Heights, Ohio. Filed May 5, 1930. Serial No. 449,788. 3 Claims. (Cl. 214—128.)



1. In a car dumper, the combination with a frame, of a cradle adapted to be elevated and tilted therein, a hinge member mounted upon the cradle, a material conveying apron disposed within the frame and overhanging the path of travel of the cradle, and means on the apron adapted to be engaged and raised by the hinged member and held in cooperative contact therewith during the tilting movement of the cradle.

1,905,368. PACKLESS TURBINE PUMP SHAFT. GEORGE S. COATS, Visalia, Calif. Filed Apr. 21, 1931. Serial No. 531,831. 4 Claims. (Cl. 103—102.)

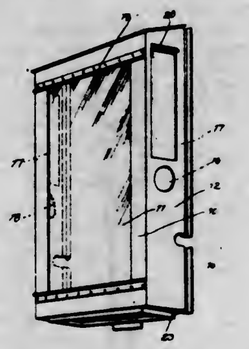


1. The combination with a motor driven shaft, a pump runner connected to the shaft, and a well casing for carrying water, the shaft being received in the casing and passing through a portion thereof, of a packless bearing disposed on the shaft at the place where the shaft passes through the portion of the casing, said casing carrying the water, having a water discharge outlet, a water outlet leading from the bearing and terminating in the casing discharge outlet, whereby water flowing through the casing outlet will entrain any water in the bearing outlet.

1,905,369. CLOSURE FOR LOCOMOTIVE CAB WINDOWS. THOMAS C. CRAVEN, Dumont, N. J. Filed Aug. 22, 1931. Serial No. 558,786. 1 Claim. (Cl. 20—40.)

In a closure for window openings, a main frame member, sides hinged to the vertical edges of said main frame member and having the inner longitudinal edge portions thereof provided with channels for the snug reception of

the vertical edge portions of the walls of a window opening, a bottom member hinged to the main frame and movable into engagement with the side members and means



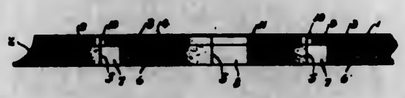
carried by said bottom member for engagement with the bottom of the window opening to aid in securing the closure in position.

1,905,370. HAIR PROTECTING HEADBAND. JOHN J. DORSEY and DOROTHY DORSEY, New York, N. Y. Filed Jan. 20, 1932. Serial No. 587,728. 10 Claims. (Cl. 2—174.)



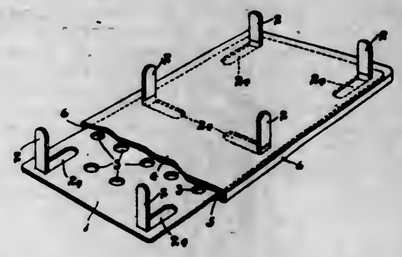
1. A head band formed of a strip of waterproof elastic material having saw teeth along the top edge and being reinforced at the bottom edge and shaped with a central projection, cut away parts for the ears, the flaps forming the front of the ear parts being stiffened, and spreaders at the ends, one including a hook and the other an eye, there being a tongue extending from under one end under its hook.

1,905,371. MAT. JAMES F. DUFFY, Holland, Mich., assignor to Duffy Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed July 29, 1929. Serial No. 381,990. 4 Claims. (Cl. 154—49.)



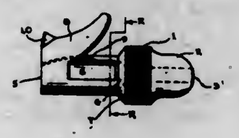
1. A mat comprising a relatively thin cover or top of flexible wear resisting material having depending border sections at the edges thereof, thereby providing a recess at the underside of the mat substantially co-extensive with said top or cover, said cover or top having openings therethrough and a flexible heat insulating filler permanently secured in said recess of the mat with its underside and the under edges of said border sections located in the same horizontal plane, said filler extending into and filling the openings in said cover, and having smaller openings therethrough at the places where it fills the openings in the cover.

1,905,372. PLATE COVERING AND ATTACHMENT. JAMES FRANCIS DUFFY, Holland, Mich., assignor to Duffy Manufacturing Company, Holland, Mich., a Corporation of Michigan. Filed Sept. 16, 1929. Serial No. 392,777. 4 Claims. (Cl. 280—169.)



1. In a construction of the class described, a flat plate of sheet metal having integral elongated tongues struck therefrom and bent outwardly at substantially right angles, thereby providing openings through the plate at the places where the tongues are struck therefrom, said plate having a plurality of additional openings therethrough spaced from each other, and a rubber covering at both sides and around the edges of said plate, the opposite sides of the rubber covering having integral connecting portions extending through the openings in the plate.

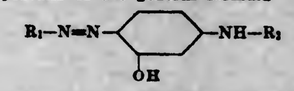
1,905,373. PERMANENT WAVE WINDER. STEPHEN JOHN DURANEY, Johnstown, Pa., assignor of one-half to Samuel Richard Block, Johnstown, Pa. Filed July 1, 1929. Serial No. 375,068. 4 Claims. (Cl. 132—38.)



1. A device for winding hair or the like on a rod, comprising a chamber having an opening therein and a slot communicating with said opening for admitting the hair thereinto, the walls of the chamber forming said slot being in overlapping relationship, whereby to facilitate entry of hair thereinto.

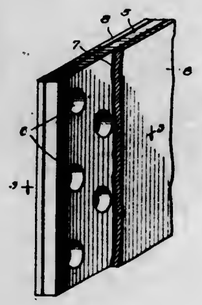
1,905,374. AZO-DYESTUFFS AND PROCESS OF MAKING SAME. FRIEDRICH FELIX and WILHELM HUBER, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Nov. 30, 1932, Serial No. 645,134, and in Switzerland Dec. 21, 1931. 9 Claims. (Cl. 260—97.)

5. The dyestuffs of the general formula



wherein R_1 means a benzene nucleus which contains no substituents capable of bringing about solubility in dilute aqueous caustic alkalies, and R_2 the residue of an aliphatic carboxylic acid of low molecular weight, which products constitute yellow to red powders which dissolve in acetic ester to yellow to orange solutions, and dye acetate silk in aqueous suspensions fast yellow to orange tints.

1,905,375. CONSTRUCTIONAL UNIT. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed July 29, 1926. Serial No. 125,738. 13 Claims. (Cl. 94—18.)

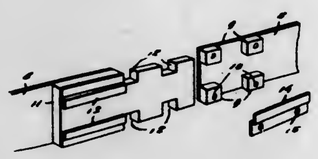


1. Constructional material embodying in its construction an intermediate perforated sheet, surfaced with sealing sheets closing said perforations.

1,905,376. ROOFING MASTIC. ALBERT C. FISCHER, Chicago, Ill., assignor to The Philip Carey Manufacturing Company, a Corporation of Ohio. Filed June 4, 1920. Serial No. 386,609. 2 Claims. (Cl. 106—31.)

2. A mastic material comprising a bituminous base, an adhesive ingredient incorporated with said base, and a glycerine constituent combined with said adhesive to prolong the setting thereof.

1,905,377. HIGHWAY GUARD RAIL. SAMUEL R. GARNER, Mercer, Pa. Filed Apr. 12, 1932. Serial No. 604,825. 2 Claims. (Cl. 287—103.)



1. A highway guard structure comprising a pair of rail sections, and means for connecting said sections together, said means including lugs on one of the sections, a plate mounted on the other section and having notches therein for the reception of lugs, and elements mounted on the lugs and engaged with the plate for preventing disengagement of said plate from the lugs.

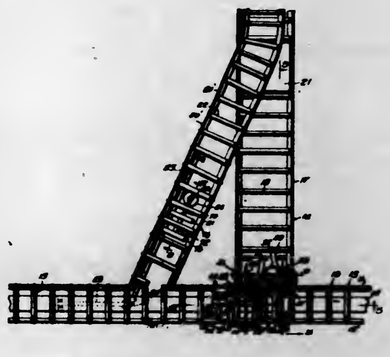
1,905,378. TRAFFIC REGULATING DEVICE. HERMAN J. GECHTER, Cleveland, Ohio. Filed July 5, 1929. Serial No. 375,937. 14 Claims. (Cl. 177—327.)

11. In a traffic regulating device, a pointer, means for slowly rotating said pointer, electrical illuminating means mounted on said pointer and illuminating substantially its entire extent for the routine control of traffic when



energized and means for cyclically energizing said illuminating means during predetermined extents of angular movements of said pointer.

1,905,379. CONVEYING SYSTEM. HENRY R. GOTTHARDT, Louisville, Ky., and WILLIAM E. CAIN, Jeffersonville, Ind., assignors to Logan Co. Inc., Louisville, Ky., a Corporation of Kentucky. Filed July 13, 1931. Serial No. 550,546. 11 Claims. (Cl. 198—33.)



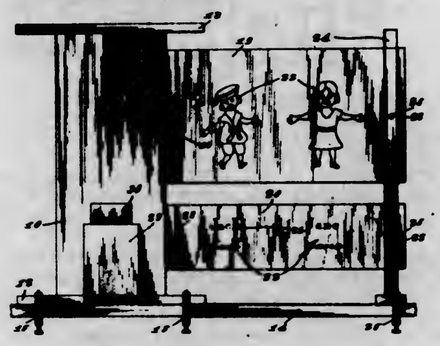
2. A conveying system comprising a main conveyor, a pusher member arranged substantially parallel to said main conveyor and movable substantially horizontally transversely thereof to remove articles therefrom, and means movable substantially horizontally transversely of the main conveyor and operative in advance of said pusher member for engaging and turning an article transversely prior to the removal thereof by said pusher member.

1,905,380. ANTIFREEZE COMPOUND FOR RADIATORS. OLIVER P. GREENSTREET, Owensville, Mo. Filed June 25, 1931. Serial No. 546,925. 6 Claims. (Cl. 252—5.)

1. An anti-freezing mixture consisting approximately of kerosene three gallons, oil of mirbane six ounces, sulphonated bitumen six ounces, glycerine three ounces, flax seed one-half ounce, and zinc oxide one-half ounce.

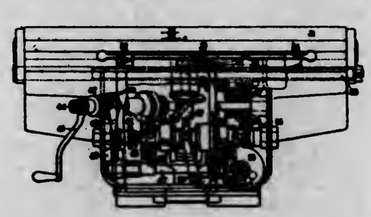
2. A compound of the character described, consisting of sulphonated bitumen four to eight ounces, glycerine two to four ounces, oil of mirbane four to eight ounces, flax seed one quarter to one ounce, and zinc oxide one quarter to one ounce.

1,905,381. EDUCATIONAL DEVICE. ADELLA VALLIANT GRIFFIN, San Diego, Calif. Filed July 29, 1932. Serial No. 626,025. 2 Claims. (Cl. 35—9.)



1. An educational device of the character described comprising a reversible housing, end pieces forming rest for the housing, spaced movable strips normally within the housing and bearing educational matter and adapted to be drawn laterally outward from said housing for display purposes one above the other, and a post removably supported spaced from the housing and detachably engaged by the strips on extension thereof from the housing.

1,905,382. MILLING OR CUTTING MACHINE. OSCAR HOPPE, Rorschach, Switzerland. Filed May 12, 1927, Serial No. 190,898, and in Germany Feb. 11, 1927. 7 Claims. (Cl. 90—58.)



1. In a milling machine, a vertically movable frame, a work table movable longitudinally on said frame, a vertical screw shaft to raise and lower the frame and hence also the table, a shaft geared to the screw shaft, a member on the last named shaft to partly turn the latter, a controlling shaft having a cam to operate said member, a controlling bolt geared to the controlling shaft and having a head, and spaced cams on the longitudinally movable work table, in the path of which the head of the controlling bolt is arranged, said cams coacting with the head to move the bolt upwardly or downwardly according to the direction of longitudinal movement of the table and thereby cause the table to be raised or lowered, a manually operable lever by which the controlling shaft may be manually operated and positive positioning means to releasably hold the controlling shaft in adjusted position.

1,905,383. METHOD FOR HYDROGENATING OR DEHYDROGENATING HYDROCARBONS. WALTER F. HUPPKE and FREDERICK E. FENY, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla. Filed July 22, 1930. Serial No. 469,915. 16 Claims. (Cl. 260—169.)

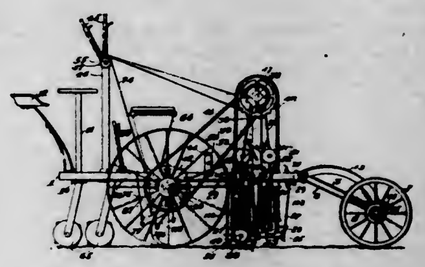
1. In the catalytic treatment of aliphatic hydrocarbons at elevated temperature to change the carbon-hydrogen ratio thereof, the step which includes passing the hydrocarbon into contact with a chromic oxide gel, which is stable at such temperature.

1,905,384. PULVERIZING ROLLER. CARL JABS, Horicon, Wis. Filed Feb. 4, 1932. Serial No. 590,953. 1 Claim. (Cl. 97—216.)



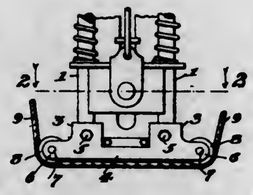
In a device of the class described, the combination of a drum provided with comparatively thick end discs, a separate shaft extending through each end disc, a pin extending from opposite sides of said shaft and entirely embedded in said thick end disc, each shaft provided with a head at its inner end engaging an end disc and partly countersunk in the engaged disc, and spring pressed teeth on said drum, substantially as shown and described.

1,905,385. CONTROL MEANS FOR EARTH PULVERIZING MACHINES. CARL JABS, Horicon, Wis. Filed Mar. 8, 1932. Serial No. 596,622. 8 Claims. (Cl. 97—40.)



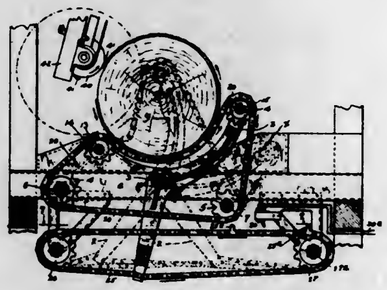
1. In a mechanism of the class described, the combination with a frame, of a plurality of bearing devices on said frame, each bearing device comprising a bracket attached to said frame, rods extending through said bracket, a bearing slidably mounted on said rods, springs engaging said rods and exerting pressure on said bearing, and an axle journalled in said bearing.

1,905,386. EARTH PULVERIZING MACHINE. CARL JASS, Horicon, Wis. Filed June 27, 1932. Serial No. 619,578. 4 Claims. (Cl. 97—40.)



1. In a device of the class described, the combination with a support, of a pair of rods carried by said support, a bracket attached to said rod, pulleys carried by said bracket, a cable fastened firmly at one end to said support and passed under said pulleys, and means for manually adjusting said cable on said support.

1,905,387. DEBARKING MACHINE. ARTHUR M. KIRKWOOD, Portland, Oreg. Filed July 13, 1931. Serial No. 550,530. 14 Claims. (Cl. 144—208.)



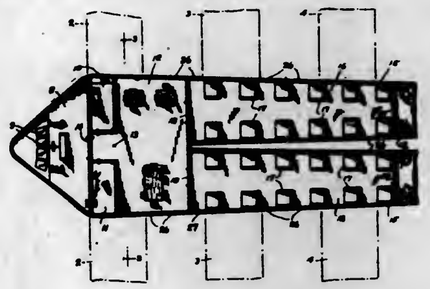
1. In a log turner, a log supporting means comprising a chain having means for supporting a section thereof at spaced points with a slack in said section on which the log may be received, means for lowering only one of the points for allowing the log to be rolled thereover and means for imparting endwise movement to the chain.

1,905,388. UNIVERSAL RATCHET WRENCH. JUDSON D. LAMB, Reno, Nev. Filed Mar. 31, 1931. Serial No. 526,720. 2 Claims. (Cl. 81—60.)



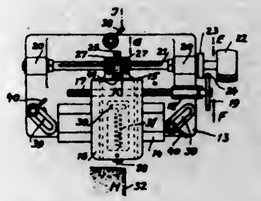
1. A universal socket wrench comprising a body having a spherical-shaped bearing with diametrically opposed openings, a ball-shaped member having a non-circular socket and being receivable in the bearing for rotation in any direction, said ball having meridian grooves of the same width throughout, and a roller having a concave surface with a curvature similar to the curvature of the ball groove, and spring means for guiding the roller into binding engagement with the ball.

1,905,389. AEROPLANE. SAMUEL W. LANNING, New Lexington, Ohio. Filed Mar. 14, 1932. Serial No. 598,827. 4 Claims. (Cl. 244—30.)



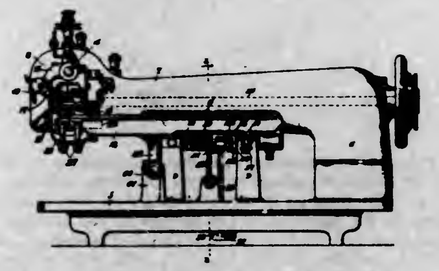
1. An aeroplane comprising a fuselage, wings mounted transversely on the fuselage at longitudinally spaced points, said fuselage including a bow portion extending the width of the fuselage and providing a dining room, a nose portion projecting forwardly from the bow portion and separated therefrom and providing a control room, the fuselage further including substantially duplicate extensions projecting rearwardly from the bow portion, partitions defining passenger compartments in the extensions immediately rearwardly of the dining room, and partitions defining lavatories in the extensions rearwardly of the passenger compartments, the fuselage still further including transversely spaced compartments in the forward portion of the bow portion immediately to the rear of the first named partition, the partitions having doors therein, the last named compartments defining a longitudinal passage between the dining room and the control room.

1,905,390. DEVICE FOR SHAPING AND TRUING GRINDING ROLLS. HERBERT LINDNER, Berlin, Germany. Original application filed Apr. 30, 1930, Serial No. 448,658, and in Germany Oct. 17, 1927. Divided and this application filed June 1, 1932. Serial No. 614,777. 8 Claims. (Cl. 125—11.)



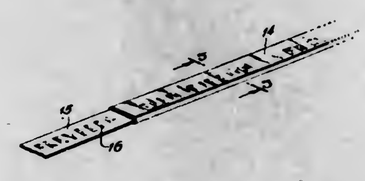
1. A device for shaping and truing grinding rolls comprising a frame, a saddle mounted on the frame to move transversely thereof, a tool holder mounted on the saddle to move longitudinally of the frame, a drive shaft extending transversely of the frame and provided with driving means, a cam mounted on the drive shaft and engaging the tool holder to move the same in one direction, a spring constantly holding the tool holder against the cam, and means to feed the saddle transversely of the frame.

1,905,391. SEWING MACHINE. CHARLES W. MUELLER, St. Louis, Mo., assignor to Lewis Invisible Stitch Machine Company, St. Louis, Mo., a Corporation of Maine. Filed Nov. 19, 1930. Serial No. 496,728. 12 Claims. (Cl. 112—176.)



1. In a sewing machine, the combination with an oscillatory shaft, of a ridge forming element fixed to said shaft and having ridge forming surfaces of different radii arranged in tandem, and means for adjusting said ridge forming element about the longitudinal axis of the shaft to vary the effective height of said element.

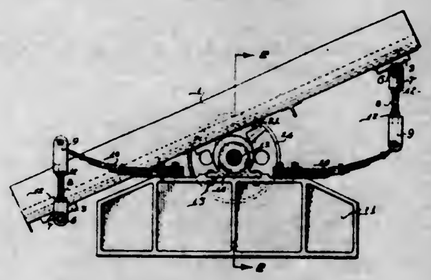
1,905,392. TYING STRAND OR STRIP. AARON FREYDBERG, New York, N. Y., assignor to Freydberg Brothers, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 17, 1931. Serial No. 509,525. 4 Claims. (Cl. 154—52.)



1. As a new product of commerce, a tying strand consisting of a flattened cylinder or tube formed from flexible transparent sheets of synthetic cellulose material, substantially one-half of the wall of said tube being formed of a single layer of said cellulose material, and substantially the other half of the wall of said tube being formed by a double layer of said cellulose material separated by a thin layer of transparent adhesive material, the said tube or cylinder being flattened so that a strip will be formed, one side of which will consist of the single layer of material and the other side of which will consist of the triple layer of material, the inner walls of said tube or cylinder being substantially free of adhesive, so that when the tube or cylinder is flattened they may readily slip relative to each other.

1,905,393. VIBRATING SCREEN. BURNETT E. GAMBN, Alpena, Mich., assignor to Huron Industries, Inc., Alpena, Mich., a Corporation of Michigan. Filed Mar. 3, 1930. Serial No. 432,667. 7 Claims. (Cl. 209—326.)

1. A device of the character described comprising a base, a screen-supporting frame, front and rear multileaf quarter elliptic springs disposed lengthwise in spaced apart parallel relation to said frame and base and having one end secured to said base and the other pivotally shackled to said screen-supporting frame, variable-length connecting means between said springs and said screen adapted to support said screen in an adjustably inclined position, and a transversely-disposed eccentric drive shaft



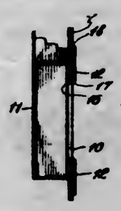
supported by said base and connected to said screen frame whereby rotation of said shaft causes vibration of said screen.

1,905,394. VENTILATOR. ERNEST W. HORNUNG, Cleveland, Ohio. Filed May 22, 1931. Serial No. 539,277. 3 Claims. (Cl. 98—2.)



1. A ventilator comprising a body having front, top and bottom walls, plates slidably secured to the top and bottom walls and projecting beyond the ends of the body, resilient members having means at one end adapted to engage the inner ends of said plates for opposing inward movement thereof, said bottom wall having a series of openings therein, and means on the other end of said resilient member for engagement with said openings.

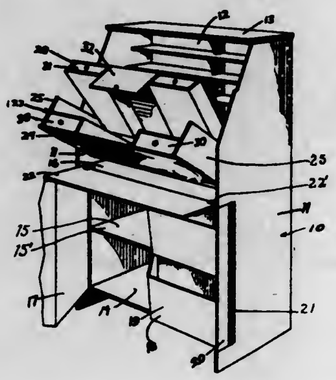
1,905,395. DISPLAY DEVICE. FERDINAND MALLGRAF, Little Neck, N. Y., assignor to The American Tobacco Company, New York, N. Y., a Corporation of New Jersey. Filed June 16, 1932. Serial No. 616,548. 6 Claims. (Cl. 40—126.)



1. A display device of the class described, including a sign providing a support, a dummy package formed independent of the sign, the sign having an opening over which the dummy is mounted at the front of the sign, and a flap on the dummy extending through said opening and provided with creases at the front and back edges

of the opening, the end of said flap being bent over the back of the sign, said dummy being of greater dimension than said opening whereby marginal portions around said flap abut the face of the sign.

1,905,396. CABINET DESK. WILHELM J. MICHELET, Waukegan, Ill. Filed Sept. 9, 1932. Serial No. 632,287. 8 Claims. (Cl. 45—6.)



1. In combination, a cabinet and desk furniture unit, a stationary partition therein; a triple strap hinge having its rearmost strap secured on said stationary partition; a writing panel secured to the foremost strap of said hinge, and a desk portion comprising a pair of panels secured in perpendicular relation to each other, one of said panels being secured to the intermediate hinge strap.

1,905,397. WALL BOARD CONSTRUCTION. CLIFTON G. REYNOLDS, San Francisco, Calif. Filed Apr. 6, 1931. Serial No. 527,899. 7 Claims. (Cl. 154—45.9.)



1. A wall board construction comprising a layer of porous fabric, and a layer of semi-rigid material affixed to each side of the fabric, the said layers of semi-rigid material having a composition in which asphaltum is the main ingredient.

1,905,398. METHOD AND APPAPATUS FOR MAKING A SILL PLATE. WILLIAM SCHNELL, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1931. Serial No. 513,906. 4 Claims. (Cl. 153—2.)



1. An apparatus for operating upon a continuously moving sheet metal strip comprising in combination a pair of rollers for forming the said strip to a predetermined shape, a pair of ornamenting rollers for indenting an ornamentation upon the said strip, and rigid means in front of the said ornamenting rollers for stretching the fibers of the metal strip to maintain the predetermined shape and to prevent the warping of the said strip.

1,905,399. BRUSH FOR EYELASHES AND EYEBROWS. TOSCA WAGNER, Seattle, Wash. Filed Mar. 28, 1932. Serial No. 601,575. 1 Claim. (Cl. 15—160.)



A brush for treating eyelashes, comprising a handle of resiliently-connected sections, the free terminals of the sections forming brush-carrying plates and being projected in the direction of the lengths of the sections, the brush-carrying plates being curved throughout their lengths, bristles carried by each plate, the bristles of one plate being projected toward the bristles of the other plate, and guards carried by the plates in the direction of the bristles, the guards being relatively rigid and of materially less length than the length of the bristles.

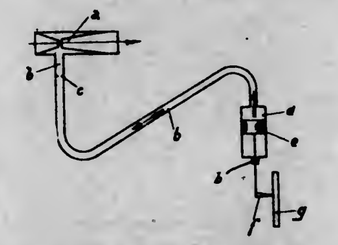
1,905,400. BRAKE MECHANISM. AUGUSTUS F. KLASING, Chicago, Ill. Filed July 24, 1930. Serial No. 470,367. 13 Claims. (Cl. 74—112.)



1. In a brake mechanism for a railway car having a wall with outwardly projecting corrugations, supporting means including integral bracket means comprising inner bracket means including horizontal arms having vertical end portions for securing to the car wall and lower depending bracket means securable to a corrugation, integral housing means on said supporting means, including an upper sleeve-like portion having its axis directly above said depending bracket means for carrying the brake staff with a pinion on its lower end, said housing means also including an outer housing portion for carrying the brake drum and an arcuate portion whereby said outer portion is merged with said upper portion and for housing and protecting a gear member to mesh with said pinion positioned at the inward side thereof.

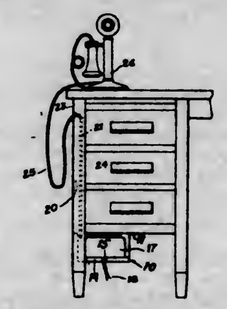
1,905,401. MEASURING APPARATUS. WALDEMAR MÖLLER, Berlin-Charlottenburg, Germany, assignor to Askania-Werke Aktiengesellschaft, Berlin-Friedenau, Germany, a Corporation of Germany. Filed Feb. 27, 1930, Serial No. 431,951, and in Germany Mar. 18, 1929. 13 Claims. (Cl. 73—122.)

1. In apparatus for measuring distance traveled by a vehicle, in combination, a Venturi tube carried by said vehicle; means forming a passage connected to the throat of the Venturi tube and communicating with atmosphere; a constriction provided in said passage, said Venturi tube and said constriction cooperating to produce within said



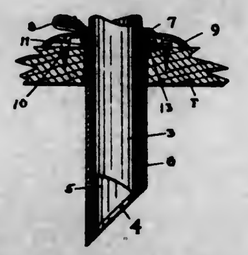
passage, when said Venturi tube is operative, a flow of air proportional to the speed of travel of said vehicle; distance indicating means; and operating means for the latter actuated by said flow of air.

1,905,402. TELEPHONE INSTALLATION APPARATUS. JAMES FRANK SINK, Winston-Salem, N. C. Filed July 2, 1932. Serial No. 620,589. 4 Claims. (Cl. 45—90.)



1. In a desk and the like, a support for a telephone bell box secured to the lower portion of the desk, said support comprising an open ended U-shaped bracket enclosing at least three sides of the box, a conduit for a telephone cord leading from the support to the exterior of the side portion of the desk, said support having a slot therein thru which the incoming wires to the bell box may be inserted as the bell box is inserted into the support.

1,905,403. ASH RECEIVER. JOSEPH L. THOMAS, Milan, Wash., assignor of one-half to John Saad, Spokane, Wash. Filed Sept. 8, 1931. Serial No. 561,635. 8 Claims. (Cl. 206—19.5.)



1. In an ash receiver, the combination with a cylindrical stationary member and a concentric rotatable member, one of said members having a lateral port and a diagonally extending bottom forming a wall of the port, and the other member having a complementary open bottom having diagonally extending walls, of means for turning the rotatable member for alternately opening and closing the ash receiver.

1,905,404. PROCESS OF MANUFACTURING EBONITE IN WHICH STONE CHIPPINGS OR THE LIKE ARE INCORPORATED. FRANS CORNELIS VAN HEURN, Amsterdam, Netherlands, assignor, by mesne assignments, to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed May 21, 1931, Serial No. 539,131, and in Germany May 27, 1930. 3 Claims. (Cl. 18—59.)

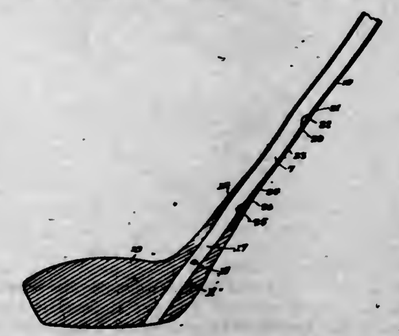
1. A process of manufacturing ebonite in which stone chippings or the like are incorporated, which comprises preparing a mixture of unvulcanised rubber, fillers and sulphur, subjecting said mixture to a partial vulcanisation, crumbling the partially vulcanised mixture and mixing said crumbled, partially vulcanised mixture with a stone aggregate, moulding and then completely vulcanising the partially vulcanised mixture to produce an ebonite article of manufacture containing aggregate.

1,905,405. REPAIR DEVICE FOR CLOSING RUPTURES IN CONCRETE STRUCTURES. EDWARD J. WINSLOW, Chicago, Ill. Filed July 8, 1931. Serial No. 548,570. 7 Claims. (Cl. 72—128.)



5. In a repair device for closing ruptures in concrete and the like structures, including a metal sheet member adapted to overlie the rupture to be sealed and having a series of perforations adjacent the rupture, clamping bolts extending through said perforations, means for anchoring the bolts in the concrete structure adjacent the rupture, and a sealing member positioned between and adapted to be clamped against the concrete structure and the metallic sheet metal member.

1,905,406. GOLF CLUB. HAROLD G. BARRETT, Wilmette, Ill., assignor to Pyratone Products Corporation, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1929. Serial No. 413,957. 6 Claims. (Cl. 273—80.)



1. A shaft for golf clubs and the like embodying a core, a casing sleeve upon the core, one end of the casing being reduced, the end of the casing terminating a considerable distance from the end of the core, a sleeve telescoped upon the said reduced portion of the casing and terminating short of the end of the said reduced portion, a cap telescoped upon the end of said casing and abutting

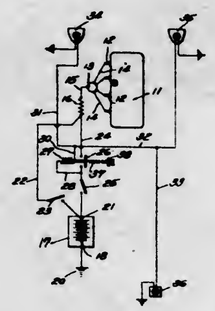
the end of the sleeve, said cap having an internal shoulder flush with the end of said casing, the lower portion of the cap being spaced from the core and flaring from said shoulder toward the lower end thereof and said core extending beyond the lower end of the cap.

1,905,407. FISH LURE. VIRGIL H. BEST, Pasadena, Calif. Filed July 17, 1931. Serial No. 551,814. 5 Claims. (Cl. 43—42.)



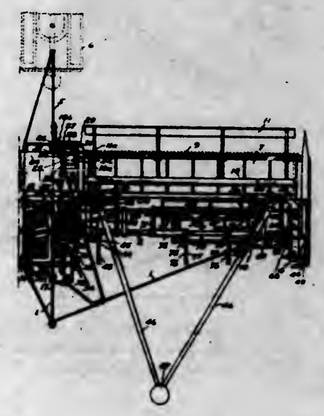
1. A fish lure including a hook, a spoon plate of substantially uniform thickness secured thereto and extending longitudinally of the shank thereof, said spoon plate being characterized by a continuous reverse curve throughout the length of its body and along its longitudinal center whereby the plate will generally form a longitudinally extending concaved and convexed section throughout its length, said concaved and convexed sections being laterally concaved and convexed respectively, the lateral and longitudinal concavity and convexity merging along the center of the spoon, and the marginal edges of the spoon lying in substantially a common plane.

1,905,408. AUTO LIGHT CHECKING MEANS. WILLIAM T. CRESPINEL and CHARLES W. PRYNNE, Los Angeles, Calif. Filed Sept. 16, 1931. Serial No. 563,214. 8 Claims. (Cl. 180—82.)



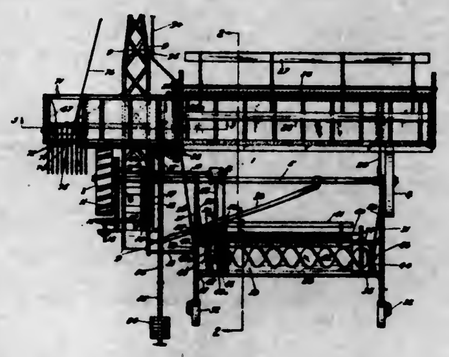
1. In a motor propelled vehicle, the combination of: a motor for propelling said vehicle; an electric circuit involved in the operation of said motor; lights on said vehicle; an electric circuit for energizing said lights; and electrically actuated means in said second circuit operated by a flow of electric current having a magnitude equalling the electric current consumption of all of said lights to close said first named circuit, said means opening said first named circuit when the flow of electric energy is reduced below said magnitude.

1,905,409. METHOD OF HARVESTING GRAIN. GEORGE INNES, Davenport, Iowa, assignor to Innes Manufacturing Company, Bettendorf, Iowa, a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,893. 5 Claims. (Cl. 56—28.)



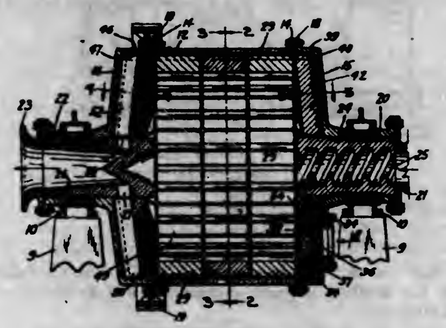
1. The herein described method of harvesting grain which consists in severing the heads of grain from the stalks and collecting said heads, cutting swaths through the standing straw to provide pathways of standing stubble, and depositing the several heads in windrows on the standing stubble along said pathways.

1,905,410. HARVESTING MACHINE. GEORGE INNES, Davenport, Iowa, assignor to Innes Manufacturing Company, Bettendorf, Iowa, a Corporation of Delaware. Filed Dec. 19, 1929. Serial No. 415,319. 16 Claims. (Cl. 56—28.)



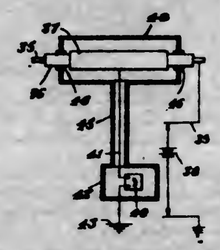
1. A harvesting machine comprising a main cutter for severing the stalks of grain adjacent the heads thereof, an auxiliary cutter for cutting straw left standing by the main cutter, and means for collecting the heads of grain and discharging the same in windrows on stubble left standing by the auxiliary cutter.

1,905,411. GRINDING MILL. RUDOLF P. JUERS, Denver, Colo., assignor to American Ball Mill Company. Filed Mar. 31, 1930. Serial No. 440,403. 5 Claims. (Cl. 83—9.)



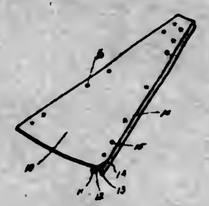
1. In a grinding mill, a shell, a channeled head closing an end of the shell, the head having a channeled flange, and lining sections for the head having flanges in the channels of the head and in the channels of the flange.

1,905,412. METHOD OF TESTING. CHARLES L. KASSON, Mattapan, Mass. Filed Mar. 14, 1927. Serial No. 175,221. 2 Claims. (Cl. 175—183.)



1. That improvement in the art of measuring the electrical leakage current, electrical power input, electrical energy input, or the like of an insulating material under an electrical stress which consists in completely electrically shielding the material, the measuring instruments, and connections thereto.

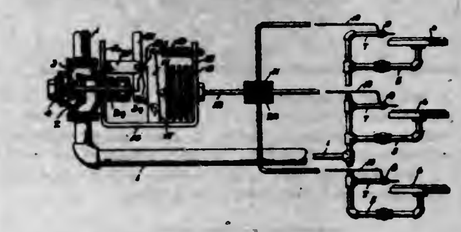
1,905,413. REENFORCED METALLIC STRUCTURAL SHEET AND METHOD OF MAKING THE SAME. ANDREW A. KRAMER, Kansas City, Mo. Filed Jan. 31, 1930. Serial No. 424,828. 12 Claims. (Cl. 113—120.)



1. In a device of the character described, a sheet metal body portion having a doubled flange substantially perpendicular to said body portion along one edge thereof, and a portion lying in face to face relation to said body bracing portion narrower than said body portion adjacent said flange, said body portion and said last mentioned portion having aligning openings therein.

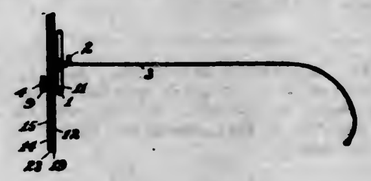
2. The method of making a sheet metal construction unit, comprising cutting a blank out of sheet metal, forming a flange along one edge of said blank, doubling back the edge portion of said blank having the flange thereon to provide a two ply portion adjacent said flange and bending up said two ply portion between said flange and the outer edge thereof in substantial parallelism to said first flange to provide an integral channel on said unit.

1,905,414. PILOT LIGHT CONTROLLED SAFETY VALVE. EDGAR J. LEACH, Janesville, Wis., assignor, by mesne assignments, to Minneapolis-Honeywell Regulator Company, Minneapolis, Minn., a Corporation of Delaware. Filed Feb. 20, 1928. Serial No. 255,847. 7 Claims. (Cl. 158—117.1.)



1. In an apparatus of the character described, a plurality of burners, an automatically closing valve controlling the flow of fuel to all of said burners, a plurality of tubes, one for each burner, each having a sealed free end closely associated with a burner, a closed junction box to which all of the tubes are connected, an expansible and contractible vessel, means establishing communication between said vessel and said junction box, said vessel, junction box and tubes connected therewith being filled with a volatile fluid, and means associated with said vessel and said valve for holding the valve in open position when the vessel is expanded in response to the heat of all of said burners and permitting the automatic closing of said valve when any one of said burners is extinguished.

1,905,415. DEVICE FOR THE PROTECTION OF THE EYES. SAMUEL L. LEIBEL, Shaker Heights, Ohio. Filed Mar. 26, 1931, Serial No. 525,380, and in Austria Nov. 28, 1930. 3 Claims. (Cl. 2—12.)

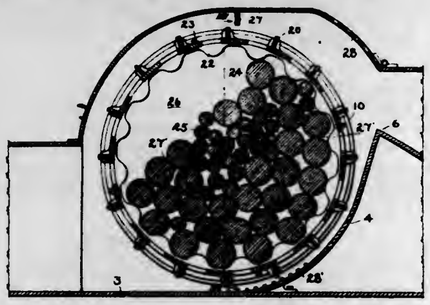


1. In a device for the protection of the eyes, the combination of spectacle frames, pins extending from the eye-glass frames thereof, said pins being arranged at the outer sides and near the bottom of said eye-glass frames, discs of transparent material rotatably mounted upon said pins, the discs covering the eye-glass frames, a shield supported by said pins, the shield protecting said discs, the shield being provided with openings opposite the eye-glass frames, and means for retaining said discs and said shield upon said pins.

1,905,416. CIGARETTE. ALBERT H. LOW, Denver, Colo. Filed Jan. 19, 1931. Serial No. 509,288. 2 Claims. (Cl. 131—52.)

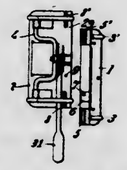
1. As a new article of manufacture, a cigarette having its wrapper impregnated with a soluble silicate having a fixed alkali base.

1,905,417. ROD MILL. CHARLES H. MACDONALD, San Francisco, Calif. Filed Apr. 4, 1930. Serial No. 441,511. 3 Claims. (Cl. 92—20.)



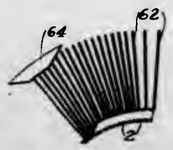
1. A rod mill comprising a casing; a rotary drum having peripheral openings therein and mounted within said casing; a segmental apron in said casing adjacent the periphery of said drum; radially disposed fly bars on said periphery between said openings and cooperating with said apron and rods within said drum.

1,905,418. LETTER FILE. ROBERT HERMANN MEYER, Berlin-Friedenau, Germany. Filed Sept. 27, 1930, Serial No. 484,816, and in Germany Sept. 28, 1929. 4 Claims. (Cl. 129—11.)



1. In a letter file of the character described, the combination with a file cover of a pair of filing pins, a supporting base for said pins secured to the cover, a latch plate secured to the cover for the reception of the free ends of the filing pins, a pair of transfer arches, a supporting base for said arches, and means for detachably securing said latter supporting base to that of the filing pins with the transfer arches in position to form continuations of said pins.

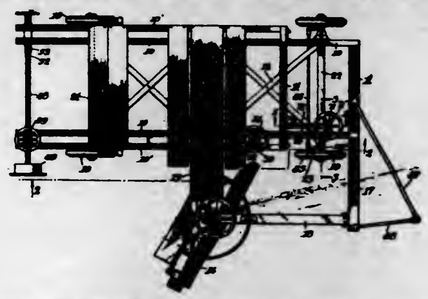
1,905,419. KNITTING MACHINE. MAX C. MILLER, Cumberland, R. I. Original application filed Apr. 10, 1923, Serial No. 631,071. Divided and this application filed Mar. 7, 1931. Serial No. 520,810. 4 Claims. (Cl. 66—102.)



1. In a knitting machine, a series of spring needles, and a corresponding series of reciprocating pressers provided with laterally projecting and ovelapping beard pressing surfaces.

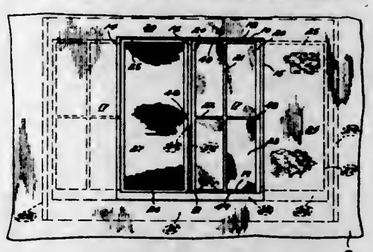
1,905,420. ROAD GRADER. CHARLES J. MORITZ, Effingham, Ill. Filed June 20, 1930. Serial No. 462,575. 7 Claims. (Cl. 37—155.)

2. In a road shoulder machine, a carriage, front and rear wheels on said carriage adapted to travel on the surface of a hard road, a mold board carried at the side of the carriage and adapted to operate on the road shoulder, means for engaging the edge of the hard road



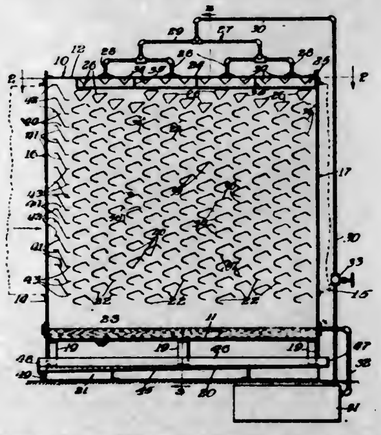
to hold the carriage in alignment, and means for adjusting the position of said engaging means vertically and transversely.

1,905,421. WINDOW SCREEN AND STRUCTURE. HAZLEHURST R. NOYES, Los Angeles, Calif., assignor to Gertrude E. Noyes, Los Angeles, Calif. Filed Oct. 24, 1930. Serial No. 490,883. 14 Claims. (Cl. 20—52.1.)



1. In combination with a window structure and a window, a screen, and pivoted means connecting the screen to the window, said means being characterized whereby a movement of the window out of the window structure will automatically cause the screen to occupy the position in the window structure formerly occupied by the window.

1,905,422. AIR CONDITIONING APPARATUS. ROBERT P. RASMUSSEN, Chicago, Ill., assignor of one-fourth to Edvald L. Rasmussen and one-fourth to Aksel F. Rasmussen, Chicago, Ill. Filed Jan. 15, 1931. Serial No. 508,913. 8 Claims. (Cl. 261—112.)



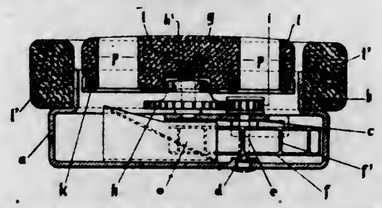
1. In an air conditioner of the kind described, a plurality of vertical stacks of baffles, each baffle being formed

of sheet metal formed to provide an upwardly inclined top surface and a downwardly inclined lower surface, the two joined at their forward edges, the lower surfaces being narrower than the upper surface and the upper surface terminating in a downwardly inclined flange.

1,905,423. TREATMENT OF TAR. EDMUND O. RHODES and FLOYD D. HAGER, Pittsburgh, Pa., assignors to The American Tar Products Company, a Corporation of Delaware. Filed Jan. 2, 1930. Serial No. 418,151. 4 Claims. (Cl. 196—13.)

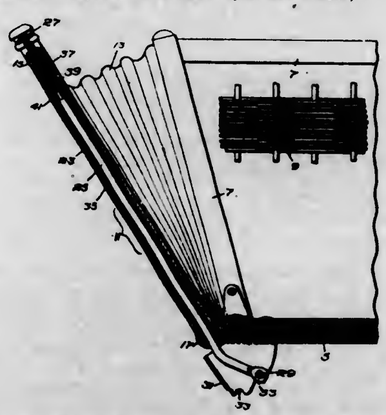
1. A process comprising treating high-temperature coke oven tar with a solvent containing acetone to extract the soluble matter from the said tar, distilling the solution thus formed to remove the said solvent, and distilling the soluble matter to produce a creosote-like distillate and a pitch-like residue.

1,905,424. HYDRAULIC DRIVEN WASHING APPARATUS. RUDOLF SCHLIEPER, Remscheid-Hasten, Germany. Filed Dec. 23, 1929, Serial No. 416,094, and in Germany May 3, 1929. 1 Claim. (Cl. 15—97.)



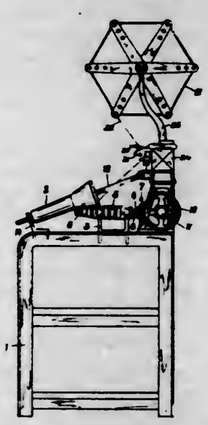
A hydraulic driven washing apparatus, comprising in combination a rotary sponge having passage and distributing apertures for the washing water situated away from the centre of rotation of said sponge, a casing carrying said rotary sponge, an annular stationary sponge surrounding said rotary sponge, adapted to completely catch the water thrown off by said rotary sponge, and an inclined trough in said casing adapted to supply the washing water to the apertures of said rotary sponge means for rotating said rotary sponge accommodated in said casing.

1,905,425. ARTICLE WITH ASSOCIATED PLUNGER ROD. HAROLD F. SHAW, Leominster, Mass., assignor to F. A. Whitney Carriage Company, Leominster, Mass., a Corporation of Massachusetts. Filed Oct. 26, 1929. Serial No. 402,686. 1 Claim. (Cl. 155—160.)



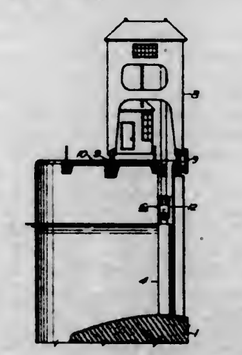
An article embodying a frame including opposed pairs of frame members defining a panel, a number of stakes extending across the panel between the members of one pair and including in their number one stake constituted by a channelled element extending in openings passing through the members of the pair, filling strand embracing the second pair of frame members and interwoven with said stakes to form a stake and strand fabric embracing said channelled element in its plane, and a movable operating member working in the plane of the fabric within said channelled element.

1,905,426. WINDING FRAME. OSWALD STENGLEIN, Markersdorf-Chemnitztal, Germany, assignor to Chemnitzer Strickmaschinen-Fabrik, Chemnitz, Germany. Filed June 17, 1931, Serial No. 545,031, and in Germany June 21, 1930. 4 Claims. (Cl. 242—27.)



1. A winding frame comprising a rotary winding cylinder having an endless helical camway, a thread guide under the control of said winding cylinder, a driving member connected to said cylinder so as to rotate at the same speed and having an endless helical camway of the same pitch and lead as the camway in said cylinder, and a bobbin adapted to engage said driving member and mounted for free rotation and free axial displacement with respect to said driving member.

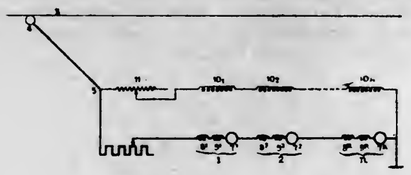
1,905,427. LIFTING DEVICE. ADOLPH J. ACKERMAN Mankato, Minn. Filed Oct. 14, 1931. Serial No. 568,737 14 Claims. (Cl. 61—28.)



1. A lifting device comprising a beam supported at its opposite ends from a flexible support adapted to raise or lower the beam, means at each end of the beam adapted to automatically take hold of the load by the act of lowering the beam to load engaging position, and means on the

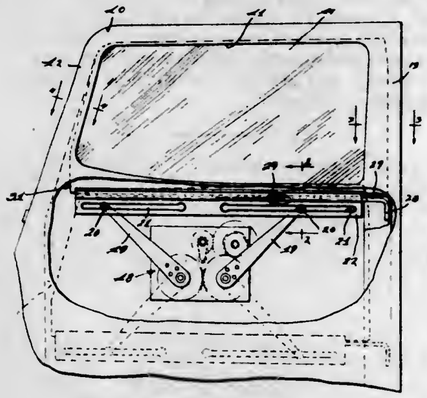
load coacting with said automatic means arranged to automatically disengage the same from the load by the act of lowering said beam to a point below the load engaging position.

1,905,428. ELECTRIC TRACTION SYSTEM EMPLOYING COMPOUND MOTORS. LOUIS BACQUEYRISSE, Paris, France. Filed Jan. 24, 1930, Serial No. 423,093, and in France Oct. 8, 1929. 1 Claim. (Cl. 172—179.)



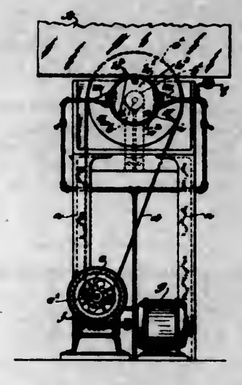
The method of operating a plurality of compound-wound motors in a system of regenerative electric traction which consists in connecting the armature windings and series field windings in series across the power mains, connecting the shunt field windings in series across said power mains, maintaining said connections during starting, normal operation, and regenerative braking, and controlling the speed of said motors during said operations solely by varying the shunt excitation.

1,905,429. DOOR AND WINDOW CONSTRUCTION. ALBERT P. BALL, Detroit, Mich., assignor to Briggs Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed July 13, 1931. Serial No. 550,586. 1 Claim. (Cl. 296—48.)



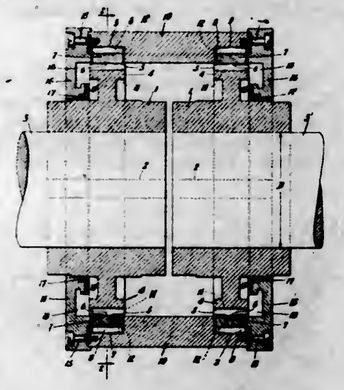
A vehicle body provided with a window opening comprising a frame having a vertical side and an inclined side, a glass channel carried by said inclined side and a relatively deep glass channel carried by said vertical side, a glass panel having corresponding vertical and inclined side edges slidably mounted in said channels, means projecting from the vertical edge of said panel and engageable in said deep channel for maintaining the inclined edge of said panel in engagement with said inclined channel during the raising and lowering of the panel, the lateral edgewise shifting movement of the panel resulting therefrom being less than the depth of the deep channel, for the purpose set forth.

1,905,430. MANUFACTURE OF LAMINATED GLASS. EDWARD M. BALL, Bloomingdale, N. J., assignor, by mesne assignments, to Libbey-Owens-Ford Glass Company. Filed Feb. 8, 1929. Serial No. 338,572. 5 Claims. (Cl. 49—81.)



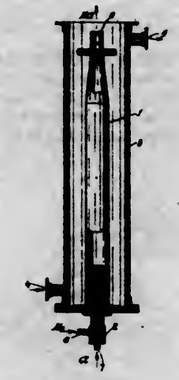
1. The improvement in the manufacture of laminated glass composed of two sheets of glass and an intersheet of non-brittle material, which consists in preparing the laminated glass for sealing at the edge by destroying the material of the intersheet by burning the material to the required depth at the edge of the laminated sheet.

1,905,431. SHAFT COUPLING. OTTO A. BANNER, Highland Park, N. J., assignor to John Waldron Corporation, New Brunswick, N. J., a Corporation of New Jersey. Filed Nov. 3, 1931. Serial No. 572,743. 8 Claims. (Cl. 64—92.)



1. A coupling for shafts, comprising two hubs, gears on said hubs, torque ring gears cooperating with said hub gears, a cover, gears within said cover cooperating with said torque ring gears, spaced abutments within said cover to permit the cover to cock with respect to the torque ring gears until a predetermined tilting angle is reached, said abutments in predetermined spaced relationship with respect to said torque rings for said abutments to tilt said torque rings with said cover when said cover has tilted beyond a predetermined angle with respect to said hubs.

1,905,432. MANUFACTURE OF HYDROGEN CHLORIDE OR HYDROGEN BROMIDE OR THEIR CORRESPONDING ACID SOLUTIONS. WALTER BAUER, Darmstadt, Germany, assignor to Rohm & Haas Aktiengesellschaft, Darmstadt, Germany, a Corporation of Germany. Filed May 27, 1929, Serial No. 366,537, and in Germany June 2, 1928. 6 Claims. (Cl. 23—156.)



1. The method of manufacturing hydrogen compounds of the intermediate halogens in the halogen series, or their corresponding acid solutions by a combination of the halogen elements with hydrogen which consists in passing the reacting gases through a resistant metal burner at a velocity of about 450 grams of halogen per hour per square millimeter to prevent reaction of the gases or their products with the metal burner.

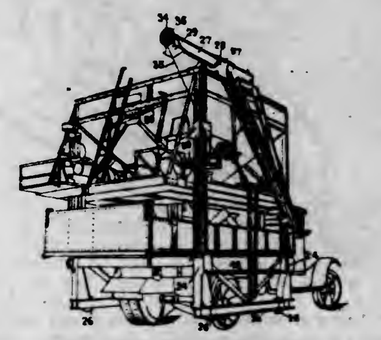
6. The method of manufacturing hydrogen chloride or its corresponding acid solution by a combination of the halogen elements with hydrogen, which consists in passing the reacting gases through a burner of copper at a velocity of about 450 grams of halogen per hour per square millimeter to thereby prevent reaction of the gases or their products with the burner, and then passing the gases into a combustion chamber made of copper while at the same time cooling said chamber.

1,905,433. HYDROGENATION CATALYST. OWEN G. BENNETT, Baltimore, Md., and CAREY B. JACKSON, Meridian, Miss., assignors to Catalyst Research Corporation, Baltimore, Md., a Corporation of Maryland. Filed Sept. 27, 1932. Serial No. 635,048. 17 Claims. (Cl. 23—236.)

1. The method of making a nickel catalyst for hydrogenation of unsaturated fatty oils and the like, comprising heating a nickel chromate admixed with a tolerable amount of sulfur to convert the chromate to chromite, and reducing said chromite at an elevated temperature with hydrogen and thereby forming metallic nickel activated by said sulfur to a state of enhanced hydrogenation ability as compared with nickel prepared in the same way without the use of sulfur compound.

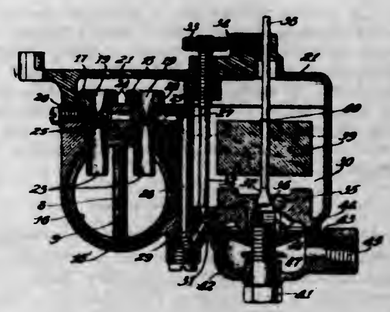
1,905,434. HOPPER CRANE OF THE MOVABLE AND TRAVELING TYPE. FERNAND BOYER, St. Quentin, France. Filed July 19, 1930, Serial No. 469,184, and in France May 1, 1930. 7 Claims. (Cl. 214—41.)

1. A portable and self contained loading and handling apparatus which may be condensed into compact condition, including the combination, with a supporting frame surmounted by a hopper and a folding crane permanently associated with said hopper, of extensible posts upon said frame having telescoping members which may be extended downward whereby to support said hopper at such distance from the ground as to afford clearance for



vehicles to pass freely beneath the same, and which members may also be telescoped upward to lower said apparatus as a whole upon a truck for transportation.

1,905,435. CARBURETOR. ROBERT F. BRACKB, Chicago, Ill., assignor, by mesne assignments, to Lynn A. Williams, Evanston, Ill., and Clifford C. Bradbury, Glencoe, Ill., as trustees. Filed Mar. 4, 1931. Serial No. 520,032. 9 Claims. (Cl. 261—69.)

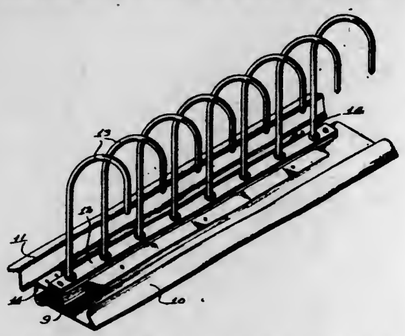


1. In a carburetor, having a mixing chamber through which a stream of secondary air is adapted to pass, a pair of suction multiplying Venturi tubes extending into said chamber and terminating therein and constituting the primary air inlet of the carburetor, said tubes being located symmetrically with respect to a diameter of the mixing chamber, a fuel chamber, a passage interconnecting the fuel chamber and throats of said Venturi tubes whereby fuel may be drawn into the primary air stream from said fuel chamber and discharged into the mixing chamber in two distinct streams.

1,905,436. ALLOY FOR USE IN THE CRACKING OF PETROLEUM. VERE B. BROWNE, Brackenridge, Pa. Filed Feb. 7, 1930. Serial No. 426,596. 1 Claim. (Cl. 196—133.)

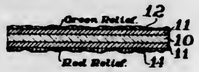
In petroleum cracking, carrying out the cracking operations in apparatus composed of 4–8% chromium, .25–5% copper, .5–1% aluminum, with the balance chiefly iron, there being freedom from other elements in an amount more than that classified as impurity.

1,905,437. MECHANISM FOR SHIFTING SHEETS. HUGH G. BUCHAN, Philadelphia, Pa. Filed Nov. 18, 1931. Serial No. 575,723. 3 Claims. (Cl. 129—11.)



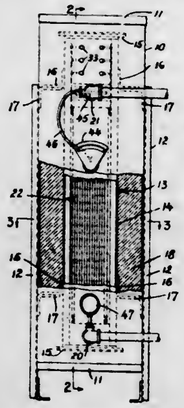
1. A sheet shifter for use in a binder having guide posts comprising a base portion having downwardly projecting resilient clips for engaging said guide posts, a strip hinged to said base and hook-like prongs attached to said strip.

1,905,438. PHOTOGRAPHIC COLOR PROCESS. JOHN G. CAPSTAFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 25, 1930. Serial No. 431,800. 10 Claims. (Cl. 95—2.)



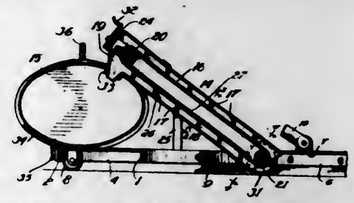
10. The method of making a two-color picture that comprises forming color-component, silver images in two insoluble colloid layers on opposite surfaces of a transparent support and having unsensitized gelatin layers readily soluble in warm water adherent thereto, the two soluble layers being differently and permanently colored, treating the images with a bath that removes the silver and differentially tans the soluble layers, and removing the unhardened gelatin.

1,905,439. ELECTRIC FLUID HEATING APPARATUS. ROBERT A. CARLETON, Brooklyn, N. Y., assignor to National Electric Heating Co., Inc., New York, N. Y., a Corporation of New Jersey. Filed July 31, 1931. Serial No. 554,258. 10 Claims. (Cl. 219—39.)



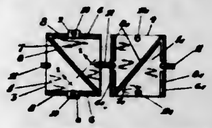
1. A fluid heating apparatus comprising a fluid containing receptacle having an inlet and an outlet, a chamber having narrowly spaced parallel walls of electric insulating material, a plurality of thin metallic strips of high electrical resistance arranged in substantial parallelism, narrowly spaced apart and edge supported between said walls to provide a plurality of rectangular conduits of small cross sectional area for the fluid, means for supplying an electric heating current to pass through said high resistance strips, means for causing the fluid to pass through said conduits in a predetermined direction and in direct contact with said high resistance strips.

1,905,440. SQUEEGEE MACHINE. ARTHUR P. CARTER and MICHAEL J. HYNES, Chicago, and JAMES C. CRONIN, Oak Park, Ill., assignors to Arco Vacuum Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 11, 1930. Serial No. 474,848. 7 Claims. (Cl. 15—98.)



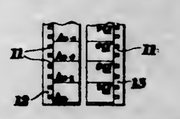
1. A squeegee machine having, in combination, a squeegee supporting means including members arranged at an angle to each other, a squeegee secured to said members and adapted to rest upon the floor, a tank located rearwardly of the squeegee, an endless belt conveyor carrying squeegees, a pan extending from a point near the floor within the angle formed by said members and upwardly to said tank, the squeegees on the lower run of said belt conveyor being arranged to travel upwardly in said pan, a backing for the lower run of the conveyor to maintain said squeegees in wiping contact with said pan, and roller means adapted to bear upon the floor for driving said belt conveyor.

1,905,441. NONSKID DEVICE. WILLIAM COOPER and WILLIAM F. KNAPP, Apalachin, N. Y. Filed Nov. 4, 1932. Serial No. 641,210. 2 Claims. (Cl. 152—14.)



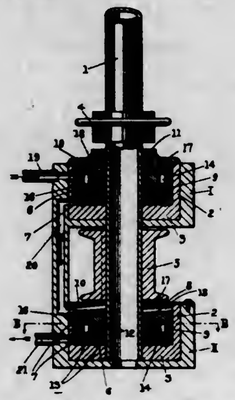
1. A non-skid device for tires comprising a plurality of tread elements arranged in end to end relation, each of said elements comprising a base having upstanding flanges on two parallel sides, each of said elements having its flanges disposed at right angles to the flanges of the adjacent element, and each of said elements having a diagonally extending rib substantially the same height of said flanges.

1,905,442. METHOD OF PRODUCING MOTION PICTURE FILM. FRITZ COONS, Jr., Berlin, Germany, assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 2, 1931, Serial No. 541,703, and in Germany June 3, 1930. 4 Claims. (Cl. 88—19.5.)



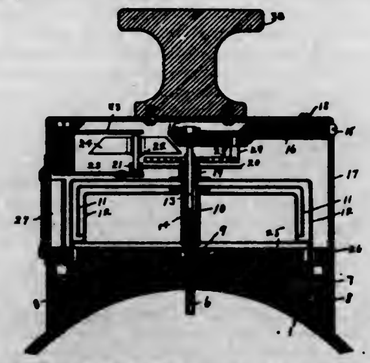
1. The method of producing a motion picture film which comprises making longitudinally of a film one series of exposures to true images of an objective field, making alongside the first series but in the reverse direction another series of exposures to true images of an objective field, the individual exposures of the second series being inverted with respect to those of the first series, developing the exposed film by a reversal process, slitting the film between the two longitudinal series of pictures resulting from said developing and joining one end of the first series to one end of the second series to form a continuous strip of film with a continuous series of similarly positioned pictures.

1,905,443. BEARING AND APPLICATION THEREOF. ERNEST CECIL COPE and EDWARD KINSELLA, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed June 9, 1928, Serial No. 284,064, and in Great Britain June 30, 1927. 9 Claims. (Cl. 308—162.)



1. A vibration-damping bearing for a shaft comprising at least one member surrounding the shaft and out of driving connection with said shaft, at least one member surrounding and clear of said shaft, means for introducing lubricant between said members, and an orifice in at least one surface of said members, whereby the first-mentioned member shares the lateral vibration of the shaft and slides transversely over the second-mentioned member to damp the lateral vibration by sliding friction between the surfaces of the said members, and by the resistance to shear of the lubricant in said orifice.

1,905,444. ANEMOMETER. ALFRED U. DAVIS, Baltimore, Md., assignor to Davis Instrument Manufacturing Company, Incorporated, a Corporation of Maryland. Filed Apr. 30, 1930. Serial No. 448,617. 1 Claim. (Cl. 73—2.)



An anemometer comprising a vane case having an aperture in the upper end thereof, a number of vanes revolubly mounted in said vane case, a casing mounted on said vane case and having an opening in one side thereof, a drive shaft driven by said vane and projecting through said aperture and into said casing and having a hub on one end thereof, a drive box within said casing and mounted on the hub of said drive shaft and revoluble therewith, a driven shaft revolubly mounted in said casing, a driven box rigidly mounted on said driven shaft and surrounding said drive box and having a dial thereon visible through the opening in said casing, a stabilizer fan mounted in said casing, a shaft upon which said stabilizer fan is mounted, a pinion on said stabilizer fan shaft, and a gear wheel on the driven shaft and in mesh with said pinion.

1,905,445. ALLOY. ERNST DE RIDDER and HUBERT ALTWICKER, Bitterfeld, Germany, assignors, by mesne assignments, to Magnesium Development Corporation, a Corporation of Delaware. Original application filed Sept. 20, 1929, Serial No. 394,119. Divided and this application filed June 28, 1931. Serial No. 546,862. 2 Claims. (Cl. 75—1.)

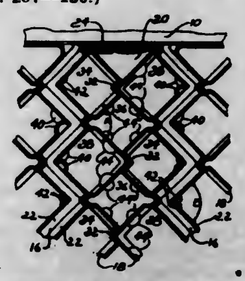
1. An alloy in sheet form having the characteristic of being drawn or embossed consisting of, manganese between about 0.2 and 1.5 percent, zinc from about 0.5 to about 3 percent, aluminium from about 0.5 to about 6.5 percent, balance magnesium.

1,905,446. FILM BACKING PAPER MAKING MACHINE. HAYWOOD G. DEWEY and JOHN G. JONES, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 17, 1929. Serial No. 386,692. 17 Claims. (Cl. 164—89.)



16. In a machine for preparing film backing papers from printed strip material, the combination with a power drive and an advancing means for said strip material driven by said power drive, of a compensator means for holding a portion of said strip material stationary, a mechanism for performing an operation on said strip material, a control means for actuating said compensator means and said mechanism in timed relation to each other, and a change speed device between said power drive and said control means, and adapted to be adjusted manually for varying the timed relation between said advancing means and said control means.

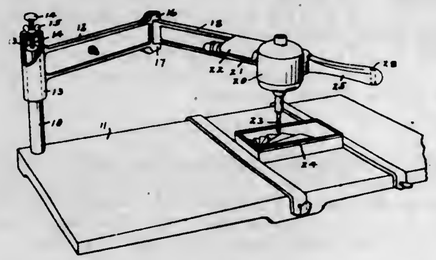
1,905,447. RADIATOR. NICHOLAS S. DIAMANT, Detroit, Mich. Filed Oct. 5, 1929. Serial No. 397,596. 8 Claims. (Cl. 257—130.)



1. In a core, spaced pairs of corrugated plates forming liquid passages and having adjacent joined edge portions

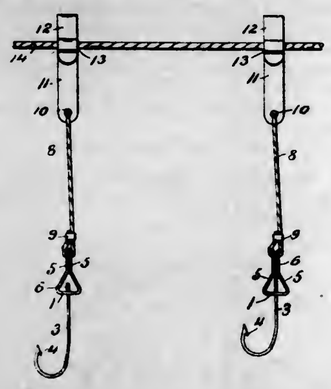
at the front and rear of the core, the intermediate portions of each pair of plates being offset with respect to said edge portions, and a pair of corrugated spacer plates forming with each other a series of vertically aligned air passages through said core and forming a pair of vertically aligned air passages with the adjacent plates of said liquid passages, the edge portions of said spacer plates being so located with respect to the joined edge portions of the plates of said liquid passages so as to form substantially geometrically identical cells on the front and rear sides of said core and the intermediate portions of said spacer plates being offset inwardly towards each other between their edge portions and sufficiently to substantially balance the volumes of the air passages between said spacer plates with the volumes of the air passages between each spacer plate and the adjacent plates of said liquid passages.

1,905,448. ROUTING MACHINE. JOHN W. DIXON, Indianapolis, Ind. Filed Apr. 18, 1932. Serial No. 606,041. 5 Claims. (Cl. 90—15.)



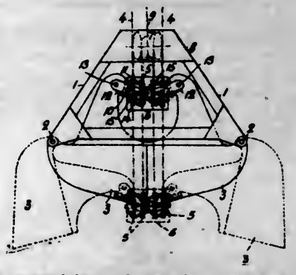
1. In a routing and levelling device, a table, a post carried by the table, an arm, a sleeve closed at the top carried by the arm revolubly fitted over the post in a manner to be lifted freely off of the post, an adjusting screw screw-threadedly passed through the closed end of the sleeve to abut the end of the post, the contacting surfaces between the post and the sleeve being smooth, and an electric motor carried on the arm.

1,905,449. FISHHOOK FASTENING MEANS. WILLIAM EARL DUNN, Kansas City, Mo. Filed Mar. 9, 1932. Serial No. 597,708. 5 Claims. (Cl. 43—28.)



1. In a fishhook fastening means, the combination with a fishhook having a shank, a barb at one end of said shank and an enlarged part at the upper end of said shank, of an attaching member having a transverse portion provided with a hole therethrough through which said shank extends, said hole having a diameter less than the largest diameter of said enlarged part, whereby said portion may support said hook, said member having two arms extending upwardly from said portion at opposite sides respectively of said hole, said arms having means for attachment to a snell.

1,905,450. GRAB. EGIL VALDEMAR PETERSEN DYGGVE, Copenhagen, Denmark, assignor to Koefoed, Hauberg, Marstrand & Helweg, Aktieselskabet Titan, Copenhagen, Denmark. Filed Mar. 11, 1931, Serial No. 521,787, and in Denmark Mar. 11, 1930. 8 Claims. (Cl. 37—187.)



5. A grab comprising a frame, jaws pivoted at relatively fixed points to said frame, a closing crosshead, and means comprising connections solely between the jaws and the crosshead to hold the vertical axis of the crosshead coincident with the vertical axis of symmetry of the jaws during opening and closing movements of the jaws.

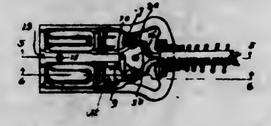
1,905,451. SUN SUIT. GEORGE F. EARNSHAW, Newton, Mass., assignor to Earnshaw Knitting Company, Newton, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1931. Serial No. 582,520. 4 Claims. (Cl. 2—67.)



1. An article of the character described consisting of a sun suit comprising a trunk portion, supporting means including a pair of shoulder straps, each secured at its ends to the front and back portions of said trunk portion at the waist line thereof, said straps being crossed in the back and provided with snap fastening means for fastening them together at the said crossing, a neck portion connecting the straps at the front thereof near their shoulder engaging portions, a front shield or panel filling in the space between said straps, neck portion and trunk portion, said shield or panel being of a mesh formation sufficiently close to conceal the front upper portion of the body from view and yet leave the same exposed to the influence of sunlight, and a pair of side straps for holding said shield or panel close to the body irrespective of the posture of the wearer, each of said straps being permanently fastened at one end to the front portion of one of said shoulder straps and at its other end to the rear portion of the same strap at the point of the crossing of said straps.

1,905,452. ELECTRIC PLUG. GEORGE EATON, Cleveland, Ohio, assignor to May C. Eaton. Filed May 9, 1929. Serial No. 361,828. 6 Claims. (Cl. 173—332.)

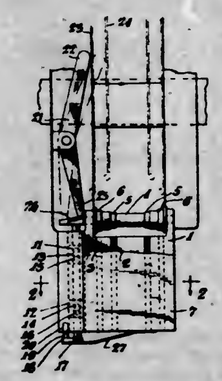
4. An appliance plug including a chambered insulation body comprising a plurality of sections detachably but rigidly connected together, a terminal prong receiving socket in the body chamber comprising a pair of members yieldingly constrained towards each other for socket formation and prong engagement, and means including a body exposed portion for forcibly separating said members for ready socket reception and removal of the prong.



1,905,453. TREATMENT OF CELLULOSE DERIVATIVES. GEORGE HOLLAND ELLIS and HENRY CHARLES OLPIN, Spondon, near Derby, England, assignors to Celanese Corporation of America, a Corporation of Delaware. Filed Sept. 29, 1928, Serial No. 309,850, and in Great Britain Nov. 15, 1927. 4 Claims. (Cl. 8—13.)

1. In a process for weighting materials comprising organic derivatives of cellulose with tin compounds, the step of treating the materials with a solution containing stannic chloride and zinc chloride in such concentration as to swell the organic derivative of cellulose.

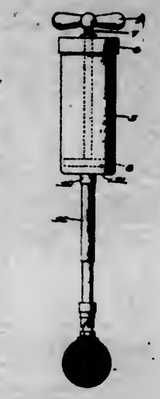
1,905,454. CINEMATOGRAPHIC APPARATUS. MAX ENGELMANN, Lausa, Germany. Filed Dec. 16, 1930, Serial No. 502,725, and in Germany Apr. 4, 1930. 7 Claims. (Cl. 88—17.)



1. In a cinematographic apparatus of the class described, including the fire preventing film drums and film spools, a support having bearings, a stepped spool journaled in said bearings, doors hingedly attached at opposite sides to said support, a two-armed lever in each drum engaging with one of its arms the spools, means for holding said arm in its spool engaging position, a wedge shaped element adapted to be engaged by the other of said arms, and locking means for one of said doors adapted to be operated by said wedge shaped element.

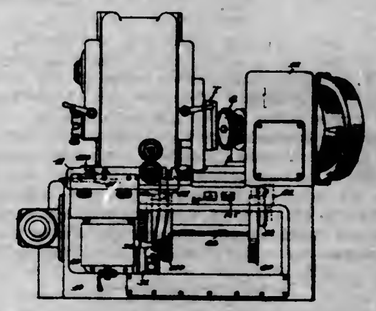
7. In an apparatus of the character described, a vertically disposed body having opposed faces formed with film channels of unequal width, doors for closing said channels, a spindle for hingedly mounting one door, said spindle being slidably carried by said body and turning when the door is moved, a spring urging said spindle upwardly, means carried by the spindle to engage said body and prevent turning of the spindle and secure the door closed when the spindle is moved upwardly, and a cam at the upper end of the spindle to facilitate depression of the spindle to release the door.

1,905,455. COMPRESSOR. DOUGLAS F. FRELER, Evanston, Ill., assignor to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 16, 1921, Serial No. 515,460. Renewed July 7, 1930. 5 Claims. (Cl. 221—47.4.)



3. A lubricant compressor comprising a barrel, compressing means comprising cylinder and plunger elements having relative telescoping movement for receiving lubricant from said barrel and ejecting lubricant under pressure, and separate cylindrical guide means rigid with said barrel for guiding the movement of one of said elements.

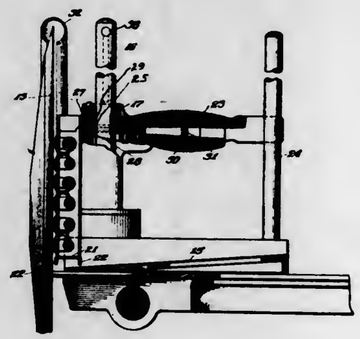
1,905,456. AUTOMATIC THROW-OUT MECHANISM FOR GEAR CUTTING MACHINES. ERVIND FINSEN, Rochester, N. Y., assignor to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Mar. 28, 1930. Serial No. 439,646. 28 Claims. (Cl. 90—4.)



1. In a machine for cutting gears, tool mechanism and a work support, means for moving one of said parts toward and away from the other through a limited distance for alternate finding and indexing, means for automatically stopping the tool mechanism after a pre-

determined number of operations have been performed, means operable automatically thereafter for producing a relative movement of separation between the tool mechanism and the work support to permit removal of the completed gear and chucking of a new blank, means for actuating said last named means to return the tool mechanism and the work support into operative relation, and means operable when said return movement has been completed for rendering the tool mechanism operative.

1,905,457. COMBINED TOP CLAMP AND END GRIP FOR SLICING MACHINES. JOSEPH FOLK, La Porte, Ind., assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed Apr. 20, 1927. Serial No. 185,093. 14 Claims. (Cl. 146—217.)

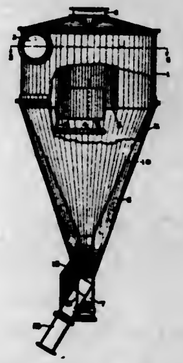


4. In a slicing machine, a slicing knife, a work support for presenting material to said knife, an upright mounted on said work support, a sleeve slidably mounted on said upright, a gripper secured to said sleeve and projecting over said work support, said gripper having its front face substantially parallel to the cutting plane of said knife and having means for securing material to said front face, a clamping bar carried by the lower face of said gripper for clamping material between said gripper and said work support, a releasable clutch for holding said gripper against upward movement on said upright, means for shifting said upright toward and from the cutting plane of said knife, and means for preventing upward movement of said sleeve and gripper when said upright is in one position of adjustment.

11. In a slicing machine, a slicing knife, a work support for material to be sliced, an upright mounted on said work support at the edge thereof opposite the operator's position, a sleeve slidably mounted on said upright, a combined top and end grip projecting from said sleeve substantially parallel to the cutting plane of said knife and leaving the space between the lower edge thereof and said support unobstructed at the operator's side of said support, a clutch connected with said sleeve for holding said sleeve against upward movement on said support, a manipulating arm extending rearwardly from said sleeve, a lever for releasing said clutch disposed beneath said manipulating arm, and a post mounted on said work support and engaging said manipulating arm to hold said sleeve against horizontal rotation upon said upright.

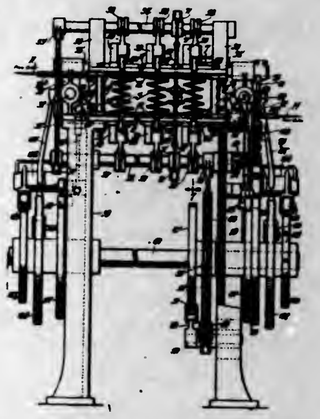
1,905,458. SEPARATOR. JOSEPH B. GAFFNEY, Bethlehem, Pa., assignor to Fuller Lehigh Company, Fullerton, Pa., a Corporation of Delaware. Filed Mar. 1, 1928. Serial No. 258,389. 4 Claims. (Cl. 209—144.)

1. In a separator, a cylindrical upper portion, a tangential inlet into said cylindrical portion, a conical portion extending downwardly from said cylindrical portion, a second conical portion within said first-named conical portion and spaced therefrom, extending downwardly from adjacent said cylindrical portions, separate outlets from said conical portions, and means for maintaining said



conical portion in different adjusted positions with respect to each other so that the distance between said conical portions may be varied.

1,905,459. SPRING ASSEMBLING MACHINE. JOHN F. GAIL, Evanston, Ill., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 18, 1929, Serial No. 407,941. Renewed Aug. 26, 1932. 27 Claims. (Cl. 140—3.)



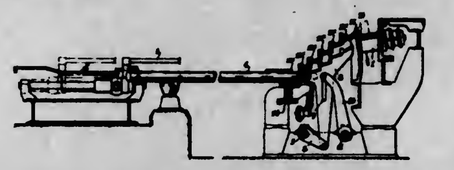
1. Spring assembling mechanism of the character described, comprising in combination means for supporting two parallel rows of coil springs with corresponding end coils of the two rows disposed adjacent to each other, means for feeding a wire helix endwise between said end coils and simultaneously rotating said helix on its axis, and spiral means for guiding said helix so as to cause the coils thereof to be wrapped around laterally adjacent portions of said spring coils.

1,905,460. PROCESS FOR CONVERTING INTO SOLUBLE SALTS LEAD AND OTHER METALS CONTAINED IN LEAD BEARING ORES. PAUL GAMICHON, Paris, France. Filed June 12, 1931, Serial No. 543,819, and in France June 17, 1930. 5 Claims. (Cl. 75—67.)

1. Process for converting into soluble salts metals contained in lead bearing sulphide ores, which consists in roasting said ores at a moderate temperature in the presence of a small quantity of sulphate of lime and of alkaline or earth-alkaline chlorid, then in treating the roasted

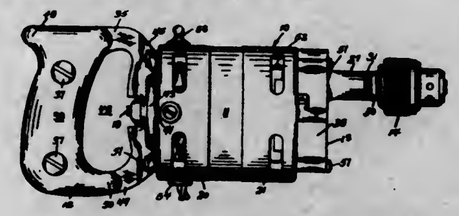
material successively with a strong acid having the property of converting into soluble salts the sulphides or traces of oxides left unconverted after roasting, lixiviating the mass to separate the salts of soluble metals, such as those of zinc or copper, and treating with a brine to bring into solution the lead, the silver and the metals associated therewith.

1,905,461. COOLING MEANS FOR ROLLED BARS. JOSEF GASSEN, Dusseldorf, Germany, assignor to Schloemann Aktiengesellschaft, Dusseldorf, Germany, a Corporation of Germany. Filed July 12, 1932, Serial No. 622,080, and in Germany July 18, 1931. 8 Claims. (Cl. 80—42.)



1. Cooling means for rolled bars comprising, in combination, a feed mechanism for the rolled bars, a cooling bed, a stepped member between the feed mechanism and the bed, means cooperating with said member to effect a step by step advance of bars entirely thereacross from the feed mechanism to the cooling bed, and a glide member separate from said means, said glide member being mounted for movement between an inoperative position in which it does not affect the step by step advance of the bars across the stepped member and an operative position in which it overlies the stepped member and extends from the feed mechanism to the bed to support bars during their transfer from the feed mechanism to the cooling bed.

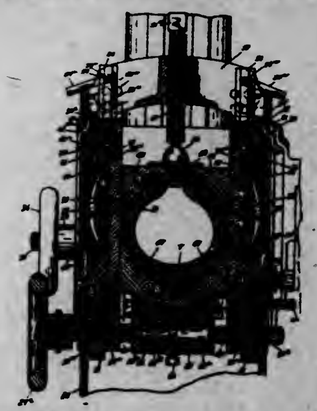
1,905,462. ELECTRIC DRILL OR SIMILAR TOOL. ALFRED C. GILBERT, North Haven, Conn., assignor to The A. C. Gilbert Company, New Haven, Conn., a Corporation of Maryland. Filed May 20, 1929. Serial No. 364,449. 8 Claims. (Cl. 77—6.)



1. In an electric tool, an electric motor, a handle for supporting the motor and a speed reduction unit, said handle comprising a pair of L-shaped members secured together with two of their arms abutting and the other arms extending laterally on either side of the abutting arms and common means for securing the laterally extending arms and the speed reduction unit to the motor casing.

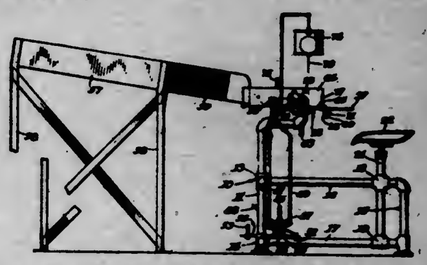
1,905,463. VULCANIZER. LEO O. GRANGE, Chicago, Ill., assignor to Walter J. Jarratt, Chicago, Ill. Filed Nov. 11, 1930. Serial No. 494,881. 23 Claims. (Cl. 18—18.)

8. A tire vulcanizing mold comprising a central arcuate bottom member and cooperating side members adapted to provide a trough to receive a section of a tire to be vulcanized, means for heating each of said mold members comprising an electrical resistance element adjacent the wall of each member including stretches of resistance wires, the stretches of said wires being comparatively concentrated on each side member at the ends thereof and along the tops thereof and comparatively widely spaced at the centers and along the bottoms thereof adjacent the bottom member and the stretches of wires in said bottom member also being comparatively concentrated at the ends thereof and comparatively widely spaced at the center thereof whereby a substantially uniform vulcanizing temperature may be maintained throughout the vulcanizer, said central member and the side members being separable, means comprising rods in the ends of the central member for slidably supporting the side mem-



bers on the central member, means associated with the ends of the side members to hold them against spreading from adjusted positions, means comprising a shaft in the center of the bottom member and having reversely threaded screw portions threaded through the side members for simultaneously adjusting the side members toward and from the central member, and heat conductor segments adapted to be fitted between the central member and side members when adjusted apart.

1,905,464. JOURNAL BOX WASTE ROLL WINDING MACHINE. CHARLES W. HARRIS, Michigan City, Ind., assignor, by mesne assignments, to Pullman Car & Manufacturing Corporation, a Corporation of Delaware. Filed Feb. 18, 1931. Serial No. 516,765. 8 Claims. (Cl. 28—1.)

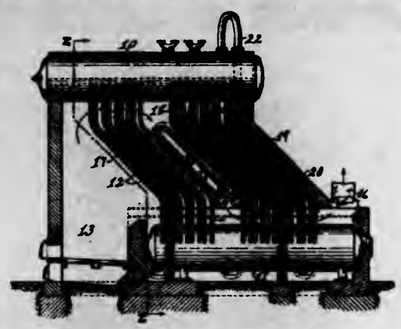


1. A machine for winding material in rolls for use in journal boxes comprising a spindle, a support for said spindle, mechanism for rotating said spindle, a waste container, a passageway leading to said spindle from said container, means for retaining said spindle on said support, means for discharging one end of said spindle from said support when said first named means is released and means for stopping and starting said mechanism.

1,905,465. STEAM BOILER. ISAAC HARTER, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Oct. 29, 1921, Serial No. 511,337. Divided and this application filed Sept. 8, 1930. Serial No. 479,494. 5 Claims. (Cl. 122—347.)

1. In a water tube boiler, an upper and a lower cylindrical drum, with their axes horizontal and parallel, a

furnace, a flue arranged to conduct the hot gases from the furnace between and longitudinally of the drums, a plurality of water tubes in the path of the gases and connecting the upper and lower drums and being connected to said drums in circumferential rows, the tubes being arranged in rows extending across the flue, with the greater portion of each of the tubes in the several

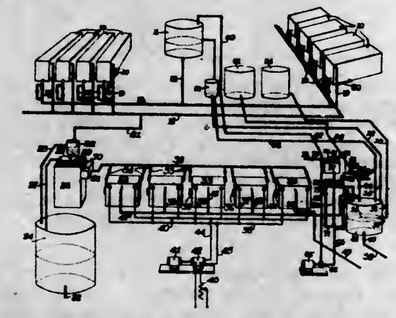


rows in parallel planes perpendicular to the plane of the axes of the drums and inclined toward the furnace end of the flue, the distance between the outer tubes in each row being greater than the diameter of one of said drums, the axis of each end of each tube being normal to that portion of the shell of the drum which the end enters and each tube having more than two bends.

1,905,466. PROCESS OF PREPARING ACETIC ANHYDRIDE. FRANZ HENLE, Frankfort-on-the-Main-Hochst, GEORG MEDER, Munster in Taunus, VALENTIN LANG, Frankfort-on-the-Main-Hochst, and FRANZ PRIVINSKY, Hofheim in Taunus, Germany, assignors to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 10, 1931, Serial No. 514,816, and in Germany Feb. 4, 1928. 4 Claims. (Cl. 260—123.)

1. In the process of preparing acetic anhydride by heating together acetyl chloride and glacial acetic acid the step which comprises causing the two components to act upon each other in about stoichiometric proportions in a continuous manner at a temperature in the neighborhood of the boiling point of acetic anhydride and in the presence of boiling acetic anhydride.

1,905,467. METHOD FOR PHOTOGRAPHIC PROCESSING. KENNETH C. D. HICKMAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 4, 1931. Serial No. 542,053. 7 Claims. (Cl. 204—16.)



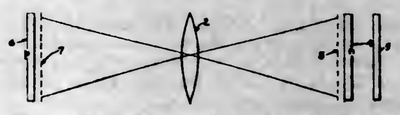
1. The method of recovering silver from a used photographic fixing solution by electrolysis in a plurality of electrolytic units, which comprises circulating the solution continuously through some of said electrolytic units, plating part of the silver from the solution in the units containing continuously circulating solution, bleeding some of the solution into the remaining electrolytic units and plating substantially all of the silver from the solution in said remaining electrolytic units.

1,905,468. PROCESS AND APPARATUS FOR FORMING SHAPED MOLD CHARGES OF MOLTEN GLASS. GEORGE E. HOWARD, Butler, Pa., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed June 21, 1930. Serial No. 462,795. 8 Claims. (Cl. 49—55.)



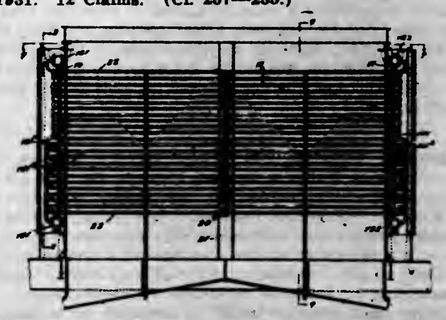
4. The method of feeding molten glass in a mold charge having an artificial shape which comprises, passing glass in a stream from a source of supply through a downwardly tapering passage having an orifice at its lower end to form the lower end of said charge, decreasing the taper of said passage and increasing the size of said orifice to increase the flow of glass while at suspended portion of the charge is formed and while the glass issuing from said passage is connected by said stream with said source of supply, and severing the charge when formed and before the same receives any substantial undersupport.

1,905,469. METHOD OF PRINTING STEREOSCOPIC POSITIVES FROM INVERTED RELIEF NEGATIVES. HERBERT E. IVES, Montclair, N. J. Filed May 31, 1930. Serial No. 458,305. 17 Claims. (Cl. 88—24.)



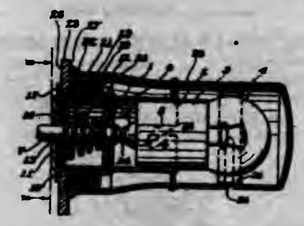
1. The method of printing stereoscopic positives from inverted relief negatives, which consists of projecting the image on the negative through a large lens and a grating located between said negative and said lens, on to a sensitive plate placed slightly behind another similar grating, both of said gratings being formed of alternate opaque and transparent vertical lines.

1,905,470. ECONOMIZER. DAVID S. JACOBUS, Montclair, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Dec. 4, 1928, Serial No. 323,716. Renewed Jan. 17, 1931. 12 Claims. (Cl. 257—255.)



1. In an economiser, a gas flue in which the gases flow upwardly, an upper and a lower header extending transversely of said flue, continuous tubular members connected at their ends to said headers and bent to extend back and forth across said flue, the tubes located in the lowest portion of said economiser being divided into sections, the water flowing upwardly in individual sections and downwardly from section to section, whereby a series of pockets are formed and any steam formed in a given tube can rise no further than the higher tube with which it directly communicates.

1,905,471. LAMP AND LAMP MOUNTING. PHILIP J. KENT, Birmingham, and IAN C. MCKECHNIE, Detroit, Mich., assignors to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Nov. 13, 1930. Serial No. 495,461. 6 Claims. (Cl. 240—8.16.)



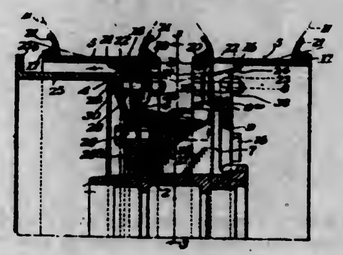
1. A lamp mounting including a member having an irregular shaped base portion on one end including projecting elements for insertion through a correspondingly shaped opening in a support and having a bulb receiving recess at its opposite end, said base end portion being insertable through said opening from the side of said support on which the bulb receiving end of said member is desired, and being movable in said opening for placing corresponding portion of said base portion and opening in misalignment after insertion of said base portion into said opening, and a rubber cushion on said member engageable with said support and located between the side thereof and the bulb receiving end of said member for yieldably resisting insertion of said base portion and frictionally resisting turning of said member.

1,905,472. LOADING MACHINE. ROBERT H. KRAFT, Chicago, Ill., assignor to Goodman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 16, 1929, Serial No. 407,593. Renewed June 18, 1932. 10 Claims. (Cl. 198—10.)



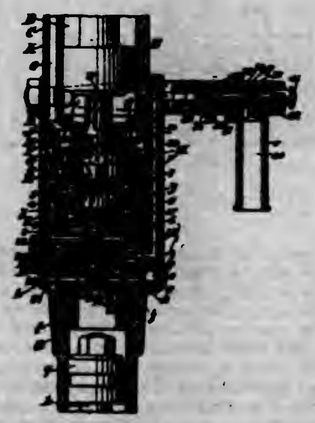
1. In a loading machine, a base, a conveyor adapted to engage the ground at the front of said base, an extensible thrust member pivotally mounted on said base on an axis extending transversely of said conveyor, a loading pan pivotally connected on the forward end of said thrust member and having its swinging end collapsible toward the rear end of said thrust member, when the latter is moved forwardly and means limiting the downward swinging movement of said loading pan when said thrust member is moved rearwardly.

1,905,473. WHEEL. ALVAN R. LAMBERT, Hollywood, Calif., assignor, by mesne assignments, to Bennett Walker, New York, N. Y. Filed Apr. 22, 1926, Serial No. 103,868. Renewed Jan. 22, 1932. 8 Claims. (Cl. 301—6.)



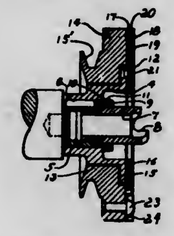
2. A wheel structure comprising a hub having inner and outer ends, a first series of spokes extending from the inner end of the hub, a second series of spokes extending from the outer end of the hub, fan blades extending from spokes of the first series to spokes of the second series, said fan blades being arranged radially in planes extending longitudinally of the hub, the fan blades having their outer ends bent rearwardly from the leading surface of the blades.

1,905,474. SAFETY DEVICE FOR ROCK DRILLS. EARL B. LAAR, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed May 15, 1931. Serial No. 537,597. 7 Claims. (Cl. 121—7.)



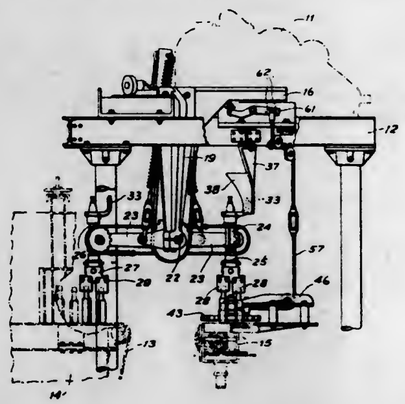
1. In a safety device, the combination with a rock drill having a hammer piston and rotation mechanism for the piston comprising a rifle bar wherewith said piston is slidably interlocked, a feeding element for the rock drill, a ratchet ring, of pawls carried by the rifle bar to engage the ratchet ring for holding the rifle bar against rotation during one stroke of the piston thus causing the piston to describe a partial revolution, pressure actuated trip means for preventing engagement of the pawls with the ratchet ring, and pressure actuated valve means for controlling the supply of pressure fluid to the pressure actuated trip means.

1,905,475. VIBRATION DAMPER. ROGER K. LEE, Highland Park, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 1, 1930. Serial No. 425,312. 9 Claims. (Cl. 74—6.)



3. A vibration damper comprising a pair of relatively movable concentric members, a connecting unit consisting of inseparable parts and having an inner element secured to said inner member and an outer element secured to said outer member and having a rubber member between said elements and secured to the adjacent surfaces thereof.

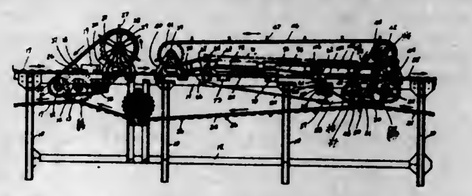
1,905,476. APPARATUS FOR HANDLING GLASSWARE. EDWARD H. LORENZ, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 24, 1931. Serial No. 552,865. 6 Claims. (Cl. 214—1.)



2. Apparatus for handling glassware, comprising the combination with a transfer arm having tongs mounted thereon for engaging an article of ware at a single receiving position and releasing it at any one of a plurality of laterally spaced delivery positions, and means for mounting said tongs for angular movement with respect to said arm about a vertical axis, of means including a member not partaking of the transferring movement of the tongs for presenting the tongs always in a single predetermined relation to said receiving position at the time they are in readiness to engage a glass article at that position.

1,905,477. BRICK EDGING MACHINE. GRAFTON E. LUCE, Chicago, Ill., assignor to Lancaster Iron Works, Inc., Lancaster, Pa., a Corporation. Filed Oct. 19, 1929. Serial No. 400,835. 14 Claims. (Cl. 198—30.)

1. In combination, a conveyor adapted to movably support a pallet having brick thereon, a separator for removing the brick from the pallet, a platform having guide channels adapted to turn the brick on edge to group the same in a predetermined relation, a conveyor for moving the brick from the separator to the platform and for discharging the brick therefrom in the said predetermined relation, said first mentioned conveyor extending to a point adjacent the point of discharge of said brick from said platform, and mechanism for operating said conveyors in



such timed relation that the brick and pallet reach said point of discharge simultaneously and the brick are discharged upon said pallet.

1,905,478. METHOD OF ELECTRIC WELDING. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Dec. 16, 1930. Serial No. 502,660. 7 Claims. (Cl. 219—10.)



1. The method of lap-welding consisting in making an inclined surface along an edge of a metal blank, forming the blank into tubular shape, overlapping one marginal portion upon the outer surface of the adjacent marginal portion for a distance from the longitudinal edge of the latter with the inclined surface lapping said adjacent marginal portion, and compressing and heating said overlapped portions to a welding temperature.

1,905,479. METHOD OF ELECTRIC WELDING. GEORGE A. LUTZ, Cranford, N. J., assignor to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Feb. 12, 1931. Serial No. 515,229. 4 Claims. (Cl. 219—10.)

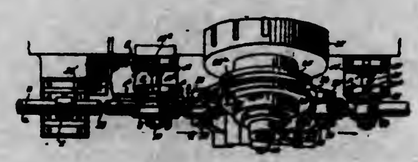


1. The method of lap-welding consisting in forming inclined surfaces along the marginal portions of metal stock, lapping portions of said metal stock with the inclined surfaces substantially parallel to and over-lapping one another, heating said inclined marginal portions to a welding temperature, and forcing said marginal portions one into another while so heated to such a thickness as substantially equals the thickness of the gage of said stock.

1,905,480. MEANS FOR ELECTRIC WELDING. GEORGE A. LUTZ and LOUIS B. KRAMER, Cranford, N. J., assignors to American Circular Loom Company, Inc., Dover, Del., a Corporation of Delaware. Filed Dec. 1, 1930. Serial No. 499,278. 18 Claims. (Cl. 219—6.)

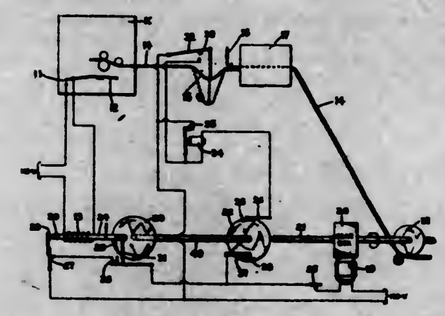
1. A welding apparatus comprising means to traverse a tubular blank having overlapped marginal portions, a pair of spaced electrodes having a common axis and located

in a position to engage the exterior of the blank adjacent to the overlapped portions thereof, means supporting said electrodes parallel in planes at an angle oblique to a



plane passing through the longitudinal axis and the overlapped portions of the blank, and means to supply said electrodes with electric current.

1,905,481. TAPE FEEDING DEVICE. HARRY H. LYNN, New Rochelle, N. Y., assignor to Trans-Lux Daylight Picture Screen Corporation, New York, N. Y., a Corporation of Delaware. Filed June 20, 1928. Serial No. 286,905. 26 Claims. (Cl. 178—42.)



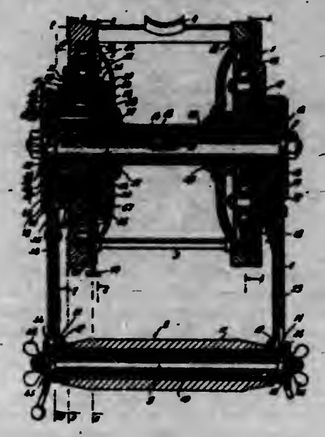
1. In apparatus of the class described, a ticker, a motor, tape pulling means operated by said motor for feeding tape with respect to a projector, an operating circuit for said motor, and a switch controlled directly by the ticker printing mechanism whereby said motor circuit is impulsively energized to cause the tape pulling means to advance the tape with respect to said projector each time that a character is printed by the ticker.

1,905,482. SAW ADAPTER. ABEL A. MAGNI, Rochester, N. Y. Filed Apr. 6, 1932. Serial No. 603,619. 5 Claims. (Cl. 145—108.)



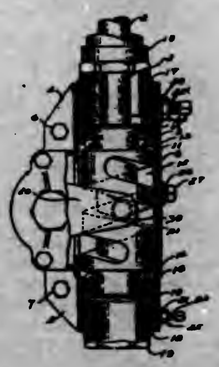
1. A saw adapter comprising a handle having a forked end, a stud passing through said forked end, a pair of washers on said stud inside the forked end of the handle, said washers being cut away to form radial recesses therein, which together form an opening, an adapter, a stem on said adapter adapted to engage said opening.

1,905,483. FISHING REEL. HYLA P. MAYNES, North Tonawanda, N. Y., assignor of one-half to Emma C. Maynes, North Tonawanda, N. Y. Filed May 20, 1932. Serial No. 612,467. 26 Claims. (Cl. 242—84.5.)



1. In a fishing reel, a spool, means for mounting the spool on a pole a crank mounted to swing about the axis of the spool and extending across the pole, and means interposed between the crank and the spool for transmitting movement of the handle to the spool for rotating the spool.

1,905,484. STEERING GEAR MECHANISM. CHARLES D. MCCALL, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 2, 1930. Serial No. 441,122. 5 Claims. (Cl. 74—79.)

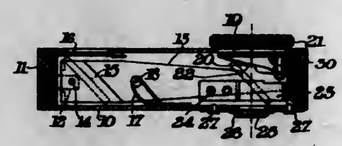


1. In steering apparatus, driving and driven members having a substantially closer fitting engagement with each other throughout a limited portion of their operating cycle than during the remainder of said operating cycle, and means for shifting one of said members in respectively opposite directions relative to the other member for locating the latter member in a selected position when said members are in close fitting engagement.

1,905,485. RANGE TYPE RANGE FINDER. JOSEPH MIHALTI, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 8, 1931. Serial No. 579,750. 2 Claims. (Cl. 88—2.7.)

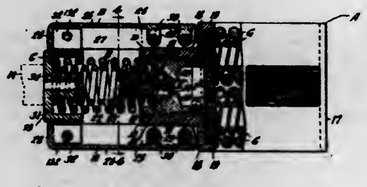
2. In a range finder the combination with two relatively adjustable mirrors, of an eye piece for viewing an

image of an object as formed by said mirrors, one of said mirrors being semi-transparent whereby the object may be viewed directly, means for adjusting one of said mirrors relatively to the other, a scale in the apparent field of



view of the eye piece, and an indicator movable over said scale in accordance with the adjustment of said one of said mirrors, said eye piece having a plane parallel center portion for viewing the images of the object and an outer spherical portion for viewing the indicating scale.

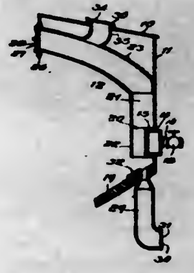
1,905,486. BUFFER. WILLIAM H. MINER, deceased, Chazy, N. Y., by Alice T. Miner, executrix, Chazy, N. Y., and William P. Sidley, executor, Winnetka, Ill., assignors to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,378. 1 Claim. (Cl. 213—222.)



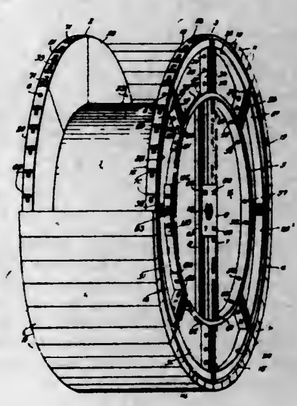
In a buffer, the combination with a casing open at one end and containing a shock absorbing means, said casing having, at said open end, laterally projecting pairs of exterior ears at opposite sides thereof, the ears of each pair being spaced apart; of channel-shaped guide members at opposite sides of the casing having the flanges thereof directed inwardly, each of said guides members having its inner end seated betwen the ears of the pair at the corresponding side of the casing and rigidly secured thereto by fastening devices extending through the ears and the flanges of the corresponding guide member, each of said guide members having reinforcing portions between the flanges thereof disposed about said fastening devices, each of said guide members having the outer ends of the channels thereof closed, thereby providing limiting shoulders; a spring cap having integral guide lugs of substantially rectangular outline at opposite sides thereof engaging between the flanges of said guide members respectively, said lugs engaging said limiting shoulders to restrict outward movement of the spring cap; and spring means interposed between the spring cap and the shock absorbing mechanism of the casing.

1,905,487. AUTOMOBILE HEATER. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed May 14, 1930. Serial No. 452,319. 11 Claims. (Cl. 237—241.)

1. In a vehicle heater, the combination of a heater element and a wall of a vehicle body, the heater element being located exteriorly of said wall of said body and arranged with respect to said wall to transmit heat to said wall, to thereby provide heating means including said wall, and an element associated with said wall, said element providing a wall of a heat duct, the opposite ends of said duct being in communication with the interior of the vehicle body.



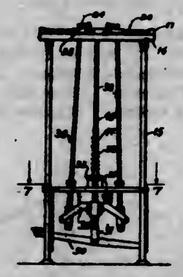
1,905,488. COLLAPSIBLE STEEL CABLE REEL. LEO W. NACK, Chicago, Ill. Filed June 5, 1930. Serial No. 459,299. 15 Claims. (Cl. 206—59.)



1. A cable reel, having a tubular cable support comprising a plurality of longitudinal radially joined sections, closures, flanges, and means for removably mounting a closure and a flange at each end of said support, comprising bolts each passing through aligned openings in a section, a closure and a flange.

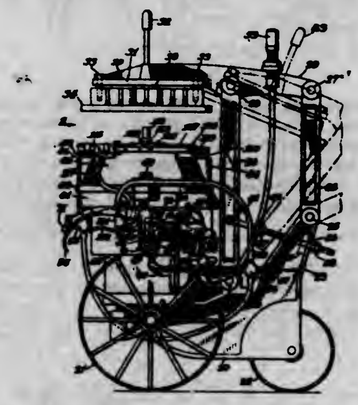
1,905,489. MACHINE FOR WRAPPING PACKAGES. JOHN VICTOR NELSON, Chicago, Ill., assignor, by mesne assignments, to Milprint Products Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Dec. 26, 1930. Serial No. 504,817. 9 Claims. (Cl. 93—2.)

1. A wrapping machine comprising a frame, a table mounted on said frame adapted to support a wrapper and the goods to be wrapped, folding wing supporting members mounted on said frame for horizontal adjustment toward or from each other to adapt the spacing of the wings to different size packages, a plurality of folding wings pivoted on the supporting members, means for rotating said wings to vertical positions, said means comprising a rod pivoted to each of said wings and extending downwardly, a lever



for each rod pivoted to said frame and with its outer end pivoted to said rod, and means common to all of the levers for forcing downwardly the inner end of each of the levers.

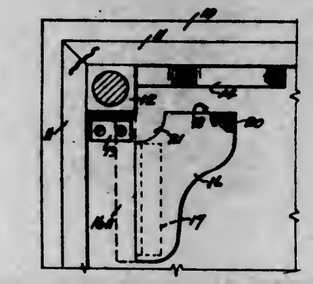
1,905,490. MOLDING MACHINE. STANLEY A. NORRICK, Newcastle, Ind., assignor to The Perfect Circle Company, Hagerstown, Ind., a Corporation of Indiana. Filed Dec. 14, 1929. Serial No. 413,979. 24 Claims. (Cl. 22—25.)



1. In a molding machine, the combination of a pair of squeezing members, means for supporting a pattern and a sand flask between said members, a plurality of cylinders carried by one of said members, the pistons in said cylinders excepting one having rods for engaging with said flask to move the same and the piston in said excepted cylinder having a rod normally extending through said pattern within the margin of said flask for forming the pouring gate of said mold, means for operating said members to compress the sand around said pattern to form a mold, and means for supplying fluid to said cylinders for moving said pistons to separate said mold from the pattern, and for retracting said gate forming rod from said mold.

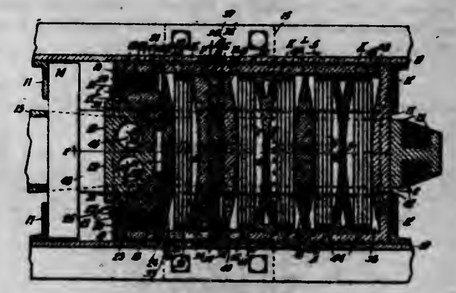
1,905,491. FOLDING TABLE. ABRAHAM E. NULL, Memphis, Tenn. Filed Feb. 5, 1931. Serial No. 513,478. 1 Claim. (Cl. 45—11.)

In a folding table having a top and depending side rails, forming a rectangle, legs each disposed beneath the table top in the angle formed by the intersection of two of the rails and positioned with a side and an edge against said rails, hinges one for each of said legs secured to said top and to the side of said leg away from one of said rails whereby folding of the leg along the other of the rails may be accomplished, a bracket of less than half the leg thickness secured to the edge of said leg away from the second of said rails, and having its top flush with the top of said leg, and extending therefrom substantially parallel to said hinge axis, the rail face of said bracket being substantially flush with the rail side of said leg, means for adjusting the height of said bracket adjacent the outer end thereof, and an auxiliary bracket hinged to



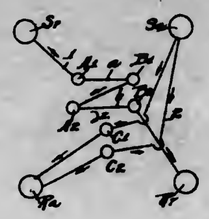
said top, and positioned when open parallel to said second rail, in the path of said leg and bracing said leg against the first of said rails, said auxiliary bracket being less than half the leg thickness and being adapted to be swung about said hinge out of the path of said leg, said post and the bracing end of said bracket having complementary parts of a bullet latch thereon to hold said latter bracket in place when in position to brace said leg.

1,905,492. SHOCK ABSORBING MECHANISM. JOHN F. O'CONNOR, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,425. 6 Claims. (Cl. 213—24.)



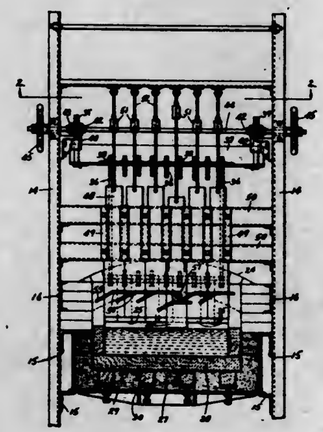
6. In a shock absorbing mechanism, the combination with a follower; of a combined friction shell and spring cage open at one end and having the friction shell portion at said open end, said follower and combined shell and spring cage being relatively movable toward and away from each other; a primary cushioning means; a secondary cushioning means including friction elements cooperating with the friction shell portion; a pressure-transmitting device extending through said friction shell portion and interposed between said follower and primary cushioning means and continuously engaged by said follower for compressing the primary cushioning means during a compression stroke of said mechanism, said device being freely movable with respect to the friction elements and opposed only by said primary cushioning means throughout the compression stroke of the mechanism; and means normally spaced from the follower and adapted to be actuated thereby after a predetermined compression of the primary cushioning means for actuating said friction elements to compress the secondary cushioning means.

1,905,493. PROCESS OF PURIFYING ROSIN. ROBERT C. PALMER, JOHN L. BURBA, and ANTHONY F. OLIVER, Pensacola, Fla., assignors, by mesne assignments, to Newport Industries, Inc., a Corporation of Delaware. Filed Jan. 27, 1930. Serial No. 423,598. 7 Claims. (Cl. 87—2.)



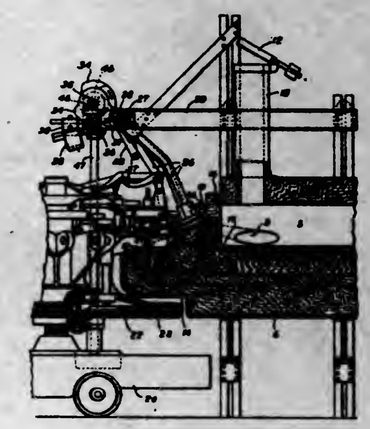
1. The process of purifying rosin which comprises forming a plurality of separate groups of adsorbent filter beds from beds of varying purities, arranging the beds in each group in series and in a descending order from the inlet end of each group according to the amount of impurities adsorbed on each bed, connecting the groups in series with the group having the most impure beds at the inlet end of the series and that having the freshest beds at the exit of the series, passing an impure rosin solution through the series of filters, cutting out the most saturated filter from each group, advancing each filter one position in each group, inserting a fresh or revivified filter at the exit end of each group and passing further quantities of impure rosin solution through the new series of filters.

1,905,494. APPARATUS FOR SUPPLYING MOLTEN GLASS. KARL E. PHILBE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 16, 1931. Serial No. 537,811. 10 Claims. (Cl. 49—56.)



1. In combination with a container for a pool of molten glass, a mold unit adapted to be dipped to gather charges of glass periodically from the surface of the pool, a plurality of heat obstructing members, means holding said members out of contact with the glass at all times, and means operable in timed relation to the movement of the mold to move said members respectively into and out of heat obstructing position in succession.

1,905,495. APPARATUS FOR SUPPLYING MOLTEN GLASS. KARL E. PHILBE, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed May 21, 1931. Serial No. 538,950. 11 Claims. (Cl. 49—56.)



1. In combination with a container for a pool of molten glass from the surface of which charges of glass are gathered, a sectional cover for said container, means supporting said cover out of contact with the glass at all times, and means for periodically moving the sections of said cover respectively into and out of closed position.

1,905,496. SHIFTING DEVICE. RALPH F. PSO, Buffalo, N. Y., assignor to Houde Engineering Corporation, Buffalo, N. Y., a Corporation of New York. Filed June 9, 1931. Serial No. 543,068. 2 Claims. (Cl. 74—17.)



1. A drag link consisting of two similar semi-tubular sheet metal sections of increased radius at their outer ends, said sections being welded together along their longitudinal engaging edges, and bearing abutments in the form of sheet metal cups inserted into the ends of and between said sections and welded thereto to form additional means for securing said sections together.

1,905,497. WORKING IMPLEMENT FOR PERCUSSIVE TOOLS. ARTHUR E. PETERS, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 5, 1932. Serial No. 591,071. 2 Claims. (Cl. 255—1.)

1. The method of drilling holes in rock and like materials which consists in driving a cutter head and its shank into the rock to the extent permitted by the shank, then withdrawing the shank from the cutter head and the hole



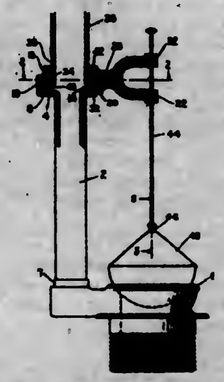
and inserting another shank into the cutter within the hole to advance the cutter into the rock.

1,905,498. VALVE SPRING. KARL PFEIFFER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Mar. 19, 1928. Serial No. 262,780. 9 Claims. (Cl. 267—61.)



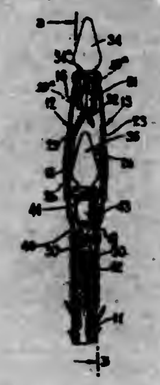
1. A resilient member of the class described comprising, a coiled body portion, and oppositely extending relatively thin flanges on said body portion.

1,905,499. VALVE. JACOB PODOLSKY, Dorchester, Mass. Filed Oct. 17, 1931. Serial No. 569,406. 8 Claims. (Cl. 4—57.)



5. A valve construction comprising an overflow pipe having an interiorly threaded collar integral therewith and provided with a valve seat, a pipe having a threaded portion engaging with the threads of the collar, a bracket having an interiorly threaded ring threaded upon the threads of the second-named pipe, a valve stem guided in the bracket, and a valve adapted to be seated on the valve seat and connected with the valve stem.

1,905,500. DECORATIVE DEVICE. LOUIS PERRY, New York, N. Y., assignor to Noma Electric Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 28, 1932. Serial No. 635,170. 8 Claims. (Cl. 40—133.)



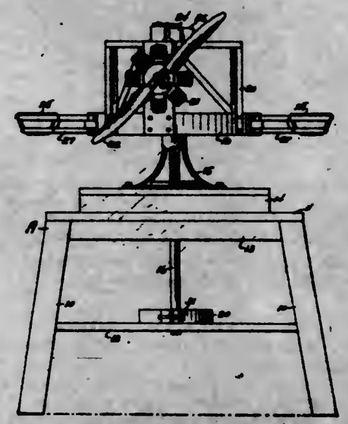
4. A decorative device comprising a member, a plurality of radially extending sockets mounted on said member, lamps attached to said sockets and projecting from said member in radial directions, said member being formed with a legend cut out therefrom, means for illuminating said legend, and means on said member for mounting the same on a Christmas tree or the like support.

1,905,501. CIRCUIT BREAKER. KARL C. RANDALL, Edgewood, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1930. Serial No. 441,513. 9 Claims. (Cl. 175—294.)



1. The combination with a circuit breaker having a current-responsive thermal trip-device connected in series with the contacts thereof, of an auto-transformer connected in series with the circuit-breaker contacts for controlling the supply of current to the said trip-device.

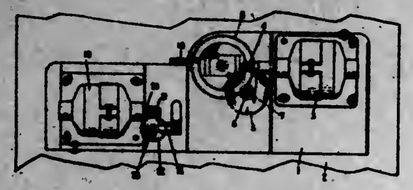
1,905,502. FROST CONTROL MACHINE. CHAUNCEY S. REED, Brownsville, Tex. Filed Oct. 31, 1931. Serial No. 572,400. 1 Claim. (Cl. 47—2.)



In a machine of the character described, a stand constituting a tower and having a top and subplatform, a

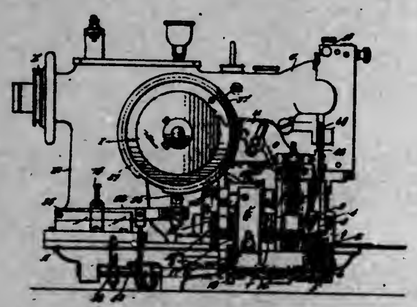
pedestal carried by the top, a vertical shaft journaled in the pedestal and in said subplatform, a wheel fixed to the upper end of the shaft and rotatable in a horizontal plane, a motor operated propeller supported by the wheel and having its axis disposed to one side of the axis of rotation of the wheel and inclined away from the plane of the latter, a brake having its parts carried by the subplatform and shaft and manually set.

1,905,503. SYSTEM OF REMOTE RADIOCONTROL. LLOYD THOMAS ROBERTSON, Milwaukee, Wis. Filed Oct. 25, 1929. Serial No. 402,880. 12 Claims. (Cl. 250—20.)



1. The combination, with a radio receiving set having a tuning condenser and a volume control rheostat, of electrically actuated means to operate the tuning condenser, electrically actuated means to operate the volume control rheostat, a control therefor, comprising a switch connected to convey current to the set, and means actuated by a single mechanism to close any one or more desired circuits individually or simultaneously, whereby either or both the rheostat control and tuning control will be moved in any desired direction or either one may be moved in any desired direction and the other in the opposite direction or both may be moved in the same direction.

1,905,504. MACHINE FOR SEWING FASTENER TAPE AND THE LIKE. LEO ROSSMAN, Newark, N. J. Filed Apr. 15, 1931. Serial No. 530,170. 11 Claims. (Cl. 112—2.)

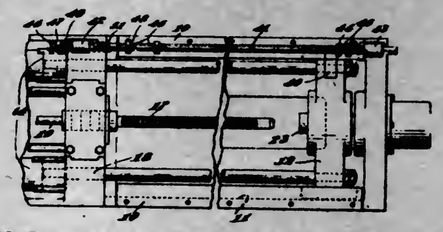


1. In a sewing machine for sewing fastener elements on work, a sewing mechanism including a needle, means at the work discharge side of said needle for feeding work to the needle with a step-by-step motion to form a line of stitches, and auxiliary work advancing means between said needle and said work feeding means including a member to engage the fastener elements which have been stitched and move the work from the needle at a different rate than said work feeding mechanism.

1,905,505. METALLIC COMPOSITION AND METHOD OF MAKING THE SAME. ADRIAN P. ROUX, Oriskany, N. Y., assignor to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed Dec. 3, 1929. Serial No. 411,390. 7 Claims. (Cl. 75—1.)

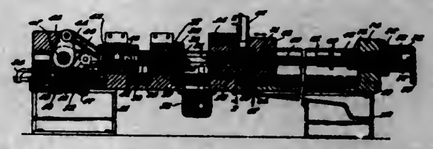
1. The method of making a metallic composition which comprises, making a plurality of simple tungsten carbide compositions at approximately 1100° C. or 2012° F., one having a carbon content of ½% to 1%, a second having a carbon content of 3½% to 4%, a third having a carbon content of 5½% to 6% and a fourth having a carbon content of 7½% to 8%, mixing these several simple compositions and sintering in a closed carbon mold, cutting off the sintering heat at approximately 2600° F. and simultaneously applying pressure upon the sintered material in the mold and cooling the mold and contents.

1,905,506. BROACHING MACHINE. GEORGE J. RUSSELL, Waltham, Mass. Filed Jan. 30, 1930. Serial No. 424,557. 18 Claims. (Cl. 90—33.)



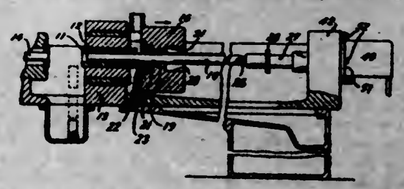
18. Broaching apparatus of the class described comprising a broach, an abutment engageable with the rear end of the broach, a carrier for advancing stock to be broached, means for reciprocating the carrier along the broach for effecting the broaching operation, means providing lubricating ducts within the carrier and directed toward the broach, and a source of lubricant to supply said ducts.

1,905,507. EXTERNAL BROACHING MACHINE. GEORGE J. RUSSELL, Waltham, Mass. Filed Jan. 30, 1930. Serial No. 424,558. 12 Claims. (Cl. 90—33.)



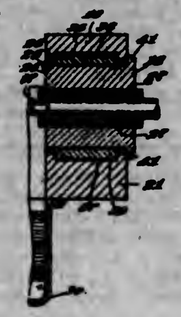
12. A broaching machine comprising an external broaching tool, an internal guide for slidably receiving and guiding pieces of stock and holding the latter from axial tilting movement relative to this guide as the stock is advanced to and beyond said external tool, said internal guide being disposed within said external tool and extending through the stock past said tool, said internal guide having its ends accessible for receiving and discharging pieces of stock, external means for slidably engaging and supporting previously broached pieces of stock disposed on said internal guide and thereby supporting said internal guide through the medium of such pieces of stock while the ends of said guide are accessible for receiving and discharging pieces of stock.

1,905,508. BROACH CENTERING APPARATUS. GEORGE J. RUSSELL, Waltham, Mass. Filed Jan. 30, 1930. Serial No. 424,559. 16 Claims. (Cl. 90—33.)



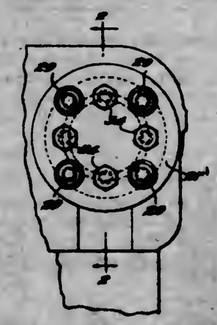
1. In a broaching machine, the combination of a broach, means for holding the broach substantially stationary during broaching, a center engageable with the front end of the broach and fluid-pressure means for advancing the center to a fixed position in engagement with the broach and for holding the center in this fixed position during broaching.

1,905,509. BROACHING GUIDE. GEORGE J. RUSSELL, Waltham, Mass. Filed Jan. 30, 1930. Serial No. 424,560. 20 Claims. (Cl. 90—33.)



1. In a broaching machine of the class described, the combination of an external guide for receiving stock from the broach and for supporting the stock with an end of the broach disposed therein, said external guide comprising members segmental in section and arranged with their longitudinal edges adjacent, means for urging the members inwardly, and means for supporting the members in position longitudinally of the broach.

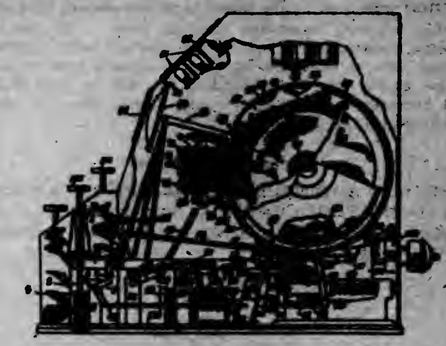
1,905,510. CYLINDER CONSTRUCTION. GEORGE J. RUSSELL, Waltham, Mass. Original application filed Mar. 5, 1930, Serial No. 433,490. Divided and this application filed Apr. 11, 1931. Serial No. 529,998. 15 Claims. (Cl. 74—108.)



1. The combination of a cylinder wall having a substantially annular end portion, a head fitting this end portion of the wall, relatively fixed abutment means adjacent the head, a member bearing against the abutment means and extending across the head in spaced relation thereto, means for holding this member rigidly against the abutment means, and means carried by the member and engageable with the head only at points substantially opposite the annular end portion of the cylinder wall for holding the head and the cylinder wall in fluid tight relation.

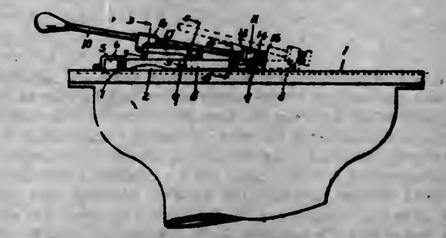
1,905,511. AUTOMATIC LIGHT CONTROL. KURT SCHWENNER, Rocklyn, N. Y., assignor to Oehler Machine Company, Inc., a Corporation. Filed Sept. 24, 1931. Serial No. 564,791. 15 Claims. (Cl. 95—75.)

1. In a key operated machine for automatically controlling the exposure lamps used in motion picture film printing machines, a means for automatically locking the keys, said means comprising a block having an axial bore for the reception of a number of balls, and a plurality of slots



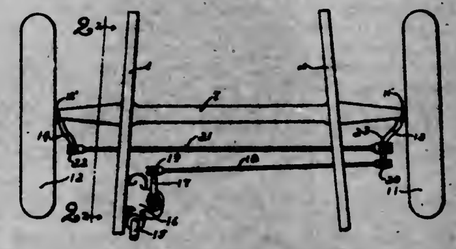
for the passage of the key levers, and a switch lever, a plunger, spring and screw arrangement in said bore permitting the operation of one of the key levers only, and the switch lever selectively.

1,905,512. CLAMP FOR SAWS AND THE LIKE. ALVIN O. SHAFER, Kalamazoo, Mich. Filed July 21, 1930. Serial No. 469,466. 6 Claims. (Cl. 90—59.)



6. In a clamp, the combination with an abutment member, of a coacting slidably supported jaw, a lever pivotally and rotatively connected to said jaw, and a clutch embracing said lever and pivotally connected to said abutment member to move towards and from said abutment on the swinging of the lever and to move said sliding jaw on the swinging of said lever when the latter is engaged with said clutch member, said clutch member being engaged and disengaged with said lever by a rotative movement of the lever.

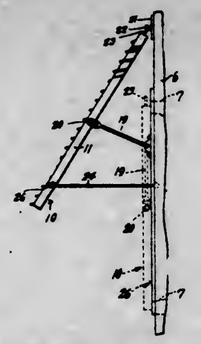
1,905,513. ANTISHIMMYING STRUCTURE FOR VEHICLES. EDGAR SHAY, Pleasant Ridge, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Feb. 8, 1930. Serial No. 426,970. 2 Claims. (Cl. 280—95.)



1. In a vehicle chassis including a frame and a front axle, leaf springs extending longitudinally of said chassis fixed at their intermediate portions to the respectively opposite end portions of said axle for supporting the front end portion of said chassis, a pair of tension shackles

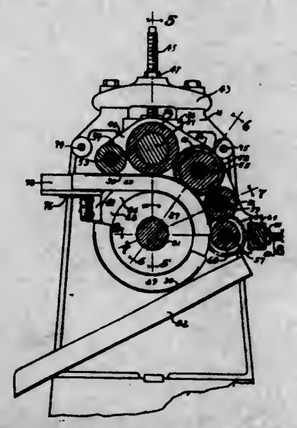
each pivotally connected at its lower extremity with said frame and each pivotally attached at its upper end to one of the respectively opposite ends of one of said springs, dirigible wheels pivotally mounted on the ends of said axle having inwardly extending steering arms, a tie rod extending transversely of said chassis and pivotally attached to the ends of said steering arm, a pitman arm on said frame, and a drag link extending laterally of said frame and pivotally connected with said pitman arm and with one of said steering arms.

1,905,514. ADJUSTABLE COMBINATION AWNING AND SHUTTER. GEORGE F. SHEPARD, Bethel, Conn. Filed July 10, 1931. Serial No. 549,873. 6 Claims. (Cl. 20—59.)



1. The combination with a window frame, a combined shutter and awning device comprising a rigid frame having slats extending between the side members thereof, said device of a size to cover the window opening with which it is associated, means for mounting the device on the window frame or house for movement from a position immediately in front of and covering the window opening to a position where the upper end of the device is above the window frame and the device inclines outwardly from the window opening, means above the window frame, means on said device for detachably engaging said means above the window frame to secure the device in inclined position, and independent means to secure the device in window closing position.

1,905,515. BENDING MACHINE. ADELBERT R. SMITH, Newcastle, Ind., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 29, 1930. Serial No. 457,262. 23 Claims. (Cl. 153—57.)



1. A bending machine comprising a main frame, a main shaft journaled on said frame, a forming roll on said main shaft, a second shaft journaled on said frame in spaced parallel relation to said main shaft, a sub-frame pivotally mounted on said second shaft, a plurality of forming rolls journaled on said sub-frame for cooperating with said first mentioned main shaft roll and means for driving some of said rolls to feed work through said machine.

1,905,516. CELLULOSIC COMPOSITION OF MATTER CONTAINING A DIALKYL HYDROPHTHALATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 17, 1931. Serial No. 545,083. 10 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic ester of cellulose and a lower dialkyl hexahydrophthalate.

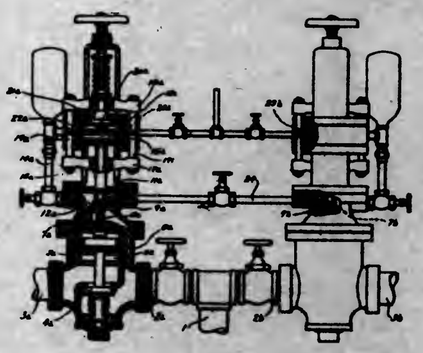
1,905,517. CELLULOSE ESTER COMPOSITION OF MATTER CONTAINING THE TETRAETHYL ESTER OF A TETRACARBOXYL DERIVATIVE OF A SATURATED ALIPHATIC HYDROCARBON. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,229. 10 Claims. (Cl. 106—40.)

1. A composition of matter comprising a cellulose ester and the tetraethyl ester of a tetracarboxyl derivative of a saturated lower aliphatic hydrocarbon.

1,905,518. CELLULOSE ORGANIC DERIVATIVE COMPOSITION OF MATTER CONTAINING A BB'-DIALKOXY ETHYL CARBONATE. HENRY B. SMITH, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 10, 1931. Serial No. 556,230. 8 Claims. (Cl. 106—40.)

1. A composition of matter comprising an organic derivative of cellulose and a lower BB'-dialkoxy ethyl carbonate.

1,905,519. REGULATOR. STEN E. B. SODERBERG, Passaic, N. J., assignor to Leslie Company, Lyndhurst, N. J. Filed Sept. 22, 1931. Serial No. 564,316. 5 Claims. (Cl. 103—11.)

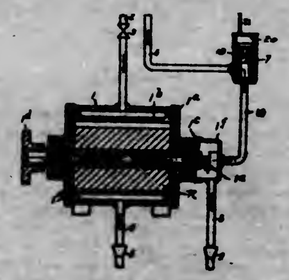


1. In apparatus of the class described, the combination of a plurality of pump regulators, each adapted to regulate the respective supply of actuating pressure fluid to one of a plurality of pumps discharging into the same main, each of said regulators comprising a valve controlling the supply of pressure fluid to a pump and a movable member actuating the valve, the position of the member being responsive to fluid pressure in a space adjacent to it, and a conduit placing the fluid pressure spaces into communication with each other.

1,905,520. CONVERSION OF METHANE INTO LIQUID HYDROCARBONS. CHRISTIAN SCHNEEWALD, Ludwigshafen-on-the-Rhine, Germany, assignor to I. G. Farbenindustrie Aktiengesellschaft, Frankfort-on-the-Main, Germany. Filed Feb. 16, 1931, Serial No. 516,217, and in Germany Feb. 28, 1930. 2 Claims. (Cl. 260—168.)

1. In the production of liquid hydrocarbons by heating a gas comprising methane to a temperature between about 800° and 1200° C., the step which comprises confining said gas by means of a surface consisting of an element selected from the group consisting of chromium, tungsten, molybdenum and carbon in the form of graphite.

1,905,521. COOLING FACILITIES FOR ROTARY COMPRESSORS. HANS STEMME, Winterthur, Switzerland. Filed Aug. 2, 1929, Serial No. 383,913, and in Germany Aug. 16, 1928. 4 Claims. (Cl. 230—208.)



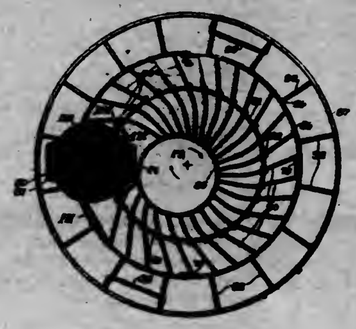
1. An arrangement for providing circulation of a cooling medium in the stationary and moving parts of a rotary compressor, comprising a water jacket housing for a rotor, a hollow shaft for the latter, means for supplying the cooling medium to the housing and hollow shaft, and means operatively connected to the supply means and compressor for automatically varying the quantity of cooling medium supplied by said first named means in accordance with variations in pressure of the air discharged from said compressor to reduce to a minimum the play between rotor and housing at all working conditions.

1,905,522. MOTION PICTURE CAMERA CONTROL. PAUL A. STEPHENSON, Newton, Mass., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 16, 1929. Serial No. 414,903. 10 Claims. (Cl. 74—107.)



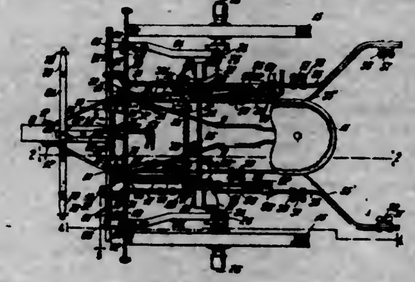
2. In a multi-speed motion picture camera, the combination with a motor, of a release therefor movable to an operative position in which the motor may run and to an inoperative position wherein the motor will not run, a speed change device adapted to normally retain the parts in position for a predetermined speed, and a locking bar cooperating with the speed change device and release through which said release may hold said speed change device from its normal position.

1,905,523. DISHWASHING MACHINE. EDGAR S. STOCKBARD, Berwyn, Ill., assignor to The Conover Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 21 1928. Serial No. 271,661. 7 Claims. (Cl. 141—9.)



1. A dish rack of the type described, comprising an outer ring, an inner ring eccentric thereto, and wire partitions connecting said outer ring to said inner ring to form a graduated series of dish holders.

1,905,524. CULTIVATOR. CARL G. STRANDLUND, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Aug. 8, 1928. Serial No. 298,199. 22 Claims. (Cl. 97—147.)



1. In a cultivator, the combination of a pair of wheels, a wheel frame tiltably mounted thereon, a seat frame having a seat thereon, pivot means connecting said frames on a transverse pivot axis disposed in a plane spaced longitudinally from the axis of said wheels sufficient to cause the seat to shift vertically through a distance at least substantially equal to the distance said wheels shift longitudinally, means for permitting vertical folding movement between said frames at said axis, a pole, means for normally holding said pole in substantially fixed relation to said seat frame so that said pole moves therewith as a unit in the relative folding movement between said frames, and cultivator rigs carried by said wheel frame.

1,905,525. ELECTRICAL RECTIFIER. CHARLES E. STROBEL, Pittsburgh, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Original application filed Sept. 10, 1931, Serial No. 562,042. Divided and this application filed Nov. 30, 1932. Serial No. 644,979. 4 Claims. (Cl. 175—366.)

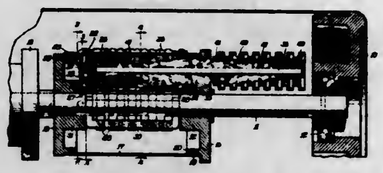
1. A rectifier comprising a metal block provided with a hole and with a slot which communicates with one side

of said hole throughout its length, means for insulating the sides of said hole and said slot, a plurality of asymmetric units in said hole, a plurality of conducting spacers in said hole, one between each two adjacent units and between the bottom of said hole and the adjacent unit and



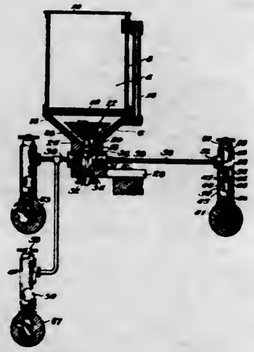
each provided with a lug which extends outwardly through said slot, a pressure disk in said hole adjacent the outer unit, a compression spring having one end engaging the outer side of said pressure disk, and means secured to said block for compressing said spring.

1,905,526. TYPE CARRYING CYLINDER. HJALMAR A. SWANSON, Chicago, Ill., assignor to Cummins Perforator Company, a Corporation of Illinois. Filed Oct. 7, 1931. Serial No. 567,362. 7 Claims. (Cl. 101—91.)



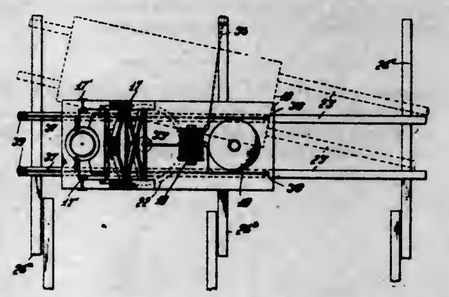
1. In a type cylinder of the character described, in combination, a cylinder including end members, an arcuate plate forming a portion of the drum of the cylinder and being secured to the members, a type form secured to the respective ends of the plate, and a yoke member insertable in the cylinder through the space formed by the drum plate and positioning for association with the type form a plurality of type discs.

1,905,527. GRAVITY LUBRICATING SYSTEM. GEORGE F. THOMAS, Berwyn, and OTTO J. HERR, Chicago, Ill., assignors to Alemite Corporation, Chicago, Ill., a Corporation of Delaware. Filed Mar. 15, 1928. Serial No. 261,779. 7 Claims. (Cl. 184—7.)



1. In a central lubricating system, the combination of a source of lubricant, a plurality of bearings to be lubricated, conduits connecting said source with said bearings, and a lubricant flow controlling fitting interposed between between said conduits and each of said bearings, each of said fittings comprising a pair of flow resistance passages and a transparent well intermediate said passages.

1,905,528. PILE DRIVER. JOSEPH H. THORNLEY, Evanston, Ill. Filed Nov. 13, 1929. Serial No. 406,759. 6 Claims. (Cl. 61—73.)



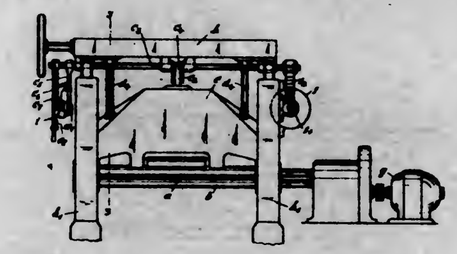
1. In a pile driver of the class described, the combination of a bed, a platform, a pivot connection between said bed and said platform permitting horisontal rotative movement of said platform on said bed, a derrick rising from said platform, cable winding means on said platform, a pair of rails materially longer than said bed and along which the bed is adapted to move, guide means for guiding relative movement between said rails and said bed in a direction longitudinally of the rails, said guide means positively preventing tilting of said bed relative to said rails, a plurality of skid timbers adapted to be supported on the ground, said pair of rails having slidable mounting on said timbers to be skidded endwise and sidewise thereon a cable adapted to be extended from said winding means to a point of anchorage for effecting movement of said bed on said rails or movement of said rails on said skid timbers, said rails having free sliding mounting on said skid timbers so as to enable them to be skidded in any direction, endwise or sidewise, on said timbers, and said rails being capable of motion independently of each other in their endwise sliding movement, said platfom having an opening therein in proximity to said pivotal connection for permitting said cable to be passed from said winding means down through said opening to the lower portion of the pile driver, and a pulley mounted on the lower portion of the pile driver substantially in line with said opening and having a horisontal swivelling movement for guiding the cable substantially horisontally to different points of anchorage.

1,905,529. SHOE. THOMAS TORIO, Corona, N. Y. Filed Aug. 4, 1931. Serial No. 555,037. 1 Claim. (Cl. 36—12.)



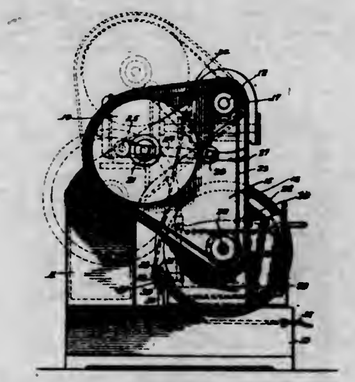
A shoe construction comprising an inner sole having a split perimeter from the toe to the heel thereof, the lower part of said split portion being folded downwardly and inwardly with the free ends thereof opposing each other, an upper secured to the outer part of said downwardly bent portion, the under part of said sole and the downwardly and inwardly bent ends of said portion cooperating to form adjacent the arch a pocket completely enclosed at its sides and a sole shank stiffener located in said pocket.

1,905,530. ADJUSTING DEVICE FOR PLATE STRAIGHTENING MACHINES. FRITZ UNGERER, Pforzheim, Germany. Filed Jan. 22, 1932, Serial No. 588,426, and in Germany Jan. 31, 1931. 8 Claims. (Cl. 153—54.)



1. A device for adjusting the mutual inclination of rows of straightening rollers of plate straightening machines, comprising in combination with the rows of straightening rollers, a main motor adapted to rotate said straightening rollers, a yoke carrying one of said rows of rollers, and an auxiliary motor adapted to oscillate said yoke and consequently the row of rollers carried by said yoke, whilst said rows of rollers are being rotated by said main motor.

1,905,531. SLICING MACHINE. CORNELIS FRANCISCUS MARIA VAN BERKEL, Wassenaar, Netherlands, assignor to U. S. Slicing Machine Company, La Porte, Ind., a Corporation of Indiana. Filed June 20, 1927, Serial No. 200,245, and in the Netherlands Sept. 10, 1926. 5 Claims. (Cl. 146—103.)



1. A slicing machine comprising a support, a casing adapted to move relatively to said support and guided by means on said support, a knife having a spindle journaled in said casing, a sprocket fastened to said spindle within said casing, a chain drive for said sprocket, a rotary member within said casing and driven by said chain, a pitman operatively connected at one end to said rotary member and at its other end to a member extending through said casing and attached to said support, and means for actuating said chains to rotate said sprocket and said rotary member.

1,905,532. FUNGICIDE. HAROLD P. VANNAN, West Palm Beach, Fla., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Aug. 15, 1929. Serial No. 386,227. 3 Claims. (Cl. 167—14.)

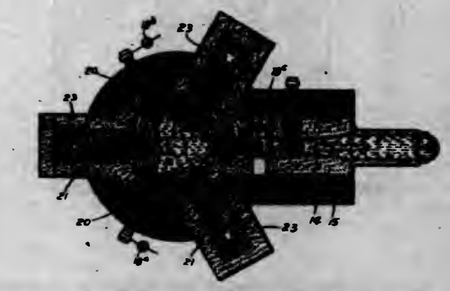
1. A process of making from zinc sulphate and copper sulphate a composition in which basic sulphates of both zinc and copper exist as such, which comprises forming independent solutions of zinc sulphate and copper sulphate, forming an aqueous alkaline medium containing alkaline earth oxide and of an alkalinity to precipitate basic sulphates from both sulphate solutions, adding the zinc sulphate solution to the alkaline medium to precipitate first the zinc basic sulphates, and then adding the copper sulphate solution to precipitate the copper basic sulphate.

1,905,533. FOREHEARTH OF GLASS MELTING FURNACES. HAROLD A. WADMAN, Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed Mar. 1, 1930. Serial No. 432,370. 2 Claims. (Cl. 49—55.)



1. A forehearth for a glass melting furnace comprising a trough adapted to receive glass from the furnace, a second trough adapted to maintain a body of glass in contact with the bottom and side walls of the first trough, means comprising the first trough for dividing the second trough into a plurality of electrically insulated compartments, and means to pass a variably controllable electrical current through the glass contained in each of said compartments, whereby the temperature of the various compartments may be regulated.

1,905,534. APPARATUS FOR AND METHOD OF MAKING GLASS. HAROLD A. WADMAN, West Hartford, Conn., assignor to Hartford-Empire Company, Hartford, Conn., a Corporation of Delaware. Filed July 25, 1931, Serial No. 553,040. Renewed Sept. 9, 1932. 8 Claims. (Cl. 13—6.)



1. In a furnace for making glass and similar substances in which the glass acts as a resistance to a current of electricity, a plurality of electrodes submerged in the glass and located so that the major portion of a current of electricity passing therebetween tends to flow

through the glass adjacent the side walls of the tank, and means for passing batch through said side walls between the electrodes and into the major portion of the current passing therebetween, whereby the zone of greatest current density and of greatest heat is removed from said side walls by the relatively non-conductive batch.

1,905,535. MODIFIER FOR CELLULOSE ACETATE PLASTICS. JAMES F. WALSH, South Orange, and AMERIGO F. CAPRIO, Newark, N. J., assignors to Celluloid Corporation, a Corporation of New Jersey. Filed June 8, 1929. Serial No. 369,519. 1 Claim. (Cl. 106—40.)

A firm, relatively hard composition comprising cellulose acetate, triphenyl phosphate and dibutyl tartrate in the proportion of 100 parts of cellulose acetate, 20 to 25 parts of triphenyl phosphate and 5 to 10 parts of dibutyl tartrate.

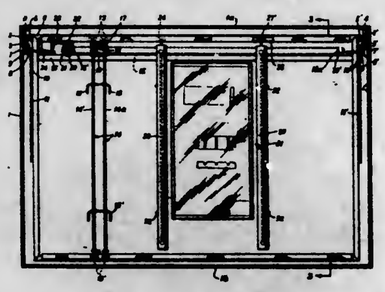
1,905,536. PROCESS FOR THE HYDROLYSIS OF CELLULOSE ACETATE. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,207. 4 Claims. (Cl. 260—102.)

1. In the process for the production of acetone-soluble cellulose acetate the step which comprises hydrolyzing an acetic acid solution of cellulose acetate in the presence of B B' dichlordiethyl ether.

1,905,537. PROCESS FOR THE HYDROLYSIS OF CELLULOSE ACETATE. CHARLES S. WEBBER, Springfield, Mass., and CYRIL J. STAUD, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1929. Serial No. 414,209. 6 Claims. (Cl. 260—102.)

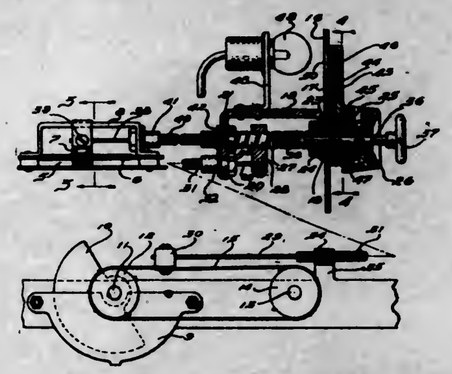
1. In the process for the production of acetone-soluble cellulose acetate, the step which comprises hydrolyzing the cellulose acetate in the presence of 1–4 dioxan and an organic acid at a temperature of approximately 100° C.

1,905,538. APPARATUS FOR ILLUMINATING OBJECTS TO BE REPRODUCED. ELLIS WEISKER, Bronx, N. Y. Filed Aug. 8, 1929. Serial No. 384,445. 6 Claims. (Cl. 240—1.)



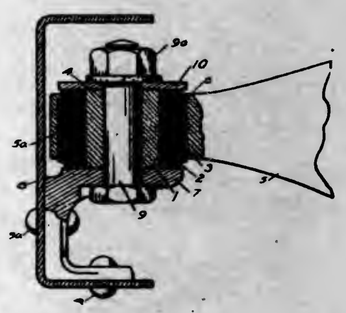
1. In apparatus for illuminating objects to be reproduced, an illuminating element composed of a plurality of illuminating parts, said illuminating parts having coupling edges adapted to be interengaged to form a light-sealed joint therebetween and being capable of joint traversing movement across the object to reproduce the same, said parts being also capable of independent movement to enable independent positioning thereof.

1,905,539. CONTROL APPARATUS FOR RADIO RECEIVING INSTRUMENTS. JAY R. WEBER, Detroit, Mich., assignor to Chrysler Corporation, Detroit, Mich., a Corporation of Delaware. Filed Oct. 1, 1930. Serial No. 485,802. 9 Claims. (Cl. 250—14.)



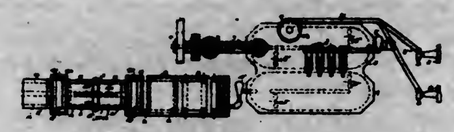
9. A radio receiving set including a casing having a pair of variable instruments therein, control apparatus for said instruments located in said casing, a support spaced from said casing, an operating unit mounted on said support including a rotatable manually operable element and a shiftable manually operable element, the latter element being shiftably mounted on said rotatable element, a flexible cable extending into said casing and connected at one end with the control apparatus of one instrument and at its other end with said shiftable operating element, means on the rotatable element for converting rotary movement thereof to lineal movement, and a flexible cable secured at one end to said means and at its other end to the control apparatus of the other instrument.

1,905,540. MOUNTING. IRVING P. WHITEHOUSE, Erie, Pa., assignor to Hugh C. Lord, Erie, Pa. Filed Mar. 27, 1929. Serial No. 350,846. 9 Claims. (Cl. 248—14.2.)



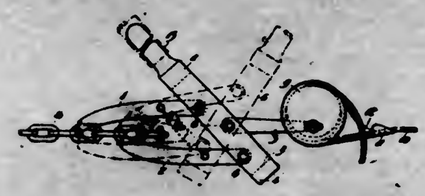
1. In a mounting, the combination of a supported and a supporting member having opposing spaced walls; and a dampening member comprising an uncompressed rubber portion between the walls and normally carrying a major portion of the load of the supported member on the supporting member through shear of the rubber and a rubber portion having initial engagement with one of the members and subjected to compression through said engagement and incident to shock on the supported member.

1,905,541. FIREPROOF WALL BOARD. JOHN A. WEBBER and JOHN B. HARMON, Oswego, N. Y. Filed May 5, 1932. Serial No. 609,424. 8 Claims. (Cl. 92—21.)



1. The hereindescribed process of making wall boards, which resides in conveying vermiculite from a source of supply, supplying a fluid to the vermiculite at its said source, then in mixing the vermiculite and fluid with pulp at a point remote from the said source of supply of the vermiculite and during conveying mixing the vermiculite with said fluid to render same viscous, then in refining the mass and forming same in sheets.

1,905,542. CABLE TIGHTENING AND HOLDING DEVICE FOR LOAD PULLING APPARATUS. ANDERS WIKSTRAND, Mora, Sweden. Filed Dec. 19, 1929, Serial No. 415,288, and in Sweden June 7, 1929. 1 Claim. (Cl. 24—129.)



A cable tightening and holding device embodying a supporting member, a grooved disc journalled eccentrically on said supporting member and having affixed to it a projecting arm whose free end is provided with a cable-engaging-hook lying in the plane of the groove in the disc, for the purpose set forth.

1,905,543. SUPPORTING STRUCTURE FOR THE CASING OF A MOTION PICTURE PROJECTION SCREEN. OTTO WITTEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed May 21, 1931. Serial No. 539,003. 22 Claims. (Cl. 88—24.)



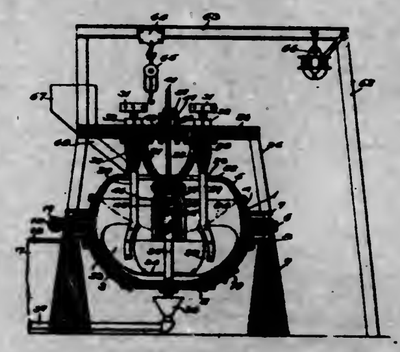
1. The combination with a casing and a plurality of connecting members attached to said casing and each having a portion rotatable about an axis, of a pair of legs mounted on said portion of each connecting member, each leg being rotatable about an axis transverse to said axis for said portion of each connecting member.

1,905,544. ORNAMENTAL DISPLAY DEVICE. CHARLES T. WITTEMEN, Newark, N. J. Filed July 13, 1929. Serial No. 377,963. 2 Claims. (Cl. 40—130.)



1. An ornamental display device, comprising an opaque member having an exposed segmental spherically concave surface, and means concealed outside the boundaries of said surface of said member adjacent one edge thereof to project light rays of different colors simultaneously upon said surface, from said edge thereof, whereby said colors are blended on the surface to produce an ornamental effect by reflection of the light rays from one portion of said surface to other portions thereof.

1,905,545. GRINDING MILL. CHARLES ERB WUENSCH, Joplin, Mo., assignor to Minerals Beneficiation Incorporated, a Corporation of Delaware. Filed Mar. 6, 1931. Serial No. 520,535. 6 Claims. (Cl. 83—9.)

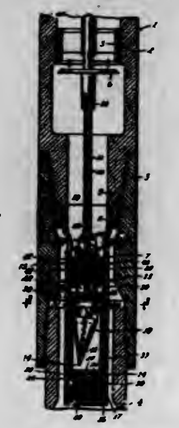


1. In a grinding machine, a bowl mounted for rotation on a vertical axis, the interior of said bowl being of approximately elliptical shape in transverse vertical section, deflecting means within the bowl and disposed to deflect materials in the lower portion of the bowl upwardly and toward the central portion of the bowl during rotation thereof, and a take-off pipe opening into the bowl centrally and remote from the bottom thereof and disposed to take off by gravity fines accumulated at the central portion of the bowl.

1,905,546. INSTRUMENT FOR RECORDING INCLINATION. HOWE B. WESTON, Oakland, Calif., assignor to Standard Oil Company of California, San Francisco, Calif., a Corporation of Delaware. Filed Nov. 3, 1930. Serial No. 492,005. 4 Claims. (Cl. 234—1.)

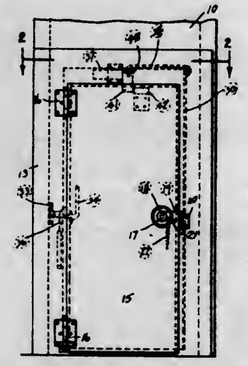
1. In a float valve operated instrument for recording inclination including the combination of a float valve, a

pivoted plumb-bob, a recording disc, and means operatively, connecting said valve and said disc arranged to actuate



said disc to and from recording engagement with said plumb-bob.

1,905,547. PROTECTIVE ENTRANCE TO A BURGLAR-PROOF SAFE. JAMES WOOD, Noblesville, Ind. Filed June 15, 1931. Serial No. 544,412. 7 Claims. (Cl. 20—1.01.)



1. A protective entrance to a burglar-proof safe and the like, including three cooperating doors, the first door being an entrance door, the second door being an intermediate door connected rigidly with the entrance door, and the third door being a rear door, releasable means for holding the rear door closed, and means mounted on the intermediate door for releasing the rear door when the intermediate door is in open position, whereby when the entrance door is open the intermediate door will close the entrance temporarily and the rear door will be locked and after the entrance door is closed the intermediate door will be open and the rear door can then be released and opened.

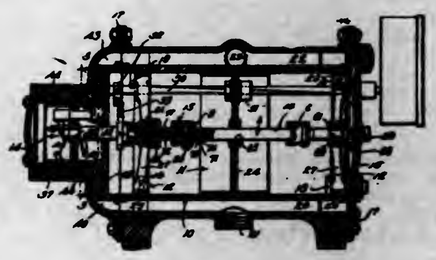
1,905,548. SHEET FEEDING MECHANISM FOR PRINTING MACHINES. KARL ZIMEN, Berlin, Germany, assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 28, 1930, Serial No. 439,064, and in Germany July 2, 1927. 4 Claims. (Cl. 271—38.)

1. A sheet feeding mechanism for printing machines and the like comprising a sheet supporting belt having a stack of sheets thereon, means for imparting an intermittent movement to said belt, means for withdrawing a sheet from the sheets on said belt, means for imparting movement to said sheet withdrawing means, means for connecting said intermittent movement imparting means to said sheet withdrawing means to receive movement therefrom, a detecting member in the path of the sheets moved by said sheet withdrawing means whereby said belt may be operated in different amounts, a normally



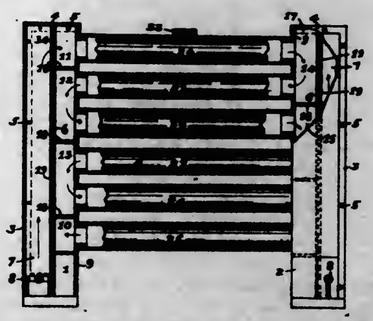
retracted pawl operable from said detecting member for rendering said intermittent movement imparting means inoperative when said detecting member is moved in certain predetermined amounts, and means for interrupting movement of said pawl to limit movement of said intermittent movement imparting means whereby said intermittent movement imparting means will remain operative when said detecting means is not moved or is moved in less than said predetermined amount.

1,905,549. METER. CARLOS J. BASSLER, Alhambra, Calif., assignor to American Liquid Meter Company, Alhambra, Calif., a Corporation of Washington. Filed Dec. 2, 1929. Serial No. 410,991. 16 Claims. (Cl. 73—30.)



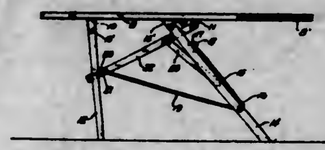
11. A meter valve rod including, a rod, spaced stops on the rod, and thermostatic means carried by the rod for varying the spacing of the stops.

1,905,550. HEATING APPARATUS. WILLIAM A. BOLLINGER, Pittsburgh, Pa. Filed July 8, 1931. Serial No. 549,407. 8 Claims. (Cl. 126—91.)



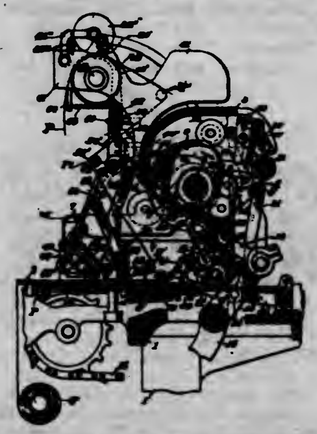
1. In a heating apparatus, an end casing, partition walls mounted in said end casing and dividing the latter into a combustion chamber and a draft chamber, and a radiator manifold providing a continuous passage having its inlet communicably joined with the upper end of said combuston chamber, the outlet of said radiator manifold being communicably joined with the lower end of said draft chamber.

1,905,551. FOLDING IRONING TABLE. JOHN P. DORAU, Portage, Wis. Filed Feb. 13, 1932. Serial No. 592,676. 4 Claims. (Cl. 68—10.)



1. An ironing table, comprising a board member, a pair of legs pivotally connected to the bottom portion of the board member intermediate its ends, a third leg pivotally connected to the bottom portion of the board adjacent one end thereof and remote from the pivotal connections for the pair of legs, a brace member extended between a bottom portion of the board and said third leg, said brace member being pivotally connected at one end to one of the elements between which it is extended and having its free end releasably connectible to the other of said elements, a flexible brace member extended between the pair of legs and the third leg to cause joint movement of all of said legs to and from folded position, and diverging means pivotally connected to the first-mentioned brace member and to the pair of legs and exerting leg spreading forces on the pair of legs.

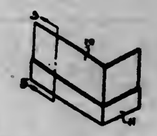
1,905,552. PRINTING MACHINE. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Wilmington, Del., a Corporation of Delaware. Filed Jan. 19, 1928. Serial No. 247,814. 7 Claims. (Cl. 101—65.)



1. In a printing machine, the combination of a reciprocating platen, a platen head comprising two parts, arms projecting from said parts and pivotally connected, yielding means engaging said parts, a cam interposed between said parts, and means for operating said cam to position the platen for printing or for skipping.

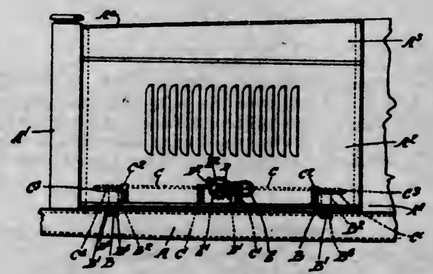
1,905,553. BUILDING MATERIAL. RUDOLPH D. FALK, Peoria, Ill. Filed Aug. 1, 1930. Serial No. 472,218. 8 Claims. (Cl. 20—5.)

1. A corner siding construction composed of a plurality of flexible waterproof building shingles positioned at a building corner in overlapping relationship, each of said shingles being formed in L-shape by bending the shingle in a vertical plane, each shingle comprising at its front surface a lower portion which extends outward of the



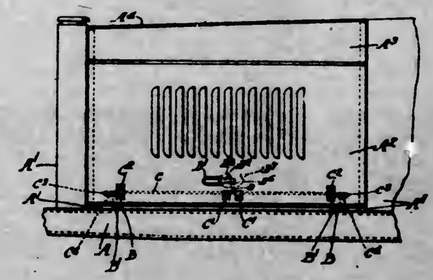
plane of the upper portion to simulate brick, one side thereof being of a dimension to simulate a header and the other as stretcher.

1,905,554. HOOD LATCH. FRANK A. FALK, Stacyville, Iowa, assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1932. Serial No. 584,462. 9 Claims. (Cl. 292—215.)



1. For use with a latching device for the multiple hinge closure of an automobile hood, a rod rotatably mounted upon the inner face of the closure for rotation about a generally horisontal axis, and means for rotating said rod including an exterior handle mounted for rotation about an axis generally perpendicular to the axis of rotation of the rod, an offset of said rod including a portion generally inclined to said rod, and an actuating member associated with and rotatable in unison with said handle, said actuating member including a cam slot continuously penetrated by the offset portion of said rod.

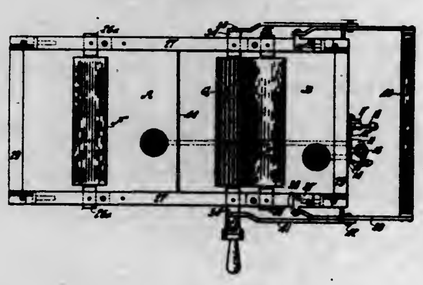
1,905,555. HOOD LATCH. FRANK A. FALK, Stacyville, Iowa, assignor to Chicago Forging & Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Jan. 2, 1932. Serial No. 584,463. 9 Claims. (Cl. 292—215.)



1. For use with a latching device for the multiple hinge closure of an automobile hood, a rod rotatably mounted upon the inner face of the closure for rotation about a generally horisontal axis, and means for rotating said rod including an exterior handle mounted for rotation about an axis generally perpendicular to the axis of rotation of

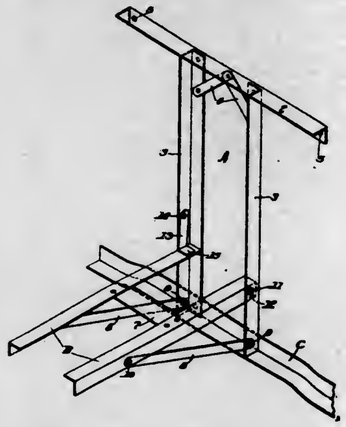
the rod, a closed loop associated with said rod and held against rotation in relation thereto and an actuating member, penetrating said loop, associated with and rotatable in unison with said handle.

1,905,556. WRINGER. ALVIN J. FATHAUER, Cleveland, Ohio. Filed Mar. 19, 1931. Serial No. 523,739. 12 Claims. (Cl. 15—262.)



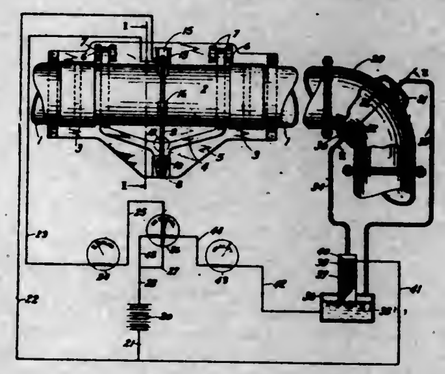
1. A wringer including an open top tank, an end roller near each end of said open top, a laterally movable driving roller intermediate said end rollers, and a toggle mechanism adapted to move said driving roller into and out of mop wringing relations with either one of said end rollers.

1,905,557. SUPPORTING STAND FOR PORCH GLIDERS. SAMUEL M. FISCHER, Pittsburgh, Pa. Filed May 4, 1931. Serial No. 534,757. 1 Claim. (Cl. 5—129.)



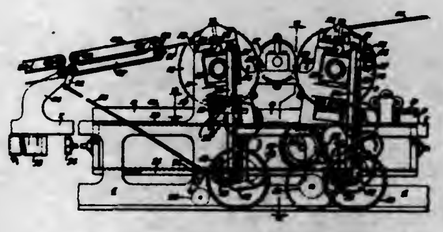
In combination with end framing members having a pair of vertical angle bars providing side flanges and inwardly extending end flanges, each side flange being provided with an inwardly extending button head stud, a pair of longitudinal connecting angle bars having at opposite ends downwardly sloping links pivotally connecting them with the vertical bars, the ends of the longitudinal bars having inclined slots in the side flanges for engaging the studs, a locking shoe of sheet metal pivoted to each upright having an angularly bent terminal having a lower face at an angle to the horizontal upper face of the longitudinal bar and adapted to engage by its rear edge on inward movement the slotted end of each longitudinal bar with increasing force to press it into engagement with the stud and against the inner face of the end flange of the vertical angle bar.

1,905,558. MEASURING DEVICE. LEONARD FOOTE, Pedro Miguel, Canal Zone. Filed Sept. 14, 1928. Serial No. 306,080. 5 Claims. (Cl. 73—167.)



1. Measuring apparatus comprising a conduit including a movable section and relatively stationary adjacent sections, flexible joints connecting said sections, a movable supporting member bearing said movable section, a counterpoise for said latter section and the material passing therethrough, said counterpoise being connected to said supporting member, an indicator, means connecting the indicator to the supporting member, and adjustable means associated with said member for varying the indication of said indicator to compensate for the specific gravity of the material passing through the conduit.

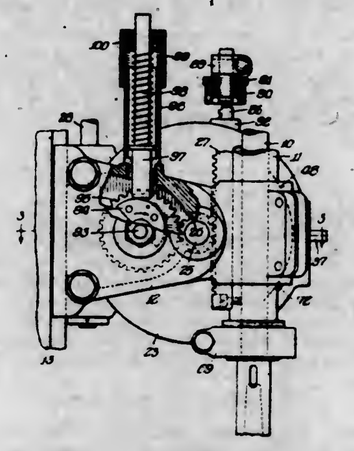
1,905,559. PRINTING, CUTTING, AND SCORING PRESS. GEORGE F. FORD, Hollywood, and WALTER PITTMAN, Huntington Park, Calif., assignors to Fibreboard Products Inc., San Francisco, Calif., a Corporation of Delaware. Filed Nov. 18, 1929. Serial No. 407,807. 7 Claims. (Cl. 101—250.)



1. In a press, the combination with a type carrying bed and a cylinder for impressing the material to be printed against the type, of a rule die secured to said bed, a second cylinder for impressing the material against said die, means on each of said cylinders for holding a sheet of material and means for transferring the material from said first cylinder to said second cylinder.

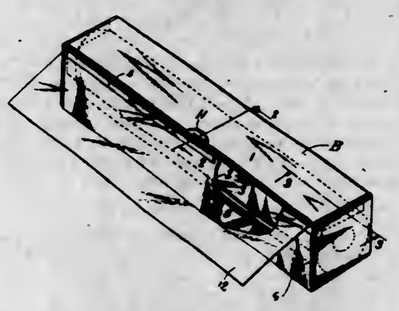
1,905,560. DRILLING MACHINE. JOSEPH FRIEDL, Covington, Ky., assignor to The Avey Drilling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Original application filed Mar. 20, 1924, Serial No. 700,525. Divided and this application filed June 23, 1930. Serial No. 462,974. 7 Claims. (Cl. 77—36.)

1. In a drill machine, the combination of a drill spindle, a power feed and a counterbalance for effecting the working and return strokes respectively of the spindle, and oscillating cam geared to said spindle, and an adjustably



spring-pressed plunger constantly engaging and cooperating with said cam to control the return movement of the spindle.

1,905,561. DISPENSING CARTON. ALVA FLINT GLUCK, Minerva, Ohio, assignor to The Coated Paper Products Company, Minerva, Ohio, a Corporation of Ohio. Filed Nov. 13, 1929. Serial No. 406,747. 3 Claims. (Cl. 206—58.)



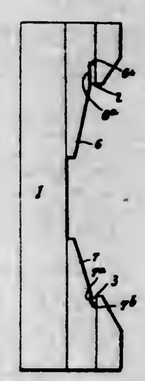
1. A dispensing carton for rolls of wax paper and the like made of a single piece of material folded into box form in which the end walls are formed of the parts constituting integral extensions of the front, rear and bottom walls, the said front wall having a metallic strip crimped over and secured to its upper edge and said strip having integral extensions crimped over and secured to the upper edge of the extending parts of the front wall which constitute a portion of the end wall, said strip constituting in its association with the front wall a cutting edge for paper drawn from the container and being turned at right angles at the ends of the front wall and extending rearwardly with the said extensions of the front wall in the formation of the end wall, the said extensions of the front and rear walls of the carton lying adjacent in the end walls, and the extending portion of the bottom wall of the carton extending upwardly from the bottom of the carton overlying the extensions of the front and rear walls in the end walls and having a portion folded over the top of the end wall and the said extensions of metallic strip and secured to the inner side of the end wall and closing and gripping the inwardly extending portions of the metallic strip and securing the front and rear walls in place and maintaining the said metallic strip in rigid and fixed relation to the end wall.

1,905,562. PAPER DISPENSING DEVICE. FRED CLARKE GLUCK, Minerva, Ohio, assignor to The Coated Paper Products Company, Minerva, Ohio, a Corporation of Ohio. Filed Oct. 2, 1930. Serial No. 485,924. 7 Claims. (Cl. 242—55.5.)



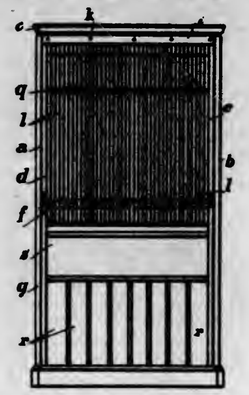
1. A dispensing cabinet comprising a front wall having opposed end walls integral therewith, means for mounting the cabinet on a support, means associated with said end walls for supporting a roll of sheet material, and a cutting edge at the lower side of said front wall for severing sheet material from the roll, the bottom of the cabinet being substantially unobstructed to permit access to the roll.

1,905,563. REVERSIBLE ATTRACTION SIGN. CHARLES W. HATKE, Denver, Colo. Filed May 27, 1932. Serial No. 618,881. 1 Claim. (Cl. 40—140.)



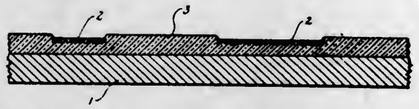
In a sign, in combination, a backboard, parallel upper and lower members attached to and relatively spaced apart upon the backboard and strips on the front faces of said members, said members being cut away behind said strips whereby to form upper and lower opposed grooves spaced forward from said backboard and adapted to carry character-bearing plates, the upper groove being deeper than the lower groove, the distance between the bottoms of said grooves being greater than the length of the character-bearing plates, but the distance between the lower edge of said upper strip and the bottom of the lower groove being less than the length of said plates whereby said plates may be readily placed in or removed from said grooves and whereby sufficient space is provided between the backboard and said plates, when carried in said grooves, to permit the gripping of the edges of said plates by the fingers of an operator.

1,905,564. NEWSPAPER STAND. MAX KLIEM, Leipsig, Germany. Filed May 23, 1931, Serial No. 539,616, and in Germany Sept. 3, 1930. 3 Claims. (Cl. 211—45.)



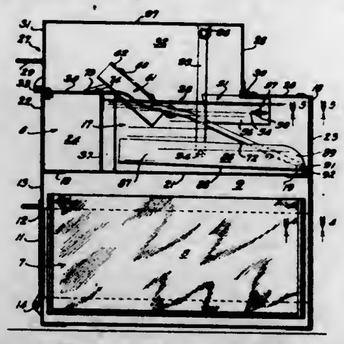
1. A newspaper stand comprising a cabinet having an open front, a horizontal channel rail at the top of the cabinet, a horizontal ledge projecting from the median part of the cabinet beyond the vertical plane of said rail and overhanging the lower part of the cabinet, the side wall portions of the cabinet between said rail and said ledge having straight, inclined edges situated in a plane which covers the rail as well as the ledge.

1,905,565. PRODUCTION OF SIGNS, DECORATIONS, AND THE LIKE. HOWARD B. LIND, Toledo, Ohio, assignor to The Toledo Porcelain Enamel Products Company, Toledo, Ohio, a Corporation of Ohio. Filed Oct. 22, 1929. Serial No. 401,615. 2 Claims. (Cl. 41—26.)



1. The method of producing designs upon porcelain enamel which consists in taking a pasty composition of mineral coloring matter and an oily carrier containing no frit capable of causing a change in the depth of porcelain enamel to which it is applied, applying the said composition to a layer of porcelain enamel material upon a metallic object, and subjecting the enamel so treated to fusing.

1,905,566. STERILIZER. JESS G. MOORE, Los Angeles, Calif. Filed Oct. 1, 1931. Serial No. 566,283. 2 Claims. (Cl. 167—3.)



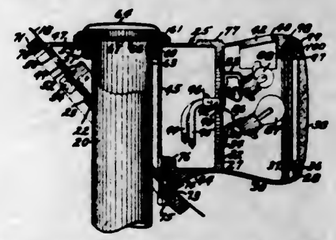
1. In a steriliser of the class described, a reservoir adapted to contain a sterilising fluid, a cover hinged thereto, and a holder comprising a basket structure hinged adjacent one end to said reservoir below the level of the fluid therein, and a link connected at one end to said basket structure and at the other end to said cover, whereby the other end of said basket structure is raised above said fluid level when said cover is opened.

1,905,567. FLOATING BUG OR LURE. CHARLES T. PFLUEGER, Akron, Ohio, assignor to The Enterprise Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed Aug. 26, 1927. Serial No. 215,649. 1 Claim. (Cl. 43—42.)



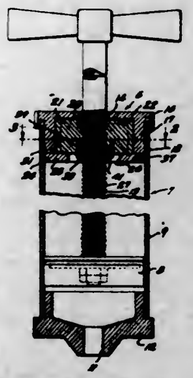
A fish lure comprising a light buoyant body and a wire passing through the body from end to end, a hook attached to the wire in position to trail behind the body with its point directed upwardly, and a stop on the wire to flexibly maintain the hook in substantially horizontal position.

1,905,568. TAIL LAMP FIXTURE. WILLIAM A. RADKE, South Bend, Ind., assignor to The Studebaker Corporation, South Bend, Ind., a Corporation of New Jersey. Filed Sept. 19, 1932. Serial No. 633,805. 9 Claims. (Cl. 240—8.3.)



1. In an automotive vehicle, the combination of a rear fender having an aperture therein, a gasoline tank filler spout extending through said aperture from a point below said fender to a point above the same, and a tail lamp fixture secured to said fender surrounding said aperture adapted to support and conceal the portion of said gasoline tank filler spout extending above said fender.

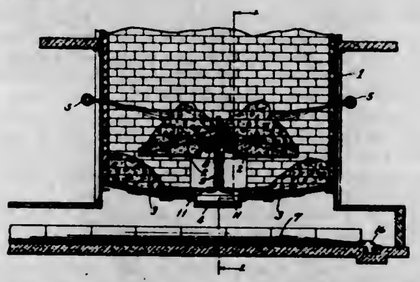
1,905,569. GREASE GUN. RENÉ RAPELLIN, San Gabriel, Calif. Filed Dec. 9, 1931. Serial No. 579,882. 2 Claims. (Cl. 74—40.)



1. In a device of the class described, a tubular barrel, a closure cap mounted adjacent one end of said barrel and rotatable with respect thereto, a feed screw extending

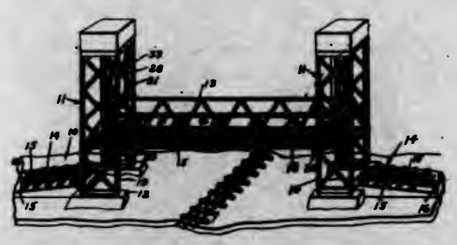
slidably and rotatably through said cap, a pair of spaced guides rigid with said barrel and having opposed faces parallel to each other, a pair of threaded members slidable between said guides, an annular flange carried by said cap and having a pair of cams on its inner face engaging said threaded members, each cam extending a distance of half a circle, said cam surfaces being adapted to advance said members to said screw when said cap is turned half a revolution in one direction, and spring means for moving said members away from said screw when said cap is turned a half revolution in the other direction.

1,905,570. NOZZLE OSCILLATING MEANS. JACOB ROMM, Philadelphia, Pa., assignor to The Allen-Sherman-Hoff Company, a Corporation of Pennsylvania. Filed May 31, 1929. Serial No. 367,281. 6 Claims. (Cl. 302—15.)



1. Ash disposal means including walls spaced apart from each other for retaining ash, apparatus comprising in combination a sluiceway disposed in position to receive ash removed from the walls, a nozzle assembly including a plurality of pivotally suspended pipes having nozzles disposed between and above the tops of the said walls, means connecting said pipes together for conjoint movement, and guided means joined to the said pipes for swinging said pipes in unison about their pivots to direct water progressively against the ash on both walls.

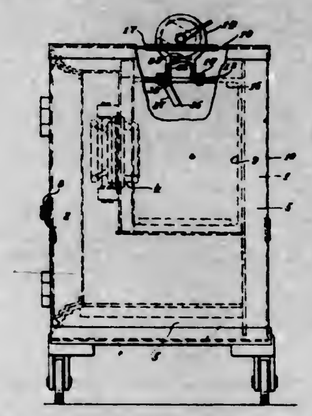
1,905,571. TOY RAILWAY SYSTEM. RONALD G. SMITH, Fairfield, Conn. Filed Dec. 24, 1930. Serial No. 504,519. 18 Claims. (Cl. 104—129.)



1. A toy railway bridge comprising as a unitary portable structure: piers; approaches; and a span movably mounted to permit the passage of movable objects beneath or upon it.

1,905,572. CHEST DEPOSITORY. CHARLES F. SIOMMO, York, Pa., assignor to York Safe & Lock Company, York, Pa., a Corporation of Delaware. Filed June 13, 1931. Serial No. 544,150. 5 Claims. (Cl. 109—1.)

1. The combination with a fireproof safe and burglar proof chest of a depository having a discharge passage leading downwardly into the chest with a depository casing at the top of the passage having a discharge opening leading to said passage, the casing having enclosing and supporting means for a rotary pocket member and an admission opening for access to the pocket, a rotary pocket member in the said casing, having a pocket opening adapted to register with the admission opening and the discharge opening in turn, the casing enclosure including a wall separating the admission opening from the discharge opening, the same being of a dimension in the direction of



rotation of the pocket greater than the corresponding dimension of the pocket, the discharge passage from the depository having a baffle mounted to move from open to closed position as to said passage, and a float connected thereto to operate the baffle to block the passage if the chest is flooded with water.

1,905,573. OIL WELL SURVEYING INSTRUMENT. WAYNE M. SMITH and KENNETH W. HALBY, Fellows, Calif. Filed Mar. 29, 1932. Serial No. 601,814. 5 Claims. (Cl. 234—5.3.)

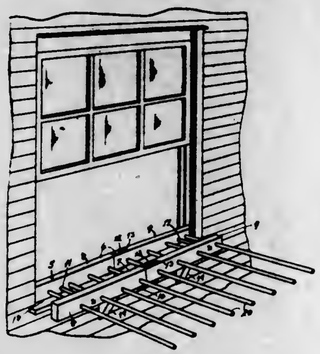


1. In an instrument for measuring the angular deflection of bores, a frame to be lowered into the bore, means on said frame movable through a great arc relative to said frame for recording great angles of deflection, a second means movable through a lesser arc relative to said frame, and cooperating with said first named means for recording lesser angles of deflection.

1,905,574. WINDOW CLOTHES RACK. CARRIE STERNBERG, Philadelphia, Pa. Filed Oct. 19, 1932. Serial No. 638,479. 2 Claims. (Cl. 211—104.)

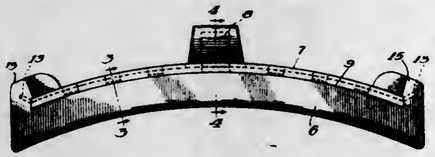
1. In a window clothes rack, an inner rail consisting of two sections hinged together and adapted to be mount-

ed in a window casing with the ends projecting into opposite sash guideways, said rail having a series of holes in both of the sections in longitudinally spaced relation, compressible members on the ends of said rail, an outer rail consisting of two sections hinged together and having



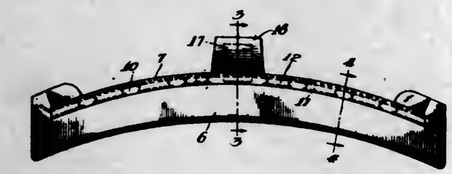
a series of longitudinally spaced holes throughout both sections of said rail, cross bars on the ends of which are mounted said rails for holding the latter in spaced relation with the holes in both rails in alignment, and rods removably and slidably mounted in the holes in said rails, said rods having heads on their inner ends.

1,905,575. BRAKE SHOE. WALLACE B. SUTHERLAND, Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 9, 1931. Serial No. 536,147. 4 Claims. (Cl. 188—258.)



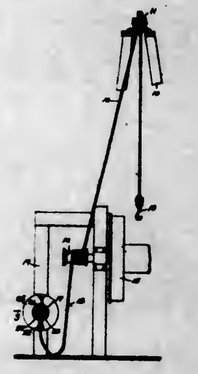
1. A brake shoe comprising a body, a back on the body and having side edge flanges enclosing corners of the body, downwardly inclined and transversely extending tongues on the back adjacent said flanges and embedded in the body, and lugs on the body, and upturned projections with dovetail recesses therebetween embedded in the end lugs.

1,905,576. BRAKE SHOE. WALLACE B. SUTHERLAND, Suffern, N. Y., assignor to The American Brake Shoe and Foundry Company, Wilmington, Del., a Corporation of Delaware. Filed May 18, 1931. Serial No. 538,162. 1 Claim. (Cl. 188—258.)



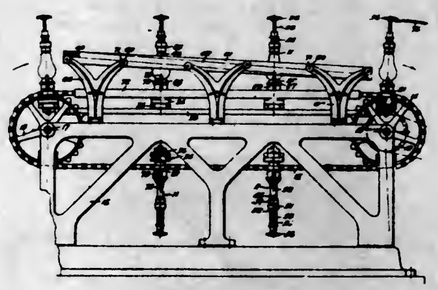
A brake shoe comprising a body, a reenforce back on the body and having side flanges enclosing adjacent corners of the body, an auxiliary back secured to the inner side of the reenforce back and having downwardly and outwardly inclined side flanges embedded in the body, a strap lug engaged with said backs, said auxiliary back having elongated recesses in its side edges and said reenforce back having complementary openings to receive parts of the strap lug and to permit the body metal to flow therethrough during the casing operation to form reenforce projections at the sides of said parts of the strap lug.

1,905,577. CAT LINE SPOOL. BERT TRAVIS, Santa Fe Springs, Calif. Filed Nov. 3, 1930. Serial No. 593,004. 2 Claims. (Cl. 254—176.)



1. In combination with a well drilling rig having a cat line and a cat head, a spool on which the cat line may be wound after being removed from the cat head, and means on the spool rotatable therewith adapted to releasably hold the cat line whereby the spool may be rotated without winding up line on the spool to take the twist out of the cat line.

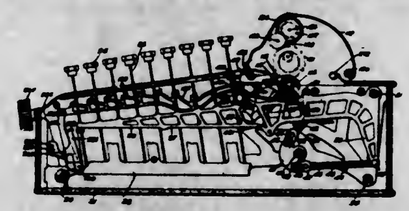
1,905,578. FRUIT PEELER. JOHN T. TUCKER, Berkeley, Calif. Filed Mar. 29, 1930. Serial No. 439,956. 18 Claims. (Cl. 146—48.)



1. A fruit peeler comprising means for advancing a fruit, means for rotating said fruit during the advancement thereof, and a blade having successive portions adapted to operate on successive superficial portions of said fruit during the advancement thereof.

1,905,579. CALCULATING MACHINE. JOSEPH A. V. TURCK, Wilmette, Ill., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 30, 1929. Serial No. 359,262. 25 Claims. (Cl. 235—82.)

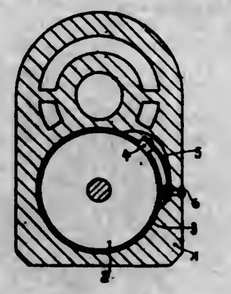
4. A combined key-driven and key-set operated calculating machine having a board of keys for driving and for setting actuating mechanism in said machine and having keyboard locking devices for locking the keyboard against accumulative manipulation, in combination: devices adapted for compelling full key-value-stroke of the actuating mechanism under both key-driven and key-set operation and adapted for setting said keyboard locking devices in event of a partial down key-stroke, under key-driven operation, to lock the rest of the keyboard against manipulation; and means for clearing the keyboard of said keyboard locking devices at the will of an operator.



12. In a calculating machine comprising ordinal columns of depressible keys; ordinal actuators set in motion by said keys; a digital stop device for each of said ordinal actuators for digitally controlling their degree of actuation, according to the key depressed, said stop devices being connected to said actuators and movable thereby into contact with a depressed key to effect the digital control; in combination: full stroke mechanisms for each of said actuators, said mechanisms being connected to and movable with their respective actuators to prevent their return until predetermined digital actuation of said actuators has been completed by said keys; said full stroke mechanisms being adapted to be cleared by limited movement of the actuators relative to said digital stop devices at the completion of each down key-stroke so as to allow the return of the actuators to normal position; and also being adapted to act on the return strokes of said actuators to compel a complete return of said actuators before another down key-stroke thereon may be effected.

24. In a calculating machine comprising ordinal accumulator mechanism, ordinal actuators therefor, key set means for said actuators, ordinal keys for said key set means, and means for operating said actuators when set by said keys, the combination of partial key-value stroke locking means controlled by said actuators and adapted for compelling a full digital actuation of the actuators for the value of the keys set therefor.

1,905,580. DYNAMO-ELECTRIC IGNITION APPARATUS. FRITZ ALLENDORFF, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Sept. 15, 1930, Serial No. 482,116, and in Germany Oct. 7, 1929. 2 Claims. (Cl. 171—209.)



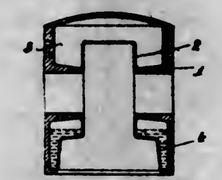
1. Grounding means for an ignition magneto comprising a slip ring carried by the armature of said magneto, a brush cooperating with said ring, and a combined support and grounding element for said brush comprising a spring of blade form in a single arc of curvature approximating the curvature of the slip ring secured at one end to the frame of said magneto and alone supporting said brush from said magneto frame in resilient engagement with said slip ring.

1,905,581. WIRE BALE-TIE. GEORGE H. GAUS, Washington, D. C., dedicated to the free use of the Government and the People. Filed Dec. 16, 1932. Serial No. 647,004. 2 Claims. (Cl. 24—28.) (Granted under the act of Mar. 3, 1883, as amended Apr. 30, 1928; 370 O. G. 757.)



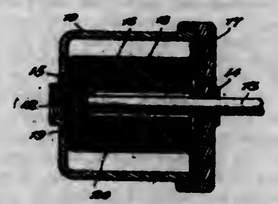
1. A bale-tie, comprising a metallic rectangular sleeve, having parallel tapering surfaces, semicircular slots cut at opposite ends of said sleeve, and a longitudinal slot, having parallel sides, bisecting said sleeve.

1,905,582. PISTON WITH COOLING EFFECT. ANTON GAZDA, Vienna, Austria. Filed Apr. 23, 1929, Serial No. 357,472, and in Austria Apr. 23, 1928. 2 Claims. (Cl. 123—176.)



1. A piston comprising a body portion, an insertion tightly fitted in said body portion providing a closed hollow space bounded by the interior surface of the body portion and the adjacent surface of the insertion, and a small quantity of liquefiable salt in said hollow space and having a boiling temperature above the highest temperature occurring in the engine.

1,905,583. FLEXIBLE CORRUGATED TUBULAR WALL. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed May 16, 1927. Serial No. 191,826. 7 Claims. (Cl. 137—156.5.)



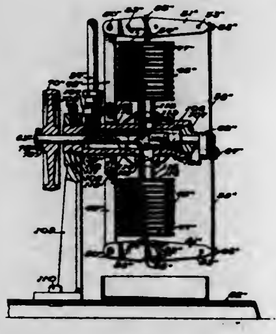
1. An axially expansible and collapsible, corrugated metallic bellows having relatively deep, flexible corrugations and provided with a casing of elastic material which substantially fills like corrugations and which is deformable but substantially incompressible, and means cooperating with said elastic material to limit the extent of its deformation in the direction of the radii of said bellows and thereby limit the collapse of said bellows by limiting the extent to which said elastic material may be extruded from said corrugations as a result of the squeezing action thereon of the lateral walls of said corrugations.

1,905,584. METHOD OF MAKING THIN WALLED TUBES. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Syphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Feb. 21, 1930. Serial No. 430,453. 10 Claims. (Cl. 29—156.)

1. In the manufacture of thin walled tubes for highly-flexible, deeply-corrugated tubular metal walls, the method

which includes forming a tube with a non-homogeneous seam including a metal different from that of the tube, alternately subjecting the tube to a plurality of drawing operations during which the tube wall is reduced in cross section and a plurality of operations during which the tube is subjected to a sufficient temperature for a sufficient time to permit a substantial grain growth therein and continuing said alternate operations until under microscopic examination said seam has disappeared.

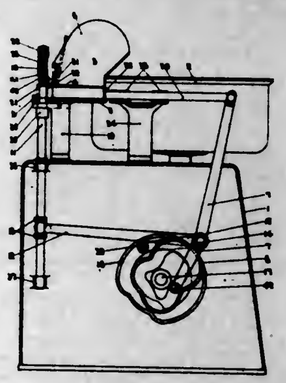
1,905,585. STEAM ENGINE. JEAN V. GIESLER, Knoxville, Tenn., assignor to The Fulton Sylphon Company, Knoxville, Tenn., a Corporation of Delaware. Filed Mar. 19, 1930. Serial No. 437,173. 2 Claims. (Cl. 121—48.)



1. In a toy engine of the type embodying a tubular support, a plurality of collapsible and expansible metallic vessels each having a movable end wall and a stationary end wall and mounted at intervals around the periphery of said support, means for admitting and exhausting a motive fluid to and from said vessels, and a crankshaft to be driven from said movable end walls, a device for transmitting the movement of each of said movable end walls to said crankshaft comprising a lever formed of sheet metal elements secured together and spread apart to form a bifurcated end, said lever being adapted to receive the thrust from said movable end wall, a lever support having a longitudinal portion and an arcuate portion, the latter portion having a curved surface conforming to a portion of the periphery of said tubular support and the longitudinal portion being pivotally secured between the furcations of the end of said lever, and a link connected at one end to the opposite end of said lever by the passage of the lever end through an opening in said link and the spreading of said lever elements, the other end of said link being adapted to be connected with said crank shaft, said lever, support and link being permanently secured together for installation as a unit after assembly of said vessels and tubular support, the arcuate portions of said lever supports surrounding said tubular support and being removably secured to one another when in installed position.

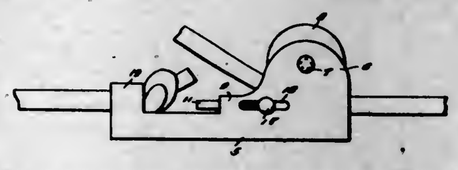
1,905,586. MACHINE FOR THE SEPARATION AND FORMATION OF THE FILLER OF CIGAR BUNCHES. ERIK GRANSTEDT, Stockholm, Sweden, assignor to Aktiebolaget Formator, Stockholm, Sweden, a Joint-Stock Company of Sweden. Filed Mar. 8, 1928, Serial No. 260,112, and in Germany Mar. 17, 1927. 2 Claims. (Cl. 131—5.)

1. A machine for making cigar fillers, comprising a press mold having a horisontal channel formed therein, the width of which is equal to the length of the desired strings, a plunger mounted above the one end of said press mold, a head wall closing the end of the channel adjacent the plunger, a piston movable in the channel toward the head wall to press the filler material between it and said head wall, a door at the top of said channel, said door engaging the upper side of the piston to retain the door in its closed position during the working stroke



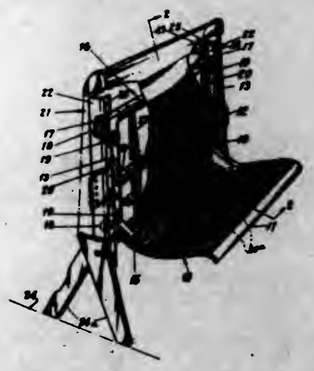
of the piston, and means whereby the working stroke of said piston is interrupted at predetermined intervals and whereby the piston makes short return movements on said interruptions.

1,905,587. FASTENING DEVICE. JOHN J. HAFER, Sr., Stratford, Conn., and MATHIAS HAFER, Sr., College Point, N. Y. Filed Oct. 27, 1932. Serial No. 639,884. 5 Claims. (Cl. 24—126.)



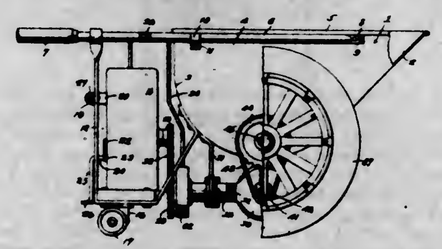
1. A device of the class described comprising a body, a pulley, means for rotatably mounting the pulley on the body, a wedge shaped jaw slidable on the body, and means normally urging the jaw to a position between the body and the pulley.

1,905,588. VEHICLE SEAT. LEONARD B. HARRIS, New York, N. Y. Filed Oct. 22, 1930. Serial No. 490,429. 2 Claims. (Cl. 155—53.)



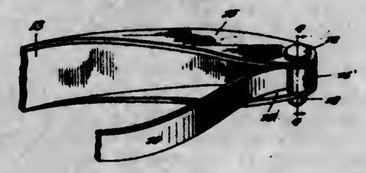
1. In a multiple-passenger bench seat structure, the combination of an elongated unitary seat and back rest frame slidably housed in a stationary frame for vertical movement, said stationary frame being designed to be fastened to a floor and comprising two spaced channels positioned with the flange edges facing each other and providing guide tracks on the inner faces and on the edges of the flanges, rollers fixedly mounted at the corners of said back rest frame and disposed in rolling engagement with flange edges of said channels and further rollers fixedly mounted at the corners of said back rest frame and disposed between the inner faces of the flanges of said channels, said further rollers being of a diameter substantially equal to the distance between the said inner faces, said edge-contacting rollers being in right-angular relation with said further rollers, said back rest frame being guided in its vertical movement in the stationary frame on all sides.

1,905,589. MOTOR BARROW. JOE HOFFMAN and HUGO HOFFMAN, Two Rivers, Wis. Filed Aug. 24, 1931. Serial No. 559,074. 2 Claims. (Cl. 180—29.)



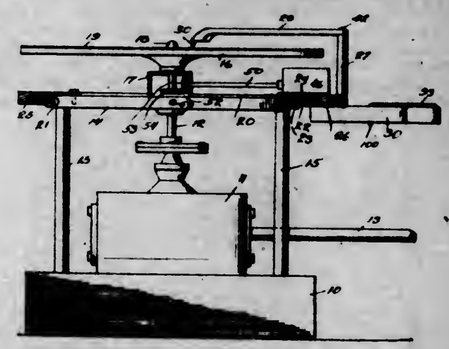
2. A wheel barrow comprising a load-carrying body, a single pair of ground wheels supported for rotation at the sides of the body and located intermediate the front and rear ends of the body, a differential disposed underneath the body in substantially vertical alinement with the center of rotation of the ground wheels, the differential including transverse shafts and a rearwardly extending housing, means for suspending the differential from the body, means extended upwardly from the transverse shafts of the differential for operatively connecting those shafts with the ground wheels, a longitudinal shaft journaled in the housing and operatively connected with the transverse shafts of the differential, a motor, means for supporting the motor on the barrow in a position behind the body, a driving connection between the motor and the longitudinal shaft, a brake mechanism carried by the housing and acting on the longitudinal shaft, the brake mechanism being located between the motor and the body, rearwardly extended handles carried by the body, means for operating the brake mechanism, and means for controlling the motor, both of said means being extended backwardly upon the handles within reach of a person holding the handles.

1,905,590. AUTOMOBILE BUMPER. WALTER V. ISGRIG, Milwaukee, Wis. Filed Apr. 5, 1932. Serial No. 603,824. 4 Claims. (Cl. 293—55.)



1. A bumper bar terminally bent along an oblique line at the longitudinal edge to provide a flange tapering from its extremity toward the center of the bumper bar, the extreme end of the bar being reversely bent to provide a tongue at the extremity of the flange, said flange being provided with a bolt opening adjacent said tongue.

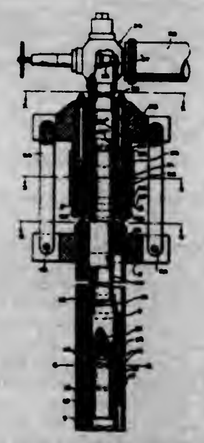
1,905,591. SYNCHRONIZER. OLIVER A. JONES and JAMES A. STRUTHERS, Bacchus, Utah. Filed July 12, 1930. Serial No. 467,580. 9 Claims. (Cl. 274—9.)



2. An adjusting device for reproducing instruments comprising a fixed table, a ring mounted for revolution on the periphery of the fixed table, a turntable, means for rotating the turntable, a phonograph pick-up arm mounted on the ring, the ring being adapted to be revolved for advancing or retarding the usual needle of the pick-up arm in a groove of a record carried by the turntable, means for supporting the ring at the periphery of the fixed table, and means for releasably holding the ring against rotation relative to the fixed table.

3. A synchronizing device for sound recording and reproducing instruments comprising a fixed support, a ring mounted for rotation on the support, a shaft for revolving a phonographic record, means for revolving the shaft, a pick-up arm mounted on the ring and provided with a stylus engaging a groove of the record, an indicating needle connected to the arm and moved through a definite arc by the arm by reason of the stylus moving across the record in the groove of said record, a complementary indicating needle, means operatively connecting the complementary needle with the shaft for causing the second indicating needle to move in synchronism with the first indicating needle.

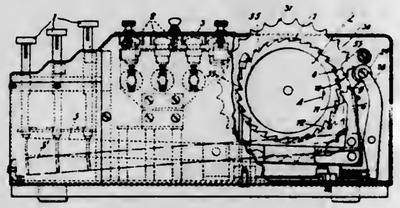
1,905,592. CONTROL DEVICE FOR WELLS. DONALD R. KNOWLTON and WILBUR J. CRITES, Bartlesville, Okla., assignors to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed Jan. 30, 1932. Serial No. 589,952. 10 Claims. (Cl. 166—15.)



1. The combination in a well having a casing and tubing, of a plurality of adjustable beans for controlling

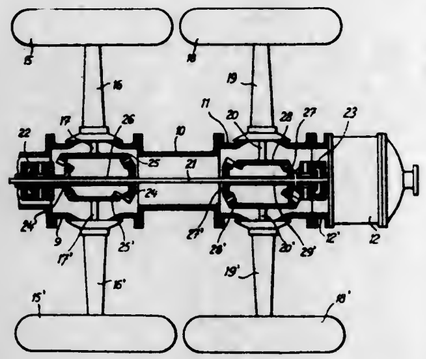
the flow of fluid through the tubing, one of said beans being submerged and the other being positioned at the top of the tubing, and means at the top of the well for adjusting both beans.

1,905,593. CODING MACHINE. WILLI KOHN, Berlin-Friedenau, Germany. Filed Nov. 12, 1929, Serial No. 406,695, and in Germany Nov. 16, 1928. 5 Claims. (Cl. 35—13.)



1. An electrical coding device comprising coding cylinders containing electric conductors and electrical contacts for passing the electric current through the coding device for the purpose of exchanging characters, a gear connected with each coding cylinder, means for rotating the coding cylinders, character keys operating the rotating means for the coding cylinders, manually operable character rings adapted to be operated with respect to the coding cylinders, means for fixing the character rings on the coding cylinders, means for rotating at predetermined periods each coding cylinder from the preceding one, and a plurality of teeth for the rotating means connected with the character rings to enable a frequent rotation of the adjacent cylinder.

1,905,594. POWER-DRIVEN VEHICLE. HANS LEDWINKA, Koprivnice, Czechoslovakia. Filed Jan. 16, 1930, Serial No. 421,281, and in Germany Jan. 23, 1929. 6 Claims. (Cl. 180—22.)



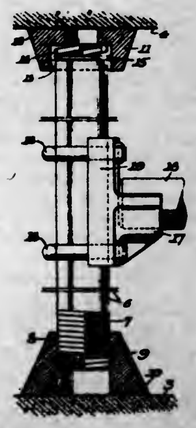
1. A motor driven vehicle comprising driving wheels, an engine, electrical and mechanical power transmission devices between the engine and the driving wheels, the electrical transmission device including a generator driven by the engine and an electric motor operated by the generator, said electrical and mechanical power transmission devices including a shaft driven by the electric motor, a hollow shaft mounted on the first mentioned shaft, a gear wheel carried by the hollow shaft, means connecting the gear wheel with one of the driving wheels, a second gear wheel freely rotatable on the hollow shaft and means connecting the second gear wheel with the other drive wheel and a differential gear between the electric motor driven shaft and said gear wheels, and a tubular carrier arranged in the central longitudinal plane of the vehicle and constituting the chassis frame, said tubular carrier embracing the electric motor, generator and said shaft.

1,905,595. INTERCHANGEABLE PORCELAIN ROOT FACING. ARTHUR S. LEVY, Birmingham, Ala., assignor, by mesne assignments, to Dixie Dental Manufacturing Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 28, 1922. Serial No. 584,729. 10 Claims. (Cl. 32—9.)



4. A tooth which includes a root extension and a crown portion, the crown portion provided with an inclined surface extending labio-occlusally from the lingual side, the front side being a greater distance than the rear side from the gingival end of the tooth; a metal backing having a surface to fit said inclined surface; said crown portion and backing having retaining means disposed in the direction of the inclined surface and engaged by a relative sliding movement of the inclined surfaces of the crown portion and the backing, whereby the root extension can be withdrawn from the root socket by an outward movement in the direction of said inclined surface.

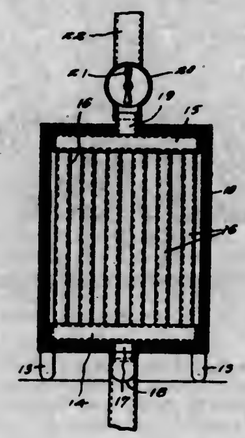
1,905,596. STANCHION. LLOYD L. LEWIS, Wollaston, Mass. Filed Apr. 6, 1931. Serial No. 528,173. 2 Claims. (Cl. 137—75.)



1. A stanchion for supporting pipe lines between vertically spaced surfaces comprising a pair of horizontally spaced vertically disposed standards, each having an end retaining member at each end for frictionally engaging the vertically spaced surfaces, a screw connection between one end of each standard and its corresponding retaining member for extending or retracting the length of the standard to adjust the frictional engagement with the vertically spaced surfaces, a spring between the opposite end of the standard and retaining member to maintain the frictional engagement at approximately a predetermined

degree of pressure, a retainer bracket attached to each standard intermediate its ends and a horizontally disposed pipe supporting rod having its ends supported in said retainer brackets.

1,905,597. REFRIGERATOR. JOSEPH H. LONG, Cleveland, Ohio. Filed May 10, 1932. Serial No. 610,468. 4 Claims. (Cl. 257—22.)



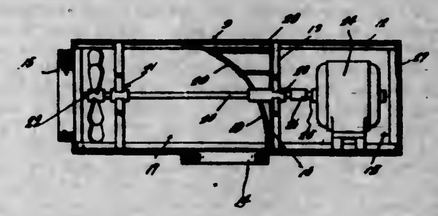
2. A refrigerator comprising an insulated box, an upper and a lower manifold in the box, a plurality of parallel cooling pipes mounted within the box and connected to said manifolds, nipples carried by each manifold and extending through the box, an intake pipe connected to one of said nipples and having the opposite end thereof disposed in a position to receive cool air, and means connected to the other nipple to draw the cool air through said intake pipe and said cooling pipes.

1,905,598. SIMULTANEOUS PRODUCTION OF CONDENSED CARBON DIOXIDE AND SLOW SETTING CEMENT. CHAUNCEY C. LOOMIS, Lenox, Mass., and ALEXANDER DONALD MACDONALD, New York, N. Y., assignors, by mesne assignments, to New England Lime Company, Pittsfield, Mass., a Corporation of Delaware. Filed June 5, 1929. Serial No. 368,717. 2 Claims. (Cl. 23—150.)

1. The method of producing carbonic acid gas and slow setting calcium sulphate cement from limestone and sulphuric acid solution which comprises finely crushing limestone, bringing the finely crushed limestone and the sulphuric acid solution into intimate contact with each other, the limestone being employed in at least sufficient amount to neutralize the sulphuric acid, maintaining this intimate contact with exclusion of air until the chemical reaction between the limestone and sulphuric acid is substantially complete and the sulphuric acid completely neutralized and separating the carbonic acid gas from the slow setting calcium sulphate cement, the initial concentration of the sulphuric acid solution being limited to a concentration not less than about 40 parts by weight of sulphuric acid to each 60 parts by weight of water and the temperature of the reacting mixture of limestone and sulphuric acid being maintained between about 110 deg. C. and about 300° C.

1,905,599. VENTILATOR. HERMAN S. NOWITSKY, Norfolk, Va. Filed June 2, 1932. Serial No. 615,068. 2 Claims. (Cl. 230—117.)

1. In a ventilator of the class described, frame work, a fireproof casing built around said frame work, a partition in said casing dividing it into individual compartments, one compartment being formed with a deflector plate and complemental pipe connections defining an exhaust duct, a rotary suction fan located in said duct, an operating shaft for said fan located in the duct and extending into the remaining compartment, a motor in said last named compartment operatively connected with the adjacent end



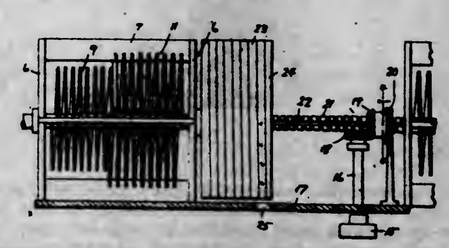
of said fan shaft, said compartments being in communication with each other through the medium of screened openings and said fan serving to suck in atmospheric air for circulation through the motor compartment for cooling the motor, and said motor compartment having individual doors to permit access to be had to the compartment for repair and lubricating purposes.

1,905,600. METHOD OF MAKING SPARK PLUGS. EDWARD B. NOWOSIELSKI, Bloomfield, N. J., assignor to Eclipse Aviation Corporation, East Orange, N. J., a Corporation of New Jersey. Filed Aug. 9, 1930. Serial No. 474,226. 2 Claims. (Cl. 123—169.)



1. A method of forming spark plugs to adapt them for use with internal combustion engines having different heat characteristics, which consists in making the central electrode assemblies of the plugs identical in structure, providing said assemblies with the same number of insulating washers having substantially the same diameters and surrounding the electrodes, adjacent their sparking ends, compressing said washers to form a substantially homogeneous mass of insulation, and thereafter applying a cutting tool to the mass to remove a different predetermined amount of said insulation from each of a different predetermined number of washers to form a cylindrical portion and a tapered portion of varying lengths in each assembly in accordance with the temperature requirements of the engine with which each plug is to be used.

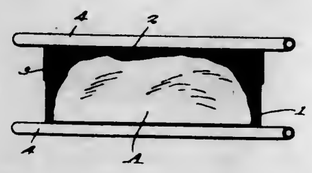
1,905,601. VARIABLE CONDENSER. CHARLES E. PARCELL, Vinton, Iowa. Filed Feb. 18, 1930. Serial No. 428,104. 1 Claim. (Cl. 175—41.5.)



A variable condenser comprising a supporting plate, a pair of spaced parallel members supported from each end portion of said plate, an elongated screw shaft passing

through the two pairs of parallel members, some of said members having openings therein engaging the threads of the shaft whereby the shaft will have longitudinal movement in said parallel members, a pair of spiral blades having their inner peripheries fastened in portions of the grooves formed by the threads of the shaft and each blade being located between one pair of parallel members, bars of non-conducting material connecting the parallel members of each pair together and spaced apart and having grooves in their inner edges, a second spiral blade located between each pair of parallel members and having portions of its outer periphery located in and fastened in the grooves of the non-conducting bars, said second blade having an opening at its center through which the shaft and portions of the first blade pass, with the first blade out of contact with the second blade, means located between the pairs of parallel members for rotating the shaft without interfering with its longitudinal movement, a drum carried by the shaft for movement therewith and located between the pairs of parallel members and a spiral scale carried by the periphery of the drum, the convolutions of the scale corresponding to the convolutions of the spiral blades on the shaft, said supporting plate having a window therein for exposing portions of the scale, with the operating means for the shaft extending through said supporting plate.

1,905,602. METHOD OF QUICK FREEZING. FRANK HOWARD PATTERSON, Fredonia, Kans. Filed Aug. 31, 1931. Serial No. 560,480. 3 Claims. (Cl. 62—104.)



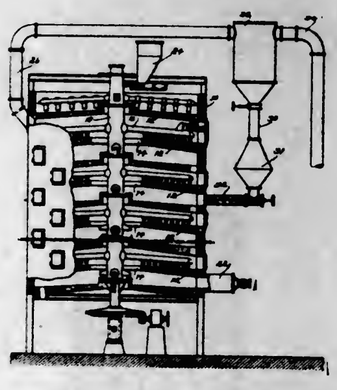
1. The method of quick freezing which includes the steps of packing the article in a container with a comminuted material which will not cohere when subjected to quick freezing temperatures, said material and the container having a high coefficient of thermal conductivity, and then freezing the article by placing the container in contact with a freezing medium.

1,905,603. WALL INSERT. BION C. PLACE, Detroit, Mich., assignor of one-half to George E. Gagnier, Detroit, Mich. Filed July 10, 1931. Serial No. 549,981. 11 Claims. (Cl. 72—101.)



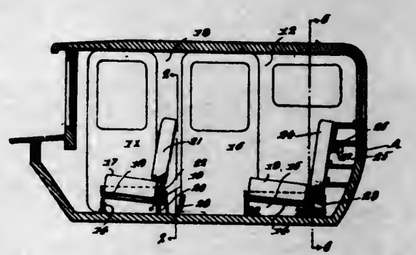
1. An insert strip for initially plastic walls, comprising a hollow body, provided with means designed to hold the body to the wall when embedded therein, said body including an exposed side provided with a cut substantially completely, but not entirely, severing a portion of said side from the remainder so that an opening may be readily formed through said side by removing said portion.

1,905,604. PROCESS OF ROASTING ORES. AUGUSTIN LEON JEAN QUENEAU, New York, N. Y. Filed June 25, 1931. Serial No. 546,892. 11 Claims. (Cl. 75—60.)



1. In the roasting of ores, the method of controlling the temperature of the roast which comprises adding at an intermediate point in the roasting process where the temperature is excessive increments of thermally decomposable material of relatively high heat absorbing capacity.

1,905,605. AUTOMOBILE BED. JOSEPH L. RICHARDSON, Nashville, Ark. Filed June 15, 1929. Serial No 371,191. 1 Claim. (Cl. 155—7.)



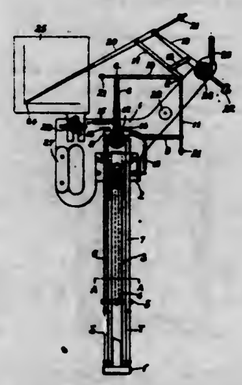
In a structure of the class described, a vehicle body, spaced front and rear bases within the body and having spaced front and rear walls defining intervening recesses, seat cushions in said recesses and movable to rest on the rear walls of said bases, a removable back cushion mounted at the rear of said rear base and adapted to rest on the front wall of the rear base between the said seat cushions, a foot rest between the front and rear bases and forming a support for the forward portion of the removable back, when the removable back is positioned between said cushions, a removable back for the front seat cushion and having attaching elements provided with angularly extending terminal portions, and socket members for engagement by the angularly extending terminal portions of said attaching elements, said back for the front seat cushion being adapted to rest on the front wall of the front base to form a head rest, there being means associated with the front base for sliding engagement by the angularly extending terminal portions of said attaching elements allowing said angularly extending terminal portions to have pressure contact with the seat cushion of the front base.

1,905,606. GAS SAVER. HENRY K. RYDER, Laurel, Mont. Filed Apr. 25, 1931. Serial No. 532,854. 1 Claim. (Cl. 137—69.)



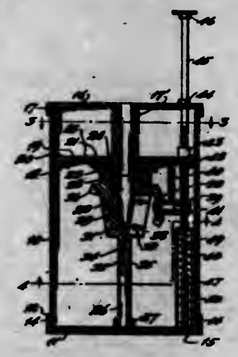
An auxiliary air inlet for the intake manifold of a combustion engine including a downwardly extended suction pipe coiled to provide a substantially horizontal extension for threaded engagement with an intake manifold to discharge thereinto, opposite disposed tubular arms on the pipe above the coil and extending downwardly below the coil in substantially parallel relation, ball valves for normally closing the lower ends of said arms, said valves being liftable by suction to admit fresh air to the arms and pipe, and a rigid spacing connection between the arms and engaged by the pipe and the extension.

1,905,607. SELF RECORDING DILATOMETER. SEIKICHI SATO, Sendai, Japan. Filed Feb. 25, 1932. Serial No. 595,170. 2 Claims. (Cl. 234—11.)



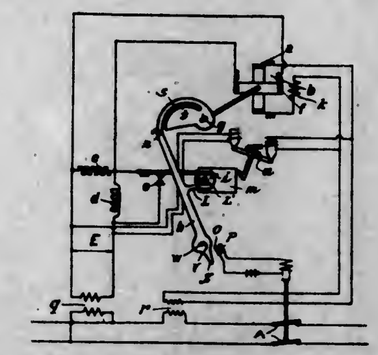
1. A portable self-recording dilatometer adapted for recording the relation between the temperature and the thermal change as well as their time function by entirely mechanical means on a plane recording board in a rectangular coordinate system, comprising a portable base, a T-shaped supporting rod of a material having a very small coefficient of thermal expansion rigidly secured to said base and projecting therefrom, a pair of thin pipes of material having a very small coefficient of thermal expansion arranged in parallel on the opposite sides of said supporting rod, brackets secured to the base for slidably receiving the pipes, a pair of swing levers pivoted to said base on the same axis, one of said levers being parallel to said transmission rods while the other is arranged normally to said transmission rods in their initial positions and both levers being in engagement with said transmission rods respectively, links connected to the free ends of each of said levers to form a quadrilateral therewith, a pantograph mechanism associated with a point on said quadrilateral links, one member of said pantograph being pivoted to said base and the last member thereof being extended to provide a pen tip, a plane recording board supported by the base to cooperate with said pen tip, springs attached to said swing levers and pantograph mechanism so as to maintain their parts at normal condition to enlarge the resultant movement of said quadrilateral, a test piece and a standard piece being adapted to be held in position between free ends of said supporting rod and transmission rod respectively so that the thermal dilatation of said test piece and standard piece may be transmitted to the cooperating swing lever respectively and the resultant movement of a point on said parallelogram may be multiplied by said pantograph mechanism and recorded mechanically.

1,905,608. PENCIL SHARPENER. HENRY W. SCHOENFELDT, Youngstown, Ohio. Filed Aug. 6, 1930. Serial No. 473,401. 8 Claims. (Cl. 120—96.)



7. In a pencil sharpener, a casing, a cutter head rotatably mounted in said casing, a plunger extending from said casing, parallel to the axis of and adjacent said cutter head, gearing connecting the plunger and cutter head to rotate the latter upon depression of the plunger, a stem extending downwardly from said cutter head and provided with a dust escape opening, and a guide seat on the bottom of the casing receiving and guiding the lower end of said stem.

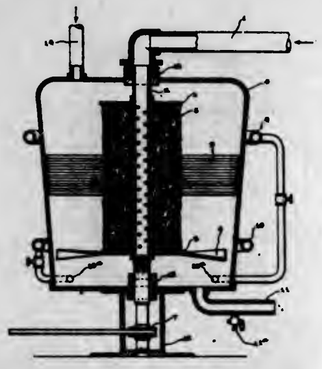
1,905,609. DISTANCE RELAY FOR ELECTRIC LINES. JOSEF STORCKLIN, Zurich, Switzerland, assignor to Aktiengesellschaft Brown, Boveri and Cie., Baden, Switzerland. Filed July 2, 1928, Serial No. 289,816, and in Germany July 7, 1927. 3 Claims. (Cl. 175—294.)



1. In a protective system for alternating current transmission lines, a protective device containing in combination transformers whose primary windings are connected to the line respectively in series and parallel, connections from the secondary windings of said transformers to the coils of an ohmmeter, a winding in series with one of said coils for producing the field of the ohmmeter, a choke coil in series with the other of said coils, a slotted member on a rotatable shaft which latter carries the said coils, a clockwork mechanism and a pivoted lever adapted to be

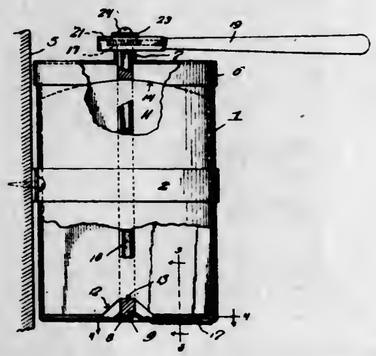
rotated by the mechanism, said lever coacting with said slotted member and adapted to abut on selective points on the latter and to slide on its pivot and in so doing to close a switch, means for disconnecting the transmission lines on the closing of said switch, means for setting in motion the clockwork mechanism in dependence on the line impedance, said protective device being provided with means for changing the phase of the current in one of the coils of the ohmmeter during the movement of the clockwork.

1,905,610. METHOD AND APPARATUS FOR REDUCING FUEL OIL OR THE LIKE TO A COMMINUTED CONDITION. EDGAR A. STOLL, South Bend, Ind. Filed Dec. 17, 1927. Serial No. 240,858. 5 Claims. (Cl. 158—53.)



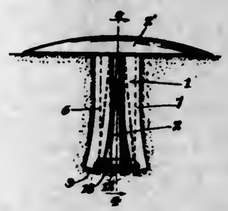
1. An apparatus for atomizing fuel oil or the like to a comminuted condition, comprising a hollow rotatable shaft having perforated walls, an annulus of matted fibrous material snugly embracing said shaft and mounted on said shaft, a casing enclosing the annulus, and means for adjustably compressing the annulus to vary the compactness of said fibrous material.

1,905,611. SOAP DISPENSING APPARATUS. DE WITT CLINTON TYLER, Chicago, Ill. Filed Apr. 7, 1931. Serial No. 528,423. 4 Claims. (Cl. 146—60.)



1. A container for paste soap or the like having a bearing in its bottom and an opening adjacent the bearing whose sides are provided with respective inwardly and outwardly directed angle flanges, a removable flanged top for the container having an opening in the center thereof surrounded by a flange, a shaft having a pointed end received in the bearing, and the said shaft likewise extending through the flange of the closure, said shaft being slotted longitudinally, a dasher plate having its lower end notched and its upper edge struck at a curvature, removably received through the opening, and an operating lever for the shaft.

1,905,612. MARKER UNIT. JOHN A. WAGNER, Decatur, Ill. Filed Sept. 23, 1930, Serial No. 483,911. Renewed Sept. 7, 1932. 7 Claims. (Cl. 94—1.5.)



6. In a marker unit, a pair of elements, one of said elements including a marker head and a hollow stem of triangular cross section split, at spaced points from end to end to provide a series of anchoring members, the other of said elements including a base formed with deflecting surfaces, and a tapered spreading member formed with spreading surfaces, the said surfaces acting on the inner faces and inner ends of said members for spreading them to anchoring position, the said spreading surfaces being spaced from each other, and the said deflecting surfaces being spaced from each other.

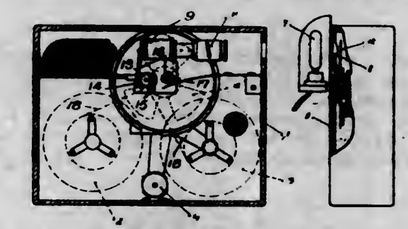
1,905,613. DISPENSER. EDWIN G. WESSMAN, Easton, Pa., assignor to Individual Drinking Cup Company, Inc., Easton, Pa., a Corporation of Pennsylvania. Filed Dec. 6, 1930. Serial No. 500,641. 3 Claims. (Cl. 312—41.)



2. In combination with a dispenser including a base, a readily removable housing supported by the base and adapted to receive a stack of the articles to be dispensed, said housing having a closed end and an open end adapted to register with a dispensing opening in the base, a projection at the open end of the housing extending inwardly to overlie the interior diameter of the housing but permitting dispensing of the articles, and a follower operable in the housing and adapted to be supported by the stack of articles, the follower being of a diameter permitting sliding movement in the housing but adapted to be engaged by the inwardly directed projection at the open end of the housing whereby it will be held within the confines of the housing when all of the articles of the stack have been dispensed or when the housing is removed from the base.

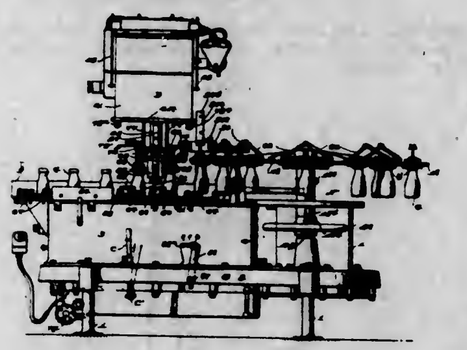
1,905,614. COMBINED CINEMATOGRAPHIC APPARATUS AND BOX. WILHELM WINNEBURG, Dresden, Germany. Filed June 20, 1929, Serial No. 372,425, and in Germany Feb. 25, 1928. 2 Claims. (Cl. 88—17.)

2. In a portable cinematographic projection apparatus, comprising, in combination with two film band reels located oppositely to one another and a film band running from one of said reels to the other thereof, an objective located opposite the middle portion of the film band between the reels, a light-reflecting member located counter to said objective opposite the other side of the middle film band portion, and means for illuminating this film band portion: a casing enclosing all said members and having in one of its large sides an illuminating opening, the axis of which lies parallel to the axis of rotation of said film



band reels, a lens in said opening, a rotary bladed shutter arranged between said lens and said light-reflecting member, means for rotating said shutter, and illuminating means adapted to be attached to, and detached from, said illuminating opening at the outside of said casing.

1,905,615. HOOD CAPPING CONTAINER. WILBUR L. WRIGHT and LEE D. PIERCE, Fulton, N. Y., assignors to Oswego Falls Corporation, Fulton, N. Y., a Corporation of New York. Filed Dec. 12, 1927. Serial No. 239,538. 29 Claims. (Cl. 226—83.)



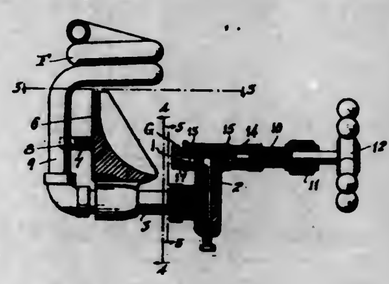
1. In the method of hood capping bottles, those steps which comprise arranging a stack of binder-carrying paper material flaring skirt hood cap disks with their skirts flaring rearwardly and their centers to the front; heating said caps to render their skirts moldable and to maintain a supply of said moldable hood cap disks; dispensing moldable caps from the front end of the stack to bottle heads; causing the stack to feed forwardly as caps are removed therefrom; and contracting the moldable cap skirts to securing position on the bottle heads.

1,905,616. CONCRETE FORM BOARD TRUING HOLDER. APOLLONY ZANELLA, Spadra, Calif. Filed Feb. 29, 1932. Serial No. 595,791. 3 Claims. (Cl. 25—131.)



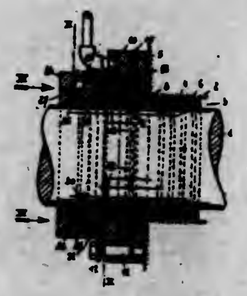
1. A concrete form board holder comprising a plane plate at each end of which is a set of lugs which are so disposed in their own sets as to form a Z end-contour.

1,905,617. PLUMBER'S FURNACE. WILLIAM REBER, JAMES EDWARD FLITCROFT, and JOSEPH M. IMFELD, Newark, N. J., assignors to Otto Berns Co. Inc., Newark, N. J., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 506,783. 2 Claims. (Cl. 158—82.)



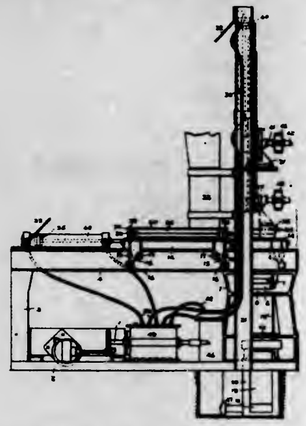
1. A plumber's furnace comprising a fuel tank, a preheating pipe including a helical coil with its axis vertically disposed and connected at its upper end to said tank, said pipe at the lower end of said coil having a portion disposed substantially horizontally, a burner nozzle connected to said horizontally disposed portion with its axis substantially horizontal and at one side of said coil to direct a flame from the orifice horizontally beneath said coil, and a flame deflector mounted on said horizontally disposed portion of said pipe in the path of said flame to deflect the flame vertically in substantially the axial line of said coil.

1,905,618. METALLIC PACKING MEANS FOR THE SHAFTS OF CENTRIFUGAL PUMPS AND OTHER ROTARY MACHINES. JULES BODART, Brussels, Belgium, assignor to Fernand Bodart, Marchienne-au-Pont, Belgium. Filed May 14, 1930, Serial No. 452,465, and in Belgium May 16, 1929. 3 Claims. (Cl. 286—7.)



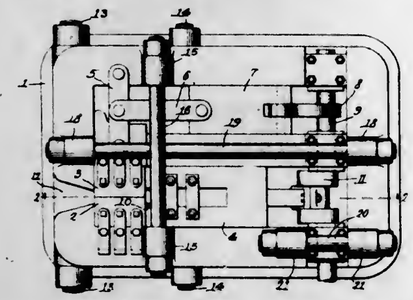
1. In a metallic joint for a rotating shaft, in combination with the shaft and a body in which the said shaft rotates, a fixed unit bodily connected to the said body, a wearing ring housed in the fixed unit, a plate bearing against the said wearing ring, the said plate having a face perpendicular to the axis of the shaft, an annular chamber formed in the plate, means for delivering a cooling fluid to said chamber, and a movable unit directly keyed to the shaft to turn with it, the said movable unit having also a face perpendicular to the axis of the shaft and means whereby the said face of the movable unit is pressed in frictional contact against the face of the plate perpendicular to the axis of the shaft.

1,905,619. CEMENT BLOCK MOLDING MACHINE. LEE C. CARTON, Detroit, Mich., assignor to Arthur Carton, J. H. Henderson, James E. Montgomery, and E. Trimble, Toronto, Ontario, Canada, and Thomas Watson, Woodstock, Ontario, Canada. Filed Dec. 21, 1929. Serial No. 415,864. 12 Claims. (Cl. 25—45.)



8. A block molding machine, comprising in combination a mold open at the top, horizontally reciprocable means for transferring a measured quantity of comminuted material to the mold, means for temporarily supporting, said transferred materials above the open mold a horizontally disposed fluid pressure operated ram connected with said transfer means, a movable closure hood adapted to form an enclosure above said supporting means and to receive fluid pressure to force said comminuted material therefrom into the mold, a fluid pressure operated ram for raising and lowering said hood, fluid pressure operated means for lifting the completed block from the mold, a valve chest having a plurality of cooperative pairs of inlet and exhaust valves adapted to direct a flow of fluid pressure to said rams and to exhaust the pressure therefrom, and means for operating said valves.

1,905,620. FORGING MACHINE. WILLIAM L. CLOUSE, Tiffin, Ohio, assignor to The National Machinery Co., Tiffin, Ohio. Filed Oct. 9, 1929. Serial No. 398,415. 4 Claims. (Cl. 78—13.)



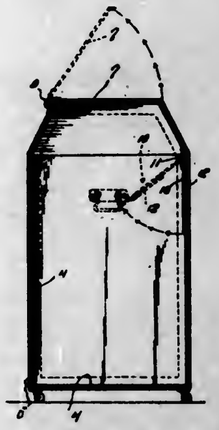
1. The combination with the bed frame of a forging machine having a feed gap in one end, a tool-carrying heading slide movable toward and from the gap, and gripping dies for receiving stock from the gap and holding it in the path of the slide and tool, of means for reinforcing the bed frame transversely against strains resulting from forging operations, said means including lower tie bars extending transversely through and connected at their ends to the bed frame and an upper transverse tie bar connected to the side portions of the bed frame and positioned back from the feed gap and the gripping dies, all of said tie bars being parallel and defining a triangular area in which are located the cooperating portions of the dies and tool all of the bars being substantially at right angles to the path of movement of the heading slide.

1,905,621. METHOD OF PRODUCING SELF-LOCKING NUTS. EDWARD J. COLE, Peekskill, N. Y., assignor, by mesne assignments, to Helen Margaret Cole, Peeksville, N. Y. Original application filed Oct. 28, 1930, Serial No. 491,686. Divided and this application filed Sept. 30, 1931. Serial No. 566,041. 2 Claims. (Cl. 10—86.)



1. The method of producing a self-locking nut which consists in dividing and separating the metal of the nut blank at one end of its unthreaded bore within the periphery of the blank to laterally spread the end of the bore and certain side portions of the blank, screw threading the bore and thereby forming threads of lesser depth at the divided and spread end of the bore, and finally compressing the spread side portions of the blank and consequently the divided and spread end of the bore.

1,905,622. ASH CAN. PHILIP D'ANGELO, Algonac, Mich. Filed Feb. 28, 1929. Serial No. 343,455. 1 Claim. (Cl. 220—32.)



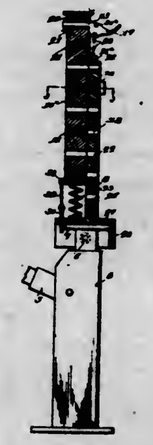
An ash can including an upright body of rectangular configuration having at its upper end an integral extension of truncated pyramidal form, said extension being open at its upper end and including walls of uniform height, an upwardly opening flat spring influenced cover normally closing the upper end of said extension and reposing on said walls thereof, one wall of said body portion having an opening immediately beneath said extension, and an inwardly opening spring influenced cover hinged within the body and normally closing said opening.

1,905,623. DOOR MOUNT FOR ACCESSORY EQUIPMENT OF MOTOR VEHICLES. JOHN G. DEITZ, Tulsa, Okla. Filed Feb. 8, 1929. Serial No. 338,606. 11 Claims. (Cl. 248—20.)

1. In a vehicle body having a hinged door having a glass channel therein and having a flange extending from a vertical side edge to overlie the jamb edge of the door casing, an accessory supporting bracket overlying and detachably mounted on the outer face of the door stile between its glass channel and edge flange and having members provided with portions insertible in the glass channel bordering the stile and over said jamb edge flange, with means for effecting relative movement of said members to clamp said portions thereof to a wall of said glass channel and to said edge flange.



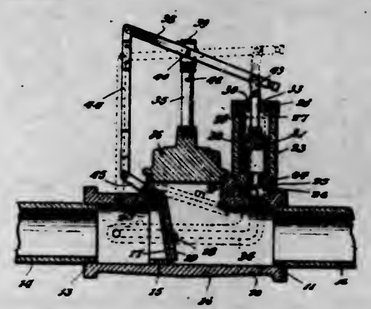
1,905,624. JACK. MAX DWORK, Brooklyn, N. Y. Filed Feb. 27, 1930. Serial No. 431,875. 2 Claims. (Cl. 254—133.)



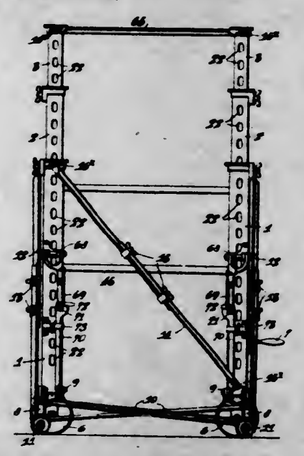
1. A lifting jack extension comprising a vertically extending member provided with a lifting element, a plate carried by the lower end of the vertically extending member adapted to rest upon a jack standard, parallel flanges depending from the plate, a third flange depending from the plate at right angles to the first mentioned flanges and contacting one side of said jack standard, oppositely extending threaded elements carried by the parallel flanges and engageable with the jack standard to hold the plate against movement in two directions, and a removable fastening passing through the plate and contacting the side of said jack standard opposite said other flange and serving therewith to hold the plate against movement in two other directions.

1,905,625. CONSERVATION VALVE. THOMAS A. FAGAN, Denver, Colo. Filed July 31, 1930. Serial No. 472,041. 1 Claim. (Cl. 137—153.)

The combination with a valve housing, a swing valve pivoted at the top therein and closing in the direction of flow, a crank for operating the valve, a by-pass conduit in the housing laterally of the valve and a piston operated by pressure in the by-pass, of a cap closing a hand opening formed in the housing above the valve, a post adjustable at the bottom on said cap, a walking beam carried by the top of the post, a link connecting one end of the walking beam with said crank, a pair of links pivotally connected together and connecting the other end of said walking beam with said piston, a cylinder for the piston, and an annular seat adjustably mounted in the end of the cylinder, the piston and the seat being tapered to provide tight seating of the piston for sealing the by-pass when said valve is open, adjustment of said post and of said seat relative to each other permitting said piston accurately seating in said seat whereby leakage past the piston when said valve is open is positively prevented.



1,905,626. SCAFFOLDING. JOHN A. HERSHEY, Cherryville, Pa. Filed Oct. 1, 1931. Serial No. 566,345. 18 Claims. (Cl. 304—10.)

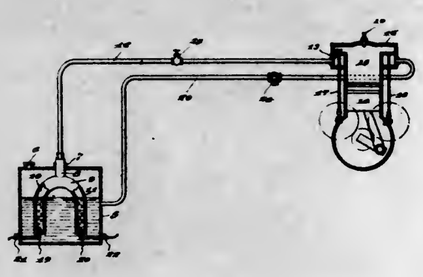


1. In scaffolding, a scaffolding comprising tubular telescoping-section posts, means to support said posts in vertical position, a platform, carriages for said platform which are vertically movably mounted on said posts, and mechanism on said carriages for raising and lowering said platform and extending and retracting said post sections, said posts having means cooperating with said mechanism for the purpose stated.

1,905,627. APPARATUS FOR ELECTROLYSIS. WALTER HOLLAND, Washington, D. C. Filed Sept. 24, 1930. Serial No. 484,147. 2 Claims. (Cl. 204—6.)

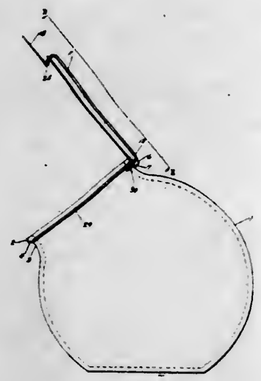
1. A device of the class described comprising a receptacle, a supply of liquid within said receptacle, a vessel positioned within said receptacle, said vessel including a

pair of members having their open ends extended into the liquid and spaced from the bottom of said receptacle, said members uniting to present a gas-collecting chamber with



the receptacle and electrodes of opposite polarity, one electrode being positioned within each of said members of said vessel.

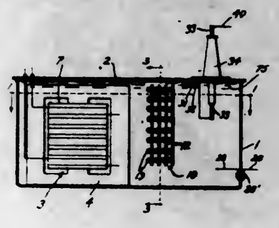
1,905,628. CONTAINER AND IN SEALING CLOSURE THEREFOR. CHARLES S. BARON, Tiffin, Ohio. Filed Mar. 4, 1931. Serial No. 520,145. 6 Claims. (Cl. 215—68.)



1. The combination with a container body having a continuous annular latch-member retaining ledge formed upon a mouth-defining rim for the container, of a cover having a yielding gasket and a latch member extending across it and provided at one end with two separate resilient ledge-engaging members extending toward each other, and at the opposite end with cam acting resilient ledge-engaging latches, said oppositely extending resilient member being hingedly secured to the container body by a collar confined to a neck formed therein below said rim.

1,905,629. APPARATUS FOR PRODUCING RECTIFIED HIGH VOLTAGE ELECTRIC CURRENT. HOWARD B. COBBITT, Los Angeles, Calif., assignor to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Feb. 8, 1930. Serial No. 425,880. 8 Claims. (Cl. 175—366.)

1. In an apparatus for producing rectified high voltage electric current, a housing, a plurality of insulating supporting panels removably mounted within said housing, a plurality of asymmetrically conductive solid contact rectifier units mounted on each of said supporting panels, means electrically connecting said rectifier units in series, and a body of liquid cooling medium within said housing



and surrounding all of said rectifier units, said supporting panels being provided with openings adjacent said rectifier units so as to permit free circulation of said cooling medium through said openings and around said units.

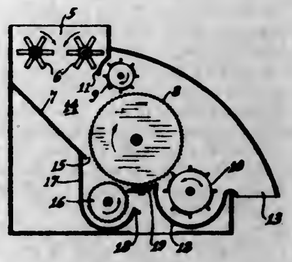
1,905,630. BITUMINOUS EMULSION. ORIN R. DOUTHETT, Perth Amboy, N. J., assignor to The Barber Asphalt Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Aug. 31, 1928, Serial No. 303,369. Renewed Sept. 7, 1932. 16 Claims. (Cl. 134—1.)

1. An emulsion including bitumen dispersed in an aqueous medium containing neutralised sludge sulfonic acid treated to render it substantially free from soluble alkaline earth compounds and characterised by the fact that it is of a substantial alkalinity.

1,905,631. COMPOSITION FOR ACOUSTICAL DEVICES. EARL EBERHARDT, Chicago, Ill. Filed May 18, 1928. Serial No. 278,922. 1 Claim. (Cl. 106—84.)

A composition for acoustical devices comprising hardened plastic material containing grains of sand to render the surface rough.

1,905,632. HULL EXTRACTOR. THOMAS ELLIOTT, Birmingham, Ala., assignor to Continental Gin Company, a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 447,876. 8 Claims. (Cl. 19—37.)



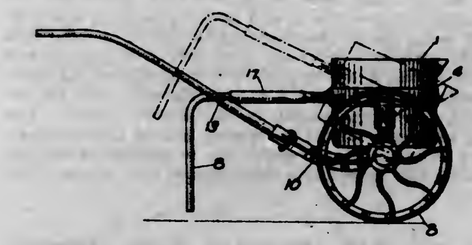
1. The combination with a hull extractor assembly comprising a rotatable toothed cylinder, means to guide cotton and hulls thereto, and a stripper means and a doffer means associated with said cylinder, of a second rotatable toothed cylinder disposed in position to retreat cotton and hulls escaping between said guide means and the first mentioned cylinder, a free unobstructed guide for said escaping hulls extending about the under side of said retreating cylinder and terminating opposite to and spaced from its upgoing side, said first mentioned toothed cylinder being disposed in position and driven so as to doff said retreating cylinder.

1,905,633. DENTAL MIRROR. DOUGLAS L. FELTHAM, Toledo, Ohio. Filed Mar. 14, 1931. Serial No. 522,563. 2 Claims. (Cl. 128—11.)



1. The combination of a compressed air supply conduit with an arm offset therefrom and formed with a socket, and a mirror having a shank detachably secured in said socket with the reflecting surface of the mirror spaced from the outlet end of said conduit and disposed across the path of air blown through said conduit.

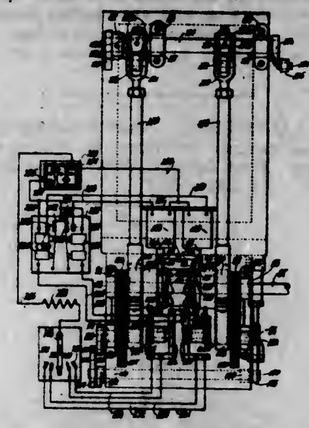
1,905,634. FOUNDRY LADLE. JAMES G. GARRARD, Grand Rapids, Mich., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 11, 1931. Serial No. 580,243. 9 Claims. (Cl. 22—82.)



1. In a conveying and pouring device, a carriage tiltably mounted on wheels, spaced standards and a handle rigid with said carriage, and a ladle pivoted on said standards above said carriage, said handle extending downwardly with its end engaging the floor, in the rest position of the device, and said standards being inclined from the vertical towards said handle in said position.

1,905,635. GEAR SHIFTING MECHANISM. FRED GINSBURG, Chicago, Ill. Filed Apr. 5, 1932. Serial No. 603,298. 20 Claims. (Cl. 74—97.)

1. The combination with a gear transmission having shafts, and gears adapted to slide axially of said shafts for coengagement to propel a drive shaft at a selected speed relative to said gears, of a mechanism for automatically engaging said gears and comprising a governor, a rotating member, means for sliding said gears, and means for operatively engaging said rotating means to said gear



sliding means incident to selected speeds, attained in a definite order, of said drive shaft, said governor being adapted to actuate said engaging means.

1,905,636. FOUR-WHEEL TRAILER TRUCK AND ASH HOPPER. HARRY GLAENZER, Philadelphia, Pa. Filed Nov. 27, 1931. Serial No. 577,622. 5 Claims. (Cl. 105—37.)



1. The combination in a radial truck for a locomotive, of a frame having pedestals for axle boxes and equalising gear located in the frame at each side thereof, said gear resting upon the boxes between the pedestals; and ash hoppers on the outer side of the frame beyond the equalising gear, arranged to receive ashes from the grates and main ash pan of the locomotive.

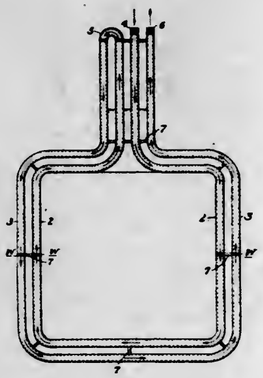
1,905,637. LOOP FORMING AND CUTTING DEVICE. JOHN HUDSON HOWE, South Orange, N. J. Filed Dec. 31, 1931. Serial No. 584,260. 10 Claims. (Cl. 112—80.)



1. A device of the class described, comprising a pair of relatively slidable supporting members, a stationary

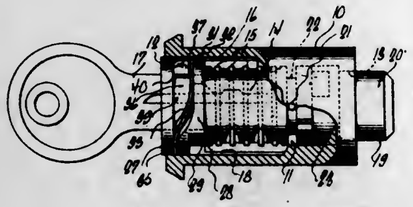
needle carried by one of said members, a loop former pivotally carried by the other of said members, a cam follower on said loop former on each side of the pivot point thereof, and spaced cams on said one member adapted to engage said cam followers to actuate said loop former in relation to said needle as said members are relatively moved.

1,905,638. VALVE SEAT. PERRY D. HUSHOUR, Youngstown, Ohio, assignor to Walter M. Charman, Youngstown, Ohio. Filed Dec. 17, 1929. Serial No. 414,707. 11 Claims. (Cl. 251—158.)



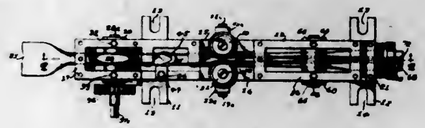
1. As an article of manufacture, a seat comprising a pair of water cooled portions extending in adjacent freely spaced relationship throughout the major portion of their length and lying in a substantially common plane throughout the major portion of their length, said water cooled portions being adapted to be directly engaged by a valve.

1,905,639. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Filed Sept. 6, 1929. Serial No. 390,738. 10 Claims. (Cl. 70—46.)



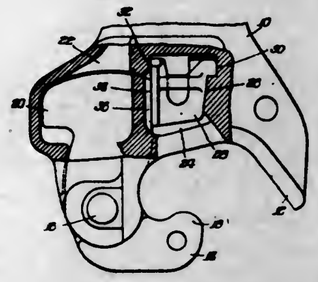
1. In a lock of the character described, a mounting member, a lock cylinder in the mounting member being movable therein in the performance of its normal locking functions upon insertion of a proper key, cooperating means carried by the mounting member and the lock cylinder for releasably securing the lock cylinder in the mounting member, said means becoming inoperative upon movement of the lock cylinder to a predetermined position, and means for preventing movement of the lock cylinder to said predetermined position, said means becoming operative upon insertion of the key.

1,905,640. MACHINE FOR PRODUCING STRIP MOLDINGS. WILLIAM JAQUIERY, Waterbury, Conn., assignor, by mesne assignments, to Johns-Manville Corporation, New York, N. Y., a Corporation of New York. Filed July 1, 1929. Serial No. 375,015. 18 Claims. (Cl. 153—32.)



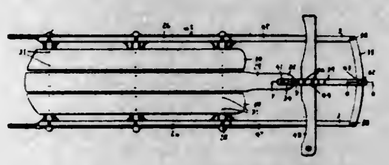
1. In a machine for producing a thin molding, means for bending a longitudinally moving strip of metal into U-shape, means for forming spaced locking beads on the edges of said strip, and means for folding the portion of said strip below said beads into a pair of alined flat side sections.

1,905,641. COUPLER. FRANK H. KAYLER, Alliance, Ohio, assignor to American Steel Foundries, Chicago, Ill., a Corporation of New Jersey. Filed July 18, 1930. Serial No. 468,778. 6 Claims. (Cl. 213—145.)



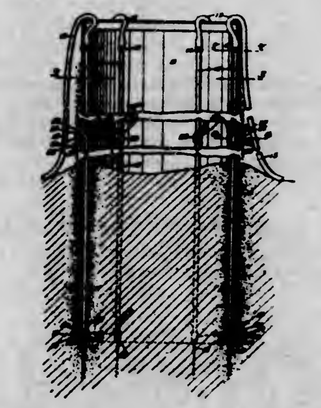
3. In a coupler, the combination of a coupler head, a knuckle pivotally mounted on said head, a lock for said knuckle, a lock cavity in said head for receiving said lock, said cavity having oppositely disposed walls provided with guide surfaces cooperating with said lock, one of said walls having a portion disposed forwardly of the guide surface thereof and at a greater distance from the opposite wall at the knuckle bearing surface than the normal width of a lock at the knuckle bearing surface whereby a lock of increased width may be substituted for said normal lock to maintain the gauge of said coupler when worn.

1,905,642. SLED. WILLIAM E. KIDDER, Kalamazoo, Mich., assignor to Kalamazoo Sled Company, Kalamazoo, Mich. Filed June 11, 1931. Serial No. 543,509. 13 Claims. (Cl. 280—22.)



8. In a sled, the combination with flexible runners having upwardly curved forward ends, knees mounted on said runners, links each having a slot in one end thereof pivoted to the forward ends of said runners and the front knees, and means for flexing said runners, said slots in said links permitting the effective lengths thereof to change in accordance with the flexing of said runners.

1,905,643. APPARATUS FOR SINKING BODIES SUCH AS CAISSONS AND PILES. ALGOT F. JOHNSON, Minneapolis, Minn., assignor to Al Johnson Construction Co., Minneapolis, Minn., a Corporation of Delaware. Filed Oct. 14, 1931. Serial No. 568,729. 1 Claim. (Cl. 61—80.)



The combination with a caisson having circumferentially spaced notches at its lower edge, of circumferentially spaced longitudinally extended jetting pipes within said caisson, said pipes terminating at their lower ends in close proximity to the bottom edge of the caisson and arranged to project jets of water downwardly from the inside of the lower edge portion of the caisson and being provided near their lower ends with projections extending outwardly through the said notches in the lower edge of the caisson and arranged to project jets of water upwardly past the outside of the caisson.

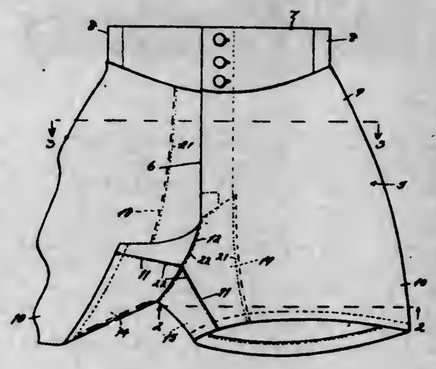
1,905,644. OPHTHALMIC LENS. MAX A. LAABS, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 12, 1928. Serial No. 318,838. 3 Claims. (Cl. 49—82.1.)



1. The process of producing lenses in quantity comprising grinding a plurality of lens blanks simultaneously to a given lens power, said ground surface being curved and the opposite surface being plano, placing the blanks over a shaped portion of a refractory block and submitting them to heat to cause them to subside into the shaped portion of the block, said shaped portion being such that the subsided blank will have substantially the same lens power as it had before subsidance but its planoform will have been changed to a meniscus form.

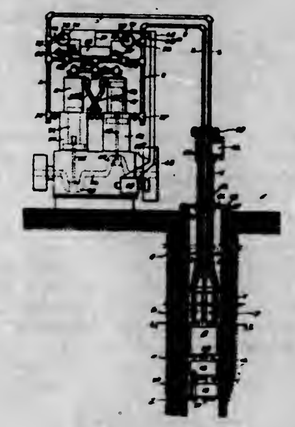
1,905,645. UNDERGARMENT. ANNA LAVER, Philadelphia, Pa. Filed Apr. 29, 1932. Serial No. 606,190. 4 Claims. (Cl. 2—224.)

1. A garment including a waist band, a body depending therefrom and legs, in combination with a reinforcement including a pair of similar back sections corresponding to parts of the back of the garment and the legs with the meeting edges of said sections stitched together, and front sections corresponding to parts of the front of the garment and the legs thereof stitched together along



their meeting edges, the contiguous leg parts of a front and back section being stitched together along their meeting edges and the whole reinforcement stitched around its edges on the inside of the garment in the region of the middle, back and front and inner parts of the legs.

1,905,646. FLUID PUMP. JOHN LIMING, Jr., Philadelphia, Pa. Original application filed Feb. 19, 1925, Serial No. 10,272. Divided and this application filed Dec. 6, 1928. Serial No. 324,153. 17 Claims. (Cl. 230—1.)

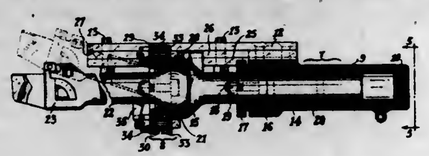


1. In a pump, the combination of a pair of compressors, a pair of pressure ducts respectively connected to the intakes of said compressors, and means for connecting the ducts alternately with the discharge ports of both compressors.

1,905,647. FLEXIBLE PIPE COUPLING FOR RAILWAY VEHICLES. FREDERICK W. MARTIN, Bronxville, N. Y., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 9, 1930. Serial No. 419,480. 7 Claims. (Cl. 285—94.)

1. A flexible connection for use between coupled railway vehicles including a conduit having a flexible joint

part associated with an end thereof, a cooperating flexible joint part, and means for securing the joint parts in operative relationship including a pair of U-shaped

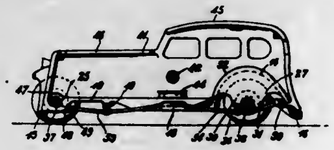


members adapted to engage the conduit and having cooperating interengageable portions providing against relative rotation of the members about the conduit.

1,905,648. COATED WELDING WIRE. ROBERT NOTVEST, Indianapolis, Ind., assignor to J. D. Adams Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Feb. 12, 1932. Serial No. 592,660. 5 Claims. (Cl. 219—8.)

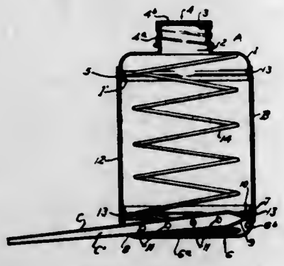
1. A coating composition for an arc-welding rod, comprising approximately 55 parts by weight of ferric oxide and 45 parts by weight of silica, a binder composed of sodium silicate and water, and sufficient calcium carbonate to render the coating composition neutral.

1,905,649. WHEELED TOY. EDWARD S. PEAKE, Westerville, Ohio, assignor to The Kilgore Mfg. Company, Westerville, Ohio, a Corporation of Ohio. Filed Oct. 29, 1931. Serial No. 571,918. 19 Claims. (Cl. 46—48.)



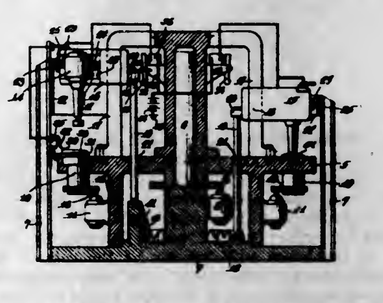
1. In a wheeled toy, a chassis frame having downwardly open recesses, an axle rotatably seated in said recesses, a demountable body supported on the frame, and a member serving to hold the body on the frame and the axle in said recesses.

1,905,650. DISTRIBUTOR FOR INSECTICIDES AND THE LIKE. THOMAS C. RALEY, St. Louis, Mo., assignor to Getz Exterminators, Inc., St. Louis, Mo., a Corporation of Missouri. Filed Jan. 16, 1932. Serial No. 587,090. 2 Claims. (Cl. 43—147.)



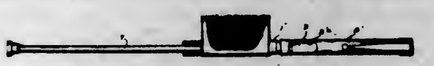
1. A device of the class described comprising a container, said container including a top element having an inlet opening, a cap for closing said inlet opening, a bottom element having a bottom wall and a continuous upstanding flange, a discharge spout associated with said bottom element and arranged to communicate with the interior of the container, said discharge spout being closed at its inner end and having openings formed therein forwardly of said inner end, said discharge spout being extended through an aperture formed through the upstanding flange of said bottom element and the inner end of said discharge spout being secured to said flange of said bottom element at a point which is in opposed relation with respect to said aperture whereby a two-point support for said discharge spout is provided, the relationship of said points of support of said discharge spout with respect to the bottom wall of the bottom element being such that a space is present between the discharge spout and said bottom wall whereby material within the device may circulate entirely around the discharge spout, a side wall associated with said top and bottom elements and adapted to be collapsed on movements of said top and bottom elements toward each other, and resilient means within said container which tends to restore said container to its extended position when the side wall thereof has been collapsed.

1,905,651. SAFETY DEVICE FOR GRINDERS. CLIFFORD T. RAULE, Brookline, Pa. Filed Mar. 2, 1929. Serial No. 343,878. 9 Claims. (Cl. 51—53.)



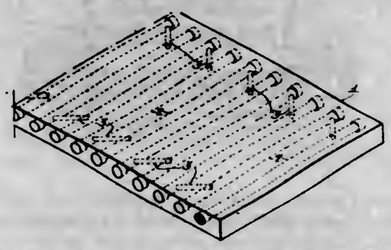
1. In a multiple grinder, a turn-table, grinding units mounted on the turn-table spaced thereabout, each unit comprising a revolving work-holder and a grinding wheel, supporting structure for the turntable having unloading and loading points for the units adjacent one side of the table, and mechanism for moving the wheels successively away from the grinding position before the unloading point is reached and back into grinding position after the loading point has been passed, in combination with a safety device for preventing the movement of a grinding wheel to its grinding position preparatory to initially grinding the work and operative by means of an abnormal condition at the unit.

1,905,652. CIGARETTE MAKING DEVICE. JEAN B. SABOURIN, Norton, Mass. Filed Nov. 24, 1931. Serial No. 576,959. 3 Claims. (Cl. 131—5.)



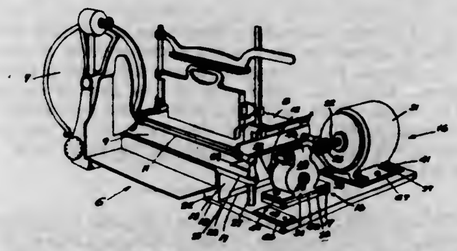
1. A cigarette making device comprising a tube adapted to extend into a wrapper and having a side opening, a hopper having a section rigidly attached to said tube and having a section rotatably mounted on said tube and movable to open said hopper for introduction of tobacco; an element extending through said tube beyond said hopper and adapted to be reciprocated in said tube to effect feeding of the tobacco through the tube and into the wrapper.

1,905,653. PLUG FOR STEAM PLATENS AND OTHER METALLIC ARTICLES. CHARLES A. SCHRANK, Philadelphia, Pa., assignor to Walter Wood (trading as R. D. Wood & Company), Philadelphia, Pa. Filed May 8, 1931. Serial No. 536,064. 1 Claim. (Cl. 257—256.)



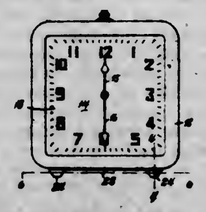
The combination of a metallic object having a channel therein, the end of the channel being counterbored, forming a seat for a plug; and a plug of metal harder than the metal of the object and of substantially frusto-conical form having its base contacting the seat formed by the counterbore and its sides impacted in the metal of the object.

1,905,654. POWER UNIT FOR SLICING MACHINES. THOMAS T. SHIELDS, Los Angeles, Calif. Filed Oct. 30, 1929. Serial No. 403,643. 4 Claims. (Cl. 146—102.)



4. A power unit for a manually operable machine having a drive shaft, comprising a base plate, a motor mounted thereon, a speed reduction unit mounted on said plate and coupled to said motor, including a frame, a tubular shaft mounted in said frame having its end projecting therefrom in axial alignment with the drive shaft, means for directly connecting the tubular shaft to the drive shaft to form a unitary shaft, a pin serving as an end bearing for said tubular shaft mounted at one side of said frame, and a second bearing for the tubular shaft mounted at the opposite side of said frame.

1,905,655. CLOCK. JOHN O. SIMPSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Mar. 19, 1932. Serial No. 599,880. 3 Claims. (Cl. 58—53.)



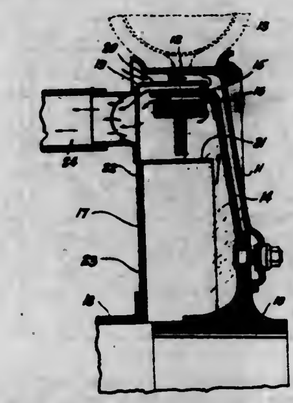
1. The combination with a clock-case; of a sheet-metal foot-plate having struck downwardly therefrom a plurality of integral hollow boss-like feet and secured to the under-face of the said clock-case in position to cause the same to conceal the upper face of the said plate and the hollow interiors of the said integral boss-like feet.

1,905,656. ROTARY TOOTHBRUSH. CARL C. V. SMITH, Copenhagen, Denmark, assignor to Alfa Klara Smith, Copenhagen, Denmark. Filed June 19, 1931. Serial No. 545,593. 2 Claims. (Cl. 15—25.)



1. A tooth-brush comprising an elongated handle member, a guard member having a tubular portion adapted to fit snugly over said handle member, a brush member having a stem extending axially through said handle member, a cup-shaped member carried by said stem adjacent the brush and adapted to snugly fit over an end of said handle member and abut against said tubular portion to hold the same upon said handle member, and means removably attachable to the end of said stem and adapted to abut against the other end of said handle member, whereby said brush member may be firmly attached to said handle.

1,905,657. BRAKE COOLING SYSTEM. JOHN P. TARBOX, Philadelphia, Pa., assignor to Budd Wheel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 22, 1929. Serial No. 334,238. 5 Claims. (Cl. 188—264.)

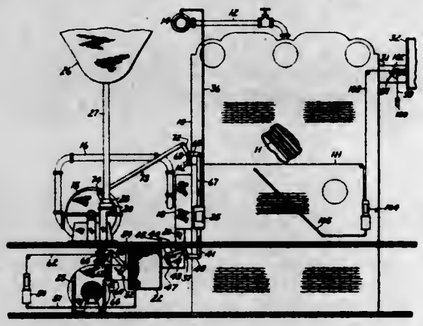


1. In combination in a braking system, a wheel having a rim, a brake drum interiorly of the rim of the wheel, a brake drum cover plate, and annular transverse baffle flanges carried by the cover plate, one interiorly and one exteriorly of the drum and in spaced relation thereto.

1,905,658. METHOD AND APPARATUS FOR CONTROLLING COMBUSTION. CHARLES M. TERRY, Decatur, Ill., assignor to A. W. Cash Company, Decatur, Ill., a Corporation of Delaware. Filed May 6, 1929. Serial No. 360,976. 5 Claims. (Cl. 236—14.)

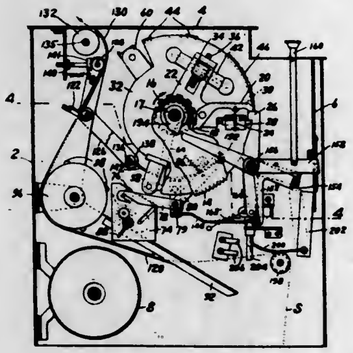
1. In combination with a plurality of steam boiler furnaces, means including regulatable feeding devices to deliver a controlled amount of pulverized fuel on a current of primary air to each furnace for combustion, a main air duct for secondary air, branch ducts leading from the main duct to each furnace, a movable damper in each branch duct, a plurality of fans arranged to discharge air into the main duct, a damper at the outlet of each fan, a compensating type regulator actuated by steam pressure and arranged to regulate simultaneously

all of the feeding devices and all of the branch duct dampers in accordance with the demand on the boilers, and a non-compensating type regulator actuated by the



pressure in the main duct and arranged to regulate all the fan outlet dampers and maintain this duct pressure constant.

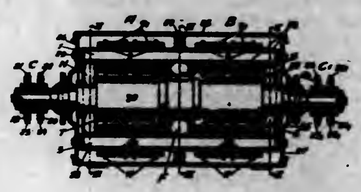
1,905,659. TICKET PRINTING AND ISSUING MACHINE. HENRY A. THOMSON, Bansdowne, Pa., assignor to Globe Ticket Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 5, 1931. Serial No. 513,505. 15 Claims. (Cl. 101—66.)



1. In a ticket printing and issuing machine, a rotatable type member provided with a series of successively arranged printing elements, means for presenting to the type member a ticket to be printed, driving means for the type member, a plurality of keys, and mechanism controlled by actuation of a key to effect rotation of the type member by the driving means and printing of the ticket by a selected printing element, said mechanism including devices limiting the type member to a single rotation upon each actuation of a key, which devices include a stop, a latch engageable with the stop to maintain parts of the machine in inoperative position, an element actuated upon depression of a key to trip the latch, and means for restoring the latch at the end of a cycle of operation, said element yielding if engaged by the restored latch whereby it does not prevent engagement of the latch with the stop.

1,905,660. ELECTRIC MACHINE. BALTZAR CARL VON PLATEN, Stockholm, Sweden. Filed Apr. 23, 1930, Serial No. 446,471, and in Sweden May 3, 1929. 18 Claims. (Cl. 171—123.)

4. In an electric machine, a rotor provided with a plurality of rotor pole pieces, a plurality of magnetically independent stator cores cooperating therewith, and means for periodically forming a magnetic circuit between differ-



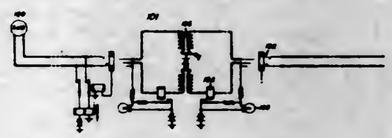
ent stator cores comprising a magnetic field distributor mounted on said rotor and rotatable in conjunction therewith.

1,905,661. STEEL WHEEL. DANIEL W. VOORHEES, Jr., Peru, Ill. Filed Nov. 4, 1931. Serial No. 572,889. 1 Claim. (Cl. 301—86.)



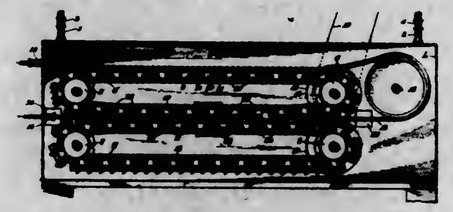
A heavy duty steel wheel, comprising an annular band having a circumferential grooved medial portion, the base of the grooved portion forming means for securing spokes thereto, flanges on either side of the grooved portion offset radially from said base, said flanges increasing in thickness laterally from the side walls of the grooved portion and having tread peripheries on equal radii of the wheel.

1,905,662. TELEPHONE SYSTEM. HORACE W. ULRICH, Newark, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1931. Serial No. 577,571. 11 Claims. (Cl. 179—27.)



1. In a telephone system, an operator's position, trunks incoming to said position from a manual office, trunks incoming to said position from a dial office, means at said dial office to automatically announce wanted line designations, common control equipment at said operator's position, an operator's telephone associated with said control equipment and normally disconnected therefrom, means in said control equipment for connecting said telephone with said trunks, means responsive to the seizure of any one of said trunks for automatically connecting said control equipment with said trunk, means to identify said trunks incoming from the dial office to said control equipment, means in said control equipment to transmit a tone signal to said operator's telephone, means responsive to said identifying means to transmit a signal to initiate the operation of said announcing means, means normally responsive to the completion of said tone signal to connect said telephone with said trunk, and means responsive to said identifying means to delay the connection of said telephone with said trunk until the termination of said signal.

1,905,663. CONTINUOUS VULCANIZING APPARATUS. ARCHIBALD L. WALLACE, Brooklyn, N. Y. Filed July 30, 1930. Serial No. 471,648. 16 Claims. (Cl. 18—6.)



4. A vulcanizing machine, comprising a steam chest, a pair of endless chains within said steam chest co-operative to provide parallel leads between which the article to be vulcanized is received, means to continuously drive said chains, means to hold said leads in gripping engagement with the article, the steam chest having an opening through which to introduce the article into the chest, and one of said chains having a lead constituting a conveyor extending from adjacent said opening to adjacent the article receiving end of the first leads serving to carry the article from said opening to adjacent its point of reception between the first mentioned leads.

1,905,664. METHOD OF PRODUCING A CONTROLLING DEVICE. ALBERT J. WEATHERHEAD, Jr., Cleveland, Ohio. Filed Feb. 6, 1929. Serial No. 337,759. 2 Claims. (Cl. 153—2.)



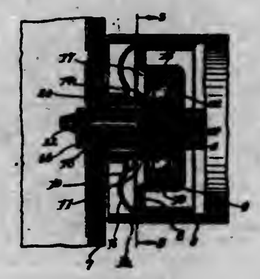
1. A method of producing a controlling device as described, including the steps of forming a tube close to its end with outwardly extending narrow and relatively short corrugations arranged parallel to the axis of said tube, in forming a bushing having approximately the same inner diameter as said tube with a stepped counter-bore, in inserting the corrugated end of said tube into said bushing until engaged with the shoulder at the inner end of said counter-bore, and in contracting the end of the counter-bored portion of said bushing to interlock with said corrugated end, and to embed said corrugations within the wall of said bushing.

1,905,665. METHOD OF PRODUCING COUPLINGS. ALBERT J. WEATHERHEAD, Jr., and JOHN D. BALDWIN, Jr., Cleveland, Ohio; said Baldwin assignor to said Weatherhead. Filed Oct. 29, 1929. Serial No. 403,228. 7 Claims. (Cl. 29—157.)



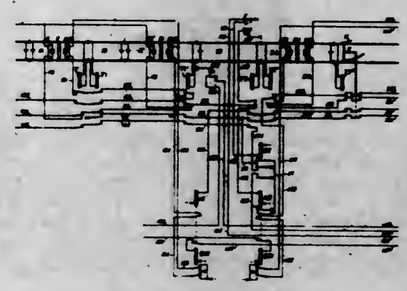
1. A method of producing a coupling member having a fluid-passage and screw-threaded chamber, together with a truncated conical seat having a finished truncated edge and projecting forwardly at the bottom of said chamber, consisting in forming the fluid-passage and chamber and also the truncated conical seat in a single uninterrupted cutting operation, and then tapping the chamber wall with a screw-thread.

1,905,666. SEALED BEARING. PETER C. WEGO, St. Paul, Minn., assignor to Standard Conveyor Company, North St. Paul, Minn., a Corporation of Minnesota. Filed Jan. 2, 1930. Serial No. 417,891. 8 Claims. (Cl. 308—184.)



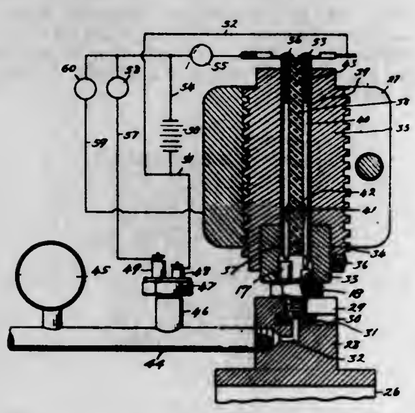
1. In a bearing for a roller having a revoluble body and a bearing recess in an end of said body, an axial support projecting into said recess, said support comprising an axial shaft and a sleeve on said shaft, a bearing on said sleeve in said recess, an annular closure cap for said bearing recess fixed on said sleeve and having an opening for the escape of lubricant extending around its outer periphery within said roller body and a passageway for lubricant extending longitudinally in said axial shaft and having branch passageways in said sleeve opening between said cap and bearing at a plurality of points spaced around the periphery of said support, said passageways and branches being adapted to receive lubricant from an opening in the outer end of said axial support.

1,905,667. TRAIN-CONTROL TRACKWAY EQUIPMENT. GEORGE F. WEINRICH, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,421. 15 Claims. (Cl. 246—63.)



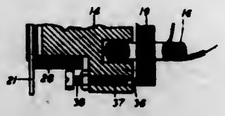
1. In combination with a stretch of trackway having sidings for permitting the passage of trains and being divided into insulated sections, sets of trackway electromagnets in various of the sections, each set including electromagnets for transmitting impulses to vehicles passing in both directions, means for preventing the energization of any of the magnets for controlling a vehicle moving in one direction over the stretch when a vehicle is moving over the stretch in the other direction, and means for successively energizing the other magnets of the sets first in one direction and then the other.

1,905,668. METHOD OF AND APPARATUS FOR FORMING AND TESTING SWITCHES. JOHN WILLIAM WHITE, Detroit, Mich., assignor to Kelsey-Hayes Wheel Corporation, Detroit, Mich., a Corporation of New York. Filed Mar. 10, 1930. Serial No. 434,717. 19 Claims. (Cl. 175—183.)



1. In an apparatus for completing a switch having binding posts adapted to be connected electrically by an element of said switch under pressure, said apparatus comprising a bed in which said switch is placed and a movable die, connecting means carried by said die for contacting with said binding posts, a source of electrical energy and a bulb in circuit with said connecting means, a master switch, the binding posts of which are in circuit with a source of electrical energy and a bulb, means for operating and completing the switch in said bed, and means for supplying pressure simultaneously to both said master switch and the switch in said bed to cause the element in each switch to complete the circuits.

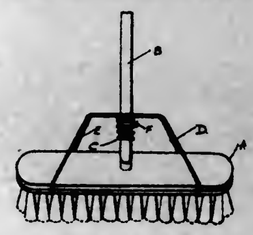
1,905,669. VIBRATION TRANSLATING DEVICE. GEORGE R. YENNER, Woodhaven, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1931. Serial No. 561,865. 6 Claims. (Cl. 179—100.41.)



3. In an electromagnetic translating device, a stationary structure including a magnet, a moving system including an armature adapted to vibrate between the poles of the magnet, a set screw in the stationary structure having an eccentric hole in the end thereof, and a pin secured to the moving system and extending into the hole in the set screw to provide a biasing means for the system.

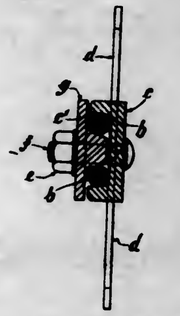
1,905,670. DEVICE FOR SECURING BROOM HEADS TO THEIR STICKS. ELIJAH ALFRED YOUNG, Johannesburg, Union of South Africa. Filed Sept. 9, 1931. Serial No. 561,888. 2 Claims. (Cl. 206—20.)

1. Means for securing a handle to a broom head comprising a symmetrical pair of wire rods each bent substantially U shape and both formed with horisontal medial portions united to each other, the remainder of the two wire rods being side limbs which are angularly spread hooks at the free ends of all of said side limbs adapted to engage under the broom head, a circular ring formed in the centre of the united median portion of said wire rods, a coiled wire rod united to said ring coaxial therewith and depending therefrom and adapted to receive the handle of



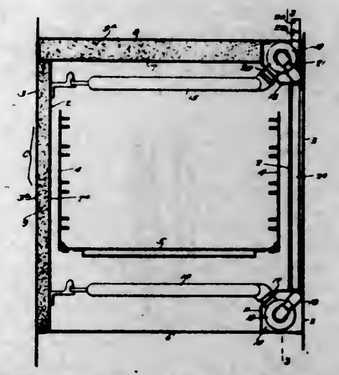
the broom, and a radial projection being driven into the handle of the broom adapted to travel along the convolutions of said coiled wire rod.

1,905,671. FLEXIBLE HARROW OR CULTIVATOR. WILLIAM AITKENHEAD, Failsworth, England. Filed Nov. 25, 1931, Serial No. 577,278, and in Great Britain Dec. 8, 1930. 4 Claims. (Cl. 55—82.)



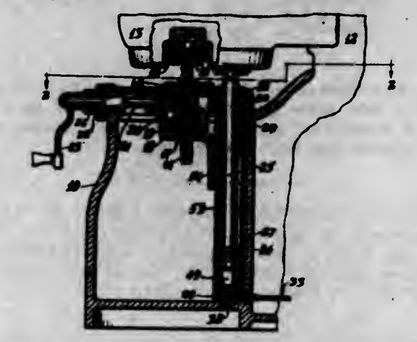
1. In flexible harrows or cultivators composed of a plurality of links having hooks and eyes or loops for connection with one another, and clamping means for holding tines thereto, a clamp having two acutely inclined relatively movable faces, and a third and opposed abutment face of the tine itself in the angle of the said inclined faces between which three faces the link is clamped.

1,905,672. GAS RANGE. WILLIAM D. ANTRIM, Gloucester, N. J., assignor to Roberts & Mander Stove Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 20, 1931. Serial No. 570,019. 4 Claims. (Cl. 126—273.)



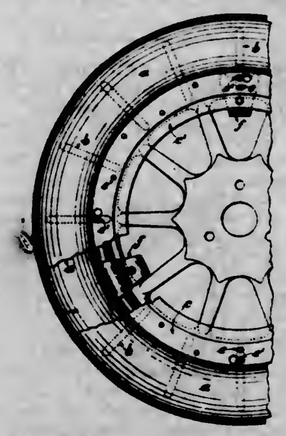
1. The combination in a gas range, of an oven having an inner and outer casing; a baking burner in the lower portion of the oven; a broiling burner in the upper portion of the oven; and a controlling valve controlling the flow of gas to the said burners through their mixing chambers, said mixing chambers being located in compartments formed by the inner and outer plates of the oven, the inner plates forming the compartments, being removable through the oven.

1,905,673. MILLING MACHINE. WALTER D. ARCHEA, Cincinnati, Ohio, assignor to The Cincinnati Milling Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 8, 1930. Serial No. 419,425. 7 Claims. (Cl. 90—18.)



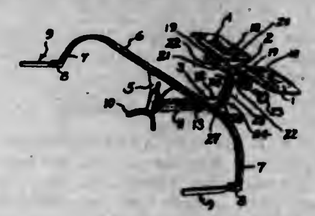
2. In a milling machine having a bed, a table slidably mounted on said bed, a column, a spindle carrier mounted on said column for movement toward and from said table, the combination of means for effecting said movement including a screw and nut, and means to counter-balance the carrier during movement in either direction including a piston and cylinder, one of which is attached to said head, a source of hydraulic pressure coupled to said cylinder to effect a lifting force on said head and adjustable automatic valve means for maintaining the pressure at a predetermined constant valve during movement of the head in either direction.

1,905,674. SPLASH GUARD FOR MOTOR VEHICLES. ALFRED JAMES BARBA, Longsight, Manchester, England. Filed Jan. 2, 1931, Serial No. 506,236, and in Great Britain Aug. 29, 1930. 2 Claims. (Cl. 280—156.)



1. A splash guard for a vehicle wheel, comprising a flexible ring of uniform thickness throughout and having in cross section an inner straight part and an outer curved part, flat metal springs intermoulded in the ring and arranged radially thereof, a metal clamping ring at each side of the straight part of the flexible ring clamping bolts passing through the clamping rings and the intermediate part of the flexible ring, each clamping bolt passing through one of the intermoulded metal springs, and means for securing the inner clamping ring to the vehicle wheel.

1,905,675. OPHTHALMIC MOUNTING. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed July 25, 1929. Serial No. 380,968. 5 Claims. (Cl. 88—41.)



1. In a device of the character described, a frame member having a nose rest support thereon, an arm pivoted to the nose rest support and extending forwardly therefrom, a lens support pivoted adjacent the outer end of said arm, a hinge joint on the arm intermediate the pivot connections by means of which the said arm may be folded, and a spring member at said hinge joint and pivot connections adapted to hold the lens support rigid in its outwardly adjusted position.

1,905,676. AUTOMATIC SPRINKLER OR FIRE EXTINGUISHER AND OTHER FIRE DEVICE. SIDNEY FRASER BARCLAY, Manchester, England, assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Mar. 30, 1931, Serial No. 526,509, and in Great Britain Apr. 15, 1930. 5 Claims. (Cl. 169—38.)

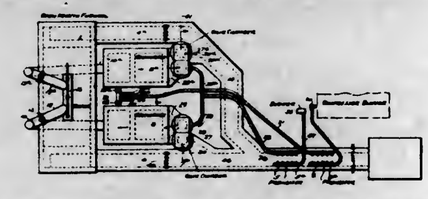


1. In bulbs containing a liquid and a bubble for use in automatic sprinklers, fire extinguishers and other fire control devices, the addition to the thermally expansive liquid by which the bulb is shattered at a predetermined temperature of a material or materials which destroy or reduce to a low value the tensile stress induced in such liquid prior to the reappearance on cooling of the bubble after its disappearance upon heating of the bulb to a temperature lower than the shattering temperature.

1,905,677. OPEN HEARTH FURNACE. IRVIN A. BILLIAR, Burnham, Pa. Filed Dec. 2, 1931. Serial No. 578,592. 8 Claims. (Cl. 263—15.)

3. The combination in an open hearth furnace, of a furnace having downtake flues at each end; a waste gas flue with which said downtake flues communicate; a series of burners in the roof of the furnace, arranged to direct the flames upon the charge within the furnace; two regenerator chambers; a preheater in the waste gas flue; a burner pipe connected to each regenerator chamber; a pipe leading from the said pre-heater to said burner pipe;

valves in said burner pipe for controlling the flow of highly heated air to either regenerator furnace; a hot blast pipe leading from each regenerator chamber to the



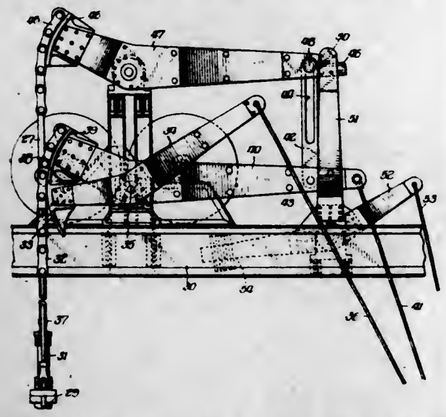
burner at the roof of the open hearth furnace; and a valve in each of said hot blast pipes for controlling the flow of heated air therethrough.

1,905,678. LOAD LIFTING ARRANGEMENT. CHARLES D. BONSALL, New Kensington, Pa., assignor to P. H. Murphy Company, New Kensington, Pa., a Corporation of Pennsylvania. Filed Apr. 18, 1929. Serial No. 356,242. 4 Claims. (Cl. 108—5.)



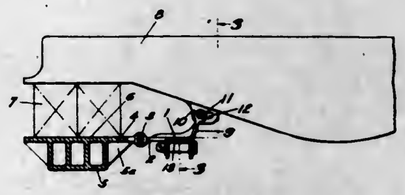
1. In a railway car, the combination of a load lifting beam having oppositely projecting flanges, and a member formed of a double looped bar with its free ends and the return bends thereof being substantially parallel and in close proximity to said flanges of the lifting beam, said member also having means for attachment of a lifting device positioned between said return bends whereby a downward inclined pull upon the lifting device causes the ends and return bends of the member to bind upon the flanges of the beam and retard movement of the member longitudinally of the beam.

1,905,679. APPARATUS FOR CHARGING FURNACES. ARTHUR J. BOYNTON and PAUL ZIMMERMANN, Chicago, Ill., assignors to H. A. Brassert & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 23, 1932. Serial No. 588,310. 5 Claims. (Cl. 214—36.)



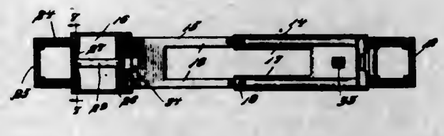
1. In a shaft furnace, charging apparatus comprising a charging hopper, a two-part bell closing the lower end of the hopper, said bell comprising an inner part and a ring shaped outer part, a bell rod and operating bell crank for each of said bell parts, and a slotted link connecting the two bell cranks for joint operation.

1,905,680. RAILWAY TRUCK CONSTRUCTION. EDWIN G. BUSSE, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 5, 1932. Serial No. 597,066. 14 Claims. (Cl. 188—207.)



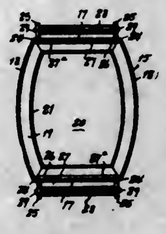
1. In a railway vehicle, a plurality of structural parts, one of said parts being movable relative to the other, and a brake beam guard, guide or support member deriving support from both of said parts.

1,905,681. EXTENSION DEVICE. EDWIN G. CARLSON, Riverside, R. I., assignor to Speidel Chain Co., Providence, R. I., a Firm composed of Frederic Speidel and Eugen Speidel. Filed Dec. 18, 1930. Serial No. 503,269. 11 Claims. (Cl. 24—71.)



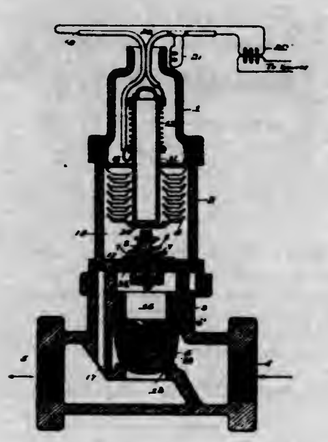
11. An extension device for an open chain link bracelet comprising a pair of overlying sections with spaced projecting arms hinged together at their ends and unconnected laterally leaving a continuously open unobstructed space between said arms from the pivoted free end for at least half the length of said sections when in folded position, and means for adjustably connecting a link bracelet to said device with the openings in the links registering with the space between said arms regardless of the position of said links when the extension device is in folded position, so as to give the appearance of a continuous chain.

1,905,682. WRIST WATCH AND THE LIKE. ELOF L. CARLSON, Bristol, Conn., assignor to The E. Ingraham Company, Bristol, Conn., a Corporation. Filed Mar. 18, 1932. Serial No. 599,706. 12 Claims. (Cl. 58—88.)



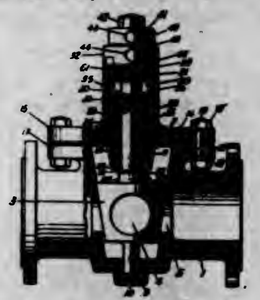
1. In a strap watch or the like, the combination with a case provided with spaced-apart openings; of a U-shaped strap-yoke having its cross-reach located within the said case and having its spaced-apart side-arms extending outwardly from the interior of the said case through the said spaced-apart openings therein.

1,905,683. THERMOSTATICALLY CONTROLLED VALVE. THOMAS W. CARRAWAY, Chicago, Ill., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of Delaware. Filed Nov. 27, 1928. Serial No. 322,241. 1 Claim. (Cl. 137—138.)



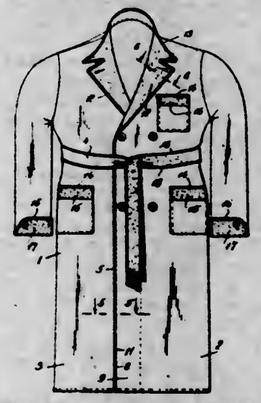
A valve mechanism comprising, in combination, a housing having an inlet an outlet passage with a valve seat therebetween; a main valve arranged to be seated on said seat to prevent direct flow from the inlet to the outlet passage; a second housing mounted on the first housing with a partition therebetween forming a chamber in the first housing on the side of said valve opposite its seat; a passage through said valve connecting the said chamber with the inlet passage whereby the supply pressure is admitted to said chamber to hold the valve seated; a third housing mounted on said second housing having a partition therebetween comprising a tubular container extending on both sides of the last said partition into the chambers of the second and third housings respectively; the portion of said container located in the chamber of the third housing having its end closed and the portion of said container located in the chamber of the second housing having its end open; a bellows sealed within the chamber of the second housing in communication with the open end of said container; a port in the first said partition connecting the chamber above the main valve in the first housing with the chamber of the second housing; an auxiliary valve located in the chamber of the first housing above the main valve having a stem extending through the first said partition into the chamber of the second housing in position to be engaged by said bellows; a spring acting on said stem to hold said auxiliary valve seated whereby the said port is closed; a second port in the first said partition opening into a passageway through the first housing leading to the outlet passage thereof; an electric heating coil surrounding the portion of the container extending into the chamber of the third housing having conduits leading to a source of electric current; and a fluid in said container and bellows adapted to expand when an electric current is passed through said heating coil; the expansion of said fluid causing said bellows to move into engagement with the stem of the auxiliary valve and effect the latter's opening, thereby permitting the pressure acting on the main valve to seat it to pass through the port opened by the auxiliary valve and thence escape through the other port in the first said partition and associated passageway to the outlet passage of the first housing, whereby the inlet pressure acting on the main valve effects its opening.

1,905,684. VALVE STRUCTURE. JOHN R. COFFMAN, Columbus, Ohio, assignor to The Columbus Valve Manufacturing Corporation, Columbus, Ohio, a Corporation of Ohio. Filed Mar. 18, 1930. Serial No. 436,813. 9 Claims. (Cl. 251—93.)



1. In a valve structure, a valve casing including a seat, a plug adapted to be disposed in said seat, a stem for said plug, a cap member for said casing having a tubular extension, a packing material in the lower portion of said extension and surrounding said stem, a gland member disposed within said tubular extension for compressing said packing material, and a nut mounted upon the upper end of said tubular extension and slidably mounted on said stem for moving the stem axially, there being a space between said nut and said gland member so as to provide a reservoir for lubricant, said nut and said gland member operating independently of each other.

1,905,685. ROBE CONSTRUCTION. GEORGE SAFIR and LEO C. SAFIR, South Norwalk, Conn. Filed Nov. 22, 1932. Serial No. 643,822. 2 Claims. (Cl. 2—93.)



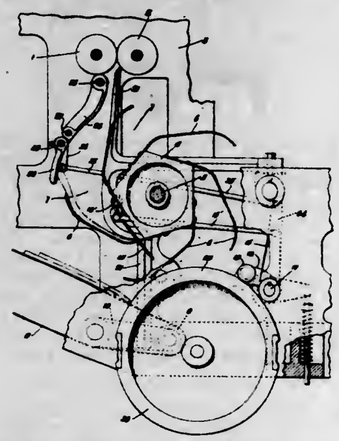
1. In an edging structure for a garment, a cord attached to the garment on the inner face thereof and adjacent the edge of said face, the margin of said garment adjacent the cord being laid against the surface of the cord, a strip of material stitched to said margin and folded upon itself so as to conceal said stitching, said strip extending around said cord and against the inner surface of said garment and being stitched to said garment in a line close to said cord, said line of stitching being exposed on the outer surface of said garment in close proximity to the fold of said strip, thereby appearing as the stitching by which said strip is secured to the garment.

1,905,686. METHOD OF PREPARING CARBON AND PRODUCT THEREOF. ROBERT M. COLB, Bryn Athyn, Pa., assignor to American Dyewood Company, New York, N. Y., a Corporation of Pennsylvania. Filed Jan. 25, 1932. Serial No. 588,826. 18 Claims. (Cl. 134—60.)

1. The method of treating carbonaceous material to produce carbon which comprises subjecting such material

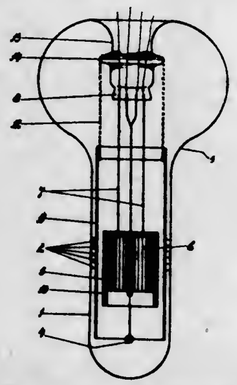
while submerged in a liquid medium to temperature, under pressure commensurate with such temperature, sufficient to char the material, the pressure and temperature being so coordinated as to maintain the medium in which the carbonaceous material is submerged in the liquid phase during the charring of the material.

1,905,687. **FOLDING MECHANISM.** CURTIS S. CRAFTS, Oak Park, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 19, 1932. Serial No. 587,498. 11 Claims. (Cl. 93—93.)



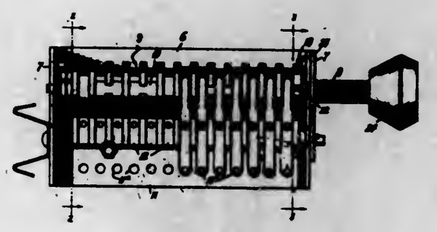
1. A delivery mechanism for high speed folders including in combination a rotary fly into which folded products are delivered, a moving surface onto which the products are placed by the fly, means for holding the products within the fly during a portion of its revolution, means for displacing certain of said products as said products are delivered and means for moving said holding means to permit normal operation of the displacing means.

1,905,688. **ELECTRIC DISCHARGE TUBE.** WILLEM DE GROOT and ENGBERT HARMEN REBBINK, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Apr. 1, 1931, Serial No. 526,922, and in the Netherlands Apr. 3, 1930. 12 Claims. (Cl. 176—122.)



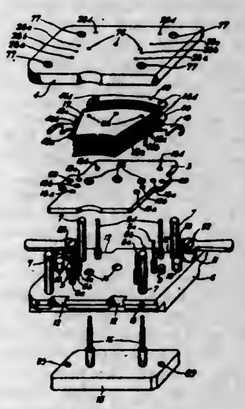
1. An electric discharge tube comprising at least two electrodes, a substance the vapour of which participates in the discharge, an open ended and solid wall member acting as a chimney for said vapour.

1,905,689. **SWITCH FOR RADIO PHONOGRAPH SETS.** FRANK C. DE RHAMES, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed Feb. 3, 1931. Serial No. 513,184. 3 Claims. (Cl. 200—8.)



1. A rotary switch comprising a spindle, thick and thin disks alternately arranged thereon, the thin disks having axially extending sockets, thin metal contacts mounted on the thick disks, certain of which are in the same axial alignment, and shallow tenons on the contacts which enter the sockets, the aggregate length of a pair of tenons entering the same socket being less than that of the thickness of the disk containing the same.

1,905,690. **ASSEMBLING MACHINE AND JIG.** FREDERICK W. DOYLE, Chicago, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Original application filed June 27, 1928, Serial No. 288,601. Divided and this application filed Nov. 21, 1931. Serial No. 576,453. 3 Claims. (Cl. 29—84.)



1. The process of assembling parts by means of a plurality of jigs and a compressor which consists in passing the jigs down a line of operators each of whom places one or more parts on each jig, in passing the jigs in turn to the compressor, the operator of which compresses the parts, permanently secures them together, and removes the complete assemblies from the jigs, and in returning the empty jigs to the beginning of the line.

1,905,691. **JOINT FOR HIGH TENSION UNDERGROUND CABLES.** EUGENE D. EBY, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 9, 1927. Serial No. 167,082. 11 Claims. (Cl. 173—268.)

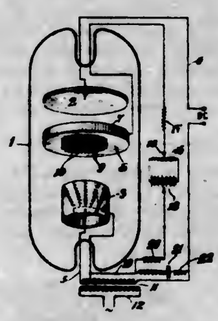
1. A joint for sheathed cable conductors comprising a casing which unites the sheaths, a cylindrical lining for

the casing, connectors for the conductors which are located within the lining between its ends, inner segmental barriers which are situated between the conductors, the sides of which engage the inner surface of the lining, and



outer segmental barriers the sides of which also engage the inner surface of the lining, the edges of the inner and outer barriers of each conductor terminating at their points of contact.

1,905,692. **RECTIFIER.** DONALD V. EDWARDS, New York, N. Y., and EARL K. SMITH, East Orange, N. J., assignors to Electrons, Inc., of Delaware, a Corporation of Delaware. Filed Dec. 30, 1930. Serial No. 505,510. 5 Claims. (Cl. 250—27.5.)

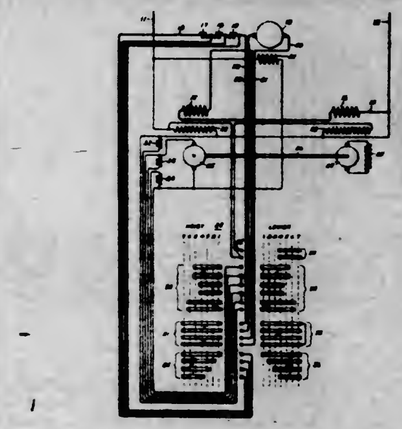


1. A discharge tube enclosing a gaseous conducting medium, an anode, a cathode and a grid adapted to control the starting of said tube, said grid having open spaces therein formed by conductive elements separated a distance approximately as great as the mean free path of the gas in the tube under starting conditions.

1,905,693. **MOTOR CONTROL SYSTEM.** WALTER ENDRES and HERBERT HOOTZ, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed Oct. 20, 1931, Serial No. 570,006, and in Germany Oct. 30, 1930. 11 Claims. (Cl. 172—179.)

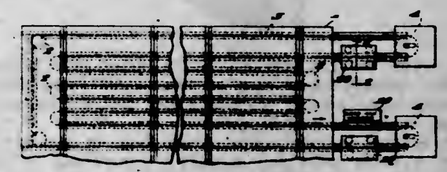
1. In a motor control system the combination with a main direct current shunt motor, of means for imparting a series characteristic to said motor comprising an auxiliary motor having its armature connected in the field circuit of said main motor and excited in inverse proportion to the load on said main motor.

11. A motor control system comprising a main direct current shunt motor, a resistance device having a plurality of sections, means for imparting a series characteristic to said motor comprising a regulating set, said set comprising an auxiliary motor having its armature connected in parallel with certain of said resistance sections and provided with a separately excited field winding and a differentially wound field winding connected in the armature circuit of said main motor and a generator driven by said motor and provided with a field winding connected in the armature circuit of said main motor, speed control means for said motor comprising a controller having a plurality of field weakening positions, electrical connections established in one of said field weakening positions for rendering said certain resistance sections and



said regulating set effective and electrical connections established in another of said field weakening positions for modifying the effect of said regulating set.

1,905,694. **ARTICLE TREATING APPARATUS.** ERNEST L. FOLEY, Newton, Mass., assignor to Underwood Machinery Company, South Boston, Mass., a Corporation of Massachusetts. Filed Feb. 15, 1928, Serial No. 254,419. Renewed Aug. 27, 1932. 11 Claims. (Cl. 91—45.)



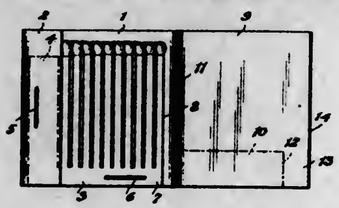
6. Apparatus of the kind in which a succession of articles moves through a treating zone, said apparatus comprising a rotary spindle for supporting an article to be treated, said spindle being bodily movable along a path substantially perpendicular to its axis of rotation, a whirl on the spindle, a pair of endless belts each having a run disposed at one side of the path of the spindle and substantially parallel thereto, and means resiliently urging said runs toward the path of the spindle and into frictional contact with said whirl as the spindle progresses along its path, said belts moving in opposite directions.

9. Apparatus of the kind in which articles to be treated are moved successively through a plurality of treating zones, said apparatus comprising an endless chain moving in a predetermined path, a guide rail for supporting the chain, a carriage rigidly connected to the chain, said carriage having a bearing, a spindle journalled in said bearing, said spindle having an article-supporting element, and power actuated means for rotating the spindle at high speed as it passes through each treating zone.

1,905,695. **MATCH PACKAGE.** BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 23, 1930. Serial No. 446,493. 1 Claim. (Cl. 206—29.)

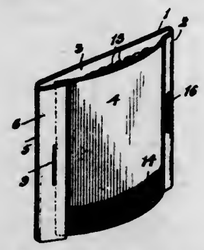
A match package having a cover, a match strip extending cross-wise on said cover and having portions of the

cover folded over it, the match strip being secured at two of its edges to the cover, with one of the secured edges lying at right angles to the other secured edge, a striking surface on the cover extending longitudinally of it, said



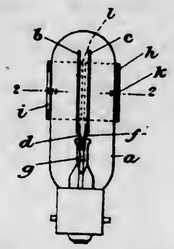
striking surface having one of its narrower ends terminating short of the free end of the cover and being so proportioned that it cannot be brought into contact with the heads of the matches by the inadvertent angular folding of the cover.

1,905,696. MATCH PACKAGE. BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 30, 1930. Serial No. 448,453. 1 Claim. (Cl. 206—29.)



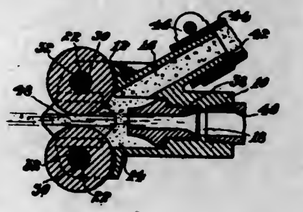
A match package provided with a match strip having a flap disposed along each of two of its longitudinal parallel edges, a cover containing said match strip, said cover having a narrow inturned flap at one of its ends adapted to overlie one of the flaps on the match strip, a wider cover flap extending transversely of the match strip and adapted to have its end removably tucked under the narrow flap, said wider cover flap overlying the second flap on the match strip, means for attaching each of the two flaps on the cover to each of the flaps on the match strip which they respectively overlie and a striking strip on the outer face of the wider cover flap located adjacent to one of its edges.

1,905,697. POLARITY INDICATOR. HEINRICH FRIEDRICHSEN, Berlin-Treptow, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 8, 1930, Serial No. 427,033, and in Germany June 21, 1929. 1 Claim. (Cl. 250—27.5.)



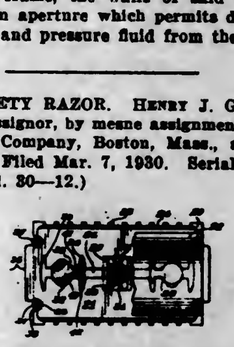
A polarity indicator consisting of an electric discharge device of the cathode glow type comprising a container, a gaseous atmosphere therein, electrodes therein and a stencil mounted externally thereon, said stencil being a split-ring, resilient shell having its inside diameter slightly less than the outside diameter of the container and having a plus sign opposite the flat side of the positive electrode and a minus sign opposite the flat side of the negative electrode, said electrodes being plates mounted in coextensive parallel relation, one of said plates being a shield to prevent light from the other plate from passing through the lamp wall in the direction of the first named plate.

1,905,698. SAND BLAST NOZZLE. JAMES S. FULTON, Shields, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 11, 1932. Serial No. 642,198. 3 Claims. (Cl. 51—11.)



1. A sand blast nozzle comprising in combination, a frame, a conduit for pressure fluid, a conduit for abrasive material, a plurality of rotatably movable elements mounted in the frame, the walls of said rotatable elements forming an aperture which permits discharge of a mixture of sand and pressure fluid from the nozzle.

1,905,699. SAFETY RAZOR. HENRY J. GAISMAN, New York, N. Y., assignor, by mesne assignments, to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Mar. 7, 1930. Serial No. 434,047. 6 Claims. (Cl. 30—12.)



3. A safety razor head, including cap and guard members having co-operating blade flexing and blade clamping surfaces, and a flexible blade having cutting edges, said blade being interposed between said members and comprising blade sections held in spaced relation by flexing hinges, the adjacent portions of said blade sections being provided intermediate their end and central portions with a plurality of resilient tongues having their free ends recessed to form blade-locating openings, said guard member having studs engaging the openings at the ends of the tongues to align the blade and guard, said studs having excluding portions extending longitudinally beyond the recesses and transversely about portions of the free ends of said tongues, and co-acting means on said cap and blade to align the same.

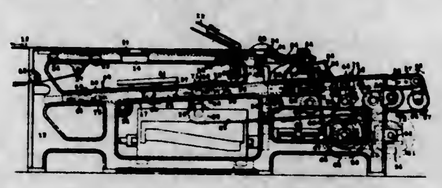
1,905,700. FACING MACHINE. HARRY A. GREENHOLT, Chicago, Ill., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 16, 1926. Serial No. 129,388. 11 Claims. (Cl. 198—33.)

1. A facing machine for an article having a substantially flat face and sharp edge on one side and a receding edge on the other side, including a pair of driven belts having adjacent edges spaced apart less than the thickness of the articles being faced, guide means for said belts intermediate their ends disposed to tilt opposed portions of said belts to form a V of sufficient acuteness that one side of the V will exert pressure on the sharp edge of the article being faced and the other side of the



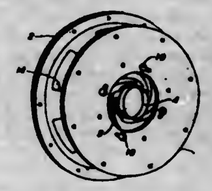
V will exert pressure on the receding side of the article inward from its extreme edge, whereby a turning moment will be produced to turn the flat face of the article against one of the belts.

1,905,701. CONVEYING MECHANISM. HARRY A. GREENHOLT, Chicago, Ill., assignor to National Biscuit Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 21, 1925. Serial No. 10,720. 24 Claims. (Cl. 107—7.)



20. In a machine of the character described, the combination comprising a panner blade mounted for advancing and retreating movement for periodically delivering batches of articles, a pan carrier for receiving said batches, means for moving said pan carrier at alternate different speeds synchronously with said panner blade reciprocations, and means for controlling the panner blade reciprocation and said carrier speed changes, said means being constructed and arranged to advance said panner blade at a different speed than its retreating speed and means connecting said delivery point and carrier to cause them to move together.

1,905,702. LOUDSPEAKER. RUPERT W. HARDISTY, Aldwych, London, England, assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 4, 1931, Serial No. 527,656, and in Great Britain June 19, 1930. 11 Claims. (Cl. 179—115.5.)



8. A moving coil loud speaker comprising a diaphragm, a driving coil attached to said diaphragm, a permanent magnet providing a magnetic air gap for said coil, a frame assembly carried by the magnet and detachable as a unit therefrom, said diaphragm and coil being permanently centered on said frame assembly, and coil positioning means for accurately recentering the coil in the air gap after removal therefrom, said means being operative by a small rotation of the frame assembly relative to said magnet.

1,905,703. CONTACT RECTIFIER. WOLFGANG HARRIES, Jena, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 5, 1930, Serial No. 500,404, and in Germany Dec. 12, 1929. 6 Claims. (Cl. 175—366.)



1. In a contact rectifier, a plurality of rectifier units and a bolt arranged to compress said units, each of said units including a plate composed of a material having a coefficient of expansion substantially different from that of the material of said bolt, said plate having a layer of active material thereon, each of said units further including a plate in contact with said active material, said plates being of such thickness and of such material that the thermal expansion of said plurality of rectifier units is substantially equal to that of said bolt.

1,905,704. ACOUSTIC DEVICE. HENRY C. HARRISON, Port Washington, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 14, 1930. Serial No. 452,154. 9 Claims. (Cl. 179—115.5.)



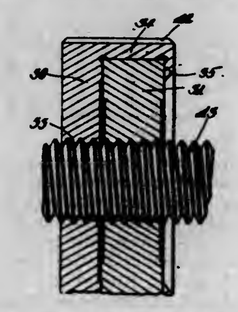
1. A sound reproducing device comprising an elongated direct acting diaphragm, means defining a magnetic air-gap, and a current conducting member disposed in said air-gap and secured to and across the face of said diaphragm along its short dimension, said member having integral flexible portions near its extremities.

5. In combination, a diaphragm comprising a plurality of spaced elongated elements, means for securing said elements at their extremities, said means comprising a member having depressions into which the extremities of said elements are placed and clamped therein by displacement of the material between said depressions, and means for actuating said diaphragm.

1,905,705. SCREW THREAD GAUGE. JAMES HARTNESS, Springfield, Vt. Filed Nov. 18, 1927. Serial No. 234,116. 12 Claims. (Cl. 33—199.)

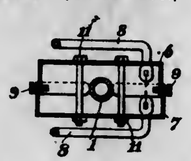
1. A method of gauging a screw, which comprises screwing onto said screw two ring gauges which are relatively adjustable about their common axis and are thus so adjusted that their threads lie in a common helix, the threads being of a sufficient pitch diameter to receive the

maximum tolerable screw to be gauged, effecting a relative rotation of the gauges from their original adjusted position as far as possible while restraining them from relative axial movement to cause their threads to jam against the opposite flanks of the threads of the screw, and noting the angle of relative rotation of said ring gauges.



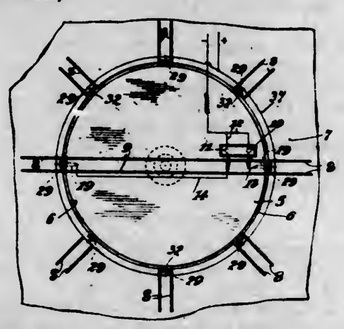
4. A gauge comprising a pair of members, each having a threaded aperture, said members being relatively adjustable about their common axis to positions wherein their threads lie in a common helix and being normally so adjusted, means for preventing relative axial movement of said members but permitting their relative rotation; and means for indicating the amount of relative rotation in either direction from said normal adjusted position.

1,905,706. ADVERTISING DEVICE. WOLFGANG HASENPATT, Berlin-Friedenau, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 27, 1932, Serial No. 619,607, and in Germany July 9, 1931. 2 Claims. (Cl. 40—130.)



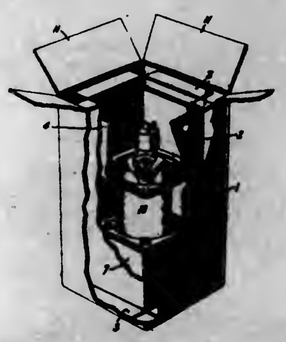
1. A sign comprising a plurality of letters mounted on a rod-support, said letters being in two parts adapted to clamp said rod, each of said parts having a reflecting surface and a luminous electric discharge device of the same configuration mounted thereon in operative relation to said surface.

1,905,707. INDICATING MEANS FOR TURNTABLES AND THE LIKE. HENRY O. HAVEMEYER, Jr., Mahwah, N. J. Filed Apr. 5, 1930. Serial No. 441,747. 3 Claims. (Cl. 200—164.)



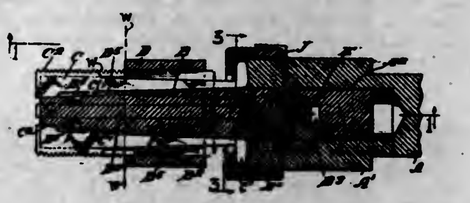
1. In combination with a rotary part, electrical circuit closing means including a fixed contact adjacent the periphery of said rotary part, a spring pressed circuit closing member carried by said rotary part and radially movable with respect thereto for engagement with the fixed contact, and means for regulating the frictional pressure of said circuit closing member upon the fixed contact.

1,905,708. PACKING CASE FOR FRAGILE ARTICLES. JOHNSON F. HENDRY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 18, 1929. Serial No. 392,446. 6 Claims. (Cl. 206—65.)



5. In a packing case for glass tubes and the like, an outer casing, a unitary inner containing member, and retaining members snugly and yieldingly held within said inner containing member when in position, a tube within said inner containing member, and means for cushioning said tube within said inner containing member, said cushioning means forming part of said retaining members.

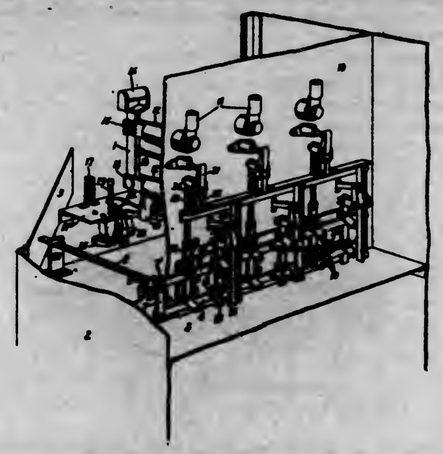
1,905,709. COLLAPSIBLE TAP. RAYMOND L. HERMAN, New York, N. Y., assignor to Benjamin May and Louis Schulman, Brooklyn, N. Y., a Partnership. Filed May 31, 1930. Serial No. 457,817. 7 Claims. (Cl. 10—145.)



1. A collapsible tap comprising a body, a head slidable lengthwise relatively to said body, inwardly-springing chasers engaging said head, the latter being formed to expand the tap by moving the working portions of the chasers outwardly when the head slides in one direction relatively to the body, said chasers having attaching portions adjacent to the body, and a clamping collar mounted on the body movably and arranged to press said attaching portions firmly against the body to hold them stationary relatively thereto.

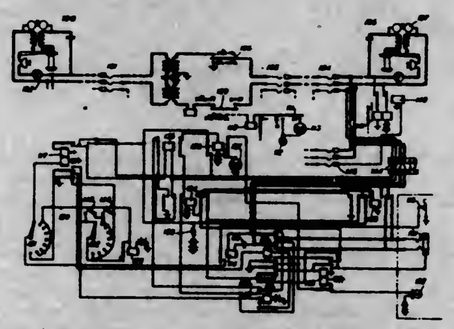
1,905,710. INTERLOCKING SYSTEM. CHARLES H. HILL, Drexel Hill, Pa., assignor to General Electric Company, a Corporation of New York. Filed Sept. 24, 1931. Serial No. 564,878. 7 Claims. (Cl. 200—50.)

1. An interlocking system for a plurality of individually movable members and enclosing housing therefor, comprising locking means operatively related to each of said members, said locking means positioned to accordance with the determining positions of the corresponding member, and blocking structure arranged selectively to be engaged by said locking means, uniform positioning of said members permitting partial movement of said blocking structure and non-uniform positioning completely locking the



same, and means relating said blocking structure to said enclosing housing so that said housing may be closed only when said members are in uniform positions.

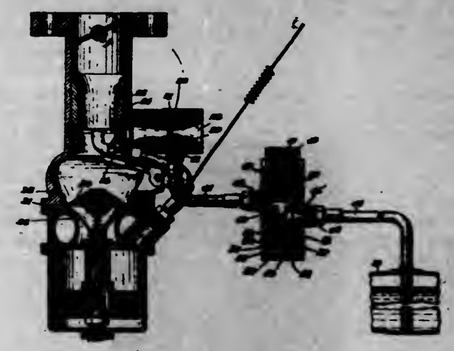
1,905,711. TELEPHONE SYSTEM. EDWARD E. HINRICHSEN, New York, N. Y., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 18, 1931. Serial No. 523,388. 9 Claims. (Cl. 179—27.)



1. In a telephone system, a calling line, a called line, means to establish a connection from said calling line to the terminals of said called line, means to apply ringing current to said called line at definite intervals, a stepping switch, a signal, means effective in a particular position of said stepping switch to operate said signal, means responsive to each application of ringing current to advance said switch one step, whereby said signal will be operated after a predetermined elapsed time, other means for advancing said switch, and means to render said other means effective to vary said elapsed time.

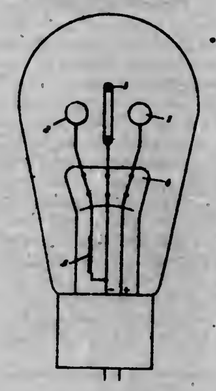
1,905,712. CARBURETING SYSTEM. CASPAR E. HOWBAUER, New York, N. Y., assignor to Paramount Carburetor Corporation, New York, N. Y., a Corporation of New York. Filed July 25, 1929. Serial No. 380,857. 2 Claims. (Cl. 261—69.)

1. As an attachment to a fuel feed system for automobiles and the like, a valve chamber, a valve seat therein, a valve, means acting automatically to keep said valve on its seat, a diaphragm supported in said chamber in spaced relation to said valve and connected thereto and presenting an area open to the chamber substantially equal to the area of the valve open to the chamber, the valve chamber being open to one side of the valve seat for connection of the conduit to the fuel nozzle and on the opposite side of the valve seat and at a point between the valve seat



and the diaphragm for connection to the conduit to the fuel source whereby the action of the head of the fuel from the source of supply upon the valve and the diaphragm and therefore upon the valve will be substantially equal and opposite, thus eliminating this head as a factor in the operation of the fuel feed control.

1,905,713. GAS FILLED DISCHARGE TUBE. GILLES HOLST, Eindhoven, Netherlands, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Jan. 22, 1927, Serial No. 162,900, and in the Netherlands Jan. 29, 1926. 7 Claims. (Cl. 176—123.)

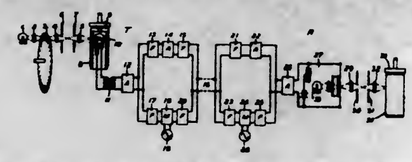


1. An electric arc discharge tube comprising a rare gas filling, main cooperating electrodes and a ring-shaped auxiliary electrode for increasing the arc voltage, said ring-shaped electrode being mounted entirely between said main electfodes and surrounding the discharge path.

1,905,714. SIGNALING SYSTEM. JOSEPH W. HORTON, Cambridge, Mass., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1931. Serial No. 529,043. 13 Claims. (Cl. 178—5.)

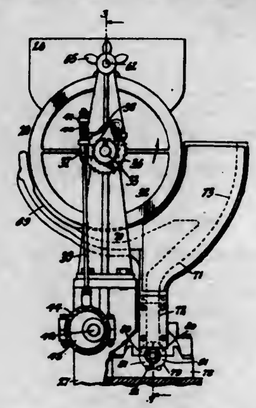
1. The method which comprises producing two currents having the same signal modulations but occupying differ-

ent frequency ranges, selecting a portion of one of said currents and stepping the selected portion into the frequency range of the other of said currents, and combining the



selected portion with the said other current to selectively modify the amplitude of certain frequency components of said other current.

1,905,715. NUT BLANK FEEDING MECHANISM. EDWARD H. INGRAM, Philadelphia, Pa., and VICTOR E. PEARSON, Buffalo, N. Y., assignors, by mesne assignments, to Helen Koch De Sherbinin. Filed Mar. 9, 1931. Serial No. 521,084. 5 Claims. (Cl. 10—170.)



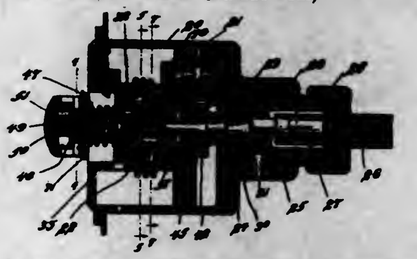
1. A mechanism for feeding nut blanks which are provided with a diametrical deflection across the central parts thereof, comprising a rotary bowl of conical form into the small end of which nut blanks are introduced promiscuously into said bowl, two positioning rings mounted opposite each other on the periphery of the large end of said bowl and having their opposing surfaces constructed to form an annular row of positioning openings through which the nut blanks are adapted to pass from the interior of the bowl to the exterior thereof, the corresponding sides of the openings in one of said rings having convex faces and the corresponding sides of the openings in the other ring having concave faces conforming to the shape of the nut blanks being fed the large end of said bowl being provided with means to prevent the nuts from falling out of this end of the bowl.

1,905,716. MAKING STEREOSCOPIC PARALLAX PANORAMAGRAMS FROM PSEUDOSCOPIC PARALLAX PANORAMAGRAMS. HERBERT E. IVES, Montclair, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Apr. 3, 1931. Serial No. 527,378. 21 Claims. (Cl. 88—166.)



2. In a system for producing pictures in stereoscopic relief, means to produce a pseudoscopic parallax panoramagram of an object, pictures of which are to be viewed in stereoscopic relief, means to produce a stereoscopic parallax panoramagram from said pseudoscopic parallax panoramagram, and means utilising said stereoscopic parallax panoramagram to produce a picture visible in stereoscopic relief.

1,905,717. AUTOMOBILE INDICATING DEVICE. ALFRED F. JACKSON, Providence, R. I., assignor to Lewis R. Smith, receiver of Apco Mossberg Corporation, a Corporation of Rhode Island. Filed Apr. 9, 1931. Serial No. 528,855. 17 Claims. (Cl. 116—31.)



1. In an automobile indicating device, a rotary element driven in predetermined relation to the wheels of the automobile, a driven member for indicating the distance traveled, means for connecting said element and member thru a lost motion device whereby movement of said element in opposite directions causes a different relative corresponding movement of said member.

1,905,718. FASTENER. ISIDOR JACOBS, Union City, N. J., assignor to G. E. Prentice Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed June 10, 1929. Serial No. 369,558. 22 Claims. (Cl. 24—205.)

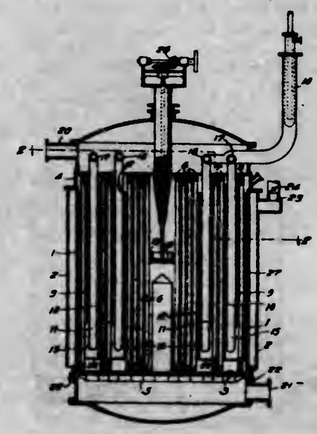


1. A sliding cam device for the stringers of a slide fastener comprising a separable pair of cam members arranged to slide on the stringers, means to join said members together, and an actuating means cooperating with said joining means and so arranged that movement thereof longitudinally of the stringers moves the sliding cam, and movement thereof transversely of the stringers releases the joining means in order to separate the cam members.

1,905,719. CATALYTIC APPARATUS. ALPHONS O. JAEGER, Mount Lebanon, Pa., assignor, by mesne assignments, to the Selden Research & Engineering Corporation, Pittsburgh, Pa., a Corporation of Delaware. Filed June 10, 1929. Serial No. 369,544. 5 Claims. (Cl. 23—288.)

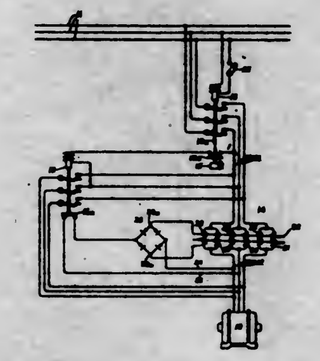
1. An apparatus for carrying out vapor phase catalyses, comprising in combination a converter shell, a plurality of zones of vertical catalyst tubes arranged concentrically therein, zones of tubes containing a cooling medium arranged between the zones of catalyst tubes and a baffle structure consisting in a baffle surrounding the central zone of catalyst tubes and extending from a point below the upper level of the bath to a point slightly above the bottom of the converter, a second baffle surrounding the first zone of cooling tubes and extending from above the upper surface of the bath to a point slightly above the lowest point of the first baffle, a third baffle surrounding

the second zone of catalyst tubes and extending from a point slightly above the bottom of the converter to a point slightly below the upper surface of the bath, the first and third baffles being joined at their bottom edge by a horizontal baffle. The baffling structure being repeated for each additional zone of cooling tubes and catalyst tubes whereby the bath is caused to flow upwardly along the



catalyst tubes of the central zone, downwardly along the cooling tubes of the first cooling tube zone, upwardly over the catalyst tubes of the second catalyst tube zone and so on until the bath flows over the top of the baffle surrounding the last zone of catalyst tubes, whereupon it flows downwardly between the converter shell and the last baffle, underneath the horizontal baffle joining the bottoms of the old numbered baffles and into the bottom of the central zone of catalyst tubes.

1,905,720. MOTOR STARTER. BENJAMIN W. JONES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 2, 1931. Serial No. 572,547. 11 Claims. (Cl. 172—289.)



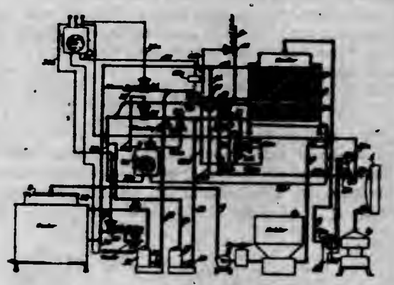
1. A motor starting system comprising an electric motor, means for supplying a voltage to said motor, means for progressively increasing the voltage supplied to said motor to the starting value comprising a variable magnetization, reactance device and means responsive to an increase in the terminal voltage of said motor by said supply means for controlling the magnetization of said reactance device to provide a further increase in the voltage supplied to said motor.

1,905,721. STAINLESS IRON AND METHOD OF PRODUCING THE SAME. WILLIAM H. KNOX, Albany, N. Y., assignor to Chas. W. Guttsell, New York, N. Y. Filed Aug. 14, 1930. Serial No. 476,456. 7 Claims. (Cl. 148—12.)



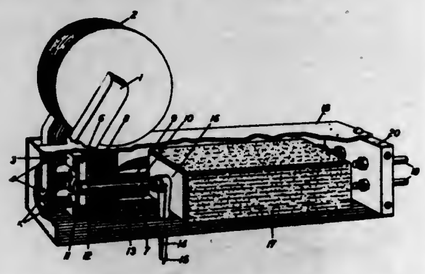
3. The method of treating stainless iron or steel containing chromium in a proportion approximating 10 to 15% and carbon in a proportion approximating 0.06 to 0.15% to produce a structure consisting essentially of a mixture of sorbite and troostite which comprises working the same at a temperature approximating 1800 to 1900° F. and below 1950° F. as a limit and thereafter annealing by heating to approximately 1500 to 1650° F.

1,905,722. MILK HEATER CONTROL. RUSSELL C. KINSMAN, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Feb. 28, 1931. Serial No. 519,154. 10 Claims. (Cl. 257—4.)



1. In apparatus of the character described, the combination with a heater defining heating surfaces, means for supplying heat to the heating surfaces and means for passing a liquid to be heated, in contact with the heating surfaces including means for controlling the flow of the liquid to the heater, of means responsive to the operation of said controlling means to stop the flow of the liquid for applying a cooling medium to the said heating surfaces, said last means also being responsive in the reverse operation of said controlling means to reestablish the flow of the liquid, for reestablishing the supply of heat to the heating surfaces.

1,905,723. VIBRATION DAMPING DEVICE. WESLEY E. LANDAMAN, Cedar Grove, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1931. Serial No. 561,820. 3 Claims. (Cl. 179—180.)



1. In a vibration translating device a vibrating member and means for receiving and dissipating the excess energy of the member comprising a solid block of reclaimed rubber supported solely by being attached at one end to and adapted to be vibrated torsionally by the member.

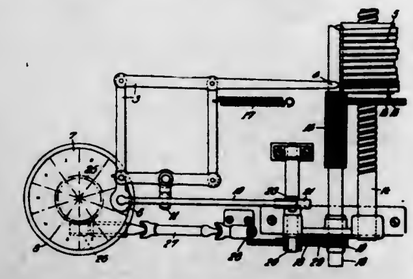
1,905,724. ELECTRIC CURRENT VALVE. JOHN G. H. LIEBEL, Cincinnati, and ROBERT C. JACQUELET, Norwood, Ohio, assignors, by mesne assignments, to The Union Switch & Signal Company, a Corporation of Pennsylvania. Filed Aug. 8, 1927, Serial No. 211,629. Renewed Feb. 4, 1933. 11 Claims. (Cl. 175—366.)



1. An electric current valve, comprising, a copper member having a film of copper oxide thereon, and a layer of reduced copper on the surface of the oxide film, the surface of said layer burnished.

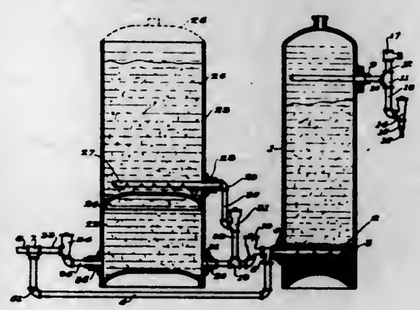
2. The process of making an electric current valve, comprising, the heating of a copper member to a temperature approximating 1900° F. in the presence of oxygen, the reduction of the surface of the oxide film by contact with a reducing liquid when said copper member is at an elevated temperature, and the pressing of the grains of the reduced copper into a smooth surface to decrease the electric resistance of the element.

1,905,725. ENGRAVING MACHINE. JOHN DUNLOP LINN, York, England, assignor of one-half to Cooke, Troughton & Simms Limited, York, England, a British Company. Filed Mar. 10, 1931, Serial No. 521,458, and in Great Britain May 12, 1930. 11 Claims. (Cl. 90—13.4.)



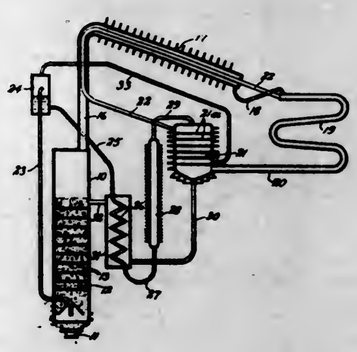
1. An engraving machine, comprising a copy cam, means for rotating said cam, said cam having a contoured portion, said portion having a groove, an engraving tool capable of universal movement in a given plane, and a controlling member capable of similar movement, said member having operative connection, on the one hand with said engraving tool, and on the other hand with said contoured portion, for applying to said tool a component of motion in a given direction, and with said groove for applying a second component at right angles thereto.

1,905,726. METHOD OF AND MEANS FOR SOFTENING WATER. LYNN G. LINDSAY, near Dayton, Ohio, assignor to Trupar Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 1, 1929. Serial No. 351,581. 7 Claims. (Cl. 210—24.)



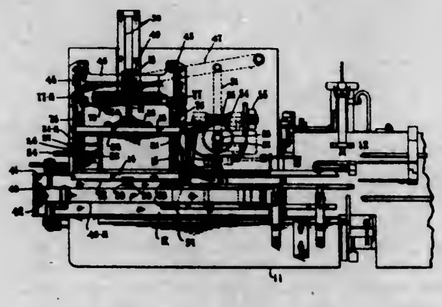
1. In a water softener, a tank containing water softening material, a brine tank in communication with the latter, a valve for admitting water under pressure to the brine tank, a valve for admitting brine from the brine tank to the softening tank, a valve for draining the latter tank, and means set by a single operation to simultaneously open all of said valves to recondition and wash the water softening material without a further change in said valves.

1,905,727. ABSORPTION REFRIGERATING SYSTEM. GUIDO MAIURI and RAOUL FELICE BOSSINI, London, England, assignors, by mesne assignments, to Electrolux Servel Corporation, a Corporation of Delaware. Filed June 9, 1930, Serial No. 460,018, and in Great Britain Oct. 29, 1929. 31 Claims. (Cl. 62—119.5.)



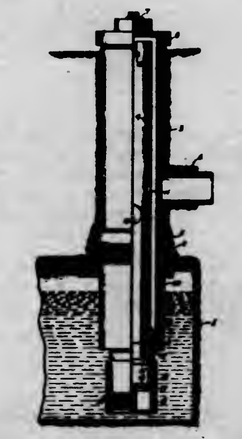
1. In a generator of an absorption refrigerating apparatus, means presenting small interstices located mutually closely adjacent throughout substantially the entire depth of the liquid space of said generator for restraining vertical movement of the liquid within said space.

1,905,728. CIGAR HANDLING MACHINE. FRANCIS X. MALOCHAY, Upper Saddle River, N. J., assignor, by mesne assignments, to Commercial Investment Trust Incorporated, a Corporation of New York. Filed Mar. 2, 1931. Serial No. 519,847. 22 Claims. (Cl. 131—39.)



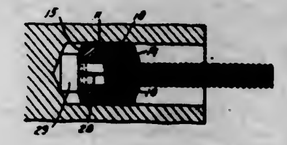
1. In a cigar handling machine, a cigar hopper adapted to receive rows of cigars and intervening spacers, means for discharging individual rows of cigars from the hopper and means for individually discharging the spacers from the hopper.

1,905,729. REMOVABLE VALVE MECHANISM FOR UNDERGROUND LIQUID TANKS. WILLIAM R. MCFEELY, Ponca City, Okla. Filed Apr. 11, 1932. Serial No. 604,465. 5 Claims. (Cl. 137—21.)



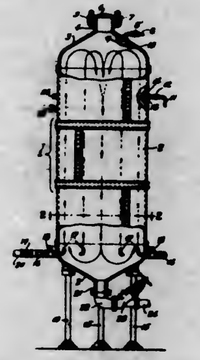
1. An underground tank fluid discharge assembly comprising in combination a tank, a casing secured thereto, a foot valve unit including a suction pipe, a valve housing and a valve; said unit being removably supported in said casing, means integral with said casing for supporting said unit, said suction pipe being provided with a discharge opening intermediate its length and being spaced inwardly from said casing to form an annular reservoir therewith, a discharge nipple for said casing communicating with said reservoir, and a cover plate for said casing accessible at the surface of the ground adapted to be removed to permit said unit to be withdrawn.

1,905,730. BOLT ANCHOR. ROY B. MCINTOSH, New York, N. Y., and THOMAS J. NOONAN, Jersey City, N. J., assignors to J. Edward Ogden Company, Inc., East Orange, N. J., a Corporation of New Jersey. Filed Oct. 18, 1930. Serial No. 488,388. 7 Claims. (Cl. 72—105.)



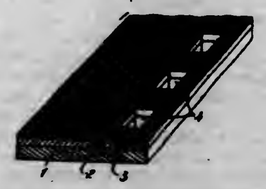
1. A bolt anchor unit comprising a body portion of ductile metal having a central bore therethrough, and a dished washer at each end of the body portion said washer and body portion having intereengaging portions whereby they are connected together.

1,905,731. PROCESS OF DIGESTING PULP AND APPARATUS THEREFOR. RALPH H. MCKEE, Jersey City, N. J. Filed May 4, 1929. Serial No. 360,341. 8 Claims. (Cl. 92—7.)



1. A pulp digester having electrical heating means.

1,905,732. SOUND RECORD BLANK. JAMES A. MILLER, Forest Hills, N. Y. Filed Oct. 7, 1931. Serial No. 567,439. 11 Claims. (Cl. 274—43.)

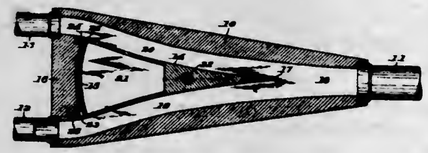


1. A sound record blank adapted to receive a sound track capable of optical reproduction, said blank having an opaque surfacing and a layer of transparent material below and adjacent to the opaque surfacing, the transparent ma-

terial having a degree of softness such that it may be cut into by a recording stylus and having a thickness sufficient to receive a sound track having vertical undulations.

2. A sound record blank adapted to receive a sound track capable of optical reproduction, comprising a base of transparent material, an intermediate layer of transparent material on the base, and an opaque surfacing on said intermediate layer, the material comprising the intermediate layer being of softer composition than the material of the base and having a thickness sufficient to receive a sound track having vertical undulations.

1,905,733. FLOW DIVIDER. WILLIAM F. MOORE, Flushing, N. Y., assignor to The Texas Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 18, 1932. Serial No. 599,648. 4 Claims. (Cl. 137—166.)



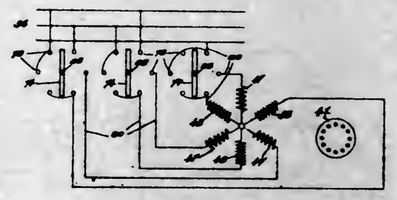
1. A device for dividing a stream of fluid into two equal streams comprising a casing interposed in the stream of fluid, a wedge-shaped vane pivoted centrally in the casing, limited in the extent of its rotation and adapted to divide equally the flow of fluid through the casing.

1,905,734. DRAFT REGULATOR. CLARENCE H. MORROW, Cleveland, Ohio, assignor to The Hotstream Heater Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 12, 1930. Serial No. 443,767. 3 Claims. (Cl. 236—45.)



1. An automatic damper of the class described, comprising an annular base adapted to be secured with the pipe through which flow is to be controlled, a shutter mounted on said base for swinging movement about a non-diametric axis in the plane thereof, a threaded spindle carried by said shutter on one side thereof at right angles to said axis, said shutter having an opening in its short stretch from said axis, a head secured upon said spindle and projecting through said opening, whereby the spindle may be rotated from either side of said shutter, said head having mass to substantially balance the shutter upon its axis whereby the head serves as a counterbalance for the long stretch of the shutter, and a weight threaded on said spindle for adjustment thereon through said long stretch of the shutter, said weight extending from said shutter substantially beyond said spindle whereby its center of mass is substantially offset from the plane of the shutter.

1,905,735. DRIVING AND STOPPING MECHANISM. ALFRED R. MORRILL, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Original application filed July 25, 1927, Serial No. 208,116. Divided and this application filed Feb. 1, 1930. Serial No. 425,342. 14 Claims. (Cl. 172—239.)



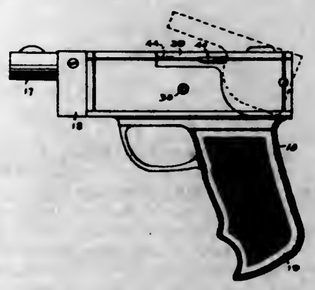
1. A driving and stopping mechanism for a machine having, in combination, an electric motor, a cam shaft driven thereby, means for supplying current to the motor, comprising an electric switch part movable to high, low, reverse and off positions, mechanism rendered operative in starting the machine to move the switch part to high speed position, and in stopping the machine to move the switch part to low speed position and then at a predetermined angular position of the cam shaft to move the switch part to reverse position.

1,905,736. SPRING FROG. HENRY E. MUCHNIC, Atchison, Kans., assignor to The Locomotive Finished Material Company, Atchison, Kans., a Corporation of Kansas. Filed Nov. 4, 1931. Serial No. 572,994. 4 Claims. (Cl. 246—276.)



1. A spring frog of the character described comprising a single piece casting constituting the non-movable member having an integral extended supporting base, tie-plate portions and spring housing; and a single piece element constituting the movable member having an integral spring housing.

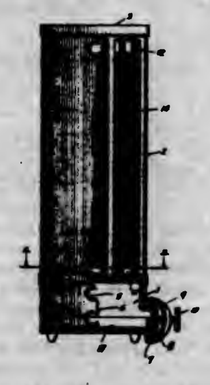
1,905,737. TOY GUN. HENRY F. NELSON, La Fayette, Ind. Filed Mar. 14, 1932. Serial No. 598,591. 7 Claims. (Cl. 42—57.)



1. In a toy gun adapted to detonate percussion caps carried by a tape, a reciprocating hammer, an anvil against which the hammer in the form of an equilateral triangle

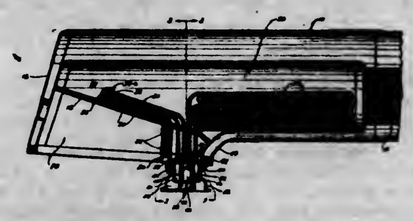
may strike, a cam adjacent said hammer, a tape passageway across said cam leading to said anvil, a projection on said cam adapted to press said tape against a wall of said passageway upon revolution of the cam and drag the tape therealong across said anvil, a spring normally urging said hammer toward the anvil, a member on the hammer adapted to be intercepted by said cam projection to pull the hammer away from the anvil and to be released upon continued travel of the projection therepast to allow said spring to return the hammer sharply against the anvil having an extension with an outwardly curved edge, and means for revolving said cam.

1,905,738. FILTER. VICTOR C. NORQUIST and EARL E. TRENNON, Kansas City, Mo., assignors to Butler Manufacturing Company, Kansas City, Mo., a Corporation of Missouri. Filed June 6, 1930. Serial No. 459,577. 2 Claims. (Cl. 210—184.)



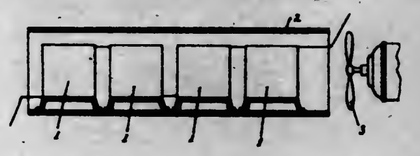
1. A filter comprising in combination a casing, a partition dividing said casing into upper and lower chambers, a plurality of apertures in said partition, tubular filter screens mounted in said apertures, a sludge pan removably positioned in said lower chamber, a handhole in said lower chamber permitting the removal of said sludge pan, a cover plate for said handhole, an inlet for introducing the liquid to be filtered into said lower chamber, an outlet for the filtered liquid from said upper chamber, said upper chamber provided with a removable cover, and said filter screens provided with removable caps whereby said cover and said caps may be removed to permit the filter screens to be cleaned expeditiously.

1,905,739. SUPERHEATER. HENRY B. OATLEY, Great Neck, N. Y., assignor to The Superheater Company, New York, N. Y. Filed Apr. 20, 1931. Serial No. 531,379. 10 Claims. (Cl. 122—481.)



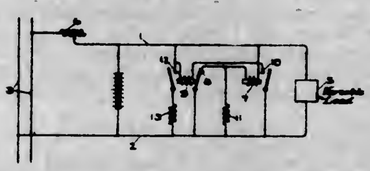
1. The combination in a boiler fire-box having arch tubes, of baffling on said tubes adapted to radiate heat from its upper surface and extending downwardly at the rear of the lower ends of said tubes, headers near the lower ends of said tubes, and superheater elements arranged along the upper and forward surface of said baffling and having end portions running down to and connected with said headers, said members all so arranged that said end portions lie outside the current of combination gases.

1,905,740. MEANS FOR OPERATING DRY DISK RECTIFIERS AT CAPACITIES GREATER THAN NORMAL. CLARENCE E. OGDEN, Cincinnati, Ohio, assignor, by mesne assignments, to The Union Switch & Signal Company, a Corporation of Pennsylvania. Filed May 25, 1929, Serial No. 366,043. Renewed Jan. 21, 1933. 1 Claim. (Cl. 175—366.)



A device of the character specified comprising a channel open at both ends, dry disk rectifier units, mounted with their edges turned longitudinally in said channel, and means at one end of said channel for forcing a draft therethrough.

1,905,741. STORAGE BATTERY VOLTAGE REGULATOR. JAMES H. OLIVER, Aldan, Pa., assignor to General Electric Company, a Corporation of New York. Filed Jan. 2, 1931. Serial No. 506,184. 6 Claims. (Cl. 171—314.)



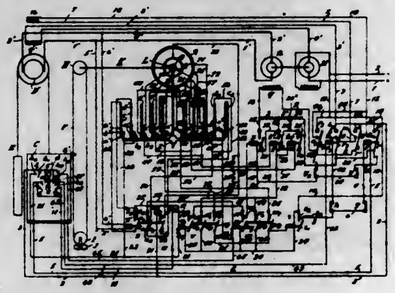
5. In combination, a source of direct current, a variable load connected thereto, a storage battery connected to be charged from said source, a pair of electrically interlocked relays, one of said relays being connected to respond to the battery voltage through a pair of contacts on the second relay which remain closed until the second relay is actuated, the first relay being arranged to be actuated when the battery voltage reaches a predetermined value, a current limiting device connected in parallel with the contacts of the second relay, the first relay having a pair of contacts for connecting the second relay to respond to the battery voltage when the first relay is actuated, the second relay being arranged to be actuated by a higher battery voltage than the voltage at which the first relay is actuated, an artificial load, and additional contacts on the second relay for connecting said artificial load to said source when the second relay is actuated.

1,905,742. ELECTRIC ELEVATOR SYSTEM. CARL F. E. OLOFSON, West Orange, and NILS O. LINDSTROM, Nutley, N. J., assignors to A. B. See Elevator Company, Inc., a Corporation of Delaware. Filed Dec. 6, 1927. Serial No. 238,010. 37 Claims. (Cl. 172—152.)

1. In an electric elevator system, a car and a contact movable in unison therewith, a set of normally open car stopping circuits, one for each landing, and means under control of the operator for causing said movable contact to close one of said circuits to stop the car.

12. In an electric elevator system, a car, a set of slow down circuits, one for each landing, each of said circuits being normally open at two points, means for closing said circuits at one of said points comprising a fixed contact

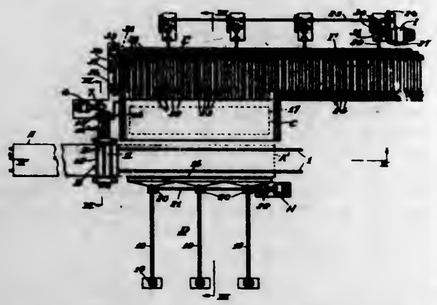
for each landing and a contact movable in unison with the car to engage said fixed contacts, and means for closing said circuits at the other of said points comprising a fixed contact and a rotating contact to engage the same, said rotating contact moving in unison with the car.



22. In an electric elevator system, a plurality of fixed contacts in stepped relation to each other and corresponding to one floor landing, a corresponding number of movable contacts each cooperating with one fixed contact, means for moving the movable contacts in accordance with the movement of the elevator, a plurality of normally open circuits corresponding in number to the fixed contacts, each circuit including a fixed and movable contact to be closed by the successive engagement of said fixed and movable contacts.

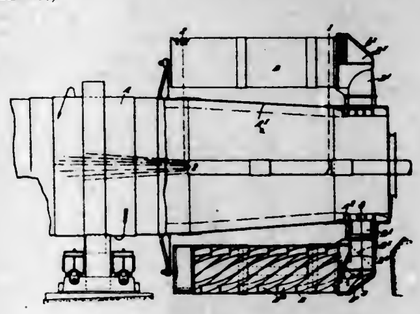
36. In an electric elevator system, a hoisting motor, a generator directly connected thereto, a variable resistance in the generator field circuit, a plurality of circuits for varying said resistance, an electromagnet adapted to control said circuits, means under the control of the operator for partially energising the electromagnet, and means responsive to the voltage in the hoisting motor circuit for controlling the full energization of the electromagnet.

1,905,743. APPARATUS FOR MAKING PLATE GLASS. WILLIAM OWEN, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed July 25, 1929. Serial No. 380,910. 5 Claims. (Cl. 49—3.)



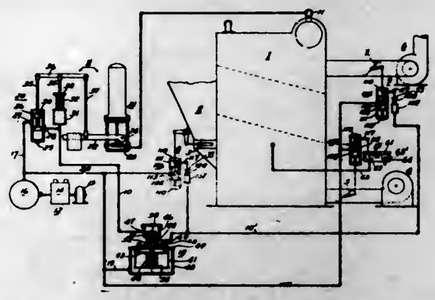
5. Apparatus for making sheet glass, comprising a receiving leer section provided with rollers interspersed with lifting bars mounted for vertical movement so that in one position their upper faces lie above the rollers and in another position such faces lie below the tops of the rollers, means for raising and lowering said bars, a main roller leer section in alignment with said receiving section, means for driving the rollers of said sections at the same peripheral speed, an oven alongside said receiving leer section having its bottom at the level of said bars when they are in raised position, a sheet receiving table along one side of the oven with its surface at the level of said floor, means for forming a glass sheet and depositing it on the table, and stowing means movable laterally across the table and oven for moving the sheet from the table onto the floor of the oven and for moving it from the floor of the oven onto said bars in the receiving leer section.

1,905,744. ROTARY KILN FOR BURNING CEMENT, ORE, AND SIMILAR MATERIALS. LIONEL DOUGLAS PARKER, Barrow-in-Furness, England, assignor to Vickers-Armstrongs Limited, Westminster, England, a British Company. Filed Feb. 6, 1931, Serial No. 513,904, and in Great Britain July 19, 1930. 10 Claims. (Cl. 222—7.)



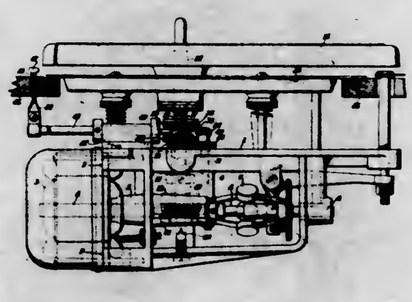
1. In a rotary kiln, the combination of a plurality of hollow heat recuperating members disposed longitudinally around the front portion of the kiln, transverse hollow members which establish communication between the interior of the kiln and the forward ends of the latter hollow members, an inclined surface at the forward end of each heat recuperating member, down which surface the hot material falls by gravity at all positions of said member during the rotation of the kiln, and inwardly extending projections which shield the outlet openings of the transverse members and act as barriers to the return of the material through these members.

1,905,745. AUTOMATIC COMBUSTION SAFETY CONTROL SYSTEM. THOMAS A. PEEBLES, Mount Lebanon, Pa., assignor to John M. Hopwood, Dormont, Pa. Filed July 7, 1931. Serial No. 549,178. 15 Claims. (Cl. 236—14.)



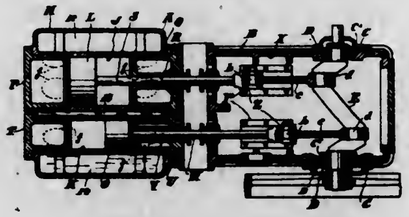
2. The combination with a boiler furnace having forced and induced draft mechanisms, fuel delivery mechanism, pressure actuated regulators for controlling the draft and the rate of fuel delivery, said regulators being disposed to operate between two extreme positions, and a source of supply of fluid under pressure for operating said regulators, of means responsive to a predetermined condition approaching failure of the fluid pressure source for causing said regulators to move to one of said extreme positions, before failure of the supply source has been completed.

1,905,746. PHONOGRAPH DRIVING MECHANISM. WILBUR J. PEETS, Elizabeth, N. J., assignor to Diehl Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Dec. 31, 1930. Serial No. 505,712. 2 Claims. (Cl. 274—9.)



1. A phonograph driving device having a frame formed with a lubricant well, a removable bearing-plug closing the top of said well, a horizontal motor-shaft, a vertical sleeve-shaft journaled in said bearing-plug and extending into said well, a worm on the motor-shaft, a gear on said sleeve-shaft meshing with said worm in said well, a turntable shaft journaled in said sleeve-shaft, and a selective two-speed gear transmission mechanism above said bearing-plug and between said sleeve- and turntable-shafts, said mechanism including a driving gear on said sleeve-shaft, a sliding gear splined to the turntable-shaft, and a pair of rigidly connected intermediate gears journaled on said removable bearing plug.

1,905,747. COMPRESSOR. ARTHUR E. PETERS, Phillipsburg, N. J., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Mar. 9, 1931. Serial No. 521,133. 5 Claims. (Cl. 230—182.)



1. In a multi-stage compressor, the combination of cylinders operating at different pressures, a casing through which pressure fluid flows from one cylinder to another, a cooling element in the casing to cool the compressed medium flowing therethrough and comprising cooling liquid conveying tubes, closely spaced fins on the tubes to conduct the compressed medium into intimate contact with the tubes, and baffles in the casing and being staggered with respect to each other to direct the compressed medium along a serpentine path through the casing.

1,905,748. GLASS DRAWING APPARATUS. JOSEPH H. REDSHAW, Homestead Park, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Mar. 12, 1932. Serial No. 598,437. 4 Claims. (Cl. 49—17.)

4. In combination with apparatus for drawing a glass sheet and carrying it vertically through a leer, a conveyor mounted for lateral movement above the leer, a tilting vacuum frame swivelled for movement about a vertical axis on the conveyor and adapted to engage the top section of the sheet as it emerges from the leer, and power means on the conveyor for applying a lifting force to the vacuum



frame preliminary to cutting off such top section, such force being in excess of that required to lift the top section at a rate of speed in excess of the speed of draw of the glass sheet.

1,905,749. MANUFACTURE OF ARTIFICIAL LEATHER. GEORGE A. RICHTER, WALLACE B. VAN ARSDEL and ROGER B. HILL, Berlin, N. H., assignors to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Sept. 17, 1929. Serial No. 393,310. 11 Claims. (Cl. 91—70.)

8. Sheet material comprising a porous foundation of loosely felted cellulose fiber, the pores of which contain rubber and bakelite varnish.

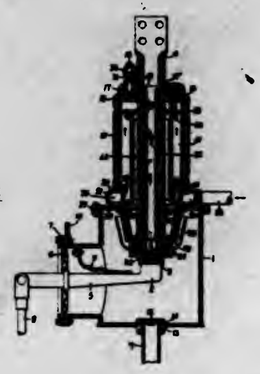
9. A process which comprises impregnating a porous foundation of interfelted cellulose fiber with an aqueous dispersion of rubber, drying said foundation, impregnating with a solution of bakelite varnish, removing the solvent, and curing at elevated temperature.

1,905,750. APPLICATOR AND MASSAGE INSTRUMENT. EMMET M. ROBINSON, Minneapolis, Minn. Filed July 6, 1931. Serial No. 548,775. 6 Claims. (Cl. 128—65.)



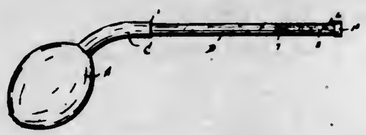
4. An applicator comprising a container having an open end, a discharge controlling element secured over said open end and provided with a discharge aperture and a flexible cap secured over said discharge controlling element and having a series of projections and discharge ports for supplying material to said projections, the apertured portion of said discharge controlling element being normally disposed flush against an imperforate portion of said cap to close said aperture whereby when said cap is flexed by rubbing the same against a surface, portions of said cap will be spaced from said discharge controlling element to permit discharge of material from the device.

1,905,751. VACUUM SEALING STRUCTURE. WILLIAM K. RANKIN, Lansdowne, Pa., assignor to General Electric Company, a Corporation of New York. Filed Dec. 26, 1929. Serial No. 416,319. 9 Claims. (Cl. 200—144.)



1. In vacuum apparatus comprising an evacuated casing and a substantially rigid electrical conductor extending therein, a mounting for positioning said conductor with respect to said casing for limited longitudinal movement in one direction, and a flexible diaphragm independent of said mounting for sealing said conductor with respect to said casing.

1,905,752. CARTRIDGE FOR MEDICINAL APPLICATIONS. BYRON REES, Salt Lake City, Utah. Filed Mar. 3, 1931. Serial No. 519,756. 4 Claims. (Cl. 128—266.)



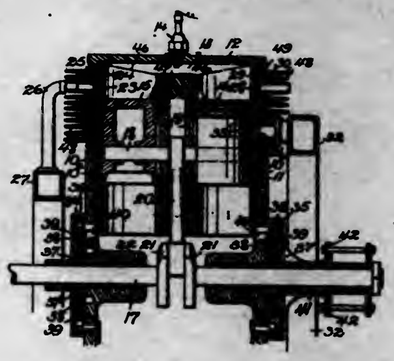
1. In a device of the class described the combination of a tube; a pad of soluble material carried therein; a dosage of medicine carried in said tube adjacent said pad, having the end of said tube closed by a cap.

1,905,753. INORGANIC METAL INSULATION. EMIL RUPP, Berlin-Frohnau, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 23, 1931, Serial No. 524,772, and in Germany Apr. 7, 1930. 5 Claims. (Cl. 148—7.)

1. A method for producing an insulating layer on metals having a melting point higher than alkaline fluorides which comprises contacting the metal with a fused alkaline fluoride until it has assumed the temperature of the latter and a thin, adherent layer consisting of the fluorine compound of the metal and of the fluorine compound of the fusion is formed on the metal, and cooling said coated metal outside of the bath in a non-oxidizing atmosphere.

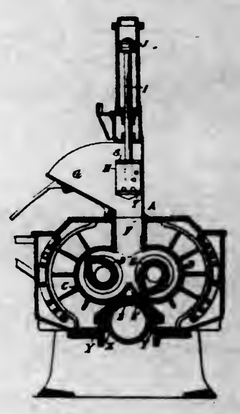
1,905,754. INTERNAL COMBUSTION ENGINE. JACOB SCHICK, Sound Beach, Conn., assignor to Schick Dry Shaver, Inc., a Corporation of Delaware. Filed July 28, 1929. Serial No. 380,849. 1 Claim. (Cl. 123—53.)

An internal combustion engine comprising a pair of cylinders side by side with a partition between them which partition terminates short of the end of the cylinders, a single flat cylinder head bridging both cylinders and co-operating with the end of the partition to form a combustion chamber, pistons in the cylinders, and sleeves in the cylinders and surrounding the pistons, the cylinders having ports controlled by the sleeves, said sleeves having



inclined ends whereby the sleeves at the outer sides are at the end of the cylinder and at their inner sides at the top of the partition.

1,905,755. MIXING MACHINE. CARL F. SCHNUCK, New Haven, and FRANLEY H. BANBURY, Ansonia, Conn., assignors to Farrel-Birmingham Company, Incorporated, Ansonia, Conn., a Corporation of Connecticut. Filed May 23, 1930. Serial No. 454,857. 4 Claims. (Cl. 18—2.)

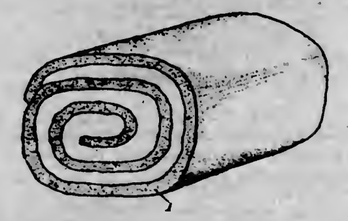


4. In a mixing machine, the combination of mixing mechanism, a feed opening, and a weight adapted to press upon the material which is being fed, said weight having on one side an inclined surface running substantially from top to bottom of the weight, the upper part of the incline being at the rear, and the lower part of the incline being nearest the feed opening, and said weight having side walls defining the ends of the incline, and said side walls having lips or flanges extending laterally beyond the sides of the weight and designed to contact with the side walls of the feed passages.

1,905,756. ICE CREAM ROLL CAKE. ALBERT SCHORNO, Grand Rapids, Mich., assignor of one-half to Carl Cegler, Grand Rapids, Mich. Filed Nov. 14, 1931. Serial No. 574,941. 1 Claim. (Cl. 99—16.)

The method of manufacturing an ice cream cake roll consisting of forming a layer of cake dough containing approximately 10% of shortening to render substantially

resistant to moisture on a sheet of paper, baking said dough at a temperature of approximately 300° F. and in the presence of steam to prevent forming a crust, cool-



ing, applying thereto a layer of ice cream, convolutely wrapping the cake layer and the ice cream layer into a roll by the manipulation of the paper sheet, and freezing.

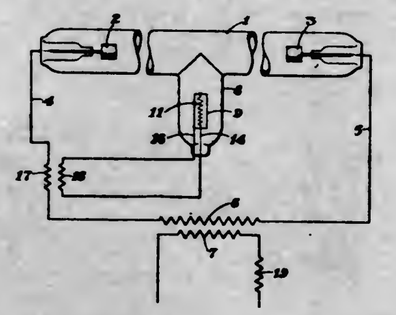
1,905,757. DEODORIZATION OF PAPER. MILTON O. SCHUR, Berlin, N. H., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed May 5, 1931. Serial No. 535,293. 20 Claims. (Cl. 92—40.)

5. A step which comprises treating viscose-containing paper with an oxidising agent to destroy foul odors and odor-generating substances in such paper.

1,905,758. PROCESS FOR THE MANUFACTURE OF ELECTRICAL INSULATION. EMIL W. SCHWARTZ, Bridgeport, Conn., assignor to General Electric Company, a Corporation of New York. Filed May 16, 1930. Serial No. 453,110. 4 Claims. (Cl. 18—47.5.)

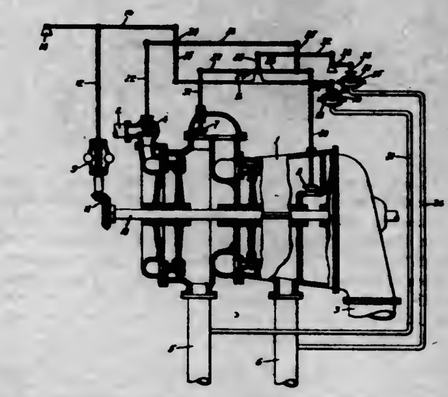
1. In the manufacture of rubber insulation including waste reclaim rubber for insulating electrical conductors, the process of forming insulation stock material which comprises devulcanizing waste rubber, adding thereto after the devulcanizing process and prior to the refining operations, fillers, and producing a blended reclaim, compounding said blended reclaim with crude rubber and other usual non-filler ingredients.

1,905,759. GASEOUS ELECTRIC DISCHARGE DEVICE. FRANZ SKAUPY, Berlin-Lichterfelde, HANS EWEST, Berlin, and HANS PULFRICH, Berlin-Baumschulenweg, Germany, assignors to General Electric Company, a Corporation of New York. Filed June 4, 1931, Serial No. 542,166, and in Germany July 18, 1930. 2 Claims. (Cl. 176—125.)



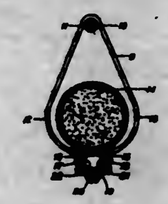
1. An electric discharge device comprising a container, electrodes sealed therein, a gaseous atmosphere therein, and two or more different gas evolving materials in said container adapted to evolve gas when heated, the gas evolved by one gas evolving material being adapted to transform to a gas these solid materials formed from the gas evolved by the other gas evolving material which are reactive with said first named gas.

1,905,760. ELASTIC FLUID TURBINE. REGINALD G. STANDERWICK, Marblehead, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 26, 1932. Serial No. 644,461. 2 Claims. (Cl. 60—67.)



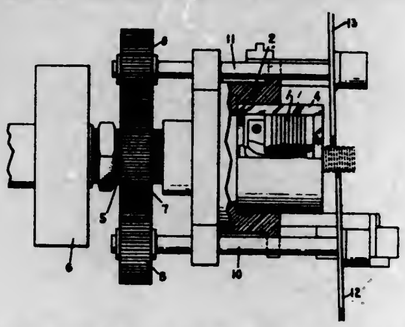
1. An elastic fluid turbine having valve means for controlling the admission of elastic fluid thereto, two conduits connected to the turbine at stages of lower pressure therein, valve means for regulating the flow of elastic fluid from said stages to the next lower stages, a three arm lever having two of its arms connected to said regulating valve means, a floating lever on which the three arm lever is pivoted, means responsive to the pressure in one of said stages connected to the floating lever, means responsive to the pressure in the other of said stages connected to the other arm of said three arm lever, a third lever connecting the three arm lever to said controlling valve means, a speed governor, and means connecting the speed governor to said third lever and to said floating lever.

1,905,761. CABLE SUSPENSION. EVERETT ST. JOHN, Westport, Conn., and STANLEY C. MILLER, Mountain Lakes, N. J., assignors to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed May 29, 1930. Serial No. 456,986. 2 Claims. (Cl. 175—376.)



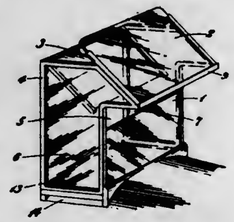
1. The method of installing cable and the like which comprises first placing a hand line or rope adjacent a supporting strand, placing the cable ring over both the supporting strand and the rope, inserting a portion of the cable ring in a holding means to hold the ring open, positioning the ring on a supporting strand, pulling the cable into the ring by means of the rope and then causing the ring to firmly grip the cable by removing the holding means.

1,905,762. DIE. R. HARRY STONE, Irvington, N. J., assignor to Titeflex Metal Hose Co., a Corporation of New Jersey. Filed May 8, 1929. Serial No. 361,417. 23 Claims. (Cl. 113—35.)



1. In an apparatus for forming tubing from a strip, the combination with a rotating mandrel, of a die about said mandrel, said mandrel gripping the strip to draw it through the die, said die having channels with cam walls adapted to bend the strip transversely and to interfold the edges of adjacent convolutions of said strip and a bending roll positioned adjacent the point where the strip enters into the die for preliminarily bending the strip before it enters said channels.

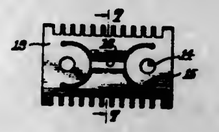
1,905,763. WINDSCREEN. FREDERICK ASSHETON TAYLOR, Tadworth, England. Filed Jan. 9, 1930, Serial No. 419,476, and in Great Britain Jan. 21, 1929. 5 Claims. (Cl. 296—84.)



3. A wind screen for a vehicle comprising side members, a lower panel mounted between said side members at an angle to the horisontal, and a plurality of horizontally displaced upper panels held by said side members in fixed parallel relationship, said lower panel having an upper free edge, said upper panels having free upper and lower edges, the upper edge of the lower panel being normally below the lower edges of the upper panels to provide a clear vision gap, said upper panels being inclined rearwardly with respect to said lower panel, one of said upper panels being disposed vertically above the lower panel and one of said upper panels being disposed behind the lower panel, whereby the vertical projection of the lower panel passes between the lower edges of the upper panels, the upper panels providing a passageway of undiminished cross-sectional area having a lower inlet opening normally above the upper edge of the lower panel and an outlet opening above the inlet opening.

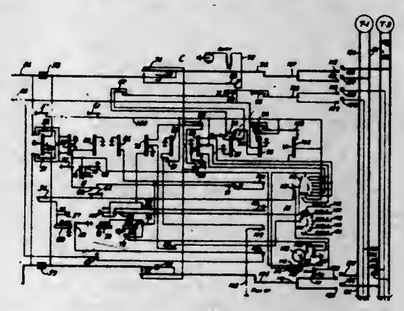
1,905,764. SAFETY RAZOR. NICHOLAS TESTI, New York, N. Y., assignor to Gillette Safety Razor Company, Boston, Mass., a Corporation of Delaware. Filed Nov. 19, 1931. Serial No. 576,110. 4 Claims. (Cl. 30—12.)

4. A safety razor guard formed of resilient material, said guard having an oblong central aperture extending longitudinally of said guard, said guard having slits extending divergently from the ends of the central aperture thereby forming a plurality of resilient tongues, two of said tongues extending transversely of said guard



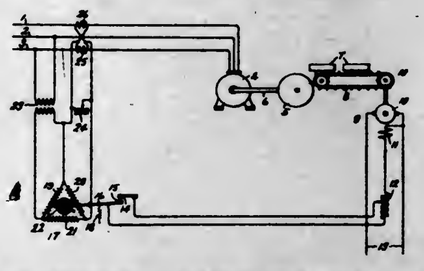
and deflected therefrom at their free ends, two of said tongues extending longitudinally of the guard and provided with positioning apertures.

1,905,765. TELEPHONE SYSTEM. VICTOR S. THARP, deceased, Elmhurst, Ill., by Bessie Mary Tharp, administratrix, Elmhurst, Ill., assignor, by mesne assignments, to Associated Electric Laboratories, Inc., Chicago, Ill., a Corporation of Delaware. Filed Dec. 7, 1931. Serial No. 579,416. 9 Claims. (Cl. 179—16.)



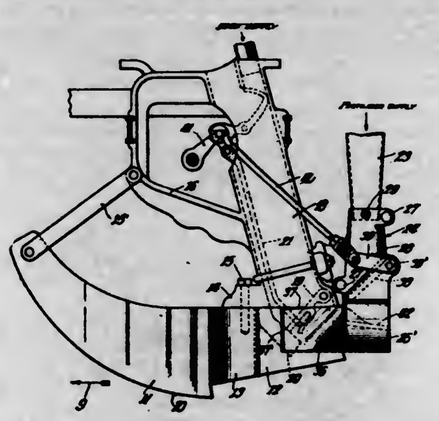
1. In an automatic switch, a line relay and a release relay, a circuit for said release relay closed when said line relay operates responsive to the seizure of said switch, means controlled by said line relay responsive to received digit impulses for operating said switch, and means responsive to the operation of said switch for completing an auxiliary holding circuit for said release relay during the intervals when said first circuit is opened by the release of said line relay responsive to received impulses.

1,905,766. POWER RESPONSIVE MEANS. LOUIS W. THOMPSON, Schenectady, N. Y., and MYRON ZUCKER, Royal Oak, Mich., assignors to General Electric Company, a Corporation of New York. Original application filed Jan. 13, 1930, Serial No. 420,309. Divided and this application filed Feb. 2, 1931. Serial No. 512,874. 7 Claims. (Cl. 172—280.)



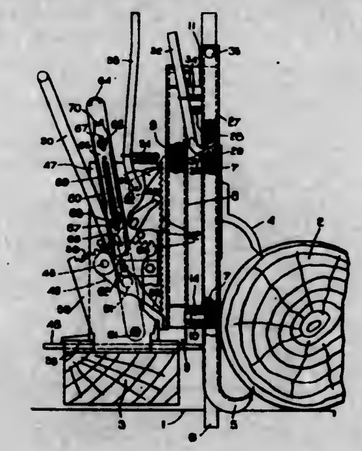
1. In combination, a polyphase power circuit, a polyphase induction motor having means for producing a rotating magnetic field and means connecting said motor to said circuit so that the torque of said motor is proportional to the power flow through said circuit.

1,905,767. FERTILIZER BOOT. HARRY RANDALL TRAPHAGEN, Rockford, Ill., assignor to J. I. Case Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 8, 1931. Serial No. 507,810. 2 Claims. (Cl. 111—73.)



1. In a device of the class described, the combination of a seed planter shoe having a portion for forming a seed-receiving furrow, and a fertilizer-receiving, furrow-forming device including a pair of side members diverging rearwardly and downwardly and having their lower edges elevated above the bottom of said shoe and their front edges fitting said shoe, said side members being arranged to materially widen the seed furrow and form lateral shoulders above the bottom thereof without materially increasing the width of the same at its top, thereby forming inwardly and upwardly inclined side walls in the fertilizer-receiving furrow, which walls normally collapse to fill in the furrow when said device is moved away, a single fertilizer container, and means for dividing fertilizer from said container into two portions and conducting said portions to said shoulders.

1,905,768. SAWMILL DOG. EDWARD P. TUFTS, Bow, N. H. Filed Aug. 24, 1932. Serial No. 630,201. 5 Claims. (Cl. 143—130.)



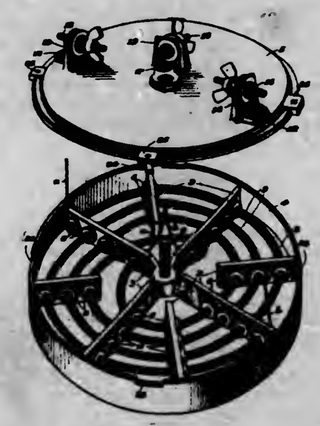
1. A sawmill dog comprising a supporting post, a sleeve fitting over said post and adjustable vertically thereon, two dog-carrying bars carried by said sleeve, an upper dog mounted on one bar, a lower dog mounted on the other bar, means for moving said bars simultaneously but in opposite directions to cause the dogs to bite into the log, said sleeve having ratchet teeth, a rocking pawl-supporting member, a lifting pawl carried by said member and adapted to engage said ratchet teeth, and means to rock said member thereby to cause the lifting pawl to engage the ratchet teeth and raise the sleeve and dogs supported thereby relative to the post, said rocking member having means normally engaging said teeth to lock the sleeve from raising movement.

1,905,769. AUTOMOBILE RUNNING BOARD AND THE LIKE. WILLIAM S. VROOMAN, Cleveland, Ohio, assignor to The Paine and Williams Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 1, 1928. Serial No. 282,086. 6 Claims. (Cl. 154—49.)



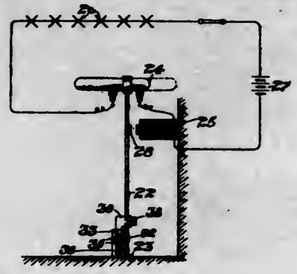
1. As an article of manufacture, a covering material for automobile running boards and the like, comprising sheets of rubber and paper vulcanized together, the paper being exposed at the under side of such article.

1,905,770. ELECTRIC HEATING UNIT AND METHOD OF MANUFACTURING SAME. ARTHUR W. WALKER, Malden, and ALBERT L. SMITH, West Medway, Mass., assignors to Walker & Pratt Mfg. Co., Boston, Mass., a Corporation of Massachusetts. Filed July 3, 1929. Serial No. 375,750. 16 Claims. (Cl. 219—37.)



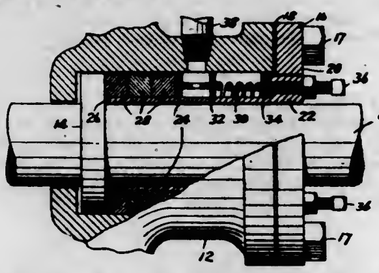
1. In an electric heating unit, the combination of an electric heating conductor, a plurality of insulating bushings arranged in spaced relation through which said conductor extends and in which it is supported, and a metal support carrying said bushings and shrunk on them, thereby to hold the bushings in place.

1,905,771. SWITCH MOUNTING. WARREN R. WALKER, Bloomfield, N. J., assignor to General Electric Vapor Lamp Company, a Corporation of New Jersey. Filed Nov. 27, 1926. Serial No. 151,214. 10 Claims. (Cl. 200—90.)



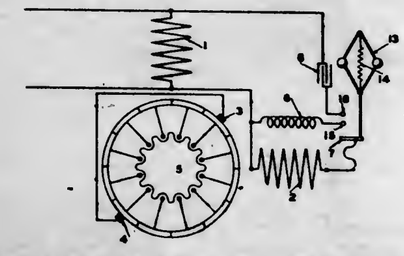
1. In combination, a mercury switch, and means for periodically moving said switch horizontally and at a speed such that the inertia of the mercury will cause it to remain relatively stationary with respect to the envelope and electrodes of the switch.

1,905,772. PACKING MEANS FOR SHAFTS. JULIAN N. WALTON, Brooklyn, N. Y., assignor to The Anchor Packing Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 27, 1929. Serial No. 388,649. 4 Claims. (Cl. 286—7.)



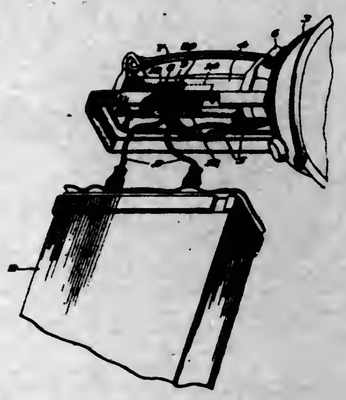
1. In combination, a stuffing-box, a shaft extending through the stuffing-box and having an annular bearing shoulder, a gland having a sleeve portion extending about the shaft towards the bearing shoulder, annular packing located between the sleeve portion and the stuffing-box walls and pressed towards the shoulder, and means for introducing liquid under pressure to the side of the packing opposite the bearing shoulder.

1,905,773. SINGLE PHASE MOTOR. HANS WEICHSEL, St. Louis, Mo., assignor to Wagner Electric Corporation, St. Louis, Mo., a Corporation of Delaware. Filed May 14, 1931. Serial No. 537,355. 2 Claims. (Cl. 172—277.)



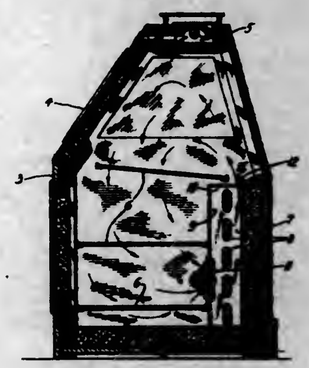
1. In a single phase motor, the combination of an induced member provided with a commuted winding, an inducing member having a main inducing winding and an auxiliary winding displaced therefrom, an inductance, means closing the commuted winding along an axis displaced from the main inducing winding, speed controlled means for short-circuiting the commuted winding along a plurality of axes when a selected sub-synchronous speed has been attained, and means for connecting the auxiliary winding in circuit with the inductance at a speed lower than said last named speed.

1,905,774. PORTABLE ELECTRIC LAMP. GRANT WHEAT, Marlboro, Mass., assignor to Kohler Manufacturing Company, Marlboro, Mass., a Corporation of Massachusetts. Filed June 30, 1931. Serial No. 547,814. 8 Claims. (Cl. 240—19.)



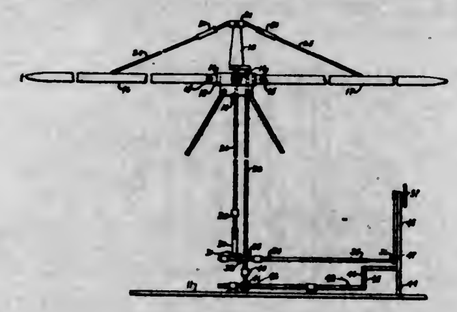
1. A portable lamp structure comprising the combination with an electric lamp, a storage battery, a casing for one of said elements, and connections for supplying current from said battery to said electric lamp, of charging terminals in said casing, a cover for protecting said terminals, said cover being movable to expose said terminals, and means for locking said cover in position to prevent access to said terminals.

1,905,775. ILLUMINATED REFRIGERATOR DISPLAY CASE. CHARLES E. WICKE, Mount Vernon, N. Y., assignor to A. C. Wicke Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1930. Serial No. 483,768. 6 Claims. (Cl. 62—89.5.)



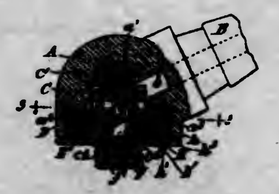
1. The combination of a display case having a bottom section and a top section with inwardly sloping sides, tray supports intermediate the top and bottom sections and spaced from the sides thereof, of refrigerating means disposed in the bottom section adjacent the front wall thereof, said bottom section having a food storage compartment disposed rearwardly of said refrigerating means or cooling coils.

1,905,776. AIRCRAFT. EDWARD BURKE WILFORD, Merion, Pa. Filed Feb. 20, 1931. Serial No. 517,226. 2 Claims. (Cl. 244—19.)



2. In gyroplanes, a mast, a mast extension pivoted relative to the mast a hub rotatably mounted on the mast, blades pivoted to the hub, a ring rotatably disposed on the mast extension, compression members engaging between the ring and the respective blades, and means for varying the angular relation of the mast extension to the mast.

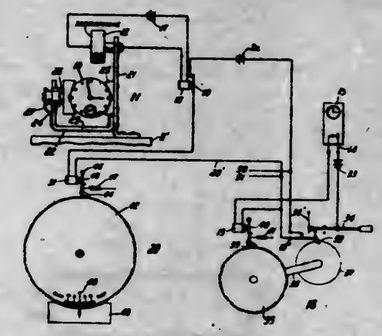
1,905,777. AIR CHUCK. SELDEN T. WILLIAMS, Bellerose, N. Y., assignor to A. Schrader's Son, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 28, 1931. Serial No. 511,664. 6 Claims. (Cl. 284—17.)



1. An air chuck or the like comprising a casing having within it a valve provided with a deflator, a gasket providing a seat for said valve, a second gasket for making a seal with the end of a tubular member with which the air cauck is adapted for connection, said gaskets being mounted in superposed relation within said casing upon an element having a bushing-like portion extending into the opening in the second mentioned gasket and providing a guide for the deflator, and removable means engaging the sealing face of the second mentioned gasket whereby it may be removed from the casing independently of the first mentioned gasket.

1,905,778. MEANS FOR COMPARING TIME MECHANISMS. JOHN L. ALDEN, Wyncote, Pa., and CHARLES J. MCCARTHY, East Orange, N. J., assignors, by mesne assignments, to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1927. Serial No. 243,545. 4 Claims. (Cl. 73—51.)

1. In a time indicating system, a base, an oscillatory reed having one end secured to said base, means carried by said reed at a point adjacent said base for supporting the timepiece, a microphone mounted on the free end of said reed for receiving amplified impulses from the timepiece, and a work circuit connected to said microphone.



3. In a time indicating system, a base, an oscillatory reed having one end secured to said base, a pair of jaw members carried by said reed at a point adjacent said base for supporting the timepiece, a microphone mounted on the free end of said reed for receiving amplified impulses from the time-piece, a circuit for said microphone including a source of current, and a magnet alternately energized through the operation of said microphone, an armature actuated by said magnet, an indicator, a motor magnet for actuating said indicator, a circuit for said motor magnet including a source of current, and said armature and a contact arranged to be engaged by said armature for alternately closing and opening the last mentioned circuit, a normally open switching device in the last mentioned circuit, manually operable means for closing said device for causing the operation of said indicator, a time standard, and a camming mechanism operable under control of said standard for actuating said switching device after a predetermined lapse of time for stopping the operation of said motor magnet.

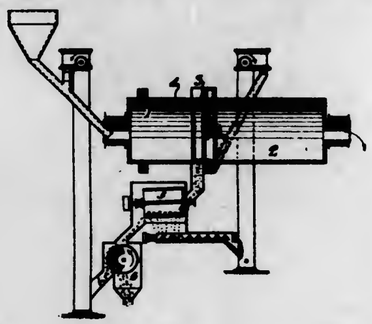
1,905,779. CENTRIFUGAL SEPARATOR. WILLIAM ALEXANDER, Glasgow, Scotland. Filed Jan. 30, 1932, Serial No. 589,830, and in Great Britain Jan. 1, 1932. 5 Claims. (Cl. 183—83.)



1. A multiple separator comprising a plurality of centrifugal separator components acting in parallel, each of said components incorporating a substantially vertical exposed cylindrical vortex chamber having a gas inlet at one end and a gas outlet at the opposite end, said chamber being entirely free from internal obstructions from the gas inlet to the gas outlet, said inlet admitting directly all of the gas into the vortex chamber near the periphery of the vortex with a tangential component of motion, the gas outlet being constituted by an outlet pipe having its inner end coaxial with the chamber and arranged to convey all the gas from said chamber in a direction away from the inlet end of the chamber, a dust outlet from the chamber, and a partition extending from said outlet pipe towards the wall of the chamber, compelling all of the separated dust to pass from the chamber at or near its periphery and at a radius substantially greater than that

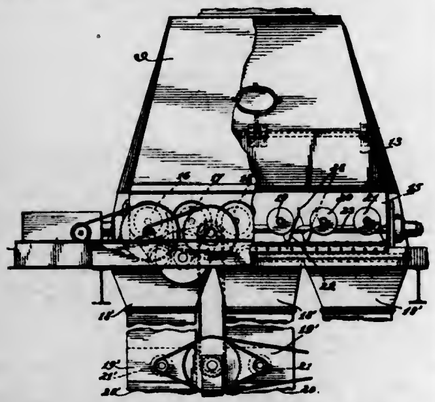
of said outlet pipe, and an unenclosed dust hopper common to said components and open to the several dust outlets, said components being mounted outside of and on top of said hopper.

1,905,780. APPARATUS FOR GRINDING MATERIALS WHICH CONTAIN PARTICLES OF IRON. NIKOLAJ AHLMANN, Copenhagen, Denmark, assignor to F. L. Smidth & Co., New York, N. Y., a Corporation of New Jersey. Filed Oct. 18, 1930, Serial No. 489,634, and in Great Britain Oct. 24, 1929. 1 Claim. (Cl. 209—6.)



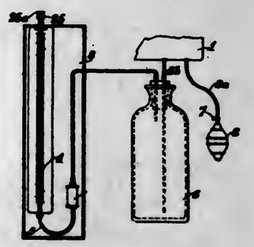
Apparatus for grinding Thomas slag and the like comprising a drum having a preliminary grinding chamber and a fine grinding chamber, a screening device, means to deliver the material from the preliminary grinding chamber to the screening device, means to deliver fine material to the fine grinding chamber from the screening device, and a magnetic separating device, means to deliver the coarse material from the screening device to the magnetic separating device, means to deliver the non-magnetic separated material to the preliminary grinding chamber from the magnetic separating device, whereby the material from the preliminary grinding chamber is subjected to a screening and a separation of the iron contents, and the sufficiently comminuted material is conveyed to the fine grinding chamber, and the coarse material is returned to the preliminary grinding chamber, while the iron contents are removed.

1,905,781. WOOD-WASTE FEEDING SYSTEM. WILLIAM E. ALLINGTON, Saginaw, Mich. Filed Sept. 8, 1931. Serial No. 561,590. 6 Claims. (Cl. 214—21.)



3. A heterogeneous material feeder comprising a storage reservoir having a downward and outward taper, a hopper lying laterally of and below the reservoir and tapering in the direction of movement of material therethrough, a screw conveyor in the hopper for carrying material therethrough, and a screw agitator rotatable on an axis at an angle to the axis of the screw conveyor and projecting above the plane of the bottom of the screw conveyor.

1,905,782. MANOMETER. SAMUEL S. AMDURSKY, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Oct. 25, 1930. Serial No. 491,146. 9 Claims. (Cl. 73—44.)



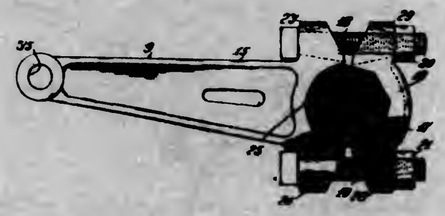
1. In a manometer of the character described, the combination with a cuff, a pressure chamber, a measuring tube connected to the pressure chamber and a liquid in the pressure chamber and the tube, of a closed vessel in fluid connection with the cuff and the pressure chamber, said vessel having a volume capacity such as to materially damp out pulsating waves coming from the cuff.

1,905,783. REWINDING MECHANISM FOR CLOCK SPRINGS. JOHAN M. ANDERSEN, Brooklyn, Mass., assignor to Albert & J. M. Anderson Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 16, 1928. Serial No. 247,178. 3 Claims. (Cl. 58—41.)



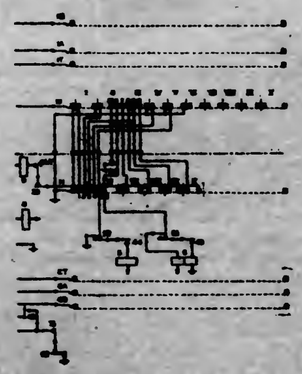
1. In an apparatus of the character described, in combination, a clock mechanism provided with a main shaft and with a main spring having one end connected with said main shaft, a time train geared to said main shaft and governing rotation thereof, a gear loose on said main shaft and with which the other end of said main spring is connected to be driven by said main spring, a rotatable device, a differential having a member geared with said rotatable device and a second member geared to the gear loose on said main shaft, a shaft upon which said differential members are mounted, an electric motor geared with the last-mentioned shaft, means for restraining said main spring from rotating said device, means for releasing said restraining means, a selective mechanism driven by said main shaft and co-operating with said releasing means, a circuit controller for said electric motor, and means actuated by said main spring for automatically operating said circuit controller to cut out the electric motor when the main spring has been wound up a predetermined amount and to cut in said electric motor when the main spring has been unwound a predetermined amount.

1,905,784. ADJUSTABLE LEVER. ALFRED ALGAKER and ELIAS S. CHRISTIANSEN, Chicago, Ill., assignors to The Delta Star Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1929. Serial No. 378,337. 16 Claims. (Cl. 287—52.02.)



12. In combination, a polygonally shaped rotatable shaft, an arm having a semi-cylindrical end surface adapted to embrace said shaft, opposed ears at said arm extending outwardly in angular relation with respect to each other, a heel piece adapted to non-rotatably cooperate with said shaft, opposed ears extending outwardly from said heel piece, and adjustable means for drawing one set of correspondingly disposed ears of said arm and heel piece together and simultaneously drawing apart the other set of correspondingly disposed ears of the arm and heel piece whereby the angularity of said arm may be varied with respect to said heel piece.

1,905,785. AUTOMATIC TELEPHONE SYSTEM USING SINGLE MOTION SWITCH BY-PATH CIRCUITS. JOHN HENRY ELVIDGE BAKER, Aldwych, London, England, assignor to International Standard Electric Corporation, New York, N. Y. Filed June 26, 1930, Serial No. 463,920, and in Great Britain July 3, 1929. 15 Claims. (Cl. 179—18.)



1. In or for an automatic or semi-automatic telephone system, selecting means comprising a plurality of single-motion switches, groups of outlets from said selecting means, multiple connections for certain of said groups to the later portion of the bank of one of said switches and to the earlier portion of the bank of another of said switches, and connections for the remaining groups connected to the earlier portion of the first-mentioned switch.

1,905,786. METHOD OF AND MEANS FOR USE IN MAKING FOOTWEAR. ALBERT F. BANCROFT, West Newton, Mass., assignor to Bancroft-Walker Company, Boston, Mass., a Corporation of Massachusetts. Filed May 7, 1931. Serial No. 536,635. 7 Claims. (Cl. 12—107.)



1. An increaser element for use in making shoes comprising a piece of material having index means for selectively determining its location when applied to a shoe upper, whereby any desired increase in the cross-sectional dimension of the throat portion of the shoe upper may be attained.

1,905,787. FLASH LIGHT BOTTOM CAP WITH SPARE BULB CARRIER. GEORGE H. BARBER, New Rochelle, N. Y., assignor to Bond Electric Corporation, Jersey City, N. J., a Corporation of Delaware. Filed Nov. 16, 1929. Serial No. 407,590. 2 Claims. (Cl. 240—10.66.)

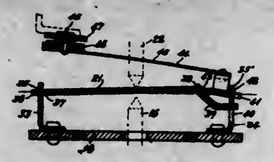


1. A spare lamp carrier adapted to be inserted in a flashlight bottom cap comprising a single sheet of metal of generally strip-like shape formed with an intermediate plate-like portion extending from one edge of the strip and bent downwardly at an angle thereto, an intermediate portion of the strip being substantially flat and adapted to form a battery thrust receiving portion, the ends of the strip being bent from said flat battery thrust receiving portion downwardly to provide flexible arms to engage at their ends the bottom cap substantially on a diameter and at the junction of the bottom and wall thereof and said downwardly bent plate-like portion being formed with an aperture to receive the base of a spare lamp.

1,905,788. TEMPERATURE AND PRESSURE CONTROLLER. FRANK J. BASH, Queens Village, N. Y., assignor to Charles J. Tagliabue Mfg. Co., Brooklyn, N. Y., a Corporation of New York. Filed July 3, 1931. Serial No. 548,530. 14 Claims. (Cl. 200—83.)

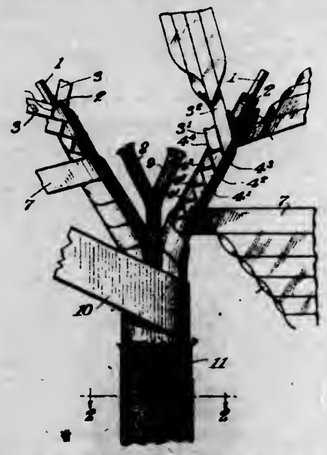
1. In a temperature or pressure control device, including a responsive member adapted to expand and contract in response to temperature or pressure changes, the combination of two elements associated with each other in pivotal relation at their inner end portions and separate from said responsive member, spring means urging said elements toward each other, said elements arranged to be

moved by said responsive member and adapted to snap quickly to reverse position when moved by said member toward a neutral plane, a spring arranged to urge said



elements toward their original position, and a switch arm attached to one of said elements and adapted to cooperate with a terminal of an electric circuit to control the latter.

1,905,789. INSULATED ELECTRICAL CONDUCTOR. ANTHONY A. BENNER and RUDOLPH A. SCHATZEL, Rome, N. Y., assignors to General Cable Corporation, New York, N. Y., a Corporation of New Jersey. Filed July 30, 1927. Serial No. 209,505. 10 Claims. (Cl. 178—264.)



1. An article of manufacture comprising, in combination, a plurality of insulated conductors having separate overlying protective jackets comprising fibrous material assembled and enclosed within a fibrous outer sheath to form a cable, a sticky protective compound incorporated in the outer sheath, and a thin sealing layer enclosing the assembled conductors and separating said outer sheath from the conductors, said layer non-adhesively engaging the insulated conductors to keep the protective jackets clean of said protective compound and facilitate movement of the insulated conductors within the outer sheats.

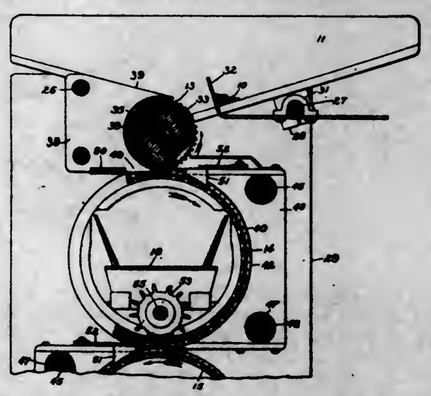
1,905,790. MAGNETIC CORE WITH SUPPORTING AND CLAMPING STRUCTURE. FREDERICK F. BRAND, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 18, 1932. Serial No. 638,811. 8 Claims. (Cl. 175—356.)



1. The combination with a laminated magnetic core, of a metal supporting and clamping structure for said core

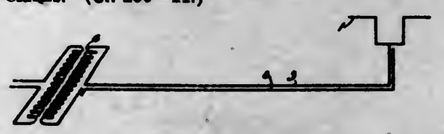
said supporting and clamping structure including a mechanically closed loop surrounding a leakage flux path, and said loop also including at least one insulated joint to prevent flow of current in the loop.

1,905,791. APPARATUS FOR SORTING RODS AND TUBES. CARL A. BROWN, East Cleveland, and FRANK B. VAN SICKLE, Wickliffe, Ohio, assignors to General Electric Company, a Corporation of New York. Filed Oct. 9, 1929. Serial No. 398,516. 3 Claims. (Cl. 209—97.)



1. An apparatus for sorting rods, tubes or similar articles comprising a plurality of substantially horizontally disposed superposed drums each having longitudinal slots in the peripheral wall thereof, the widths of said sorts being least in the uppermost and progressively greater in lower drums, means for rotating said drums, and plates spaced from said drums and each shaped to retain rejected rods or tubes as they are carried around the outside of one drum to the next drum below.

1,905,792. TRANSMISSION SYSTEM. EDMOND BRUCH, Red Bank, N. J., assignor to Bell Telephone Laboratories, Incorporated, New York, N. Y., a Corporation of New York. Filed Mar. 20, 1929. Serial No. 348,485. 6 Claims. (Cl. 250—11.)

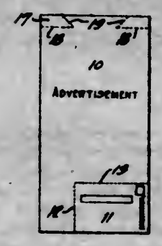


1. In combination with a transmission line, a second transmission line, means comprising an antenna for causing high frequency current to flow in the first mentioned line, and means comprising a reflector for causing high frequency current to flow in the second line, said currents being of relatively opposite phase and the spacing of said lines being small as compared with the wave length of the said current.

1,905,793. GARMENT BOARD. ALFRED O. BUCKINGHAM, New Rochelle, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Aug. 12, 1932. Serial No. 628,500. 2 Claims. (Cl. 223—18.6.)

1. A garment board comprising a substantially rectangular sheet of material, the longer sides of the board having longitudinal outer edges extending substantially the full length of the board providing a form for supporting the bosom of a shirt which may be drawn taut and folded over said longitudinal outer edges of substantially the full length of said bosom, and a cuff support and re-

taining member comprising a detachable card forming a part of said sheet of material, said card being spaced within said longitudinal outer edges and disposed across the lower end of the board and having its end portions separated from the body of the board along lines extending inwardly from the lower edge of the board in a direction approximately parallel to said longitudinal outer edges, the upper side of said card being defined by a weak-



ened line along which said card is detachable, said card being folded outwardly along said weakened line to a position adjacent said board and cooperating therewith to provide a support and retaining member for the cuffs of a shirt folded about the board the portions of of the board between said outer longitudinal edges and said inwardly extending lines providing lower substantially aligned, transversely extending edges about which the lower portion of a shirt may be folded upwardly.

1,905,794. CONDUIT FOR SUBWAY CABLES. EDMUND BURKE, Portland, Me., assignor to Brown Company, Berlin, N. H., a Corporation of Maine. Filed Apr. 5, 1928. Serial No. 267,505. 3 Claims. (Cl. 247—27.)



1. In combination with a wall and cable-supporting brackets thereon, a longitudinally split fiber conduit on said brackets, and means for holding the split conduit portions together, said means including a monolithic concrete structure enclosing said brackets and conduit and abutting said wall.

1,905,795. AMMUNITION. JAMES H. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Sept. 20, 1929. Serial No. 393,415. 6 Claims. (Cl. 52—2.)

1. A priming mixture comprising guanylnitrosaminoguanylitetracene and lead nitrate.

2. A priming mixture comprising guanylnitrosaminoguanylitetracene, lead trinitroresorcinate, and lead nitrate.

1,905,796. AMMUNITION. JAMES H. BURNS, Bridgeport, Conn., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed Aug. 27, 1930. Serial No. 478,204. 4 Claims. (Cl. 52—4.)

1. A priming mixture comprising diazodinitrophenol and lead trinitroresorcinate.

1,905,797. PROCESS OF TREATING RUBBER AND PRODUCT OBTAINED THEREBY. SIDNEY M. CADWELL, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Original application filed Mar. 2, 1928, Serial No. 258,670. Divided and this application filed Mar. 2, 1928. Serial No. 258,681. 53 Claims. (Cl. 18—53.)

1. A method of treating rubber which comprises adding to rubber a vulcanising combination including a compound containing the group

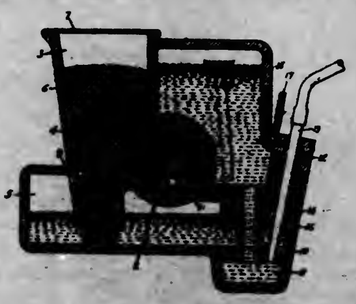


in which R represents either H, O, or C or further represents S when X is N; X represents O or S, or further represents N when R is S; and Y represents a carbon atom in a substituted cyclic group, or in a substituted methyl group that does not contain O or S doubly bonded to Y which compound hydrolyses in aqueous alcohol in the presence of sodium hydroxide, at least as rapidly as diphenyl methyl dimethyl dithiocarbamate under the same conditions, and carrying out the vulcanization of the rubber in the presence of a basic material introduced therinto.

1,905,798. MERCAPTO ARYL THIAZOLES AND METHOD OF MAKING THEM. SIDNEY M. CADWELL, Leonia, N. J., assignor to The Naugatuck Chemical Company, Naugatuck, Conn., a Corporation of Connecticut. Filed Mar. 2, 1928. Serial No. 258,682. 25 Claims. (Cl. 260—44.)

12. A method of forming a benso thiazyl sulfid containing a substituted phenyl group attached to said sulfid grouping, which comprises reacting in the presence of an organic solvent, a mercaptobenzothiazole, an alkali and a di-substituted benzene containing less than eight carbon atoms, the latter containing a nitro group, and separating the reaction product.

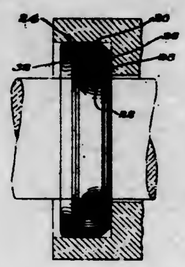
1,905,799. CONSTANT LEVEL LUBRICATING DEVICE FOR BEARINGS. FRANK E. CASE, Erie, Pa., assignor to General Electric Company, a Corporation of New York. Filed Aug. 8, 1930, Serial No. 473,934. Renewed June 18, 1932. 8 Claims. (Cl. 308—189.)



1. In combination with a bearing, a lubricating device comprising a storage reservoir adapted to contain lubricant below atmospheric pressure, said reservoir having an opening in the lower portion thereof, a feeding chamber communicating with said bearing and the opening in the lower portion of said reservoir, said feeding chamber having a passageway therinto, a vent tube communicating with the upper portion of said reservoir and directly with said passageway, said passageway being formed below the opening of said vent tube into the same and arranged to provide for introducing a filling nozzle there-

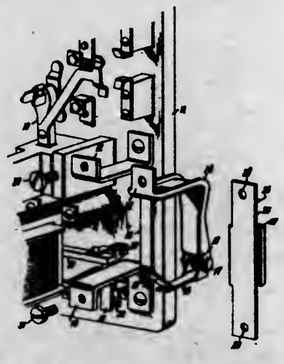
through into the opening in the lower portion of the reservoir to direct lubricant into said reservoir and to prevent the flow of lubricant into said feeding chamber during filling of said reservoir.

1,905,800. OIL SEAL. ROBERT W. CHANDLER, Worcester, Mass., assignor to Graton & Knight Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 16, 1932. Serial No. 628,995. 4 Claims. (Cl. 288—1.)



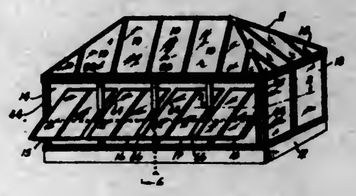
1. As an article of manufacture, a self-contained seal for insertion as an assembled unit within a housing in encompassing relation to a centrally located shaft, comprising a generally cylindrical housing having an inwardly formed and generally radial flange at one end and an inturned flange at the opposite end having a re-entrant portion to provide spaced concentric walls forming between them a circumferential space, the two flanges providing circular apertures of greater diameter than the shaft passing therethrough, a flexible packing of sheet material having a reduced axially extending portion adapted to encompass and engage with the shaft, an outer and axially extending clamping portion offset radially from the inner portion and assembled and clamped within the circumferential space, and a circular spring engaging with the reduced axial portion of the packing and maintained in assembled relation therewith by the housing for maintaining the packing in yielding engagement with the shaft.

1,905,801. ELECTRICAL HEATER. CHARLES H. CHAPMAN, Scotia, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 18, 1930. Serial No. 436,815. 6 Claims. (Cl. 219—19.)



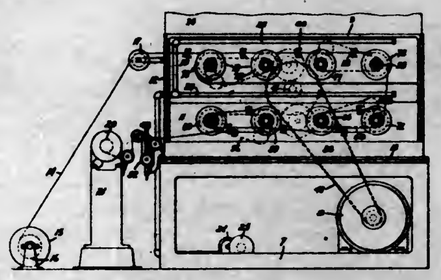
1. An electric heater for a bimetallic strip comprising a flat portion extending the length of the heater for conducting the heating current and provided with terminal engaging apertures, a portion intermediate the ends of said flat portion and extending from a side thereof and cooperating with said flat portion to provide a substantially closed loop for surrounding a bimetallic element for radiating heat thereto to all sides thereof, said looped portion having a substantial heat storage capacity.

1,905,802. TURRET OR WINDOW CONSTRUCTION. STEPHEN E. CIBULAS, Bridgeport, Conn. Filed Oct. 24, 1930. Serial No. 490,916. 7 Claims. (Cl. 108—16.)



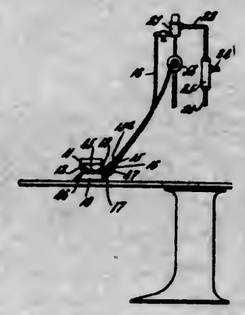
2. In a window construction, a mounting post, said post being substantially U-shaped in cross section, a sash at each side of said post, means pivoting the sashes intermediate their upper and lower edges to the post, each of said sashes at their edges adjacent the post including front and rear members extending for substantially the length of the respective sashes and connected together to clamp an edge portion of a window glass between them, one of said members of each sash integral with a corresponding member of the other sash and including a portion connecting their lower portion whereby the sashes move together toward and from open position, said connecting portion closing a portion of the open side of said post and swingable toward and away from the post as the sashes are swung to closed and open position, and a slide pivotally secured to said connecting portion and closing the remaining portion of the open side of the post when the sashes are in closed position.

1,905,803. WIRE DRAWING MACHINE. ERNEST W. CLARK, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 17, 1930. Serial No. 453,375. 6 Claims. (Cl. 205—13.)



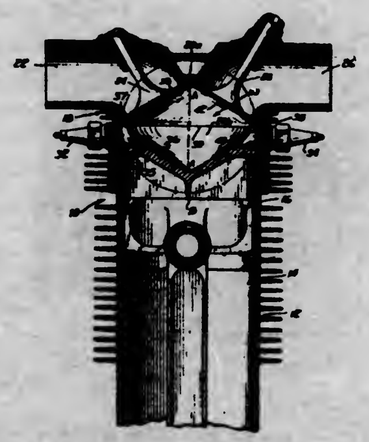
2. In a wire drawing machine, the combination of a frame having a vertical partition, spaced drawing rolls mounted on the front of the partition and arranged in horizontal rows, one row above the other with the initial and final rolls located at the same end of the machine, horizontal shafts extending through the partition from the rear for driving each of the rolls, a main driving shaft located centrally of the frame in the rear of the partition, pairs of spur gearing located in the rear of the partition for independently transmitting motion from the main shaft to some of the roll shafts of both the upper and lower rolls, other gearing also located in the rear of the partition for transmitting motion from certain of the roll shafts to other roll shafts located at greater distances from the main shaft, all of said gearings cooperating to drive the rolls at progressively increasing surface speeds from the initial to the final roll to distribute the slippage of the wire between them, and dies supported on the front of the partition in such positions as to act on the wire prior to passing around each of the rolls.

1,905,804. PRESSING IRON. FREDERICK J. CLARK, Buffalo, N. Y., assignor to Steam Pressing Iron Company, Chicago, Ill., a Corporation of Delaware. Filed Oct. 21, 1931. Serial No. 570,127. 7 Claims. (Cl. 68—26.)



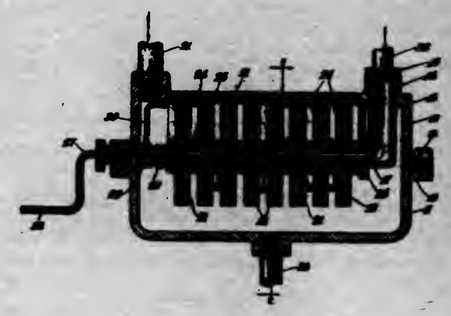
5. The combination of a pressing iron provided with steam discharge means including a valve distant from the iron for controlling the discharge of steam therefrom, a bearing plate detachably secured on said iron, a control device movably mounted on said bearing plate in position to be actuated by a finger of the hand grasping the handle of the iron, and means controlled by said control device for operating said steam discharge valve.

1,905,805. COMBUSTION CHAMBER CONSTRUCTION. ARLINGTON MOORE, New York, N. Y., assignor, by mesne assignments, to Maxmoor Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 26, 1930. Serial No. 477,857. 9 Claims. (Cl. 123—191.)



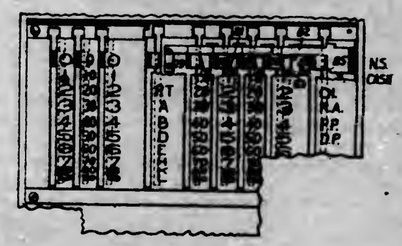
1. In an internal combustion engine, opposing portions having conical recesses therein diverging towards each other and forming a combustion chamber of double conical formation.

1,905,806. FILTER. LEE H. CLARK, Haverford, Pa., assignor to The Sharples Specialty Company, Philadelphia, Pa., a Corporation of Delaware. Filed Feb. 24, 1928. Serial No. 256,554. 13 Claims. (Cl. 210—200.)



1. A filter comprising a porous support having a rigid surface and a filtering membrane loosely enclosing and supported by said support and directly engaging and smoothly overlying the surface thereof.

1,905,807. INTERLOCKING MECHANISM. GROVER C. COIL, Dayton, Ohio, assignor to Ohmer Fare Register Company, Dayton, Ohio. Filed June 29, 1928. Serial No. 289,278. 4 Claims. (Cl. 235—130.)

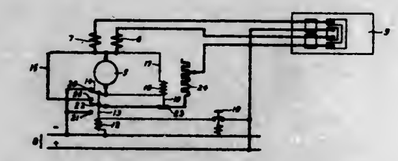


1. In a register, a plurality of money keys and a class key each adapted to be set to a plurality of operative positions and means whereby said class key is locked out of "no sale" position unless all of said money keys are in zero position.

1,905,808. MOTOR CONTROL SYSTEM. ABRAHAM COUWENHOVEN, Baden, Switzerland, assignor to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland, a Joint-Stock Company of Switzerland. Filed Mar. 18, 1929, Serial No. 347,871, and in Germany Mar. 19, 1928. 2 Claims. (Cl. 172—179.)

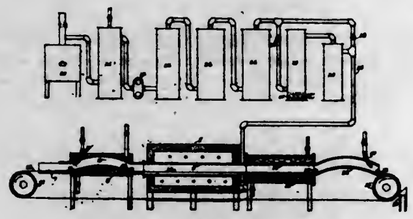
1. In an electric motor control system, a source of current supply, a motor comprising a plurality of field excitation windings and an armature winding, means including a reversing switch operative to a plurality of positions to selectively connect one or another of said field windings in series circuit with said armature winding and with said source of current, a low resistance disposed to be connected in shunt circuit with said armature winding, a current limiting resistance disposed to be connected in series circuit with said field windings and said source of

current, an electromagnetically actuated switch operable to a plurality of positions, the said electromagnetically actuated switch being effective when operated to one of its said positions to connect said armature winding in operative circuit with said source of current and effective



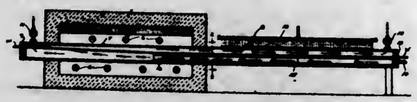
when operated to another of said positions to connect said low resistance in shunt circuit with said armature winding and to connect said current limiting resistance in series circuit with said field windings and said source of current.

1,905,809. METHOD OF PREVENTING OXIDATION OF METALS DURING HEAT TREATMENT. ROYSEL J. COWAN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 2, 1931. Serial No. 534,470. 9 Claims. (Cl. 148—16.)



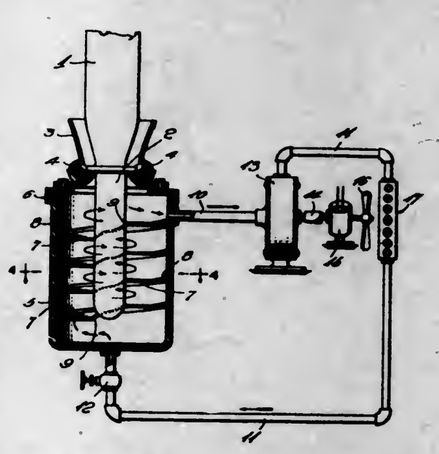
1. In a method of bright annealing metals, the steps comprising continuously passing through a heating chamber a gaseous mixture comprising dehydrated flue gas and the vapors of an alcohol, and passing the metal through said chamber in a direction opposite to the flow of said mixture.

1,905,810. LOW-TEMPERATURE BRIGHT-ANNEALING. ROYSEL J. COWAN and ORVILLE E. CULLEN, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Dec. 29, 1930. Serial No. 505,240. 8 Claims. (Cl. 148—16.)



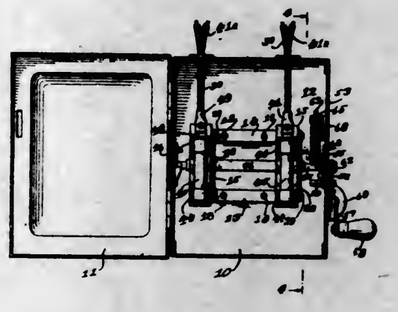
1. In a method of preventing the formation of and removing surface tarnish on nonferrous metals which are to be heat-treated at temperatures not substantially in excess of 1200° F., the steps comprising continuously passing a gas containing hydrogen through a heating chamber maintained at a temperature substantially in excess of 1200° F., moving the metal through said chamber in a direction opposite to the flow of the gas and at such a rate that the desired heat-treating temperature will not be exceeded, continuing the movement of the metal through a cooling chamber, and continuously passing through the cooling chamber in the same direction of flow as the metal some of the gases from the heating chamber.

1,905,811. COOLING SYSTEM FOR VACUUM TUBES. CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1929. Serial No. 406,549. 2 Claims. (Cl. 250—27.5.)



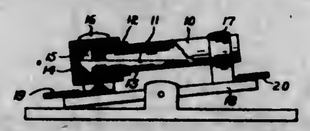
2. A cooling system for electron discharge devices comprising, a chamber adapted to receive and enclose in a gas tight manner the anode of an electron discharge device, a baffle plate within said chamber and adapted to encircle the anode of said discharge device, a pump, a radiator, an expansion valve, a conduit connecting said chamber, pump, radiator and expansion valve to form a closed fluid circulating system, an inert gas constituting the sole cooling medium contained in said closed system, and means for operating said pump to cause a circulation of said gas in said closed system.

1,905,812. ELECTRIC SWITCH. JOSEPH J. DANTE, Bantam, Conn., assignor to The John E. Cook Estate, Incorporated, Torrington, Conn., a Corporation of Connecticut. Filed Oct. 12, 1928. Serial No. 312,091. 9 Claims. (Cl. 200—164.)



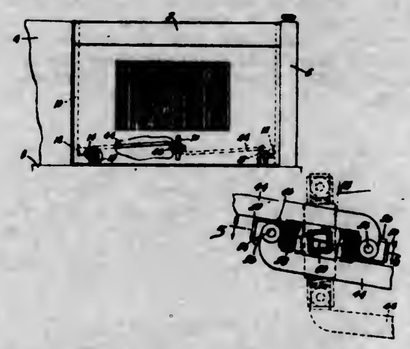
1. In an enclosed switch, a movable contact comprising a two-part hollow rotary member, a detachable floating conductor element located within said member and having exposed resilient terminals extending outside the periphery of said member, a pair of fixed contacts on opposite sides of said movable contact for engagement by said terminals, an operating shaft extending through the interior of said member, between said terminals and means for connecting said fixed contacts to a source of current.

1,905,813. MERCURY TUBE SWITCH. DEAN W. DAVIS, Pendleton, Ind., assignor to Joseph H. Staley, Columbus, Ind. Filed Dec. 24, 1932. Serial No. 648,788. 4 Claims. (Cl. 200—152.)



1. In a mercury switch, the combination of a metallic tube closed at one end, a metallic cap having a chamber and overlapping the open end of the tube, a compressible, resilient, insulating bushing interposed between and having sealing contact with the tube and cap, said bushing having a projection extending above the bottom of the tubes to provide a dam therebetween and the chamber, and a mass of mercury bridgable across the projection to electrically connect the tube and cap.

1,905,814. HOOD LATCH. STEPHEN DE ORLOW, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1931. Serial No. 560,840. 3 Claims. (Cl. 292—48.)



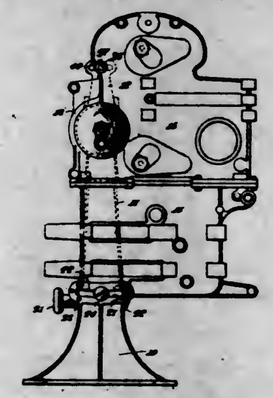
1. In a hood latching means, a plurality of links having overlapping ends and extending away from each other inside the hood, a resilient connection between said overlapping ends comprising a hollow member, a spring in said member, blocks slidable in said member and urged apart by the spring, said ends secured to said blocks, and a handle to move said member to operate said links.

1,905,815. HOOD LATCH. STEPHEN DE ORLOW, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1932. Serial No. 592,994. 6 Claims. (Cl. 292—214.)



1. In a latch for the hoods of vehicles having holding means permanently secured thereto at spaced apart points and latching means on the hood and adapted to engage with or become disengaged from the holding means, said latching means having a crank intermediate its length, operating means secured to the hood and engaging the said crank, said operating means comprising a bracket rigidly secured to the hood, a shelf on the bracket, a vertically reciprocable lever mounted on the bracket, said lever having a portion lying on said shelf rigidly to hold the parts when in latched position, and a link secured to the lever and to the crank, the raising of said lever causing the link to swing inwardly and downwardly to turn the crank to cause the latching means to become disengaged from the holding means.

1,905,816. MOTION PICTURE PROJECTION MACHINE STRUCTURE. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 30, 1929. Serial No. 410,820. 7 Claims. (Cl. 88—17.)

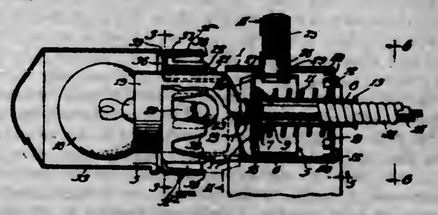


1. In a motion picture projector, a frame supporting the projector mechanism and including the intermittent motion sprocket, a support for said frame, means for supporting said frame in said support for movement of the frame around the axis of said sprocket as a pivot.

1,905,817. ODORANT FOR REFRIGERATION. FRANK J. DOBROVOLNY, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930, Serial No. 418,166. Renewed Sept. 10, 1931. 6 Claims. (Cl. 252—5.)

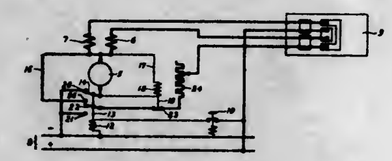
1. A composition of matter comprising a refrigerant of the group comprising hydrocarbons and halogenated hydrocarbons containing an alkyl mercaptan in amounts suitable for warning purposes.

1,905,818. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Original application filed Feb. 27, 1931, Serial No. 518,665. Divided and this application filed Dec. 14, 1931. Serial No. 580,889. 2 Claims. (Cl. 240—8.16.)



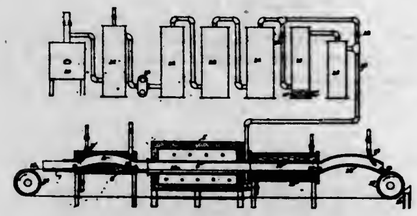
1. A dash lamp or the like embodying, in combination, a cylindrical metallic shell of resilient material split lon-

current, an electromagnetically actuated switch operable to a plurality of positions, the said electromagnetically actuated switch being effective when operated to one of its said positions to connect said armature winding in operative circuit with said source of current and effective



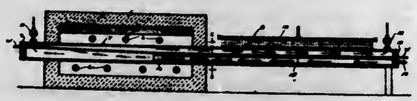
when operated to another of said positions to connect said low resistance in shunt circuit with said armature winding and to connect said current limiting resistance in series circuit with said field windings and said source of current.

1,905,809. METHOD OF PREVENTING OXIDATION OF METALS DURING HEAT TREATMENT. ROYSEL J. COWAN, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed May 2, 1931. Serial No. 534,470. 9 Claims. (Cl. 148—16.)



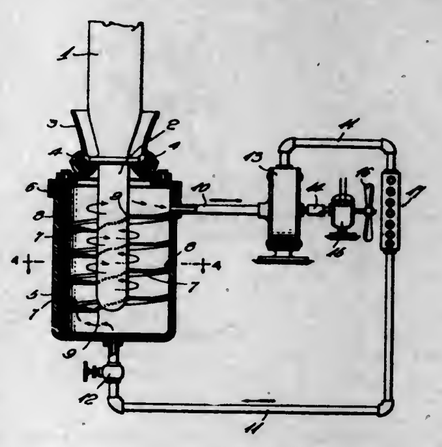
1. In a method of bright annealing metals, the steps comprising continuously passing through a heating chamber a gaseous mixture comprising dehydrated flue gas and the vapors of an alcohol, and passing the metal through said chamber in a direction opposite to the flow of said mixture.

1,905,810. LOW-TEMPERATURE BRIGHT-ANNEALING. ROYSEL J. COWAN and ORVILLE E. CULLEN, Toledo, Ohio, assignors to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Dec. 29, 1930. Serial No. 505,240. 8 Claims. (Cl. 148—16.)



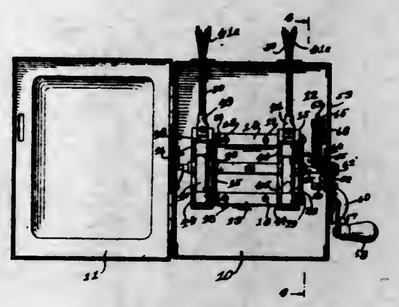
1. In a method of preventing the formation of and removing surface tarnish on nonferrous metals which are to be heat-treated at temperatures not substantially in excess of 1200° F., the steps comprising continuously passing a gas containing hydrogen through a heating chamber maintained at a temperature substantially in excess of 1200° F., moving the metal through said chamber in a direction opposite to the flow of the gas and at such a rate that the desired heat-treating temperature will not be exceeded, continuing the movement of the metal through a cooling chamber, and continuously passing through the cooling chamber in the same direction of flow as the metal some of the gases from the heating chamber.

1,905,811. COOLING SYSTEM FOR VACUUM TUBES. CHARLES A. CULVER, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1929. Serial No. 406,549. 2 Claims. (Cl. 250—27.5.)



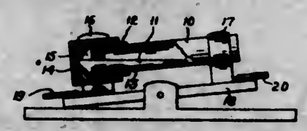
2. A cooling system for electron discharge devices comprising, a chamber adapted to receive and enclose in a gas tight manner the anode of an electron discharge device, a baffle plate within said chamber and adapted to encircle the anode of said discharge device, a pump, a radiator, an expansion valve, a conduit connecting said chamber, pump, radiator and expansion valve to form a closed fluid circulating system, an inert gas constituting the sole cooling medium contained in said closed system, and means for operating said pump to cause a circulation of said gas in said closed system.

1,905,812. ELECTRIC SWITCH. JOSEPH J. IANTE, Bantam, Conn., assignor to The John E. Cook Estate, Incorporated, Torrington, Conn., a Corporation of Connecticut. Filed Oct. 12, 1928. Serial No. 312,091. 9 Claims. (Cl. 200—164.)



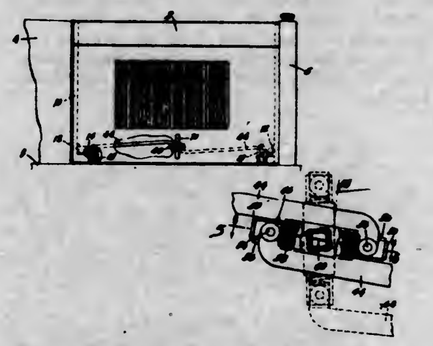
1. In an enclosed switch, a movable contact comprising a two-part hollow rotary member, a detachable floating conductor element located within said member and having exposed resilient terminals extending outside the periphery of said member, a pair of fixed contacts on opposite sides of said movable contact for engagement by said terminals, an operating shaft extending through the interior of said member, between said terminals and means for connecting said fixed contacts to a source of current.

1,905,813. MERCURY TUBE SWITCH. DEAN W. DAVIS, Pendleton, Ind., assignor to Joseph H. Staley, Columbus, Ind. Filed Dec. 24, 1932. Serial No. 648,782. 4 Claims. (Cl. 200—152.)



1. In a mercury switch, the combination of a metallic tube closed at one end, a metallic cap having a chamber and overlapping the open end of the tube, a compressible, resilient, insulating bushing interposed between and having sealing contact with the tube and cap, said bushing having a projection extending above the bottom of the tubes to provide a dam therebetween and the chamber, and a mass of mercury bridgable across the projection to electrically connect the tube and cap.

1,905,814. HOOD LATCH. STEPHEN DE ORLOW, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 31, 1931. Serial No. 560,340. 3 Claims. (Cl. 292—48.)



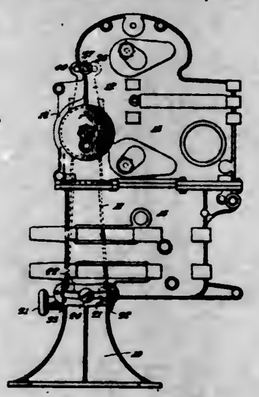
1. In a hood latching means, a plurality of links having overlapping ends and extending away from each other inside the hood, a resilient connection between said overlapping ends comprising a hollow member, a spring in said member, blocks slidable in said member and urged apart by the spring, said ends secured to said blocks, and a handle to move said member to operate said links.

1,905,815. HOOD LATCH. STEPHEN DE ORLOW, Detroit, Mich., assignor to Ternstedt Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 15, 1932. Serial No. 592,994. 6 Claims. (Cl. 292—214.)



1. In a latch for the hoods of vehicles having holding means permanently secured thereto at spaced apart points and latching means on the hood and adapted to engage with or become disengaged from the holding means, said latching means having a crank intermediate its length, operating means secured to the hood and engaging the said crank, said operating means comprising a bracket rigidly secured to the hood, a shelf on the bracket, a vertically reciprocable lever mounted on the bracket, said lever having a portion lying on said shelf rigidly to hold the parts when in latched position, and a link secured to the lever and to the crank, the raising of said lever causing the link to swing inwardly and downwardly to turn the crank to cause the latching means to become disengaged from the holding means.

1,905,816. MOTION PICTURE PROJECTION MACHINE STRUCTURE. AUGUSTO DINA, Elizabeth, N. J., assignor to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 20, 1929. Serial No. 410,829. 7 Claims. (Cl. 88—17.)

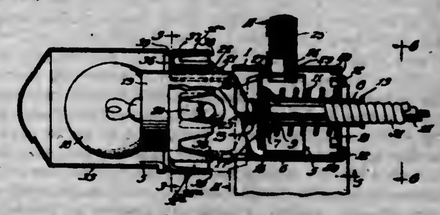


1. In a motion picture projector, a frame supporting the projector mechanism and including the intermittent motion sprocket, a support for said frame, means for supporting said frame in said support for movement of the frame around the axis of said sprocket as a pivot.

1,905,817. ODORANT FOR REFRIGERATION. FRANK J. DOBROVOLNY, Niagara Falls, N. Y., assignor, by mesne assignments, to The Roessler and Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 2, 1930, Serial No. 418,166. Renewed Sept. 10, 1931. 6 Claims. (Cl. 252—5.)

1. A composition of matter comprising a refrigerant of the group comprising hydrocarbons and halogenated hydrocarbons containing an alkyl mercaptan in amounts suitable for warning purposes.

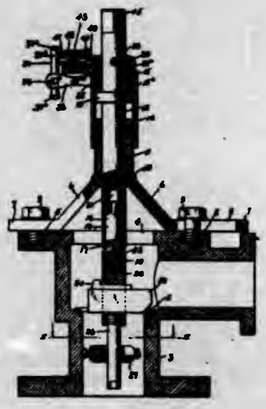
1,905,818. ELECTRIC LAMP. HARRY A. DOUGLAS, Bronson, Mich. Original application filed Feb. 27, 1931, Serial No. 518,665. Divided and this application filed Dec. 14, 1931. Serial No. 580,889. 2 Claims. (Cl. 240—8.16.)



1. A dash lamp or the like embodying, in combination, a cylindrical metallic shell of resilient material split lon-

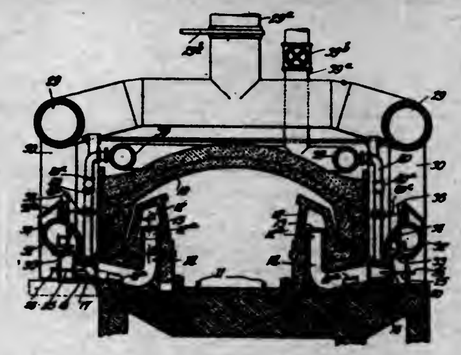
gitudinally; a flange at the forward end of said shell, said flange being turned back over the body of the shell and extending longitudinally rearwardly thereof spaced from said shell; continuations of said flange extending longitudinally rearwardly in the form of spring fingers, the material of said fingers being decreasingly tapered in longitudinal section toward their free ends to progressively decrease their resiliency; and a cylindrical cowl, said cowl telescoping over said flange and said fingers which yieldingly engage the cowl, whereby said flange provides a split ring bearing for the cowl and said fingers at their free ends have substantially no greater resiliency than is necessary to maintain them in frictional engagement with the cowl.

1,905,819. BORING AND FACING TOOL WITH FEED ATTACHMENT. MICHAEL P. DOYLE, Brooklyn, N. Y. Filed May 13, 1931. Serial No. 536,965. 2 Claims. (Cl. 90—12.5.)



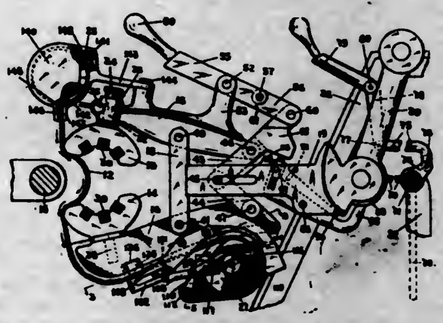
1. A tool of the class described comprising a support adapted to be adjustably secured to the valve casing and having an upwardly extending exteriorly threaded tubular extension, a hollow interiorly threaded tubular element having a head portion with an opening therethrough, and mounted on said threaded tubular extension and adapted to be rotatably moved with respect thereto, a shaft having rotary mounting in said support and extending through said threaded extension and the opening in the head portion of said tubular element, a collar integrally secured to said shaft and positioned within the hollow interiorly threaded element so as to contact with the interior face of the head portion thereof, an arm secured to and extending outwardly from the head portion of said tubular element and slidably carrying at its outer end, a square pin with a rounded portion formed thereon, means secured to said shaft adapted to engage said pin when said shaft is rotated and to cause the said pin and its associated arm and the tubular element to be rotated with said shaft so as to cause said tubular element to be moved downwardly along the threaded portion of the exteriorly threaded tubular extension of said support and thus cause said shaft to move downwardly into the valve casing, an extension shaft removably secured to the lower end of said shaft, a cutting tool removably secured to the lower end of said extension shaft and provided with a cutting element positioned so as to contact with the valve seat of said valve casing when said first mentioned shaft is moved downwardly by the downward progression of said tubular element on the threaded extension of said support, and means secured to the lower end of said cutting element to center said tool with respect to the valve casing and its valve seat.

1,905,820. KILN AND BURNER APPARATUS. HENRY A. DREFFEIN, Chicago, Ill. Filed Oct. 4, 1928. Serial No. 310,389. 11 Claims. (Cl. 158—7.)



8. In apparatus of the class described, a duct, means to supply gas thereto and means to supply air to the inner periphery of said duct in such wise as to envelop said gas.

1,905,821. LAPPING DEVICE FOR CYLINDRICAL OBJECTS. HOWARD W. DUNBAR and JOHN C. BAKER, Worcester, Mass., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 15, 1929. Serial No. 347,298. 15 Claims. (Cl. 51—73.)



1. A lapping device comprising two jaws having concave bearing surfaces conforming substantially to the curvature of the work to be lapped, feeding and receiving mounts, one being located on each of the jaws to support and retain the ends of a flexible strip of abrasive material and hold it in operative relation with the work, means for opening and closing the jaws, and means operated in timed relation with the movement of the jaws to move a measured invariable amount of the abrasive strip for each operation of the jaws and present a fresh portion to the work and to feed the used portion of the strip to the receiving mount.

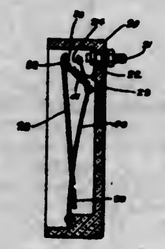
1,905,822. PACKING. IRWIN L. DUNN, Tulsa, Okla. Filed Oct. 6, 1930. Serial No. 486,710. 1 Claim. (Cl. 288—1.)



A packing ring having a central portion of its circumference reduced in diameter to provide relatively narrow contacting rings at the end of the body, the body

member being recessed to provided inclined undercut grooves at the ends of said reduced central portion forming relatively narrow necks for said end ring members, whereby said members may be flexed in response to pressure of fluid admitted to said grooves.

1,905,823. THERMOSTATIC SWITCH. HENRY G. DYRVIG, Dayton, Ohio, assignor to Delco Products Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Feb. 27, 1930. Serial No. 431,758. 6 Claims. (Cl. 200—138.)



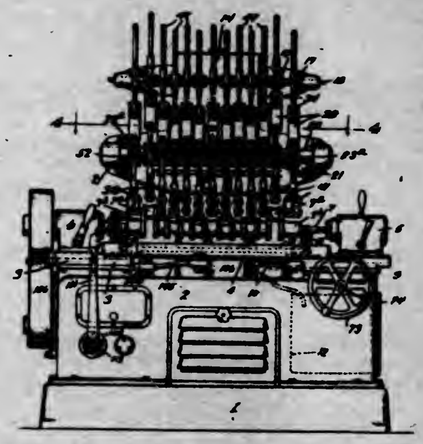
1. A thermo-switch comprising, in combination, a housing having two parallel walls provided with aligned, oppositely disposed openings, one of said openings having connecting means therein, a contact carrier having oppositely disposed arms extending into the said openings of the housing walls respectively whereby said contact carrier is pivotally supported at one end within the housing; a thermostatic member anchored at one end within the housing; a compression spring interposed between the free ends of the thermostatic member and carrier and adapted to shift the carrier from one position in the housing into another in response to movement of the thermostat; and a switching means comprising a stationary contact on the housing and a cooperating contact on the carrier.

1,905,824. JOINTED METALLIC HOSE CASING. MARTINIUS DYSTHE, Minneapolis, Minn. Filed Sept. 28, 1931. Serial No. 565,410. 3 Claims. (Cl. 187—90.)



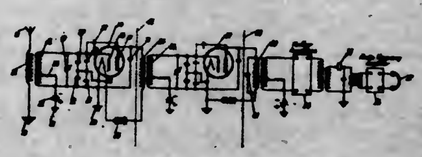
1. A device of the class described comprising a plurality of axially spaced tubular links telescopically assembled and connected for angular movement, and a metallic lining for the links comprising spring members in the form of leaves that extend longitudinally of the device and are anchored thereto with freedom to permit longitudinal movement of the links in respect thereto during their angular movement.

1,905,825. MACHINE FOR HONING AND POLISHING CRANK SHAFTS. WALTER F. EGGER, Cleveland, and LOGAN A. BECKER, Lakewood, Ohio, assignors, by mesne assignments, to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed July 18, 1927. Serial No. 206,515. 32 Claims. (Cl. 51—73.)



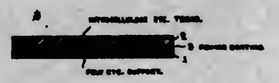
1. In a machine of the kind described, the combination, with means for supporting and rotating a crank shaft, of a tool carrier having a tool adapted to operate on a crank pin on said crank shaft, a pivotal support for the end of the tool carrier opposite said tool, and a guide adapted to slidably engage the carrier between the ends thereof as said carrier is reciprocated by said crank pin, said guide comprising side plates and means to move the plates laterally to clamp the carrier therebetween and hold it in a fixed position.

1,905,826. HIGH FREQUENCY AMPLIFIER. HAROLD F. ELLIOTT, Palo Alto, Calif., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Apr. 21, 1928. Serial No. 271,861. 10 Claims. (Cl. 179—171.)



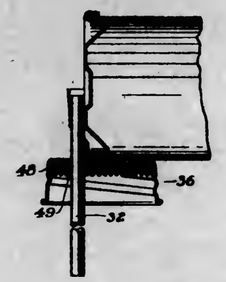
6. In an amplifying system having a certain frequency range of operation, a plurality of cascade connected amplifiers, coupling transformers between successive amplifiers each including a primary coil connected in the output circuit of one amplifier and a secondary coil included in the input circuit of a second amplifier, and means associated with said coils forming resonant circuits having resonant frequencies above and below the operating range of the system.

1,905,827. FLOOR COVERING. CARLETON ELLIS, Montclair, N. J., assignor, by mesne assignments, to Resyl Corporation, New York, N. Y., a Corporation of Delaware. Filed Nov. 12, 1926. Serial No. 148,112. 9 Claims. (Cl. 91—68.)



1. A floor covering comprising a backing of asphalt-saturated felt substantially free from oil, coated with a flexible self-flattening layer comprising a mixture of high viscosity nitrocellulose and low viscosity nitrocellulose.

1,905,828. LIQUID SPRAYER AND METHOD OF MAKING THE SAME. CARL F. ELLSWORTH, Collingswood, N. J., assignor to The R. M. Hollingshead Co., Camden, N. J., a Corporation of New Jersey. Filed Apr. 23, 1931. Serial No. 532,197. 10 Claims. (Cl. 299—88.)



4. The method of constructing liquid sprayers which consists of providing a hand pump having a discharge head with a discharge opening therein, said discharge head attached to the hand pump by a bead; an apron having a resilient bead-engaging flange, and having a flangeless bead-engaging portion, and having also a siphon-tube-receiving aperture; a siphon tube; and a container retaining means, said retaining means having a siphon-tube-receiving aperture, and having also a solderable aperture; and assembling the sprayer by attaching the apron to the discharge head by snapping the resilient flange of the apron onto the bead and interlocking the bead with the flangeless bead-engaging portion; inserting the siphon tube through the aperture in the apron into interlocking juxtaposition to the apron and discharge head, and positioning the siphon tube in operative juxtaposition to the discharge opening in said discharge head; inserting the free end of the siphon tube into said aperture therefor in the container-retaining means, and positioning said retaining means in abutting relation to the pump wall; soldering the container retaining means through the solderable aperture therein to the pump wall, and soldering the siphon tube to a portion of the assembled sprayer.

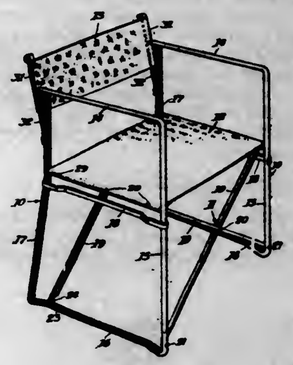
10. A sprayer including an air pump having a discharge head attached thereto by means of a bead, said discharge head having a discharge hole therein; an apron having a bead-engaging flange adapted to engage the apron with the discharge head; a siphon tube, the upper portion of said siphon tube being intermediate said apron and said discharge head so as to lock the engagement of the apron with the discharge head, said siphon tube being in operative juxtaposition to the pump discharge hole; container-retaining means having a siphon-tube-receiving aperture, the free end of the siphon tube extending into said aperture of the container-retaining means, and said container-retaining means being in abutting relation to the pump and secured thereto.

1,905,829. LUMINAIR EMPLOYING PRISMATIC REFLECTORS. SOLOMON ENGLISH, London, England, assignor to Holophane Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 10, 1932, Serial No. 591,945, and in Great Britain Feb. 18, 1931. 16 Claims. (Cl. 240—106.)



1. A prismatic reflector having external prisms on a reflector form concave to incident light and of non-circular section, wherein the prism systems radiate from the points of normal incidence and reflection and in which at any point on the surface of the reflector the prism axis passing through said point lies in the plane of the incident and reflected rays reaching and leaving that point.

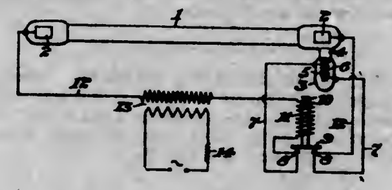
1,905,830. FOLDING CHAIR. PHILIP E. G. ERICSON, St. Charles, Ill., assignor to The W. H. Howell Company, Geneva, Ill., a Corporation of Illinois. Filed Nov. 9, 1931. Serial No. 573,757. 6 Claims. (Cl. 155—140.)



1. In a chair, a side frame composed of a channel bar bent upon itself to provide an arm, front and rear legs and a lower brace, the rear leg being joined to the arm adjacent the rear end thereof, and said rear end of the arm having a down turned tongue, a flexible back having a looped end, a bar extending through said loop and bearing against the rear leg and the rear end of the arm, removable securing means extending through said bar, loop and the tongue of the arm, and other means rigidly connecting the bar to the leg.

1,905,831. GASEOUS ELECTRIC DISCHARGE DEVICE. HANS EWEST, Berlin, and MARCELLO PIRANI, Berlin-Wilmersdorf, Germany, assignors to General Electric Company, a Corporation of New York. Filed July 9, 1929, Serial No. 377,009, and in Germany July 17, 1928. 2 Claims. (Cl. 176—125.)

1. In an electric discharge device, a container, electrodes for said container, a gas filling in said container, a gas supply chamber for said container, a dividing body between the gas filled container and the gas supply chamber pervious to said gas only when heated, heating means connected in series with said electrodes for heating said



dividing body, and means controlled by the current flowing in said device to cut into and out of circuit said heating means.

1,905,832. INSULATING WALL. STUART W. ECKEL, Chicago, Ill., assignor to Standard Oil Company, Chicago, Ill., a Corporation of Indiana. Filed Sept. 17, 1930. Serial No. 482,506. 7 Claims. (Cl. 72—16.)



1. A construction for insulating walls comprising a wall, a plurality of horizontally disposed and outwardly directed strips secured at one edge of said wall between the top and bottom of the latter, and a layer of insulation against said wall and supported by said strips.

1,905,833. NONHYGROSCOPIC COMPOSITION COMPRISING ALUMINUM SULPHATE AND AN ACID SALT. CHESTER C. FRASELEY, Philadelphia, Pa., assignor, by mesne assignments, to The Grasselli Chemical Company, a Corporation of Delaware. Filed June 25, 1926. Serial No. 118,568. 1 Claim. (Cl. 23—250.)

The process of forming a soluble non-hydroscopic acid sulphate of aluminum which comprises adding sodium carbonate to particles of sodium acid sulphate to form thereon a coating of normal sodium sulphate to render them non-gyroscopic and thereafter incorporating said particles with aluminum sulphate.

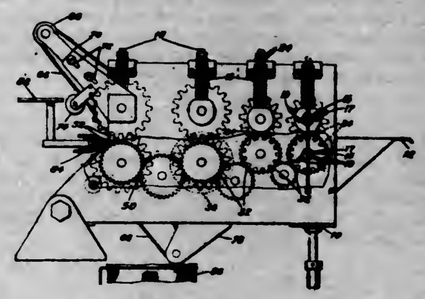
1,905,834. COPYHOLDER. CHARLES FRUSKY, St. Louis, Mo., assignor of one-half to Vera F. Fiader, St. Louis, Mo. Filed June 21, 1930. Serial No. 462,726. 13 Claims. (Cl. 129—34.)

4. A copy-holder comprising a copy-holding support, a line indicator movable thereover, mechanism for moving said line indicator with a step-by-step movement, said mechanism including a pull-rod slidably mounted on said copy-holding support and operatively connected to said line indicator to actuate the same when slid in one direction



only, a spring operatively connected to said pull-rod for sliding the same in the other direction, an abutment on said pull rod, and a stop disposed in the path of said abutment.

1,905,835. SHEET-SEPARATING APPARATUS. SIDNEY J. FINN, Beverly, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 5, 1928. Serial No. 325,900. 50 Claims. (Cl. 271—18.)

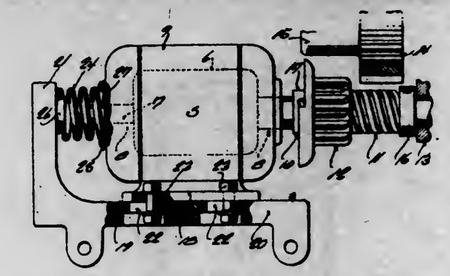


1. In a sheet-separating apparatus, cooperating rolls arranged to receive between them adhering sheets, and sheet-separating projections carried by each roll and extending in a series about the entire periphery.

1,905,836. ENGINE STARTER. JOHN W. FITZ GERALD, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Delaware. Original application filed May 19, 1926, Serial No. 279,174. Divided and this application filed July 15, 1931. Serial No. 550,863. 8 Claims. (Cl. 74—7.)

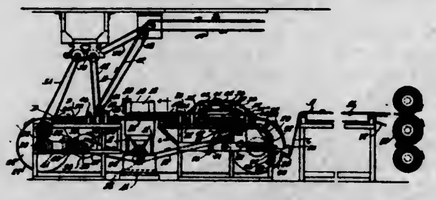
1. An engine starter, comprising the combination with a member operatively connected with an engine, a motor, a rotatable member, a driving member mounted to travel

longitudinally on said rotatable member into engagement with said engine member and also to rotate therewith, means mounting the motor for axial movement, and



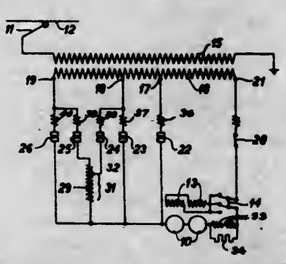
means yieldably resisting axial movement of the motor in a direction opposed to the direction of movement of the driving member to engage the engine member.

1,905,837. METHOD AND APPARATUS FOR PRODUCING CUT ARTICLES OR BLANKS FROM PLASTIC STRIP MATERIAL. JOHN H. FLINK, Watertown, Mass., assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed June 5, 1931. Serial No. 542,419. 20 Claims. (Cl. 164—20.)



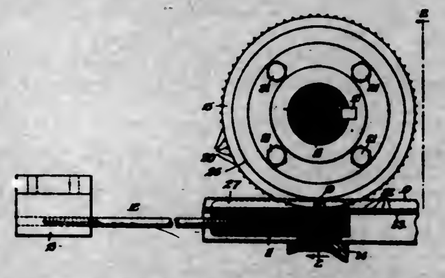
19. Apparatus of the character described comprising, in combination, a conveyor adapted to feed plastic strip stock past a cutting station, a plurality of cutter backing mats positionable between incoming strip stock and the conveyor consecutively along the latter, and mechanism for progressively stripping surplus outgoing stock from the mats, said mechanism comprising means for preventing relative movement of the mats and conveyor.

1,905,838. CONTROL SYSTEM FOR ELECTRIC MOTORS. ALFRED K. FLUELER, Collingswood, N. J., assignor, by mesne assignments, to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a Corporation of Delaware. Filed Apr. 10, 1929. Serial No. 353,939. 5 Claims. (Cl. 172—274.)



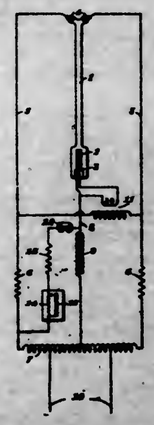
1. In a control system, the combination with a source of alternating current, a transformer connected with said source and provided with a plurality of voltage-stage taps, a multi-tapped impedance device, and a motor, of a controller comprising a plurality of switches arranged to sequentially effect connection of the said voltage-stage taps with the said motor, the said controller including switches to effect connection of a portion only of said device in circuit between certain of said voltage-stage taps and the said motor, and including switches for effecting connection of the whole of said device in circuit with certain other of said voltage-stage taps and the said motor to vary the impedance of the motor circuit.

1,905,839. SASH FORMING MACHINE. GUSTAV T. FORREDD and VERNON R. CORNISH, Elkhart, Ind., assignors to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 16, 1929. Serial No. 393,087. 5 Claims. (Cl. 113—34.)



1. A rolling machine attachment for prick-punching the seam in a tubular sheet metal frame member being rolled in an associated machine, comprising a plug adapted to be positioned within the frame member against the inner side of the seam, a circular die adapted to be positioned outside of the frame member in tangential relation to the outer side of the seam at a point opposite the plug, and a plurality of radially projecting studs positioned in sockets in the periphery of the die at intervals circumferentially thereof for prick-punching the seam against the plug upon rotation of the die, said die being laterally separable in the plane of the sockets to permit replacement of the studs.

1,905,840. SYSTEM FOR STARTING AND OPERATING GASEOUS ELECTRIC DISCHARGE DEVICES. JOHN D. FORNEY, Chatham, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 29, 1929. Serial No. 410,488. 10 Claims. (Cl. 176—124.)



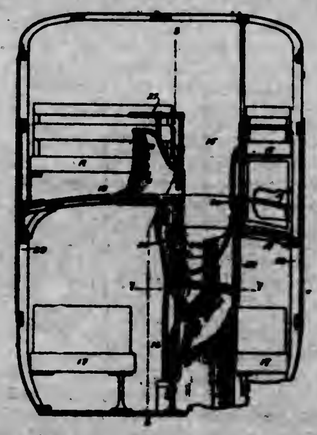
1. In combination, an electric gaseous discharge device having a cathode adapted to emit electrons when heated, means comprising an electric heater to heat said cathode, and means to vary the energy supplied to said cathode heating means.

1,905,841. ELECTRIC DISCHARGE DEVICE AND OPERATING CIRCUITS THEREFOR. JOHN D. FORNEY, Chatham, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 4, 1930. Serial No. 433,655. 20 Claims. (Cl. 176—124.)



1. In combination, an electric discharge device having a thermionic cathode and an anode, a discharge maintaining circuit for said device comprising leads from a suitable source of direct current to a point on said cathode and to said anode, an inductance in the lead to said anode, means to pass a heating current through said cathode before a discharge is initiated in said device comprising a connection from another point on said cathode to said anode lead at a point between said inductance and said source, means to open said connection, and means to initiate a discharge in said device.

1,905,842. DOUBLE DECK PASSENGER VEHICLE. MICHAEL J. FORRESTER, Astoria, N. Y., assignor to Fifth Avenue Coach Company, a Corporation of New York. Filed Apr. 14, 1932. Serial No. 605,180. 2 Claims. Cl. 296—28.)



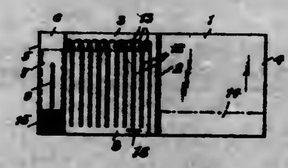
1. A passenger vehicle having a deck arranged at a common level, a second deck arranged at a different level from the first deck and itself constructed in two different levels disposed respectively on opposite sides of a line extending longitudinally of the same, and adapted to accommodate passengers' seats on both levels, said second deck having a longitudinally extending aisle at the junction of its two levels and disposed in the plane of the lower level, and a stairway positioned within the vehicle and leading from said aisle to the other deck.

1,905,843. BASE AND SOCKET FOR ELECTRIC LAMPS. THEODORE H. FOULKE, Nutley, N. J., assignor to General Electric Vapor Lamp Company, Hoboken, N. J., a Corporation of New Jersey. Filed Nov. 21, 1931. Serial No. 576,589. 5 Claims. (Cl. 176—32.)



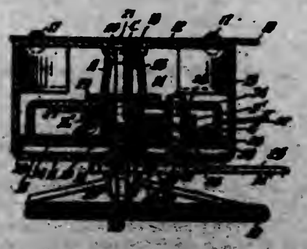
1. In combination, a tubular lamp base member of insulating material, an electric lamp bulb mounted therein, and spaced contact strips extending longitudinally along the outer surface of said base member and permanently attached thereto, the leads of said lamp bulb being connected to said contact strips, said strips having an outwardly extending bulge therein.

1,905,844. MATCH PACKAGE. BENJAMIN H. FREEDMAN, New York, N. Y., assignor to Hudson Holding Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 9, 1930. Serial No. 442,753. 5 Claims. (Cl. 206—29.)



1. A match package having a cover strip, a match strip held cross-wise on said cover strip and having portions of said cover strip folded over it, said match strip having a continuous base portion extending along the ends of the matches in said strip, means for attaching said base portion to the cover strip, said match strip being provided with a flap extending along the sides of the matches in said strip, and means for attaching said flap to the cover strip.

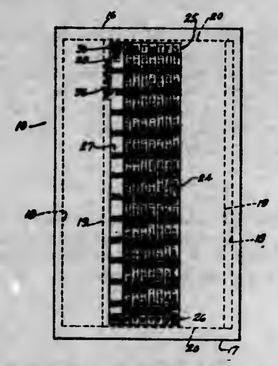
1,905,845. HAND BRAKE. HENRY FUCHS, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Aug. 1, 1930. Serial No. 472,227. 3 Claims. (Cl. 74—112.)



1. In a hand brake mechanism, the combination with a chain winding drum; of a hand wheel; power-multiplying gear means operatively connecting the hand wheel and chain winding drum, said gear means including a pair

of gear members rigidly connected to each other and mounted for planetary movement; means for normally locking said members against planetary movement but permitting axial rotation thereof, whereby the power is transmitted through said gear means to the drum to wind the chain and tighten the brakes, said locking means being releasable to permit planetary movement of said members, thereby allowing free running of the chain winding drum with respect to the hand wheel to release the brakes; and a locking dog for positively holding said hand wheel against rotation in an unwinding direction.

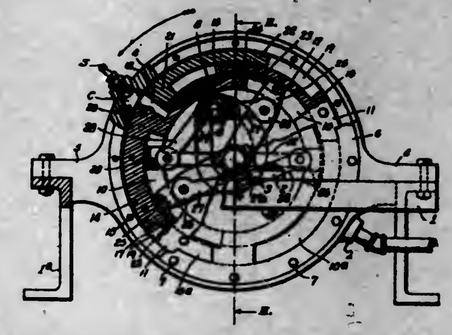
1,905,846. PERPETUAL CALENDAR. STEPHEN FURRDI, New York, N. Y. Filed July 28, 1932. Serial No. 625,266. 6 Claims. (Cl. 40—109.)



1. A perpetual calendar including a plurality of interrelatively movable members, one of said members having on one side thereof a table of numbers in rows and columns for the months of different years, so that any portion of said table including seven of said numbers in a row shall afford the numbers for the months of a desired year, said member having indicia on its reverse side, and the second member having indicia which can be coordinated with said indicia on the first member by movement of the members relative to each other, so that a desired year can be obtained by alinement of the indicia on the different members, certain of said indicia on the second member being differentiated from others thereof for indicating whether the year obtained is a leap year, the second member having window means for defining a portion of the table on the first member to obtain a calendar corresponding to the year to which the members have been set according to said indicia, and the second member having other indicia coordinated with the columns of said tables to indicate the names of the days for common and leap years corresponding to the numbers of said table, certain of the last mentioned indicia being adapted for use with January and February of a leap year and with all months of a common year, and others of the last mentioned indicia being adapted for use with the last ten months of a leap year.

1,905,847. ROTARY ENGINE. ELMER B. GALYEAN, Topeka, Kans. Filed Aug. 24, 1931. Serial No. 558,863. 2 Claims. (Cl. 123—11.)

1. A rotary engine, comprising a stationary casing providing a circular chamber and having gas-intake and exhaust ports and continuous cam grooves in the inner faces of the side walls, a shaft journaled in the side walls coaxially thereof and eccentrically of said grooves, a rotor of cylinder shape and open at its sides, mounted on the shaft within the said chamber and engaging the circumferential and side walls thereof and having opposite external peripheral chambers providing piston faces at their front ends, the bottoms of said peripheral chambers being of step form to divide the chambers into front and rear portions of different depth, the front portions being deeper than the rear portions and constituting follower chambers, the risers of the said stepped portions having passages opening from the front parts of said rotor chambers into the casing chamber, independent arms pivotally mounted at their inner ends on the shaft, followers snugly engaging the front parts of the rotor chambers and

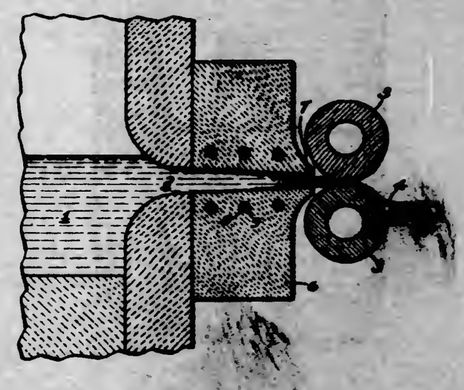


provided with tail pieces extending into the shallow rear chambers, rods projecting rearwardly from the followers and through the said passages and secured to said arms, toggle connections between said arms respectively and the rotor, and rollers on and at opposite sides of the jointed parts of the toggles and engaging the said cam grooves.

1,905,848. ZIRCONIUM CITRATE HEXAMETHYLENETETRAMINE. ARNOLD J. GELARIE, New York, N. Y. Filed July 30, 1928. Serial No. 296,428. 2 Claims. (Cl. 260—11.)

1. Zirconium-citrate-hexamethylenetetramine.

1,905,849. METHOD OF MAKING SHEET GLASS. FREDERICK GELSTHARP, Tarentum, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Dec. 17, 1931. Serial No. 581,586. 2 Claims. (Cl. 49—87.)



1. A method of making sheet glass which comprises melting and maintaining in a tank furnace a reservoir of molten glass, supplying the glass by the head pressure of the tank through a slot in the wall of the tank and between the pass of a pair of cooled rolls which constitutes a continuation of said slot and driving the rolls at a peripheral speed at least equal to the natural rate of flow of the glass to the roll incident to said head pressure, so that the glass flows through the slot without retardation by the rolls.

1,905,850. SYNTHETIC LUBRICANT AND METHOD OF MAKING SAME. JOHN J. GRABEN and SELVIA M. SWENSEN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Apr. 25, 1930. Serial No. 447,408. 9 Claims. (Cl. 87—9.)

1. The method of making oleaginous products which comprises heating diphenyl oxide at a temperature between 400° C. and the decomposition point thereof and separating from the reaction product the fraction distilling between approximately 200° and 350° C. at an absolute pressure of 5 to 10 millimeters.

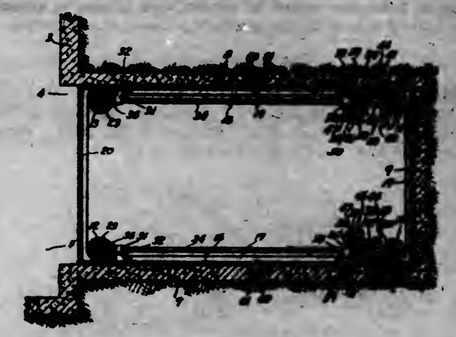
1,905,851. SURGICAL INSTRUMENT. LOUIS D. GREEN, San Francisco, Calif. Filed Apr. 30, 1930. Serial No. 448,607. 3 Claims. (Cl. 128—305.)



1. In a surgical instrument for performing operations on the human eye, a rotatable tool having an annular cutting edge, a shoulder on said tool for indicating the depth at which the tool is operating, a helical spring for storing energy to rotate said tool, a gear train interconnecting said spring and said tool, said tool being driven by an intermediate gear in said gear train, a rotatable shaft driven by said gear train at a higher rate of speed than said tool, a fan on said shaft for retarding the rate of rotation of said tool, a fly-wheel on said shaft for maintaining the rate of rotation relatively constant, an elongated casing having the general form of a pencil for supporting said tool, said gear train and said spring in general alignment and with said tool extending from one end of the casing, a cap on the opposite end of said casing for winding said spring, a finger button projecting through said casing for controlling the rotation of said tool, said finger button being disposed at a position which is adjacent the forefinger when the instrument is held between the thumb and forefinger in the manner by which a pencil is held, and a set screw for securing said casing in proper position about the gear train and spring, all of the operating parts of the device including the spring being removable through one end of the casing for inspection upon removal of said set screw.

1,905,852. GARAGE. PALATINE GRIMM, Higginsville, Mo. Filed Oct. 6, 1930. Serial No. 486,654. 2 Claims. (Cl. 187—25.)

1. A garage including a rectangular platform, vertical threaded posts extending through said platform adjacent its corners, gears rotatively mounted on the platform and threaded on the posts, means for operably connecting the gears at each side edge of the platform including spaced aligning shafts, pinions fixed on the shafts and meshing with said gears, spaced aligning counter shafts on the platform and having driving connection with said spaced



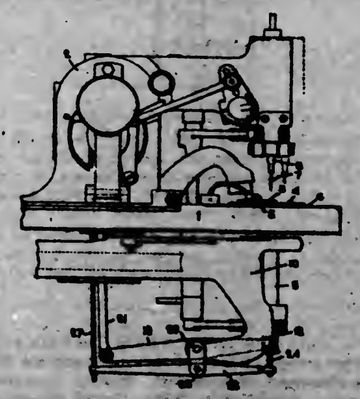
aligning shafts, and common means operable by an automobile mounted on the platform for operating counter shafts to move the platform vertically on the posts.

1,905,853. HEAT INSULATING PANEL MEMBER. RICHARD T. GRIFFITHS, Akron, Ohio, assignor, by mesne assignments, to Miller Rubber Company Inc., Wilmington, Del., a Corporation of Delaware. Filed Dec. 20, 1929. Serial No. 415,541. 9 Claims. (Cl. 20—35.)



1. An insulating panel of the character described comprising a front member of hard rubber having a facing plate of metal homogeneously united thereto, and a self-supporting imperforate back member of hard rubber spaced therefrom and having a continuous non-conducting flanged margin homogeneously united to the rubber of the front member.

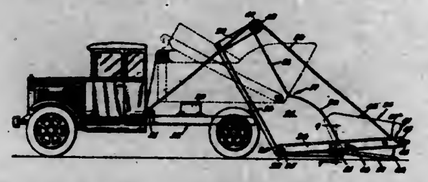
1,905,854. BUTTONHOLE SEWING MACHINE. CARL A. O. GRIP, Newtonville, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed May 24, 1932. Serial No. 613,217. 9 Claims. (Cl. 112—242.)



1. In a buttonhole sewing machine, the combination with a stitch frame, of a thread rotatively mounted thereon, stitch-forming mechanism including loopers pivotally

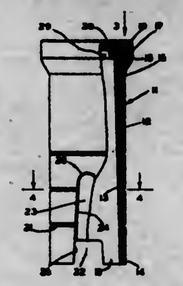
mounted on the turret to oscillate about a common axis, a thread pull-off arm pivoted co-axially with the loopers and adapted to engage the under thread to pull a length thereof from the source of supply, and means to actuate the pull-off arm after the sewing operation is completed.

1,905,855. LOADING AND DUMPING TRUCK. WILLIAM M. GROSS, Las Vegas, Nev., assignor of one-half to Will Beckley, Las Vegas, Nev. Filed Apr. 28, 1932. Serial No. 608,019. 18 Claims. (Cl. 37—4.)



1. In a dump truck having a body with a floor, side walls, and a rear end, the body being tiltably mounted on the truck, said body being adapted to tilt rearwardly to bring the floor into an inclined position and the rear end contiguous to the ground, means for attaching a draft connection to the rear portion of the truck body to move said body and the truck rearwardly and force a load of loose material into the rear portion of the truck body, and means to tilt the truck body to bring the floor into horizontal position for transportation of the load, an excavating bucket operatively connected to the truck body to engage the material for the load and to support and guide the load while being forced into the truck body, and means to lift the bucket relative to the body to deposit part of the load in the body.

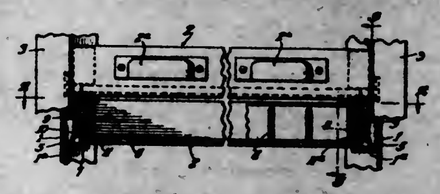
1,905,856. CURB VALVE BOX. LEO G. HAASE, Long Beach, and FRANK M. BROOKS, Pasadena, Calif., assignors to Art Concrete Works, Inc., Pasadena, Calif., a Corporation of California. Filed June 30, 1930. Serial No. 464,888. 2 Claims. (Cl. 137—13.)



1. A curb valve box comprising a tubular concrete structure open at the bottom, said structure having annular grooves thereon adjacent the bottom providing weakened places for breaking sections from the box to reduce its height, said box having upwardly extending areas of reduced thickness, which areas extend across the grooves and which may be broken out when a section or sections are removed to provide notches in the bottom of the shortened box for the reception of inlet and outlet pipes.

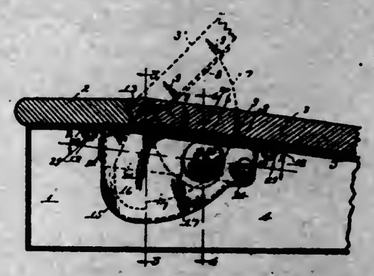
1,905,857. DRAWER STRUCTURE. EDWARD P. HAMILTON, Two Rivers, Wis., assignor to Hamilton Manufacturing Company, Two Rivers, Wis., a Corporation of Wisconsin. Filed Oct. 2, 1930. Serial No. 485,953. 8 Claims. (Cl. 45—77.)

1. A metal shoe for type cases comprising a channel-shaped runner portion having a bottom wall arcuate in cross section, and lateral extensions of the side walls thereof, the lateral extension of one of said walls being turned outwardly of the runner portion to provide an attaching portion for said shoe and having holes therein



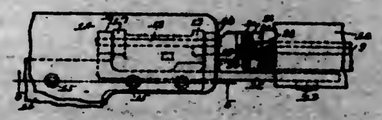
for the passage of fasteners therethrough, the lateral extension of the other wall being turned inwardly of said runner portion to provide a smooth external edge for said shoe.

1,905,858. HINGE HAVING FRICTION BEARINGS. GEORGE H. HAMILTON, East Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Feb. 14, 1931. Serial No. 515,899. 1 Claim. (Cl. 16—140.)



In a structure of the character described comprising a pair of parts having a swinging interrelative movement, one of said parts being a box having a side wall with an inwardly extending flange, and the other one of said parts being a flat closure for the box having a recess adjacent its inner edge; a hinge connecting said parts comprising a member forming an extension of said wall and a member forming a friction plate carried by the other one of said parts at right angles to the axis of said swinging movement and extending through said flange, said members being detachably connected pivotally inside said recess; a casing detachably connected to said flange on its under side; a pair of friction plates in the casing extending parallelly with, and frictionally bearing on, the opposite sides of the first-mentioned friction plate, the casing when detached and said pair of friction plates being removable from said flange in a direction parallel with all of said friction plates; threaded means for detachably connecting the casing with said flange.

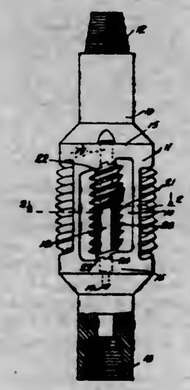
1,905,859. CHAIR WITH SWINGABLE TABLE LEAVES. GEORGE H. HAMILTON, East Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Apr. 6, 1931. Serial No. 527,975. 4 Claims. (Cl. 155—126.)



4. In combination with a chair having a side standard with a hooper socket extending inwardly from its side: a bracket arm mounted on the standard swingably about

a horizontal axis; a member, having a table leaf, mounted on the free end of the arm turnably about an axis transverse to the first-mentioned axis and having a head movable by the turning movement of said member, in the arm's raised position, into the socket to locking engagement with the standard for releasably holding the table leaf in horizontal position of use, said member having a leg portion resting on the arm in said position of use.

1,905,860. WELL REAMER. OTTO HAMMER, Whittier, Calif., assignor to Security Engineering Company, Reno, Nev., a Corporation of Nevada. Filed Apr. 22, 1931. Serial No. 531,986. 4 Claims. (Cl. 255—73.)



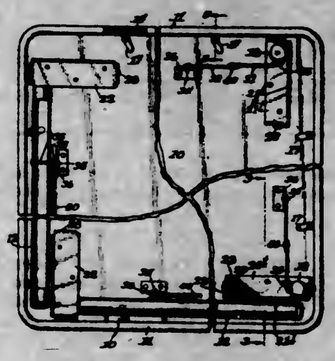
1. A well reamer comprising a body, a cutter pin mounted upon the body remote from the vertical central axis of the body, a plurality of bushings mounted upon the cutter pin, the planes of the bushings being inclined at other than a right angle to the cutter pin, and disc like cutters rotatable upon the bushings.

1,905,861. WASHING DEVICE. MICHAEL A. HAMMES, Racine, Wis. Filed Sept. 22, 1931. Serial No. 564,259. 5 Claims. (Cl. 15—128.)



1. In a device of the character described, a hollow body having a plurality of discharge orifices, means to connect the hollow body with a source of fluid supply, said hollow body being shaped to provide a handle and to cause the streams of fluid issuing from its discharge orifices to diverge outwardly, a cleaning brush, and means to mount the cleaning brush from the hollow body with the brush disposed in the space defined by the diverging streams of fluid and with the sides of the brush spaced from said streams of fluid.

1,905,862. FOLDING CARD OR LIKE TABLE. FRANK B. HARMAN, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed July 19, 1929. Serial No. 379,337. 5 Claims. (Cl. 45—11.)



1. In a folding table of the class described, the combination of a table top, legs for supporting said top, said legs being pivotally secured to said top so as to be foldable from extended position to folded position substantially flatwise adjacent the under side of the top, and means for so mounting each of said legs comprising a pair of substantially like brackets, one secured to said top and the other to said leg, said bracket being substantially U-shaped and having transverse ear portions projecting from their ends, the ear portions of the respective brackets being pivoted together.

1,905,863. BLASTING CARTRIDGE. ALLYN HARRIS, Wheaton, Ill., assignor to Safety Mining Company, a Corporation of Illinois. Filed Oct. 11, 1930. Serial No. 488,143. 7 Claims. (Cl. 102—7.)



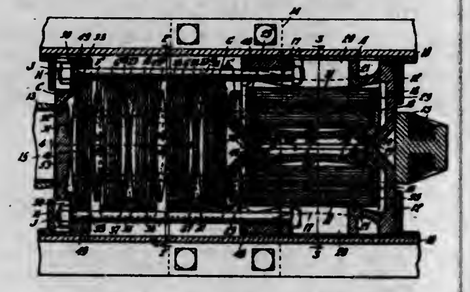
1. A blasting cartridge comprising a metallic body having a gas chamber therein, an electrode subject to the gas pressure within said chamber and insulated with respect to said body and accessible to the interior thereof for cooperation with a heater circuit and to the exterior thereof for cooperation with a source of electricity, said electrode being constructed and arranged so that the forces acting thereon resulting from the gas pressure are substantially balanced.

1,905,864. SHOCK ABSORBING MECHANISM. STACY B. HASELTINE, Chicago, Ill., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Oct. 10, 1928. Serial No. 311,690. 7 Claims. (Cl. 213—30.)

1. In a shock absorbing mechanism, the combination with a plurality of sets of laminated spring plates; of follower elements at opposite ends thereof; spacer elements between said sets; and cooperating means on the follower elements and spacer elements for maintaining the same in alignment while permitting relative approach

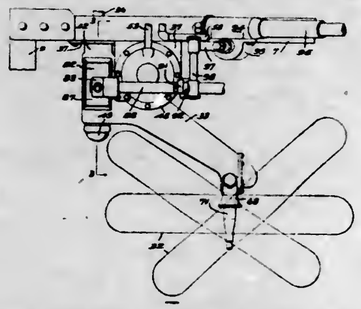
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thereof, said means comprising slidable interfitting means on adjacent elements including a laterally projecting tongue on one of said elements and a cooperating grooved



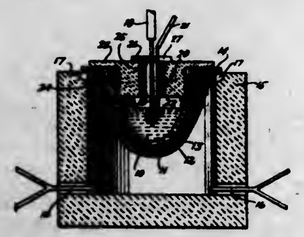
guide on the next adjacent element receiving and closely fitting said tongue throughout its length for sliding movement.

1,905,865. VEHICLE. CHARLES A. HAWKINS and HORACE L. HIRSCHLER, San Francisco, and MARCUS LOTHROP, Berkeley, Calif., assignors, by direct and mesne assignments, to Hawkins Patents, Ltd., Reno, Nev., a Corporation of Nevada. Filed Aug. 2, 1929. Serial No. 382,972. 1 Claim. (Cl. 280—91.)



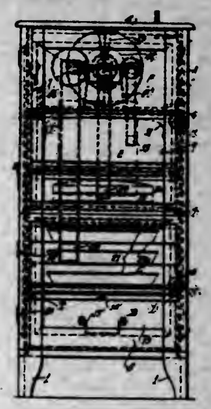
A vehicle comprising a main frame, a hollow support arm mounted on said frame to rotate in a vertical plane and about a transverse axis, a dirigible wheel pivotally mounted on said arm, steering means movable along said axis, and a link within said support arm connected to said steering means for moving said wheel pivotally.

1,905,866. PROCESS OF PRODUCING YTTRIUM AND METALS OF THE YTTRIUM GROUP. JOHN ALLEN HEANY, New Haven, Conn., assignor to Sirian Lamp Company, Newark, N. J., a Corporation of Delaware. Filed Feb. 8, 1930. Serial No. 426,979. 29 Claims. (Cl. 204—19.)



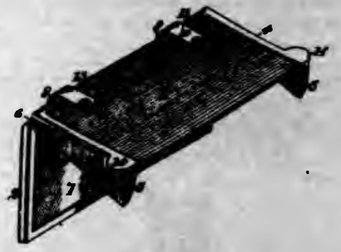
1. A process of preparing yttrium which comprises subjecting a pure yttrium compound to electrolysis in a bath consisting of fused alkali fluoride.

1,905,867. VENTILATED CABINET. HENRY HEUTI, St. Louis, Mo. Filed June 1, 1931. Serial No. 541,294. 4 Claims. (Cl. 98—51.)



1. A cabinet comprising a shell provided with ducts for communicating one part of the shell with another, drawers shiftable in the shell for communicating registration each with an outlet of a respective duct, one of said drawers including a wall having ports registrable with the respective ducts for communicating all of said ducts with the last named drawer, and means including a fan located within said last-named drawer for circulating a current of air through said ducts and into said drawers.

1,905,868. DRIVING MIRROR. GEORGE N. HEIN, San Francisco, Calif. Filed Oct. 2, 1926, Serial No. 139,061. Renewed Aug. 3, 1928. 11 Claims. (Cl. 88—1.)

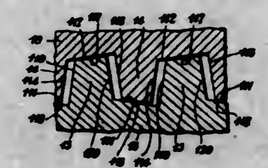


1. A mirror device for vehicles comprising a mirror; a semi-reflecting screen normally positioned in front of said mirror at an angle thereto; a hinged connection between the upper edges of said mirror and screen whereby the latter may be swung upwardly away from said normal functional position; and wall members carried by the screen and movable therewith for limiting its movement into normal functional position, and when in said latter position affording a wall connection between the ends of the mirror and screen.

1,905,869. SELF-LOCKING COUPLED SCREW ELEMENT. WILLIAM E. HOKE, Baltimore, Md., assignor to Dardelet Threadlock Corporation, New York, N. Y., a Corporation of Delaware. Original application filed Nov. 1, 1927, Serial No. 230,300. Divided and this application filed Feb. 26, 1931. Serial No. 518,425. 7 Claims. (Cl. 151—14.)

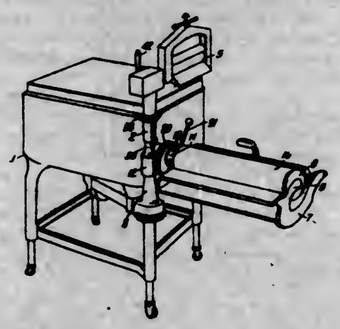
6. In combination, two members provided with coupling screw threads, said threads having space between their convolutions to permit substantial crosswise movement between the threads while coupled, the root surfaces of said threads of the two members being oppositely directed

with respect to the longitudinal axis of the threaded member and the crest surfaces of the threads of the two members being formed to jam on the said root surfaces, to form profiles adapted to freely screw together only while the threads are out of side contact and to wedge the crest of



one thread on the root of its co-acting thread when the threads are displaced crosswisely in one direction, and to wedge the crest of the other thread on the root of its co-acting thread when the threads are displaced crosswisely in the opposite direction.

1,905,870. IRONER ATTACHMENT FOR WASHERS. SIDNEY S. HOLLAND, Kansas City, Mo., assignor of one-half to Oscar Rieger, Kansas City, Mo. Filed Sept. 28, 1929. Serial No. 395,905. 4 Claims. (Cl. 68—9.)



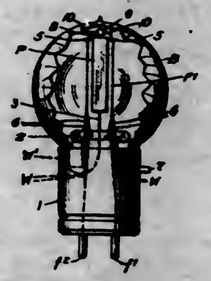
1. In an apparatus of the character described, a support, vertically spaced sleeves on the support, and an operating shaft rotatable in the sleeves, a housing-like bracket supported by and between said sleeves, a worm fixed to the operating shaft and located within said bracket and a worm gear rotatably mounted within said bracket and meshed with said worm, an ironer mounted on the bracket, and means for transmitting motion of said worm gear to the ironer.

1,905,871. WRINGER ROLL. SIDNEY S. HOLLAND, Kansas City, Mo., assignor of one-half to Oscar Rieger, Kansas City, Mo. Filed May 29, 1930. Serial No. 456,928. 5 Claims. (Cl. 68—33.)



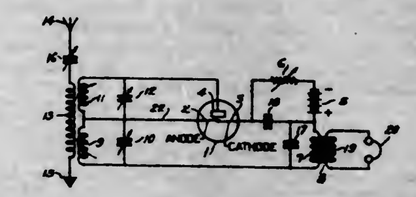
1. A wringer roll including a yielding cylindrical core, a facing for the core having a greater degree of resiliency than the core, and a plurality of layers of fabric embedded in and covering the facing at one end of the roll, and having a greater coefficient of friction than the exposed surface of the facing.

1,905,872. THERMIONIC VALVE. HARRY W. HOUCK, East Orange, N. J., assignor to Dubilier Condenser Corporation, New York, N. Y., a Corporation of Delaware. Filed July 18, 1924. Serial No. 726,841. 6 Claims. (Cl. 250—27.5.)



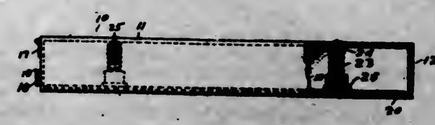
2. A thermionic valve having a common anode in the form of a hollow body with wide exterior faces, a plurality of cathodes positioned adjacent to and extending parallel with said faces, the anode being positioned intermediate said cathodes and extending in overlapping relation thereto to shield the cathodes from each other, and means supporting said cathodes extending through said hollow anode.

1,905,873. DETECTOR CIRCUIT FOR THREE-ELEMENT GASEOUS DISCHARGE TUBES. AUGUST HUND, West Orange, N. J., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Oct. 30, 1931. Serial No. 571,989. 9 Claims. (Cl. 250—27.)



1. A radio frequency detector comprising a gaseous discharge device having an anode, a cold cathode and a control electrode, a tuning device connected to said gaseous discharge device having a high frequency primary inductance and two secondary inductances, said secondary inductances forming respectively branches of two independent resonant circuits, one of which includes the control electrode and one of the other electrodes of said gaseous discharge device and the other of said resonant circuits being in circuit with the anode and cathode of said gaseous discharge device, and means to demodulate signaling energy through the effect of ionization in said device.

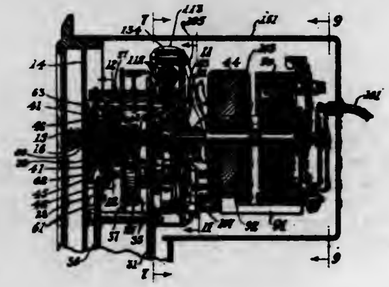
1,905,874. SELF-HOLDING AUTO LICENSE FRAME. PATRICK HUDSON, New York, N. Y. Filed Jan. 19, 1932. Serial No. 587,576. 4 Claims. (Cl. 40—125.)



1. A license plate holder comprising a box, the front of said box being recessed to form a frame, a closure member in one edge of said box to admit of a license plate

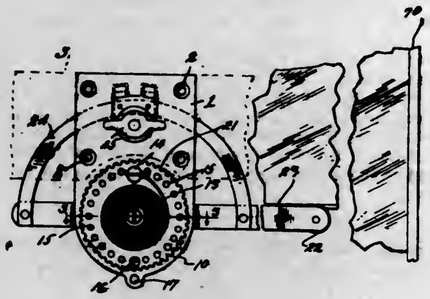
being inserted therethrough, spring means secured in said box, said spring means cooperating to hold the license plate against said frame, said spring means comprising a plurality of compression springs, one end of said spring being secured against the back of said box member and a rubber finger secured about the other end of said spring, said rubber finger being adapted to be pressed against the back of said license plate by said spring and hold said license plate against said frame.

1,905,875. PARKING CLOCK. BENJAMIN F. HUTCHES, Jr., Allendale, N. J. Filed Nov. 8, 1926. Serial No. 146,968. 39 Claims. (Cl. 161—15.)



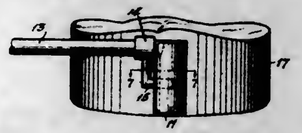
39. An elapsed time indicator comprising a composite shaft having two shaft sections, potential power means connected to a first shaft section to rotate the section in one direction, electro-magnetic means connected to the second shaft section to rotate the section, clutch means connecting the second shaft section to the first shaft section for rotation of the latter in a direction opposite to the direction of rotation caused by the potential power means, elapsed time indicating means connected with the first shaft section, and trembler switch means to actuate the electro-magnet means upon vibration thereof.

1,905,876. AUTOMATIC WINDOW REGULATOR. EDWARD L. ACKERMAN, Detroit, Mich., assignor to Ackerman-Blaesser-Fenzey, Incorporated, Detroit, Mich., a Corporation of Michigan. Filed Sept. 25, 1929. Serial No. 394,947. 3 Claims. (Cl. 16—200.)



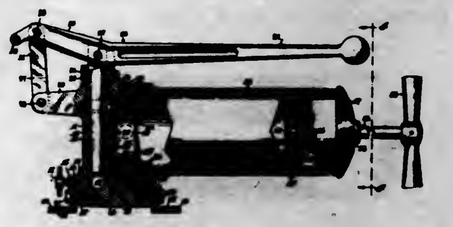
1. In sash operating mechanism, a pivoted arm in operative engagement with the sash, a spring having a tension sufficient to automatically turn the arm to raise the sash, an arcuate strip attached to the arm, a base plate on which the arm is pivoted, a friction device including a friction plate on the base plate the face of which is practically in registration with the face of the strip, a second friction plate movable into or out of frictional engagement with the arcuate strip to hold the arm from movement by the spring or release it to movement thereby, yieldable means tending to separate the friction plates, and manually operable means for moving said second friction plate into contact with the arm.

1,905,877. ORTHODONTIC APPLIANCE. JULIUS ADERER, New York, N. Y. Filed Sept. 3, 1931. Serial No. 560,909. 1 Claim. (Cl. 32—19.)



An orthodontic appliance comprising longitudinally separable members, one of said members consisting of a tubular socket provided on one side thereof with an aperture penetrating its wall and on its top with a channelled seat for an alignment wire, the other of said members consisting of a plug having its outer peripheral surface conforming with the inner peripheral surface of said socket and adapted to fit into said socket in surface engagement therewith, said plug having an aperture adapted to register with the aperture in said socket only when said plug is fully seated in said socket and the alignment wire rests on the seat of the socket, an alignment wire attached to the upper end of said plug in parallelism with the aperture of the plug and at a distance from said aperture corresponding to the distance between the wire seat and aperture of the socket member, a collar slidable on the wire toward and from said plug, and a lock pin rigidly supported on said collar and comprising a horizontal portion aligned with the plug aperture and a vertical portion rigidly connecting said horizontal portion with the collar and maintaining the horizontal portion permanently in such a position that its upper surface is constantly the same distance from the longitudinal center line of the wire in the region of the plug as is the upper surface of the plug aperture, whereby the horizontal portion of the pin is positioned and movable for entry without distortion into and for withdrawal without distortion from the apertures of the plug and socket when the apertures are in registry with each other and whereby at the same time the parts when inter-engaged will, due to the inter-communicating strains, maintain themselves in the locked position until separated by movement of the collar on the wire in a direction longitudinal of the wire.

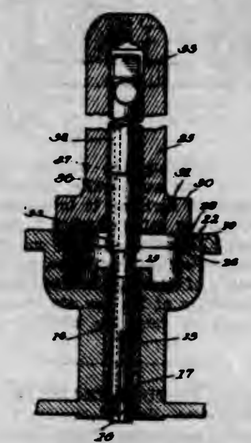
1,905,878. LUBRICATING APPARATUS. HERMAN ALBERTINE, East Rutherford, N. J., assignor to Rogers Products Company, Inc., a Corporation of New Jersey. Filed May 16, 1928. Serial No. 278,289. 5 Claims. (Cl. 221—471.)



1. The combination with a support having a pump cylinder therein and a socket communicating at its bottom with said cylinder to supply lubricant thereto, said socket including a cylindrical internally threaded outer portion and an inner portion with an undercut groove at the

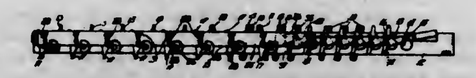
periphery of its bottom, a strainer extending across said bottom and seated at its periphery in said groove, a cylindrical lubricant reservoir having one end detachably secured in the outer portion of said socket, and means including a follower piston to urge lubricant in said reservoir toward said outlet.

1,905,879. VALVE SEAT RING DRIVER. FRANK O. ALBERTSON, Sioux City, Iowa, assignor to Albertson & Company, Inc., Sioux City, Iowa, a Corporation of Iowa. Original application filed Feb. 18, 1929, Serial No. 340,770. Divided and this application filed Dec. 7, 1931. Serial No. 579,633. 3 Claims. (Cl. 29—88.2.)



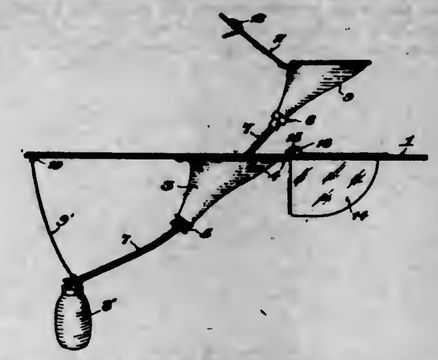
1. A valve seat ring driver comprising a metal member having an impact surface at one end and having a driving surface at the opposite end for engaging a valve seat ring, said member having an intermediate handle portion for engagement with the hand of the operator in driving the ring, said ring driver having a cylindrical bore extending into the same and a valve stem pilot having a complementary cylindrical surface for slidably supporting said ring driver during the driving of a valve seat ring.

1,905,880. COMBINATION ORGAN STOP ACTION. JOHN T. AUSTIN, Hartford, Conn., assignor to The Austin Organ Company, Hartford, Conn., a Corporation of Connecticut. Filed May 20, 1932. Serial No. 612,501. 13 Claims. (Cl. 84—345.)



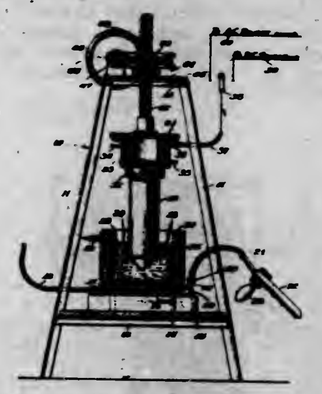
2. In a musical instrument, a set of stop action operating devices, a second set of stop action operating devices, a longitudinally movable trace, actuators on said trace respectively associated with the devices of the first set and settable into two positions and in each of which said actuators are effective at all times, a second set of actuators on said trace respectively associated with the stop action operating devices of the second set, each of the last mentioned actuators being normally ineffective to operate the associated devices when the trace is moved, and means for rendering said actuators effective, each of said second mentioned actuators being settable into two positions when said means is in effective position.

1,905,881. AUTOMOBILE COMMODE. JOSEPH T. AVILA, Providence, R. I. Filed July 20, 1932. Serial No. 623,911. 4 Claims. (Cl. 4—114.)



1. In combination with an automobile floor board having openings, an open ended housing in register with one of the openings secured to the floor board and depending therefrom, a removable closure for the top of the housing, a receiver having a removable cover movable into and out of the housing, a flexible pipe connected at its upper end to the receiver and extending through the housing, a container connected to the lower end of the pipe, a flexible connection secured to the floor board and to the container to support the latter, and a flushing water container hinged to the floor board and movable into and out of the other opening in the floor board and having an outlet which when the water container is swung upwardly discharges water into the receiver to flush same.

1,905,882. METALLIC COLUMBIUM AND PROCESS FOR MAKING THE SAME. CLARENCE W. BALKE, Highland Park, Ill., assignor to Fansteel Products Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Jan. 20, 1928. Serial No. 248,047. 8 Claims. (Cl. 204—19.)

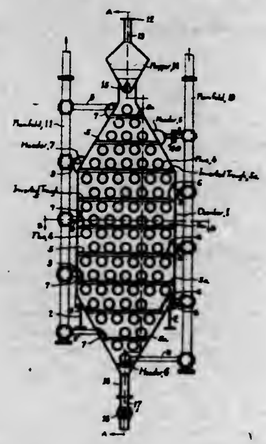


1. The process for producing metallic columbium which comprises electrolytically reducing a double potassium fluoride of columbium.

1,905,883. APPARATUS FOR CONTACTING SOLID AND GASEOUS MATERIALS. EDWIN O. BARSTOW and SHERROW B. HEARN, Midland, Mich., assignors to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed Feb. 13, 1930. Serial No. 428,006. 8 Claims. (Cl. 34—34.)

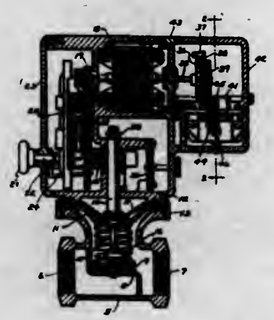
1. In apparatus of the character described, the combination of a closed rectangular chamber provided with

a closable top charging inlet and bottom discharge outlet, a plurality of horizontal flues in uniformly spaced relation extending lengthwise of said chamber and being secured in the end walls thereof, means for supplying a gaseous temperature regulating medium to said flues, a plurality of horizontal inverted troughs disposed transversely of said chamber and being secured to the lateral walls there-



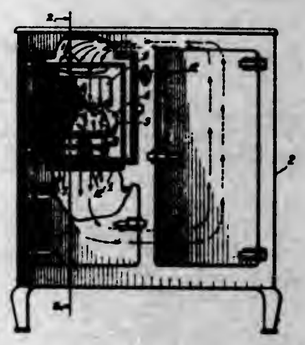
of in banks between alternate rows of said flues, headers joining one end of said inverted troughs in each alternate bank thereof and communicating with an inlet manifold, similar headers joining the opposite ends of the inverted troughs in the remaining banks thereof and communicating with an outlet manifold and means for supplying a gas to said inlet manifold and for withdrawing a gas from said outlet manifold.

1,905,884. MOTOR OPERATED VALVE. VILYNN O. BEAM, Toledo, Ohio, assignor to Surface Combustion Corporation, Toledo, Ohio, a Corporation of New York. Filed Dec. 13, 1930. Serial No. 502,141. 7 Claims. (Cl. 137—139.)



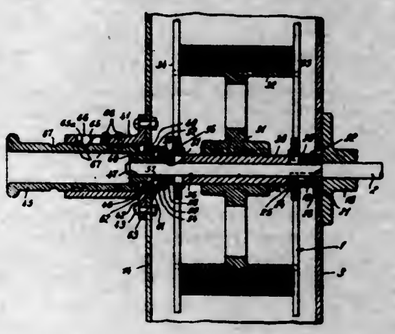
1. The combination with a valve and a prime mover for opening the valve, of a second prime mover and self-locking gear mechanism coupling the two prime movers in such a manner that unless the second prime mover is actuated the valve-opening prime mover will be incapable of opening the valve, and means embodied as part of said mechanism permitting said valve to close when power is cut off from the valve-opening prime mover.

1,905,885. DRY ICE CONVERSION UNIT. EDWIN O. BENNETT, Ponca City, Okla., assignor to Continental Oil Company, Ponca City, Okla., a Corporation of Delaware. Filed Oct. 31, 1931. Serial No. 572,245. 4 Claims. (Cl. 62—91.5.)



3. An ice box including the combination of a container having heat insulated walls, a perforated partition in said container dividing it into upper and lower chambers, said partition being adapted to support a piece of dry ice, a tray adapted to contain water to be frozen slidably positioned below said partition within said lower chamber, a plurality of openings in said container adapted to permit a circulation of ice box air through said container, and means to vary the effective area of said openings.

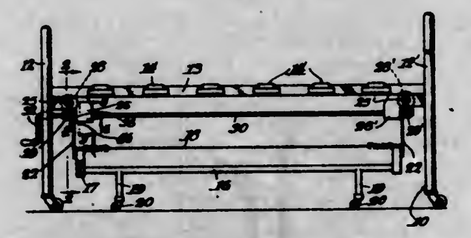
1,905,886. MOTION PICTURE PROJECTING MACHINE. MICHAEL BERKOWITZ, New York, N. Y., assignor to United Research Corporation, Long Island City, N. Y., a Corporation of Delaware. Filed Aug. 5, 1930. Serial No. 473,176. 4 Claims. (Cl. 242—55.)



1. In a projecting machine having an upper film magazine, a lower film magazine and a film feeding mechanism intermediate the upper and lower magazines, a stud shaft in one of the magazines, a fixed abutment thereon located at a substantial distance inwardly from the free end of the stud shaft, a reel supported by the stud shaft, and means for supporting the free end of the stud staft comprising a socket carried by the magazine, a sleeve extending thru the socket and a freely rotatable member carried by the end of the sleeve for supporting the free end of the stud shaft.

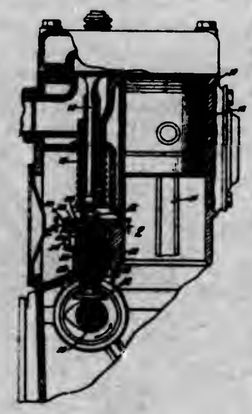
1,905,887. ORTHOPEDIC BED. JOHN V. BERNS, Kenosha, Wis., assignor to Simmons Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 28, 1930. Serial No. 446,752. 7 Claims. (Cl. 5—65.)

1. In combination with a bed frame having a vertically adjustable bottom, means for adjusting the elevation of said bottom, means mounted on said bed frame and rendered operative by engagement with said bottom for stopping the latter at a predetermined elevation, and



means carried by said adjusting means and operated by a reverse movement of said adjusting means for rendering said stopping means inoperative.

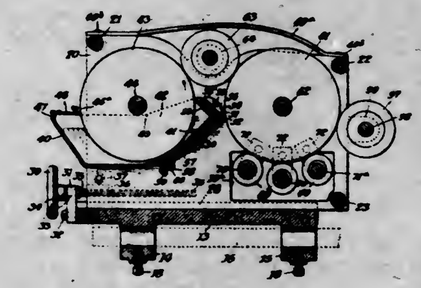
1,905,888. SCREW TYPE MECHANICAL LASH ADJUSTER FOR VALVES. GEORGE P. BERRY, Detroit, Mich., assignor to General Motors Research Corporation, Detroit, Mich., a Corporation of Delaware. Filed May 27, 1931. Serial No. 540,299. 10 Claims. (Cl. 123—90.)



1. Operating mechanism for valves and the like adapted to have cyclical movement, including a slack takeup device comprising interfitting parts capable of relative rotation, yielding means tending to produce relative rotation of said parts to increase their overall length and take up slack in the system, a stationary part, and pin and slot means carried by one of said interfitting parts and said stationary part for oscillating said interfitting part upon operation of said valve gear to produce slack in the system.

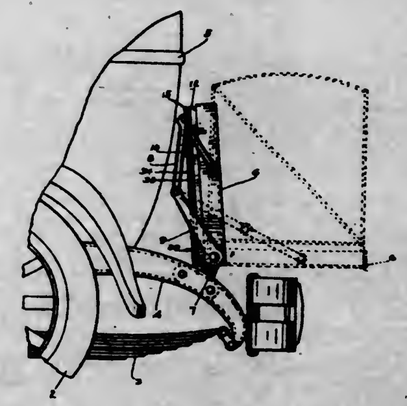
1,905,889. APPARATUS FOR COLORING PAPER. HERMAN BLACK, WILLIAM HOLMES, and MAURICE ALBERT HEGEN, Chicago, Ill., assignors to Evening American Publishing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1929. Serial No. 412,782. 22 Claims. (Cl. 92—40.)

1. In a device of the character described, in combination, means for conducting a web or film of material to be fed at a uniform rate of speed, a container for coloring fluid, and means operating synchronously with said con-



ducting means for applying a coloring material from said container to a portion of said web or film.

1,905,890. COLLAPSIBLE LUGGAGE CARRIER. SIDNEY B. BLAKELY, Minneapolis, Minn., assignor to Mitchell Battery Company, a Corporation of Minnesota. Filed Dec. 23, 1929. Serial No. 415,993. 4 Claims. (Cl. 224—29.)



1. A collapsible luggage carrier including a bottom member and a plurality of walls, hinges connecting said walls to the bottom member, said hinges being situated at different elevations whereby the walls may be folded inwardly, one over another in parallel relation, three of said walls each comprising a plurality of hinged-together sections whereby said sectional walls may fold upon themselves, when the carrier is collapsed, and means slidably and pivotally connecting together the walls at the corners of the carrier whereby said walls may slide relatively to each other at the corners of the carrier, when said walls are folded and unfolded.

1,905,891. AERONAUTICAL PROPELLER. WERNER J. BLANCHARD, Hempstead, N. Y., assignor to Curtiss Aeroplane & Motor Company, Inc., a Corporation of New York. Filed July 14, 1930. Serial No. 467,782. 5 Claims. (Cl. 170—167.)

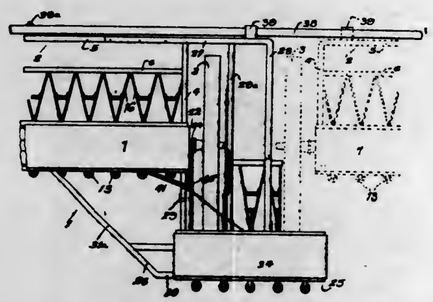
1. A one piece forged metal aeronautical propeller comprising thin solid blades and integral therewith and on opposite faces thereof opposed hub forming enlargements,

said enlargements, in each instance, being of circular section and of substantially uniform diameter, the diameter, in each case, being substantially less than the width of



the propeller at the line of juncture of the propeller blades, and the length, in each case, being substantially greater than the blade depth.

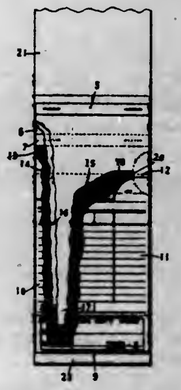
1,905,892. SEEDING IMPLEMENT. ALBERT E. BOTSFORD, Walla Walla, Wash. Filed Mar. 11, 1930. Serial No. 434,955. 8 Claims. (Cl. 111—52.)



8. A seeding implement, said seeding implement comprising a drill consisting of a parent drill and an auxiliary drill formed integral therewith, and provided with a pair of driving wheels adapted to support and operate said implement, and arranged with one of said wheels inset from the end of said implement and disposed to provide an overhanging and outwardly unsupported seed depositing extension.

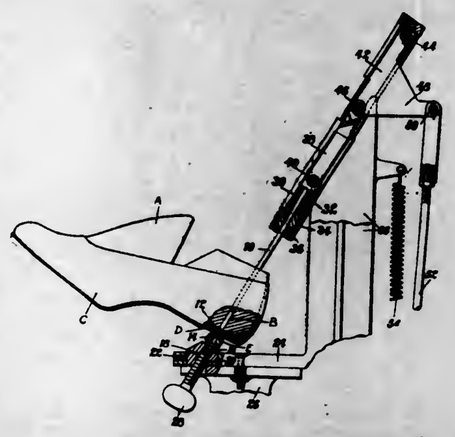
1,905,893. MANIFOLDING BOOK. EDWARD KIRBY BOTTLE, Elmira, N. Y., assignor to American Sales Book Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed Sept. 30, 1927. Serial No. 223,080. 4 Claims. (Cl. 282—24.)

1. A manifolding book comprising a main and a supplemental pad, said main pad having relatively superposed sets of folded record leaves, means supporting said pads in relation for placing the leaves of the supplemental pad into and out of position between the leaves of the uppermost set of the main pad, and a transfer sheet mounted for interposition between the leaves of succeeding sets of the main pad folded to provide upper and lower transfer sheets, the upper and lower faces of the bottom transfer leaf having carbon thereon, and the lower face of the upper transfer leaf having carbon thereon, said supplemental pad having a set of two relatively superposed leaves for each set of folded sheets of the main pad, the bottom leaf of each set of the supplemental pad being translucent, the free end of the upper transfer leaf having clean upper and lower faces, the lower transfer leaf having, on its



upper face a clean area positioned adjacent said free clean end of the upper transfer leaf and having a portion extending beyond said free end when the book is set for inscription.

1,905,894. METHOD AND MEANS FOR USE IN LOCATING SHANK PIECES. FRANCIS L. BRANDT, Wakefield, Mass., assignor to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 23, 1932. Serial No. 612,963. 15 Claims. (Cl. 12—142.)



2. That improvement in the art of making shoes which comprises forming an integral locating projection on a shoe sole, locating an apertured reinforcing member relatively to the sole by positioning the reinforcing member with the projection on the sole extending into the aperture in the reinforcing member, securing the reinforcing member to the sole, and making a hole in the sole in line with the aperture in the reinforcing member thereby removing said locating projection and preparing the sole for the reception of a fastener which is to extend also through the aperture in the reinforcing member.

14. A machine for forming a locating projection on a sole mounted on a last having a hole extending through its heel portion from the top of the cone to the bottom of the heel seat face comprising a spindle adapted to extend through the hole in the last and having a projection-forming extremity, a member having a molding cavity

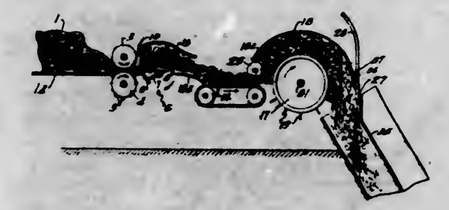
disposed in the path of said spindle for cooperating with said extremity of the spindle to form a projection on the insole, and means for relatively moving the spindle and said member to and from co-operative projection-forming relation.

1,905,895. RUNNING BOARD. BURR BRONSON, Cleveland, Ohio, assignor to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 26, 1930. Serial No. 438,967. 4 Claims. (Cl. 280—163.)



1. A running board comprising a metal body having alternate elevated and depressed portions, and a covering of rubber vulcanized and attached to said body so as to follow the contour of said elevated and depressed portions, said covering having thickened portions extending above the elevated portions of the body, and spaced rubber rivets formed integral with said thickened portions and extending through openings in said elevated portions.

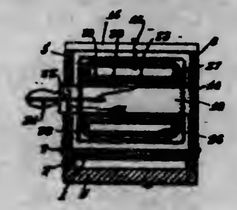
1,905,896. STRAND TREATING APPARATUS AND METHOD. HORATIO W. BROWN, Concord, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Original application filed Mar. 7, 1929, Serial No. 345,977. Divided and this application filed Sept. 4, 1930. Serial No. 479,650. 4 Claims. (Cl. 19—144.)



1. Apparatus of the class described, comprising an elongate strand receiving duct, means to deliver strands to an open end of the duct, and an air nozzle independent of said delivery means, said nozzle being movable across the open end of the duct and arranged to emit a high velocity concentrated air jet into the open end of the duct, at an angle to the plane of travel of said strand material through said duct, and driving means to move the air nozzle to and fro transversely of the duct.

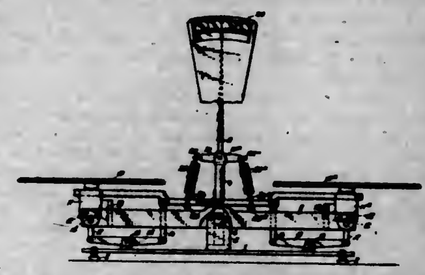
1,905,897. MOLD. CHARLES T. CAHILL, Boston, Mass. Filed July 25, 1930. Serial No. 470,598. 3 Claims. (Cl. 25—121.)

1. A mold of the kind described, comprising a bottom, sides and ends hinged to said bottom, means to hold said sides and ends in closed position, one of said sides having a plurality of apertures therethrough, the other of said sides, on its inner surface, being provided with recesses aligned with said apertures, removable cores adapted to be inserted through said apertures and to be supported in said recesses and said apertures, a handle on each of said cores externally of said mold, a latch pivoted in each of said cores adapted to form lifting recesses in a block during



the formation of said block in said mold, and means located in said handle to release said latches to permit withdrawal of said cores.

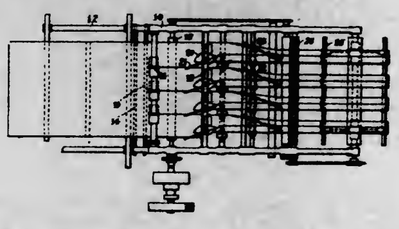
1,905,898. LOW TYPE EVEN BALANCE COUNTER SCALE. HUGH M. CAMMON, Woodhaven, N. Y., assignor, by mesne assignments, to Seederer-Kohlbusch, Inc., Jersey City, N. J., a Corporation of New Jersey. Filed June 11, 1929. Serial No. 370,099. 6 Claims. (Cl. 265—59.)



1. In an even balance counter scale, a pivoted main lever, a platform support pivoted thereon and transversely thereto, a platform mounted on said support, an auxiliary even lever pivoted intermediate the platform support and the opposite end of the main lever, the axis of the pivot of the auxiliary lever being parallel to and fixed with relation to the axis of the pivot of the main lever, rigid means pivotally connected to the platform support and to the adjacent end of the auxiliary lever to prevent approach or separation thereof and rigid means pivotally connected to the other end of the auxiliary lever and to the main lever to prevent approach or separation thereof, said last means being connected to the main lever at a point on the main lever on the opposite side of the pivot of the main lever from the platform support but at the same distance as said platform support from the pivot of the main lever.

4. An even balance scale comprising a pivoted main lever, a pair of platform supports pivoted thereon, one at each end of said main lever, each support having a horizontal arm extending toward the opposite end of the main lever, platforms mounted on said supports, a pair of auxiliary even levers pivotally mounted on the base of the scale each having one end adjacent the end of the arm of one platform support and the other end adjacent the opposite end of the main lever, the axes of the pivots of the platform supports, main lever, and auxiliary levers being parallel, means pivotally connecting the end of the arm of each platform support to the adjacent end of the adjacent auxiliary lever, a member pivoted to the other end of each auxiliary lever, and adjustable means connecting each member to the adjacent end of the main lever to vary the distance at which force is applied to the main lever from the pivot thereof.

1,905,899. METHOD OF PAPER FOLDING, WINDING AND CUTTING, AND MECHANISM THEREFOR. SAMUEL J. CAMPBELL, Green Bay, Wis., assignor of one-half to Hudson-Sharp Machine Company, Green Bay, Wis., a Corporation of Wisconsin. Filed Nov. 7, 1930. Serial No. 493,990. 8 Claims. (Cl. 270—94.)



1. The method of handling paper or the like which consists in feeding forwardly, and folding a strip of paper and winding the folded strip to afford a plurality of superposed folded turns in the winding, and in cross-cutting through the superposed windings to sever the folded strip into lengths.

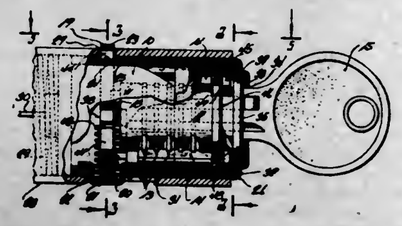
1,905,900. PROCESS FOR VAPOR RECOVERY. PAUL JOHNSON CARLISLE and RALEIGH P. WARD, Niagara Falls, N. Y., assignors to The Roessler & Hasslacher Chemical Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 21, 1931. Serial No. 531,847. 10 Claims. (Cl. 252—4.)

4. A process for recovering trichlorethylene from a mixture of its vapor with air comprising contacting said mixture with dehydrated alumina gel at 10–40° C., subsequently contacting said gel with air at 90–150° C. to substantially completely remove trichlorethylene and restore said gel to its original state of activity and cooling the off-gases to condensation of the trichlorethylene.

1,905,901. COLLECTION OF SULPHUR FROM GASES OR VAPORS. ARTHUR MAURICE CLARK, Norton-on-Tees, England, assignor to Imperial Chemical Industries, Limited, London, England, a British Company. Filed May 14, 1931, Serial No. 537,499, and in Great Britain May 31, 1930. 5 Claims. (Cl. 23—225.)

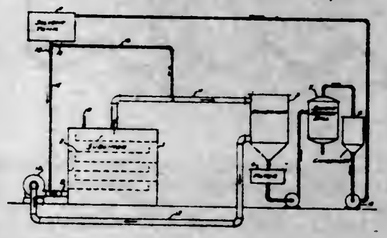
1. In a process of recovering elemental sulphur from a hot gaseous fluid containing suspended non-gaseous particles and gaseous sulphur at such a low concentration that on rapid cooling of said fluid no substantial deposit of sulphur takes place on impingement on a cold surface, the step of regulating the cooling of said fluid in such a manner that it will take at least 5 seconds to cool said fluid from the dew point of the sulphur in said fluid to about 100° C.

1,905,902. LOCK. EDWARD N. JACOBI, Milwaukee, Wis., assignor to Briggs & Stratton Corporation, Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 9, 1931. Serial No. 528,824. 17 Claims. (Cl. 70—46.)



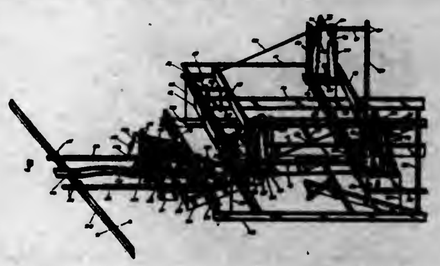
1. In a lock structure, including a mounting head and a lock cylinder mounted therein, a protecting element engaged over the exposed end portions of the lock cylinder and mounting head to removably secure the lock cylinder in the mounting head, and means operable by actuation of the lock cylinder for normally holding the protecting element assembled with the mounting head, said last mentioned means being movable to a position releasing the protecting element for detachment from the mounting head upon movement of the lock cylinder beyond one of its normal limits of movement.

1,905,903. PURIFICATION OF CRUDE AROMATIC COMPOUNDS. ALPHONS O. JAEGER, Mount Lebanon, and LLOYD C. DANIELS, Crafton, Pa., assignors to The Selden Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 22, 1930. Serial No. 438,284. 18 Claims. (Cl. 202—46.)



1. A method of purifying solid impure aromatic hydrocarbons from the distillation of coal tar which comprises subjecting them in liquid condition to sublimation by contact with a subliming medium containing at least one gaseous medium which at ordinary temperatures is not a solvent for the hydrocarbon to be purified and condensing the vapor stream in the presence of at least one solvent for at least one impurity, which solvent is present in the vapor stream prior to condensation.

1,905,904. TRUCK MAINTAINER. CARL O. JOHNSON, Lincoln, Nebr. Filed June 3, 1932. Serial No. 615,151. 14 Claims. (Cl. 37—153.)



1. A highway maintainer adapted to be supported on a truck frame, said maintainer including a supporting frame to rest on the truck frame and having means for releasable attachment thereto, a scraper frame suspended from and beneath said supporting frame with the center line of draft of said scraper frame in substantial alignment with the center line of draft of the truck frame, means for bodily raising or lowering said scraper frame, and means for adjustably altering the inclination of said scraper frame relative to the truck frame.

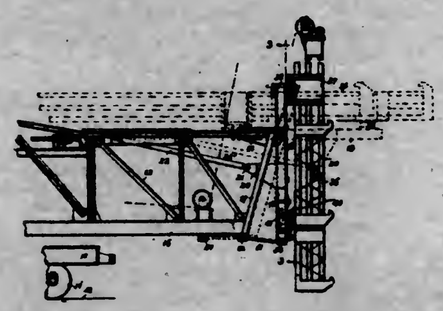
1,905,905. CLAMP FOR PLATE GLASS RACKS. JOHN F. JOHNSON, Bellevue, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed Apr. 26, 1930. Serial No. 447,752. 2 Claims. (Cl. 217—36.)

1. The combination with a rack for carrying plate glass sheets having one side inclined to the vertical, of a clamp or holder for glass sheets carried by the rack and resting against said side, comprising a bracket secured to one end of the rack, a block pivoted on the bracket for movement about a horizontal axis, an arm mounted on the block for adjustment about a vertical axis, said arm comprising a part extending substantially at right angles to



said vertical axis and a second part extending at substantially right angles to the first part, a plate for engaging the glass mounted for rocking movement on the end of said second part, and means for releasably holding the arm in its various positions of adjustment about said vertical axis.

1,905,906. PILE DRIVER. ROBERT W. KALTENBACH, Cleveland Heights, and ANTHONY FRONEK, Cleveland, Ohio; said Fronek assignor to said Kaltenbach. Filed Aug. 28, 1930. Serial No. 478,434. 5 Claims. (Cl. 61—74.)



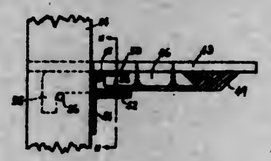
1. In a railroad pile driver, a truss adapted to overhang its mounting, a horizontal pivot carried by the free end of said truss, a batter frame mounted upon said pivot at a point intermediate the ends of the frame, and leads pivotally carried by said frame, the outer end of said truss below the level of said pivot being formed to provide a space into which the batter frame may be tilted inwardly.

1,905,907. WORKHOLDER FOR SEWING MACHINE DARNING OPERATIONS. JOHN D. KARLE, Roselle Park, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 26, 1931. Serial No. 559,296. 8 Claims. (Cl. 112—121.)



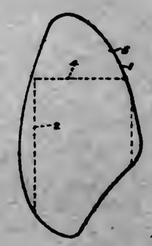
2. A stocking darning work-holder comprising a ring-shaped member having a gap for the clearance of a sewing machine needle, a needle-guard at said gap, and means below said guard for holding a portion of a stocking stretched over said ring-shaped member.

1,905,908. DISPLAY STAND. ORIN E. KARNES, Caldwell, Tex. Filed June 25, 1931. Serial No. 546,696. 4 Claims. (Cl. 211—147.)



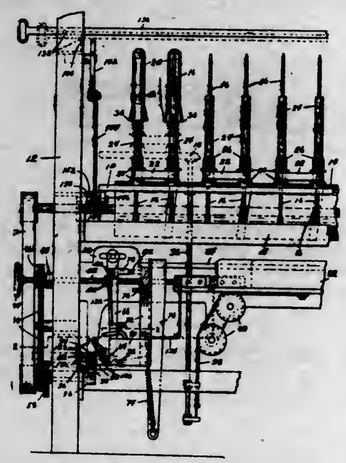
1. A display stand having a post; a pin on said post; a shelf having a tongue; and a shelf bracket comprising a transverse bar having a hook to releasably engage said pin and a socket to receive said tongue, and a locking member movable on said bracket to releasably engage said tongue to hold said tongue in said socket, said locking member being held in its active position by said post when said hook is in engagement with said pin.

1,905,909. PROCESS OF MANUFACTURING RUBBER SOLES. CHARLES R. KNIGHT, Dayton, Ohio, assignor to The Serton Rubber Company, Dayton, Ohio, a Corporation of Ohio. Filed Apr. 25, 1931. Serial No. 532,817. 9 Claims. (Cl. 12—146.)



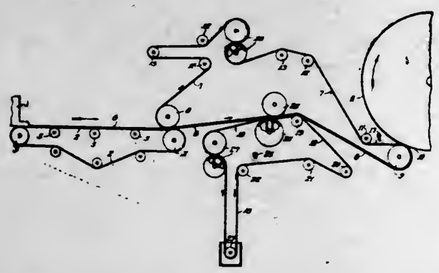
6. In the process of forming rubber soles, forming blanks from which either a right or a left sole may be formed, placing one blank upon another with a strip of paper between them so that each blank overlies the other, shaping the assembled blanks into the form of soles, and forming the outer surfaces of the assembly to provide bearing surfaces for the soles.

1,905,910. BOBBIN WINDING AND BUNCH FORMING MECHANISM AND METHOD. IRVING KELLETT and NED ARMITAGE, Lawrence, and WALTER J. WOOD, Methuen, Mass. Filed May 23, 1929. Serial No. 365,450. 18 Claims. (Cl. 242—43.3.)



1. Bobbin winding mechanism including bobbin rotating means, means to advance the bobbin in a progressive manner lengthwise, means to reciprocate said bobbin during such lengthwise movement, said reciprocating means having separate means providing separately short and long amplitudes of reciprocatory movement of the bobbin and a common device for reciprocating both of said separate means, means to condition said reciprocating means to reciprocate said bobbin throughout the short amplitude for winding the bunch on the bobbin and thereafter to condition said reciprocating means to reciprocate said bobbin throughout the long amplitude for filling the remainder of the bobbin.

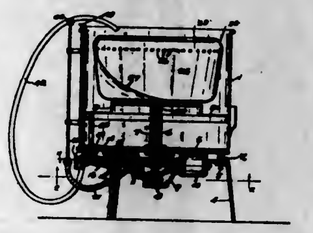
1,905,911. PAPER MAKING APPARATUS. WILLIAM R. KELLETT, Menasha, Wis., assignor to Paper Patents Company, Neenah, Wis., a Corporation of Wisconsin. Filed May 11, 1932. Serial No. 610,545. 4 Claims. (Cl. 92—49.)



1. In a paper-making machine, web forming means, web drying means, a felt engaging the web between the forming means and the drying means, a felt washer, and a pair of suction pressure rolls engaged with said felt after the latter leaves said washer and before it makes contact with the web.

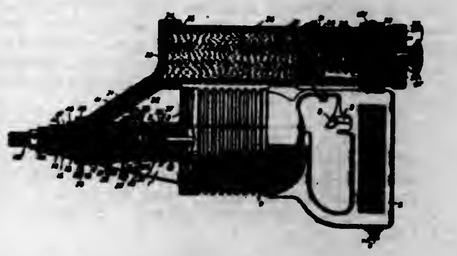
1,905,912. WASHING MACHINE. JAMES B. KIRBY, West Richfield, Ohio. Filed Mar. 21, 1927, Serial No. 176,909. Renewed July 3, 1930. 10 Claims. (Cl. 68—18.)

1. In a combined washing machine and extractor, a casing, a vertical shaft therein, a container carried by said shaft and having an imperforate bottom and a side wall also imperforate below a given level, said container being supported at a substantially fixed elevation sufficiently above the bottom of the casing to accommodate the entire liquid contents of said container therebeneath, a fixed annular shelf carried by the casing and projecting part way beneath the bottom of said container, and means for selectively washing clothing inside said container and for rotating said container at high speed.



7. In a combined clothes washer and extractor, a single tub mounted on a vertical axis, said tub having a slanting wall and its lower part being imperforate, driving mechanism for selectively oscillating said tub to agitate its contents or to spin the same about its axis and a vane mounted inside said tub to oscillate and rotate therewith, the tub-interior, being unimpeded except by said vane.

1,905,913. GREASE GUN. PHILIP E. KOPP, Kansas City, Mo. Filed Apr. 23, 1930. Serial No. 446,524. 12 Claims. (Cl. 221—47.3.)

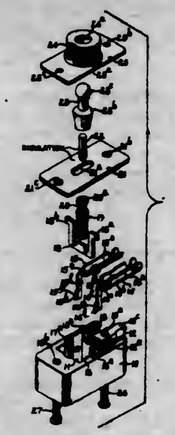


1. A grease gun including a plunger support having a plurality of grease compression chambers, means for supplying grease to said chambers, a grease delivery member communicating with said compression chambers, back pressure valves controlling communication between the compression chambers and the delivery member, plungers operable in said compression chambers, a rotatable shaft associated with the plunger support, a plunger actuating member on the shaft and adapted for rotation therewith, a floating wabble plate in disconnected relation with and positioned between said plungers and the actuating member to effect reciprocation of the plungers upon rotation of the actuating member, and means for holding the plungers and actuating member in operative engagement with said plate.

1,905,914. ELECTRIC SNAP SWITCH. ALVIN W. KRIEGER, Milwaukee, Wis., assignor to Cutler-Hammer, Inc., Milwaukee, Wis., a Corporation of Delaware. Filed May 5, 1932. Serial No. 609,442. 14 Claims. (Cl. 200—67.)

14. As an article of manufacture, a one-piece combined contact and wiring terminal member for electric snap switches, said member having a wiring terminal portion of substantially U-shape in cross section, the side walls of said terminal portion being notched to provide lugs bendable into clamping engagement with a circuit wire, whereby soldering of the wire to said terminal portion is facilitated, said terminal portion also having an opening formed in the bottom wall thereof, the walls of said open-

ing being adapted for engagement with shoulders formed on a suitable support, whereby endwise movement of said terminal portion is prevented upon clamping thereof in assembled position, and a resilient contact portion formed integrally with one side wall of said terminal portion and projecting downwardly at substantially right angles to the latter, said contact portion being offset inwardly

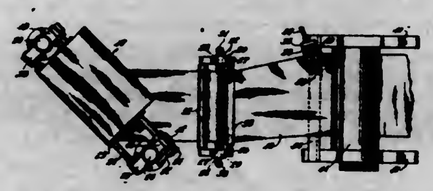


from said side wall to extend in a plane intersecting the center of the bottom wall of said terminal portion, said contact portion having forward extensions arranged in stepped relation at the lower end thereof, and said end being bent in the line of the forward edge of said contact portion to facilitate engagement therewith of a movable contactor of suitable form.

1,905,915. CONDENSATION PRODUCT OF CINCHONA BARK ALKALOIDS WITH THIURAM SULPHIDES AS INHIBITORS. RALPH B. LAWRENCE, Wickliffe, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Dec. 19, 1931. Serial No. 582,186. 4 Claims. (Cl. 148—8.)

1. A cleaning and pickling bath for metals comprising a dilute non-oxidizing acid containing a small amount of a condensation product of a cinchona bark alkaloid and a thiuram sulphide.

1,905,916. METHOD AND APPARATUS FOR TREATING TEXTILE MATERIAL. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1930. Serial No. 419,895. 14 Claims. (Cl. 91—68.)



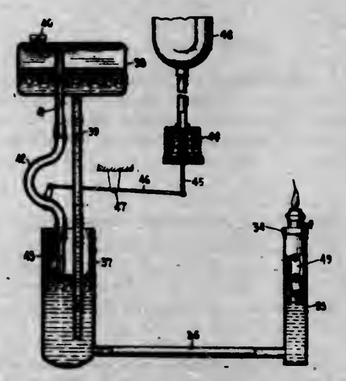
7. In apparatus for treating textile material, the combination of a support for a roll of said material, a calender disposed in nonaligned relation to said roll and adapted to withdraw a sheet of material therefrom and apply a plastic coating thereto, means intermediate said support and said calender for diverting the course of the sheet in a manner to skew the weave thereof after it is withdrawn from its roll, and means engaging the skewed sheet before it passes through the calender for tentering the sheet.

1,905,917. SEPARABLE FASTENER. CHARLES W. LEGUILLON, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed July 9, 1932. Serial No. 621,664. 6 Claims. (Cl. 24—201.)



1. A separable fastener comprising a catch plate adapted to be attached to one of the members to be fastened and formed with a T-shaped opening, and a bifurcated spring latch adapted to be flexibly attached to the other member to be fastened, said bifurcations being of such size and shape relative to the T-shaped opening as to interlock with the catch plate only by successive entrance of said bifurcations through said opening.

1,905,918. CONTROL FOR WICK TYPE LIQUID FUEL BURNERS. GÖSTA GREGORIUS LENNMOR, Stockholm, Sweden, assignor, by mesne assignments, to Electrolux Servel Corporation, New York, N. Y., a Corporation of Delaware. Filed Aug. 14, 1931, Serial No. 557,079, and in Germany Sept. 27, 1930. 8 Claims. (Cl. 236—1.)

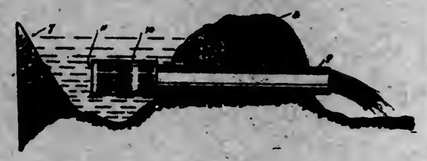


1. A wick type liquid fuel burner and means for controlling the supply of fuel to said burner comprising an open top container, a substantially horizontal conduit between the lower part of said container and the lower part of the fuel chamber of said burner, a fluid tight fuel reservoir above said container, a fuel supply line from the lower part of said reservoir to the lower part of said container, a pipe having a flexible portion, one end of said pipe communicating with the upper part of said reservoir and the other end opening within said container, a thermostat, and means operated by said thermostat for controlling the height of said pipe opening within said container.

1,905,919. IRRIGATION PIPE SCREEN. W KENT LEWIS, Selma, Calif. Filed Mar. 12, 1923. Serial No. 626,477. 2 Claims. (Cl. 210—170.)

1. In combination with an irrigation pipe of a screen adapted to cover the intake end of the pipe consisting of

a cup-shaped member having perforations through the side walls, said perforations consisting of pressed in portions



of the wall which have been cut on three sides thereof, said pressed in portions being adapted to hold the irrigation pipe a spaced distance from the inside wall of the cup.

1,905,920. MECHANICAL PENCIL. WILLIAM H. LINDSMON, Fort Madison, Iowa, assignor to W. A. Sheaffer Pen Company, Fort Madison, Iowa, a Corporation of Delaware. Filed Feb. 24, 1931. Serial No. 517,899. 5 Claims. (Cl. 120—18.)



1. A mechanical pencil comprising a substantially tubular barrel, a metallic tip comprising a shell having an apertured bushing secured therein for one end of said barrel through which the pencil lead is propelled, and a lead operating mechanism, one element of which is secured in said barrel and another element of which has a split tubular extension for forced engagement in the aperture of said bushing.

1,905,921. CASEMENT LOCKING MECHANISM. ISAAC W. LITCHFIELD, Boston, Mass., assignor to Bemis Industries, Incorporated, Boston, Mass., a Corporation of Delaware. Filed Nov. 21, 1930. Serial No. 497,187. 7 Claims. (Cl. 268—117.)



1. A device for retaining a window frame member and a sash member therefor in position, which comprises a lever slidably engageable with one member and pivotally engageable with the other, a slot in said lever at its pivotal engagement to permit limited longitudinal movement thereof, means to prevent said longitudinal movement except when said sash is in closed position, and means to lock said sash in closed position operable by said longitudinal movement of the lever, said locking means comprising a locking element adapted to be mounted on one of the members and engageable with a portion of the lever.

1,905,922. FIREARM. CRAWFORD C. LOOMIS, Ilion, N. Y., assignor to Remington Arms Company, Inc., a Corporation of Delaware. Filed May 10, 1930. Serial No. 451,242. 9 Claims. (Cl. 42—17.)

2. In a firearm comprising a firing chamber, a magazine, a receiver, a reciprocating breech block in said receiver, and a cartridge transferring and shell ejecting device in said receiver adapted to be moved from a position below said magazine to an intermediate position adjacent said chamber and subsequently moved to a position above said chamber; means associated with said breech block for preventing movement of said device to its uppermost position during the forward movement of said breech block.

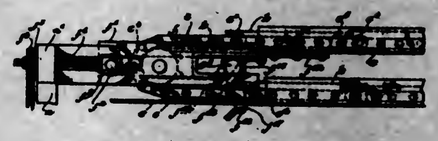


9. In a firearm comprising a magazine, a receiver having a lateral port, and a firing chamber; a cartridge transferring and shell ejecting device in said receiver, means for moving said device to eject a shell extracted from said chamber downwardly, and means for moving and maintaining said device in position to support a cartridge inserted through said lateral port in alignment with said chamber.

1,905,923. WAX COMPOSITION. FREDERICK H. MACLAREN, Hammond, Ind., assignor to Standard Oil Company, Whiting, Ind., a Corporation of Indiana. Filed Mar. 13, 1929. Serial No. 346,807. 3 Claims. (Cl. 87—19.)

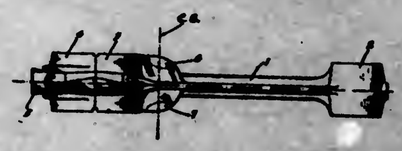
3. A normally tacky, high melt-point wax mixture consisting principally of hydrocarbon waxes, said mixture comprising 20% of 130° F. melt-point petrolatum, 78% of 163–165° F. melt-point petrolatum wax and 2% resin.

1,905,924. CONVEYER. JAMES H. MACLAUCHLAN, New York, N. Y. Filed Dec. 20, 1928. Serial No. 327,258. 1 Claim. (Cl. 198—159.)



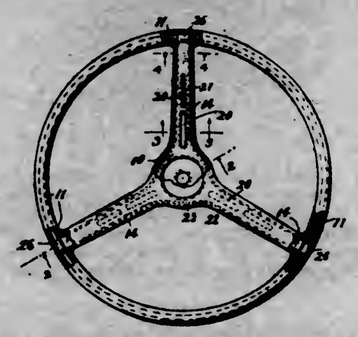
A process conveyer having conveyer chains, guide wheels for the chains, carriers, and in which tracks are provided at each side of the conveyer forming a plurality of courses in different vertical planes, and each carrier is pivoted to the conveyer chains at one end only, and has at that end rollers supported upon certain of the courses and at its other end is free from the chains and has rollers supported upon other of the courses in different vertical planes, and in which the courses upon which the carriers are supported at their free ends are interrupted, and in which pivoted guiding devices are provided on the inner courses to facilitate the guiding of the free ends of the carriers as the chains supporting the other ends pass about the guide wheels.

1,905,925. METHOD OF MAKING CONNECTING RODS. WILLIAM H. MANNING, Pontiac, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Apr. 16, 1931. Serial No. 530,501. 8 Claims. (Cl. 29—1565.)



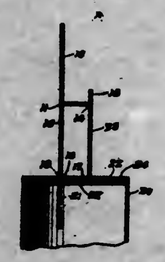
1. The method of making a connecting rod to certain given standards which includes the formation of a rod with excess material at one end thereof and at a predetermined intermediate portion respectively, the removal of material from adjacent said end of the rod to shift the center of gravity longitudinally of the rod to a given location adjacent the excess material at said intermediate portion and then the additional removal of material from said intermediate portion to bring the total weight of the rod within given limits.

1,905,926. METHOD OF MAKING STEERING WHEELS. EDWARD R. MARRACH and GERALD F. CAVANAGH, Cleveland, Ohio, assignors to The Ohio Rubber Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 5, 1930. Serial No. 479,901. 8 Claims. (Cl. 29—159.)



5. The method of forming a spider for a steering wheel, which comprises, cupping the central portion of a polygonal sheet metal blank, drawing the corners of said blank upward to form wedge shaped extensions of the wall of the cup, and bending said extensions downwardly and outwardly.

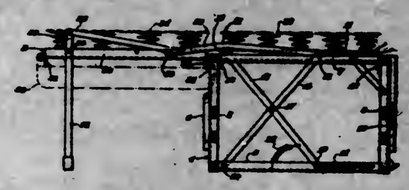
1,905,927. PLACARD. HARRY V. MARSH, Chicago, Ill. Filed Mar. 21, 1929. Serial No. 348,773. 8 Claims. (Cl. 40—7.)



1. A placard for use upon a can top comprising a main body having scores and slits therein whereby to provide a second body from the material of said main body and adapted to be displaced therefrom into parallelism therewith, there being a tongue depending from said second body, and extensions on said main body, said first and second bodies being above said can top, and said tongue and said extensions cooperating for locking the placard upon a can.

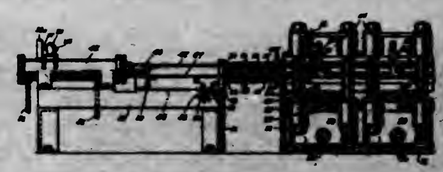
1,905,928. DAY-BED. JOSEPH MARTIN, New York, N. Y., assignor to United States Cabinet Bed Co., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 26, 1930. Serial No. 431,954. 2 Claims. (Cl. 5—81.)

1. The combination with a main frame, of an extensible bed section pivotally connected to said main frame, a main bed section, crossed levers pivotally connected to one another and operatively connecting said main bed section with said main frame, control links pivotally connecting said crossed levers with said extensible bed section whereby said crossed links will be operated to raise said main bed section when said extensible bed section is swung outwardly, legs pivotally connected to said extensible



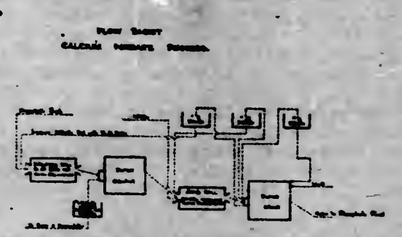
bed section, and links operatively connecting said legs with said control links so that said legs will be swung into supporting position when said extensible bed section is swung outwardly.

1,905,929. VULCANIZING APPARATUS. GILBERT L. MATTHIAS, Cuyahoga Falls, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Aug. 24, 1928. Serial No. 301,797. 2 Claims. (Cl. 18—4.)



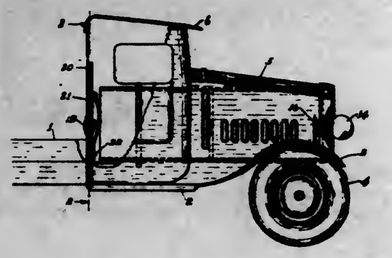
1. Apparatus for moving a mold between the platens of a vulcanizer from a point remote therefrom, the said apparatus comprising a support for a mold adjacent the platens of a vulcanizer of the platen type, mechanism for presenting a mold on the said support, and means operative in timed relationship with the said mold-presenting mechanism for feeding the mold between the platens of a vulcanizer.

1,905,930. METHOD OF PREPARING CALCIUM NITRATE FROM PHOSPHATE ROCK. ARTHUR LIONEL MCCALLUM, BRIAN PORTER SUTHERLAND, and JOSHUA BEAUMONT THOMPSON, Trail, British Columbia, Canada, assignors to The Consolidated Mining and Smelting Company of Canada, Limited, Montreal, Canada, a Corporation of Canada. Filed July 30, 1931. Serial No. 553,924. 8 Claims. (Cl. 23—102.)



5. A method of preparing calcium nitrate, substantially free from impurities, in the beneficiation of phosphate rock containing impure calcareous material which comprises the step of treating the calcareous material with an excess of nitric acid, and precipitating the impurities contained in the acid solution by neutralising it with an excess of fresh phosphate rock.

1,905,931. HEADLIGHT FOR TOY VEHICLES. GEORGE E. HARCOURT, St. Louis, Mo., assignor to Metalcraft Corporation, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 16, 1933. Serial No. 651,879. 9 Claims. (Cl. 46—48.)



1. In a headlight device for toy vehicles, a radiator simulation, a cross bar mounted on the radiator simulation, means for insulating said cross bar from said radiator simulation and openings in each end of said cross bar to receive the screw threaded base of an incandescent bulb.

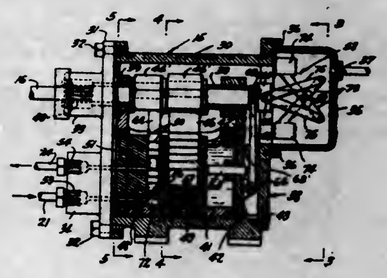
8. In a toy vehicle, a chassis having a substantially horizontal floor member, an inverted U-shaped member mounted on said floor member, a battery confined between said inverted U-shaped member and the floor member, a detachable radiator simulation for said toy vehicle mounted forwardly of said battery, said battery being made accessible for replacing by detachment of said radiator simulation member.

1,905,932. PROJECTOR. JOHN E. FOSTER, San Bernardino, Calif. Filed May 13, 1932. Serial No. 611,214. 3 Claims. (Cl. 273—107.)



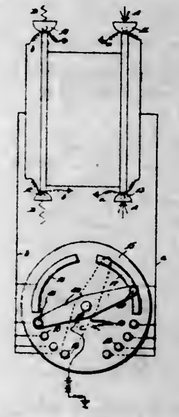
1. A game device including a rod, a grip on one end thereof, a ball slidably mounted on the opposite end thereof, a shoulder on the rod limiting sliding movement of the ball in one direction, a spring catch at the tip of the rod limiting movement of the ball on the rod in the opposite direction, a trigger carried by the grip, and a cord connected to the spring catch and to the trigger for withdrawing the catch from the path of the ball when the trigger is pulled.

1,905,933. HIGH SPEED COMPRESSOR. WILFRED FOURNESS, Oakland, Calif., assignor to Fourness Development Corporation Ltd., New York, N. Y., a Corporation of New York. Filed May 12, 1930. Serial No. 451,824. 32 Claims. (Cl. 230—29.)



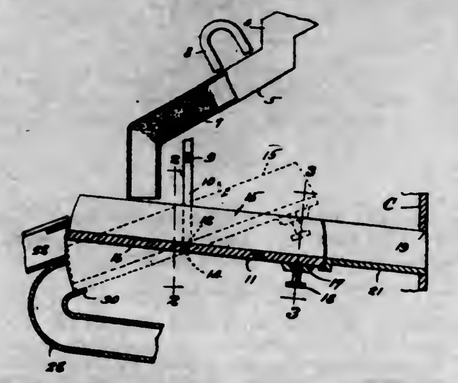
1. In a compressor, a plurality of oscillating cylinders having a passageway therebetween for the flow of a fluid, one of said cylinders containing a piston and the other a sliding valve, and means for keeping said passageway continuously open and to obviate escape of fluid from the passageway directly to the exterior of the cylinders.

1,905,934. APPARATUS FOR SIGNALING. ALFRED F. W. HANUSSLER, San Juan, Puerto Rico. Filed Apr. 18, 1929. Serial No. 356,216. 1 Claim. (Cl. 177—337.)



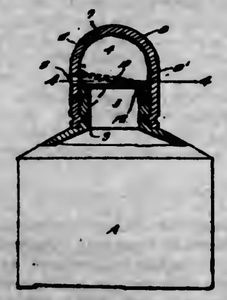
A signaling system for motor vehicles comprising electric lamps at the front and rear of each side of the vehicle directing the lights to the front and to the rear thereof, a source of electric current, and a switch consisting of a centrally pivoted lever, arcuate contact plates extending from the ends of the lever towards each other at one side of the lever in the normal position of said lever, and contact points spaced from the ends of the contact plates on a line concentric therewith at the other side of the lever in its normal position, said contact plates and companion contact points being electrically connected respectively to the lamps at opposite sides of the vehicle and a circuit connecting the source of current with the aforesaid lever, whereby when the switch lever is thrown in either direction one end thereof will travel over one of the contact plates to furnish a steady light to the lamps at one side of the vehicle and the other end of said lever traveling over the contact points associated with the other contact plate will flash the lamps at the other side of the vehicle and movement of the lever back and forth over the opposite contact plates and points will alternately light and flash the lamps at both sides of the vehicle.

1,905,935. FRAUD PREVENTIVE DEVICE. HOBART J. HALSTED and NORMAN ROBERT BRIGGS, Buffalo, N. Y. Original application filed July 24, 1930, Serial No. 470,517. Divided and this application filed Nov. 2, 1931. Serial No. 572,649. 1 Claim. (Cl. 194—103.)



The combination with a casing, of an inclined coin guide tube having an outlet end extending downwardly at an obtuse angle thereto, an inclined stationary delivery trough opening through a wall of the casing, scales tiltably mounted and aligning normally at one end with said trough, the other end being extended under the outlet end of the coin tube, parallel upstanding strips on the scales for guiding a rolling coin to the trough from the outlet of the coin tube, a weight on the scales and adjustable along the bottom thereof, a coin receiving channel, a coin returning channel, said channels having superposed coin receiving ends normally positioned below the adjacent coin receiving end of the scales and cooperating to define an arc close to and parallel with the path of movement of said end of the scales, said scales when subjected to the correct weight of a coin being tiltable to deliver said coin into the receiving channel and, when subjected to overweight, being adapted to deliver the coin into the return channel, and a stop on said channel for the scales.

1,905,936. AUTOMATIC PRESSURE VALVE SEAL CAP FOR COLLAPSIBLE TUBES. JAMES JEFFERSON HEARD, Phoenix, Ariz. Filed June 29, 1932. Serial No. 620,028. 2 Claims. (Cl. 221—60.)



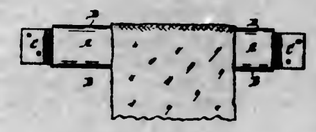
1. In combination with a collapsible tube having a neck, a substantially dome-shaped cap permanently attached to the neck, said cap having a chamber therein in communication with the tube and having a discharge opening passing through one side of the cap and communicating with the lower part of the chamber, a valve member of spring material including an arcuate-shaped part contacting a portion of the internal curved wall of the chamber, a straight portion extending over the neck and a vertical portion closing the discharge opening, the latter two portions moving upwardly when pressure is exerted upon the contents of the tube to permit some of the contents to pass from the neck through the discharge opening, said portions moving back to closing position when the pressure ceases.

1,905,937. DOOR CALL. EUGENE A. HOAG, Pacific Grove, Calif. Filed Nov. 20, 1931. Serial No. 576,405. 2 Claims. (Cl. 116—157.)



1. In a device of the character described, a pair of shell-like body members having overlapping meeting edges forming an inclosure, a frame supported within the inclosure, and carrying a springless gear train including an escapement lever, a member associated with the escapement lever and movable therewith, and a shaft extending through the overlapped edges at one side of the inclosure to retain the body members in assembled relation and providing a rotatable support for the drive gear of the train.

1,905,938. TOWEL RAIL. LOUIS JENKINSON, Auckland, New Zealand. Filed Mar. 17, 1931, Serial No. 523,260, and in New Zealand Jan. 26, 1931. 2 Claims. (Cl. 211—123.)



1. A towel holder, comprising a rail made from a length of flat sheet metal shaped to curve rearwardly along its two edges, the edges being spaced from both the curved portions and the straight portion in order to provide a resilient support for a towel or similar article, and supporting wall brackets for each end of the rail, said wall brackets being of goose-neck form to provide a fascia member adapted to be fastened to a wall, a carrying member shaped to fit within the rail between the edges and the flat portion, and a forwardly flared double spring member connecting the fascia member and the carrying member, said double spring member serving to limit the degree of insertion of the carrying member into the space between the edges and flat portion of the rail.

1,905,939. SUSPENDER SLIDE WITH BARS FLATTENED AND EMBOSSED ACROSS WELD. LEMUEL W. JOYCE, Greensboro, N. C., assignor to Joyce-Venning Manufacturing Co., Inc., Greensboro, N. C., a Corporation of Delaware. Filed Apr. 14, 1931. Serial No. 530,113. 2 Claims. (Cl. 29—148.)

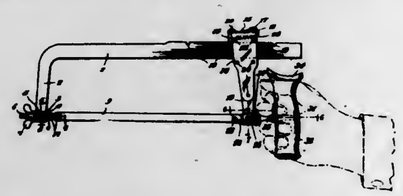
1. Method for manufacturing an endless suspender slide frame of the type having a weld adjacent the middle

of one of the cross bars, comprising flattening said bar throughout an extent which includes the region of weld,



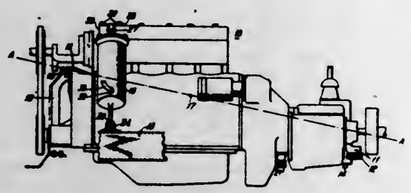
by a pressing tool having a flat face that can be easily ground, and subsequently embossing the flattened portion by a suitably configured die.

1,905,940. HACK SAW. HENRY C. LAMBERT, Anthon, Iowa. Filed June 15, 1931. Serial No. 544,530. 2 Claims. (Cl. 145—84.)



1. A saw comprising a frame having a main bar and front and rear arms, blade engaging elements carried by said arms, the rear arm having forks extending across opposite side faces of the main bar and projecting beyond the outer edge face thereof, the outer edge face of the bar being provided with seats, a latch between the extended portions of said forks extending longitudinally of said bar and pivotally mounted adjacent its rear end, the front end of said latch having a bill to engage in a selected seat and retain the rear arm in a set position, and a strip disposed between the extended portions of said forks longitudinally of said bar and firmly secured to the forks in engagement with the outer edge face of said bar, said strip being split from its rear end to form a spring engaging the rear end of said latch and yieldably holding the latch in an operative position.

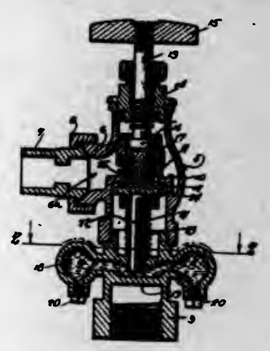
1,905,941. FLUID PUMP. RAYMOND P. LANSING, Montclair, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Sept. 30, 1931. Serial No. 566,126. 14 Claims. (Cl. 180—54.)



1. In an automotive vehicle, a substantially rigid frame, a relatively movable power plant mounted longitudinally thereon, and a pump having relatively movable operating members connected respectively to the power plant and the frame.

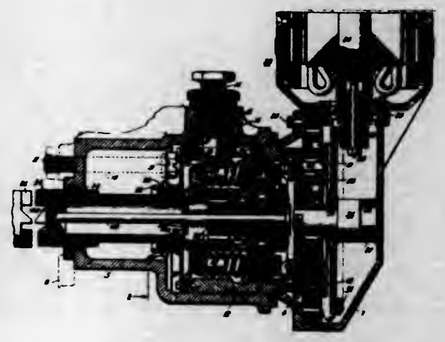
1,905,942. AUTOMATIC THERMOSTATIC RADIATOR VALVE. JAMES J. LAWLER, Mount Vernon, N. Y. Filed Sept. 21, 1931. Serial No. 564,121. 3 Claims. (Cl. 236—42.)

1. In an automatic thermostatic radiator valve, valve casing, a double valve seat therein, and manual and thermostatically operated valves respectively engageable with the valve seats, the thermostatic valve comprising an expansible tube and an annulus in communication with the tube, and surrounding the valve casing and containing



an expansible fluid, and a tubular web extending between sides of the annulus and transversing the valve casing in the path of flow of the heating medium.

1,905,943. ENGINE STARTING APPARATUS. RAYMOND P. LANSING, Montclair, N. J., assignor to Bendix Aviation Corporation, South Bend, Ind., a Corporation of Delaware. Filed Jan. 30, 1932. Serial No. 589,961. 14 Claims. (Cl. 74—7.)



1. In an engine starter of the type having a driven member adapted to engage and crank an element drivably connected to the power producing parts of the engine, the combination with said driven member and element of a bridging member having means at one end thereof for supporting said driven member for movement therewithin, means near the other end of said bridging member for supporting the other elements of the starter, said last named means comprising a portion of the starter housing adapted to register with and extend along the inner surface of said bridging member to be supported thereby, and bearing means enclosed within said starter housing for supporting the non-engaging end of said driven member.

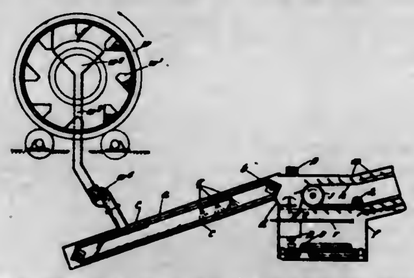
1,905,944. METHOD OF MAKING TUBULAR TURBINE BLADES. CHRISTIAN LORENZEN, Berlin-Treptow, Germany, assignor, by mesne assignments, to Bendix Aviation Corporation, Chicago, Ill., a Corporation of Delaware. Filed Nov. 14, 1929, Serial No. 407,095, and in Germany Nov. 14, 1928. 7 Claims. (Cl. 29—156.8.)

1. The method of making tubular turbine blades, which consists in first giving a tubular blank having a longitudinal passage open at both ends, a shape in which its wall thickness increases toward one end of the blank, and



then giving such tubular blank of tapered thickness the desired crescent shape to form a blade convex on one face and concave on the other.

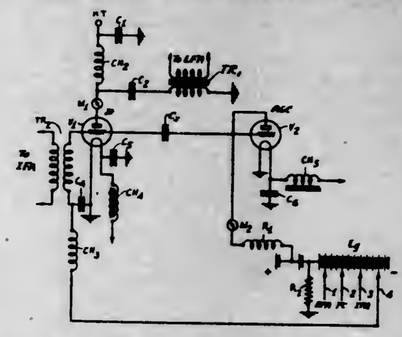
1,905,945. METHOD OF AND APPARATUS FOR SEPARATING SOLID CARBONACEOUS MATERIAL FROM FOREIGN IMPURITIES. CLIFFORD MACHEN, Westminster, England, assignor to British Coal Distillation Limited, London, England, a British Company. Filed Dec. 7, 1932, Serial No. 646,176, and in Great Britain Aug. 7, 1931. 6 Claims. (Cl. 209—173.)



1. The method of separating solid carbonaceous material from foreign impurities such as slate, shale, clay or the like, which comprises subjecting the material to heat treatment so as to drive off at least a portion of the volatile matter contained therein, thus converting the carbonaceous material to a porous condition; moving the hot porous material over a relatively still body of liquid maintained at a substantially constant level; maintaining the surface liquid substantially at the boiling point, whereby gases evolved assist in giving buoyancy to the porous material and prevent said material becoming saturated with liquid; permitting the impurities to sink in said body of liquid while floating said carbonaceous material; and removing the carbonaceous material from the surface of the liquid while in a heated condition.

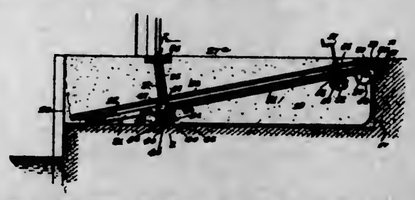
1,905,946. AUTOMATIC GAIN CONTROL. GASTON ADELIN MATHIEU, London, and GERALD ARTHUR ISTED, Essex, England, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Apr. 1, 1932, Serial No. 602,524, and in Great Britain Mar. 28, 1931. 2 Claims. (Cl. 250—20.)

1. An automatic gain control arrangement for a superheterodyne receiver which includes a radio frequency amplifier, first detector, intermediate frequency amplifier and a second detector, said arrangement comprising a diode control tube having a cold electrode connected to an input electrode of said second detector for the impression of signal currents on said diode electrode, a control bias source connected in the circuit of said diode cold electrode, and a plurality of independent direct current connections from a plurality of points of increasing negative potential on said source to the gain control electrodes of said second detector, intermediate frequency amplifier and said radio frequency amplifier respectively, said points



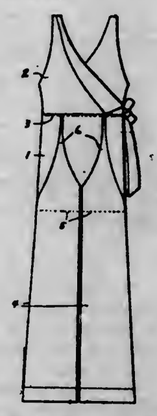
being so chosen that as the received signals vary from weak to strong the biases of said gain control electrodes are successively altered in the aforesaid order.

1,905,947. GANGWAY. DAVID H. MORGAN, Youngstown, Ohio, assignor to Truscon Steel Company, Youngstown, Ohio, a Corporation of Michigan. Filed May 21, 1931. Serial No. 539,069. 11 Claims. (Cl. 14—71.)



1. In a gangway structure, the combination with a floor having a pit and a platform pivotally mounted to have a free end that swings in a substantially vertical direction between a depressed and an elevated position, and mechanism in the pit and beneath the platform and below the floor level for elevating it and effecting its depression for holding it at different elevations.

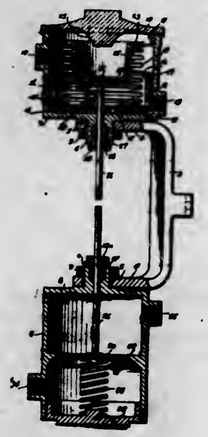
1,905,948. PAJAMAS. WILLIAM A. NOSIK, RUDOLPH J. NOSIK, JOHN S. KROCKA, and WALTER MONCHER, Milwaukee, Wis. Filed Sept. 16, 1932. Serial No. 633,518. 3 Claims. (Cl. 2—83.)



1. A beach pajama comprising a trunk portion of flexible, water-proof material, a bodice portion of flexible material secured to the trunk portion, and trousers members of

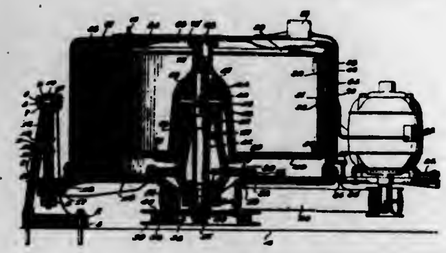
flexible, water repellent material telescopically receiving the legs of the trunk portion and secured to the trunk portion at the ends of the legs and at the waist line of the trunk portion.

1,905,949. AUTOMATIC WATER HEATER CONTROL VALVE. ROBERT ROGERS, Dallas, Tex., assignor to Henry Chilton Rogers, Dallas, Tex. Filed Apr. 24, 1931. Serial No. 532,577. 1 Claim. (Cl. 236—25.)



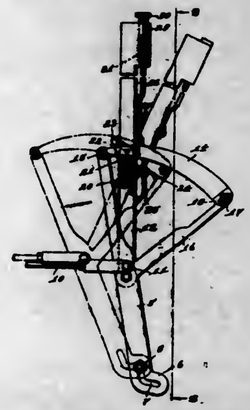
In a water heater the combination with the water heater control valve casing having inlet and outlet ports, of a cylinder located therein, and spaced from the wall of the casing and of less diameter than the casing, and a detachable soft metal gasket between the inner wall of the casing and the outer wall of the cylinder, the latter being beveled at its upper edge and the gasket correspondingly beveled.

1,905,950. DRIVE RELEASE AND BRAKE FOR EXTRACTORS. FLETCHER SCHAUM, Philadelphia, Pa., assignor to Fletcher Works, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Mar. 29, 1928, Serial No. 265,761. Divided and this application filed Nov. 10, 1928. Serial No. 318,408. 6 Claims. (Cl. 192—2.)



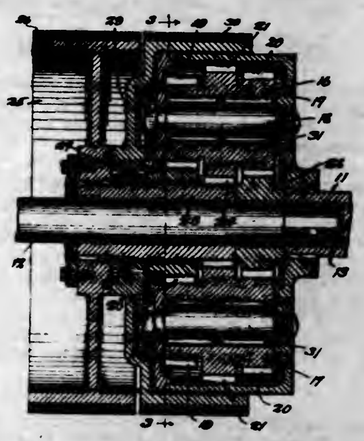
1. A hydro extractor comprising a guard suspended for a slight horizontal movement, a shaft rotatably mounted in said guard, a basket tiltably mounted on the upper end of said shaft, a motor connected with said shaft for driving the same, a brake drum on the lower end of the shaft, a brake including a handle cooperable therewith, electric control means for the motor for starting and stopping the same, and said control means operable by the movement of the brake handle.

1,905,951. BRAKE. HENRY SCHNAKENBERG, Homestead, Pa. Filed June 28, 1932. Serial No. 618,650. 3 Claims. (Cl. 74—89.)



1. An emergency brake lever comprising a pivoted lever, a quadrant at the upper end of said lever, a hand lever pivoted intermediate its ends and pivotally connected at its lower end to said first mentioned lever, a locking dog pivotally attached to said hand lever having cams engageable with the upper and lower edges of said quadrant, and releasable means for actuating said locking dogs to move the cams into tight frictional engagement with the edges of said quadrant.

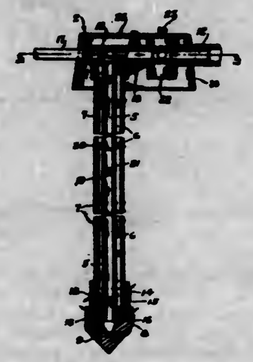
1,905,952. STEERING MECHANISM FOR TRACTORS HAVING ENDLESS TREAD MEMBERS. ROBERT F. SCOTT, Charleston, W. Va. Filed Dec. 26, 1929. Serial No. 416,702. 1 Claim. (Cl. 180—9.2.)



A power operated tractor guiding device comprising driven shafts having bearing openings in the outer ends thereof, wheel supporting driven shafts having the inner ends thereof extended into the bearing openings in the ends of the first mentioned driven shafts, gear housings secured to the outer ends of the first mentioned driven shafts, shafts journaled in the housings, planetary gear members mounted on the last mentioned shafts and including end gears and intermediate gears, said gears being of various sizes, gears secured on the inner ends of the wheel supporting shafts and meshing with certain of the gears of the planetary gearing, sleeves mounted on the wheel supporting shafts and having gears at the inner ends thereof meshing with the intermediate gears

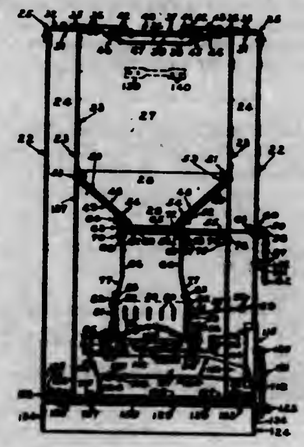
of the planetary gearing, brake drums secured to the outer ends of the sleeves, sleeves mounted on the first mentioned sleeves and having gears at the inner ends thereof meshing with the gears of the planetary gearing, drums secured to the outer ends of the last mentioned sleeves to move therewith, and brake bands cooperating with the drums for locking either of the sleeves or both of the sleeves against movement to vary the speed of rotation of the driven shafts with respect to each other, a driven shaft, and crawlers mounted on the wheels of the wheel supporting shafts to propel or guide the tractor.

1,905,953. APPARATUS FOR PRODUCING SUDS. LEE LEWIS STRASBURGER, Atlanta, Ga. Filed Dec. 28, 1930. Serial No. 504,334. 6 Claims. (Cl. 299—84.)



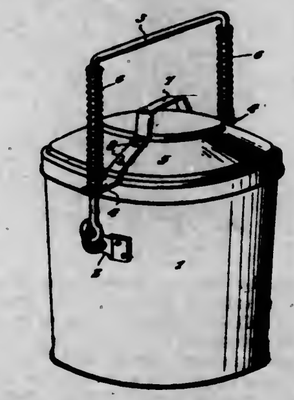
2. A device for removing a solid or plastic material such as soap from a mass, comprising a tubular member, a spear head of greater diameter than the tubular member on one end thereof with a return conduit in the tubular member and ports affording communication between said return conduit and the exterior of the spear head and ports between the exterior of the tubular member and the bore thereof above the enlarged part of the spear head.

1,905,954. HEATER FOR REFRIGERATOR CARS AND OTHER STRUCTURES. EDWARD A. SWEELEY, Alexandria, Va., and NORMAN T. ANDERSON, Washington, D. C. Filed June 8, 1929. Serial No. 368,184. 6 Claims. (Cl. 126—56.)



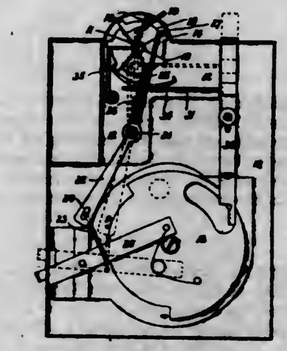
1. A heater comprising a casing the upper portion of which constitutes a fuel magazine, a fire-pot within the casing having its upper end in communication with the fuel magazine to receive fuel therefrom, spaced from the walls of the casing, having valve controlled openings in the lower portion of its wall, and provided with an apertured fuel supporting bottom, means for admission of air to the interior of the casing for supply of air to fuel in the fire box, an external casing surrounding the inner casing substantially from top to bottom of the inner casing and spaced from the walls thereof to form a chimney-flue in communication with the space between the fire box and walls of the inner casing for supplementing the valve controlled openings in the walls of the fire box for passing air through the fuel and exhausting the gases generated in the heater, and a valve for controlling the exhaust of gases through the chimney-flue.

1,905,955. RECEPTACLE. PAUL E. WARNER, Brooklyn, N. Y. Filed Oct. 22, 1931. Serial No. 570,697. 1 Claim. (Cl. 220—30.)



The combination of a receptacle, lugs projecting from the sides of the same at diametrically opposite points thereof, a bail pivoted at its ends in said lugs, a cover fitted to the receptacle, lugs projecting from the cover at diametrically opposite points thereof and slidably engaging the sides of the bail, and expansion springs fitted upon the sides of the bail between said lugs and the cross bar of the bail.

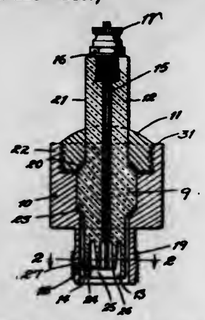
1,905,956. EXPOSURE INDICATOR ATTACHMENT TO PHOTOGRAPHIC CAMERAS. CECIL ALEXANDER BURNS WATSON, Auckland, New Zealand. Filed June 15, 1931, Serial No. 544,509, and in New Zealand Feb. 6, 1931. 4 Claims. (Cl. 95—59.)



1. In cameras, a casing having an extension projecting therefrom formed with a vision aperture in its rear side, a round disc mounted in the casing to rotate upon a central

axis and disposed to extend into the said extension so that a portion of its rear face is positioned against the said vision aperture, which rear face is numbered with characters disposed in a ring coincident with the aperture and spaced at even distances apart, and the front face of which disc is formed with radial teeth corresponding in number and spacing with the spacing of the said characters, shutter actuating means for the camera and means combining therewith and with the said disc, whereby on each complete exposure operation of the shutter, the disc is caused to turn on its axis through a distance corresponding to the spaces between the characters thereon.

1,905,957. SPARK PLUG. AUGUST E. ANDERSON, Montclair, N. J. Filed Nov. 8, 1932. Serial No. 641,765. 5 Claims. (Cl. 123—169.)



1. In a spark plug having the usual electrodes, a metal housing member and an insulator core member firmly seated therein, said core member being provided with a downwardly open chamber, an annular space being formed between the lower ends of said members; the main electrode being mounted axially in said core members and the ground electrode secured in said housing member and extending across said space into said chamber, the spark points being situated within said chamber well beyond the lower edge of the core member; the combination with means forming an obstruction in the spark gap, thereby creating a substantially flat spark between the spark points.

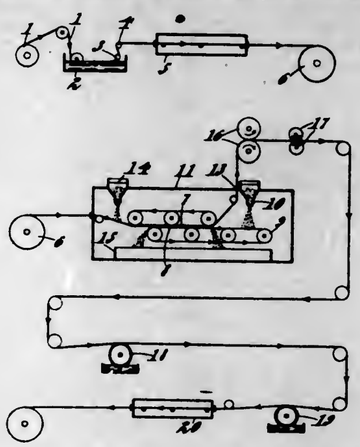
1,905,958. RUBBER CLOTHESPIN. PRESTON PEARCE BOOLEY, Chicago, Ill. Filed Aug. 25, 1932. Serial No. 630,467. 2 Claims. (Cl. 24—137.)



2. A clothespin made of rubber, comprising, an annular head of uniform thickness, a pair of legs extending therefrom, the inner walls of said legs converging toward said head, the outer walls of the legs being substantially parallel, said inner and outer walls merging into said annular head of uniform thickness, and a transverse recess in said annular head.

1,905,959. METAL COATED MATERIAL. LEONARD WALTER CUTLER and CARL ADOLPHE KLEIN, Enfield, England, assignors, by mesne assignments, to Goodlass Wall and Lead Industries Limited, London, England. Filed Dec. 5, 1929, Serial No. 411,955, and in Great Britain Dec. 14, 1928. 2 Claims. (Cl. 91—18.)

1. Apparatus for distributing finely-divided metal over the surface of both sides simultaneously of a continuous web of sheet-material carrying an adhesive, which comprises a pair of oppositely-travelling endless-belts disposed horizontally face-to-face and in close proximity to one another, means to feed a web of sheet-material carrying adhesive continuously through the space between the belts, means to deliver finely-divided metal on to the moving web of sheet-material before it enters said space, and means to



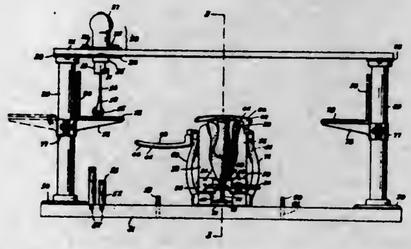
deliver a similar supply on to the lower belt before the latter reaches the interface between itself and the web of sheet material, said lower belt being extended beyond the upper belt at one end to receive this supply, and travelling towards said interface at this end, the web and the lower belt thus constituting conveyors for the metal to the interface between the belts and the web.

1,905,960. FOUNTAIN BRUSH. JOSEPH DE PHILIPPS, New York, N. Y. Filed Feb. 5, 1932. Serial No. 591,161. 8 Claims. (Cl. 15—137.)



1. In a reservoir applicator, a hollow handle defining a container having an outlet tube protruding from one end, a sleeve having limited sliding movement on said tube and an applicator head having linked connection with said sleeve and movable with and with reference to the sleeve to cover and uncover the outlet tube.

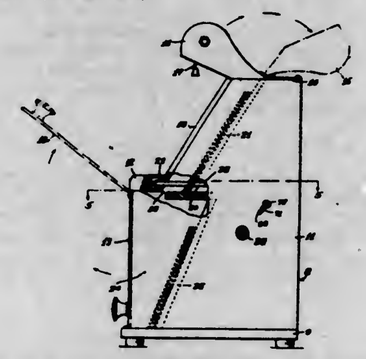
1,905,961. SHOE BOTTOM ORNAMENTING MACHINE. HERBERT E. EDWARDS, Brookline, Mass. Filed Nov. 28, 1931. Serial No. 577,776. 19 Claims. (Cl. 41—1.)



11. In a shoe bottom ornamenting machine, the combination with a frame, a work support having a toe saddle and a heel spindle relatively movable vertically and longitudinally to accommodate different sizes of shoes, and means carried by the frame and movable laterally bodily across the work support for cancellating the bottom of the shoe mounted upon the work support, of a shield movable laterally into and out of a position over the shoe bottom and longitudinally relatively to the toe saddle and heel spindle.

15. In a shoe bottom ornamenting machine, a plurality of marking tools, a head therefor, a stem for each tool longitudinally slidably mounted in the head, means for limiting the movement of the stem in one direction under the influence of gravity and a spring for resisting the movement of the stem in the other direction.

1,905,962. EXHIBITOR. HERBERT E. EDWARDS, Brookline, Mass. Filed Oct. 8, 1932. Serial No. 636,875. 6 Claims. (Cl. 40—36.)



1. In an exhibitor, the combination with means for supporting a plurality of exhibits stacked, upended, in a pile, means for exposing to view the outermost exhibit in the pile, and automatic means for withdrawing bodily the outermost exhibit from the pile, of means for retaining the pile stationary during the withdrawal of the outermost exhibit therefrom.

1,905,963. LEAF TURNER. WALTER FLIETHER, Velbert, Germany. Filed Aug. 3, 1931, Serial No. 554,844, and in France May 26, 1931. 1 Claim. (Cl. 84—498.)



A leaf-turner comprising a casing, a plurality of radial, pivoted, spring-controlled leaf-turning arms projecting from said casing, a spring-controlled slide, a pair of spring-controlled catches bearing against inclined surfaces on said slide and adapted to be operated thereby on the slide being reciprocated, and means for reciprocating the slide, one of said catches adapted normally to retain the arms in tensioned position and to release them on being operated, the other catch adapted, on being operated, to enter between the first pair of unreleased arms and ensure the release of one arm at a time.

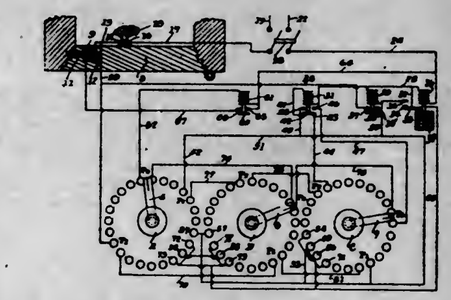
1,905,964. SANITARY PAD SUPPORTER BELT. MYRON B. HAMMOND, Bridgeport, Conn., assignor to The Thos. P. Taylor Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 11, 1932. Serial No. 585,848. 5 Claims. (Cl. 128—291.)

1. In a sanitary pad supporter, front and rear tab portions and belt portions comprising a pair of parallel strips of elastic webbing having parallel inner and outer edges and arranged side by side in the same plane and secured together at each end along their adjacent inner edges in



parallel relation to their outer edges to form said tab portions of single thickness and being unsecured between said tab portions to form belt portions.

1,905,965. ELECTRIC SAFE LOCK. HANS M. LESCHEN and PETER J. ANSELMO, San Francisco, Calif. Filed Mar. 15, 1932. Serial No. 598,938. 5 Claims. (Cl. 70—63.)



1. In a lock actuating apparatus, the combination with a movable locking member, electrical means for actuating said locking member, a plurality of relays arranged for progressive operation whereby said electrical means is energised to unlock said locking mechanism and a time controlled relay for rendering said first mentioned relays inoperative after a pre-determined interval of time.

1,905,966. EYE AND LOOP FOR ANCHOR RODS. WINFORD GLADSTONE MILNE and WILBERT NELSON ELLIOTT, Hamilton, Ontario, Canada, assignors to N. Slater Company, Hamilton, Ontario, Canada, a Company of Canada. Filed Feb. 24, 1931. Serial No. 517,658. 3 Claims. (Cl. 24—123.)

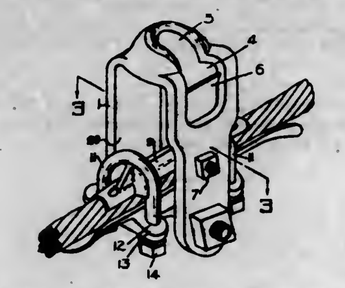


3. An eye and loop connection of the character described, comprising a wire receiving loop of U shaped cross section adapted to extend through the eye, a pair of shoulders formed substantially centrally of the convex face of the loop and between which the eye is contained, and a projection extending from the head of the eye and against which the loop rests.

1,905,967. CABLE CLAMP. WINFORD GLADSTONE MILNE, Hamilton, Ontario, Canada, assignor to N. Slater Company Limited, Hamilton, Ontario, Canada, a Corporation of Canada. Filed Apr. 28, 1932. Serial No. 608,071. 4 Claims. (Cl. 248—31.)

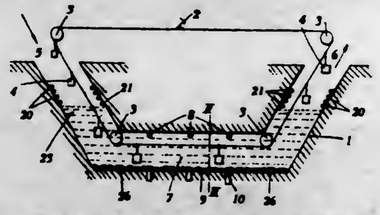
1. In a suspension clamp, the combination with an inverted U shaped loop and a cable clamp extending freely

through the loop, of a bolt extending across the open bottom of the loop and over which the cable clamp is positioned and by which it is supported, lugs having orifices



therein extending downwardly from the clamp and through which the bolt extends, and a convex bottom formed upon the clamp and resting upon the bolt.

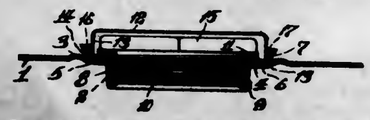
1,905,968. METHOD AND APPARATUS FOR CLEANING ARTICLES, PARTICULARLY METALLIC GOODS. KENNETH JAMES RENNIE ROBERTSON, London, England, assignor to Carrier Engineering Company Limited, London, England. Filed Aug. 25, 1928, Serial No. 302,038, and in Great Britain June 13, 1928. 17 Claims. (Cl. 87—6.)



4. A method of degreasing materials, consisting in collecting a volume of vapor in an open container, immersing material to be degreased within the container, removing condensate from the container, and maintaining substantially a constant level of vapor within the container.

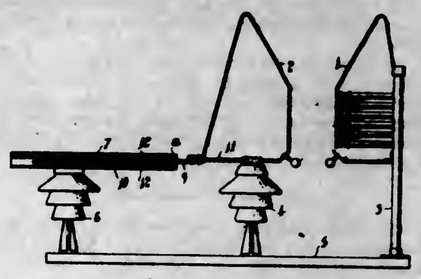
11. A combination of apparatus for cleaning greasy articles comprising a trough having an inlet and an outlet open to the atmosphere, cooling means in combination with the trough adjacent said inlet and outlet, the body of the trough being arranged at a level below said inlet and outlet, an endless conveyor entering the trough from a level above said inlet and adapted to convey articles through the trough, a still for producing solvent vapors, means for feeding vapors from the still within the trough above the line of travel of the conveyor and means for removing grease and dirt from the bottom of the trough, said inlet and outlet being arranged with respect to the body of the trough so that vapor heavier than air will be retained in the body of the trough, wholly covering the portion of the conveyor therewithin, and have its upper level below the inlet and outlet openings.

1,905,969. BUSHING AND SOLDER SEALED CAP THEREFOR FOR METALLIC CONTAINERS. LOUIS B. WACKMAN, St. Louis, Mo. Filed Aug. 11, 1930. Serial No. 474,432. 4 Claims. (Cl. 220—39.)



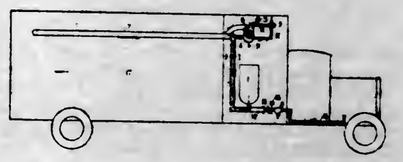
1. A flanged bushing for a container having an annular upturned lip on the flange thereof, a closure plug for said bushing, and a sealing cap mounted over said plug having its side wall solder sealed to said lip.

1,905,970. LIGHTNING ARRESTER. THOMAS DUDLEY BERRY, Markdale, Ontario, Canada. Filed May 16, 1931. Serial No. 537,901. 11 Claims. (Cl. 175—30.)



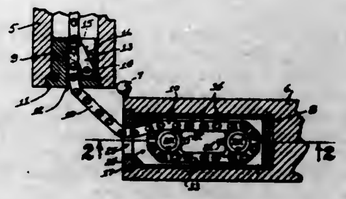
1. In a lightning arrester, the combination of a pair of spaced discharge electrodes, one of which is movable relative to the other; and means for automatically varying the spacing of said electrodes in accordance with the moisture conditions of the atmosphere.

1,905,971. PROCESS AND APPARATUS FOR REFRIGERATION WITH LIQUEFIED FUEL GAS. DELOS W. DAVISSON and FERDINAND G. WELKE, San Francisco, Calif., assignors to Shell Development Company, San Francisco, Calif., a Corporation of Delaware. Filed July 28, 1931. Serial No. 553,524. 12 Claims. (Cl. 62—92.)



2. Process of refrigerating comprising reducing the pressure on a normally gaseous fuel stored under high pressure, vaporizing said fuel under super-atmospheric pressure, reducing the pressure on the gas produced and thereafter combusting all of said gas.

1,905,972. DOOR CLOSER. WALTER F. FOSTER, San Francisco, Calif. Filed June 1, 1932. Serial No. 614,660. 10 Claims. (Cl. 16—63.)

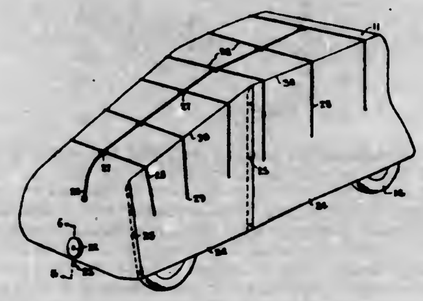


1. A door closer comprising a casing secured to one member of a hinge connected door and door frame assembly; an anchor secured to the other member thereof; a pair of sprockets mounted in said casing; an endless chain surrounding and engaging said sprockets; a second chain having one end connected with said endless chain and the other end secured to said anchor; and resilient means associated with one of said sprockets for rotating it in a direction to close the door.

8. In a door controlling device wherein a spring tensioned flexible member controls the movement of the door:

an anchor member for engaging one end of the flexible member and having an aperture for the insertion of said flexible member therethrough to any desired extent, said anchor member having means for automatically locking said flexible member against withdrawal therefrom, whereby the spring tension of the flexible member may be varied in its control of the door movement.

1,905,973. AUTOMOBILE COVER. LOUIS LEVINE, Cincinnati, Ohio. Filed Aug. 22, 1932. Serial No. 629,770. 9 Claims. (Cl. 135—5.)



1. A cover for an automobile consisting of a top and side flaps, means for folding said side flaps on said top and a roller for receiving said folded cover.

1,905,974. MANUFACTURE OF LIQUID DIALKYL PHTHALATE ESTERS. JOHN W. LIVINGSTON, Kirkwood, Mo., assignor to Monsanto Chemical Works, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 21, 1931. Serial No. 582,507. 12 Claims. (Cl. 260—103.)

1. In the process of manufacturing liquid dialkyl phthalates by the reaction of phthalic anhydride with an alkyl alcohol in the presence of an esterification catalyst, the step of purification of the crude ester which comprises treatment of the same with an aqueous solution of a permanganate.

1,905,975. CONCRETE BLOCK MOLDING MACHINE. CHARLES C. H. THOMAS, Mill Valley, Calif. Filed July 10, 1929. Serial No. 377,140. 23 Claims. (Cl. 25—41.)



12. A machine for molding plastic substances, comprised of a mold to receive plastic substances; a constant running vibrator independent of the mold; a resilient arm on the vibrator arranged in a position free of engagement with the mold; and means to move said resilient arm into engagement with the mold to transmit vibrations from the vibrator to the mold to vibrate the plastic substances in the mold.

1,905,976. MANICURING DEVICE. MARIE C. WOLF, Cleveland Heights, Ohio. Filed Sept. 18, 1933. Serial No. 689,911. 10 Claims. (Cl. 132—73.)



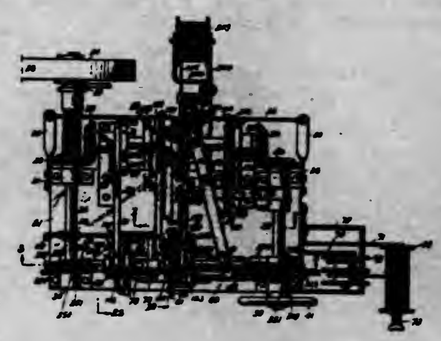
1. The combination with an orange stick of an attachment formed of resilient material removably secured to said orange stick, said attachment having a rounded bifurcated end.

1,905,977. AUTOMATIC FURNACE REGULATOR. ROY S. ADAMS, Saginaw, Mich., assignor of one-half to Joseph Pinto, Saginaw, Mich. Filed Dec. 28, 1930. Serial No. 504,337. 7 Claims. (Cl. 236—10.)



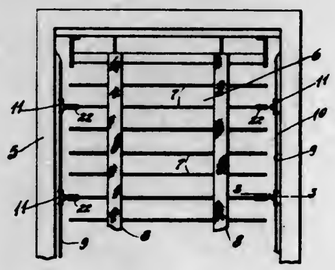
1. The combination with a furnace, of a drum projecting into the warm air jacket thereof, a control tank communicating therewith and formed with spaced apart inner and outer walls adapted to form a liquid chamber into which a liquid is introduced, a piston floating in said liquid and adapted to be raised when the furnace temperature is lowered and lowered when the furnace temperature is raised, and means connecting said piston with the furnace draft damper and smoke pipe damper respectively for simultaneously actuating said dampers as the temperature changes.

1,905,978. TASSELING MACHINE. CLARENCE F. ARNOLD, Drexel Hill, Pa. Filed Oct. 4, 1928. Serial No. 310,226. 66 Claims. (Cl. 28—8.)



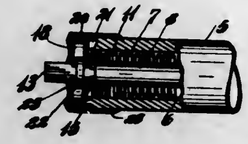
1. A tasseling machine comprising feeding means for heading loops, means for forming a tassel on each loop, means for securing said tassel on said loop, and means extending between the heading and feeding means for removing the tasseled loops from said feeding means.

1,905,979. VENETIAN BLIND. FRED J. BURNS, Saginaw, Mich., assignor to Columbia Mills, Incorporated, Saginaw, Mich., a Corporation of New York. Filed Feb. 11, 1931. Serial No. 514,952. 9 Claims. (Cl. 156—17.)



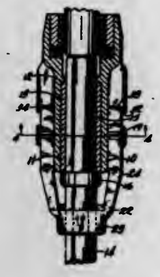
1. In a venetian blind having a plurality of movable slats, a guide rail secured to a window casing, a glider slidably mounted thereon, and disconnectible securing means between said glider and movable slats, and disconnectible in any position of said slats.

1,905,980. SHADE ROLLER. FRED J. BURNS, Saginaw, Mich., assignor to The Columbia Mills, Saginaw, Mich., a Corporation of New York. Filed Aug. 25, 1931. Serial No. 559,227. 14 Claims. (Cl. 156—36.)



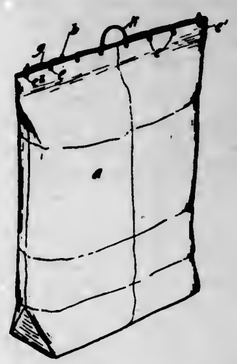
2. A shade roller comprising a body, a spindle extending into said body, a spool rotatably mounted thereon, a spool bearing secured to the spool, a spring mounted on the spindle and anchored to one end thereof, the opposite end being threaded on the spool bearing, and embedded and anchored in the end of the roller body when the roller is assembled.

1,905,981. STEEL RETAINER ATTACHMENT FOR ROCK DRILLS. JOHN C. CURTIS, Cleveland, Ohio, assignor to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 29, 1931. Serial No. 540,858. 9 Claims. (Cl. 121—32.)



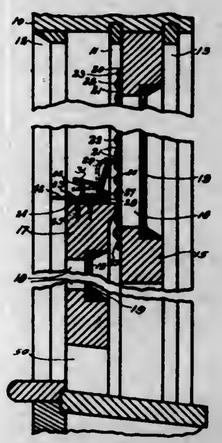
1. A drill retainer comprising in combination a front head, a pin within said front head, having means to prevent its removal therefrom comprising a recess within said pin, a bushing engageable with said head and said recess and capable to slidably receive said drill, and a retainer having arms pivotally engaging said pin.

1,905,982. BAG AND CLOSURE MEANS THEREFOR. JAMES DUVALL, Camas, Wash. Filed Dec. 23, 1930. Serial No. 504,258. 2 Claims. (Cl. 229—63.)



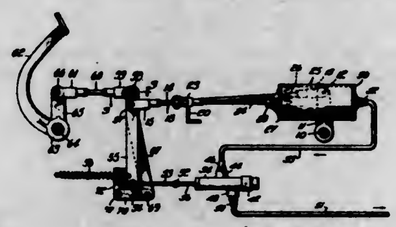
1. A paper bag provided at the top of two opposite sides with flaps of substantial width turned over to form folds with, and cemented to the sides of the body arranged flatwise, a reinforcing band arranged and cemented in the creases of the folds so produced and extending completely around the mouth of the bag, the sides of the bag directly under said reinforcing band being provided with a series of registering spaced holes and a cord laced through said holes over said reinforcing band to close the mouth of the bag, and arranged to form a loop constituting a carrying handle.

1,905,983. DETENT FOR WINDOW SASHES. JOHN F. HARDER, Omaha, Nebr. Filed May 1, 1931. Serial No. 534,393. 1 Claim. (Cl. 292—228.)



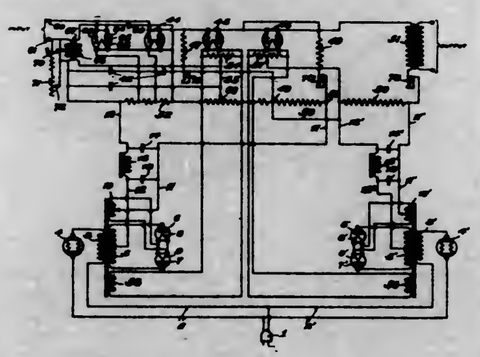
A window fastening device comprising, a corrugated strip adapted to be attached vertically upon a window sash, a base plate for attachment to an opposite sash, a detent pivotally mounted on the base plate and having its upper end curved and beveled for engagement with the corrugated strip to interlock the sashes against relative overlapping movement, a spring carried by the base plate and engaging the detent to normally urge the latter against the corrugated strip, said detent having an outstanding finger piece lying normally in spaced relation above the base plate and adapted to be depressed for manually releasing the detent from the strip, and a latterly movable holding lug mounted on the base plate in line with the finger piece and biased into a position in engagement with the finger piece, said lug having an undercut slot in one side for receiving the finger piece by edgewise movement of the lug for holding the finger piece downwardly.

1,905,984. CLUTCH OPERATING DEVICE FOR MOTOR VEHICLES. EDWARD G. HILL, Richmond, Va., assignor to Hill Engineering Corporation, Richmond, Va., a Corporation of Virginia. Filed Oct. 22, 1930. Serial No. 490,507. 8 Claims. (Cl. 121—41.)



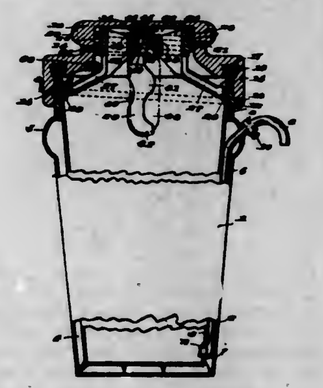
1. The combination with a motor vehicle operating member, of a pedal, a pivot pin connected to said pedal to be moved thereby, a control lever connected at one end to said pivot pin, an actuating lever having a slot in one end receiving said pin to permit initial movement of said pedal without transmitting movement to said actuating lever, a pull rod connected to said operating member and pivotally connected to both of said levers intermediate the ends thereof, means at the other end of said actuating lever to prevent movement thereof longitudinally of said pull rod, a power device for actuating said operating member, and a control device for said power device connected to the other end of said control lever to be actuated thereby and render said power device operative upon initial movement of said pedal.

1,905,985. AMPLIFIER. HERMAN HOLLERITH, Jr., Riverton, N. J., assignor, by mesne assignments, to Radio Corporation of America, New York, N. Y., a Corporation of Delaware. Filed Dec. 17, 1927. Serial No. 240,862. 20 Claims. (Cl. 179—171.)



19. The combination with means including a series of cascade connected vacuum tubes for amplifying audio frequency signalling energy and means for supplying audio frequency energy to the input circuit thereof, of means connected with said second named means for receiving therefrom and amplifying particular components of said energy having frequencies within the audible range, and means for impressing said amplified components on the input circuit of said first-named means.

1,905,986. BEVERAGE CARBONATING AND DISPENSING APPARATUS. CHARLES HUNTINGTON JACOBS and EDGAR ROY NASH, San Francisco, Calif., assignors to Syphonator Company, Ltd., a Corporation of Nevada. Filed Sept. 5, 1930. Serial No. 479,966. 15 Claims. (Cl. 225—18.)



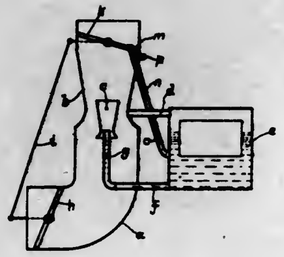
1. Apparatus for preparing and dispensing beverages comprising a vessel substantially unobstructed interiorly, with heat insulated walls and a wide, open mouth, a closure member therefor adapted to be sealed against said mouth, interengaging means between the closure member and vessel to effect air-tight sealing engagement thereof, means connected with the closure member for carbonating a liquid contained in the vessel while the closure member is sealed against said mouth, and means for dispensing a beverage from said vessel without removal of the closure member.

1,905,987. ELECTRICALLY HEATED WAX SPATULA. WILTON V. LANE, Guthrie, Okla., assignor of one-half to Zella M. Lane, Oklahoma City, Okla. Filed Apr. 25, 1931. Serial No. 532,949. 1 Claim. (Cl. 219—21.)



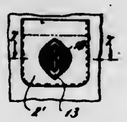
An instrument of the character described, comprising a tubular body having a portion formed of insulation material and divided into an intermediate section and two end sections, one of the said end sections and said intermediate section being threadably connected together, the other end of said intermediate section having a reduced exteriorly threaded terminal portion with which the other end section is threadably engaged, a cylindrical metallic tip threadably connected at one end with the said other end section and having its other end rounded and provided with a centrally threaded passage, said metallic tip being formed of a metal of a character to rapidly absorb heat, an annular member surrounding the reduced threaded portion of the said intermediate insulation section and secured in place by the said other end section, an electric heating element housed within said metallic tip, means for conducting electric current to said heating element through the body of the instrument, and a removable tool element having a threaded shank adapted to engage in the threaded bore to be heated through contact with the adjacent tip-enclosed heating element.

1,905,988. CARBURETOR. MAX LORENZ, Stuttgart, Germany, assignor to Robert Bosch Aktiengesellschaft, Stuttgart, Germany. Filed Aug. 11, 1930, Serial No. 474,522, and in Germany Sept. 2, 1929. 3 Claims. (Cl. 261—52.)



1. A self-feeding carburetor comprising a casing which includes a mixing chamber, at least two choke tubes adapted to produce different degrees of vacuum for any given degree of engine suction, a float chamber the air space of which is connected to the choke tube of lower vacuum and the fuel space to the choke tube of higher vacuum, an air throttle in advance of said choke tubes and a mixture throttle in rear of said choke tubes, the mixture throttle being operatively connected to said air throttle so that when the air throttle is closed, the passage from the mixing chamber to the engine is partly open but is sufficiently closed to prevent the vacuum in the mixing chamber from appreciably exceeding that required to maintain the fuel level in the float chamber.

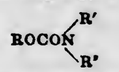
1,905,989. GARMENT MONOGRAM. LEO C. SAFIR, South Norwalk, Conn., and CHARLES SAFIR, New York, N. Y. Filed Jan. 18, 1933. Serial No. 652,266. 1 Claim. (Cl. 2—278.)



A garment having an ornamental design comprising an embroidered portion, a part of which defines an opening, and another portion including a monogram fitting within said opening, a backing sheet beneath said opening, the portion including the monogram being adhesively attached to said backing sheet, the embroidery defining the opening causing a thickening of the edge thereof which assists in preventing access to the juncture between the edge of the monogram and the backing sheet.

1,905,990. DISUBSTITUTED CARBAMIC ACID ESTERS OF PHENOLS CONTAINING A BASIC CONSTITUENT. JOHN A. ABELIN, Basel, Switzerland, assignor to Hoffmann-La Roche Inc., Nutley, N. J., a Corporation of New Jersey. Filed Apr. 8, 1931, Serial No. 528,708, and in Germany Jan. 2, 1931. 2 Claims. (Cl. 260—108.)

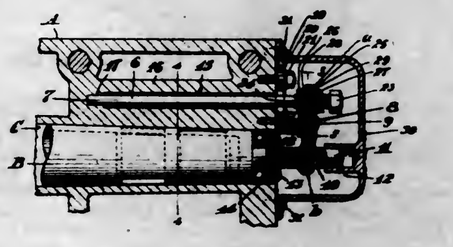
1. The disubstituted carbamic acid esters of phenols containing a tertiary amino group, of the general formula,



R representing a phenyl radical with a tertiary amino group selected from the group which consists of a phenyl radical with a dialkyl amino group, a phenyl radical with a dialkyl amino alkyl group and a benzoheterocyclic radical; in which general formula the radicals R' and R'' may be alkyl radicals, or aryl radicals of the benzene series, or the group

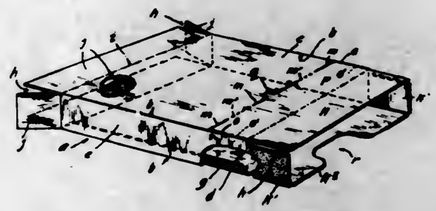
may constitute part of a piperidine nucleus; which products can be distilled in vacuo without decomposition, and form stable crystalline quaternary compounds or salts easily soluble in water forming neutral solutions, stable to heat, and having a physostigmine-like action.

1,905,991. EXPANSION COMPENSATOR. IRA H. BEDDOW, Venice, Calif. Filed May 28, 1932. Serial No. 612,981. 10 Claims. (Cl. 123—59.)



1. In an expansion compensator, the combination with a seated shiftable machine element subject to binding under the action of heat, of an expansion element adapted to be elongated under the action of heat, and a lever interposed between said elements arranged to effect shifting of said machine element on elongation of said expansion element.

1,905,992. CONVERTIBLE PAPER BOX. EDWARD C. BOGREN, Portland, Oreg. Filed Aug. 4, 1930. Serial No. 472,883. 1 Claim. (Cl. 229—17.)



A pasteboard box for holding stacked sheets consisting of a rectangular body comprising a top, a bottom, and sides, the top including at one end a top and end section removable on a line extending entirely across the top near said end and on lines extending from the ends of said line to the end of the box, the top portion of said removable section including a central, integral cut-out tab to facilitate removal and the end portion of said section fitting within the box and free from the sides of the box whereby it may be removed with the top portion of said section, the bottom of the box having an integral end section provided with a central cut-away opening extending down close to the bottom of the box, thereby disclosing and giving access at said end of the box to the stack of sheets contained therein.

1,905,993. TREATMENT OF GASES. CARL THEODOR BUSS, Berlin-Spandau, Germany, assignor, by mesne assignments, to International Precipitation Company, Los Angeles, Calif., a Corporation of California. Filed Aug. 26, 1931, Serial No. 559,453, and in Germany Aug. 29, 1930. 4 Claims. (Cl. 183—7.)



1. A device for the cooling and preliminary cleaning of gases to be cleaned mainly by electrical means, consisting of a cooling vessel, an inlet pipe for gases projecting into and forming an annular space between it and the wall of said vessel, moistening devices in said inlet pipe, said vessel being provided with a discharge outlet for gases leading from the upper end of said annular space, and discharge electrodes in the annular space surrounding said inlet pipe, said discharge electrodes being adapted for connection with a high-voltage source of electricity.

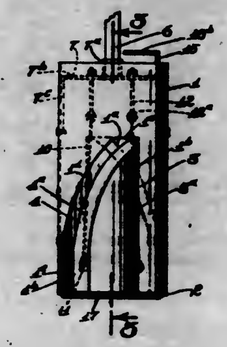
1,905,994. COLLAPSIBLE DISPENSER. JAMES P. BOWER, Wayne, N. J., assignor to Kept-Kapt, Inc., Knoxville, Tenn., a Corporation of Delaware. Filed Dec. 21, 1931. Serial No. 582,366. 5 Claims. (Cl. 221—60.)



2. A closure means including a plurality of coaxial elements movable relatively to each other in the general direction of the axis thereof, one of said elements having an opening, the other element having a tubular closed ended projecting valve portion adapted to seat in said opening, the opening and the valve portion having conical wedge engagement and the valve portion having a thin yielding wall for fitting the said opening.

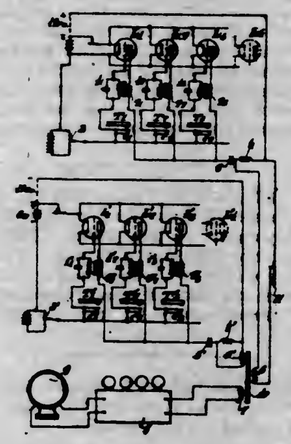
1,905,995. UNDERREAMER. BENJAMIN B. BERTRAN, Los Angeles, Calif., assignor of one-half to Jesie A. Bertran. Filed June 24, 1931. Serial No. 546,467. 9 Claims. (Cl. 255—74.)

5. In an underreamer for underreaming holes for receiving concrete underfootings with bell-shaped bases, a bucket having an opening in the side wall thereof extending from the extreme bottom of said bucket upwardly, the one side being substantially vertical and the other side tapering in curved line from near the lower side upwardly, a cutter pivotally mounted on the wall of the bucket at the



vertical side thereof and shaped to conform to said opening and adapted to form a portion of the side of the bucket when closed.

1,905,996. ELECTRIC ORGAN. EDOUARD ELOI COUPLEUX, Tourcoing, and JOSEPH ARMAND MARIE VINCENT DE PAUL GIVELET, Paris, France. Filed July 19, 1930, Serial No. 469,142, and in France July 26, 1929. 16 Claims. (Cl. 84—1.)

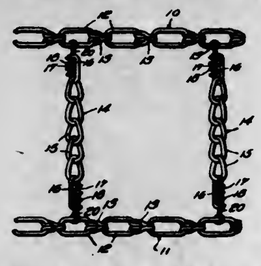


7. In an electric organ, valves having a plurality of electrodes, circuits electrically connected to the electrodes of said valves, keys of a keyboard provided with contacts actuating said circuits, and means producing notes which form harmonics for other notes produced simultaneously, thereby operating to change the timbre.

1,905,997. ANTISKID DEVICE. HORACE F. DRURY, Washington, D. C. Filed Aug. 14, 1930. Serial No. 475,295. 9 Claims. (Cl. 152—14.)

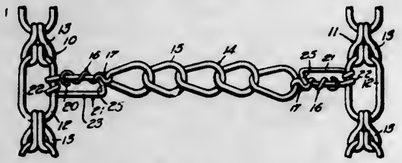
1. An anti-skid device comprising a pair of spaced side members, a transverse member adapted to be connected between said side members an elongated member associated with said transverse member, and high pitch spiral means connected to one of said side members and having operative engagement with said elongated member

to detachably connect said transverse member to said spiral means, the connection being such that upon breakage of said transverse member the portion of the latter



between the breaking point and said last mentioned side member will automatically become unscrewed from the latter.

1,905,998. ANTISKID CHAIN. HORACE B. DRURY, Washington, D. C. Filed Apr. 23, 1931. Serial No. 532,824. 14 Claims. (Cl. 152—14.)

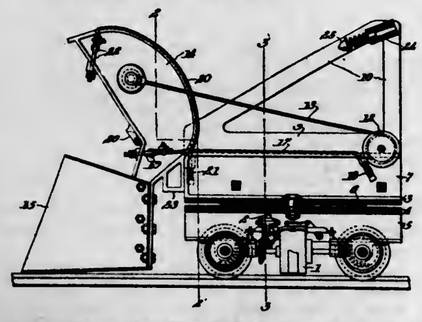


1. In an anti-skid device for a vehicle wheel including side and transverse members, a link carried by one of said side members, a spiral member carried by one of said transverse members and adapted to be spirally mounted upon said link, said spiral member being adapted to be spirally unwound from said link upon breakage of said last named transverse member, and means for preventing total disengagement of said spiral member from said link until said broken transverse member has reached a predetermined point in its revolution with the wheel.

1,905,999. CATALYZED UREA RESIN. CARLETON ELLIS, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed Feb. 10, 1930. Serial No. 427,435. 14 Claims. (Cl. 106—22.)

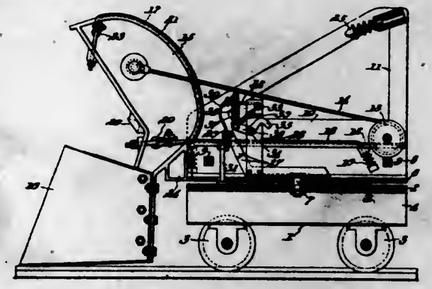
1. A molding composition comprising a thermo-setting resin of the urea type carried as an impregnum in finely divided cellulose and incorporated with unimpregnated cellulose.

1,906,000. MUCKER. JOHN S. FINLAY and EDWIN B. ROYLE, Eureka, Utah. Filed Dec. 28, 1931. Serial No. 583,546. 6 Claims. (Cl. 214—148.)



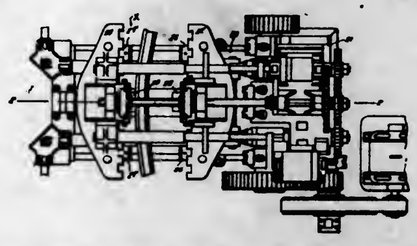
1. A mechanical shoveling device having in combination, a rocker structure having a curved portion and a dipper connected to the rocker structure adjacent one end of the curved portion, the radius of curvature of the rocker increasing in the direction away from the dipper, a supporting member on which said rocker rolls, and means to roll said rocker, said means connected to the rocker nearer the end away from the dipper than the end to which the dipper is attached, the curve of the rocker giving an accelerating dumping movement to the dipper.

1,906,001. SHOVELING MACHINE. JOHN SPENCE FINLAY and EDWIN BURTON ROYLE, Eureka, Utah. Filed Feb. 23, 1932. Serial No. 594,655. 18 Claims. (Cl. 214—132.)



1. In apparatus of the type described, the combination with a relatively fixed structure, a rotatable structure mounted thereon, a dipper supported by said rotatable structure and rockable thereon, and means for rocking said dipper on said structure to dump said dipper, of means actuated by the dipper during the rocking movement thereof to center said rotatable structure on said fixed structure.

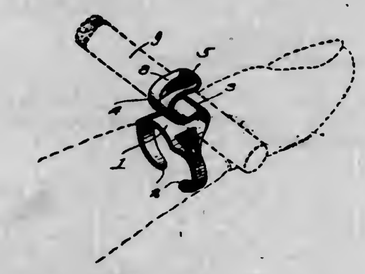
1,906,002. PROCESS AND APPARATUS FOR STRAIGHTENING RAILS. PAUL H. GAST, Buffalo, N. Y. Filed Apr. 28, 1932. Serial No. 608,050. 12 Claims. (Cl. 153—48.)



1. In a rail straightening press, the combination with a reciprocating ram and an adjustable head, each ram and head having a slidable gag and also anvils arranged to cooperate with the opposing gags, one of said gags being adapted to engage the under side of the rail base and the other gage being adapted to engage the head of the rail to turn the rail in either direction when one or the other of said gags is raised, and mechanism for operating the anvils.

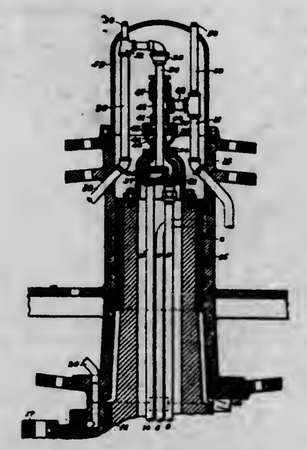
12. The method of straightening rails consisting in supporting a rail on its base, backing up one side of the base of the rail at two points applying pulsating pressures to the opposite side of the base of the rail and intermediate said points to flex the rail at right angles to its vertical axis, turning the rail on its side so that it will rest on the edges of its base and head portions, backing up either the head or the base and head portions of the rail at two points, and applying pulsating pressures opposite said points to either the base or the head of the rail and normal thereto intermediate said points to flex the rail in either direction to its vertical axis, turning the rail back on its base, repeating the pressing operations, moving the rail back and forth through the zone of operation and regulating the intensity of said pressures, all of said pressing operations being applied to broad surfaces of the rail so as not to mar or deform any portion thereof.

1,906,003. CIGARETTE RING. FRANK R. GREEN, Chicago, Ill., assignor to Joseph Peter, Chicago, Ill. Filed Aug. 18, 1930, Serial No. 476,220. Renewed Feb. 25, 1933. 1 Claim. (Cl. 131—51.)



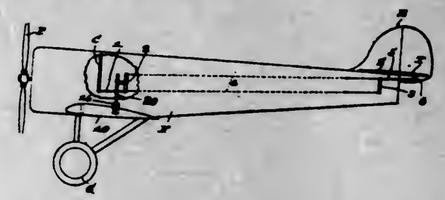
A cigarette holder comprising a ring provided on one edge with an outstanding extension carrying a U-shaped grip which overhangs the ring, the grip terminating in a tongue, the grip opening in a direction parallel to the axis of the ring, the grip extending over the top of the cigarette therein, to retain the cigarette when the finger of the smoker is moved transversely in knocking or shaking off ashes, the end of the tongue projecting, in a direction substantially parallel to the axis of the ring, beyong the cigarette in the grip, and beyond all other portions of the ring and the grip, to serve as a guard for the cigarette, the grip being spaced from the ring, by means of the extension, at a distance less than the diameter of the cigarette, to promote compactness.

1,906,004. LUBRICATING SYSTEM FOR PUMPING POWER. EDGAR E. GREVE, Bellevue, Pa., assignor to Oil Well Supply Company, Oil City, Pa., a Corporation of New Jersey. Filed Apr. 3, 1931. Serial No. 527,489. 9 Claims. (Cl. 184—6.)



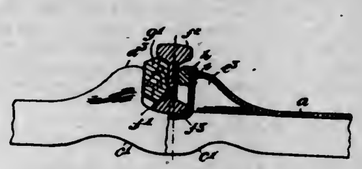
1. In a pumping power, a stationary bearing member, a rotatable member journalled on said bearing member provided with a conduit for supplying lubricant to a bearing surface, said bearing member being provided with a conduit for lubricant, and a universal joint connection between said conduits permitting relative rotation.

1,906,005. AIRPLANE. THEODORE P. HALL, Rochester, N. Y. Filed Aug. 13, 1931. Serial No. 556,901. 19 Claims. (Cl. 244—29.)



2. In an airplane, a wing of the variable lift type including a lift capacity increasing wing flap, said wing mounted for bodily movement to change its angle of incidence and automatically actuated for incidence angle change by air pressures acting thereon established by operation of the wing flap to increase wing lift.

1,906,006. RAILWAY AND LIKE SLEEPER. ARTHUR HOUNSELL HARVEY, Ebbw Vale, England, assignor of one-half to The Ebbw Vale Steel Iron & Coal Company Limited, Ebbw Vale, England, a Company of Great Britain. Filed Oct. 18, 1930, Serial No. 489,649, and in Great Britain Oct. 25, 1929. 9 Claims. (Cl. 238—60.)



1. In a pressed metal sleeper comprising a body of inverted trough section formed with integral hollowed rail-chair devices pressed upwardly above the top surface of the sleeper and having undulated sides and base edges in the region of such chair devices, the provision of cradles or liner devices inserted in the chair spaces and adapted for receiving and seating the rails and flanges on said cradle or liner devices to engage the sides of the chair devices.

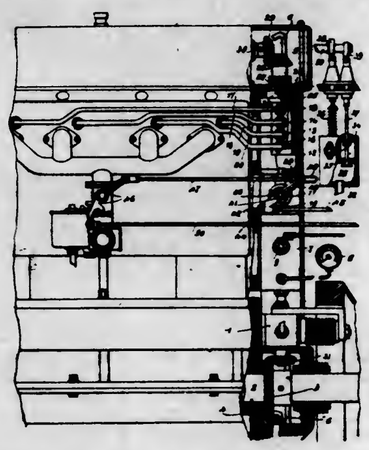
1,906,007. REMOVAL OF VOLATILE CONSTITUENTS FROM FERMENTED LIQUIDS. HERMAN HEUSER and RAYMOND S. HEUSER, Evanston, Ill., assignors, by direct and mesne assignments, to United States Process Corporation, Chicago, Ill., a Corporation of Illinois. Filed June 4, 1931. Serial No. 542,198. 7 Claims. (Cl. 202—52.)

1. In the removal of volatile constituents from alcoholic fermented liquids, preliminarily subjecting the liquid to alternate variations of reduced pressure below atmospheric and higher pressure, whereby the liquid is alternately drawn into foam and the foam collapsed, whereby the tendency of the liquid to form a persistent foam is destroyed, and subsequently subjecting the liquid to evaporation under reduced pressure.

1,906,008. APPARATUS FOR THE DISTRIBUTION AND INJECTION OF COMPRESSED AIR FOR INTERNAL COMBUSTION ENGINES. JEAN KONSTANTINOFF, Meudon, France. Filed May 2, 1928, Serial No. 274,639, and in France May 5, 1927. 2 Claims. (Cl. 123—76.)

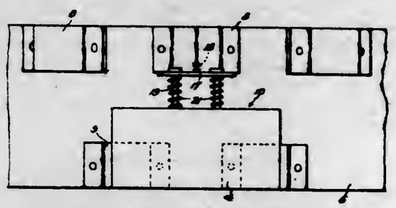
2. In combination with an internal combustion engine, an air compressor driven from the crank shaft of said engine, an air reservoir connected to said air compressor, a compressed air distributing valve device operated in

synchronism with the engine valve gear and adapted to control the supply of compressed air to the engine cylinders, ensuring expulsion from the engine cylinders of exhaust products which have not been expelled by the ascending pistons, a regulating device interconnected with the carburetor throttle control mechanism for effecting



regulation of the pressure of the air being distributed, the mechanism for regulating the admission of compressed air to the distributing valve device being operable, after the actuation of the throttle valve, to increase the compressed air supply without causing further actuation of said throttle valve.

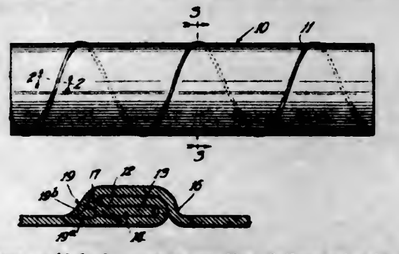
1,906,009. TREAD BLOCK. MELVIN T. LATTA, Hillsboro, N. C. Filed Oct. 11, 1932. Serial No. 637,316. 5 Claims. (Cl. 301—39.)



2. In a traction wheel, in combination, a rim, two series of staggerdly arranged traction lugs on said rim, a circular series of blocks arranged between the lugs of one series, means on each block engageable with said rim for securing the block against radial displacement, and means interposed between said block and an adjacent lug of the other series for normally urging said block axially relative to the wheel and into position between lugs of the first named series, said last named means including a plate adapted to be disposed against one side of said adjacent lug of the second series, bolts extending through said plate and one side of said block, and springs disposed about the bolts and interposed between said plate and one side of said block.

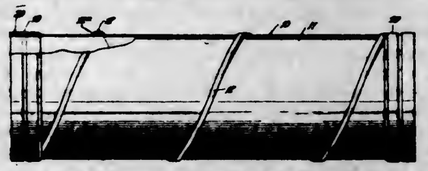
1,906,010. PIPE AND METHOD OF MAKING THE SAME. CARL G. NAYLOR, Chicago, Ill., assignor to Naylor Pipe Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1930. Serial No. 441,884. 5 Claims. (Cl. 113—35.)

2. A pipe comprising a ribbon of metal providing a plurality of spiral convolutions joined to each other by a spiral lock seam extending substantially the entire length of the pipe and including a spiral outwardly flaring portion of the wall of said pipe, the portion of the lock seam spaced from said outwardly flaring portion being welded to the pipe to form a fluid tight joint along said



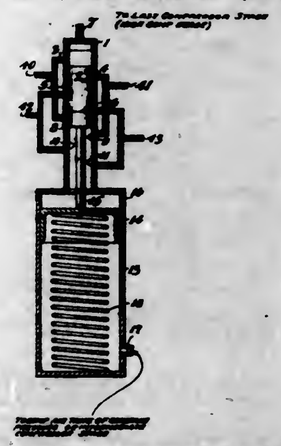
lock seam, said lock seam preventing failure of said weld by forces acting longitudinally of said pipe and, also, forces bending said pipe.

1,906,011. TUBING OR PIPE. CARL G. NAYLOR, Chicago, Ill., assignor to Naylor Pipe Company, Chicago, Ill., a Corporation of Illinois. Original application filed Jan. 9, 1931, Serial No. 507,686. Divided and this application filed Apr. 5, 1930. Serial No. 441,885. 2 Claims. (Cl. 137—75.)



1. A pipe comprising a ribbon of metal providing a plurality of spiral convolutions joined to each other by a spiral lock seam extending substantially the entire length of the pipe and including a spiral outwardly flaring portion of the wall of said pipe, the portion of the lock seam spaced from said outwardly flaring portion being welded to the pipe to form a fluid tight joint along said lock seam, said lock seam preventing failure of said weld by forces acting longitudinally of said pipe and, also, forces bending said pipe, and annular end pieces welded to the ends of the spiral convolutions.

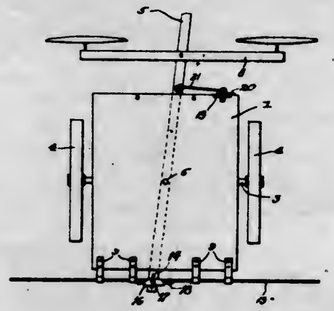
1,906,012. REGULATOR FOR MULTISTAGE COMPRESSOR SYSTEMS. WILHELM OCHEL, Berlin-Tegel, Germany, assignor to A. Borsig, G. m. b. H., Berlin-Tegel, Germany. Filed Dec. 2, 1931, Serial No. 578,579, and in Austria Oct. 1, 1930. 5 Claims. (Cl. 230—21.)



1. A regulator for air compressor systems, comprising a cylinder, a piston therein responsive to variations in the

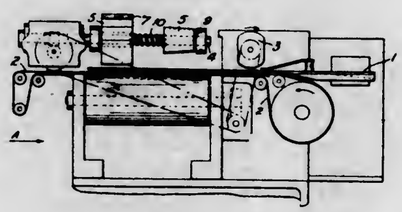
pressure of the system, means for counterbalancing the normal high pressure of the system, and separate counterbalancing means coacting with the piston for counterbalancing excess pressure in the compressor system.

1,906,013. PLANT SPRAYING MACHINE. MAURICE J. PHALEN, Marathon, N. Y. Filed July 23, 1930. Serial No. 470,041. 6 Claims. (Cl. 299—29.)



1. A plant spraying machine comprising a wheeled platform, a draft tongue connected for swinging movement to the platform, a spray nozzle supporting bar mounted for transverse sliding movement on the platform, means operatively connecting the bar to the tongue for actuation by said tongue and means for releasably securing the platform against movement relative to the tongue.

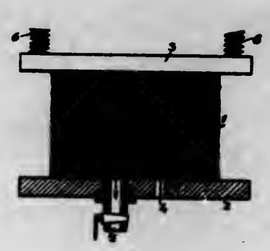
1,906,014. CIGARETTE MAKING MACHINE. FÉLIX FRÉDÉRIC RUAU, Deptford, London, England. Filed Sept. 5, 1931, Serial No. 561,481, and in Great Britain Sept. 12, 1930. 4 Claims. (Cl. 131—39.)



1. In apparatus for feeding cigarettes, the combination with a conveyor operable to receive successive cigarettes in end to end relation as they are severed from the rod and displace the same axially from one another, a pair of rotatable vanes extending substantially parallel to the direction of movement of the cigarettes, said vanes being each adapted to remove alternate cigarettes from said conveyor and move the same in a direction transverse to the axis of the rod and a roughened friction means carried by the vanes adapted to engage with and brake the axial speed of the cigarettes.

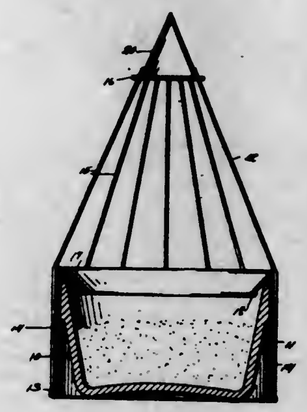
1,906,015. AFTER TREATMENT OF ARTIFICIAL SILK. OTTO SCHWARZKOPF, Linz, Austria. Filed Sept. 25, 1930, Serial No. 484,390, and in Czechoslovakia Aug. 21, 1929. 1 Claim. (Cl. 18—8.)

An apparatus for the after-treatment of artificial silk obtained in the form of a spun cake by the spinning pot process, comprising a plate for each end of the cake, adjustable loading devices for the plates adapted to hold the plates in fluid-tight contact with the ends of the spun



cake, means on the plates for the admission of liquids used in the treatment, an adjustable outlet for the liquids provided in one of the plates.

1,906,016. POULTRY WATER AND FEED PROTECTOR. LEOPOLD STECHER, Wichita, Kans., assignor of one-third to Karl Stecher, Wichita, Kans. Filed Sept. 30, 1930, Serial No. 485,512. Renewed Nov. 15, 1932. 3 Claims. (Cl. 119—61.)

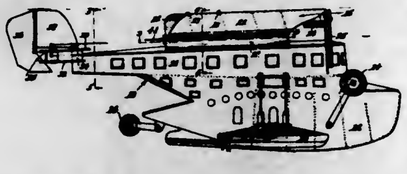


1. A feed protector of the character described to be disposed about an open receptacle comprising a vertically disposed cylindrical base portion having an open bottom, a plurality of upwardly extending and inwardly converging protecting members positioned about the periphery of the base in spaced relation to each other, means for securing the upper ends of said protecting members in spaced relation to each other, an inwardly extending inverted frustoconical shield secured to the upper end of said base and disposed over the open end of the receptacle, and a cone shaped member positioned on the upper surface of said securing means.

1,906,017. AIRPLANE. FRITZ RUBEN SUNDLING, Chicago, Ill., assignor of one-fourth to Albert John Christenson, Chicago, Ill. Filed Mar. 18, 1932. Serial No. 599,636. 11 Claims. (Cl. 244—12.)

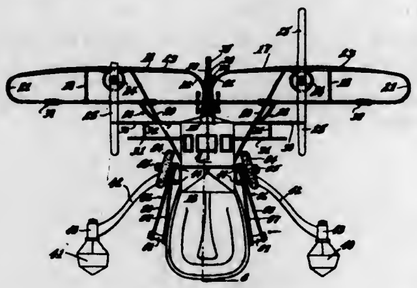
1. The combination in an airplane, of a fuselage, a pair of laterally extending wings of tubular formation providing air passageways extending in a direction longitudi-

nally of the fuselage center line, and a pair of transversely restricted auxiliary tubular air receiving members mounted adjacent the median longitudinal line of the plane and



cooperatively beneath said wings, said auxiliary tubular members communicating between their ends laterally with the superposed tubular wing portions.

1,906,018. AIRPLANE. FRITZ RUBEN SUNDLING, Chicago, Ill., assignor of one-fourth to Albert John Christenson, Chicago, Ill. Filed Mar. 18, 1932. Serial No. 599,637. 11 Claims. (Cl. 244—2.)



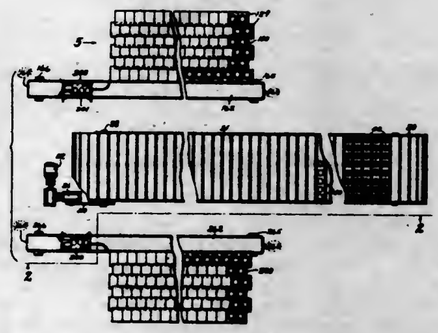
1. In an aircraft of the character described, in combination with the body or fuselage thereof, landing gear comprising forward ground wheels, said wheels being mounted upon vertically swingable frames or standards, said frames or standards being fixed on transversely disposed inclined shafts extending laterally outward and upward from opposite sides of the body or fuselage and being operably joined for simultaneous rotation, power means for actuating said shafts, at will, to raise and lower said ground wheels, a tail skid pivotally mounted at the rear portion of the body or fuselage, and an operative connection between said tail skid and the actuating means for the forward ground wheels whereby the tail skid is raised and lowered simultaneously with the ground wheels.

1,906,019. NUMBERING MACHINE. VICTOR A. SVENSSON, Montclair, N. J., assignor to The Bates Manufacturing Company, West Orange, N. J., a Corporation of New Jersey. Filed July 9, 1930. Serial No. 466,740. 32 Claims. (Cl. 101—88.)



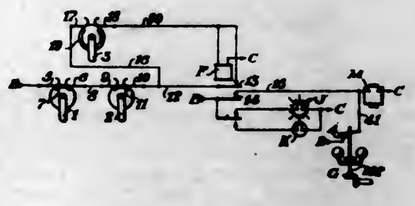
1. In a numbering machine, a main frame, a head carrying the numbering wheels mounted for reciprocatory movement in said frame and having an actuating rod, and means for holding said head in a depressed position in said frame comprising a groove in said rod and a member having a loose connection with said frame, said connection providing for sufficient movement of said member with respect to said frame and in any direction in a plane transverse to the axis of said rod to bring such member into and out of coacting relation with said groove.

1,906,020. COIL TEST APPARATUS. CLARE S. SWAYZE, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Nov. 29, 1929. Serial No. 410,448. 15 Claims. (Cl. 175—183.)



1. The method of testing electrical coils comprising, the acts of heating said coils to a determinable temperature, and maintaining said coils in a preferred temperature condition for a specified time, subjecting the coils under the existing temperature conditions to an endurance test, and finally examining the condition of circuits through the coils while in the specified temperature condition.

1,906,021. RAILWAY TRAFFIC CONTROLLING APPARATUS. HOWARD A. THOMPSON, Edgewood, Pa., assignor to The Union Switch & Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Dec. 26, 1931. Serial No. 583,372. 21 Claims. (Cl. 246—182.)



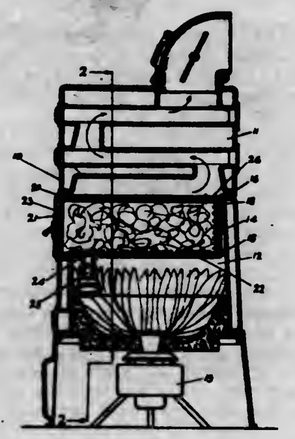
1. An automatic control system for railways including, a first stick relay and a second stick relay on the car and both normally energized, a brake controlling magnet controlled jointly by said stick relays; a car carried trip arm and a car carried reset arm to jointly control said stick relays, and arranged to deenergize the first stick relay only when the trip arm only is actuated, to deenergize both stick relays when the trip arm and the reset arm are concurrently actuated, and to reenergize said first stick relay when the reset arm only is actuated, and traffic controlled trackway means to actuate the said car carried trip and reset arms.

1,906,022. PLIABLE CHOCK BLOCK. KENNETH J. TOBIN, Chicago, Ill., assignor to Camel Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 11, 1929. Serial No. 346,121. 9 Claims. (Cl. 188—32.)



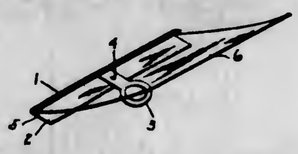
1. In a chock block, a flexible body portion having an arcuate groove, and a mobile material in said body portion and means for securing said body portion to a base.

1,906,023. INCINERATOR APPLIANCE FOR HEATING UNITS. KENNETH J. TOBIN, Chicago, Ill. Filed Mar. 14, 1931. Serial No. [illegible]544. 8 Claims. (Cl. 126—224.)



1. The combination with the combustion chamber of an installed heating unit provided with a heat emitting source, a door opening in said chamber and a door for closing said opening, of a receptacle mounted in said chamber above said heat source, said receptacle having an open front end lying in said door opening, said door serving to close said end, whereby a substantially closed receptacle is provided, said receptacle and said heat emitting source constituting an incinerator.

1,906,024. METAL BINDING FOR CALENDARS. FREDERICK CLIFFORD TOSO, Cincinnati, Ohio, assignor to The Stuebing Automatic Machine Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 28, 1930. Serial No. 498,607. 8 Claims. (Cl. 40—107.)



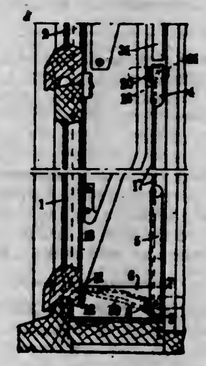
1. As an article of manufacture, a metallic binding for calendars and the like comprising a strip of sheet metal substantially V-shaped in cross-section, and a metal tab, and means for securing said tab to a face of said strip before the article to be bound is inserted.

1,906,025. GAME APPARATUS. THEODORE VAN STEENKISTE, Chicago, Ill. Filed Mar. 9, 1931. Serial No. 521,224. 3 Claims. (Cl. 273—106.)



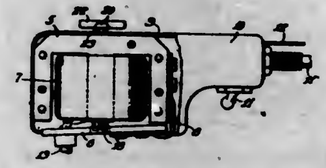
2. In game apparatus, an alley, an upwardly curved portion at one end of said alley, a plurality of target supporting prongs mounted upon the extremity of said upwardly curved portion, target members dislodgably mounted upon said prongs, and a gaming missile adapted to be used in dislodging said target members from said supporting prongs.

1,906,026. TILTING DEVICE FOR SLIDING WINDOWS. WALDEMAR VON FISCHER, Hamburg, Germany, assignor to Fa. Richard Biel, Hamburg, Germany. Filed Dec. 3, 1931, Serial No. 578,659, and in Germany Feb. 20, 1930. 8 Claims. (Cl. 20—42.)



1. A tilting device, comprising a tiltable window sash, a lever, means pivotally supporting said lever, a cam pin carried by one end of said lever, a rod attached to said cam pin, and a wire cable pivot carried by said sash, said rod being adapted to lock said wire cable pivot in the folded position of said lever.

1,906,027. VIBRATOR CONTROL DEVICE. LEO J. WAHL, Sterling, Ill., assignor to Wahl Clipper Corporation, Sterling, Ill., a Corporation of Illinois. Filed Feb. 1, 1932. Serial No. 590,181. 4 Claims. (Cl. 715—386.)



1. An alternating current vibrator having a body portion which is made up of a core, a coil wound on said core and having means to connect said coil to an alternating current source and a housing for said core and coil, said vibrator having an armature extending across the face of said core and yieldingly mounted on the body portion to vibrate in response to the current flow in said coil, said core having a small core section thereof movable outwardly into the plane of said armature whereby to adjust the power imparted to the armature.

1,906,028. UPHOLSTERY PAD AND METHOD OF MAKING THE SAME. ARTHUR ERNEST WEBER, Forest Hill, London, and JOSEPH ARTHUR HOWARD, Streatham Hill, London, England, assignors to The Hairlock Company Inc., New York, N. Y., a Corporation of Delaware. Filed Sept. 17, 1930, Serial No. 482,518, and in Great Britain Sept. 24, 1929. 25 Claims. (Cl. 18—48.)



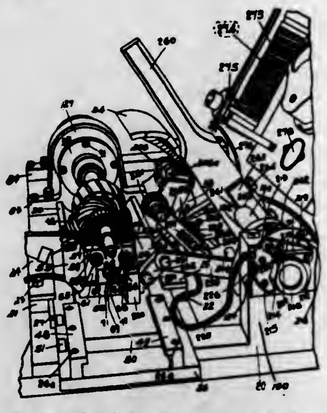
8. A method of producing an upholstery pad, consisting in confining a mass of intermingled upholstery fibres in a mould in a loosely associated condition, dipping said mould and confined mass in a liquid dispersion of rubber, draining said mould and confined mass, and drying said confined mass in substantially the shape imparted to it by the mould and in an open mesh condition.

14. An upholstery pad comprising a mould-shaped, open mesh mass of intermingled hair in a loosely associated condition and held in association by rubber.

1,906,029. ORE SEPARATION. ARTHUR J. WEINIG and ROBERT E. CUTHBERTSON, Golden, Colo., assignors to The American Metal Company, Limited, New York, N. Y., a Corporation of New York. Filed Dec. 8, 1927. Serial No. 238,717. 10 Claims. (Cl. 209—167.)

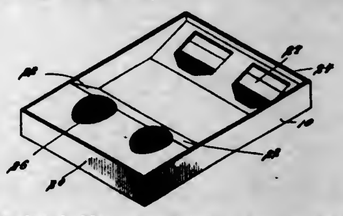
1. Method of separation by flotation of gangue from other minerals, which consists in adding to the ore pulp containing lead, copper and readily floatable gangue, prior to flotation and in addition to suitable flotation agencies a small proportion of the glue sufficient to inhibit the flotation of said copper and said readily floatable gangue.

1,906,030. ARMATURE TEST MACHINE. RUPERT C. WHELCHEL, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 6, 1931. Serial No. 535,393. 30 Claims. (Cl. 175—183.)



1. An armature testing device comprising, in combination, means for rotatably supporting an armature, a dynamo field frame having separable pole pieces and windings surrounding the pole pieces, commutator brushes movable with the separable pole pieces and normally engaging the commutator of the armature, and means for moving at least one of the pole pieces with a brush away from the other pole piece to permit the placing of the armature upon its supporting means, or for moving the pole piece with a brush toward the armature to provide a generator frame and engage said brush with the commutator of the armature.

1,906,031. ARTICLE HOLDER. LOUIS R. WILMARTH, Attleboro, Mass., assignor to Howard S. Scholes, Edgewood, R. I. Filed Apr. 24, 1930. Serial No. 446,866. 2 Claims. (Cl. 206—44.)



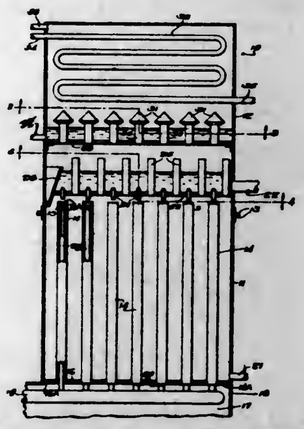
1. A display holder comprising a box having bottom and side walls, an article retaining insert in said box comprising a base lying along said bottom wall and portions at either end thereof raised and spaced from said bottom wall, said raised portions being provided with recesses in their upper surfaces and extending downwardly and terminating short of said base and bottom wall to receive the opposite ends of an article and support the ends above and in spaced relation to said base and bottom wall.

1,906,032. CONTAINER AND METHOD OF FORMING SAME. ALLEN B. WILSON, Chicago, Ill., assignor to Acme Steel Company, Chicago, Ill., a Corporation of Illinois. Filed June 29, 1929. Serial No. 374,780. 13 Claims. (Cl. 217—80.)



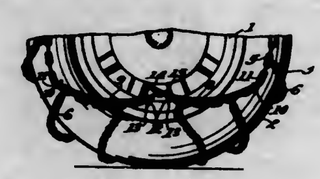
1. A container comprising a vessel, a cover mounted on said vessel and having an outwardly and upwardly extending annular surface and an adjacent outwardly extending annular surface, and a rim attached to said vessel and having a downwardly and inwardly inclined resilient flange engaging said first-named surface.

1,906,033. VACUUM SURFACE DISTILLATION. ROBERT E. WILSON, Chicago, Ill., assignor to Standard Oil Company (Indiana), Chicago, Ill., a Corporation of Indiana. Filed Jan. 2, 1930. Serial No. 417,888. 7 Claims. (Cl. 196—77.)



1. In distillation apparatus, a still, a plurality of tubes in said still, means for heating said tubes, and means for distributing oil in a film on said tubes comprising a plate having distributor nozzles aligned with said tubes, and having vapor discharge conduits between said nozzles for the removal of vapors surrounding said tubes.

1,906,034. TIRE CHAIN. BRUCE D. WOOLLEY, Johnstown, Ohio. Filed Oct. 14, 1932. Serial No. 637,801. 6 Claims. (Cl. 152—14.)

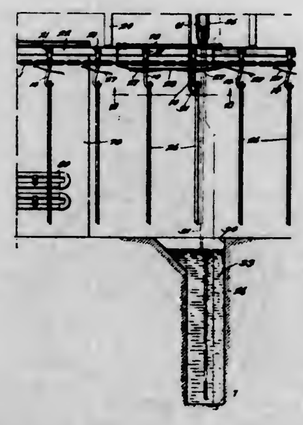


1. In a tire chain, two longitudinally extending side sections of equal length, a rod attached to each of one of said sections, said rods being attached at one of their ends to the chain and lying substantially within the length of the latter, means formed near the other ends of said rods for the attachment to the end of said chain section, and a hook and eye formed with the latter ends of said rods for connection to one another.

1,906,035. METHOD OF CHARGING COMPRESSED GAS CYLINDERS. ROBERT G. WULFF, Los Angeles, Calif. Filed Sept. 22, 1928. Serial No. 307,766. 12 Claims. (Cl. 23—247.)

1. The process which comprises simultaneously curing the solvent and gas deficiency of a compressed gas cylinder which comprises injecting into a cylinder having such deficiency a very concentrated solution of such gas in such solvent, said solution being very cold and being under high pressure.

1,906,036. CONVEYING MECHANISM. WILLIAM E. WUNDERLICH, Muncie, Ind., assignor to The Moore Company, Muncie, Ind., a Corporation of Indiana. Filed May 28, 1930. Serial No. 456,563. 8 Claims. (Cl. 214—17.)



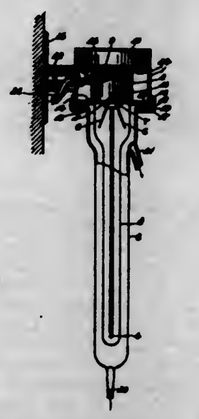
1. The combination with a traveling conveyor; of an object supporting hook caused thereby to travel therewith; a dislodging hook for removing the object from the supporting hook; mechanism in actuating relation to the dislodging hook to lower the dislodging hook and the object, said mechanism including means for thereafter lifting the dislodging hook to position the object to be caught by and redeposited upon the supporting hook; and means for coordinating the movement of said mechanism and said conveyor, whereby the dislodging hook is caused to overtake the supporting hook.

1,906,037. ELECTRODE IN DISCHARGE TUBES. GUSTAV ZECHER and JOHANNES BRUIJNES, Eindhoven, Netherlands, assignors, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Jan. 6, 1926, Serial No. 79,590, and in the Netherlands Mar. 28, 1925. 8 Claims. (Cl. 176—126.)



1. A discharge tube with positive column discharge and a leading-in conductor in the neighbourhood of which a portion of the wall of the tube is coated with a conductive layer which is at least partly covered by a magnesium coating, this coating serving as an electrode.

1,906,038. INSTALLATION SUITABLE FOR THE IRRADIATION OF SUBSTANCES WITH ULTRA-VIOLET LIGHT. GUSTAV ZECHER, Eindhoven, Netherlands, assignor, by mesne assignments, to General Electric Company, Corporation of New York. Filed July 9, 1929, Serial No. 377,025, and in the Netherlands Sept. 8, 1928. 3 Claims. (Cl. 99—2.)

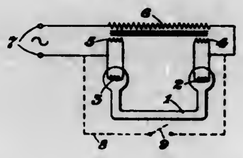


1. An installation adapted for the irradiation of substances with ultra-violet light, comprising a casing, an electric discharge tube having a gaseous filling mounted thereon, a vessel to contain the substance to be irradiated also mounted on said casing, the said discharge tube being provided with a ring for closing off the top of said vessel, the said vessel having a rim, and means for pressing said rim against said ring.

1,906,039. GASEOUS ELECTRIC DISCHARGE DEVICE. GUSTAV ZECHER, Eindhoven, Netherlands, assignor to General Electric Company, a Corporation of New York. Filed July 22, 1932, Serial No. 624,126, and in the Netherlands July 25, 1931. 4 Claims. (Cl. 176—124.)

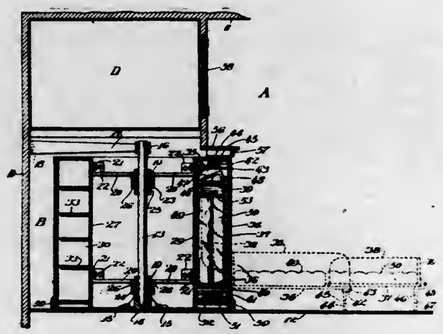
1. In combination an electric discharge device comprising a container, a gaseous atmosphere therein, electrodes sealed therein, at least one of said electrodes having

high electron emission characteristics when heated and a circuit for said device comprising a transformer, the primary of said transformer being connected in series with the discharge path in said device and serving as the sta-



bilizing impedance for the discharge in said device, the secondary of said transformer being connected to said thermionic electrode and adapted to supply the heating current for said electrode.

1,906,040. BUILDING STRUCTURE. GUSTAF ALEXANDER, Chicago, Ill. Filed Apr. 3, 1931. Serial No. 527,485. 6 Claims. (Cl. 20—1.11.)



1. In a building structure of the character described, a main compartment, an adjoined auxiliary compartment, the partition wall between said compartments having a communicable opening of given dimensions, and a multiple utility unit rotatable about a vertical axis within said auxiliary compartment, said utility unit comprising a plurality of separate utilitarian compartments each successively brought into cooperate relation to said main compartment through the communicable opening between the latter and said auxiliary compartment, and doors on the partition wall at the sides of said communicable opening cooperating with the positioned utilitarian compartment of said rotatable multiple utility unit for closing said communicable wall opening and releasably holding, said utility unit in its cooperatively set position.

1,906,041. METHOD FOR THE FORMATION OF FILAMENTS AND THE LIKE OF A CELLULOSE ESTER. HENRI LOUIS BARTHELEMY, Milan, Italy, assignor to Ruthaldo Company Inc., New York, N. Y., a Corporation of New York. Filed July 28, 1927, Serial No. 209,160, and in France Dec. 28, 1926. 2 Claims. (Cl. 18—54.)

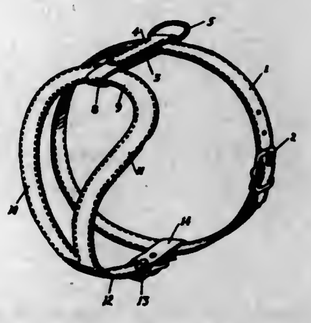
1. A method of manufacturing artificial threads which consists in injecting an acetone solution of cellulose acetate into a mixture of a polyhydric alcohol and a hydrocarbon boiling above 80° C. which mixture will extract acetone from the threads but is not a solvent of cellulose acetate, and thereafter collecting, rinsing and drying the threads thus formed.

1,906,042. SPINNING CELL FOR THE MANUFACTURE OF ARTIFICIAL FILAMENTS WITH AUTO-RECOVERY OF THE VOLATILE SOLVENTS. HENRI LOUIS BARTHELEMY, Rome, Ga. Filed Sept. 14, 1929. Serial No. 392,612. 6 Claims. (Cl. 18—8.)



1. Apparatus for dry spinning filaments of cellulose esters or ethers dissolved in organic volatile solvents and the like, comprising a closed spinning cell containing a confined body of air or gases and having two superposed portions, an inlet for admitting solution to the nozzle in the upper portion and an outlet for the filament in the lower portion, a spinning nozzle in the upper portion of the cell, means for heating the major portion of the cell exterior to the cell, means for cooling the cell adjacent the outlet, means exterior to the cell for preventing passage of air or gases into or out of the cell thermal insulating means between the heated portion and the cooled portion through the filament outlet passage, and means for withdrawing the solvent condensate from the cooled portion of the cell.

1,906,043. DOG HARNESS. MAX BERNSTEIN, Cincinnati, Ohio. Filed Feb. 4, 1931. Serial No. 513,800. 2 Claims. (Cl. 119—96.)



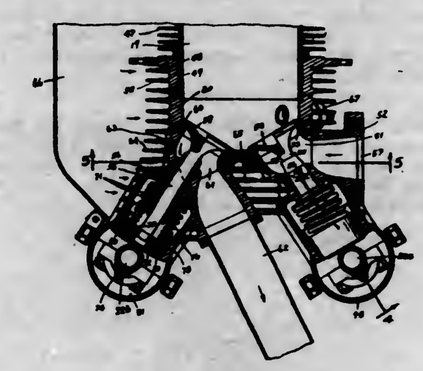
1. A harness of the type described comprising a body strap, a collar, said collar comprising an elongated loop wider at the top and terminating in a unitary strap at the bottom, said collar and strap being formed from a single flat piece of material without seams, means for securing the upper portion of said collar to said body strap, and means for securing the lower strap of said collar to the lower portion of said body strap.

1,906,044. IMPROVING CRACKED PETROLEUM DISTILLATES. ROBERT E. BURK, Cleveland, Ohio, assignor to The Standard Oil Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 9, 1929. Serial No. 384,798. 5 Claims. (Cl. 44—9.)

1. A volatile cracked petroleum distillate motor fuel treated with about 0.0004 to 1 per cent of a reagent selected from the group consisting of semicarbaside, derivatives of semicarbaside in which substituent radicles are in the 4 position, and hydrazines containing an aromatic radicle except mono-naphthyl.

3. A volatile cracked petroleum distillate motor fuel treated with about 0.0004 to 1 per cent of a hydrazine containing an aromatic radicle except mono-naphthyl.

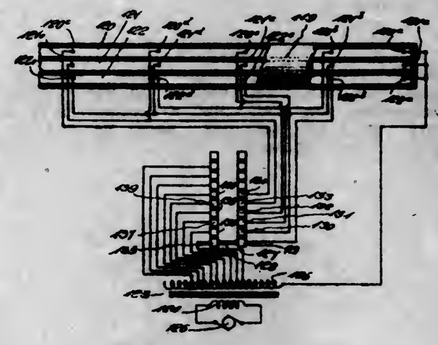
1,906,045. AVIATION ENGINE. LOUIS CHEVROLET, Baltimore, Md., and RUSSELL J. PARRISH, Indianapolis, Ind., assignors, by mesne assignments, to The Glenn L. Martin Co., Baltimore, Md., a Corporation of Maryland. Filed June 24, 1929. Serial No. 373,209. 7 Claims. (Cl. 123—59.)



1. In an internal combustion engine the combination of a plurality of individual cylinders arranged in straight line formation, a crank shaft associated with each cylinder and coincident with said alignment, a cam shaft likewise in alignment therewith and positioned oppositely with respect to the cylinders and at the remote end from said crank shaft, a multiple section gear-chain housing separably attached to said engine and connecting one end of the cam shaft and crank shaft, and resilient means interposed between said sections to compensate for laterally misaligning stresses applied to said sections.

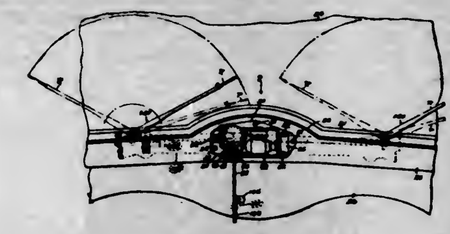
1,906,046. ELECTRICAL CONTROL SYSTEM. BEN J. CHROMY, Hopkins, Minn., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Original application filed May 23, 1929, Serial No. 365,534. Divided and this application filed July 12, 1930. Serial No. 467,602. 4 Claims. (Cl. 177—346.)

2. In a visual display system, a multiplicity of parallel extending tubes of transparent material, a plurality of glow discharge electrodes positioned at spaced intervals in each of said tubes, gases of different color characteristics saturating said tubes, and means for applying different potentials across separate sets of said electrodes in each of said parallel extending tubes for producing ionizing effects in predetermined order in differing parts of said



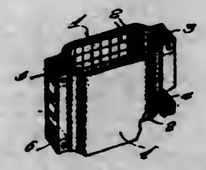
tubes for producing a predetermined composite color effect for effecting a visual display according to a particular pattern.

1,906,047. WINDSHIELD CLEANER. ROBERT M. CRITCHFIELD and JOHN W. LAWSON, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Feb. 20, 1929. Serial No. 341,489. 16 Claims. (Cl. 15—255.)



1. In a windshield cleaner, a wiper shaft, motor driven instrumentalities connected with said wiper shaft, a motor for driving said instrumentalities, said instrumentalities including a rack bar, a bracket supporting said rack bar, contact elements supported on said bracket, and normally in circuit closing relation, means on said rack bar for actuating said contact elements to circuit open and circuit closed relation, upon predetermined movements of said rack bar.

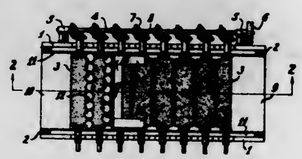
1,906,048. THERMIONIC TUBE. CHESTER L. DAVIS, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y., a Corporation of Delaware. Filed Jan. 29, 1929. Serial No. 335,860. 3 Claims. (Cl. 250—27.5.)



1. An electron tube comprising an enclosing envelop, a cathode, a control grid and an anode mounted therein, a resistance element carried by said anode and a shield

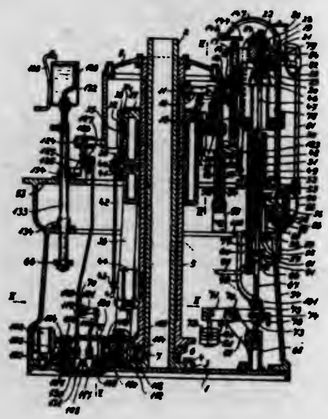
grid supported by said resistance element in spacial relation to said anode and between said anode and said control grid and disposed in an electrical path to receive a predetermined charge from said anode through said resistance element.

1,906,049. CLEAN-OUT MECHANISM. WILLIAM DE BACK, San Jose, Calif., assignor to Food Machinery Corporation, San Jose, Calif., a Corporation of Delaware. Filed Mar. 30, 1931. Serial No. 526,253. 7 Claims. (Cl. 198—127.)



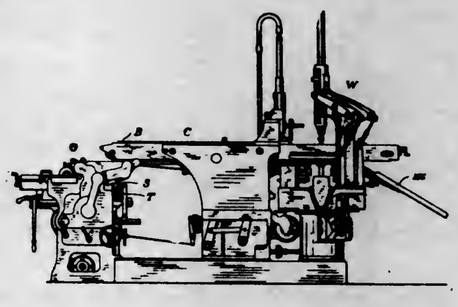
1. In a fruit treating apparatus a plurality of rotatable supporting members forming a fruit supporting runway, means for rotating all of said members in the same direction, a clean out means supported upon said members for advancement thereover by frictional contact therewith.

1,906,050. MACHINE FOR GRINDING AND POLISHING OPTICAL LENSES, SPECTACLE GLASSES, AND THE LIKE. JOSEF DESENBERG, Cologne, Germany. Filed Apr. 15, 1929, Serial No. 355,280, and in Germany Apr. 17, 1928. 17 Claims. (Cl. 51—134.)



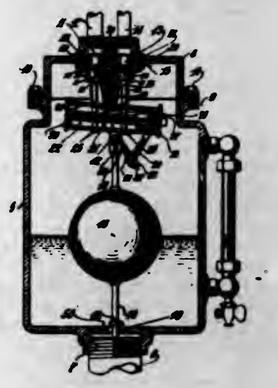
1. A machine for grinding lenses in which the work is subject to coarse grinding, fine grinding and polishing at successive stations arranged in a circular series, the combination of grinding tools rotatably mounted at the respective stations and having the desired surface of curvature, a rotary head, work holders, supports for said work holders, pivotally mounted on said rotary head to permit the oscillation of said work holders about points on the axis of said respective tools at approximately the centers of curvature of the surface to be ground, and means for intermittently rotating said head for moving said work holders from station to station.

1,906,051. CONVEYING SYSTEM. THEODORE A. FEDERWITZ and WALTER T. BAILEY, Philadelphia, Pa., assignors to Stokes and Smith Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 24, 1928. Serial No. 321,635. 54 Claims. (Cl. 93—54.)



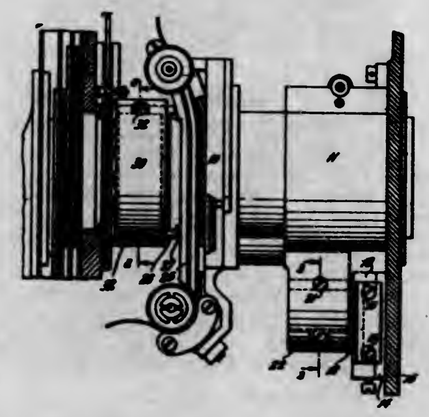
1. In the art of wrapping boxes, the method which comprises moving boxes and individual wrappers in the same direction toward a wrapping station, during intervals in which the wrappers are stationary, effecting adhesive engagement between wrappers in succession and individual boxes, and continuing moving the boxes and adherent wrappers in said direction as units in succession to the wrapping station.

1,906,052. BOILER RETURN TRAP. VALENTINE FINA, Milwaukee, Wis., assignor to Milwaukee Valve Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed July 5, 1928. Serial No. 290,550. 7 Claims. (Cl. 137—103.)



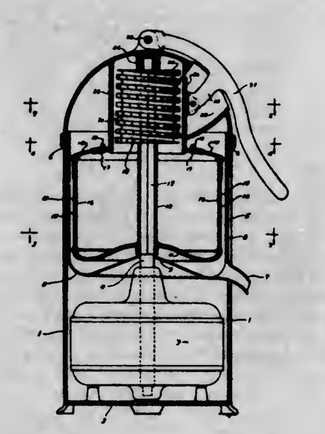
1. In a return trap, a receptacle having ports in one wall, valves for the ports, a member within the receptacle connecting the valves whereby one is open while the other is closed, a guideway carried by the member, a weight movable along the guideway to maintain the valves in either position by gravity, and means including a pivotally connected weight for moving the member to cause the weight to move along the guideway.

1,906,053. FILM GATE SUPPORT FOR MOTION PICTURE PROJECTION MACHINES. LOUIS SIMON FRAPPIER and EWALD BOECKING, Brooklyn, N. Y., assignors to International Projector Corporation, New York, N. Y., a Corporation of Delaware. Original application filed June 26, 1929, Serial No. 374,676. Divided and this application filed July 22, 1930. Serial No. 469,669. 6 Claims. (Cl. 88—17.)



1. In a projection machine, a supporting housing for a film gate, a pin carrying said housing and having a pair of oppositely disposed shoulders and screws threaded in said housing and engaging said shoulders for rotatably adjusting said housing about said pin.

1,906,054. FRUIT JUICE EXTRACTOR. PAUL S. FREESE, Marietta, Ohio, assignor of one-fourth to Ira J. Dodge, Marietta, Ohio. Filed Apr. 22, 1930. Serial No. 446,884. 19 Claims. (Cl. 146—3.)



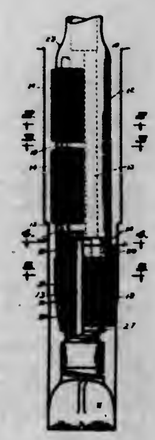
2. In a fruit juice extractor, a casing having an inlet passageway, a cylindrical grinder in said casing, means in said passageway to force fruit into said casing against the grinder, a centrifugal basket positioned to receive crushed fruit from said casing, and a common means for rotating the grinder and the basket.

1,906,055. RIBBON REEL. BERTRAM J. GOLDSMITH, Allentown, Pa., and JOSEPH W. STARR, New York, N. Y. Filed Apr. 8, 1931. Serial No. 528,572. 8 Claims. (Cl. 242—119.)



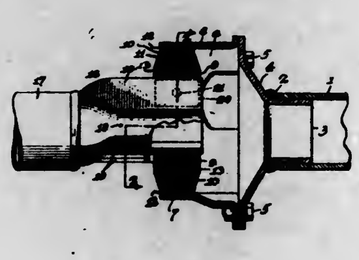
1. A ribbon reel comprising edge sections upon which a length of ribbon is to be wound, and opposed extensions at each end of said edge sections flexed toward each other by said ribbon to form arcuate supports therefor.

1,906,056. UNDERREAMER. FRANK A. GOLISH, South Gate, Calif., assignor of one-half to George E. Fentress, Los Angeles, Calif. Filed Apr. 8, 1929. Serial No. 353,462. 6 Claims. (Cl. 255—74.)



1. In a reamer adapted to function when rotated right-hand, a body, a wall engaging member projected in fixed position from one side of said body; a journal portion formed on said body, longitudinally adjacent said wall engaging member and concentric with the axis of revolution of said body; an eccentric bushing rotatably mounted on said concentric journal; stops on said bushing and said body cooperating to fix limits to the rotation of said journal within said bushing, the limit to said rotation in a left-hand direction being that at which the throw of said eccentric bushing is on the same side of said body as said wall engaging member and the limit to said rotation in a right-hand direction being that at which said throw is on the side of said body opposite said wall engaging member; and a cutter rotatably mounted on said eccentric bushing.

1,906,057. UNIVERSAL JOINT. FREDERICK M. GUY, Detroit, Mich., assignor to Guy-Murton Incorporated, Detroit, Mich., a Corporation of Michigan. Filed Sept. 13, 1929. Serial No. 392,353. 3 Claims. (Cl. 64—96.)



1. In a universal joint, the combination of a casing of internal angular formation in cross-section, a member projecting into said casing, a head on said member within said casing and of exterior angular formation with a continuous space between said head and casing, and a yieldable unit including a rubber band and interior and exterior metal rings with said band vulcanized to said rings, said unit being secured within said space between said casing and head.

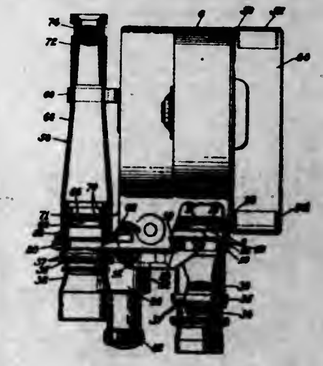
1,906,058. GARMENT HANGER. MARTIN V. GRAY, Stockton, Calif. Filed Aug. 18, 1931. Serial No. 557,777. 1 Claim. (Cl. 223—64.)



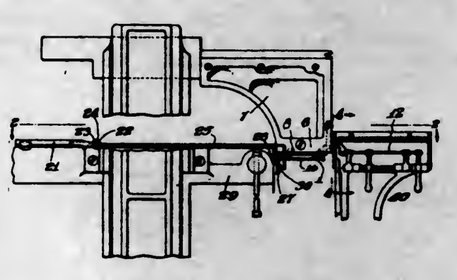
A garment hanger comprising a bar on which to support a garment, a pair of longitudinally spaced clip elements on the top edge of the bar and extending lengthwise thereof, the opposite ends of said elements normally resting on and cooperating with the bar to clamp the adjacent portions of the garment, ears depending from the elements intermediate their ends and straddling the bar, and pivot connections between said ears and the bar; the top edge of the bar, from the ears to the adjacent ends of the elements, being depressed whereby the adjacent portions of the elements may normally lie flush with the bar while permitting them to be depressed to raise the opposite ends of the elements from the bar.

1,906,059. FOCUSING DEVICE FOR CAMERAS. JOHN B. HADAWAY, Swampscott, Mass. Filed Nov. 16, 1929. Serial No. 407,769. 3 Claims. (Cl. 95—44.)

1. A motion-picture camera comprising a housing in the front face of which is located a photographic aperture, a view-finder carried by the housing and located laterally thereof, and a turret rotatably mounted upon the housing and carrying a plurality of photographic lenses, the relative locations of the view-finder, photographic aperture, and turret being such that each of the lenses can be rotated to place the optical axis thereof in alinement with that of the view-finder in focusing the lens, or in alinement with the optical axis of the photographic aperture for locating the lens in picture-taking position.



1,906,060. SAFETY ATTACHMENT FOR TYPOGRAPHICAL COMPOSING AND CASTING MACHINES. WARREN G. HAMILTON, Atlantic City, N. J., assignor of one-half to Joseph Ginsburg, Philadelphia, Pa.; Gertrude Hamilton administratrix of said Warren G. Hamilton, deceased. Filed Mar. 12, 1927. Serial No. 174,768. 5 Claims. (Cl. 199—52.)



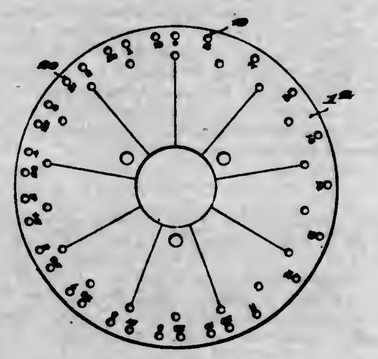
1. In a typographical composing and casting machine of the class including a matrix assembling elevator and a retractible rail for supporting the matrices, capable of being set to cause assembling of matrices at relatively different levels in said assembling elevator, and level regulating means including a manually operable pivot capable of being rotated into two different positions, to present lines of assembled matrices at relatively different levels to the casting mechanism, a safety device governed by the setting of both said retractible rail and said level regulating means, including eccentric means carried by said manually rotatable pivot, and a spring-retracted catch-slide operable by said eccentric against the force of the retracting spring thereof, said catch-slide being in operative alignment with said rail when said rail is in its inner position, and being out of alignment with said rail when the latter is in its retracted position, and being adapted to engage said rail, thereby to lock said matrix assembling elevator against upward movement when advanced towards the rail against the force of the retracting spring thereof, while said rail is in its inner position.

1,906,061. SEAT. WALTER M. HANSON, Grand Rapids, Mich., assignor to American Seating Company, Grand Rapids, Mich., a Corporation of New Jersey. Filed Dec. 19, 1930. Serial No. 503,456. 2 Claims. (Cl. 155—85.)



1. In a device of the class described, a pair of seat ends, a seat supporting member secured therebetween and provided with a centrally disposed bore, a dished member secured within said bore, a disc having a peripheral flanged edge secured to said seat supporting member, a member having a dished portion adapted to fit within the peripheral flanged edge of said disc, a clamping plate fitting within said dished portion and a bolt secured to said dished member and said clamping plate for securing said member rotatably with respect to said clamping plate and said disc.

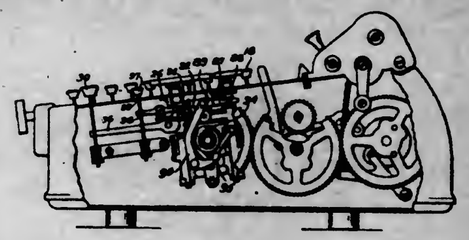
1,906,062. INDEX CENTER. JOHN HARLEY, Glasgow, Scotland, assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Filed Sept. 22, 1931. Serial No. 564,406. 4 Claims. (Cl. 90—57.)



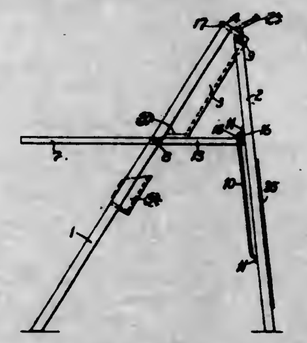
3. An index centering disc, comprising an index plate provided with a standard series of spaced holes, and a second circular series of spaced holes which latter are offset circumferentially from the first named series by an amount which is equivalent to the number of minutes on the work, said last named series of holes extending into the plate a distance less than one-half the thickness of the latter, and said plate having markings on both sides to provide for cranking in a clockwise or counter clockwise direction.

1,906,063. KEYBOARD FOR REGISTERS. STUART HILDER, Glencarlyn, Va., assignor to Monroe Calculating Machine Company, Orange, N. J., a Corporation of Delaware. Filed Oct. 8, 1931. Serial No. 567,635. 6 Claims. (Cl. 235—82.)

3. In a register having keyboard mechanism comprising a plurality of series of keys settable selectively in accordance with an amount to be registered, means for holding said keys in set position, and registering means settable by said keys; spring-actuated releasing means operable to discharge the holding means, a latch adapted to restrain the releasing means, means operable upon setting movement of any one of said keys to release said latch, and means operable by the registering means to retension and latch the releasing means.

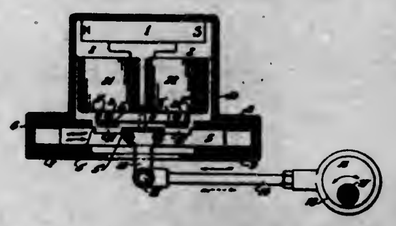


1,906,064. FOLDING DESK. EDWARD S. HODGSON, East St. Louis, Ill. Filed Feb. 25, 1932. Serial No. 594,983. 5 Claims. (Cl. 45—69.)



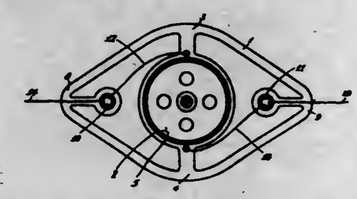
1. A folding desk comprising, in combination, a desk compartment, a pair of front legs secured at their upper portions on opposite sides of said compartment, a pair of rear legs pivotally mounted at their upper ends on opposite sides of said compartment at the upper end thereof, a lid for said compartment pivotally mounted between the front legs, and arms extending rearwardly from each side of said lid and having sliding engagement with said rear legs, whereby the legs may be moved together or spread apart by raising or lowering said lid.

1,906,065. MAGNETO-ELECTRIC MACHINE. EARL E. HOFFMAN, Springfield, Mass. Filed Oct. 2, 1929. Serial No. 396,819. 21 Claims. (Cl. 171—209.)



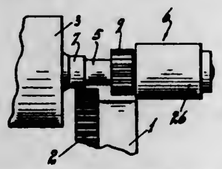
3. A magneto electric machine comprising a core member, current generating coils on said core member, a reciprocable permanent magnet located between the polar projections of the core members for varying the reluctance of the magnetic circuit in the core members.

1,906,066. DIAPHRAGM AND COIL SUPPORT. GILLIS HOLST, RICHARD SHEPHERD, and PIETER HENDRIK ABRAHAM VAN LIS, Eindhoven, Netherlands, assignors to Radio Corporation of America, a Corporation of Delaware. Filed Aug. 5, 1930, Serial No. 473,266, and in the Netherlands Sept. 3, 1929. 6 Claims. (Cl. 179—115.5.)



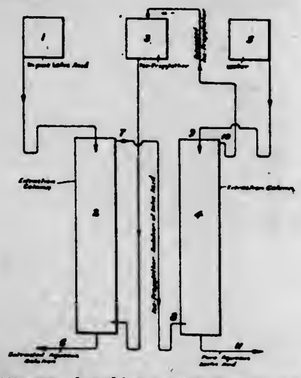
4. A body for centering and supporting the movable part of a device for converting electrical oscillations into acoustical vibrations or inversely, comprising a pressed mass of "Bakelite" whereby a dead beat member is obtained.

1,906,067. STARTER DRIVE. GEORGE H. HOWARD, Alhambra, Calif. Filed Nov. 30, 1931. Serial No. 578,089. 10 Claims. (Cl. 74—7.)



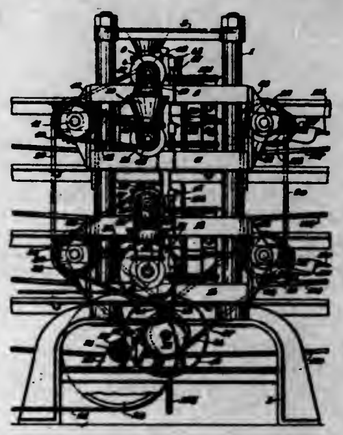
1. In combination with an engine fly-wheel, a gear on the fly-wheel, a starting motor, and an armature shaft on the moor of a starter drive comprising a sleeve shaft secured to the armature shaft a pinion gear slidably mounted on said sleeve shaft, a flange on said pinion gear, a cam sleeve slidably mounted on the sleeve shaft, said cam sleeve having a cam slot formed therein, a key on the sleeve shaft extending into said cam slot, a flange on the cam sleeve, and a spring positioned between said flanges and surrounding the cam sleeve, and means removably securing the ends of said spring to said flanges, and a housing extending over the spring and the flanges, and means securing the housing to the flanges.

1,906,068. LACTIC ACID. JOSEPH ADAM JENEMANN, Philadelphia, Pa., assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Delaware. Filed Mar. 2, 1931. Serial No. 519,353. 8 Claims. (Cl. 260—122.)



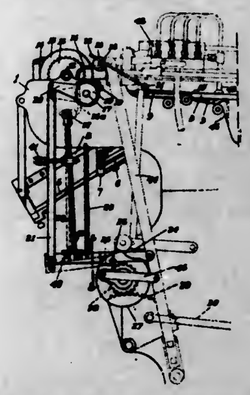
1. The process of making purled lactic acid which comprises the steps of contacting technical aqueous lactic acid with isopropyl ether, separating the isopropyl ether lactic acid solution formed from the aqueous layer, contacting said isopropyl ether lactic acid solution with fresh water and separating the aqueous solution of purified lactic acid from the extracted isopropyl ether.

1,906,069. METHOD OF AND MACHINE FOR PRODUCING CANDY UNITS. WILLIAM B. LASKEY, deceased, Brooklyn, N. Y., by Rose Bagnais Laskey, executrix, Brooklyn, N. Y., assignor to Mason, Au & Magenheimer Confectionery Manufacturing Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Mar. 27, 1929. Serial No. 350,179. 12 Claims. (Cl. 107—4.)



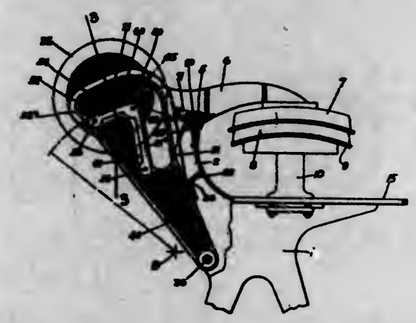
1. The method of forming a plurality of candy units from a plastic candy mixture consisting in conveying the mixture along a path of movement that is folded upon itself to form a plurality of parallel paths of movement, exercising pressure on the mass so conveyed, discharging a plurality of rows of streams of mixture by the pressure so created in a lateral direction, and thereupon severing said streams into units.

1,906,070. ELEVATOR STRUCTURE AND CONTROL FOR PRINTING PRESSES. CHARLES L. LOW, Benton Harbor, Mich., assignor to Lisenby Manufacturing Company, Fresno, Calif., a Corporation. Original application filed Sept. 10, 1929, Serial No. 391,606. Divided and this application filed Sept. 2, 1930. Serial No. 479,133. 5 Claims. (Cl. 271—62.)



1. In a printing press, a paper elevator including fixed bars having a downward slope toward their rear ends, slides engaging the bars, a substantially horizontal pile supporting table supported by the slides, means operated in conjunction with the operation of the press for moving the slides along the bars and guide bars for the side of the pile fixed in parallel relation with and above said first named bars, and extending through a transverse slot in the table.

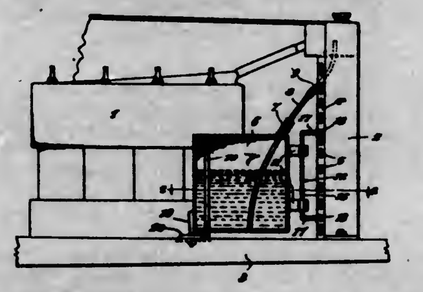
1,906,071. GARMENT PRESS. FREDERICK W. LINDEMANN, St. Paul, Minn., assignor to The Unipress Company, Incorporated, Minneapolis, Minn., a Corporation of Minnesota. Filed Nov. 9, 1928. Serial No. 318,170. 9 Claims. (Cl. 68—9.)



1. A frame, a buck, a rockable presser head arm pivoted to the frame and having a head engageable with the buck, a link swingingly pivoted to the frame, a flywheel rotatable upon the presser head arm, connections between the flywheel and the link to cause the flywheel to rotate and the link to swing when the presser head arm is rocked, the link being weighted and arranged to act by gravity to rotate the wheel and cause a retraction of the presser head.

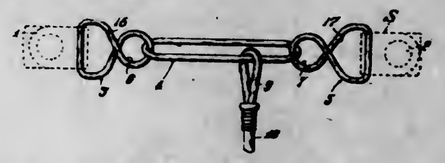
5. A press having a frame having a buck, a pivoted arm having a head engageable with the buck, an element rotatably journaled upon the arm, a link pivoted to the frame and having means guidingly cooperating with the rotatably journaled element, said guide means having a slot eccentric to the link pivot and so related to the arm pivot as to exert a gradually increasing force on the arm during the last part of its motion to final pressing position, and having a slot portion angularly related to the first mentioned slot portion, said means and said guide means positively connecting said arm and said link for movement in unison.

1,906,072. OVERFLOW TRAP FOR AUTOMOBILE RADIATORS. DAVID LUMSDEN, Sikeston, Mo. Filed Dec. 22, 1930. Serial No. 504,123. 10 Claims. (Cl. 123—174.)



1. In combination with a motor vehicle including a chassis, a radiator supported by the chassis, and provided with an overflow pipe, a bracket secured to said radiator at one side thereof and including a vertically disposed rod, a receptacle disposed rearwardly of the radiator at the side thereof carrying said bracket, hinges extending forwardly from said receptacle and engaged about the rod of said bracket to mount the receptacle for swinging movement and means to releasably secure the receptacle in a set position.

1,906,073. DOG COLLAR. GRACE V. F. MCCARTY, Park Ridge, Ill. Filed Feb. 9, 1931. Serial No. 514,460. 3 Claims. (Cl. 119—106.)

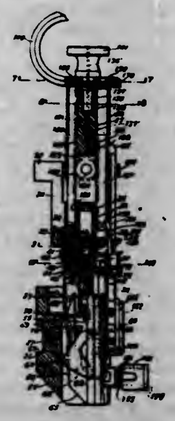


1. In a device of the character described, the combination of a strap portion and a link structure connecting the ends of the strap portion, the link structure consisting of two end links and an intermediate rigid longitudinally extended link, each end link being formed into two loops consisting of intersecting leg portions of the same piece of wire, one loop of each link being interlinked with the intermediate rigid longitudinally extended link and the other loop of each end link being connected with an end of the strap portion.

1,906,074. PROCESS OF THE PRODUCTION OF ZINC SALT SOLUTIONS. ALBERT THOMAS MEETES, Newport, Del., assignor, by mesne assignments, to Krebs Pigment & Color Corporation, Wilmington, Del., a Corporation of Delaware. Filed Feb. 18, 1931. Serial No. 516,839. 3 Claims. (Cl. 23—125.)

1. The process of dissolving the zinc content of an oxydic zinciferous material containing acid soluble silicic acid compounds which comprises adding sulfuric acid to an aqueous suspension of said material and regulating the addition of the acid to maintain the concentration of the acid during the whole time it is in contact with said material at a concentration which does not exceed 2%.

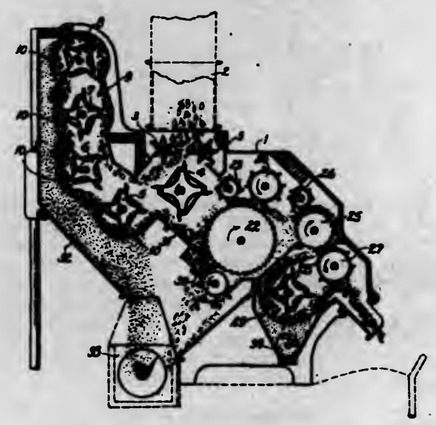
1,906,075. STITCHING MACHINE. IRVING R. METCALF, St. Charles, Ill., assignor to Latham Machinery Company, a Corporation of Illinois. Filed Mar. 25, 1931. Serial No. 525,057. 28 Claims. (Cl. 1—2.)



1. A wire stitching mechanism comprising a staple forming mechanism, a staple driving mechanism, and an

air cushion mechanism associated with said staple forming and staple driving mechanism for permitting a differential motion between said staple forming and driving mechanism.

1,906,076. COTTON CLEANING EQUIPMENT. JOHN E. MITCHELL, Dallas, Tex. Filed Apr. 17, 1931. Serial No. 530,768. 7 Claims. (Cl. 19—36.)



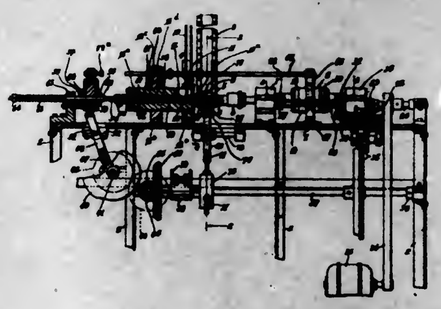
1. Cotton cleaning equipment comprising an upright housing having a series of separated bladed threshing cylinders mounted in superposed co-operative relation therein, means for delivering the cotton to be cleaned into proximity to the lowermost of said threshing cylinders at one side thereof, whereby said cotton will be successively projected, by the blades of the threshing cylinders, from the lowest to the highest cylinder along one side of the series of cylinders, and will then be passed downward from the highest to the lowest cylinder along the other side of the series of cylinders, and means for delivering the cotton from the lowermost of said threshing cylinders.

1,906,077. RADIATOR. ARTHUR B. MODINE, Racine, Wis., assignor to Modine Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Original application filed Sept. 29, 1925, Serial No. 58,540. Divided and this application filed July 5, 1929. Serial No. 376,100. 4 Claims. (Cl. 257—130.)



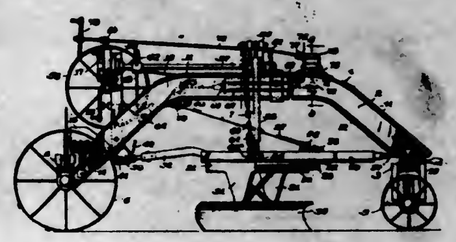
1. In a radiator, a plurality of straight tubes elongated in cross section, a member having longitudinally disposed spaced plates extending from one tube to another of a pair of tubes and providing a plurality of air passages which extend from one edge of said tubes to the opposite edge thereof, said member having a portion arranged between each pair of said first mentioned plates and providing a plurality of air passages between pairs of said first mentioned plates, said member having air engaging lips extending into said last mentioned passages and said member having apertures, said apertures being located adjacent said lips, and said lips and apertures respectively providing means for engaging and circulating air from one of said last mentioned passages to the other.

1,906,078. NUTTING MACHINE. ROBERT M. MORGAN, Alhambra, and STEPHEN W. HARDEN, Maywood, Calif., assignors, by mesne assignments, to Pacific Coast Steel Corporation, San Francisco, Calif., a Corporation of Delaware. Filed Apr. 24, 1929. Serial No. 357,659. 10 Claims. (Cl. 10—155.)



2. In a device of the class described, the combination of means for rotating a bolt, means for feeding a nut to the bolt so that the nut is screw-threaded on the bolt, and reversible clutch means operating automatically for reversing the rotation of the bolt to back the nut on the threads of the bolt after the nut has been threaded a predetermined distance on the bolt.

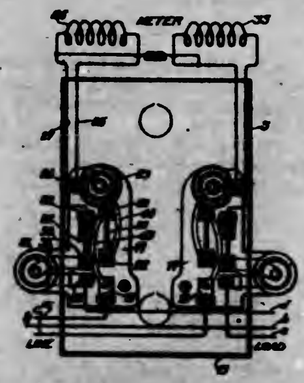
1,906,079. BLADE ADJUSTING MECHANISM FOR ROAD MACHINES. WILLIAM G. MORSE, Flossmoor, and FRED D. WILSON and HERBERT C. WURSTENBERG, Harvey, Ill., assignors to Austin Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1932. Serial No. 591,826. 14 Claims. (Cl. 37—156.)



1. In a road machine provided with a road working blade, operating mechanism for adjusting the position of said blade and including a blade lifting shaft at each side of the machine, tension means connected to said shafts and to each other, and means for simultaneously adjusting said tension means.

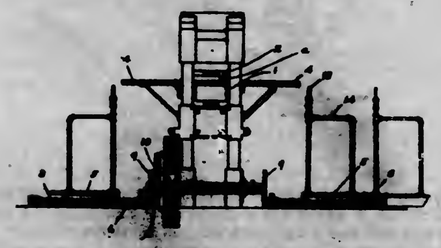
1,906,080. SWITCH AND FUSE MOUNTING. THOMAS E. MURRAY, Jr., Brooklyn, N. Y., assignor to Metropolitan Device Corporation, a Corporation of New York. Filed Sept. 25, 1925. Serial No. 58,612. 7 Claims. (Cl. 247—2.)

1. The combination with a metal box having a cover, of a plurality of electric circuit connections, a separate support of insulating material for each set of circuit connections adapted to carry switch and fuse devices within said box, each of said supports having a lateral extension



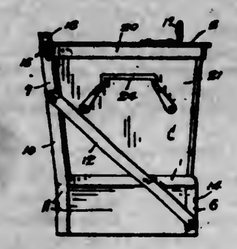
adapted to project through an outer wall of the box and to carry fuse sockets in circuit with the terminals within the box.

1,906,081. SAFETY DEVICE. ANDREW C. NICOLS and MORRIS C. MOORE, Girard, Ohio. Filed May 27, 1932. Serial No. 613,986. 8 Claims. (Cl. 60—1.)



1. In combination with a power press including a movable member, a movable platform adapted to sustain and carry an attendant and standing normally in a position affording access by an attendant so carried to the open press, and means rendered effective by the closing movement of the movable member of the press for moving said platform away from the position defined.

1,906,082. GARBAGE CAN AND HOLDER THEREFOR. PETER C. NIELSEN, Pocatello, Idaho. Filed Mar. 27, 1931. Serial No. 525,008. 1 Claim. (Cl. 248—11.5.)



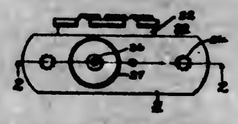
In a base for a garbage receptacle the combination of a base formed of a rectangular piece of angle iron having the corners bent down and having the interior space thus formed filled with concrete; back irons raised into a U-shaped back for said base, said back having slots in the sides thereof near the top; and a lid carried on a horizontal rod, said rod being carried in said slots, the lid being adjustable to fit any size of can set on the base.

1,906,083. SWITCH. HARRY E. NORVIEL and VANCE SCOTT, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed May 22, 1931. Serial No. 539,210. 5 Claims. (Cl. 200—11.)



1. An electric switch comprising in combination; a housing having parallel walls, one of which is provided with stationary contacts; a rotatable nonconducting member having a plurality of peripheral arms; a contact plate loosely connected to the arms of the nonconducting member to permit relative axial movement therewith but restraining rotary movement thereof; a shaft for driving the nonconducting member; a resilient means surrounding the driving shaft and interposed between the contact plate and the nonconducting member urging said members apart; and means cooperating with two of said arms to limit the movement of said non-conducting member in either direction of rotation.

1,906,084. SWITCH. HARRY E. NORVIEL, deceased, Anderson, Ind., by Anderson Banking Company, executor, Anderson, Ind., assignor to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 13, 1932. Serial No. 605,091. 11 Claims. (Cl. 200—11.)

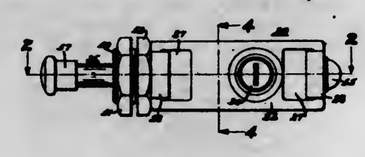


1. An electric switch comprising, in combination, an insulating support; a conducting plate carried by said support; a terminal contact post connected with said plate; stationary terminal contacts carried by said support; a circuit closing means, said means pivoted upon said post and provided with contact bosses and apertures, said apertures provided with ratchet engaging edges and said bosses connecting one of said stationary terminal contacts with said conducting plate; a driving plate having tangs extending from the plane of said driving plate to engage said ratched edges; a U-bracket pivoted upon said post, one arm of said bracket having an opening receiving an ears of said driving plate; manually operated means for moving said bracket in one direction to rotate said driving plate on said circuit closing means in one direction; a spring to turn said bracket and driving plate in the opposite direction; and spring means urging said driving plate and circuit closing means toward said stationary contacts.

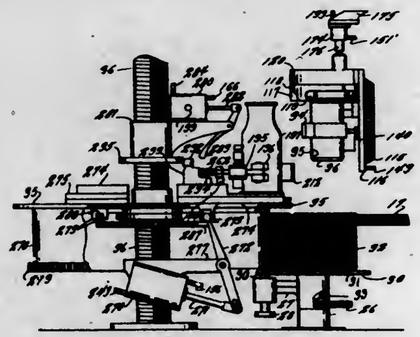
1,906,085. ELECTRIC SWITCH. HARRY E. NORVIEL, deceased, Anderson, Ind., by Anderson Banking Company, executor, Anderson, Ind., assignors to Delco-Remy Corporation, Anderson, Ind., a Corporation of Delaware. Filed Apr. 13, 1932. Serial No. 605,092. 8 Claims. (Cl. 200—16.)

1. An electric switch comprising in combination; a housing comprising a pair of blocks recessed at their ad-

jacent faces to form a chamber provided with a plurality of internal grooves; terminals insulatingly supported by the blocks and extending into the grooves; end members for securing said blocks together; an actuator slidably supported by one of said end members; a contact member provided with resilient tongues, said contact member being insulatingly carried by said actuator and the tongues extending into and slidable within the grooves; and means for moving the contact member in circuit connection with a terminal.

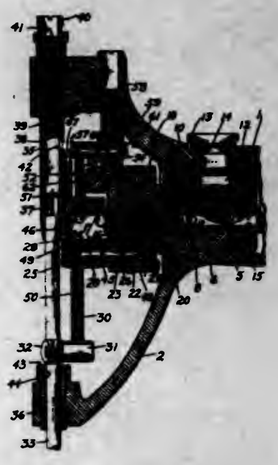


1,906,086. GLASS BLANK TRANSFER. FRANK O'NEILL, Toledo, Ohio. Original application filed Aug. 19, 1918, Serial No. 250,488. Divided and this application filed Sept. 7, 1929. Serial No. 390,956. 18 Claims. (Cl. 49—9.)



17. A glassware fabricating machine comprising a blank mold table, a blank mold thereon, a neck mold associated with the blank mold, means for constantly supporting said molds in position to be closed in axial alignment with each other, a blow mold table, a blow mold thereon, means for rotating said tables, the rotation of said mold tables causing the blank and neck mold and the blow mold simultaneously to approach each other at a transfer zone, and the said parison and neck molds and the blow mold being so positioned on their respective tables that they come into alignment on a line between the centers of the said tables in said transfer zone, means operating in synchronism with the rotation of the mold table for opening the blank mold adjacent the transfer zone to leave a previously formed parison suspended from the neck mold, means for opening the blow mold, means actuated in timed relation to the arrival of the molds at the transfer zone for imparting a lateral component of motion to the open blow mold toward the suspended parison and to cause the blow mold to approach axial alignment with the parison, means for closing the blow mold about the parison, means for then opening the neck mold to release the parison in the blow mold, whereby the parison is transferred to the blow mold, the means for moving the blow mold laterally and for closing the blow mold being so designed and timed with respect to the rotation of the mold tables that the delivery of the parison to the blow mold is effected substantially on the line connecting the centers of the said tables.

1,906,087. NEEDLE-THREAD TAKE-UP MECHANISM FOR SEWING MACHINES. WILLIAM NELSON PARKES, deceased, Brooklyn, N. Y., by Jeremiah V. B. Parkes, administrator, Newark, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Jan. 26, 1932. Serial No. 588,894. 18 Claims. (Cl. 112—241.)



1. In a sewing machine, a rotary shaft, a reciprocatory needle-bar, a needle-bar reciprocating link, a thread take-up member, and a tubular crank-pin carried by said rotary shaft provided exteriorly and interiorly of the crank-pin with bearings for said link and take-up member.

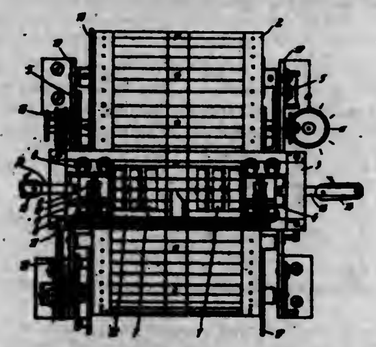
1,906,088. PULP TREATING PROCESS AND THE PRODUCT. MAURAN F. PARSONS, Millinocket, Me. Filed July 5, 1928. Serial No. 290,717. 6 Claims. (Cl. 92—3.)

1. A fiber composition board comprising a compressed mass of sized wheat straw fibers and a wood pulp filter, the wheat straw fiber bundles being but slightly disintegrated and of various lengths.

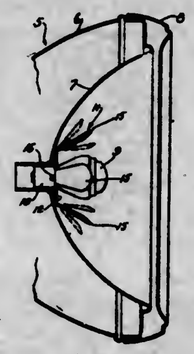
4. The method of obtaining from vegetable fiber a lumber like product having insulation properties which comprises disintegrating wheat straw into suitable lengths, then digesting the same in a low percentage alkali concentration for a period approximating two hours under pressure, then sizing said digested product and macerating the same to partially break down the fiber bundles, and then forming boards with hydrated wood paper making pulp under pressure.

1,906,089. MEASURING INSTRUMENT. PAUL PASCHEN and GEORG MOHR, Nuremberg, Germany, assignors to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany, a Corporation of Germany. Filed May 19, 1930, Serial No. 453,561, and in Germany May 28, 1929. 11 Claims. (Cl. 101—1.)

1. In a metering and recording instrument, a printing device, comprising types arranged on the one side of the sheet to be printed upon, a friction body arranged on the other side of said sheet, means suitable for moving the friction body under pressure against the sheet and with a sliding movement along the part of the sheet covering the types to be printed, for producing an imprint thereof on said other side of the sheet by abrasion due to the friction between the sheet surface and the friction body.



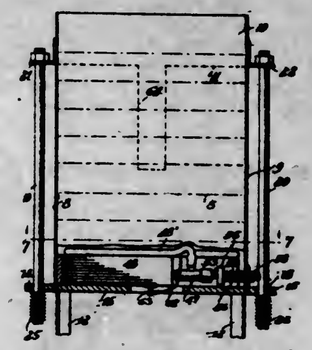
1,906,090. ANTIGLARE DEVICE. JOSEPH PEKAR, Bridgeport, Conn. Filed Aug. 28, 1932. Serial No. 630,035. 2 Claims. (Cl. 240—48.6.)



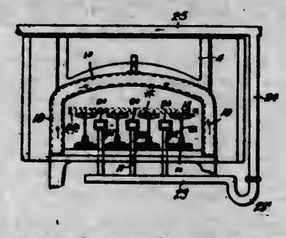
1. In an anti-glare device for use with a head-light having a reflector and an electric lamp including a stem portion, a body having a central opening for the passage of the stem of the lamp, said body of greater diameter than the bulb of the lamp, four equally spaced panels projecting from the edge of said body, said panels projecting forwardly of said body to be spaced from and disposed at the respective sides of the globe portion of a lamp having its stem extending through the opening in the body, said panels integral with the body but creased sharply at their connections with it and angularly disposed relative to the body, said body and panels of bendable metal, said panels being relatively narrow at their sharply creased juncture with the body and widest at a point spaced from the body whereby said narrowest portion provides a flexing point to permit the panels to be bent relative to the body to dispose the panels closer to or farther from the globe portion of the lamp, and said panels each of a length less than that of the globe of the bulb whereby the panels do not extend beyond the bulb and will not cast shadows on the edge portion of the reflector.

1,906,091. PARACHUTE. JAMES F. PENDERGAST, Leicester, and ERLAND JOHNSON, Geneseo, N. Y. Filed Nov. 22, 1930. Serial No. 497,398. 5 Claims. (Cl. 244—21.)

1. A parachute comprising a dome, a flexible collapsible ring secured to the edge of said dome, a source of fluid pressure, means connecting said source of fluid pressure with said ring for conducting fluid under pressure thereto, a pressure operated valve in said connection, and automatically releasable means for retaining said valve in closed position.

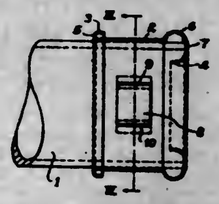


1,906,092. CONVEYER FURNACE. GUY S. PETERSON, East Cleveland, Ohio, assignor to The Strong, Carlisle & Hammond Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 30, 1930. Serial No. 471,865. 5 Claims. (Cl. 263—8.)



1. In a conveyer furnace, in combination, a heating chamber, a cooling chamber, a second cooling chamber, a chain type conveyer comprising a plurality of parallel chains carrying upstanding work supports adapted to run through said chambers in the order named, and channels disposed longitudinally of said conveyer at a level between the top and bottom elements of the chains thereof in said cooling chambers for circulating a cooling medium adjacent the conveyer and beneath the work thereon, said channels extending part of the length of said first cooling chamber and said channels extending the full length of said second cooling chamber.

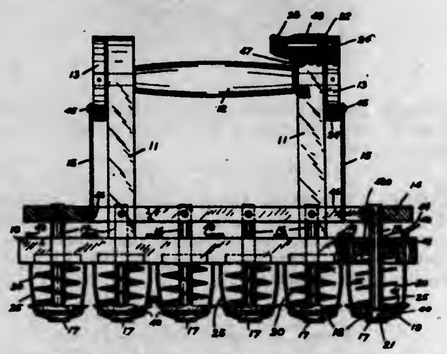
1,906,093. PIPE THREAD PROTECTOR. LUCIEN G. PONCE, Parnassus, Pa., assignor to Allegheny Steel Company, Brackenridge, Pa., a Corporation of Pennsylvania. Filed Jan. 15, 1931. Serial No. 508,849. 2 Claims. (Cl. 137—91.)



2. A pipe thread protector comprising a metal sleeve having its ends crimped to form beads of greater diameter than the outer diameter of said sleeve to constitute the

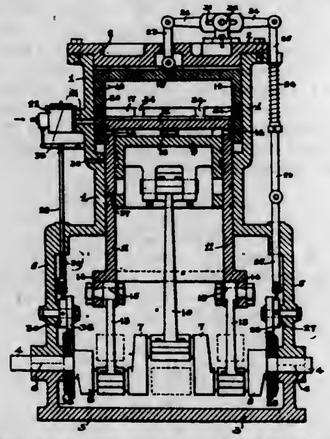
sleeve a structural section, said sleeve having an inner diameter sufficiently greater than the outer diameter of the pipe thread to permit the sleeve to freely slide on said thread, said sleeve being further provided with a pair of parallel slots axially disposed between the beads of said sleeve and a relatively wide clip of soft metal extending between said slots on the outside of the sleeve and having its ends extending in said slots for intimate engagement with a plurality of the threads of the pipe.

1,906,094. EGG MARKING APPARATUS. CHARLES K. POWELL, Dobbs Ferry, N. Y., assignor to Pacific Egg Producers Cooperative, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 27, 1929. Serial No. 358,508. 43 Claims. (Cl. 101—379.)



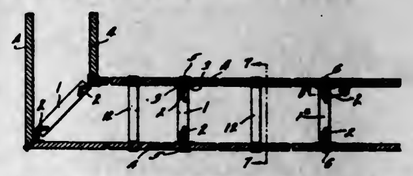
1. Apparatus for marking eggs or the like including, in combination, a plurality of flexible diaphragms forming markers side by side, and means adapted, during the marking operation, to cooperate to flex said markers into marking contours differing from each other as the contours of the eggs to be marked differ from each other.

1,906,095. INTERNAL COMBUSTION ENGINE. ALFRED T. PRENTICE, Valparaiso, Ind. Filed Apr. 21, 1930. Serial No. 445,877. 4 Claims. (Cl. 123—50.)



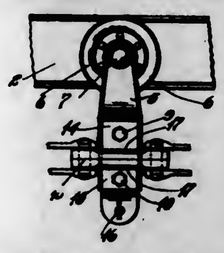
3. A reacting engine, comprising a casing, a shaft in the casing, a plurality of oppositely positioned cranks formed on the shaft, a closed head to the casing, a cylinder having a closed head slidable in the casing with its head in opposition to the head in the casing, a piston slidable within the cylinder, a closed end sleeve between the cylinder and the casing and movable adjacent to and enclosing the cylinder head, connecting means from the cylinder and piston to oppositely positioned cranks of the crank shaft said means comprising a pair of connecting rods for the cylinder and a single connecting rod for the piston, and means for explosively moving the piston and the cylinder head away from each other.

1,906,096. METAL STUDDING. THOMAS D. PRIDDY, Cleveland, Ohio, assignor to The Formed Steel Products Company, Cleveland, Ohio. Filed Mar. 19, 1928. Serial No. 262,894. 12 Claims. (Cl. 72—115.



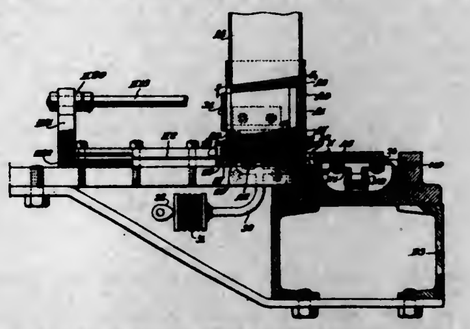
2. Metal studding comprising angle irons of substantially T form, each of said angle irons having a web portion and flanges oppositely extending therefrom, said web portions having irregular conformations, and means extending between and having interlocking engagement with said irregular conformations.

1,906,097. TROLLEY CONSTRUCTION. ALEXIS R. PRIBIL, Saginaw, Mich. Filed Feb. 11, 1931. Serial No. 514,938. 5 Claims. (Cl. 198—189.)



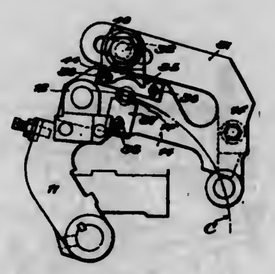
1. A carrier trolley for engaging a conveyor chain, including oppositely disposed pressed steel brackets, the lower ends of which are rigidly secured together in facial contact, and vertically spaced pressed steel clip attachments secured to opposite sides of said brackets for supporting the chain links therebetween.

1,906,098. MATCH PACKAGING MACHINE. RODNEY S. PULLEN, Akron, Ohio, WILLIAM F. CASEY, and GEORGE M. THOMAS, Philadelphia, Pa., assignors, by direct and mesne assignments, to Pullenite Company, a Corporation of Pennsylvania. Filed July 7, 1930. Serial No. 466,185. 5 Claims. (Cl. 226—7.)



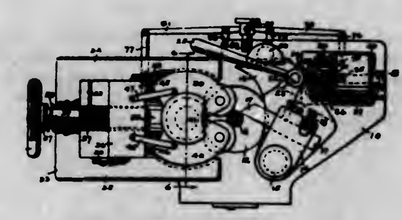
1. In a match-packaging machine, a hopper, a plurality of longitudinal passages beneath the hopper of one-match width, means for alining and feeding the matches into the passages, a longitudinal feeding mechanism concurrently engaging the bottom matches in the several passages to feed the matches longitudinally, a conveyor transversely movable with respect to the hopper and having a ribbed section to receive the matches between the ribs and air injecting means for intermittently engaging the bottom matches.

1,906,099. NUT MAKING MACHINE. CHARLES A. RICH, Providence, R. I., assignor to Brown & Sharpe Mfg. Co., Providence, R. I. Filed Oct. 20, 1931. Serial No. 569,924. 7 Claims. (Cl. 29—51.)



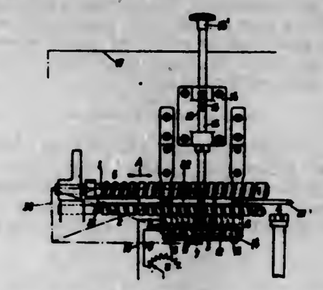
7. In combination with a work transfer arm, a substantially U-shaped member having its arms disposed in spaced parallel vertical planes, one arm of said member being flexible and provided with a work receiving opening, jaws carried by the flexible arm in register with the opening, a depending part carried by the other of said jaws, means to support the U-shaped member with its flexible arm in the path of movement of the transfer arm, said flexible arm having a face to wipingly engage an end face of the work whereby to hold the work on the transfer arm, and means carried by the flexible arm and engageable with the depending part of the other arm for limiting flexing movement of said flexible arm.

1,906,100. ROLLING TURNER. JAMES H. RICHARDSON, Indianapolis, Ind. Filed Jan. 30, 1932. Serial No. 589,795. 10 Claims. (Cl. 82—35.)



1. In a turning device, a plate, a tool holder rockably carried by the plate, a revoluble member carried by the plate, a plurality of posts adjustably carried by the member and selectively limiting the movement of said holder in one direction, a stock rest including a pair of shiftable rollers, a shiftable block controlling the spacing apart of said rollers, a second revoluble member, and a plurality of posts adjustably carried by the second member and adapted to be selectively turned to intercept movement of the block whereby the posts on the two revoluble members may be relatively adjusted to limit the tool holder and arrest the block for the simultaneous cutting of a selected diameter on a piece of stock and the supporting of that stock by the rollers during that cutting.

1,906,101. NEEDLE STRAIGHTENING MACHINE AND METHOD. WALTER JOSIAH RICKEY, Helensburgh, and WILLIAM TIVENDALE, Clydebank, Scotland, assignors to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Nov. 19, 1930, Serial No. 496,650, and in Great Britain Dec. 30, 1929. 20 Claims. (Cl. 153—39.)

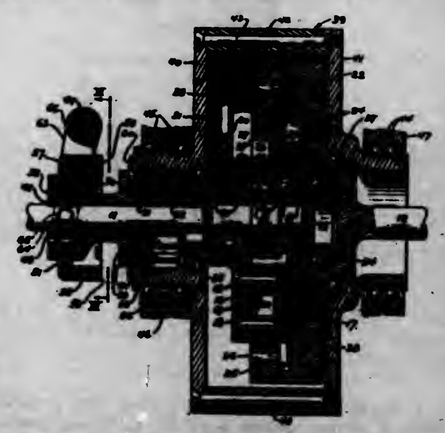


1. The improvement in the art of straightening tempered needles by hammering consisting in conveying the needles to a hammering station, heating the needles to a degree not materially affecting the temper thereof, and hammering them while hot.

1,906,102. METHOD OF ALKALIZING THE WASTE LIQUORS FROM THE SODA OR SULPHATE PULP MANUFACTURE FOR THE PURPOSE OF MAKING THEM SUITABLE FOR DRY DISTILLATION. ERIK LUDVIG RINMAN, Djursholm, Sweden. Filed June 30, 1930, Serial No. 465,067, and in Sweden May 23, 1930. 4 Claims. (Cl. 202—34.)

1. The method of alkalising waste liquors from the soda pulp manufacture for the purpose of making them suitable for dry distillation, which comprises concentrating the waste liquor to hold about 50 per cent dry substance, and alkalising said concentrated waste liquor while hot by adding to and intimately mixing with the same barium oxide in a pulverised state so as to cause a reaction which generates sufficient heat to drive off the major portion of the water so that a pulverulent mass ready to be dry distilled is obtained.

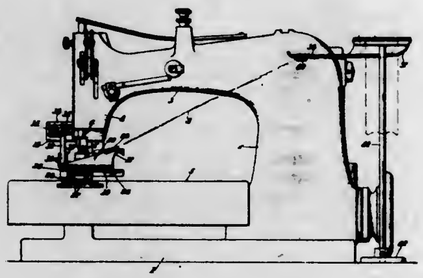
1,906,103. MECHANICAL POWER TRANSMISSION. THOMAS H. RYAN, San Francisco, Calif., assignor of one-sixth to Paul J. Boyens and one-sixth to Charles J. McCarthy, San Francisco, Calif. Filed May 26, 1930. Serial No. 455,746. 10 Claims. (Cl. 74—34.)



1. In a power transmission device, the combination of a driving shaft, a driven shaft, a pinion upon one of

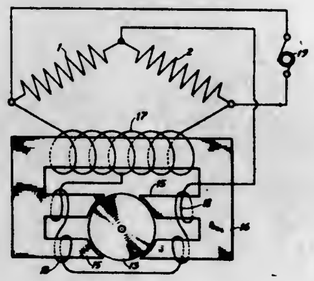
said shafts, in internal ring gear upon the other of said shafts, a rotatable support journaled between said shafts, a planetating gear journaled upon said support and disposed between said pinion and said ring gear, an eccentrically floating collar journaled in said planetating gear, and an inertia body movably mounted upon said support and engaging with said planetating gear adapted to retard rotation thereof as the angular velocities of said pinion and ring gear approach the same value, said inertia body being supported for radial movement upon said support and journaled in the eccentrically floating collar carried by said planetating gear.

1,906,104. STRIP-GUIDING MEANS FOR SEWING MACHINES. RUDOLPH J. SAILER, Townley, N. J., assignor to The Singer Manufacturing Company, Elizabeth, N. J., a Corporation of New Jersey. Filed Aug. 2, 1930. Serial No. 472,557. 8 Claims. (Cl. 112—152.)



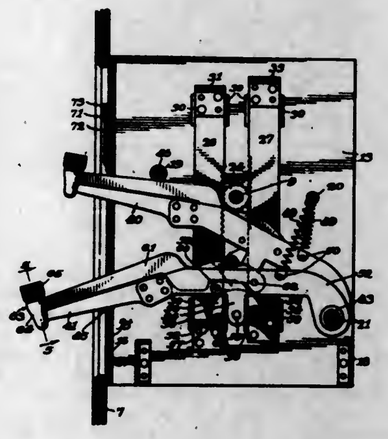
1. Strip guiding means for sewing machines comprising transversely overlying fabric-strip receiving and delivering runs, and guiding means disposed between said runs having strip-inverting guide-walls converging toward a side edge of the strip-delivering run.

1,906,105. ELECTRICAL RECORDING INSTRUMENT OF THE RELAY TYPE. ALEXANDER G. S. SANDISON, Kelda, Balta Sound, Shetland Islands, assignor to Republic Flow Meters Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 18, 1929, Serial No. 348,048, and in Great Britain May 3, 1928. 25 Claims. (Cl. 234—5.5.)



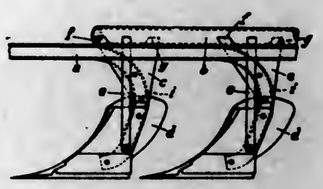
1. A recording instrument of the relay type comprising a primary moving system, a circuit including resistance elements, an electro-motive device in circuit with said resistances and adapted to be operated in one direction by the current through one resistance and in the opposite direction by current through the other resistance, means operable by the primary moving system to vary the resistance of one or the other resistance elements to operate the electro-motive device, a recording element and means whereby said element is operated by said electro-motive device.

1,906,106. KEY-OPERATED DEVICE FOR RADIO SYSTEMS. JOSEPH M. SCHAEFER, Chicago, Ill., assignor to Zenith Radio Corporation, Chicago, Ill., a Corporation of Illinois. Filed May 17, 1928. Serial No. 278,542. 30 Claims. (Cl. 250—40.)



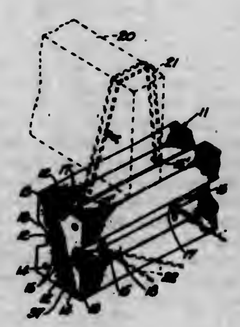
1. The combination, with a reversely adjustable controlling device for a radio system of communication, of means free from connection with said device acting upon operation in one direction to move it in either direction of its adjustment to a predetermined position; said means being returnable from each such operating action thereof without disturbing the position to which said device has been adjusted.

1,906,107. AGRICULTURAL IMPLEMENT. WERNER SCHIRMER, Leipzig, Germany, assignor to Rud Sack, Leipzig, Germany. Filed July 15, 1930, Serial No. 468,021, and in Germany Apr. 18, 1929. 2 Claims. (Cl. 97—198.1.)



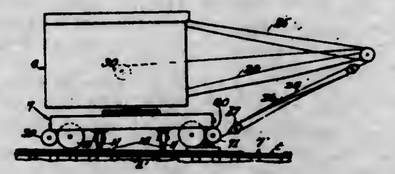
1. In a frame for an agricultural implement, the combination of a plurality of spaced beams, ground-working tools supported by said beams, a transversely positioned torsional member connected to said beams, a gusset plate connected to each beam at one end and having lugs at its other end for engaging opposite sides of said torsional member, and bracing means connecting each of said tools to said torsional member.

1,906,108. CONCRETE STRUCTURAL MEMBER. HENRY W. SCHLUETER, Beverly Hills, Calif. Filed May 26, 1931. Serial No. 540,051. 1 Claim. (Cl. 72—61.)



A concrete structural member of the class described comprising a body of concrete having a plurality of surfaces and a longitudinal channel formed in each of said surfaces, a longitudinal reinforcing means placed in said body adjacent the juncture of adjacent surfaces, and lateral reinforcing bars engaging said longitudinal reinforcing means and extending across said channels.

1,906,109. CRANE. ALBERT G. A. SCHMIDT, Chicago, Ill., assignor to Cullen-Friestedt Company, Chicago, Ill., a Corporation of Illinois. Filed June 10, 1931. Serial No. 543,339. 7 Claims. (Cl. 105—177.)



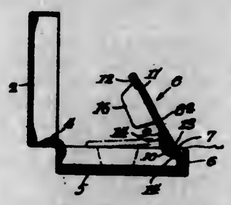
1. In combination, a truck having wheels adapted to travel on a railroad track, a set of set-off wheels mounted on the truck and adapted in conjunction with a pair of set-off rails laid across the track to support the truck in an elevated position with respect to the track and permit it to be shifted laterally, and a jack for tilting one end of the truck upwardly so as to permit one of the set-off rails to be placed beneath the set-off wheels nearest the said one end of the truck secured to the central portion of the frame of the truck and comprising a vertically movable member having a shoe at the lower part thereof for disposition between the rails of the track, and gearing supported on said truck-frame and operative to raise and lower the member.

1,906,110. WEATHER STRIP. HARRY D. SWISON, Elkhart, Ind., assignor to The Adlake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1931. Serial No. 516,536. 11 Claims. (Cl. 20—69.)



1. A top rail weather strip provided with a vertically shiftable contact portion and means for limiting the shifting movement of said portion in both directions.

1,906,111. BOX FOR DISPLAYING JEWELRY AND THE LIKE. JOHN M. SHIELDS, Chicago, Ill., assignor to F. H. Noble & Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1930. Serial No. 434,183. 3 Claims. (Cl. 206—75.)

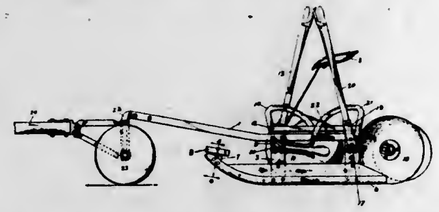


1. In a jewelry box, a sheet metal false bottom formed with an upright flange having at its top an inclined portion adjacent the front edge of the box constituting a hinge support, a display pad, and a snap spring hinge pivotally connecting said support and pad, said hinge acting to yieldingly stress said pad alternatively either to a stopped inclined display position or horisontal lowered position.

1,906,112. MANUFACTURE OF MERCAPTOARYLTHIAZOLES. ROBERT L. SIBLEY, Nitro, W. Va., assignor to The Rubber Service Laboratories Company, Akron, Ohio, Corporation of Ohio. Filed June 8, 1931. Serial No. 543,009. 7 Claims. (Cl. 260—44.)

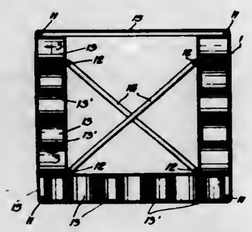
1. The process for the preparation of a mercaptobenzothiazole comprising the reaction under the addition of heat between a diphenylthiourea, carbon bisulfide and a sulfur chloride under super-atmospheric pressure.

1,906,113. RIDGE BURSTER. WALTER H. SILVER, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Jan. 5, 1927. Serial No. 159,045. 1 Claim. (Cl. 97—56.)



In a ridge burster, the combination of a pair of runners spaced apart and parallel, a front arch and a rear arch rigidly connected to said runners, a frame including side bars secured to said arches and having their forward portions converging forwardly, a laterally steerable truck pivotally mounted on the forward end of said bars and adapted to travel in a furrow between ridges, a shaft rockably journaled on the front arch, a shaft rockably journaled on the rear arch, earth-working devices supported on said shafts, and a forwardly inclined beam extending transversely of said runners between said devices and the truck and rigidly secured on the runners.

1,906,114. AERIAL CRAFT CONSTRUCTION. JOSEPH SILVERMAN, Chicago, Ill. Filed Nov. 29, 1929. Serial No. 410,394. 6 Claims. (Cl. 244—30.)



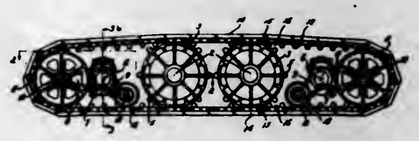
1. A pontoon comprising an outer shell, and an inner hermetically sealed rigid cellular structure comprising a plurality of individual hermetically sealed cells secured together to form an integral structure, the cells being of circular section and arranged with the axes of the cells disposed generally normal to said outer shell.

1,906,115. COMBINED RAIL BOND AND CLAMP. BENJAMIN A. SMITH, Lakewood, Ohio, assignor to The Electric Railway Improvement Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 28, 1926. Serial No. 144,687. 1 Claim. (Cl. 173—278.)



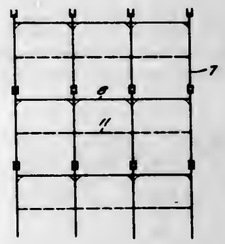
As a new article of manufacture, a rail bond having a flexible body portion and a terminal adapted to be attached to a rail or like object by depositing molten metal under high temperature conditions onto such terminal and the adjacent rail surface, said bond including a metal strap wrapped about said terminal and having a hook-like portion whereby the latter may be temporarily, mechanically secured in place.

1,906,116. TRACTOR. FRANK A. SMYTHE, Lorain, Ohio, assignor to The Thew-Shovel Company, Lorain, Ohio, a Corporation of Ohio. Filed Aug. 1, 1929. Serial No. 382,682. 3 Claims. (Cl. 305—9.)



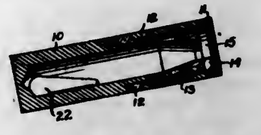
1. Apparatus of the class described comprising a tractor of the roller and tread type embodying a frame, endless treads, a centrally disposed driving and supporting means for said endless treads on both sides of said frame fixed against vertical movement with respect to said frame and forming a fixed base, said endless treads extending beyond said driving and supporting means at both ends and in end loops, and equalizing idler units engaging in the loops of the treads, each unit including a vertically moving tread loop engaging roller and a tread engaging roller, said rollers being mounted together upon a member articulated about a fixed point or axle on the frame member and adapted for equalization of the load about such point upon said rollers and to provide for variance in the ground contacting area without changing the fixed base of the tractor truck.

1,906,117. BUILDING AND METHOD OF CONSTRUCTING THE SAME. CHRISTOPHER H. SNYDER, Berkeley, Calif. Filed Aug. 22, 1930. Serial No. 477,065. 3 Claims. (Cl. 72—1.)



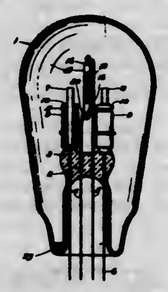
1. A building comprising upright steel columns, a plurality of steel floor beams fixed on said columns and vertically spaced apart, and a reinforced concrete floor fixed on said columns and disposed in the space between said steel floor beams.

1,906,118. MERCURY SWITCH. JOSEPH H. STALEY, Columbus, Ind. Filed Dec. 24, 1932. Serial No. 648,749. 18 Claims. (Cl. 200—152.)



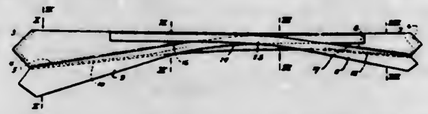
1. In a mercury switch, the combination of a metallic container constituting one electrode of the switch, a second electrode operatively associated therewith, an insulating member characterized by resilience and compressibility separating said container and electrode and forming a seal therewith, a mass of mercury shiftable to make and break the circuit between said container and electrode, and an insert over which the circuit is made and broken carried by said member.

1,906,119. GASEOUS DISCHARGE DEVICE. PERCY L. SPENCER, Medford, Mass., assignor, by mesne assignments, to Old Colony Trust Company, a Corporation of Massachusetts, trustee. Filed Mar. 26, 1929. Serial No. 350,080. 1 Claim. (Cl. 250—27.5.)



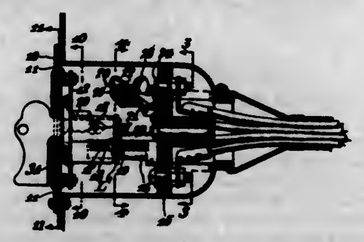
A thermionic gas discharge device comprising, a gas tight vessel having a reentrant glass stem with a press, an equipotential cathode having a heating element in the interior supported on said stem, leads sealed through said press for energising said heating element and providing a connection to said cathode, a plurality of anodes on said stem having leads sealed through said press, said anode leads being joined to the ends of said anodes facing said stem, a gas filling in said vessel at a pressure sufficient to neutralise the space charge during operation of the device, said press having tubular glass extensions surrounding the ends of the anode leads, and insulating members overlapping said extensions and surrounding the lower ends of said anodes to prevent ionisation of the gas in the space where the anode and anode leads emerge from the press.

1,906,120. NECKTIE. SUSIE R. WALTZ, Ross, Calif. Filed Sept. 20, 1932. Serial No. 633,990. 4 Claims. (Cl. 2—146.)



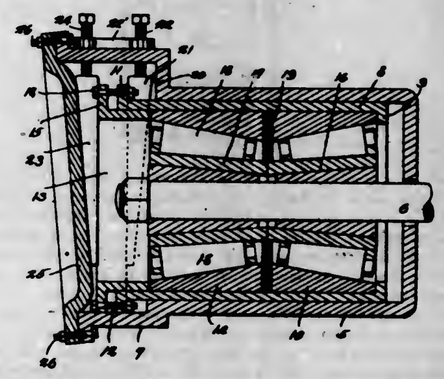
1. A necktie comprising a facing material and two pieces of lining material, one for each end of the tie, and an elongated extension on each lining piece, said extensions overlapping each other and forming an adjustable lining for the neck band portion of the tie.

1,906,121. SAFETY MAGNETO SWITCH. MELMORE ZUGERMAYER, Southampton, Pa. Filed Aug. 18, 1931. Serial No. 557,917. 1 Claim. (Cl. 200—7.)



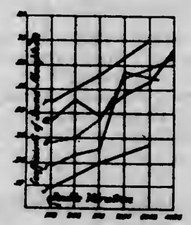
In a switch of the character described, an insulating support, a rotatable member opposing the support, a plurality of posts arising from the support and extending in surrounding relation to the rotatable member, each post having a notch and having mounted thereon spring pressed contact elements to engage a member projecting into the notch and a contact element carried by the rotatable member and including portions to extend into said notches, a normally open switch carried by said base and including an oscillating contact element, at least one of the portions of the contact of the rotatable member having insulated engagement with said oscillating contact to shift the same and thereby close said switch.

1,906,122. BEARING STRUCTURE. GEORGE FRED BLUMB, Philadelphia, Pa. Filed July 3, 1931. Serial No. 548,693. 6 Claims. (Cl. 308—180.)



1. In a bearing, the combination of a housing adapted to receive a shaft, roller bearings and roller races interposed between the shaft and housing, a sleeve between the roller races and housing, a flange on one end of the sleeve, a sleeve fitted in one end of the first mentioned sleeve and engaging the opposite ends of the races, and keys cooperating with the sleeves for moving the sleeves to adjust the rollers and races longitudinally of the shaft.

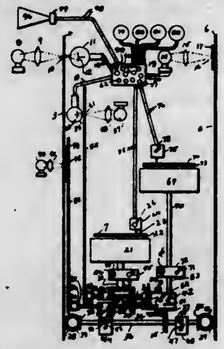
1,906,123. ACOUSTIC PLASTER. LESLIE B. EATON, Los Angeles, Calif., assignor, by mesne assignments, to Kalite Company, Limited, Pasadena, Calif., a Corporation of California. Filed Feb. 20, 1931. Serial No. 517,147. 10 Claims. (Cl. 106—84.)



1. An acoustical plaster consisting of a porous aggregate, a gypsum plaster binder, a glutinous air binding material and alum and having interconnected pores throughout, and having a hard washable surface with a porous surface, said plaster in a thickness of ⅝ inch having a coefficient of sound absorption above 35% at 512 double vibrations.

9. An acoustical plaster when gauged with water forming a plastic for application to walls, ceilings and the like, and capable of application by ordinary hawk and trowel methods to form a smooth porous surface, and comprising a porous aggregate and gypsum plaster binder, a glue air binding material to entrap air bubbles, said air bubbles on drying forming interconnected pores throughout the plaster, said plaster having a hard, washable surface, and in the thickness of three quarters of an inch, having a coefficient of sound absorption above 35% at 512 double vibrations.

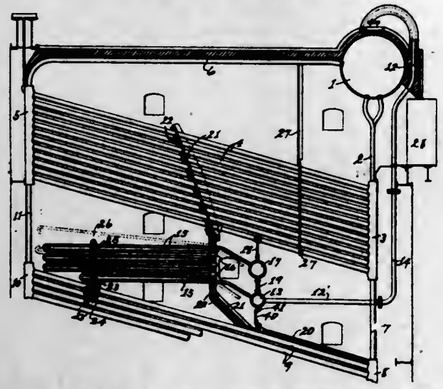
1,906,124. REVOCALIZED PHONOGRAPH RECORD. EDWIN HOPKINS, New York, N. Y. Filed Feb. 26, 1929. Serial No. 342,786. 36 Claims. (Cl. 88—162.)



10. The process of making a modified copy of selected portions of a plurality of original or primary phonographic sound records synchronous with a cinematograph film of subject matter analogous to said selected portions of said primary records but non-synchronous therewith, which consists in deriving variations in effects from selected portions of the sound tracks of the primary records, in producing from said variations in effects a sound track in the copy of effects similar to the portions selected from the plurality of primary records, and in said producing so selected effects from the different originals and so altering the location of selected effects to selected extents along the sound track of the copy that they bear the same proportionate relationship to each other in the length of the said sound track as are borne to each other by the analogous optical effects of the cinematograph film along its length.

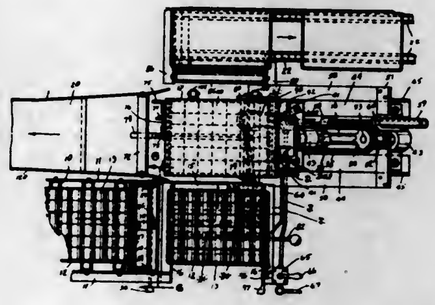
29. A modified copy of a primary sound record having a succession of particular acoustical effects, said modified copy comprising selected effects derived from said primary record artificially altered in location along its sound track as compared with the linear location of the effects on the primary record, and additional sound effect portions interlarded or overlaid or substituted for omitted portions of the sound effects of the primary record, said additional effects derived from a source independent of the primary record.

1,906,125. BOILER WITH INTERDECK SUPERHEATER. HOWARD J. KERR, Westfield, N. J., and WILLIAM A. JONES, Westerleigh, N. Y., assignors to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Nov. 24, 1928. Serial No. 321,663. 13 Claims. (Cl. 122—478.)



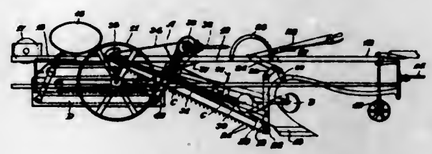
1. In a water tube boiler having superposed banks of inclined tubes spaced apart, an interdeck superheater having inlet and outlet headers in the space between said banks, and a plurality of tubes from the steam space of said boiler entering the inlet header from points beyond the ends of said banks, said tubes having removable portions and straight sections leading from the inlet header to the removable portions exteriorly of the tube bank ends so that the tubes can be expanded in the inlet header by passing an expander through the parts of the tubes which enter the header.

1,906,126. MEANS FOR CONVEYING AND UNPACKING CANS AND THE LIKE. SAMUEL B. MOTT, Noblesville, Ind., assignor to Indiana Condensed Milk Company, Indianapolis, Ind., a Corporation. Filed Aug. 17, 1931. Serial No. 557,458. 17 Claims. (Cl. 214—1.1.)



1. The combination of a filled basket supply conveyer, a receiving conveyer parallel with the supply conveyer, open top baskets and like containers for rows of cylindrical articles, and means at the end of the receiving conveyer for receiving and diagonally turning each basket so that the open top thereof will be at the side of the basket facing the receiving conveyer and the rows of the cylindrical articles changed from vertical to sidewise position for easy discharge of the contents to said receiving conveyer.

1,906,127. WEED AND FOUL SEED DESTROYING MACHINE. SONDRE S. REISHUS, Valley City, N. Dak., assignor of one-half to Harry A. Gilbertson, Valley City, N. Dak. Filed May 9, 1932. Serial No. 610,056. 12 Claims. (Cl. 97—10.)



1. A weed and foul seed destroying machine including, a plow, a primary slat conveyor having one end extending in close proximity to said plow, a reel adjacent said plow and the front end of said primary conveyor to push the sod and weeds onto said conveyor, means for simultaneously raising and lowering said plow and the front end of said conveyor into and out of operating position, a series of secondary conveyors including an open rod conveyor, a slatted conveyor below said open rod conveyor, and a final slatted conveyor, and burner means associated with said last named conveyors positioned in a manner to burn and destroy vegetable matter, seeds and roots, said last conveyor of said series discharging the soil and ash in virtually pulverized form back on the ground.

1,906,128. CONNECTER FOR REPAIRING METALLIC MEASURING TAPES. CLINTON B. ALEXANDER, Washington, D. C. Filed Dec. 11, 1931. Serial No. 580,469. 1 Claim. (Cl. 24—21.)



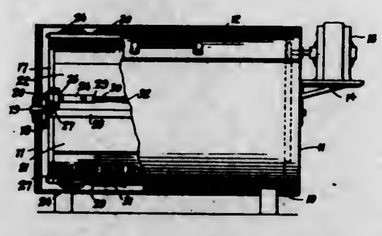
A connecter for repairing metallic measuring tapes comprising a metal blank bent so as to form a flat sleeve adapted to receive the ends of the metal tape, the side portions of said blank being overlapped and provided with openings therethrough adjacent the ends, the opposite wall of the connecter having an opening of larger diameter in alignment with each of the first-named openings, screws passing through the overlapping portions and having a threaded connection with the inner lapping portion only, said screws having heads thereon overlying the outer lapping portion, said screws being dimensioned so as to secure the lapping sections in intimate contact with each other and to engage the metal tape overlying the openings in the opposite wall of the connecter for bending said tape into said openings, and thus firmly joining the ends of the tape.

1,906,129. METHOD AND MEANS OF IDENTIFICATION. LOUIS J. ARPIN, New York, N. Y. Filed Apr. 8, 1932. Serial No. 604,099. 11 Claims. (Cl. 40—2.2.)



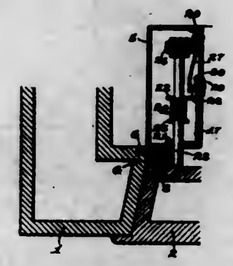
8. A seal clasp constructed of a strip of sheet metal of suitable length to provide a loop and opposing ends projecting from said loop, and a member fixed on one of said ends and constituting a stop for the purpose specified.

1,906,130. DRUM FOR DYEING, ETC. SIDNEY BAILEY, Jr., Abington, Pa. Filed Mar. 24, 1930. Serial No. 438,543. 4 Claims. (Cl. 8—18.)



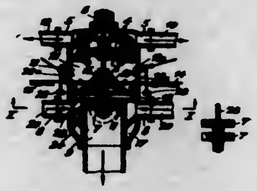
1. In a machine having a container for hot liquor, a rotary drum partially submerged in said hot liquor, said drum having an opening and a circumferentially slidable closure for said opening, the combination of an axially slidable latch on said closure for engaging a fixed catch on said drum, said latch having both ends close to the drum and having a middle portion spaced from the drum to provide a handle, a heat insulating covering for the handle portion extending from end to end of said bowed portion and close to the drum at both ends, said covering being perforated to facilitate radiation of heat from the metal core.

1,906,131. BATTERY LIGHT FOR REFRIGERATORS, ICE BOXES, CLOSETS, AND THE LIKE. GEORGE A. BAYLIS, Huntington, N. Y. Filed July 17, 1931. Serial No. 551,525. 2 Claims. (Cl. 240—4.)



1. A battery light for refrigerators, closets and the like comprising a casing formed with an extension adapted to be connected to an ice box or the like, a pair of batteries arranged in the casing, means for connecting the batteries in series, said casing formed with a depressed portion presenting a lamp socket, a lamp positioned in said socket, means forming a circuit including said batteries and said lamp, said means including a switch and a reciprocating member for closing said switch, a spring acting on said reciprocating member for moving the same to a closed position, said casing holding said reciprocating member positioned to engage the door of the refrigerator, whereby said door is adapted to move the reciprocating member to an open position when the door is closed.

1,906,132. TURBO BLOWER AGGREGATE FOR INTERNAL COMBUSTION ENGINES. ALFRED BUCHI, Winterthur, Switzerland. Filed Feb. 2, 1932, Serial No. 590,483, and in Switzerland Feb. 5, 1931. 8 Claims. (Cl. 230—116.)

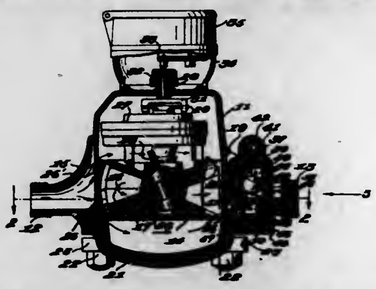


1. In a turbo blower for internal-combustion engines in combination an exhaust-gas turbine, a rotary blower, means to connect said turbine to said blower, an air inlet to said blower, said air inlet being between said turbine and said blower, a silencer for the blower inlet, said silencer being arranged in the space between said turbine and said blower, an outlet from said blower at one end of the turbo aggregate, inlet connections to said turbine, a separate inlet chamber for each inlet connection, said turbine inlets being towards the blower inlet, jackets between the turbine inlet and the blower inlet, means to supply a cooling medium to said jackets, and a common turbine outlet at the other end of the turbine aggregate.

1,906,133. METER BY-PASS CONTROLLING MEANS. HORACE CHEISMAN and HARRY G. WEYMOUTH, Pittsburgh, Pa., assignors to Pittsburgh Equitable Meter Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 26, 1929. Serial No. 395,421. 9 Claims. (Cl. 73—98.)

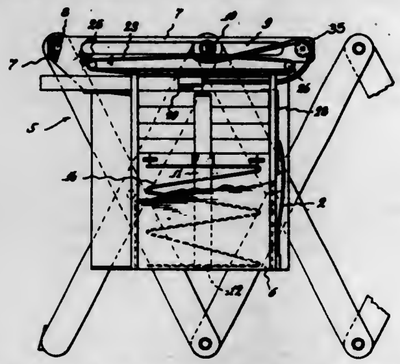
1. A fluid meter comprising a casing provided with a fluid inlet and a fluid outlet, metering mechanism interposed between said inlet and said outlet, a by-pass connecting said inlet and outlet around said metering mecha-

nism, and valve mechanism in said by-pass housed in a member containing a chamber having two spaced valve seats and a valve for cooperation with said seats, said



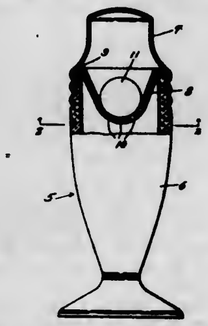
valve so cooperating with the walls defining said chamber to allow maximum flow in the by-pass when the valve is spaced midway between said seats.

1,906,134. CIGARETTE EJECTOR AND LIGHTER. MATTHEW CONFORTI, New York, and ROBERT MALERBA, Brooklyn, N. Y. Filed Mar. 11, 1932. Serial No. 598,280. 1 Claim. (Cl. 312—86.)



In a device of the character described a cigarette container and an electric lighter movable to eject a cigarette from its container and adapted to light the cigarette, in combination with lazy tongs mechanism on which said container is mounted and means operated by the movement of said mechanism for effecting movement of said lighter.

1,906,135. CONDIMENT SHAKER. MELVILLE BOYD CUNNINGHAM, Fort Worth, Tex. Filed Sept. 13, 1932. Serial No. 632,969. 1 Claim. (Cl. 65—57.)



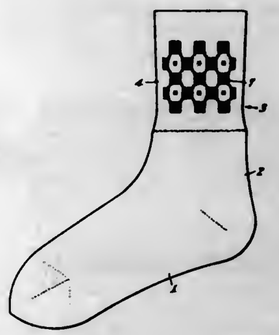
In combination with a condiment shaker including the usual perforated cap threaded on the shaker body; of a funnel member having a body portion extending into the upper end of the shaker body, and a flange on the body portion clamped between the shaker body and the cap, said body portion at the bottom of the funnel being substantially hemispherical and provided with a plurality of perforations, and a ball operating in the space between the body of said funnel member and said cap, and normally snugly seated within the hemispherical bottom portion of the funnel member for closing said perforations.

1,906,136. METHOD OF DRIVING PILE SHELLS. JOHAN ALBERT DAHRÉN, Gottenborg, Sweden. Filed Sept. 11, 1930, Serial No. 481,804, and in Sweden Sept. 11, 1929. 3 Claims. (Cl. 61—74.)



1. A method of driving supporting hollow piles comprising, applying a downward tensile force to the lower end of the pile by subjecting the same to repeated blows, and applying a continuous downward compressive force directly upon the upper end of the pile.

1,906,137. COMBINATION SOCK AND ANKLET. ROBERT E. DAVIS, Fort Payne, Ala. Filed Aug. 9, 1932. Serial No. 628,100. 1 Claim. (Cl. 2—240.)

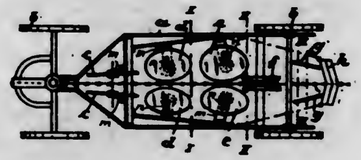


A combined sock and anklet comprising a foot merging into an ankle section, said ankle section being folded upon itself, the folded portion extending interiorly and downwardly toward the foot to present a cuff having a finished surface interiorly and exteriorly, a line of stitching for holding the folded portion in its permanent position, ornamental members arranged exteriorly of said cuff, and ornamental members arranged interiorly of the cuff on the folded part in the space between the top of the cuff and a central line, whereby when the cuff is extended the outside ornamental member will be seen and when the cuff is folded along the central line to present an anklet the inside ornamental member will be seen arranged substantially centrally of the cuff.

1,906,138. ACOUSTIC MATERIAL. JOHN H. DELANEY, Los Angeles, Calif.; Union Bank & Trust Co. of Los Angeles, administrator of said John H. Delaney, deceased, assignor to estate of Ada W. Delaney, deceased. Filed Apr. 9, 1928. Serial No. 268,805. 3 Claims. (Cl. 106—34.)

1. Material adapted to be used for the finish of wall surfaces, comprising not more than three parts by volume of a binder free from water, to two parts by volume of aggregate; and not less than one part by volume of the binder to four parts by volume of the aggregate; and effervescing matter sufficient to impart a spongy texture to the material when wetted.

1,906,139. MACHINE FOR SETTING ROWS OF PLANTS DEEPER. HERMANN DENSTÄDT, FRIEDRICH DENSTÄDT, and MAX WEICHERT, Neubrandenburg, Germany. Filed Mar. 15, 1929, Serial No. 347,376, and in Germany Oct. 9, 1928. Renewed Nov. 19, 1932. 7 Claims. (Cl. 55—18.)



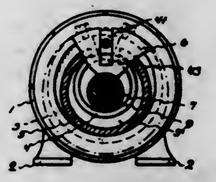
1. A deep-setting plant machine for rows of plants, comprising a frame; wheels for the frame; a plurality of discs mounted on the frame for digging a trench on each side of a row of plants and thereunder; means on the frame for setting the plants into the trenches; and means on the frame for smoothing the soil over the deep-set plants.

1,906,140. SHAVING BRUSH HAVING A RESERVOIR FOR THE SOAP. HENRI DEPASSE, Neuilly-sur-Seine, France. Filed Feb. 19, 1932, Serial No. 594,093, and in France Feb. 24, 1931. 3 Claims. (Cl. 15—137.)



1. A shaving brush of the type described comprising in combination, a tuft of hairs, a handle for said tuft of hairs, a cylindrical reservoir for shaving cream provided in said handle, a removable bottom for said reservoir, an outlet tubular nozzle provided in said reservoir, an India-rubber nipple fitted on said nozzle and extending into said tuft of hairs, the end of said nipple being provided with a slit for allowing the outflow of the shaving cream but preventing the ingress of air from the outside, a cap surrounding the end of said reservoir opposed to said nozzle and adapted to slide thereon, a cylindrical rod secured to the bottom of said cap extending coaxially throughout said reservoir, the length of said rod being such that its end is located at a certain distance from said nozzle when said cap is at its maximum distance from said reservoir and is engaged into said nozzle when said cap is pushed toward said reservoir, said rod comprising a flaring portion of frusto-conical shape provided close to said end thereof, a spring interposed between the bottom of said reservoir and the bottom of said cap, whereby a predetermined quantity of shaving cream is forced out from said nozzle into said tuft of hairs every time the cap is pressed toward the reservoir, and a packing ring slidably mounted on said rod in said reservoir and adapted to be wedged against said frusto-conical portion of the rod so as to guide said rod with respect to said reservoir and to compress the shaving cream into a compact mass when said rod is introduced into said reservoir after filling of the latter, said ring subsequently sliding along said rod when the latter is being sunk into said reservoir so as to ensure a tight joint.

1,906,141. ROTARY PUMP, COMPRESSOR AND THE LIKE. JOHN EKELÖF, Lidingo, Sweden. Filed Dec. 5, 1931, Serial No. 579,244, and in Sweden Oct. 12, 1929. 5 Claims. (Cl. 230—146.)

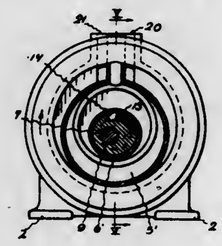


2. In a rotary pump or compressor, an annular cylinder confined in radial direction by two coaxial cylinder walls and at its one end by a fixed wall, an annular piston member mounted eccentrically movable within said cylinder in contact with its walls, a cover disc connected with said annular piston member and adapted slidingly to contact with and to close the opposite cylinder end, a radial transverse wall mounted in the cylinder, a split portion upon the piston member straddling said wall, a rotatable driving means positioned centrally in relation to the annular cylinder, a crank means connected with said driving means and adapted for driving the piston member by the intermediary of the cover disc, means for mounting the combined piston aggregate freely slidingly in axial direction in relation to the cylinder end, means for mounting of the said aggregate freely slidingly also in radial direction independently of the axial sliding movement, and slot-and-pin guide means provided directly between the transverse wall within the cylinder and the cover disc and adapted to concentrate the guiding forces applied to the piston aggregate substantially in the plane of contact between the cover disc and the cylinder end.

1,906,142. ROTARY PUMP OR COMPRESSOR. JOHN EKELÖF, Lidingo, Sweden. Filed Dec. 5, 1931, Serial No. 579,245, and in Sweden Apr. 2, 1930. 5 Claims. (Cl. 230—146.)

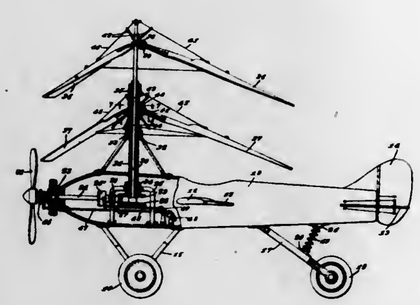
3. In a rotary pump or compressor, an annular cylinder confined in radial direction by two coaxial cylinder walls and at its one end by a fixed wall, an annular piston member mounted eccentrically movable within said cylinder in contact with its walls, a cover disc connected with the annular piston and adapted slidingly to contact with and to close the opposite cylinder end, means for mounting the combined piston aggregate slidingly in axial direction due to difference in pressure acting upon the opposite sides of the cover disc, a radial transverse wall

mounted in the cylinder and straddled by a split portion of the piston, inlet and outlet means positioned at opposite sides of said transverse wall, a driving shaft rotatably mounted centrally n relation to the annular cylinder, a cylindrical crank pin connected with said shaft, a cylindrical boss rotatably mounted in an eccentrical position



on said crank pin, such boss and a hub portion of the cover disc rotatably mounted thereon being adapted within certain limits under influence of the centrifugal force only to be freely displaced in radial direction independently of the axial displacement of the same members, and means for limitation of the turning movement of the boss around the crank pin.

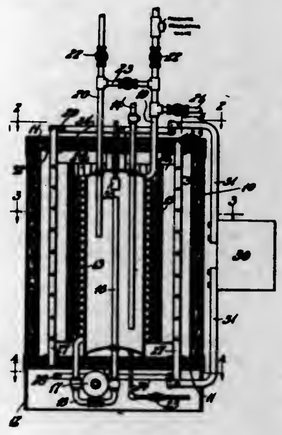
1,906,143. HELICOPTER. MERWIN W. EVANS, Holland Patent, N. Y. Filed May 27, 1932. Serial No. 614,007. 1 Claim. (Cl. 244—15.)



In an aircraft, a fuselage having a plane, ailerons associated with the plane, elevators associated with the fuselage, a rudder at the rear end of the fuselage, a motor driven propeller at the fore end of the fuselage, means for releasing the propeller from the motor, interfitted shafts mounted in the fuselage and rising vertically above the same, gear connections between the motor and said interfitted shafts, means for controlling the connections between the motor and said shafts, tri-wings associated with the said shafts, spider hangers on the shafts, universal joints connecting the tri-wings with said hangers, guy wires having connection between the shafts and said tri-wings, and braces associated with the shafts and said wires.

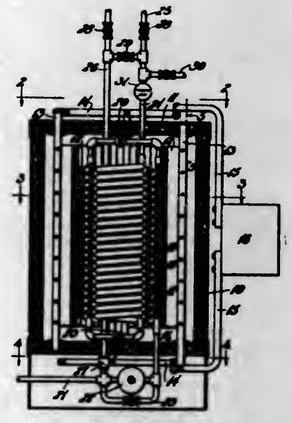
1,906,144. ELECTRIC FLUID HEATER. WILLIAM L. EVANS, Washington, Ind. Filed Aug. 9, 1930. Serial No. 474,175. 9 Claims. (Cl. 219—39.)

1. A water heater comprising, in combination, a substantially cylindrical casing; a tank within the casing; a tubular coil around the tank; having an inlet pipe extending through the upper end of the tank; a water circulating pump connected to pump water through the coil; a valved by-pass pipe around the pump; a main delivery pipe connected to the coil constituting a trunk line for a heating system; a return pipe for the system discharging into the tank; a valved by-pass connecting



the delivery and return pipes; and valves in both of said pipes so arranged that the heating system may be cut off and the water circulated through the tank and the coil.

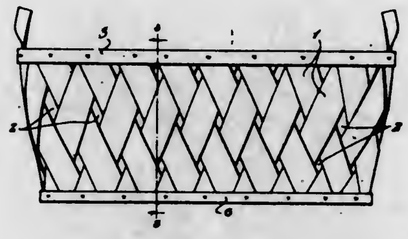
1,906,145. ELECTRIC FLUID HEATER. WILLIAM L. EVANS, Washington, Ind. Filed Aug. 9, 1930. Serial No. 474,176. 9 Claims. (Cl. 219—39.)



1. In a water heater installation of the character described, a casing; electrical heating means including a plurality of sheet metal resistance units within the casing adjacent to the inner wall; and a plurality of thin-walled, tubular coils coaxial with each other and connected in series adjacent to and surrounded by said heating means.

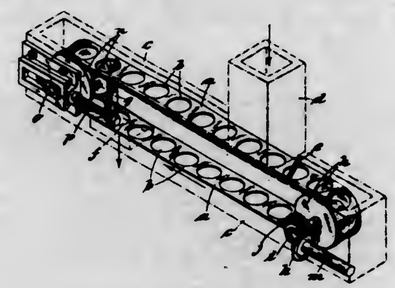
1,906,146. BASKET. EMIL A. FLORANG, Burlington, Iowa. Filed Nov. 5, 1930. Serial No. 493,609. 2 Claims. (Cl. 217—122.)

1. In a basket, having an upper hoop, a bottom, and opposite longitudinally straight side walls including oblique splints connecting said upper hoop and said bottom and continuously interwoven entirely around the basket; said splints having oblique crossing relation to one another and having a substantially solid wall of lapped portions thereof located opposite to and extending above and secured to said bottom entirely around the basket and



adapted to effectually resist the twisting strain of said splints and brace the basket against sidesway in all directions.

1,906,147. BAND CONVEYER. CHARLES WILLIAM GARDINER, High Barnet, England, assignor to Gardiner's Conveyors Limited, London, England, a British Company. Filed Jan. 14, 1932. Serial No. 586,671, and in Great Britain Jan. 15, 1931. 9 Claims. (Cl. 198—193.)



2. In a band conveyer for finely divided materials in bulk, a band casing, smooth wheels mounted in association therewith, a perforated band comprising a strip of inherently flexible material without articulations adapted to travel around said wheels, means for loading the material to be conveyed through the upper part of said casing, a discharge outlet formed in the bottom of said casing and means for driving said band, whereby the perforations in said band are successively brought into register with the said discharge outlet to effect discharge of the conveyed material.

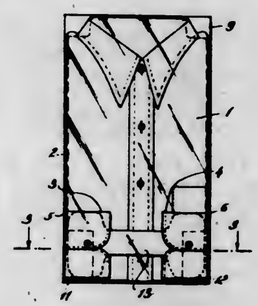
1,906,148. DELUSTERING. HENRY A. GARDNER, Washington, D. C. Filed July 1, 1929. Serial No. 375,846. 17 Claims. (Cl. 18—54.)

1. In the production of artificial silk having an opalescent silky translucence from an artificial silk composition, comprising a cellulose material of the class consisting of cellulose esters and ethers, and an organic liquid component, the steps which comprise adding a hydrolyzable alkylated compound of metal to an organic liquid component of said artificial silk composition in the presence of moisture and thereafter forming filaments of artificial silk from said artificial silk composition containing said liquid organic component.

1,906,149. DELUSTERING. HENRY A. GARDNER, Washington, D. C. Original application filed July 1, 1929, Serial No. 375,846. Divided and this application filed Feb. 1, 1932. Serial No. 590,330. 8 Claims. (Cl. 134—79.)

1. In the delustering and flatting of films, filaments, sheets and layers produced from liquid compositions, the process which comprises adding to the liquid composition a hydrolyzable alcoholate of a metal, said metal being selected from the class consisting of titanium, zirconium, aluminum, magnesium, zinc, cobalt and nickel and effecting hydrolysis of said alcoholate to obtain said delustering and flattening.

1,906,150. SHIRT PACKAGE. THOMAS H. GOLDEN, Pottsville, Pa., assignor to Phillips-Jones Corporation, New York, N. Y., a Corporation of New York. Filed Dec. 12, 1932. Serial No. 646,809. 5 Claims. (Cl. 206—46.)



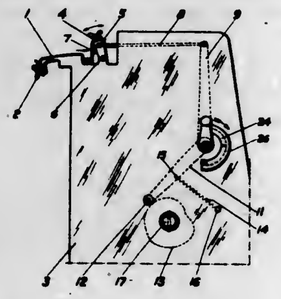
1. In a shirt package in which the shirt is folded flat with the front thereof exposed upwardly and the cuffs are buttoned and laid against the front of the shirt with the portions of the sleeves adjacent the cuffs extending around the side edges of the shirt, said cuffs lying with their open ends spaced and in alignment, the combination of a strip of sheet material having a body portion for receiving a label and end portions on each side thereof, said end portions being respectively inserted in the cuffs and frictionally engaging the same to retain both strip and cuffs in position against the front of the shirt.

1,906,151. INFLATABLE CONDUIT STOPPER. PATRICK GOODMAN, Brooklyn, N. Y.; Mary Goodman and Elizabeth A. Goodman, administratrices of said Patrick Goodman, deceased, assignors to Francis Greer Goodman and Elizabeth A. Goodman, Brooklyn, N. Y. Filed Feb. 25, 1930. Serial No. 431,218. 8 Claims. (Cl. 137—76.)



2. In a conduit stopper adapted to be introduced through a taphole in the conduit, said stopper including an inflatable elongated body having substantially semi-spherical opposite ends, means located within said body for maintaining the ends in axial alignment while permitting limited free relative movement of the ends of the body toward and away from each other whereby to prevent turning of the leading end backward when deflating the body preparatory to effecting its removal from the conduit.

1,906,152. CIGAR BUNCHING MACHINE. KARL ERIK GRANSTEDT, Stockholm, Sweden, assignor to Aktiebolaget Formator, Stockholm, Sweden, a Joint-Stock Company. Filed June 2, 1932. Serial No. 615,002. 7 Claims. (Cl. 131—42.)



1. In a cigar bunching machine in combination, an apron, a movable member connected with one end of said apron, an eccentric adapted to move said member, and means for adjusting said eccentric from the outside of said machine.

1,906,153. WINDOW LOCK. WILLIAM TULLIS HALL, San Diego, Calif., assignor of one-third to Herbert McCullough, San Diego, Calif. Filed July 28, 1932. Serial No. 625,454. 7 Claims. (Cl. 292—81.)

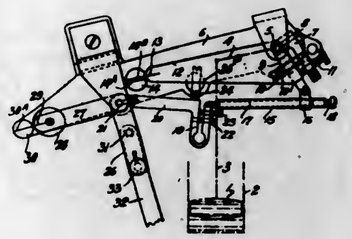


1. A window lock of the character described comprising a spring leg adapted to be fixed to a section of the window, a plate adapted to be mounted upon a second section of the window in closed position, said plate having a slot formed adjacent one end portion thereof for the passage of the leg therethrough to partly open the window, and that end portion of the plate bent at substantially right angles to the body of the latter and disposed for engagement with said leg upon its passage through the plate to lock the window in its partly open position.

1,906,154. PROCESS FOR COATING METAL OBJECTS. BERNARD HEMANN, Ashland, Ky. Filed Nov. 1, 1930. Serial No. 492,876. 3 Claims. (Cl. 91—70.)

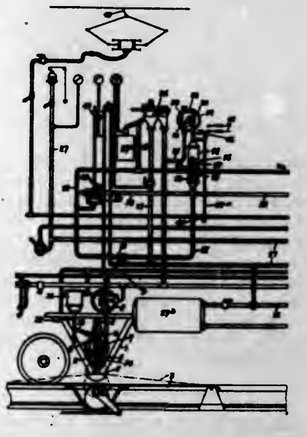
1. A process of protecting a metal object comprising heating the metal object to loosen therefrom foreign matter, drive off impurities, and open the pores thereof, dipping the metal object into a hot bath comprising a liquefied mixture of linseed oil, turpentine, micaceous hematite, asphaltum, and fish oil, removing the dipped metal object from the bath, and drying it in an oven.

1,906,155. INDICATING OR RECORDING MECHANISM. JOHN LAWRENCE HODGSON and FFOLLIOTT GRAY, Luton, England, assignors to George Kent Limited, London, England. Filed Nov. 5, 1931. Serial No. 573,283. 20 Claims. (Cl. 234—34.)



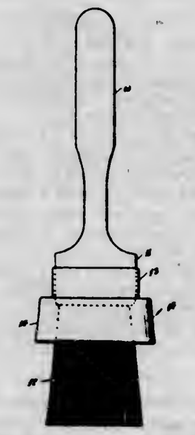
1. In indicating or recording apparatus, the combination of an actuating mechanism, including a crank arm mounted for movements in response to pressure variation, a pen shaft, a pen carrier on the shaft, an arm on the shaft, a link for connecting the crank arm to the arm on the pen shaft, a stop which prevents the axis of connection between the link and the arm on the pen shaft from lying in the plane containing the axis of connection between the link and the crank arm and the axis of the pen shaft, means for effecting disconnection between the actuating mechanism and the pen mechanism to free the former from constraint by the latter when the stop is operative, means for indicating the true free zero position of the actuating mechanism, and means for effecting an adjustment of the free zero position of the actuating mechanism.

1,906,156. COMPRESSED AIR BRAKE WITH STAGE BRAKING. WILHELM HOTZ, Basel, Switzerland. Filed Apr. 8, 1930. Serial No. 442,611. 7 Claims. (Cl. 246—183.)



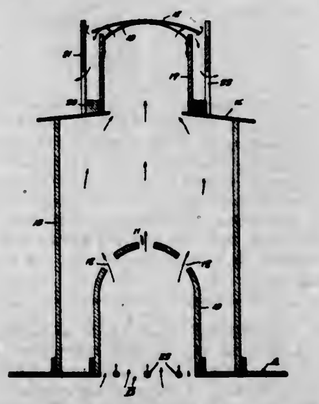
1. In air brake apparatus, a brake pipe, fluid pressure actuated apparatus connected thereto and including a movable element, an engineer's valve, and an emergency valve including a casing connected pneumatically with the engineer's valve for the discharge of air from the latter, and also including an element actuated by the movable element of said fluid pressure apparatus, said emergency valve being constructed and arranged to successively and intermittently discharge compressed air from the brake apparatus through the engineer's valve during a single movement in one direction of the said movable element of the said fluid pressure actuated apparatus, and means, independent of the engineer's valve to establish communication between the said brake pipe and said fluid pressure actuated apparatus, to cause the latter to operate and hence cause the brakes to be applied by the emergency valve in the event of failure of operation of the engineer's valve.

1,906,157. DRIP CATCHER FOR PAINT BRUSHES AND THE LIKE. FRANK JEROUSEK, Baltimore, Md. Filed June 22, 1932. Serial No. 618,754. 3 Claims. (Cl. 15—248.)



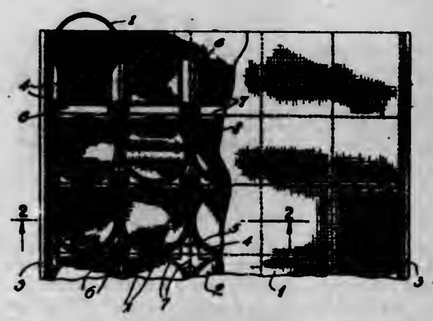
1. A drip catcher for paint brushes, comprising a tubular member adapted to surround and closely engage a brush head, said tubular member having an enlarged tubular portion at one end thereof and having oppositely disposed walls offset therefrom, and enlarged portion being adapted to surround brush bristles in said head and adapted to catch drippings from the bristles, and rods secured in opposite walls of said enlarged portion and adapted for location on opposite sides of the bristles to support them when the brush head and bristles are lying on one side and direct drip onto said enlarged portion.

1,906,158. VENTILATOR. ALEX JOHN, Port Huron, Mich. Filed Sept. 19, 1932. Serial No. 633,905. 3 Claims. (Cl. 98—29.)



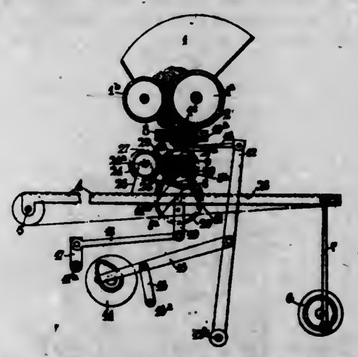
1. A ventilator of the character described comprising a hood adapted to fit over a roof opening and having intermediate and outer slots, a casing coextensive with said hood and enclosing the same, a cupola rising from the top of the casing and communicative therewith and open at its upper portion, a canopy overhanging the open upper portion of said cupola, means supporting the canopy elevated with relation to said open upper portion of said cupola, and deflectors spaced outwardly beyond each side of said cupola and rising above the canopy thereof.

1,906,159. SPRING CUSHION CONSTRUCTION. SAMUEL KRAKAUER and SAMUEL S. MARCUS, New York, N. Y. Filed June 7, 1929. Serial No. 369,200. 1 Claim. (Cl. 5—353.)



In spring cushion construction, a casing comprising top, bottom, end and side walls, said casing being of fabric material and of a size to hold a selected number of coil springs between the top and bottom thereof, strips of fabric material connected to the top and bottom to form with said top and bottom walls of the casing a plurality of compartments, each having one side open, said compartments being similarly arranged and each having opposite walls spaced at a distance less than the greatest diameter of the springs and to be expanded by the springs upon insertion thereof and to embrace the greater portion of the circumference of a spring, each compartment being adapted to receive a single spring.

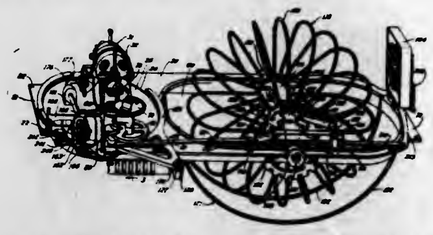
1,906,160. APPARATUS FOR FORMING MOLDED OR EMBOSSED ARTICLES OF PLASTIC MATERIAL. ARIBERT KREMMLING, Hammersleben, Germany. Filed Dec. 28, 1932, Serial No. 649,221, and in Germany Jan. 12, 1931. 9 Claims. (Cl. 107—8.)



5. A machine for forming moulded or embossed articles of plastic material, such as dough, marsipan or the like, comprising an extrusion apparatus having means for forcing the material through the opening of a die plate, a moulding or embossing element located below the die plate, means for moving said element into register with the die opening to mould the material extruded therethrough and for moving the element away from the die plate to release the element from the extruded

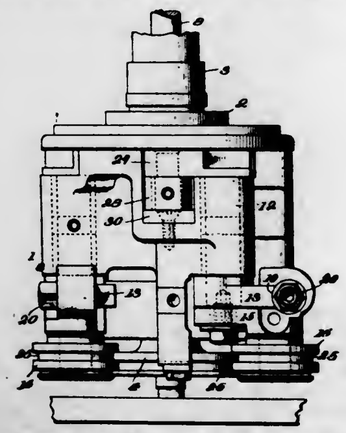
moulded end of the material, means for severing said extruded end whereby it falls onto the moulding element, means for rotating the mould element, a delivery conveyor located adjacent the mould element and having a part extending beneath said element, and means for driving the conveyor in unison with the rotary movements of the mould element, whereby the severed portion is transferred to said conveyor.

1,906,161. POWER OPERATED TALKING MACHINE. JOSEPH KRIZ, Chicago, Ill. Filed May 3, 1930. Serial No. 449,536. 11 Claims. (Cl. 274—10.)



11. A talking machine comprising a rotatable table adapted to receive a record, means for delivering a record to and removing a record from said table, means including a head movable into engagement with the record for retaining the record upon said table and for rotating said record and said table, a reproducer including a pivotally movable arm adapted to engage the record, means for moving the reproducer into and from engagement with the record, means for moving said record and table rotating means from and into engagement with the record, said last named means including an oscillatory disc, a pin on said disc adapted to engage said head, said reproducer removing means including a pivotal bar having a slotted end portion, and a pin carried by the disc and engaging in said slot whereupon upon oscillation of said disc in a direction to move the record and table rotating means for engagement with the record, said bar will be elevated against the arm of the reproducer and elevate said arm and reproducer so that said arm and reproducer will move by gravity away from the central portion of said record.

1,906,162. SEAMING HEAD FOR CLOSING MACHINES. ALFRED L. KRONQUEST, Syracuse, N. Y., assignor to Continental Can Company, Inc., New York, N. Y., a Corporation of New York. Filed Apr. 28, 1931. Serial No. 533,560. 3 Claims. (Cl. 113—24.)



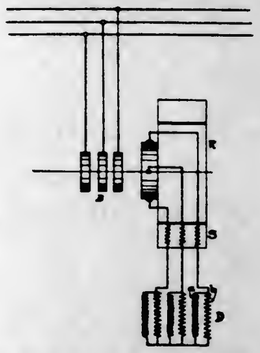
1. A seaming head for can closing machines comprising a rotating head portion, a stationary chuck associated therewith, a plurality of vertically disposed spindles carried by said head portion, an arm attached to the lower end of each spindle, a seaming roll carried thereby, an arm attached to the upper end of said spindle, a cam follower mounted thereon, a reciprocating cam rotating with said head and operating on said cam followers, said seaming rolls being held on the supporting arms therefor by interengagement with the chuck, and means whereby the cam follower may be moved to inoperative position to permit the spindle to be shifted so as to disengage the seaming roll from the chuck, whereby the seaming roll may be detached from its supporting arm.

1,906,163. PROCESS OF MAKING BASE EXCHANGE MATERIALS FOR WATER SOFTENING. PERCY LASSELLE, Chicago, Ill., assignor, by mesne assignments, to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 10, 1927. Serial No. 174,429. 14 Claims. (Cl. 23—113.)

1. The method of preparing base exchange materials which comprises mixing a solution of an alkali metal silicate with a solution of a non-alkaline compound of aluminum hydroxide and adding to said solution mixture a solution of an alkaline compound of aluminum hydroxide, the proportions and concentrations of said solutions being such as to form a jelly upon standing.

12. A method of increasing the porosity of precipitated base exchange silicates which comprises adding to the reacting mixture an acid and an alkali to provide soluble salts in excess of the amount resulting from the reaction which forms the base exchange silicate.

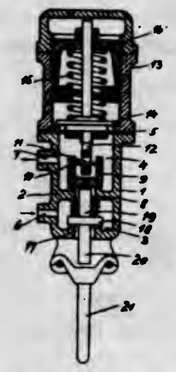
1,906,164. ASYNCHRONOUS ELECTRICAL MACHINE. PIERRE LETRILLIART, Paris, France, assignor to Forges & Ateliers de Constructions Electriques de Jeumont, Paris, France, a French Société Anonyme. Filed Nov. 25, 1929, Serial No. 409,643, and in France Nov. 29, 1928. 6 Claims. (Cl. 172—274.)



1. An automatically starting asynchronous electrical machine, comprising a primary winding, a secondary winding, a compensating winding, a commutator connected to said compensating winding, with its brushes connected to said secondary winding, and a starting impedance cooperating with said secondary winding, said starting impedance consisting of polyphase resistance and polyphase inductance, and the starting inductance being rendered negligible in normal running by the effect of said commutator.

1,906,165. PRESSURE RELEASE VALVE. RICHARD LUDWIG LEUCHTER, Weidlingau-Hadersdorf, Austria, assignor to Gebruder Hardy, Maschinenfabrik und Giesserei A. G., Vienna, Austria, a Corporation of Austria. Filed Jan. 21, 1931, Serial No. 510,252, and in Austria Feb. 6, 1930. 4 Claims. (Cl. 303—77.)

1. In a pressure release valve the combination of a cylindrical chamber, a piston operating therein, an auxiliary reservoir permanently connected to the space on one side of the piston of the said chamber, an automatic valve adapted to establish connection between the auxiliary reservoir and the other space of the said cylindrical chamber, and means responsive to the air pressure existing

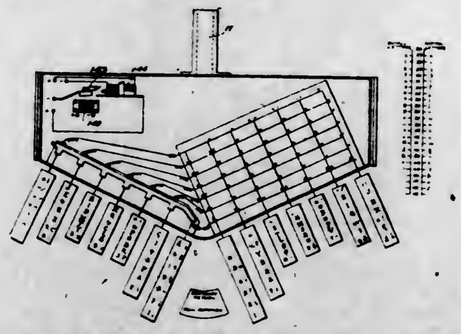


in the said other space of the said cylindrical chamber and to a substantially constant force counteracting the said air pressure, for opening the said automatic valve whenever the air pressure in the said other chamber of the said cylindrical chamber overcomes the said substantially constant force.

1,906,166. RECOVERING BASE EXCHANGE MATERIAL. OTTO LIEBKNECHT, Neubabelsberg, Germany, assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 12, 1931, Serial No. 508,379, and in Germany Jan. 25, 1930. 6 Claims. (Cl. 23—112.)

3. In making base exchange silicate gels, the process which comprises incorporating in a wet gel gelatinized fine particles of a previously formed and dried gel and then drying and granulating the gel mixture.

1,906,167. ELECTRICALLY OPERATED TYPEWRITER. AURELIO LINHARES, Rio de Janeiro, Brazil. Filed Sept. 7, 1928, Serial No. 304,533, and in Brazil Mar. 15, 1928. 3 Claims. (Cl. 197—11.)



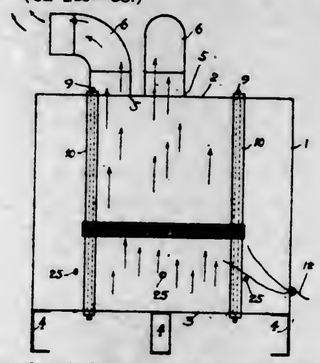
1. In an electrically operated typewriter, a keyboard for controlling the carriage and types, said keyboard comprising two sets of keys, each key of each set having a conductor attached thereto, the conductors of one set of keys crossing those of the other set at an angle, whereby a definite contact will be established whenever two keys, one of which belongs to each set, are actuated simultaneously, said contact being determined by the point of intersection of the two corresponding conductors, and a series of electromagnets controlled by the contacts thus established.

1,906,168. PROCESS OF DECORATING METALS. VEUVE F. MALLEVAL, NÉE BERTHE BURLET, Paris, France. Filed Aug. 24, 1929, Serial No. 388,263, and in France July 24, 1929. 5 Claims. (Cl. 41—18.)



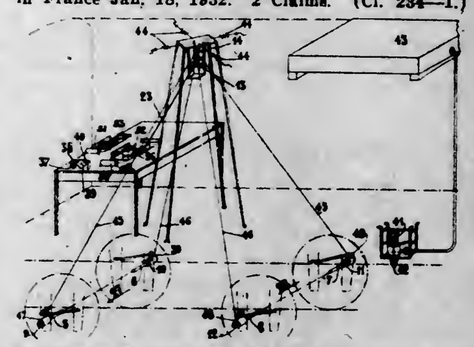
1. A process for decorating metallic surfaces which comprises covering the parts of the object to be treated with a coat of a mixture of mastic resin and petroleum jelly dissolved in a hydrocarbon, pasting metal leaf on the said coat and heat treating to produce cementation of the metals and obtain the decorative effect.

1,906,169. ELECTRIC HEATER. JOE MANZITTO, Omaha, Nebr. Filed May 5, 1932. Serial No. 609,481. 2 Claims. (Cl. 219—38.)



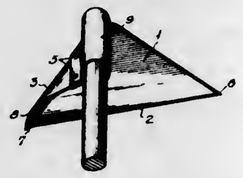
1. In an electric heater, an upstanding metal drum, a horizontal planular fire-bond plate located within said drum intermediately of the height thereof and spaced from the interior drum wall at the top, bottom and sides thereof, means for supporting said plate including upright rods connecting the top and bottom of the drum and carrying tubular insulation elements engaging the top and bottom of the drum and the top and bottom of said plate, electric means for heating said plate, said plate acting as a baffle for rising heated air in the drum, said drum having top openings, and tubular elbows engaging said openings and turned permanently in different directions, said elbows acting as further baffles for heated air and discharging in different directions to further facilitate the heating effect.

1,906,170. DEVICE FOR RECORDING THE WARP OF RAILWAY TRACKS. ANDRÉ ERNEST MAUZIN, Paris, France. Filed Mar. 17, 1932. Serial No. 599,544, and in France Jan. 18, 1932. 2 Claims. (Cl. 234—1.)



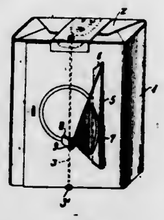
1. A device for recording the warp of railway tracks comprising cables connecting diagonally the wheels of a vehicle bogie, the variation in the vertical distance between these cables giving the warp to be measured.

1,906,171. GARDEN AND FLOWER HOE. ELI H. MCNEAL, Muskegon, Mich., assignor of one-half to Martin Newald, Muskegon, Mich. Filed July 30, 1932. Serial No. 626,587. 5 Claims. (Cl. 97—65.)



1. A hand implement of the hoe type, comprising a tool head having a blade provided with a lower straight edge, said blade having a lateral edge having an acute angle relation to and intersecting said straight edge to form a cultivator and weeder tooth, said blade having at the end thereof opposite said tooth a rearward bent portion having an upper edge located intermediately of the length of the blade and provided with a handle connection in line therewith.

1,906,172. CIGARETTE PACKAGE. BERENICE WYETH MERCHANT, Kensington, Md. Filed Jan. 14, 1932. Serial No. 586,682. 3 Claims. (Cl. 229—51.)



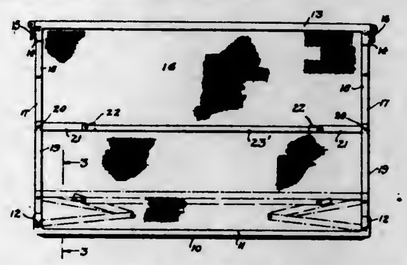
1. As an article of manufacture, a cigarette package comprising a container closed at its ends, means for splitting the container down the side wall thereof, said means comprising a string anchored at one end of the container and extending upwardly on the inside thereof to the adjacent end and projecting to the exterior of the container to provide a free end, a securing flap adapted to normally conceal the free end of the string, a clasp associated with said flap, said clasp being adapted to be secured to the adjacent side of the container after the same has been split whereby to prevent inadvertent separation of the package.

1,906,173. COLLAPSIBLE BASKET. DAVID MILLER, Brooklyn, N. Y. Filed Nov. 14, 1929. Serial No. 407,174. 2 Claims. (Cl. 150—49.)



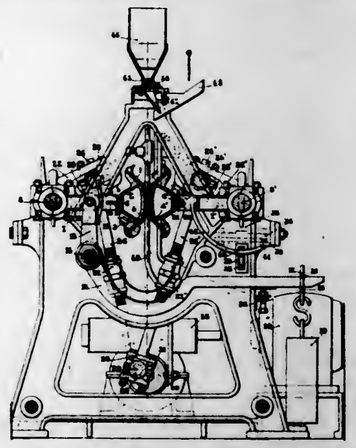
1. A hamper of the character described comprising a rigid base frame, foldable members at the corners of the base frame, a rigid top frame, foldable members at the corners of the top frame, pivots connecting the members together of the respective frame, inwardly curved ends on the members of the top frame, interfitted extensible connections pivoted to said inwardly curved end, and means latching said extensible connections together.

1,906,174. COLLAPSIBLE BASKET. DAVID MILLER, Brooklyn, N. Y. Filed Dec. 15, 1930. Serial No. 502,532. 5 Claims. (Cl. 150—49.)



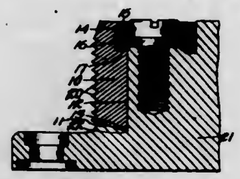
5. A collapsible crate or basket structure having the combination of a top frame, a bottom, jointed uprights each pivotally connected with said frame and bottom, said uprights being arranged in pairs, and a jointed brace pivotally connected with and arranged between the uprights of each pair.

1,906,175. MACHINE FOR DETERMINING THE RESISTING QUALITIES IN WEAR OF LEATHER FOR SOLES. PAUL MILLET, Nancy, France, assignor of one-half to Societe en nom Collectif dite: Veuve Paul Luc & Cie, Nancy, France, a Corporation of France. Filed Apr. 2, 1927, Serial No. 180,566, and in France Jan. 28, 1927. 7 Claims. (Cl. 73—51.)



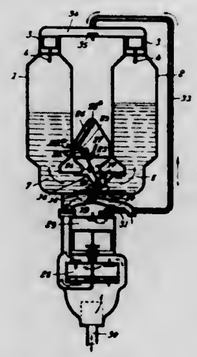
4. In a machine for testing the wearing quality of a material intended to be subjected to friction, a pair of oscillatable shafts, a pair of supports, means connecting said supports to said oscillatable shafts and said supports having curved peripheral surfaces facing one another, means for fastening material to be tested to the peripheral surfaces of said supports, a rotatable shaft, means for rotating said shaft, crank-arms rigidly connected to said oscillatable shafts, connecting rods extending from said crank-arms to independent points eccentric to the axis of said rotatable shaft, and means maintaining one end of each of said connecting rods at a fixed distance from the axis of rotation of said rotatable shaft, and means for yieldably forcing said supports towards and into contact with one another.

1,906,176. CHASER. SAMUEL F. NEWMAN and JAMES G. HARPER, Waynesboro, Pa., assignors to Landis Machine Company, Waynesboro, Pa., a Corporation of Pennsylvania. Filed Jan. 16, 1931. Serial No. 509,194. 4 Claims. (Cl. 10—104.)



1. A tangential chaser having thread cutting serrations on its face and having a back with a portion of its surface cut away to provide a beveled seat for a holding clamp and an additional portion cut away adjacent the beveled seat to provide a clearance between the clamp and a portion of the chaser, a surface on the first named cut-away portion, said surface seating against said clamp and having a beveled base adjacent the back, substantially as set forth.

1,906,177. AUTOMATIC DEVICE FOR MEASURING AND DELIVERING LIQUIDS. RENÉ PORTE, Levallois-Perret, France, assignor to Societe Hardoll, (Etablissements Hariveau & Dolimier, et René Porte & Cie Reunis), Levallois-Perret, France. Filed Oct. 5, 1926, Serial No. 139,712, and in Belgium May 22, 1926. 3 Claims. (Cl. 73—28.)



1. In an apparatus of the class described, the combination of two measuring chambers of given capacity, means for supplying liquid under pressure to said chambers, a discharge conduit communicating with said chambers, a valve mechanism cooperating with said liquid supply means and said discharge conduit and for controlling the supply to and the discharge from said chambers, means for automatically operating said valve mechanism when a chamber is supplied with a measured quantity of liquid for disconnecting said filling chamber from the supply and connecting the same to the discharge conduit therefor, said last named means including a lever attached to the valve, an auxiliary lever pivoted to the upper end of said first-named lever, a compression spring connected to the outer end of said auxiliary lever and to the casing, stops for limiting the swinging movement of said auxiliary lever and abutments carried by the casing and adapted to engage and swing said auxiliary lever whereby the connection between the compression spring and the auxiliary lever is caused to move across a dead center line during the first part of the movement of the valve, whereby said spring becomes effective to complete the movement of the valve.

1,906,178. PREPARATION AND OPERATION OF PLATINUM PLATING BATHS. ALAN RICHARD POWELL, EMYR CONWY DAVIES, and ARTHUR WILLIAM SCOTT, London, England, assignors to Johnson Matthey & Company Limited, London, England. Filed Jan. 23, 1932, Serial No. 588,492, and in Great Britain Oct. 14, 1931. 14 Claims. (Cl. 204—1.)

1. A process for the manufacture and production of adherent deposits of platinum by electrolysis in which the plating bath comprises an alkaline solution containing a conducting salt, and a readily soluble-crystalline alkali metal platinate prepared by treating the reaction product of an alkali metal hydroxide and a compound of tetravalent platinum in aqueous solution with an organic liquid which reduces the solubility of the alkali platinate.

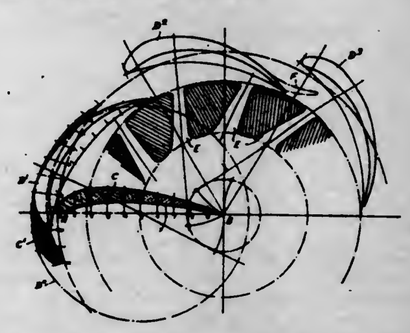
1,906,179. ALKALI METAL PLATINATES AND THEIR MANUFACTURE. ALAN. RICHARD POWELL, EMYR CONWY DAVIES, and ARTHUR WILLIAM SCOTT, London, England, assignors to Johnson Matthey & Company Limited, London, England. Filed July 27, 1932, Serial No. 625,216, and in Great Britain Oct. 14, 1931. 21 Claims. (Cl. 23—51.)

1. A readily water soluble crystalline alkali metal hexahydroxyplatinate having the chemical formula $M_2Pt(OH)_6.xH_2O$, where M is a metal of the alkali group and x is at least 0.5.

7. Potassium hexahydroxyplatinate in the form of fine crystals containing water of crystallization corresponding with the chemical formula $K_2Pt(OH)_6.xH_2O$, where x is 3.

8. The process of manufacturing alkali metal hexahydroxyplatinates which comprises boiling a soluble salt of tetravalent platinum, which is free from cyanide, nitrite, and ammonia groups, with an alkali metal hydroxide solution, cooling, and adding an organic liquid miscible with water but without solvent action on the platinate and selected from the group consisting of aliphatic alcohols, ketones, and glycols.

1,906,180. PROPELLER, PUMP, OR FAN. EDMUND SCOTT GUSTAVE REES, Oaken, England. Filed Oct. 2, 1929, Serial No. 396,844, and in Great Britain Oct. 5, 1928. 3 Claims. (Cl. 103—115.)



1. In rotary pumps, jet propellers and the like, an impeller having circumferential blades rotating without overlap in undisturbed water, each blade having the character of an aerofoil bent into a curve as by plotting the cross section of an aerofoil, not along a straight chord, but along a curve.

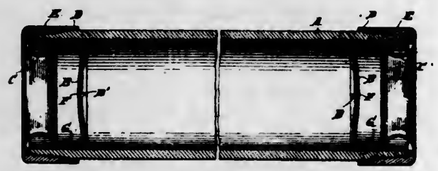
1,906,181. COMPOUND SILICATE GELS AND METHODS OF MAKING THE SAME. RAY RILEY, Paterson, N. J., assignor to American Zeolite Corporation, New York, N. Y., a Corporation of Delaware. Filed Dec. 2, 1930. Serial No. 499,606. 11 Claims. (Cl. 23—113.)

1. As a new composition for water softening and other purposes an alkali alumino-silicate gel compounded from

an alkaline artificial alumino-silicate gel and an artificial alumino-silicate gel non-alkaline at the time of compounding.

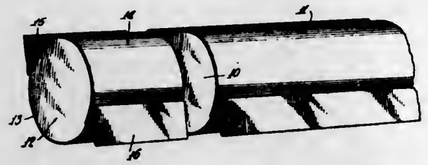
4. A process of making a base exchange silicate gel which comprises gelling a mixture of sodium silicate solution with an alkaline solution of a metal oxid, gelling another solution of sodium silicate with an acidic solution of a metal oxid, the final relative proportion or said acidic solution being sufficient to leave the gel mixture in a non-alkaline condition, washing the two gels with water pulping and intimately mixing the two washed gels and drying and granulating the gel mixture.

1,906,182. PROTECTOR FOR THREADED PIPE ENDS. ARTHUR H. RINEY, Bartlesville, Okla., assignor to Phillips Petroleum Company, Bartlesville, Okla., a Corporation of Delaware. Filed May 2, 1930. Serial No. 449,197. 4 Claims. (Cl. 137—91.)



1. The combination with a pipe having external threads, of a protector cap sealing one of the pipe ends against the entrance of water and having a threaded collar engaging the pipe threads, said cap including a cup-shaped handling hook receiving part extending into the pipe end and having a reinforced rigid back.

1,906,183. FROZEN COMESTIBLE PACKAGE. CLARENCE W. VOGT, Louisville, Ky., assignor to Vogt Instant Freezers, Incorporated, Louisville, Ky., a Corporation of Delaware. Original application filed Jan. 9, 1932, Serial No. 585,745. Divided and this application filed July 28, 1932. Serial No. 625,316. 3 Claims. (Cl. 206—56.)

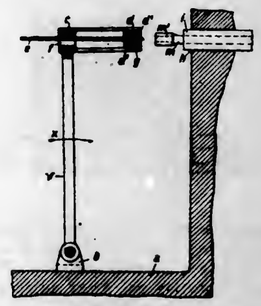


2. As a new article of manufacture, a packaged frozen comestible, comprising a substantially solid block of ice cream or the like, and a wrapper extending around the block and including two separate portions, each extending around substantially one-half of the periphery, and each terminating in a tab, said tabs being at substantially diametrically opposite points, whereby the block may be readily freed from the wrapper by pulling in opposite directions on said tabs.

1,906,184. METHOD OF REDUCING METAL OXIDES. WILHELM ROHN, Hanau, Germany, assignor to Heraeus-Vacuumschmelze A-G., Hanau-on-the-Main, Germany, a German Company. Filed Jan. 28, 1932, Serial No. 589,526, and in Germany Feb. 27, 1931. 20 Claims. (Cl. 75—45.)

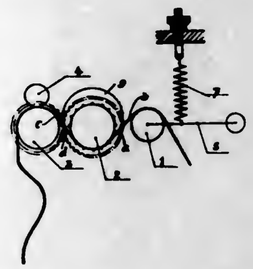
1. The method of reducing metal oxides which comprises placing the metal oxide upon a molten bath of metal adapted at least in part to alloy with the metal constituent of said oxide, and thereafter circulating substantially pure hydrogen over said oxide while maintaining said bath in a molten state.

1,906,185. LOOM. RUDOLF ROSSMANN, Munich, Germany, assignor to Tefag Textil Finanz A. G. Zurich, Zurich, Switzerland, a Corporation of Switzerland. Filed June 4, 1930, Serial No. 459,193, and in Germany June 13, 1929. 9 Claims. (Cl. 139—181.)



1. In a loom, the combination with a shuttle, of a carrier for transmitting the end of a thread to the shuttle, a clamping device on said carrier, a clamping device on said shuttle, means for bringing said clamping devices into positions for clamping engagement with the same part of the thread by either of said devices, and means for simultaneously forcing one of said clamping devices into and the other out of clamping engagement with the thread.

1,906,186. FILM-DRAWING DEVICE FOR CINEMATOGRAPHIC APPARATUS. ETIENNE SAINTE CLAIRE DEVILLE, Paris, France, assignor to Societe des Etablissements Gaumont, Paris, France, a Corporation of France. Filed Apr. 19, 1929, Serial No. 356,583, and in France May 21, 1928. 5 Claims. (Cl. 271—2.8.)

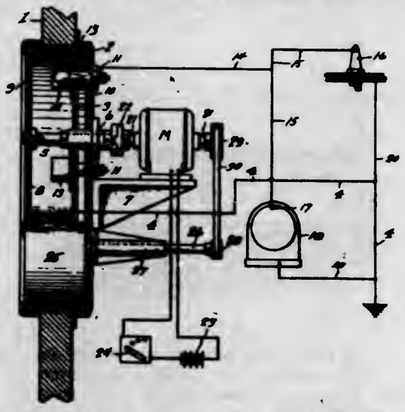


1. A film feeding mechanism for motion picture apparatus comprising a toothed film drawing roller adapted to engage the driving perforations of the film, and a smooth guiding roller of larger diameter than said film drawing roller, adjacent to it, and having a tangent plane which is also tangent to the film drawing roller along the same straight line, whereby the film is so guided as to need but a single row of driving perforations.

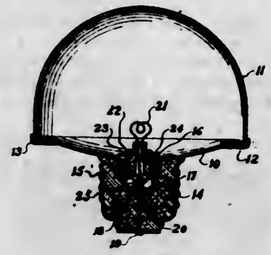
1,906,187. SPEED INDICATING DEVICE. JOHN W. SIMMONS, Cleveland, Ohio, assignor to Pioneer Instrument Company, Incorporated, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 6, 1930. Serial No. 426,815. 5 Claims. (Cl. 88—14.)

1. An indicator for indicating the speed of an internal combustion motor and comprising a dial having an aperture therein, an electric lamp disposed adjacent said dial, so that it may be viewed through the aperture, means for causing a relative movement between said dial and lamp, means connecting said lamp with said combustion motor in such a manner that said lamp will be energized

periodically in accordance with the speed of said motor, and means operatively associated with said dial for indicating the rate of relative movement between said dial and said lamp and from which the speed of the motor is determined.

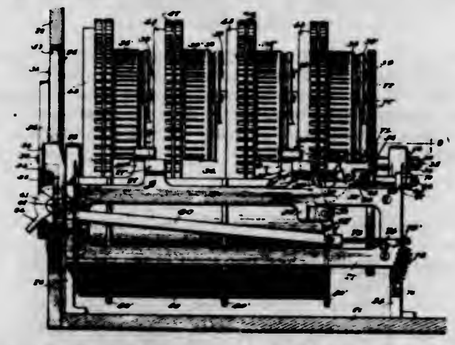


1,906,188. INCANDESCENT LAMP. EMANUEL C. SMALLY, Canton, Ohio. Filed Mar. 11, 1931. Serial No. 521,645. 5 Claims. (Cl. 176—32.)



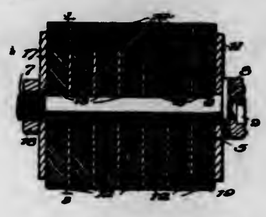
1. An incandescent lamp of the character described, comprising a base filled with insulation having a socket at its inner end, a reflector fixedly and centrally secured within said insulation provided with a peripheral groove, a glass globe mounted within said groove and adapted to be sealed within the groove to provide an air-tight joint, and a filament detachably disposed within said socket.

1,906,189. RADIO APPARATUS. WILLIAM S. SUTTON, Rockford, Ill. Filed Apr. 28, 1930. Serial No. 446,558. 15 Claims. (Cl. 175—41.5.)



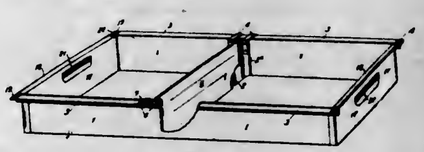
1. A radio frequency selector comprising a condenser element having a plurality of slots, a plurality of condenser plates, one or more of which may be engaged in said slots, a selector dial indicating the relative number of plates engaged, an index plate having slots corresponding to the number of said condenser plates and a pawl engaging the slots of said index plate to insure perfect registration of the condenser plates in the slots of the condenser element, each plate and associated parts representing a calibrated frequency.

1,906,190. SURFACING TOOL. HERBERT E. TAUTS, Milwaukee, Wis., assignor to Delta Manufacturing Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 16, 1931. Serial No. 575,363. 4 Claims. (Cl. 51—190.)



1. A rotary surfacing tool comprising a spindle, annular core sections of resilient material axially slidable thereon, non-resilient spacer disks slidable on the spindle and between said core sections, and means on said spindle for forcing said core sections into radial expansion to bind and hold a work engageable sleeve thereon when applied thereover.

1,906,191. BOX AND SHELVES AND PARTITIONS THEREFOR. BERTRAM THOMAS and EUSTACE THOMAS, Hulme, Manchester, England. Filed Apr. 25, 1929, Serial No. 358,116. and in Great Britain May 1, 1928. 3 Claims. (Cl. 220—22.)



1. Partition means for open top boxes comprising wing members carried by and movable with respect to opposing walls of the box and a partition slidably cooperating with the wing members, said partition serving to force the wing members into frictional contact with the walls of the box.

1,906,192. METAL ALLOY. CHARLES VANGREVENYNGH, La Celle-St. Cloud, and HENRY ELION, Paris, France. Filed Aug. 28, 1930, Serial No. 478,560, and in France Jan. 7, 1930. 2 Claims. (Cl. 75—1.)

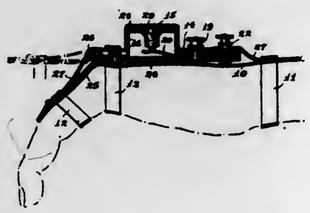
2. A light aluminium alloy, consisting of aluminium, copper, nickel, magnesium and chromium and containing of:

	Percent
Copper	1.50 to 5.00
Nickel	0.25 to 2.50
Chromium	0.25 to 1.50
Magnesium	0.25 to 2.00

1,906,193. SIGNAL DEVICE. VINCENT V. VITALE, Brooklyn, N. Y. Filed Mar. 13, 1930. Serial No. 435,522. 1 Claim. (Cl. 177—329.)

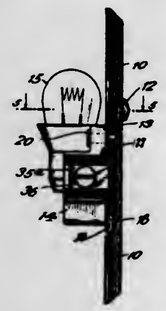
A signal device adapted to be mounted on the back of the hand of a person, said device including a flexible base, means for securing one end of said base to the wrist of a person and the other end to one of the fingers, a

metallic base plate positioned on said flexible base and extending forwardly to a point opposite the knuckle of said finger and rearwardly to a point on the back of the hand near the wrist, a metallic contact member pivoted to the forward end of said metallic base plate and secured for movement with the flexible base and said finger by said first mentioned securing means, a second metal plate of substantially the same dimensions as the base plate having a centrally positioned upstanding housing formed with a top, said top being provided with an integral lamp receiving socket, the forward end of said second plate being provided with an arcuate shaped contact portion partially encircling the pivot point on said base plate,



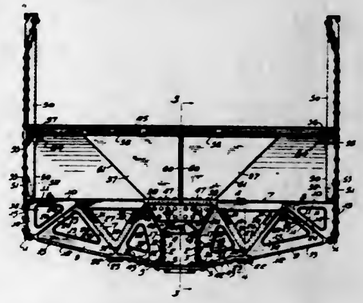
a contact tongue secured between said plates positioned to engage the center terminal of a lamp bulb to be received in said socket, insulating layers between said plates and between said contact tongue and said plates, a flexible cover provided with an opening to allow said housing to project therethrough, and means to secure said flexible base cover plates and tongue in assembled relation including said first mentioned securing means and a pair of insulated terminals, one of said terminals being electrically connected to said base plate and connectible to one side of a source of electrical energy and the other terminal being electrically connected to said contact tongue and connectible to the other side of said source.

1,906,194. ATTACHMENT PLUG WITH PILOT LIGHT. BENJAMIN C. WEBSTER, Southport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 8, 1930. Serial No. 419,337. 5 Claims. (Cl. 177—311.)



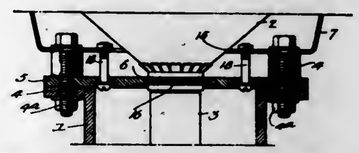
1. In an attachment plug receptacle, a molded face plate having openings for plug contacts and a bead on the back thereof to position a base, in combination with a base having an open face and recesses for contact members, means securing said base in position within the bead on said plate with its open face presented to the back of said plate, and contact members in said recesses engaging the sides thereof and having portions extending sufficiently toward said open face to engage the back of said plate whereby alone they are secured in the base,

1,906,195. RAILWAY CAR. WILLIAM E. WINE, Toledo, Ohio. Filed July 8, 1931. Serial No. 549,501. 24 Claims. (Cl. 105—247.)



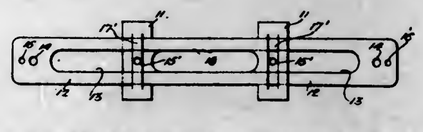
1. A body bolster for railway cars comprising top and bottom chord members and downwardly converging truss members integrally connecting the chord members, said truss members being connected to the lower chord member in substantially vertical alinement with a portion of the bolster which is cooperable with a truck side bearing, each of said truss members having a web disposed in a plane substantially parallel with the transverse axis of the bolster and a plurality of horizontally spaced flanges projecting from one side of said web.

1,906,196. ELECTRODYNAMIC REPRODUCER. ROY S. FISHER, Philadelphia, Pa., assignor to Philadelphia Storage Battery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 3, 1929. Serial No. 375,855. 8 Claims. (Cl. 179—115.5.)



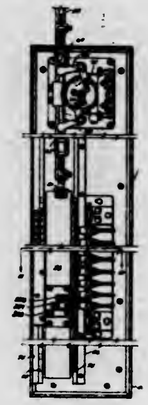
1. In an electrodynamic sound reproducer, the combination with a diaphragm including a voice coil, of a supporting frame for the diaphragm, a member having an aperture, a second member having a core element adapted to enter said aperture to form a gap in which said coil is adapted to operate, bolts for securing said frame and member together and having clearance permitting relative adjustment between the frame and said apertured member for centering the coil in the aperture, and independent means for securing together the frame and said apertured member in the adjusted position.

1,906,197. ADJUSTABLE CROSSBAR OR STRAP FOR ELECTRIC FIXTURES. JAMES MANGIN, New Brunswick, N. J., assignor to New Brunswick Electric Supply Company, New Brunswick, N. J., a Corporation of New Jersey. Filed Mar. 6, 1930. Serial No. 438,716. 2 Claims. (Cl. 247—20.)



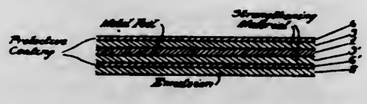
1. An adjustable fixture strap comprising two similar elements, each provided with a yoke and an extension, each of said yokes comprising a struck-out raised strap-like portion forming a slit with the yoke body through which the extension of the other element is adapted to slidably extend, each of said elements having apertures adapted to receive fastening elements for attaching said strap to an outlet box and for attaching a fixture to said strap.

1,906,198. CIRCUIT CONTROLLING MECHANISM. CARROLL E. ORR, Orange, N. J., assignor to Elevator Supplies Company, Inc., Hoboken, N. J., a Corporation of New Jersey. Filed June 6, 1928. Serial No. 283,331. 8 Claims. (Cl. 177—336.)



1. A circuit controller comprising a pair of current conducting segments, a series of current conducting brushes, means for rendering said brushes engageable successively with said segments, contact means intermediate said pair of segments for connecting th first or last of said series of brushes at all times to a source of current, means for feeding current through the first brush and one of said segments, from all other brushes, during relative movement of said brushes and said segments in one direction, and means for feeding current through the last brush and the other of said segments, from all other brushes during relative movement in the opposite direction.

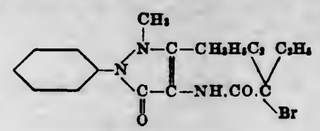
1,906,199. METAL FILM. LEOPOLD RADO, Berlin-Halensee, Germany. Filed Feb. 10, 1928, Serial No. 253,515, and in Germany Nov. 14, 1927. 5 Claims. (Cl. 95—8.)



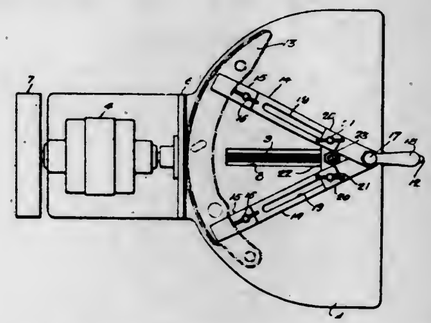
1. A metal film for photographic and kinematographic purposes, comprising in combination a metal foil having a thickness between 0.005 and 0.008 mm., and sensibly roughened at one of its sides, an elastic base of sufficient strength united with the said roughened side of the metal foil.

1,906,200. 4-BROM-DIETHYLACETYLAMINO-1-PHENYL-2, 3-DIMETHYL-5-PYRAZOLONE AND THE PROCESS OF PREPARING THE SAME. BAPTIST REUTER, Krailling-Planegg, Germany. Filed Mar. 27, 1931, Serial No. 525,861, and in Germany June 27, 1928. 3 Claims. (Cl. 260—45.)

1. A new chemical product consisting of the 4-bromdiethylacetylamino-1-phenyl-2, 3-dimethyl-5-pyrasolone being a white crystalline product insoluble in water, soluble in alcohol, ether, bensol, etc. with the formula



1,906,201. BURNISHING MACHINE. WILLIAM R. SIMPSON, Creston, N. J., assignor to Thermoid Rubber Company, Trenton, N. J., a Corporation of New Jersey. Filed Aug. 22, 1931. Serial No. 558,819. 7 Claims. (Cl. 29—90.)



1. In a machine for burnishing friction surfaces, a wheel, a shaft, a member mounted thereon and arranged for advancement or retraction with respect to said wheel, a cross piece pivotally mounted on said movable member, arms for supporting the friction elements to be treated, the said arms being pivotally connected at their opposite ends and having a slot therein, means at the ends of the transverse piece engaging the slots and supporting said arms, said means being releasable and slidable in the slot to permit the effective radius of the arms with respect to the pivot point of the cross piece to be varied, and means for pivoting said arms with respect to the wheel.

1,906,202. PROCESS OF MAKING ZEOLITES. WILLIAM MCAFEE BRUCE, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 27, 1928. Serial No. 308,888. 13 Claims. (Cl. 23—113.)

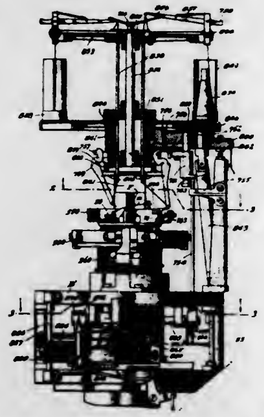
1. In the manufacture of zeolites having an adjusted silica ratio, the process which comprises adding the desired amount of silica in the form of a solution of silicate of soda to a solution of aluminum sulfate in such concentrations and in such proportions as to produce an ungelled solution mixture, and thereafter adding a further amount of alumina to the mixture in the form of a solution of sodium aluminate; the molar ratio of silica to alumina and to soda in the zeolite product being adjusted between 13 and 1 SiO_2 to one each of Al_2O_3 and Na_2O by inversely varying the relative proportion of the sodium aluminate to the aluminum sulfate put into the reagent mixture, the relative proportions of the three reagents being such as to leave the final mixed liquor slightly alkaline.

1,906,203. MANUFACTURE OF WATER-SOFTENING ZEOLITES. WILLIAM MCAFEE BRUCE, New York, N. Y., assignor to The Permutit Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 10, 1930. Serial No. 487,918. 13 Claims. (Cl. 23—113.)

1. In making water-softening zeolite gels from aluminum sulfate, sodium silicate and sodium aluminate solutions, the process which comprises mixing sulfate and sili-

cate solutions of concentrations exceeding 3° Baumé, separately mixing aluminate and silicate solutions of concentrations exceeding 5° Baumé and then mixing these two mixtures of said solutions.

1,906,204. MACHINE FOR MAKING KNITTED FABRIC. ALBERT E. PAGE, Brooklyn, and HARRY SWINGLEHURST, Jr., Floral Park, N. Y., assignors to Scott & Williams, Incorporated, New York, N. Y., a Corporation of Massachusetts. Filed Mar. 13, 1931. Serial No. 522,450. 15 Claims. (Cl. 66—135.)



1. A knitting machine having a circle of independent needles, means for selecting needles for wrapping, pattern yarn fingers and finger selecting means adapted to cause a finger to lay a pattern yarn in front of a selected needle or needles in combination with means selecting and holding across the needle circle after said finger selecting means have released same, certain of the fingers chosen by the finger selecting means, for the purpose of varying the length of wrap.

1,906,205. SHIPPING DRUM. EDGAR E. SHANOR, Sharon, Pa., assignor to The Petroleum Iron Works Co. of Ohio, Sharon, Pa., a Corporation of Ohio. Filed Jan. 27, 1932. Serial No. 589,248. 4 Claims. (Cl. 285—50.)



1. The combination with a receptacle wall having an opening whereof the defining wall is directed inside the receptacle, of means for adapting the opening to standard discharge fittings and including a fluidway freely insertible in the opening, and an elliptical locking ring admissible through the opening and adjustable on the fluidway to take a binding fit on the defining wall of the opening.

1,906,206. METHODS FOR WEIGHTING ARTIFICIAL SILK CONSISTING OF CELLULOSE ESTERS. FRIEDRICH WILHELM WEBER, Hackensack, and EUGENE SCHAEFER, Englewood, N. J., assignors to Maywood Chemical Works, Maywood, N. J., a Corporation of New Jersey. Filed July 3, 1931. Serial No. 548,708. 3 Claims. (Cl. 8—13.)

1. The method for weighting artificial silk formed by an ester of cellulose, said method consisting in acting on the artificial silk with a solution containing basic chlorides of tin and zinc, then washing the artificial silk with water, and subjecting the artificial silk thus treated with the solution of a salt capable of forming insoluble salts with tin and zinc.

1,906,207. ESTER-ALDEHYDE GUM EMULSION AND PROCESS OF MAKING SAME. KENNETH G. BLAIKIE and GEORGE O. MORRISON, Shawinigan Falls, Quebec, Canada, assignors to Canadian Electro Products Company, Limited, Montreal, Quebec, Canada. Filed Mar. 25, 1929. Serial No. 349,895. 21 Claims. (Cl. 252—6.)

1. A process of making an emulsion of a vinyl ester-aldehyde gum, which comprises heating the gum with a polyhydric alcohol, and cooling the mixture and separating the resulting emulsion from excess of alcohol.

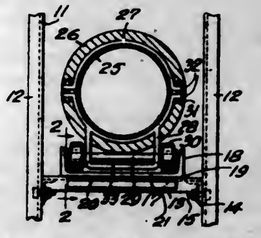
8. A gummy product being an emulsion of a vinyl ester-aldehyde gum and a polyhydric alcohol.

1,906,208. CABINET CONSTRUCTION. MEYER GREENBERG, Lynbrook, N. Y., assignor to Craftsman Radiator Enclosure Company, Inc., Oceanside, Long Island, N. Y., a Corporation of New York. Filed July 16, 1932. Serial No. 622,884. 3 Claims. (Cl. 312—152.)



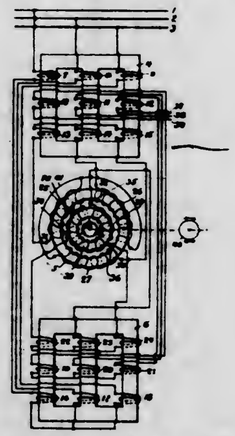
3. A cabinet adapted to be hinged and latched to a door or other suitable mounting, comprising a sheet metal construction which includes side, back and end walls rigidly secured together, the front edges of the side and end walls being turned in to form a narrow face perimeter for said cabinet parallel to the back wall, shelf supporting means at spaced elevations in said cabinet, removable sheet metal shelves mounted in said cabinet, each shelf including an integral upturned flange for a front edge and an integral downturned flange for a rear edge, hooks mounted on said downturned flange and a tie strip across the mid-front portion of said cabinet and secured to the inside faces to hold said cabinet from spreading.

1,906,209. PIPE SUPPORT. CHARLES P. HARDING, Montreal, Quebec, and JOHN A. SHAW, Westmount, Quebec, Canada. Filed Feb. 23, 1929. Serial No. 342,067. 11 Claims. (Cl. 137—75.)



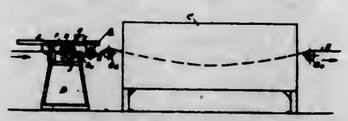
10. A pipe support for use in a conduit comprising a track co-extensive with the pipe to be supported, primary supports, members vertically adjustable upon said supports extending transversely of and supporting the track, the track being laterally adjustable on said members, and a plurality of wheeled carriages adapted to be secured to the pipe and to travel on said track.

1,906,210. METHOD OF AND MEANS FOR ELECTRIC VOLTAGE REGULATION. HERMANN HARZ, Berlin-Siemensstadt, Germany, assignor to Radio Patents Corporation, New York, N. Y., a Corporation of New York. Filed Mar. 19, 1931, Serial No. 523,675, and in Germany July 23, 1929. 15 Claims. (Cl. 171—119.)



2. In a voltage transformer comprising means forming a plurality of magnetic circuits, primary and secondary windings interlinked with said circuits for producing a corresponding number of magnetic flux components through said magnetic circuits, connections between said primary and said secondary windings whereby the transformer output voltage is determined by the resultant of said flux components, and means for varying the relative time phase position of said flux components.

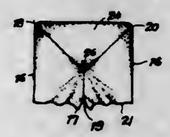
1,906,211. TENSIONING DEVICE FOR MAINTAINING A GIVEN CATENARY CURVE IN METAL STRIPS CONTINUOUSLY PULLED THROUGH AN ANNEALING FURNACE. OTTO JUNKER, Lammersdorf, Germany. Filed May 11, 1932, Serial No. 610,694, and in Germany June 16, 1931. 1 Claim. (Cl. 263—3.)



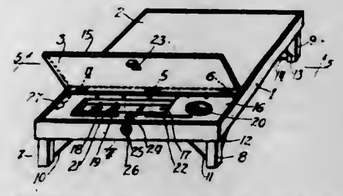
In a tensioning device for maintaining a constant catenary curve in metal strips continuously pulled through an annealing furnace, a brake located at the entrance side of the furnace with adjustable braking effect working directly upon the passing strip and a feeler for measuring the slackness of the strip, said feeler coacting with the brake in such manner that with increased slackness the brake is loaded and with increased tension the brake is released.

1,906,212. PROCESS FOR MAKING HATS. FELIX A. LACKS, Pelham Manor, N. Y., and EDWARD C. KENNEDY, New Haven, Conn.; said Kennedy assignor to said Lacks. Filed Jan. 21, 1927. Serial No. 162,486. 1 Claim. (Cl. 66—171.)

The method of knitting a hat blank on a machine having a series of needles, comprising knitting reciprocatingly to form a brim portion and a side crown portion, progressively narrowing during such knitting and retaining the terminal loops of discontinued wales on the idled needles, then knitting a top crown portion with progressive resumption of knitting on idled needles to widen the said portion, then narrowing to form another crown portion, and then widening until all the idled needles are restored to action to form a side crown portion and a brim portion corresponding to the portions first formed.

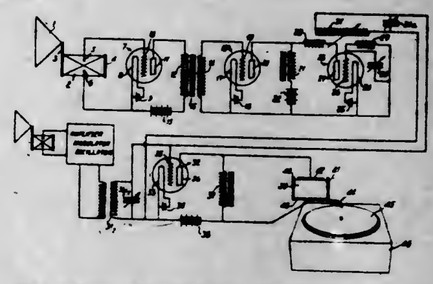


1,906,213. CARD TABLE. ROBERT NEUSCHOTZ and NATHANIEL C. RATNER. New York, N. Y. Filed Mar. 29, 1930, Serial No. 439,912. Renewed July 30, 1932. 8 Claims. (Cl. 45—70.)



3. In combination, in a table of the class described, a frame comprising bars joined end to end and defining a substantially square opening, a shoulder on each of said bars registering with the corresponding shoulders of adjoining bars and forming a continuous internal shoulder in said frame opening, a substantially rectangular top plate disposed within and partially filling said opening, said top plate being positioned with three sides on said continuous shoulder, a shoulder on the free side of said top plate forming a continuous rectangularly extending internal shoulder with the shoulder of the remaining frame opening, an elongated auxiliary plate disposed on said shoulder in said remaining frame opening, means for movably hinging said auxiliary plate to said top plate, means on said frame for locking said auxiliary plate in position forming a continuous surface plate with said top plate, and means projecting thru one of said frame bars for releasing said auxiliary plate to gain access to said opening normally covered thereby.

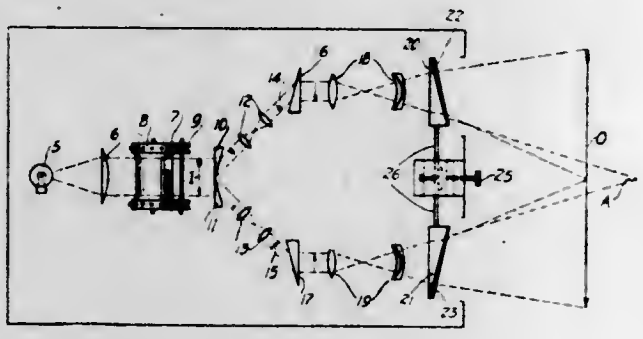
1,906,214. HIGH FREQUENCY PHONOGRAPH APPARATUS. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed Mar. 19, 1927. Serial No. 176,677. 15 Claims. (Cl. 179—100.4.)



1. The method of reproducing sound from a record engraved with super-audible frequency vibrations modulated

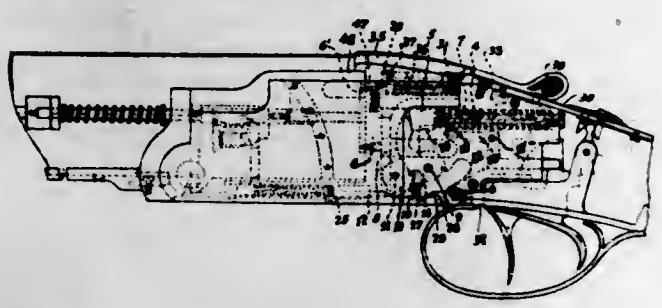
at sound frequencies which comprises producing directly from said record oscillations of superaudible frequency, modulated at sound frequencies, radiating said modulated oscillations, receiving said radiated oscillations, and converting said received oscillations into sound waves.

1,906,215. PROJECTION SYSTEM. ALEXANDER MCLEAN NICOLSON, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y., a Corporation of Delaware. Filed July 10, 1930. Serial No. 466,999. 9 Claims. (Cl. 88—24.)



1. A light projecting system comprising a source of light, means for modulating said light, means for dividing said modulated light into a plurality of portions, means for magnifying each of said portions separately, and means for joining said portions to form the original light modulations.

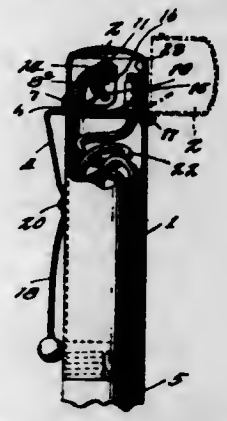
1,906,216. SUPERPOSED BARREL, BREECH-LOADING FIREARM. LÉON RIBE, St.-Etienne, France. Filed Apr. 2, 1931, Serial No. 527,245, and in France Apr. 5, 1930. 7 Claims. (Cl. 42—41.)



1. In a double-barrelled, drop-down, breech-loading firearm, a frame having a vertical median partition in the vertical plane of the barrels, and a percussion device on each side of the partition and symmetrically positioned with respect thereto, each percussion device comprising a rectilinearly movable hammer, a spring bearing on the hammer, striking means acting directly on the primer and rigidly connected to the head of the hammer, and means carried by the frame for retaining and releasing the hammer.

1,906,217. FRICTION LIGHTING DEVICE. JOHN T. SCULLY, New York, N. Y. Filed Apr. 3, 1930. Serial No. 441,335. 5 Claims. (Cl. 67—7.1.)

2. In a friction lighter in combination, a pivotally mounted abrader element, a holder having a bore therein to hold pyrophoric material, said abrader element acting in a plane substantially at right angles to the plane of the bore of said holder for pyrophoric material and having on its side adjacent the orifice of said bore of said holder an abrading surface, a crankshaft connected with said abrader element and having a bent portion disposed between bearings, and means including an elongated aperture engaging the bent portion of said crankshaft to actuate said crankshaft and said abrader element by movement of said means.

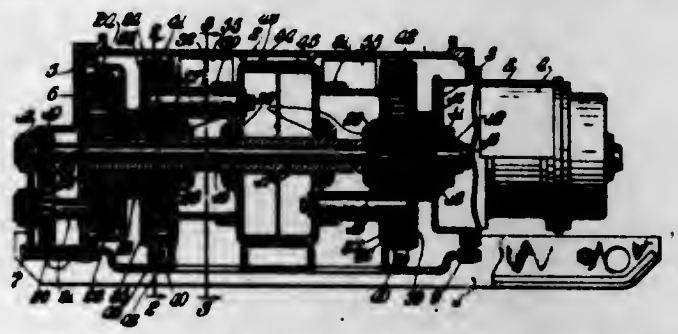


1,906,218 JOINT CONSTRUCTION FOR SHOVEL HANDLES AND THE LIKE. CHARLES E. PATCHELL, Portland, Me. Filed May 26, 1931. Serial No. 540,100. 2 Claims. (Cl. 306—18.)



1. A device of the character described comprising in combination two end-abutting, axially aligning handle elements having their ends obliquely cut, and overlapping, a scarf cut in each of said elements, mutually aligning and connected, a link disposed in said scarfs, pins pivotally connecting each of said elements with said link, a key portion on the faces of said link extending outwardly from opposite sides of the periphery of said handle elements, a sleeve disposed on and slidable over said elements, keyways in said sleeve adapted, respectively, to engage the key portions on said link, a spring-stop to prevent receding of said sleeve after completing its full advancing movement, and a fixed stop to limit the backward movement of said sleeve.

1,906,219. HOISTING MECHANISM. CHARLES F. OSGOOD, Claremont, N. H., assignor to Sullivan Machinery Company, a Corporation of Massachusetts. Filed Sept. 10, 1931. Serial No. 562,114. 15 Claims. (Cl. 254—185.)



8. In a hoisting mechanism, a base, a cylindrical housing carried by said base, end closure members for said housing, a shaft journaled within said end closure members, relatively rotatable hoisting drums arranged within said housing and rotatably mounted on said shaft, motor operated driving means for said shaft, and frictionally controlled planetary driving connections between said shaft and each of said drums and also arranged within said housing.

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